

Optional Assignment #2

- a) Firms respond to depreciation and obsolescence by investing in new capital. Likewise, it requires an investment to replace worn out human capital. Unfortunately, it's sometimes difficult for an individual to finance this investment. A firm has access to bank loans, retained earnings, commercial paper—and large firms can borrow in the stock and bond markets. Many individuals have only their savings to fall back on though many others can take out loans to gain skills by attending college. In addition to the difficulty of financing human capital, gaining large amounts of human capital is often a lengthy process. Once again looking at a college education, it typically takes at least four years and often more to complete a degree program.**
- b) The value of output per worker puts an upper limit on the amount any firm can afford to pay its workers. Rising productivity means increasing output per worker, so the potential for rising real wage rates tracks productivity growth.**
- c) Structural unemployment; other things constant, this increase means an increase in the natural rate of unemployment, which equals the sum of structural plus frictional unemployment.**
- d) If unemployment compensation allows workers to finance their retraining, it will reduce structural unemployment in the long run. In the absence of unemployment compensation, many workers would be unable to retrain and end up in a low-skilled job that underutilized their potential.**
- e) Wanda is “underemployed”. The job she now has underutilizes her talents. However, the unemployment statistics do not reflect this at all.**
- f) Workers and businesses in the shrinking industries bear the costs. Everyone enjoys the benefits, the greater abundance of goods and services from a given amount of inputs. This gain translates into higher real wages. Because the costs are concentrated among a relative few while the benefits accrue to all, one could argue that the non-suffering beneficiaries are gaining from the misery of the few. So some argue that the government should impose taxes to pay for unemployment benefits or training subsidies for the few who suffer the costs.**

Again, these were challenging questions that anticipate material to be discussed in much greater detail later on in the course. There were some excellent and creative answers. I have quoted from these below.

There were also some confused answers. In particular, confusion in applying economic models such as Demand and Supply often resulted from confusion over “cause” and “effect”. In the case of Demand and Supply, the various factors of demand and supply are the “causes”, while the equilibrium price and equilibrium quantities supplied and demanded are the “effects”. This is a subtle, but essential point. For example, in the case of the labour market, an important factor that affects demand for labour is not how many

people are employed (which is an “effect”), but how productive workers are (which is a “cause”). Firms don’t *want* to pay workers high wages, but they will be *willing* to pay for highly productive workers. An increase in willingness to pay due to higher worker productivity creates an increase in demand. That is, the demand curve shifts out. The effect of an increase in demand is a higher equilibrium price, which is the wage rate.

As a side point, the shift in a curve is not itself a “cause”. You must explain why the curve shifted. A statement such as “shifting out of the PPF increases output” doesn’t make much sense as a story of cause and effect. It begs the question of why the PPF shifts out. That is, what is the cause? Keeping “cause” and “effect” clear is the main challenge in learning economics. Shifting curves and interpreting results is relatively straightforward, but knowing why and when curves shift is the hard part. It is also the whole point of learning economics.

Here are some excerpts from good answers:

a) *“The production of new human capital takes longer to create. While new physical [capital] can be built or bought, humans must be trained ... People must see the benefits in switching or learning new skills. Additionally, there are few substitutes for human capital”*

“When physical capital depreciates or becomes obsolete, companies invest more money in capital goods and research and development. In most cases this requires paying someone to make something. Creating new human capital, especially in the modern technological and science-based economy usually requires extensive education. During the education process an individual must pay for housing, food, and clothing. The individual may need to provide for a family as well. Because of this, the opportunity costs of being re-educated are very large. A person must forego a salary, perhaps benefits, and other non-monetary things while paying for an education. The costs of new machinery or other physical capital is obviously much less.”

“...The difference between the production of physical versus human capital is mainly time.... [I]t takes time to go to college and develop skills. It is also a safer investment to produce physical capital because humans can make their own choices and can work less than expected.”

b) *“In the long run, productivity growth means that a worker is more efficient, and can therefore do more work in the same amount of time. This makes them much more desirable than a less productive worker. Companies will be more willing to pay higher wages for productive workers...”*

“In the long run, productivity gains lead to higher profits for business. With higher profits, a business can afford to pay its workers higher salaries. Keeping the employees happy with an improved salary helps to guarantee that high profits will continue. If a business does not reward its efficient employees in this way, other companies will identify the large profits being earned and begin to compete in this sector. Ultimately, they would

offer to hire these valuable employees away from their current employer. This competition forces businesses to reward productive employees for their work.”

c) “Reich is describing a shift from cyclical unemployment to structural unemployment. This implies that the natural rate of unemployment will increase because structural unemployment is a factor in the natural rate of unemployment while cyclical is not.”

d) “An unemployed person who receives no unemployment compensation faces a high opportunity cost of job search. The availability of unemployment compensation lowers the opportunity cost of Terri Brooks and Michelle Stauffer’s job search. They will continue to look for the ideal job. Compensation will also allow them to stay in school, where they will increase their human capital. They can wait for the higher-paying, more skilled job, where they will earn more money, which will increase their efficiency.”

“If Ms. Stauffer and Ms. Brooks can receive unemployment compensation then they will have a lower opportunity cost of job search. This means that they will be more likely to finish their classes – increasing their human capital. This increases their efficiency in the long-run because they will earn more money in a higher-paying, skilled job.”

“Ms. Brooks and Ms. Stauffer would greatly benefit from unemployment compensation. Once their current jobs are terminated, they will have no source of income. Thus, they will not be able to sustain themselves with the basic necessities of life, let alone pay the cost of their part time classes. Without any classes, they might be forced to abandon their pursuits and get another lower paying job where they have not learned anything new. With unemployment compensation, they would be able to complete their classes and get their new, better jobs. Their classes would improve their overall efficiency and would only be possible through unemployment compensation.”

e) “The government unemployment level does not account for people who are underemployed. In other words, it does not account for the people who are not making the amount of money a person with their skills should be making.”

f) “Those with jobs in the field of manufacturing bear most of the costs, especially older workers and others unwilling to receive training in new fields. The overall economy and those in sectors that enjoy a comparative advantage in the U.S. see the benefits of this process. Public policy should play a role in transitioning resources to growing sectors of the economy. An example of this is to provide unemployment compensation to urge people to build human capital through training in new fields where more jobs are available.”