14.472 Public Finance II

Redistribution: Cash vs. In Kind

Amy Finkelstein

Fall 2024

In-kind transfers are widespread and large

- Definition (Currie and Gahvari JEL 2008) "**physical provision of a good**, **targeted subsidy** programs in which government pays some fraction of the market cost of the good, and **vouchers**"

- Overarching question: why would government choose to redistribute through in-kind rather than cash programs?

In-kind transfers are widespread and large

Table 1: Public Expenditures on Four In-Kind Programs, Selected OECD Countries

	Health %GDP 2002	Housing %GDP 2001	Child Care %GDP 2003	Education %GDP 2003	Active Labor Market %GDP 2001
Australia	6.1	0.1	0.4	4.7	0.1
Austria	7.6	0.1	0.6	5.1	0.1
Canada	6.7	..	0.2	5	0.4
Denmark	7.3	0.7	1.6	7.3	0.2
France	7.9	..	1.2	5.2	0.4
Germany	8.4	..	0.4	4.2	0.3
Greece	4.6	..	0.4	3.9	
Ireland	5.4	0.5	0.2	4.3	0.4
Japan	6.5	..	0.3	3.3	0.1
Netherlands	5.6	0.4	0.5	4.7	0.4
New Zealand	6.4	0.6	0.4	6.5	0.1
Norway	8.2	0.2	1	7.1	
Portugal	6.5	..	0.8	5.3	0.1
Spain	5.2	0.2	0.6	3.8	0.4
Sweden	7.7	..	1.2	7	0.2
United Kingdom	6.4	1.5	0.6	5	
United States	6.6	..	0.6	5.3	0.2

Source: Currie and Gahvari (2008)

In-kind transfers: US examples

- Majority of US transfer spending is in-kind, not cash
- Health insurance:
  - Direct provision: Medicare and Medicaid
  - Subsidies: Tax subsidy for employer provided health insurance; health insurance exchange subsidies
- Nutrition:
  - Direct provision: School lunches
  - Vouchers: Food stamps (SNAP); WIC (with interesting government contracting - see Okun and Zhou in progress)
- Housing:
  - Public housing - direct provision
  - Section 8 vouchers
- Education:
  - Direct provision: public primary / secondary and post secondary
  - Subsidies and vouchers (grants): financial aid for post-secondary

Road Map

- Main focus: Economic Rationales for In-Kind Transfers vs. Cash:
  - Theory and (not enough) Evidence
- Additional question: Form of in-kind transfers:
  - Direct provision vs. Subsidies / Vouchers

In-kind transfers 101

- Basic economics: cash dominates in-kind
  - Benefits of cash superior in terms of recipient utility, since in-kind constrains recipient behavior
  - Costs of in-kind likely higher:
    - Government unlikely to have an efficiency advantage in production
    - Administrative costs of delivering in kind likely higher

- Public Finance: Atkinson-Stiglitz says don't tax / subsidize commodities (–> no in kind transfers!)

- So why ever have in-kind transfers?

Potential rationales for in-kind transfers

- Paternalism / inter-dependent preferences
- Political economy
- Samaritan's dilemma
- Market failures
- Screening (tagging and "self targeting")
- Pecuniary Effects (depends on form of in-kind transfer)

Potential rationales for in-kind transfers

- **Paternalism / inter-dependent preferences**
- Political economy
- Samaritan's dilemma
- Market failures
- Screening (tagging and "self targeting")
- Pecuniary Effects (depends on form of in-kind transfer)

Paternalism

- Specific egalitarianism (Tobin 1970, Harberger 1984) and merit goods (Musgrave 1959)
  - Objective: ensure everyone a minimum consumption of certain specific commoodities (e.g. healthy food, healthcare, housing)
  - Can motivate by
    - a non-individualist social welfare function: society cares about certain consumption goods for poor over and above their effect on poor's utility
    - or individualistic one via inter-dependent preferences - i.e. consumption externalities: my utility depend on your consumption
- Individual failures of optimization
  - Stronger: fail to maximize own utility (e.g. time inconsistency that creates over-consumption of bads such as alcohol, video games)
  - Weaker: agency problems within the family (e.g. family doesn't maximize child-wellbeing)

Implication: optimal over-provision of in-kind good

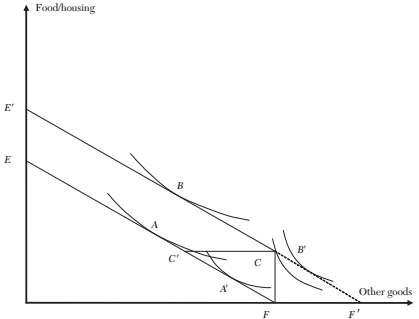

Figure 1. An Individual's Potential Choices before and after Receiving Food Stamps or Free Housing

- Compared to cash (shifts EF to E'F'), in-kind shifts to E'CF (if top up allowed as in SNAP) and EC'CF if not (as in housing)
- Individual A (moves to B) is indifferent between two types of transfers
- A' better off under cash (would move to B') than in-kind (C - over-provision)

Paternalism: Under-studied empirically

- Arguably a major motive for in-kind transfers
  - Liscow and Pershing (2022 NTJ survey experiments)
  - Currie and Gahvaria (VoxEU 2007): "it is hard to escape the conclusion that paternalism remains a fundamental underlying rationale for in-kind transfers"

- Implications for optimal mix of cash and in-kind?
  - Chorniy, Finkelstein and Notowidigdo (in progress)

Potential rationales for in-kind transfers

- Paternalism / inter-dependent preferences
- **Political economy**
- Samaritan's dilemma
- Market failures
- Screening (tagging and "self targeting")
- Pecuniary Effects (depends on form of in-kind transfer)

Political Economy

- Several variants
  - Corruption prevention (harder to steal bushels of rice than cash)
  - Salience of transfer (political credit)
  - Easier to "sell" this form of redistribution
    - Why would that be?
    - Presumably some form of paternalism?
- Limited empirical work

Potential rationales for in-kind transfers

- Paternalism / inter-dependent preferences
- Political economy
- **Samaritan's dilemma**
- Market failures
- Screening (tagging and "self targeting")
- Pecuniary Effects (depends on form of in-kind transfer)

Samaritan's dilemma

- Parable of the Good Samaritan
- Buchanan 1975: The Samaritan's dilemma
  - Lack of commitment creates a time consistency problem / distorts potential recipients' current behavior due to anticipation of future transfers
  - Examples:
    - Airplane hijkacking
    - People who have refused to work and are now starving
    - People who didn't buy health insurance and now need medical care
- But why not just provide cash?

Samaritan's dilemma as a reason for in-kind transfers

- Coate (AER 1995)
- Classic public finance explanation for government transfers:
  - altruism + free-riding –> under-provision of private charity and scope for government transfers to improve social welfare
- This paper: altruism provides an efficiency rationale not only for transfers but for **in-kind** transfers of insurance
- Actors unable to commit not to provide aid in certain situations - eg natural disasters, medical illness
  - even if government could pre-commit, private actors / private charity cannot
  - distorts individual behavior regarding purchase of insurance or ex-ante mitigation efforts
- Provides rationale for government in-kind transfers
  - Cash transfers not sufficient (see e.g. Charles Murray 2016 on UBI)

Comment on Coate: Dearth of follow-up work

- Empirical evidence of impact of in-kind transfers on private behavior?
  - Some evidence for FEMA creating reduced private incentives to reduce flood risk
  - Charity care reducing incentives to purchase private health insurance??
- Even if does not distort private behavior, is there is an efficiency argument for formalizing implicit commitments?
  - This is an argument frequently made for universal coverage

Samaritan's Dilemma and Universal coverage

- If we are going to respond ex post in crisis, efficient to formalize this up front
  - Don't know of academic work here (theoretical or empirical)
- But a lot of agreement across the political spectrum
  - Conservatives: Romneycare; Charles Murray; Hayek
    - "once it becomes the recognized duty of the public to provide for the extreme needs of... sickness... irrespective of whether the individuals could and ought to have made provision themselves... it seems an obvious corollary to compel them to insure (or otherwise provide) against those common hazards of life... [otherwise] they would become a charge of the public" - Hayek, The Constitution of Liberty
  - Liberals: RBG on 2010 Obamacare mandate; Swiss 1996 health insurance mandate
- For more discussion, see Einav and Finkelstein 2023 ("We've Got You Covered")

Potential rationales for in-kind transfers

- Paternalism / inter-dependent preferences
- Political economy
- Samaritan's dilemma
- **Market failures**
- Screening (tagging and "self targeting")
- Pecuniary Effects (depends on form of in-kind transfer)

Market failures

- Credit market failures / liquidity constraints (cannot borrow/save at market interest rates)
  - e.g. cannot borrow against kids' future human capital to pay for their education –> public provision of education
  - But why not solve with lump-sum cash transfer?
    - Presumably requires some kind of paternalism (e.g. parents would spend cash on some other - perhaps high return - activity but not on kids; agency problems within the family)
- Insurance market failures (e.g. adverse selection) mean cannot purchase insurance at actuarially fair prices
  - So insurance may be valued at more than cost yet not provided by unregulated market
  - Potential rationale for giving low-income individuals Medicaid rather than cash (bigger bang for buck)
  - Rationale for food transfers in developing countries (Gadenne et al., AER)

Insurance Against Commodity Price Risk

- Gadenne, Norris, Singhal and Sukhtankar (AER forthcoming) "In-Kind Transfers as Insurance"
- Substantial variation in price of staple commodities across time and space
- Optimal transfers: price-indexed cash transfers to equalize marginal utility of income across price states
  - Note: not equalizing consumption; may want to substitute in response to changes in relative prices
  - Often infeasible because local prices are difficult to observe at high frequency
- In-kind transfers as second-best policy: provide insurance against commodity price risk

Commodity Price Risk

- Infeasible first best: price-indexed cash transfers to equalize marginal utility of income across price states
- Compare second best alternatives: price-invariant cash transfers and in-kind transfers
  - In kind transfers preferred as long as the high marginal utility of income states are also high price states (and households are inframarginal)
- Empirical application: India's flagship in-kind transfer program: the Public Distribution System (PDS)
  - One of the largest in-kind programs in the world: provides food transfers to nearly a billion people
  - Key challenge: measuring marginal utility of income
  - Cool proxy: household falling below minimum calorie requirement (MCR)

Empirical results

- NB: ex ante not obvious that high rice prices associated with lower caloric intake (high price states could also be high income states)
- Negative covariance between local market's price of rice and caloric intake:
  - 10% increase in market price of rise associated with a (statistically significant) 1.3 percentage point decline in households meeting MCR
  - indicates potential benefits from insurance against price risk
  - Note: does not require exogenous price shocks (ok if price shocks correlated with e.g. income changes)
- Expansion of PDS (state-year staggered expansion in eligibility and benefit level) reduces sensitivity of probability of meeting MCR to market prices
  - Consistent with in kind transfers providing insurance against food price risk.

Alternative approach to market failure rationales

- The existence of a market failure is necessary but not sufficient for a market-failure based rationale for in-kind transfers
- A sufficient condition for a market-failure based rationale for in-kind transfers is that the in-kind transfers are valued by recipients at more than their cost (i.e. cash-equivalent)
  - How to empirically value in-kind transfers?
  - [Hold That Thought] Will look at below in Lieber-Lockwood and also later in course when we study value of Medicaid

Potential rationales for in-kind transfers

- Paternalism / inter-dependent preferences
- Political economy
- Samaritan's dilemma
- Market failures
- **Screening (tagging and "self targeting")**
- Pecuniary Effects (depends on form of in-kind transfer)

Tagging and Self-Targeting

- Central problem in public finance: social planner wants to redistribute (or insure) but has imperfect information about "ability" (or underlying attribute along which want to redistribute (or insure))
  - Concern that may transfer to people whom don't want to, and miss people whom do
    - e.g. is DI going to people who are truly disabled, cash transfers to people who truly have no productive employment etc
  - Concern about distorting incentives (e.g. distort labor supply if transfer based on earnings)
- Diamond-Mirlees optimal non-linear income tax problem (471)
  - Want to redistribute from high ability (high marginal product) to low ability (low marginal product)
  - Key challenge: ability (wage) not observed therefore distribute on the basis of income (wage*hours) which creates distortion in labor supply
- Tagging and targeting:
  - Can we improve on social planner's ability to insure or redistribute above and beyond the optimal non-linear income tax?

Optimal income tax in one slide

- Basic Mirlees (1971) model:
  - High and low ability types have different ability (marginal product / wage)
  - Goal of income tax is to redistribute from high to low ability
  - Ability is not observed
  - Income (= wage x hours) is observed
- Binding IC constraint on high ability type prevents first best redistribution
  - i.e. equalizing consumption across types (w utilitarian swf) not incentive compatible

Tagging and self-targeting

- Terminology:
  - Tagging: using observables to target transfers to people believed to have high marginal utility of consumption (e.g. kids, elderly, disabled).
    - Akerlof (1978) tagging model
  - Self-targeting (or screening): getting "right" individuals to self-select into transfers
- Both are attempts to combat / reduce moral hazard (weaken the binding IC constraint in the optimal income tax problem)

Tagging (examples)

- Akerlof example: categorical welfare
  - i.e. Cash welfare to poor in female headed households
    - Lower marginal product (i.e. child care costs etc)
    - Endogeneity of tag?
- Disability insurance can also be rationalized / understood as a potential tag
  - Diamond-Sheskinski (1995)
- Place-based policies as a potential tag (Gaubert et al. 2020)

Disability Insurance as a Tag

- Diamond-Sheshinski (1995)
- People have different disutilities of work
- First best outcome: only work if marginal product of work exceeds disutility from work
  - Consumption fully insured across states (work / not work)
- Issue: don't directly observe "disutility of work"
- Disability as an (imperfect) tag for high disutility of work / high marginal utility of consumption
  - Type I and Type II errors (and the boy who cried wolf)
- By adding disability insurance to existing income tax system can redistribute with less distortion (Akerlovian tag)
  - optimal disability insurance is non zero (envelope thm)
  - the worse the tag, the lower the optimal amount of disability insurance

Empirical question: how good a tag is disability

- Observed disability is an imperfect tag for true medical condition / disutility of work
- What empirical literature discusses:
  - Large empirical literature asking how DI affects labor supply
  - But how does this relate to optimal DI? Theory is about disutility of work among marginal enrollee

Despande and Lockwood 2022: Beyond Health

- Deshpande and Lockwood (EMA 2022): Beyond Health: Non-Health Risk and Value of Disability Insurance
- Substantial academic and policy interest in the question: Are the individuals who get SSDI "not that disabled"?
  - i.e. How bad is their health really? How much would they work in absence of DI?
- But what we actually want to know: how useful is disability as a tag for marginal utility of consumption
  - e.g. looking at "less severe" disability recipients compared to "less severe" non recipients, the former are worse off on a number of consumption proxies (probability of foreclosure or eviction; consumption level)
  - more severe non recipients are better off on these dimensions than more or less severe recipients

Places vs. People

- A lot of place-based policies
  - eg investment and wage subsidies for firms who locate in poor areas
- Standard economic rationale for place based policies is agglomeration economies
- Generally considered a poor way to do redistribution
  - with perfectly mobile workers and inelastic housing supply, benefits of location-based subsidies capitalized into land rents (transfer to local landowners)
  - without perfect mobility, place-based subsidies can affect utility of inframarginal workers but these may or may not be the high marginal utility of consumption workers (seems indirect)
  - "Help poor people, not poor places"

Places as a Tag

- Gaubert, Kline and Yagan (2020) "Place-Based Redistribution"
- Key insight: place (distressed neighborhood) may be a tag for unobserved ability of individuals
- Empirically the key issues are:
  - how good a tag is it (how strong a signal)
  - how large is efficiency cost from migration response (endogeneity of tag)

Self-targeting

- Theory: Nichols and Zeckhauser (AER P&P 1982)
- Application: Medicaid home care (Lieber and Lockwood 2019)

Self-targeting

- Want to redistribute based on an unobserved characteristic (e.g. ability)
- Mirlees (1971) optimal income tax: taxes marginal income of low-ability individuals (despite their being intended beneficiaries) in order to deter high-ability people from masquerading as low-ability individuals
- Nichols-Zeckhauser (1982): if demand for good (g) is higher in higher marginal-utility states of the world (e.g. decreasing in ability) in-kind transfers can allow for more redistribution to the intended recipients without breaking the IC constraint for the mimickers
    - Note: Will come back to self-targeting and this model in next lecture when we study take-up of benefits (and hassles/ordeal mechanisms which are another application of the model)

In-Kind Transfers to Deter Imposters

•Two types: Intended recipients (B) and potential imposters (A). Type not observed.

•There is a pure income tax-transfer scheme in place in which if pre-tax income is restricted to a certain level, receive a cash transfer. Assume B receives transfer, A does not.

•Assume that optimal tax transfer scheme has not fully equalized mu of income (B's is still higher so would like to do more transfers but if so would violate IC constraint). Binding IC constraint: A indiff btwn pretending to be B and not…

• Given his transfer income, B chooses to purchase optimal amt X*(B) of good X.

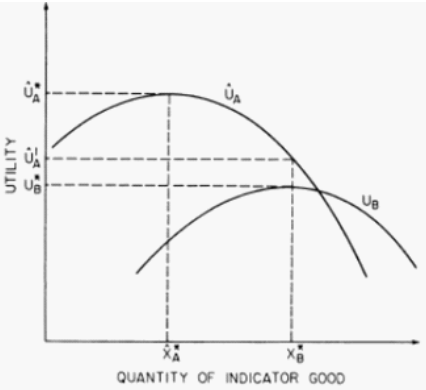

FIGURE 2. IN-KIND TRANSFERS TO DETER IMPOSTORS

• Were A to shirk and receive same income as B, he would buy only X*(A) worth of X.
• Figure shows A's utility as a function of X consumed *if he masquerades as B and gets the transfer intended for B.*

In-Kind Transfers to Deter Imposters

•Key point: when shirking and claiming to be B type, A's optimal consumption of X is less than B's

•Now imagine we convert part of the cash transfer to in kind provision of X

•Setting amt provided below X*(A) has no effect (relative to cash)

•AS we raise the amount provided above X*(A), A suffers increasing losses if he masquerades as B, and B suffers no loss so long as X< X*(B)

•So at a minimum would want to set amt of X provided at X*(B). Providing X*(B) in lieu of cash: B (intended recipient) is no worse off; A is no worse off if he doesn't masquerade. Moreover…

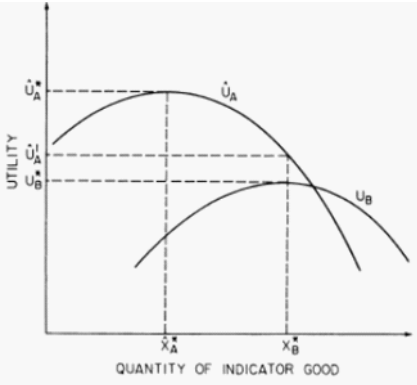

FIGURE 2. IN-KIND TRANSFERS TO DETER IMPOSTORS

If A does masquerade he has lower utility than with cash redistribution (see picture) thus creating opportunity to do more redistribution (beofre A was indifferent btwn masquerading and not, now strictly prefers not to)

In-Kind Transfers to Deter Imposters

•Have just argued that can increase redistribution (which wanted to do given binding IC constraint) by providing X*(B) in kind in lieu of cash

•*Key point:* In general, will be optimal to transfer an amt X larger than X*(B).

•Intuition: envelope thm: marginal increase in X above X*(B) has only second order welfare loss to B but first order welfare loss to A if masquerades.

•*Optimal in kind transfer scheme forces B to consume "too much" X*

•*Sacrificing productive efficiency to increase targeting efficiency!*

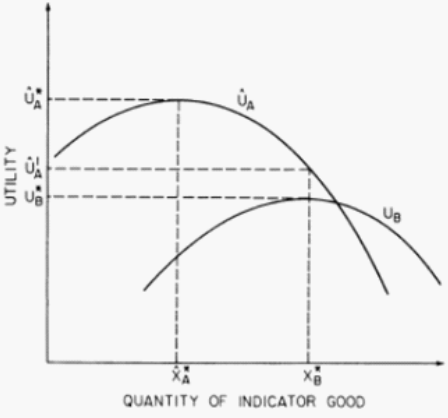

FIGURE 2. IN-KIND TRANSFERS TO DETER IMPOSTORS

Relationship to optimal income tax theory (471)

- Nichols and Zekchauser: In-kind transfers can weaken IC constraint and allow more redistribution if hurts the would-be mimicker (high ability) less than the mimicked (low ability)
  - i.e. if high and low ability want to consumer different levels of the in-kind good
- Also: In-kind transfers can improve the efficiency of the income tax system via impacts on labor supply if in-kind good is a complement to labor supply (which is inefficiently low under optimal income tax)
  - Relates to literature on benefits of commodity taxation in presence of optimal income tax (Currie and Gahvari 2008 JEL is nice overview)

Relationship to optimal income tax theory

- Atkinson-Stiglitz (1976): no role for in-kind transfers
  - assumes: preferences are weakly separable btwn labor supply and consumption goods, and identical sub-utility function over goods for all consumer types (only heterogeneity is in skills)
  - Pareto efficient allocations (constrained by self selection) can be implemented through a non-linear income tax
  - Commodity taxes are not needed (and therefore in-kind transfers as well) in presence of optimal income tax
  - Key intuition: consumption taxes are redundant bc MRS between any two goods is same for the mimicker and the mimicked
- Saez (2002): rationale for in-kind transfers
  - Allow for heterogeneity in preferences across types
  - Then differential commodity taxes can be useful for redistribution if consumption patterns provide additional information about ability (correlated preference heterogeneity)

Application: Medicaid Home Health

- Lieber and Lockwood (2019 AER) "Targeting with in-kind transfers: evidence from Medicaid home care"
  - nice example of repurposing a previously done RCT!
- Consider the government's choice between in-kind and cash benefits.
  - Government budget can be allocated across a cash benefit and a subsidy to some good.
  - Analyze the welfare impacts of a budget-neutral shift toward in-kind benefits that increases the subsidy rate while decreasing the cash benefit to make it budget neutral
- Use framework to analyze costs and benefit of in-kind vs cash
  - Context: Medicaid home care expenditures are large and growing fast.
    - Is in-kind preferable to cash?

Conceptual framework

- Basic tradeoff: cash is more valuable but in kind may be better at targeting transfers to higher-marginal utility states
- Cost of in kind: moral hazard
  - Subsidy to good distorts consumption of good above efficient point (where WTP = SMC)
  - The larger this consumption response, the lower the value to recipients of the in-kind benefit relative to its cost
- Potential benefits of in-kind: targeting
  - Across individuals: unobserved value of formal care (e.g. cost of informal care; unobserved nature of health condition)
  - (new focus of theirs) Within individuals across states: health not verifiable; by making the transfer in kind, may be better able to target poor health states
    - This applies to in kind transfers of insurance
    - e.g. don't pay lump sum for hip replacement bc want to target people who actually need it.

Empirical objects required for framework

- Moral hazard effect of in-kind
  - How elastic is use of home health care wrt price?
  - Note: Need causal estimates here
- Targeting 1: How much residual variation in use is there among the eligibles
  - Less variation suggests greater benefits of cash (which is applied uniformly conditional on eligibilty)
  - Note: This is observational / cross sectional
- Targeting 2: How correlated is consumption of home care with marginal utility of consumption within the eligibles
  - Larger (positive) correlation suggests better self-targeting properties
  - Note: This can be observational / cross sectional

RCT Evidence of Moral Hazard Impact of In-Kind Transfers

TABLE 1—AVERAGE HOURS OF FORMAL CARE BY TREATMENT GROUP

	Near-cash	In-kind	Difference p-value
Overall	6.85	14.19	<0.01
Arkansas	6.29	10.76	<0.01
Florida	7.69	18.60	<0.01
New Jersey	7.01	16.10	<0.01

Notes: Means of formal care consumption in hours per week. *Near-cash* and *In-kind* groups are defined by randomized treatment assignment. p-values test for equality of means. Rows denote different samples.

RCT Evidence of Moral Hazard Impact of In-Kind Transfers

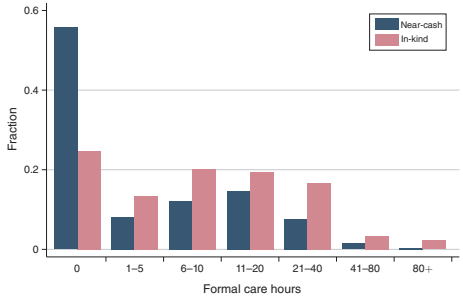

FIGURE 2. PDFS OF FORMAL CARE CONSUMPTION BY RANDOMIZED BENEFIT ASSIGNMENT

Notes: Formal care consumption, in hours per week, among participants randomly assigned to the *in-kind* versus *near-cash* benefit. Data from Cash and Counseling follow-up survey.

Heterogeneity in Demand for Care Within Eligibles (Observational)

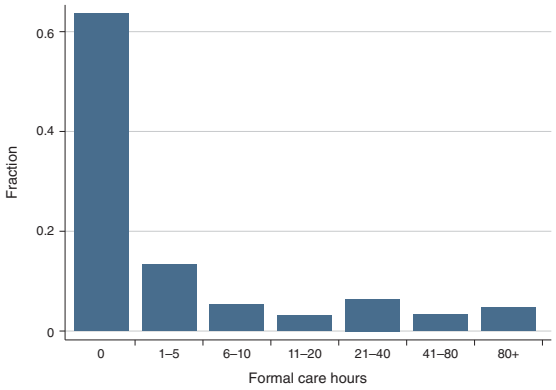

Figure 3. Distribution of Formal Care Consumption in the Benefit-Eligibile Population

Notes: Hours per week of formal care consumption among the non-institutionalized population aged 65 and older with two or more ADL limitations. Data from the 1999 National Long-Term Care Survey. Sixty-three percent do not consume any formal care. Conditional on consuming formal care, median consumption is 10 hours per week, the seventy-fifth percentile is 40 hours per week, the ninetieth percentile is 120 hours per week, and the ninety-fifth and ninety-ninth percentiles are 168 hours per week (around-the-clock care). The standard deviation, σ_{X_k}, is 35 hours per week.

Targeting of in-kind vs cash within eligibles (observational)

TABLE 3—TARGETING OF MEDICAID HOME CARE

	Take-up = 0 (1)	Take-up = 1 (2)	Difference *p*-value (3)
Fraction of eligibles who do versus do not take up, under different definitions of eligibility			
Income eligible, <2 cars	0.95	0.05	
Income eligible, no cars	0.90	0.10	
Restrictive income, no cars	0.81	0.19	
Summary statistics			
Level of formal care demand	8.30	20.82	<0.01
Age	80.01	80.82	0.45
Four or more ADLs	0.46	0.66	<0.01
Health fair or poor	0.69	0.78	0.12
Female	0.70	0.72	0.66
Lives alone	0.29	0.39	0.12
Unmarried	0.59	0.67	0.19
Has children	0.75	0.78	0.73
Household income, monthly	847.95	675.56	0.01

Notes: Means for people who did (column 2) versus did not (column 1) take up Medicaid home care. *Difference p-value* tests the equality of means across groups. Take-up rates based on non-institutionalized individuals aged 65 and older with two or more ADL limitations who meet different sets of financial-related eligibility criteria. *Income eligible* is based on the income thresholds each state uses to determine eligibility. *Restrictive income* applies the most stringent (lowest) income limit to all states to try to estimate an upper bound on take-up. Number of cars is an important determinant of eligibility for Medicaid home care. Summary statistics by take-up decision are for those who meet the *Income eligible*, *<2 cars* criteria. This sample has 448 individuals. The level of formal care demand, in hours per week, uses our estimate of price sensitivity to simulate each individual's hours of formal care if she faced a price of $18.50 per hour, the maximum in the data. The alternative to health fair or poor is health good or excellent. Data from the 1999 NLTCS.

Targeting of in-kind vs cash within eligibles (RCT)

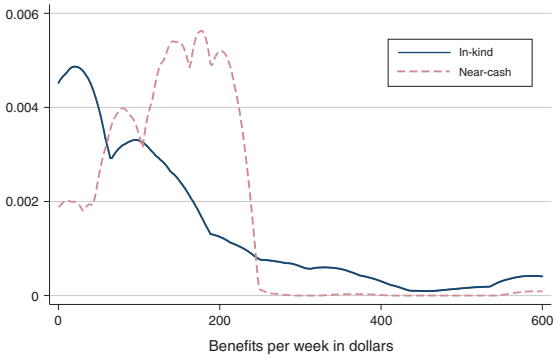

FIGURE 4. TARGETING EFFECTS OF IN-KIND PROVISION ON THE INTENSIVE MARGIN

Notes: Distributions of transfers in the Arkansas Cash and Counseling experiment. Arkansas is the only state for which we observe care plan hours, which we need in order to estimate the near-cash transfer. Transfers are measured in dollar-costs per week at market prices. We scale up the near-cash group's transfers to have the same mean as the in-kind group's in order to isolate differences in the concentration of transfers, not their average size. The average transfer is $133. Groups are based on each individual's randomized assignment. Transfers have been censored at $600 for the figure.

Empirical Evidence

- Price elasticity of care use (determines magnitude of moral hazard: how in-kind provision increases consumption of the good)
  - Estimate using RCT from Cash and Counseling experiments - randomized into either traditional in-kind home care benefit or near-cash
  - Find substantial moral hazard: home care consumption doubles with in-kind vs cash.
- Heterogeneity in demand for formal care within eligible population
  - Look at distribution of formal care consumption among eligibles. Find substantial residual variation, even conditional on rich observable measures of health.
  - Suggests tagged cash benefits would not have great targeting properties (a lot of residual heterogeneity)
- Examine targeting of in-kind provision *within the eligible population* by looking at covariance between benefits paid out and proxies for marginal utility (e.g. health)
  - Find in-kind sharply concentrates benefits on small fraction of benefit-eligible states in which people are sicker, have worse informal care options, and have greater demand for formal care

Findings from calibrating the model

- Substantial moral hazard - in kind provision significantly reduces value of benefits (vs cash)
- But substantial improved targeting - in kind provision concentrates benefits on high marginal utility states of the world
- On net: in kind benefits are much less valuable to recipients but cash leaves much of the risk uninsured (can't target the high marginal utility states)
- "Under a wide range of assumptions within a standard model, the targeting benefit of in-kind provision exceeds the distortion cost"

Potential rationales for in-kind transfers

- Paternalism / inter-dependent preferences
- Political economy
- Samaritan's dilemma
- Market failures
- Screening (tagging and "self targeting")
- **Pecuniary Effects (depends on form of in-kind transfer)**

Price / pecuniary effects of in-kind transfers

- Theory: Coate et al. 1994
- Applications: Food (Cunha et al. 2018); housing (Blanco 2023, Diamond and McQuade 2019)

Price / pecuniary effects of in-kind transfers

- Cash transfers or subsidies for specific goods increase demand for normal goods, which increases their price
- Direct in kind transfers (public provision) similarly increase demand but also increase supply which lowers prices
  - e.g. if provide food in kind, this increases supply of food
  - relative to cash transfers, in-kind transfers can therefore be price reducing
  - because of supply effect, can be more effective potentially than cash transfer for a given government expenditure

Pecuniary Effects: Empirical Evidence

- Cunha, De Giorgi and Jayachandran (2018 Restud) "Price Effects of Cash Versus In-Kind Transfers"
- Re-examine a 2003 RCT in rural Mexico that randomly assigned 200 villages to receive either boxes of food (trucked into the village), equivalently valued cash transfers, or no transfers
  - Original purpose: study impacts on food consumption and malnutrition
  - Another very nice example of re-purposing an empirical setting (**we should do more of this!**)
- Find evidence of pecuniary effect: food prices significantly lower under in-kind transfers compared to cash transfers
  - Relative to control, in kind transfers reduced food prices by 4 percent, cash transfers had a positive but neglible effect on prices
  - Price effects larger in remote villages (supply more inelastic)

Pecuniary Effects: Housing

- Construction of public housing
  - Desmond (2016 "Evicted") claims national association of realtors lobbied for vouchers over public housing because of concerns that public housing would reduce rental prices
  - "In policy circles, vouchers were known as a 'public private partnership'. In real estate circles, they were known as 'a win'."
  - Demolition of public housing increases house prices (Blanco 2023)
- Diamond and McQuade (JPE 2019) Study Low Income Housing Tax Credit
  - Funds multifamily housing developments for projects that will meet low income occupancy requirements
  - Find positive externalities on low income neighborhoods: increases house prices, lowers crime, and attacts racially and income diverse populations
  - In high income neighborhoods it causes house price declines and attracts lower income households

Recap

- Many potential rationales for in-kind transfers
  - Paternalism / inter-dependent preferences
  - Political economy
  - Samaritan's dilemma
  - Market failures
  - Screening (or "self targeting")
  - Pecuniary Effects (depends on form of in-kind transfer)

- Only recently starting to get some evidence - e.g. on market failures, screening and pecuniary effects
  - Need more evidence on these and other mechanisms

Types of evidence needed

- Evidence that a particular mechanism is operational (whether intended or not)
  - Only recently starting to get a few papers on some evidence - e.g. on market failures (Gadenne et al.), tagging (Deshpande and Lockwood), self-targeting (Lieber and Lockwood) and pecuniary effects (Cunha et al; Blanco)
    - NB: key empirical challenge in Gadenne et al., Deshpande and Lockwood and Lieber and Lockwood: proxying for marginal utility of consumption
- Evidence for which rationales drive particular in-kind transfers
  - Liscow and Pershing (NTJ 2022) survey experiments seems to be the current frontier
  - NB: different rationales imply over-provision or not of the in-kind good (e.g. paternalism vs self-targeting)
- **Lampost problem:** paternalism and/or political economy "felt" to be major rationales (e.g. Currie and Gahvari 2008)
  - yet little evidence of which variants (e.g. for political economy - salience vs sellability) are driving force or optimal policy design given a specific variant

Road Map

- **[Done]** Main focus: Economic Rationales for In-Kind Transfers vs. Cash: Theory and (not enough) Evidence
- **[Up Next]** Additional question: Form of in-kind transfers: Direct provision vs. Subsidies / Vouchers

Form of in-kind

- Direct provision vs. Subsidies / Vouchers

- What is the difference between a subsidy and a voucher?
  - Subsidies change the marginal price the consumer faces
  - A voucher is a subsidy if it is marginal (i.e. is for more of the good than the consumer would purchase absent the program)
    - voucher as an 100% subsidy up to a cap
  - A voucher that is inframarginal (i.e. is for less than or equal to the amount the consumer would purchase in the absence of the program) is 'labelled cash'
    - neoclassical model: should operate like cash
    - but with mental accounting could increase consumption of the labelled good more than cash (see Hastings and Shapiro AER 2018 on SNAP)

Direct Provision vs. Subsidies / Vouchers

- Direct provision can create positive pecuniary externalities (Coate 1994) vs subsidies/vouchers
- Administrative considerations:
  - Direct provision (e.g. moving millions of tons of food) can be much more costly to administer
  - Theft / diversion of benefits by local government officials easier with direct provision

Administrative provision

- Banerjee et al. (AER 2023): "Electronic Food Vouchers: Evidence from an At-Scale Experiment in Indonesia"
- Compare in-kind food transfers vs vouchers to purchase food on private market
  - US analog: Trump proposal for "Food Boxes" vs Food Stamps / SNAP
- Conceptually:
  - vouchers more flexible (in kind may constrain consumption choices)
  - in kind may reduce relative prices (supply effects)
  - if in kind good is inferior, may improve targeting via self-selection
  - Administrative considerations:
    - voucher may be easier to refill than moving millions of tons of rice
    - voucher may have less leakage (food is divisible voucher is not)

Food vs Food Stamps

- Randomized entire districts in Indonesia (average population 500,000) to switch from existing in-kind food transfer to electronic food vouchers
  - In-kind transfer is mostly inframarginal
- Findings suggest that change from in-kind to voucher substantially changed program impacts, substantially reducing poverty
  - Vouchers were much more targeted at intended recipients
    - vouchers increased concentration of benefits among the poor
    - despite the fact that vouchers allow purchase of higher quality food and are more fungible, both of which might appeal more to richer households
  - Vouchers cut down on leakages from sub-dividing and spreading in-kind food aid across village
- Little evidence for pecuniary externalities from in-kind (except perhaps in the most remote districts)

In-kind transfers: remarkably little empirical evidence

- Recently have started to get some Samaritan's dilemma
  - Evidence of impact on behavior?
- Targeting: Better at screening than cash?
  - Only recently starting to get some empirical evidence; could use more!
- Pecuniary effects - supply side effect on local prices
  - Ditto!
- **Observation on methods:** For estimating value of in-kind transfers, many papers rely on cross-sectional relationship between benefit receipt and (proxy for) marginal utility of consumption, rather than causal effects of transfers (e.g. Deshpande and Lockwood; Gadenne et al., Lieber and Lockwood...)