

Homework 4 - Consumer Theory

Questions 1-3 below refer to a consumer with preferences over consumption when young and old that is given by either of the following utility functions ($\alpha = .5$). Either representation of preferences gives rise to the marginal rate of substitution function below:

$$u(c_1, c_2) = c_1^\alpha c_2^{1-\alpha}$$

$$u(c_1, c_2) = \alpha \log(c_1) + (1 - \alpha) \log(c_2)$$

$$MRS(c_1, c_2) = -\frac{u_1(c_1, c_2)}{u_2(c_1, c_2)} = -\frac{\alpha c_2}{(1 - \alpha)c_1}$$

1. Calculate the marginal rate of substitution between c_1 and c_2 when (i) $(c_1, c_2) = (1, 1)$, (ii) $(c_1, c_2) = (1, 2)$ and (iii) $(c_1, c_2) = (2, 1)$.

2. Suppose that the consumer has a wage income when young of $w_1 = 10$ and has no wage income when old.

a. What are the utility maximizing values for (c_1, c_2, a_2) when the real interest rate $r = 0$?

[Note: The real interest rate in this case is 0%.]

b. Repeat part a for the case when $r = 1$.

[Note: The real interest rate in this case is 100%.]

c. Graph the consumption choices and budget sets in part a-b on a single graph.

3. Now imagine that the consumer can work both when young and when old. The wages earned when young are $w_1 = 10$ and when old are $w_2 = 5$. The budget constraints can then be written as either of the two lines indicated below:

$$c_1 + a_2 \leq w_1 \text{ and } c_2 \leq w_2 + a_2(1 + r_2)$$

$$c_1 + c_2/(1 + r_2) \leq w_1 + w_2/(1 + r_2)$$

a. What are the utility maximizing values for (c_1, c_2, a_2) when the real interest rate $r_2 = 0$?

b. Repeat part a. when $r_2 = 1$.

c. Graph the consumption choices and budget sets in part a-b on a single graph.

4. Read the (attached) article "Paying the Displaced Proves no Panacea". Answer the following questions.

(a) Is Kevin Sather's behavior potentially consistent with the utility maximization theory of consumer behavior discussed in class? Explain.

(b) What would you predict that Kevin Sather would do if the city of Minneapolis simply gave him equal payments over time instead of a single lump-sum payment? You should assume that either payment method has the same present value. Explain your reasoning carefully.

Hint: You may want to make a number of BIG assumptions in your analysis. Be sure to list any important assumptions that you use to answer the question.

#2

Paying the displaced proves no panacea

By Dennis J. McGrath
Staff Writer

When the check for more than \$3,200 arrived last June, Kevin Sather felt like a lottery winner.

The money was his compensation for being displaced from a worn-out, rat-infested apartment building that was razed to make way for a Minneapolis Convention Center parking ramp.

After years of homelessness and poverty, who could blame Sather for treating himself to a few luxuries — a television, a videocassette recorder

— and for his charity in helping his mother pay some bills?

"I went out and had a good time with the money," he said.

But the check from the city wasn't meant to pay for a good time. It was intended to pay for the more expensive apartment that the 29-year-old Sather moved into. By October, the relocation money was almost gone and his General Assistance check didn't come close to covering the rent. By January, he was evicted and

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among the ranks of the city's homeless.

Although Sather is a victim of a specific development project, he's also an example of a broader problem — government's failure to provide adequately for those bearing the brunt of urban renewal, housing advocates say.

Governments disburse relocation awards in large lump-sum payments and unreasonably expect people, some of whom are mentally handicapped or alcoholics, to use the money wisely, those advocates say.

"It took Kevin about six months to go through his money," said Herb Frey, a community organizer for the Alliance of the Streets, an organization for homeless people for which Sather does volunteer work. "That's probably slow compared to many others. They get this lump sum and they can blow it as fast as they want."

Frey said another man who was displaced from Sather's building spent his relocation payment in one weekend. He bought a videocassette recorder, an enormous number of movie tapes and an air-conditioned car to ward off last summer's heat wave.

"There are people for whom it will be difficult to make wise budgetary choices," said Alexa Bradley, a legislative advocate for the Minnesota Coalition for the Homeless. "Our responsibility as a society is to make sure people have housing, particularly when we're tearing down the housing they're in."

But because of the current policy, many people end up living with friends, as Sather is doing, or sleeping in shelters or on the street. Advocates say the money could be used better if it's distributed on a monthly basis, perhaps as rent vouchers, or to build new, affordable housing.

The city will have a chance to make changes when new federal regulations take effect in April, said David Fredlund, the city's residential relocation manager. They will give the city more discretion in disbursing the funds, and Fredlund said he will propose that the City Council approve annual or even monthly installments of the benefits. Several council members appear receptive to that idea, he said.

The relocation money, which can be as much as \$4,000, is paid to displaced tenants by the city under the federal Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970. Although he agrees with housing advocates that this law needs revision, Council Member Tony Scallon, DFL-Ninth Ward, said it is an improvement over the displacement practices of the 1960s.

"Under the first rules, it was, 'Here's \$100, now get lost,'" Scallon said.

Now the payments are larger and require a recipient to move into a house or apartment that is up to code. The benefits are given to tenants who have lived in a building for at least 90 days before the time the city offers to buy the property.

The relocation benefit is intended to pay the difference between the rent for the housing that is being demolished and the rent for the house or apartment to which the person moves. The award will make up that difference for 3½ years.

But that policy offers a tenant an incentive for finding an apartment that is considerably more expensive than the one being lost, because that will result in a larger cash payment.

"The money was nice, but to me it was like a setup to be back on the street again," said Sather. Realizing that a more expensive apartment would boost the size of his relocation benefit, he found a \$275-a-month efficiency at Franklin and Nicollet Aves., a \$95-a-month increase from what he was paying at his former residence in the Arcoia, at 12th St. and 2nd Av. S.

With his relocation money spent by October and without a job, Sather had only a \$203 monthly General Assistance check to pay \$275 a month in rent. Sather acknowledges his own blame in spending the money unwisely, but he also faults the city for providing him with the opportunity.

"It doesn't take long to go through when you're used to living in poverty," he said. "I feel like the city put me back in poverty. Well, they didn't do it. I did it myself, but they helped."

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Said Scallon: "I don't care who you are, whether you're middle class or lower class, there's an awful lot you can do when you're suddenly handed \$4,000. When you give people lump sums, you're just tempting them."

Some advocates aren't so sure the city should regulate the money. Noting that many tenants use the benefits for the intended purpose, they question the city's right to eliminate an adult's ability to choose how to use the money.

"We don't put any kind of limit on any kind of legal settlement," said Dorinda Wider, a Legal Aid attorney who works on housing cases. "Relocation funds are supposed to help you with the cost of displacement, but I'm very uncomfortable in requiring people to take that money in certain forms. We have to still allow people to make the choice."

Wider and others also say it's not always appropriate to criticize the way the money is spent. For people on General Assistance, a relocation payment may amount to more than they would receive during an 18-month period, so it's a chance to buy what they perceive as necessities.

"People don't understand why getting a brand-new coat is the best choice at a certain time. Maybe they (the displaced tenants) have never had a brand-new coat before. If you've never had anything like that before, I think it's real hard to pass up that opportunity," said Wider. "Or I've seen people buy things for their kids, because they've never been able to do that before."

Some housing advocates say that



Staff Photo by Regene Radniecki

Kevin Sather does volunteer work for the Alliance of the Streets, an organization for homeless people.

even tenants who use the relocation money still can face severe housing problems.

"Often the relocation benefits aren't very helpful because there isn't

enough decent, affordable housing," said Sue Watlov Phillips, chairwoman of the Minnesota Coalition for the Homeless. "I think the money could be targeted towards building or rehabing new housing for these folks."

As Wider said, "If you don't look at the longer scope, we'll just be moving the problem from today to 3½ years from now."