Urban planning, housing investments and redevelopment: Condominiums in Addis Ababa

Simon Franklin (LSE) - January 2015
**Puzzle:** as incomes grow, why do households continue to invest so little in housing?

- Some work on what constrains investments (Marx et al ‘13)
- Relatively little on slums in the spatial context of cities...
Slums and urban redevelopment

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**What to do with well-located land occupied by slums?**

Ethiopia is selling condominium housing on the edge of the city to households living in slums in the centre.

- **This study:** exploits a lottery to estimate the impact of winning subsidised housing & subsequent relocation.
- Evidence of enormous investments in housing outside of the city centre.
Most of Addis Ababa’s housing stock is informal.
Rent Control Established from 1975-1985

Rent Control Housing Proportion of Households

- 0
- 0.01 - 0.05
- 0.06 - 0.10
- 0.11 - 0.20
- 0.21 - 0.30
- 0.31 - 0.40
- 0.41 - 0.50
- 0.51 - 0.60
- 0.61 - 0.77

Kilometers

Extent 2012
Extent 1992
Housing in Addis Ababa

Political problem: rent controls and slums

Government Housing

Proportion of households
- 0% - 25%
- 26% - 50%
- 51% - 77%

Slums

Proportion of households
- 36% - 50%
- 51% - 55%
- 56% - 60%
- 61% - 65%
- 66% - 70%
- 71% - 100%
Addis Ababa condominium program

In Africa: most common policy response is subsidized housing, on the outskirts of cities. *Is this a mistake?*
Common wisdom about what to do with slums

Provide property rights/upgrade existing housing incrementally.
  • Is this the most efficient use of well-located land?

Encourage density: build up.
  • Can households afford formal (multi-storey) housing?
  • Without subsidies to the relatively rich?

Don’t relocate households far away from the centre.
  • How far is too far? Do the costs warrant the high price of better land?

Don’t disrupt existing social networks.
  • How severe are these costs? Should planners pay to leave networks intact?
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Government Housing Program

Government is building large 5-storey condominium housing units.
  • Built on peripheral, undeveloped land.
  • In conjunction with a master plan. New roads and light rail to connect to city.
  • Density similar to the densest central slums.
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Spatial implications: Land on the outskirts is given away for free.

1. Trying to get households to move out of the centre.
2. Ensure that (inevitable) future development on the outskirts is well managed...
3. Auctions of nearby plots of rapidly appreciating land.
Housing is built on the edge of the current extent.
Condo applicants are mostly drawn from the centre.
Financing and Targeting

**Financing:** Government mortgages on the housing: buy to own, cannot sell for at least 5 years.

- Mortgage price after subsidies $10,000 (average).
- 20% down-payment up front.
- Repaid over 15 years at 9.5%.

**Targeting:** My data shows that the recipients are:

- Relatively wealthy.
- Live in terrible housing conditions and spend little on housing.

**Scale:** Over 150,000 units have already been delivered in Addis:

- 20% of population in 2007.
- Another 700,000+ are said to have registered subsequently.
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1. 2000 households, 1000 of which won the housing lottery in March 2015.
2. Baseline survey conducted shortly after lottery.
   - We were equally successful in tracking down winning and loosing households.
   - Winning and loosing households look identical (strongly balanced).
3. Lottery also randomizes housing location and neighborhood.
Is the housing investment profitable?

Unit costs in USD:

(1) Total delivery cost (land + construction)  16,725
(2) Estimated value (constant rent* )  13,341

*Rent on the outskirts is currently around $100 per unit. Better located units rent for $300.
Is the housing investment profitable?

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How do households make down-payments this large?

I estimate the impact of winning housing on household finances to show where this money came from:

1. Move all other savings: 20%
2. Loans (mostly from friends/family): 50%
3. Gifts (mostly from friends/family): 15%

Suggests enormous spare capital available: over 100,000 households have found this credit.
Program has induced enormous housing investments where there were none before. However:

1. Formal housing, built at very low cost and highly subsidized, is only really affordable to wealthy households.
2. Coordination was required (households expect appreciation of land values on peripheral land).
Interim Results

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Design and aim of on-going study

Should housing be built closer to the centre?

- Exploit randomization in distance to estimate the cost of being located further away on households.

Should policy take social networks into account?

- Estimate the impact on loss of social networks on relocated households.

- Exploit random unit assignment to study neighborhood effects.

Should planners try to encourage neighborhood diversity?

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