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研究課題名(和文)Optimal in-kind benefits in means-tested programs

研究課題名(英文)Optimal in-kind benefits in means-tested programs

研究代表者

Porapakarm P. (Porapakarm, Ponpoje)

政策研究大学院大学・政策研究科・教授

研究者番号：10751266

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研究成果の概要(和文)：福祉給付は現物支給と現金支給のどちらが望ましいか、資力調査が実施されている場合に現物支給を合理化できるか否かを検討し、ソーシャルプランナーが個人の生産性を観察しない場合の最適配分を特徴づけた。生産性が低い個人には余暇を過剰供給し、消費財を過少供給することで余暇が家庭内生産活動に再配分される。生産性の高低により家庭内生産の為に投入財の価値が異なり、ソーシャルプランナーは生産性の低い個人がより適切な対象となるよう配分スキームを改善できる。生産性の高い個人は労働時間を減らすことでミーンズテストの要件を満たすことができる為、消費に一定の歪みが生じるが、現物支給はこの歪みを簡素化できることを示した。

研究成果の学術的意義や社会的意義

Our findings contribute to the reform of the SNAP program (food stamps in the US). Eligible beneficiaries can use SNAP transfers only for non-prepared food. We show that from the theoretical standpoint, it may be optimal to provide in-kind goods that are substitutes with time.

研究成果の概要(英文)：We investigate whether welfare benefits should be provided in-kind or in-cash. We examine whether we can rationalize an in-kind benefit when means-testing is already in place.

We characterize the optimal allocations when a social planner does not observe individuals' productivity. A solution is that individuals reporting low productivity should have their leisure overprovided and consumption goods under-provided. Our study extends this finding in a framework with home production. We argue that since individuals can reallocate the over-provided leisure time to home production activities, high and low productive individuals value input goods for home production differently, and the social planner can refine its allocation scheme to better target low productive individuals. Since high-productivity individuals can meet means-testing requirement by working less, certain distortions on consumption should be put in place. In-kind provision can simplify the implementation of these distortions.

研究分野：Quantitative macroeconomics, public economics

キーワード：in-kind transfer home production optimal taxation

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1. 研究開始当初の背景

Should means-tested benefits be provided in-kind or in-cash? In practice, the choice is often made in favor of in-kind provision. The two largest means-tested welfare programs in the US, the public health insurance program (Medicaid) and the Supplementary Nutritional Assistance Program (SNAP), provide benefits in-kind (such as health care and food, respectively).

In theory, the debate is not entirely resolved. On the one hand, a well-known downside of in-kind provision is that it limits beneficiaries' choices compared to equivalent cash transfers. On the other hand, it can improve target efficiency. Cash transfers are attractive to everyone, while in-kind transfers can be more attractive for intended beneficiaries. Thus, if well-designed, the in-kind benefits can improve the program targeting. This argument is, however, somewhat weakened when applying to a means-tested program since a means-testing restriction already serves as a screening mechanism for targeted beneficiaries.

2. 研究の目的

In this research project, we examine whether there is room for in-kind provision in means-tested programs. More specifically, can we rationalize providing benefits at least partially in-kind when means-testing is already in place?

3. 研究の方法

We use the research framework where agents differ in their unobserved labor productivity. Based on the social preference for equality, it is desirable to redistribute from high-income to low-income agents. However, a simple welfare transfer is inefficient because of information frictions (unobserved labor productivity). High-productivity types can always pretend to have low productivity by working less, thus being eligible to claim the welfare benefit.

Our study builds on this framework. The novelty is in introducing the following features. Agents derive utility from several consumption goods; some of these are produced at home, i.e., they require both time and market inputs. We distinguish two types of these goods: time and market inputs are substitutes, and time and market inputs are complements. We will refer to the first type of home-produced good as “substitute good”, and to the second “complement good”.

We characterize the optimal allocations in this economy when a social planner does not observe productivity and condition the allocation on the agent's report about his productivity type (or observed earnings). The well-known tension in this framework is that the social planner wants to redistribute from low- to high-productivity agents without incentivizing high-productive agents to misreport their type (or lower their working time or effort).

4. 研究成果

The key distinguishing feature of misreporting is that, for the same observed earnings, high-productivity agents need to work fewer hours than the low-productive counterparts. In other words, the high-productive agents will have more time left for leisure. Thus, a common solution to the misreporting problem is that agents reporting low-productivity type (or having low earnings) should have their leisure over-provided and consumption under-provided compared to the case when the labor productivity is observable.

or the full information case. In our framework, this has the following important implication: abundant leisure lowers marginal costs of time input allocated for home-produced goods. This affects the value of market input but is different for substitute and complement goods. Specifically, under certain conditions, market input for complement goods becomes more valuable, and market input for substitute goods becomes less valuable. This insight offers an additional margin for the social planner to reduce the attractiveness of misreporting strategy: over-provision of market input for substitute goods and under-provision of market input for complement goods.

We, first, turn to the possible implementation of the above provision. We show that means-testing restriction in combination with linear consumption taxes are not enough to implement the optimum. This happens because, while it is optimal to over-provide certain goods, means-testing or linear taxes cannot prevent deviations when agents decrease consumption of overprovided goods in order to increase consumption of under-provided goods.

Next, we investigate the role of non-linear taxes. To illustrate the role of such a tax scheme, we first consider versions of our model with only two consumption goods: regular consumption goods and one home-produced good (either of substitute or complement type). Since in such a framework one good should be over-provided and another under-provided, a possible implementation scheme is to link the effective price of under-provided good to the purchase of over-provided good. Specifically, if an agent deviates from the desired optimum by purchasing too little of a good that should be over provided, the price for another good increases. We show that this joint discount-type consumption tax scheme works well in the environment with two consumption goods.

We next turn to our full model with both types of home-produced goods. In such an environment, the implementation scheme with joint non-linear consumption taxes becomes too complex. This gives rise to the use of in-kind transfers: the good that should be over-provided can be delivered in-kind. The optimal consumption of the remaining two goods can be ensured with the joint discount-like tax scheme described above: the price of a more desired good goes down only if a certain minimum amount of less desired good is purchased.

Our findings suggest a justification for the use of in-kind transfers in means-tested programs. High-productivity types can easily meet means-testing requirement by working less. To reduce attractiveness of this strategy, certain distortions on consumption choices should be put in place. In-kind provision can simplify the implementation of these distortions.

Contributions to existing studies and policy debate: Our results contribute to the debate about the reform of the SNAP program in the US, which is commonly referred to as food stamps. This is one of the largest means-tested programs in the US with the costs of \$65 billion and caseload of around 41 million in 2018 (USDA). Eligible beneficiaries can use SNAP transfers only for the purchase of food. However, food ready for immediate consumption is not eligible. More specifically, the benefits of this program are determined by the Thrifty Food Plan (TFP), which outlines the cost plan to achieve a nutritional diet. The key feature of this plan is its reliance on the lowest costs but most time-intensive food items. A number of studies estimate that SNAP beneficiaries following the TFP guidelines spend considerable time on food preparation. Many suggestions for reforming the program address these significant requirements of home production time for SNAP beneficiaries. We add to this discussion by showing that from the theoretical standpoint, it

may be optimal to provide in-kind goods that are substitutes with time. This contrasts with the current focus of the food stamps program, which provides goods that are complemented with time.

5. 主な発表論文等

〔雑誌論文〕 計0件

〔学会発表〕 計0件

〔図書〕 計0件

〔産業財産権〕

〔その他〕

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6. 研究組織

	氏名 (ローマ字氏名) (研究者番号)	所属研究機関・部局・職 (機関番号)	備考
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7. 科研費を使用して開催した国際研究集会

〔国際研究集会〕 計0件

8. 本研究に関連して実施した国際共同研究の実施状況

共同研究相手国	相手方研究機関
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