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Utility Costs & Federally Subsidized Housing

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NYU Furman Center
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1

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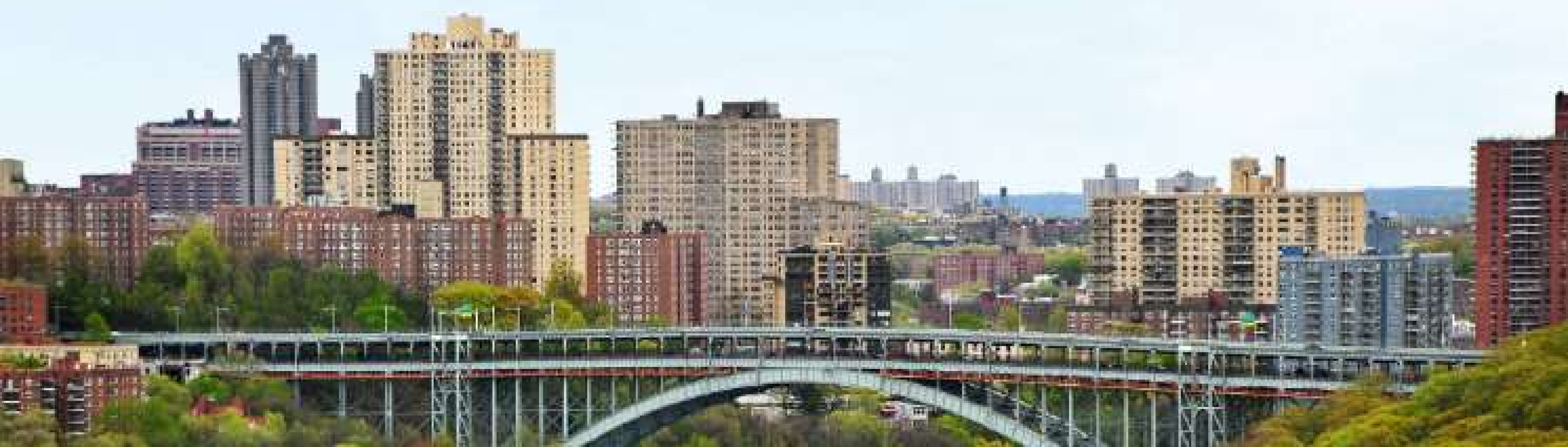

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WORKING PAPER

Utility Allowances in Federally Subsidized Multifamily Housing

Roman Pazuniak, Vincent Reina, Mark Willis | June 10, 2015

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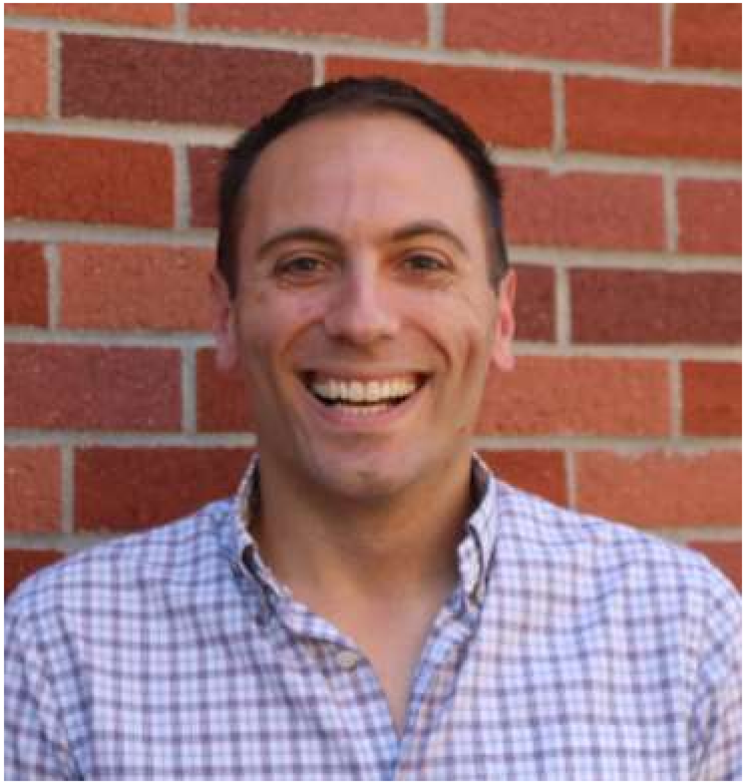
TODAY'S PRESENTER



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Research Affiliate

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Background

- The federal government has several rental subsidy programs that aim to reduce the rent burdens of low-income households
- The four largest federal subsidy programs are:
  - Public Housing
  - Project-based Section 8
  - the Housing Choice Voucher
  - the Low Income Housing Tax Credit
- The statutes, guidance, and regulations that govern utility costs in these programs affect both owner and tenant utility consumption incentives

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Background

- Researchers at the Furman Center published an article in *Cityscape* that used American Housing Survey data to analyze utility costs in subsidized housing

- The MacArthur Foundation gave the Furman Center a grant to further examine the way current federal affordable housing programs incent energy efficiency investments and motivate and allow tenants to conserve

- Our analysis has two parts
  - A legal analysis of the rules governing utility costs in subsidized housing
  - An empirical analysis of utility costs across subsidized and market-rate multifamily properties in NYC (further discussed later in this presentation)

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Purpose of Today's Webinar– Looking for Feedback

- Provide an overview of what we learned
- Receive additional feedback on our assessment of the current regulatory and legislative framework
- Receive additional feedback on the feasibility of our recommendations
- Identify additional audiences for our work and how best to share/communicate what we have learned
- Identify further research questions we should explore

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Motivation for the Research

- Spur investment in subsidized properties and motivate tenants to reduce inefficient use of utilities (heating and electricity) in order to lower greenhouse gases and other pollutants in the environment

- Assist the U.S. Department of Housing and Urban Development (HUD) in its effort to reduce the amount of its budget allocated to utility costs
  - In 2012 HUD spent approximately 14 percent of its budget on utility costs

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Incentives for New Construction and Rehab

- New construction
  - What are the incentives for developers/owners when building subsidized properties?
    - Qualified allocation plan requirements/points: i.e., LIHTC applications award extra points if the property meets Enterprise Green Community standards
    - Flexibility to adjust utility allowances in conjunction with energy-saving investments

- Existing properties
  - The main focus of this paper
  - How can we incent efficient behavior for both owners and tenants?

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Key Challenges

- Motivation to upgrade systems for energy efficiency suffers from "Split Incentives"
  - If owner pays utility costs:
    - Owner is motivated to reduce costs in common spaces
    - Tenants do no bear the cost of their consumption
    - Therefore owners may not be motivated to make units more energy efficient because they will not realize the cost savings if tenants do not reduce usage
  - If tenant pays utility costs
    - Owners may have little incentive to upgrade the systems in their properties
    - Tenants may have less ability to limit their utility consumption and will consume more utilities because they live in an inefficient building

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Split Incentives are Particularly Problematic for Subsidized Properties

- Private sector market mechanisms
  - Owners can charge higher rents for energy efficient units and raise rents for high energy users
  - Owners can access private capital to make property investments
  - Tenants have the ability to search for an efficient unit

- These mechanisms are distorted for subsidized properties
  - Revenue is set by the government and not the market
  - Programs are governed by a complex web of rules that often provide no incentive for tenants or owners to limit utility consumption
  - Tenants cannot chose a unit based on energy efficiency (a recent LIHTC property in NYC received 2,000 applications per unit)
  - Government further complicates things if it looks to capture savings

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Research Question

- How can we incent efficient behavior for both owners and tenants in subsidized housing?
  - Is there an "ideal" way to structure subsidy programs?
  - What changes are necessary?
    - Guidance
    - Regulations
    - Legislative

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Incentive Problems: Public Housing

- Buildings tend to be older and master metered
  - 55 percent of units are master metered
- Budget constraints limit a PHAs' ability to convert to sub/individual/check meters
- When the owner pays utilities
  - Operating costs are reimbursed through the HUD operating subsidy
    - PHA budgets are based on past costs
    - PHAs keep 75 percent of cost savings if costs decrease
    - PHA's budgets are increased by 75 percent of any cost increase
  - Tenant has no incentive to care about consumption levels
    - PHAs can charge additional fees to households that consume a higher than expected level of utilities but it is not clear whether this actually occurs

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Incentive Problems: Public Housing

- When tenants pay utilities
  - Owner has little incentive to care about consumption levels
  - Tenants should want to minimize energy costs, regardless of the size of their utility allowance, but are constrained by the efficiency of their building/unit
  - When allowances are based on past consumption, tenants have less incentive to conserve because their allowance may then be reduced the following year
  - Utility allowance adjustments are a product of past consumption and not some ideal level of consumption
    - PHAs must set the allowance to “approximate a reasonable consumption of utilities by an energy-conservative household of modest circumstances consistent with the requirements of a safe, sanitary, and healthful living environment.” 24 C.F.R. § 965.505(a)

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Incentive Problems: PBRA

- When the owner pays utilities
  - PBRA owners are reimbursed by HUD when they pay for utilities, which removes any incentive to make upgrades to their properties or have tenants pay for utilities
    - HUD covers some or all of the cost of inefficient systems through cost adjustments
    - Regulations are full of ambiguous language, e.g., there is no definition of "reasonable" costs, and there is no defined ceiling on utility cost reimbursements
  - Tenant has no incentive to care about consumption levels

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Incentive Problems: PBRA

- When tenants pay utilities
  - Owner has little incentive to care about consumption levels
    - Tenants get increases in utility allowances when costs increase and the owner is held harmless
  - Tenants should want to minimize energy costs, regardless of the size of their utility allowance, but are constrained by the efficiency of their building/unit
  - Utility allowance adjustments are a product of past consumption and not some ideal level of consumption
    - Language governing utility allowances is vague, e.g., it says that administrators "should usually be able to set allowances at the levels recommended by the owners"- *HUD Handbook 4350.1*
  - When allowances are based on past consumption, tenants have less incentive to conserve because they may not want their allowance reduced

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Incentive Problems: Housing Choice Voucher

- There is a strong incentive for owners to have tenants pay utilities
  - 90 percent of voucher units receive utility allowances

- When the owner pays utilities
  - Owner does not receive any reimbursement for utility costs and pays these costs from operating income
    - Creates a strong incentive for owners to care about consumption levels and to want tenants to pay their own utilities
  - Tenant has no incentive to care about consumption levels

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Incentive Problems: Housing Choice Voucher

- When tenants pay utilities
  - Owner has no incentive to care about consumption levels
    - Tenants get increases in utility allowances when costs increase and the owner is held harmless
  - Tenants should want to minimize energy costs, regardless of the size of their utility allowance, but are constrained by the efficiency of their building/unit
  - HUD does not set a unified standard for how utility allowances Utility allowance adjustments are a product of past consumption and not some ideal level of consumption
    - HUD leaves the determination of utility allowances to PHAs
    - PHAs are supposed to calculate their utility allowances using actual, and preferably local, consumption data to estimate "the typical cost of utilities and services paid by energy-conservative households that occupy housing of similar size and type in the same locality."- 24 C.F.R. § 982.517(b)(1)

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Incentive Problems: Low Income Housing Tax Credit

- Rent is fixed, and IRS regulations allow developers/owners to benefit from energy saving investments that reduce utility allowances

- When the owner pays utilities
  - Owners have a strong incentive to ensure tenants pay utilities and that the utility allowance properly reflects reasonable costs
  - Tenant has no incentive to care about consumption levels

- When tenants pay utilities
  - An owner is incentivized to ensure that utility allowances are as low as possible to maximize the rental income received net of utility allowance
  - Tenants are incentivized to consume less than the allowance because it reduces their out of pocket costs

- When an LIHTC property has either Section 8 Vouchers or a PBRA contract, the HUD program rules governs how utilities are treated
  - This rule negates the consumption incentives in the LIHTC program

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“Ideal” Situation

- Owners make all energy saving investments that optimize a building’s efficiency
- Tenants conserve energy usage

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Four Intertwined Recommendations

1. Incent owners to convert master metered buildings to individual, sub, or check-metering
2. Incent owners to make energy efficient upgrades
3. Have utility allowance calculated on a household-level based on an engineering model
4. Increase utility cost information to tenants

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Goal 1: Convert Buildings to Sub/Individual or Check-Metering

- It is important to ensure tenants bear the costs associated with their consumption

- HUD mandated conversion of Public Housing to individual metering in 1975
  – Mandate was overruled because HUD failed to be able to support the projected 25-35% cost savings

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Goal 2: Incent Owners to Make Upgrades

- HUD has financing programs to retrofit properties
  - If landlords cannot realize any incremental benefit then it may be necessary for HUD to mandate improvements and ensure the availability of financing
- HUD can change existing program rules to promote incentives to make upgrades
  - Allow owners to receive a portion of the cost savings

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Goal 3: Calculate utility allowance on a household-level based on an engineering model

- Utility allowances that are calculated based on past consumption weaken tenants' incentives to conserve because conserving will decrease their allowance amount
- Develop unit-level regression-based allowances
  - Model allows for allowances based on tenant, building, and geographic characteristics
  - Many of the household and building data needed for the model is already collected by HUD through tenant certification processes
  - HUD already has a HUSM spreadsheet that estimates allowances based on these factors but is it a good model, and what are the impediments to using it?
- Clarify what can be included in utility allowances and make these rules consistent across programs
  - E.g., different policies on air-conditioning across programs

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Goal 4: Increase Utility Cost Information to Tenants

- Tenants should have better information on utility costs
  - Tenants should know and understand their utility allowance amount and how it is calculated
  - Tenants should be able to access a tool that estimates utility costs based on tenant, building, and geographic characteristics
  - HUD can require public and private owners to provide prospective tenants utility cost estimates

- HUD should provide more timely information about utility allowances
  - Specifically, HUD should normalize rules about how tenants are informed about allowances, and adjustments to allowances, across programs

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How can these goals be achieved?

- HUD Guidance
  - Easiest to change but guidance is not binding
  - HUD sets most utility allowance rules through its *Utility Allowance Guidebook,* but rules need to be clearer
  - Most changes to the PBRA programs can occur through guidance

- Regulations
  - Changes are made through notice and comment rulemaking
  - Most changes to the Voucher and Public Housing programs involve changes to the Code of Federal Regulations

- Legislation
  - Changing legislation may not be feasible or necessary
  - The relevant statutes say very little about utility allowances

- Changes to HUD programs can affect LIHTC properties with HUD financing

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Empirical Study

- The Furman Center is analyzing the utility consumption of multifamily properties in NYC

- We want to determine whether subsidized properties consume more utilities than similar market-rate properties, and what drives any potential variation between properties

- We created a unique database that merges
  - Information on energy usage in buildings that are 50,000 sq ft or larger (subsidized and not), provided by the City of New York
  - The Furman Center's SHIP database, which has information on all subsidized properties in NYC
  - Billing arrangement data for subsidized properties from local government agencies
  - Detailed neighborhood-level data from private and public data sources

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Looking for Feedback

- Have we correctly assessed the current regulatory and legislative framework?
- Do our recommendations seem feasible?
- How can we share and communicate what what we learned to others?
- What are other research questions in this areas that we should consider?

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Q&A

Send additional questions to:

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