

NAME Mr. Key
Sign the pledge: _____

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Economics 222: Quiz #2 Postmortem

Part I: Here are four pairs of concepts. For three (only 3) of the four pairs, please (#1) define each concept and then (#2) explain their essential similarities and differences:

I had hoped that you would write more about these concepts. For example, many of the following items would have been mentioned in addressing the first pair of concepts:

1. Medicaid versus Medicare: Medicare provides partial health support for the elderly and disabled while Medicaid provides health coverage for the poor. Medicare is an entitlement program administered by the federal government; Medicaid is a means tested program administered by the states subject to Federal guidelines. Medicare is financed by a wage tax, which unlike the Social Security Wage tax is uncapped. Because Medicaid is a jointly financed federal-state program, its provisions vary considerably from state to state. Standard Medicare (Plan A) covers hospitalization but neither physician fees nor pharmaceuticals; but a supplement insurance (Plan B) covers physicians and certain other expenses. Elderly patients with serious debilitating illnesses sometimes spend down their wealth (or give it to relatives) in order to qualify for Medicaid support. A growing number of physicians are refusing to participate in Medicaid because the reimbursement payments they receive are far below their customary billing rates. ...
2. Negative Income Tax versus the Earned Income Tax Credit
3. Average Indexed Monthly Earnings versus the Primary Insurance Amount
4. AFDC versus TANF

Part II: Answer TWO (only 2) of the following three questions:

1. The voters of Durham are to decide at Town Meeting how much they will spend per pupil on education during the 2000-2001 school year. According to Hotelling & Downs, the Median Voter (about \$10,000 for this example) rules the ballot box – half the voters would prefer to spend more and half less than the median.
2. Anthony Downs argues that uncertainty and incomplete knowledge fundamentally affects the functioning of the democratic system. Explain the major effects that he describes.

The last major section of the Downs article was devoted to explaining why the presence of uncertainty complicated the workings of democracy. He argues that with certainty the preferences of each citizen would get equal weight and political power would be distributed equally. Lack of knowledge converts democratic government into representative government. Uncertainty gives rise to ideologies. Bribery now plays a role because funds are needed to finance elections, etc.

3. A new system of locks proposed for the Mississippi is estimated to cost \$500 million. According to the Corp of Army Engineers, the locks will cost \$15 million per year to operate (including maintenance) and will yield estimated annual benefits of \$60 million.

- a. If $r = 5\%$, the annual interest cost will be \$25 million and the B/C ratio will be $\$60/(\$15+\$25) = 60/40 = 1.5$. Alternatively, annual net benefits are $(60-15)$ and the benefit cost ratio is $(60-15)/25 = 45/25 = 9/5$.
 - b. The increase in the value of the land is the discounted present value of the increase in profit (rent). In order to avoid double counting, only one of the two should be included as a benefit.
 - c. The nominal rate of interest will tend to rise to offset the effect of anticipated inflation and leave the real rate of interest unchanged. The value of the annual benefits will go up over time as a result of the inflation. Therefore, nothing has changed when the calculations are carried out with deflated dollars. Alternatively, in terms of current (undeflated dollars) neither the discounted present value of future benefits and costs nor the benefit/cost ratio will be affected by anticipated inflation.
3. The Census Bureau estimates that 13.3% of the population of the United States had an income below the Poverty Level (\$12,802 for a three-person household) in 1997.

- a. Explain how the poverty level of income is estimated?

Back in the 1960's, Social Security Administration economist Orshansky defined the poverty threshold for a family as three times the food consumption requirements for a family of the specified size as estimated by the Department of Agriculture's 1961 Economy Food Plan. The index has been subsequently adjusted for inflation.

- b. Explain if and how an increase in the Earned Income Tax Credit or a decrease in the Social Security tax rate would affect the official poverty rate.

Because the official index is based on before tax money income, it does not reflect the Earned Income Tax Rate, the cost of payroll taxes, or noncash benefits such as food stamps. The handout distributed in class included alternative measures showing the effects of these exclusions on the estimated proportion of households living in poverty.

After generous scaling, the scores ranged from 52 to 92 with a mean of 74, which balances out with the scores on the first quiz.