

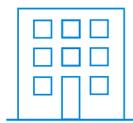
# ARE HOUSING RENTAL MARKETS THAT COMPETITIVE?

## #1 BACKGROUND

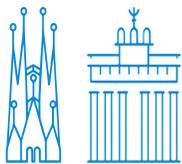
Lack of affordable housing is a pressing issue in major cities.

48%

of US tenants are cost-burdened, as of 2018.



Most economists agree that perfect competition is a good description of this market.



Berlin, Barcelona and Santa Ana, CA recently adopted new rent control policies.

## #2 DYNAMIC MONOPOLY

In alternative to perfect competition, I put forward a **new search model**, where:

- Tenants move if they find a cheaper housing unit that compensates for the **moving cost**:  $r^{offer} + moving\ cost < r$ .
- Given **imperfect info**, tenants **search** and find housing units at a given rate  $\lambda \geq 0$ .

## #3 THEORETICAL RESULTS

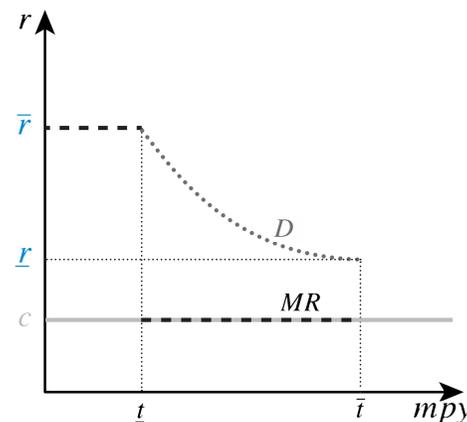


Figure 1 - **Dynamic Monopoly Model** of the housing rental market

- Residual demand (D) with a **negative and finite average elasticity**. Landlords have **market power**.
- Landlords are not price-takers. They can charge  $\underline{r} \leq r \leq \bar{r}$ .
- Landlords face a trade-off: The **higher the rent** (r) charged, the **less months per year** (mpy) their units are rented, on average.
- **Rent controls** may reduce all rents charged in the market. And only create shortages if the supply is constrained.

## #4 EMPIRICS

- **Objective**: Estimating the elasticity of the residual demand.
- **Data**: American Housing Survey data for NYC | 2001 - 2013.
- **Methods**: Duration analysis, to account for interval and right censoring and time-varying covariates in data.
- **Identification**: Exogenous variation in rent due to rent regulations and subsidies.

## #5 EMPIRICAL RESULTS

-6 to -10

Negative and finite average elasticity of -6 to -10 of the residual demand in NYC.



Landlords have substantial dynamic monopoly power in NYC.

