

Macroeconomics ctw assignment

[Economics](#)



This function assumes that the number of workers (L) will grow at a constant rate, n . So the economy will grow in output per worker until it hits the steady state. At the steady state level the economy can still grow but only at the rate of labor force growth. This says that at some point all economies will reach a point when their standard of living can no longer be increased, and we know that this is not true. For Solow's model to show how a country's production and economy can grow over time they have to add Technological Progress to the function.

To show the effect that technology has on the growth of an economy they include the efficiency of labor to the original function so, $Y = F(K, L * E)$. The variable "E" means society's knowledge on production which we think of as technology. So $L * E$ measures both, the workers in the labor force and the technology that each worker has at his disposal. So if the technology were to improve then this would cause "E" to increase. When "E" does increase it is saying that each worker is now more efficient and can produce even more output than they could before.

By incorporating technology into the equation they are showing that technological progress is labor-augmenting. This means that as the technology improves it makes each worker more productive by changing the way that they work. The rate of labor-augmenting technological progress is written as g . We know that the labor force grows at the rate of n , so we know that $L * E$ grows at a rate $n + g$. The original Solow model unfortunately is not realistic, since it says that at some point all economies would reach a point where they will no longer grow. But by adding technological progress to the

Slow Model, we are able to show a more realistic picture of a country's economy. This helps us to explain how countries standards of living and outputs have continuously grown over time. B. Innovation is good thing for a country and an economy It allows a country to be more productive and grow richer. Everyone within that country is able to receive some kind of benefit from the innovation. If a new company is innovative and creates a new product that is better than the current products in the market then everyone receives the benefit of that new reduce. C. Creative destruction is when some type of innovation revolutionizes an industry and changes it and in the process accidental destroys the old industry. An example of this is when "Uber" came into existence, offering a cheaper, easier, and safer way to get a car to drive where you want to go. AAA. An unskilled worker would earn ML^* , Skilled worker would earn $ML^* + MPH^*$ So by developing higher education it would increase the human capital, and when human capital increases it would cause the ML to increase.

So with ore human capital you would have more marginal product than an unskilled worker b. $MPH/ML = 1 + (L/H)$. When scholarships increase, H increases, which causes the ratio to fall because of diminishing returns to human capital would lower the return and at the same time would cause the marginal product of unskilled workers to increase. The policy would create a more egalitarian society by lowering the returns to education and decreasing the gap between the wages of more and less educated workers. C.