

# Homelessness as Bad Luck: Implications for Research and Policy

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# Everybody knows

- Most shelter spells are short, and few are very long (Culhane et al. 2007)
- Many different people experience homelessness in a year (Link et al. 1994, Culhane & Metraux 1998)
- Transitions to homelessness are very difficult to predict (Shinn et al. 1998)

# Luck Matters

- Homelessness is part of the stochastic variation in people's lives.
- This paper is about the implications of this way of looking at homelessness.
- Plan: first, some theory. Then, where does the bad luck come from? Finally, policies to smooth variation.

# Part One: Theory

- Hall (1978)

$$E c(t+1) = c(t).$$

Conditions:

Perfect capital markets

Quadratic utility

# Implications for research

- Current housing is a sufficient statistic for future housing
- In a population with the same distribution of shocks, current housing is the only predictor of future homelessness.
- Otherwise, current housing and correlates of higher order moments predict future homelessness.
- If shocks are symmetrically distributed, false alarm rate has to be at least 50%.

# Implications for Policy

- For prevention, predictions are **inherently** poor; you can't pick people who are going to be homeless any more than you can pick stocks that will outperform the market.
- Aiding saving may be more important in preventing homelessness than aiding borrowing.

# Reinterpreting Shinn et al as a story about stochastic dynamic processes

- They found

Table 1: Distribution of New York City Welfare Population 1988

Thousands of Families

| At time 1:       | Request shelter | Don't request | Total |
|------------------|-----------------|---------------|-------|
| At time 0:       |                 |               |       |
| Characteristic X | 6               | 27            | 33    |
| Characteristic Y | 3               | 244           | 247   |
| Total            | 9               | 271           | 280   |

- Five years later, about 8% of families that entered shelter and didn't get subsidized housing were homeless.

# My interpretation

- $C(t) = .54 + .74 C(t-1) + e(t)$ ,  $e(t)$  distributed  $N(0,1)$
- $X = 0.5$ ,  $Y = 2.3$ .
- Homeless if  $C(t) < 0$ .
- If you cut the variance in half, number of homeless families at time 1 falls from 9,000 to 1137.
- To accomplish the same reduction by uplifting, you have to triple the level.
- Smoothing may be a more effective policy than uplifting.

# Part Two: What risks matter?

## Responses from Cuomo Commission

|                             | Families | Single adults |
|-----------------------------|----------|---------------|
| Income shocks               | 11-32%   | 28-39%        |
| Health and addiction shocks | 10-12%   | 32-32%        |
| Relationship shocks         | 16-28%   | 10-11%        |
| Rent shocks                 | 5-51%    | 1-19%         |

# Comparing volatility of rent and volatility of income

- PSID data in Keys (2008) imply that 13% of HS dropouts and 25% of black women experience a 40% drop in income in a two-year period.
- AHS data indicate that 2-5% of apartments experience an increase in rent of over 40% over a two-year period.
- Apartments that poor people might reasonably occupy are not that different.

# Bottom Line on Risks

- Income shocks are probably more important than rent shocks as immediate precursors to homelessness. Income shocks could include health shocks.
- Entirely consistent, though, with current housing consumption as the only predictor (or best predictor) of future homelessness.

# Gentrification

- Therefore, would not expect gentrification shocks to be major precursors to homelessness.
- Previous address of most homeless families is a poor neighborhood (as predicted by Hall equation), not a gentrifying neighborhood (Culhane et al. 1996, Wong and Hillier 2001).
- Poor people are not more likely to leave gentrifying neighborhoods than other neighborhoods (Vigdor 2002, Freeman and Braconi 2004, Freeman 2005).
- But gentrification could be produced by changes in income distribution that also increase homelessness.

# Part Three: Policies to Reduce Shocks

- Policies to mitigate income, health, and relationship shocks in general are beyond the scope of this paper.
- Policies to mitigate rent shocks are not going to make a big difference, usually.
- Rent control is designed to mitigate rent shocks, but its effect on homelessness is theoretically ambiguous.
- Empirically, the consensus is that effect of rent control on homelessness is small; no consensus on direction.

# Shared Equity Mortgages

- May make it easier for poor people to insure against physical and market risks involved in owning houses.
- But may not provide as much liquidity insurance as traditional mortgages do—investing partner may fear incentive effects of reduction in equity share.
- That may lower hurdles to getting mortgages.
- No evidence at all.

# Subsidized Housing

- Not designed at all as a safety net program, and rarely evaluated in these terms.
- Provides excellent insurance to people who receive subsidies
- Rent geared to income is insurance against income shocks and against rent shocks (although response to income shocks is often slow).
- But poor insurance against physical shocks and may exacerbate relationship shocks.
- Big question: how much of the homelessness-reducing power of subsidized housing is due to the subsidy and how much is due to the insurance?

# Subsidized housing in the larger context

- Do entry into and exit from subsidized housing tend to smooth consumption?
- Weak reason to think so: entries coincide with low income and exits are correlated with rising income.
- But since many of the worst off people do not have the opportunity for subsidized housing, the question is open.
- Entitlements would smooth consumption of the average poor person better.

# Shelters

- Shelters smooth housing consumption the same way that unemployment insurance smooths general consumption.
- Shelter spells and unemployment spells are same order of magnitude in length.
- Shelters are harder to defraud than unemployment insurance: eg, harder to live somewhere else and in a shelter than to work off the books and receive unemployment insurance.

# Durations of completed spells (days)

|                            | Households With Children |        |
|----------------------------|--------------------------|--------|
|                            | Mean                     | Median |
| Public housing             | 1410                     | 774    |
| Tenant-based assistance    | 1245                     | 756    |
| NYC family shelter         | 770                      |        |
|                            | Households w/o Children  |        |
| Public housing             | 2235                     | 712    |
| Tenant-based assistance    | 1092                     | 376    |
| NYC single shelter         |                          | 25     |
| Philadelphia adult shelter |                          | 7      |
| Athens, GA shelter         | 17                       | 8      |
| NSHAPC                     | 761                      | 270    |

# Unemployment spells

- Mean duration of completed spells 1975: 68 days (Clark and Summers 1978)

# Implications of the Analogy

- How to find optimal shelter quality.
- Declining quality over a shelter spell if residents are cash-constrained and shelter spells can be reliably measured.
- Placement into subsidized housing should occur immediately on entry under those conditions.
- If shelter spell cannot be measured, many small subsidies better than a few big ones.

# Homelessness Prevention

- Wise investment, not picking stocks
- Safety net investments are complements
- Borrowing or saving
- Rent guarantees rather than subsidies

# Conclusion

- Levels matter too of course.
- But a lot can be learned by looking at risk.
- Using the information of individual narratives in economic analysis.
- Two approaches to analysis of homelessness: comparative statics (what economists have done), following individuals (what other researchers have done)
- This approach brings them together.