Sample: Finance - Assessment Assignment

Textbook:

- Hyman, D. (2011). *Public finance: a contemporary application of theory to policy*. (10th ed.). Mason, OH: South-Western, Cengage Learning.

Question 1

Suppose the real rate of growth of wages subject to Social Security taxes is expected to average 1% per year during the next 40 years. Assume that the Social Security tax rate remains constant, and prove that the average return on Social Security taxes paid into the Social Security trust fund will also be 1%. Why can workers with high incomes expect negative returns on their Social Security taxes during this period?

Answer:

The Social Security system operates to provide pensions and other benefits to the elderly in the United States.[1]

The Social Security retirement system is tax financed and has been designed on a "pay-as-you-go basis." Benefits are financed by a payroll tax on wages paid up to a certain maximum amount per worker. The Social Security trust fund has begun to grow because of increases in tax rates, with the result that current workers will be paying taxes for a portion of their own pensions, as well as those of current retirees. However, the trust fund will rapidly decline with the aging of the U.S. population in the second half of the 21st century.[1]

The Social Security tax rate remains constant because the percentage share amount will be the same, but the amount of taxes collected will increase every year by 1%. As the amount of tax paid increase every year by 1%, the average return on Social Security taxes paid into the Social Security trust fund will also be 1%.

Retired workers are subject to an *earnings test*, which reduces benefits by $1 for each $2 of earnings over a certain maximum amount of earnings. So, benefits compared to taxes paid are a better deal for low-income workers than upper-income workers.[2]

References:

1. Nyman, John A. (2004). Is 'Moral Hazard' inefficient? The policy implications of a new theory. *Health Affairs*. *23* (5), pp. 194-199. Retrieved from http://content.healthaffairs.org/content/23/5/194.full.
2. Public Finance, 10th Edition David N. Hyman. Chapter 8.

Question 2

Provide two separate reasons why more money is spent per person for health care in the United States than in Britain. Explain your answer in detail.

Answer:

According to the World Health Organization (WHO), the United States spent more on health care per capita ($8,608), and more on health care as percentage of its GDP(17.9%), than any other nation in 2011. But the Commonwealth Fund ranked the United States last in the quality of health care among similar countries, and notes U.S. care costs the most. In a 2013 Bloomberg ranking of nations with the most efficient health care systems, the United States ranks 46th among the 48 countries included in the study. So, we see, that one reason, why United States spent more on health care per capita is that its health care services are much more expensive, than in similar countries like Great Britain.

The English NHS cares for 49 million people (100% of the population of England); US public healthcare currently covers about 83 million (around 28% of the US population).

For a direct comparison, that means that in England the government spends around $3,200 per capita on healthcare and covers the entire population whereas in the US the federal government spends around $3,700 per capita and yet covers less than a third of the population.

Take away those 80 million covered by the US's state healthcare (which doesn't cover all uninsured Americans, so this is being generous) from the States' 300 million population, we're left with 220 million Americans to account for the other $1.1 trillion spent in the US each year on private healthcare.[2]

That works out as $5000 for every American in the private system – almost $2,000 a year more than the NHS costs. So, the second reason is that the US free market system for healthcare provision is significantly less efficient than a "socialised" one.

References:

1. Kavitha A. Davidson (29 August 2013). The Most Efficient Health Care Systems In The World. *The Huffington Post*. Retrieved 01 September 2013.
2. Online article - UK v USA – the basic healthcare facts. - http://liberalconspiracy.org/2009/08/14/uk-v-usa-the-basic-healthcare-facts/

Question 3

One method commonly used by both governments and private health insurers to control the growth in health care spending is limiting the reimbursement to providers. How can these limits to reimbursement be viewed as the exercise of monopsony power? To prevent health care providers from prescribing more services, it is often common to limit approval of services to health care recipients. How is this practice affecting recipients of Medicaid and Medicare?

Answer:

The system of health insurance in the United States is a mix of government and private insurance programs. Under the U.S. health insurance system, most Americans pay only a small portion of the price of medical services.[1]

Monopsony (monopoly-busting) theory predicts an inverse (direct) relation between health insurer concentration and hospital services.

Health insurers do not engage in monopsony behavior. The relationships between buyer concentration and the six different measures of hospital services are either direct or statistically insignificant. Consequently, it appears that much of the attention being paid to consolidations among health insurers may largely reflect that health care providers are trying to protect their monopoly rents. In fact, the empirical findings suggest that health insurers, when they possess more buyer clout, can negotiate additional inpatient days and outpatient visits without necessarily raising the number of personnel and labor expenses.[2]

The law doesn't require health care providers to accept Medicare's approved amount as payment in full, and providers are entitled to bill you for the difference between their billed amount and Medicare's approved amount.[3]

So, recipients of Medicaid and Medicare are responsible for payment of all billed charges, including those that exceed approved amount of compensating health care services.

References:

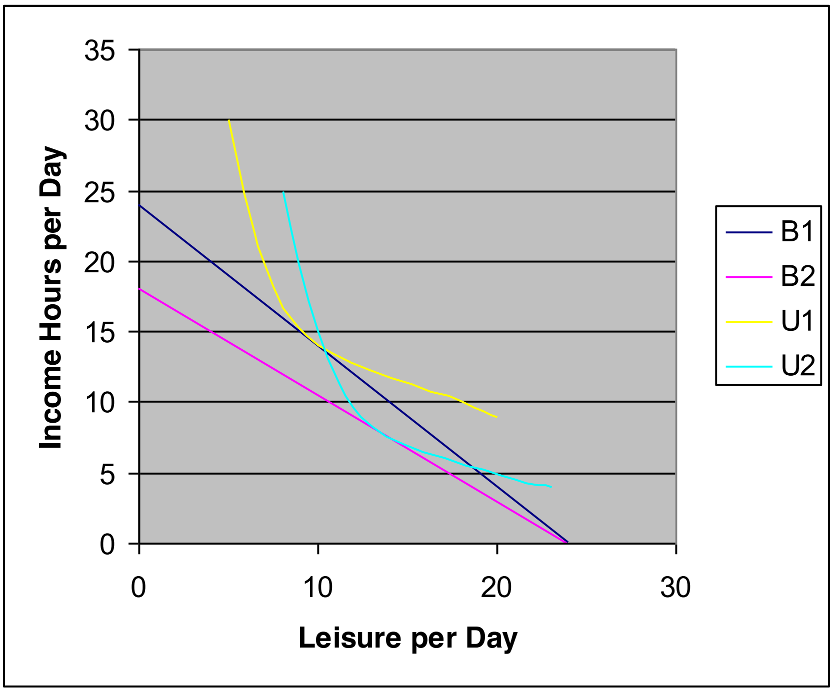
1. Nyman, John A. (2004). Is 'Moral Hazard' inefficient? The policy implications of a new theory. *Health Affairs*. *23* (5), pp. 194-199. Retrieved from http://content.healthaffairs.org/content/23/5/194.full.
2. INTERNATIONAL JOURNAL OF HEALTH CARE FINANCE AND ECONOMICS. Article: Do health insurers possess monopsony power in the hospital services industry? - http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2780653/
3. http://www.mayoclinic.org/billing-rst/faqs2.html

Question 4

Use indifference curve analysis to show how the Social Security pension system can reduce annual consumption for some workers who have a strong preference for current versus future consumption. What factors will influence the effect of the Social Security system on an individual's well-being and savings rate? Create a graph on a spreadsheet program (such as MS Excel), copy and paste it into a MS Word document, write your answer in the MS Word document.

Answer:

It is important to understand and apply the indifference curve analysis that can be used to study Social Security pensions and work and saving incentives. Social Security benefits reduce incentive that older workers may have to work beyond normal retirement age.[1]



As we can see from the graph the income tax reduces the slope of the worker's wage line. As a result, the worker moves from point E1 (where U1 intersects B1) to point E2 (where U2 intersects B2). In this case, leisure per day increases. The tax results in a decrease in hours worked per day on average over the year.[2]
This also results in a decrease in consumption, as the income of the worker increased. So, the annual consumption is reduced for some workers who have a strong preference for current versus future consumption.
Social Security system decreases induvidual's saving rate, as, firstly, his income decreases by amount of tax paid, and secondly, the individual knows, that he doesn't need to save money for his retirement, as the money he pays as taxes will be returned him, when he retire.
Social Security system also decreases individual's well-being now, as he pays taxes, and increases his well-being in the future, when he retire.

References:

1. Nyman, John A. (2004). Is 'Moral Hazard' inefficient? The policy implications of a new theory. *Health Affairs*. *23* (5), pp. 194-199. Retrieved from http://content.healthaffairs.org/content/23/5/194.full.
2. Public Finance, 10th Edition David N. Hyman. Chapter 8, p. 534.