

Brokers' Contractual Arrangements in the Manhattan Residential Rental Market

Heski Bar-Isaac and Alessandro Gavazza
NYU

Royal Economic Society Annual Meeting,
26th March 2012

Big questions (that we won't answer)

- How do markets work?
 - How should economic activity be organized?

Lots of theory, some experiments, but relatively little empirics because:

- availability of data
- limited variation within industries in many cases
- hard to control appropriately to conduct cross-industry studies

What we do

- Introduce some new facts
- in a little-studied (but important/interesting) industry
- where there is variation in contractual arrangements
- that speak to some extant theories highlighting the role of exclusivity to induce effort/service provision, and specificity
- and raise new (to us) considerations

What this talk will do

- Describe the market
- Highlight the key decisions that we explore:
 - Landlord's choice to rent through an agent/broker exclusively (69 percent in our data)
 - Landlord's choice to pay broker fee (23 percent)
- Describe our data
- Highlight the importance of “atypicality” of a rental unit in landlord's decisions

Manhattan residential rental market

Unusual

- Almost as all-consuming a topic of conversation as residential sales in London
- 75 percent of Manhattan households rent, compared to 35 percent in US as a whole and 34 percent in England (09/10)
- 64 percent of New York City rental properties under some form of rent regulation
- Substantial use of brokers in a rental market
- Variation in use of exclusive relationships
- Variation in which side pays the fee

Contractual Agreements

- Landlord decides
 - Exclusive agreement (typically 2-3 month) or “open” listing
 - Commits to pay fee (typically one month rent) or ask agent to collect own fee (norm is 15% of one year’s rent)
- Factors for exclusivity
 - “Hassle” (who has keys, does the agent understand landlord prefs and pre-screen etc)
 - “Effort” (will any agent advertize? how many will?)
- Fee/no fee
 - Tax-incidence analogy suggest irrelevant
 - But, regulatory distortions on rent stabilization
 - Timing of payments may be an issue for liquidity constrained
 - Selection effects associated with large upfront payments
 - Unlikely about creditworthiness as fairly detailed information
 - More likely about likelihood of renewing lease

Our data

- www.mlx.com A private multiple-listings service for Manhattan residential listings
- Established despite opposition from REBNY (Real Estate Board of NY)
 - Most recent court case 2007 where REBNY sought to place restrictions on ability to share listings
- 20,000 listings in Manhattan for period May 2009 – April 2010

Summary Statistics

Variable	Mean	Std. Dev.	Min	Max
Monthly Rent	3,579.39	4,002.79	0	88,000
Furnished	0.120	0.324	0	1
Number of rooms	3.356	1.288	0.5	17
Number of bedrooms	1.177	0.978	0	10
Number of bathrooms	1.275	0.611	0	9.5
Owner pays	0.227	0.419	0	1
Exclusive	0.685	0.465	0	1

23,637 observations covering rental listings for move-in dates from 1 May 2009 to 30 April, 2010.

99% of furnished apartments are exclusives.

Example of within building effects: 21 Chelsea (120 W21st St)



No rooms	Furnished	Rent	Notes
2.91 Min 2 Max 5	0	3,072.25 Min 2,400 Max 5,300	Non-exclusives (107 listings)
3	1	4,500	Fully furnished one bedroom in the heart of Chelsea. This designer furnished loft-like one bedroom features an open kitchen with granite counter tops and stainless steel appliances, oak hardwood floors and large windows. The building features a 24 hour doorman, landscaped roof deck, laundry and bike room. Available for May 5th. Flexible lease term 1 to 12 months. Utilities are extra.
3	1	4,500	Fully furnished one bedroom in the heart of Chelsea. This designer furnished loft-like one bedroom features an open kitchen with granite counter tops and stainless steel appliances, oak hardwood floors and large windows. The building features a 24 hour doorman, landscaped roof deck, laundry and bike room. Available for May 5th. Flexible lease term 1 to 12 months. Utilities are extra.
8	0	15,400	Tremendous 3500 square foot home with 3 bedrooms plus maids room/playroom, library with sliding doors, private laundry room, suburban-sized chefs kitchen with granite countertops and stainless steel appliances, 4 and one half marble baths, 2 gas fireplaces and a dramatic sun-flooded atrium with grand wood staircase. This stunning apartment also features a massive living/dining room perfect for entertaining, with custom built-ins, 2 enormous private terraces, master bedroom with fireplace, his & hers walk in closets, fabulous slate and marble master bath with separate oversized Jacuzzi tub.
9	0	15,500	Tremendous 3200 square foot duplex featuring 4 bedrooms plus home office/5th bedroom, suburban-sized chefs kitchen with granite counters and stainless steel appliances, 4.5 marble baths and a dramatic sun-flooded atrium with grand staircase and spectacular city views. There is a massive living/dining room perfect for entertaining with a working fireplace , custom built-ins and 2 enormous private terraces. The master bedroom has another working fireplace, his & hers walk in closets, fabulous slate and marble bath with separate oversized Jacuzzi tub. This spectacular home is has double Southern and Northern exposure drenching every single room with sunlight. As an added bonus there is a free parking spot that comes with the apartment! The building is a full service highrise that is pet friendly. For more information please contact Allison Block with City Connections at 917-684-4780.
3.5	1	2,860	A Lease Break is Your Gain. Highly sought after Luxury Chelsea Low-Rise. Rarely Available Spacious, renovated one bedroom with Southern Exposure. Great light, open chefs kitchen with stainless steel appliances and granite counter, two walk-in closets plus additional closet. A couple or single person can definitely live in luxury. Not to mention the finished roofdeck with oak chairs and tables for either sunning or sharing a meal upstairs. Wonderful Chelsea views. Full-time doorman. Amazing location with easy access to both the F/V and the 1 trains. Pets upon approval. Apartment Features: Building Features:

Unusual apartment are more likely to be exclusive: Count and Fraction Exclusive by Number of Bedrooms

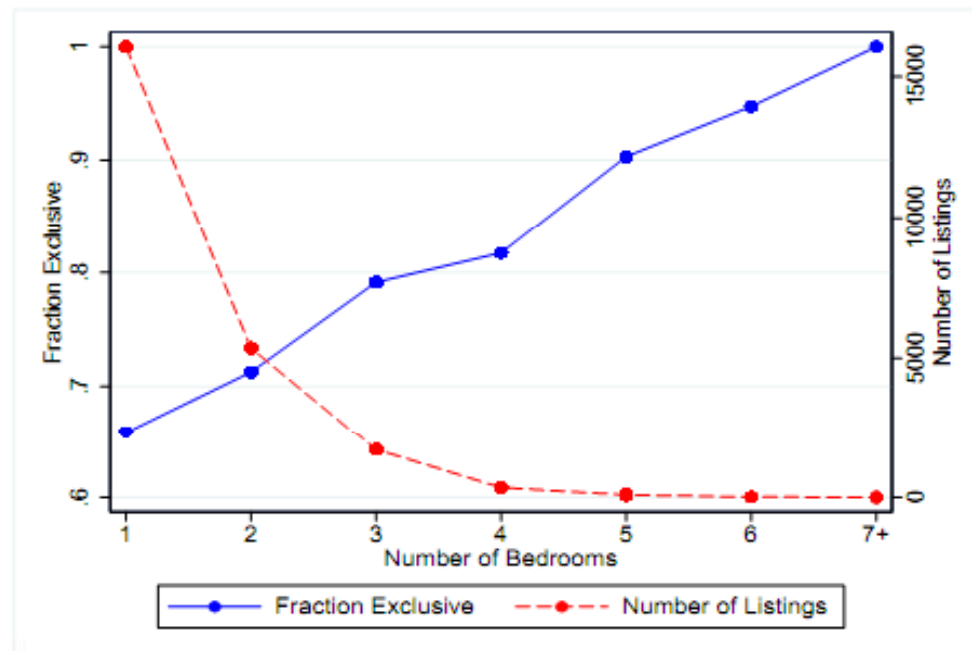


FIG. 1: Fraction of apartments with exclusive agreements (left scale) and number of listings (right scale), by number of bedrooms.

Unusual apartment are more likely to be exclusive: Fraction Exclusive by rent quintile and rent residual quintile for one bedrooms

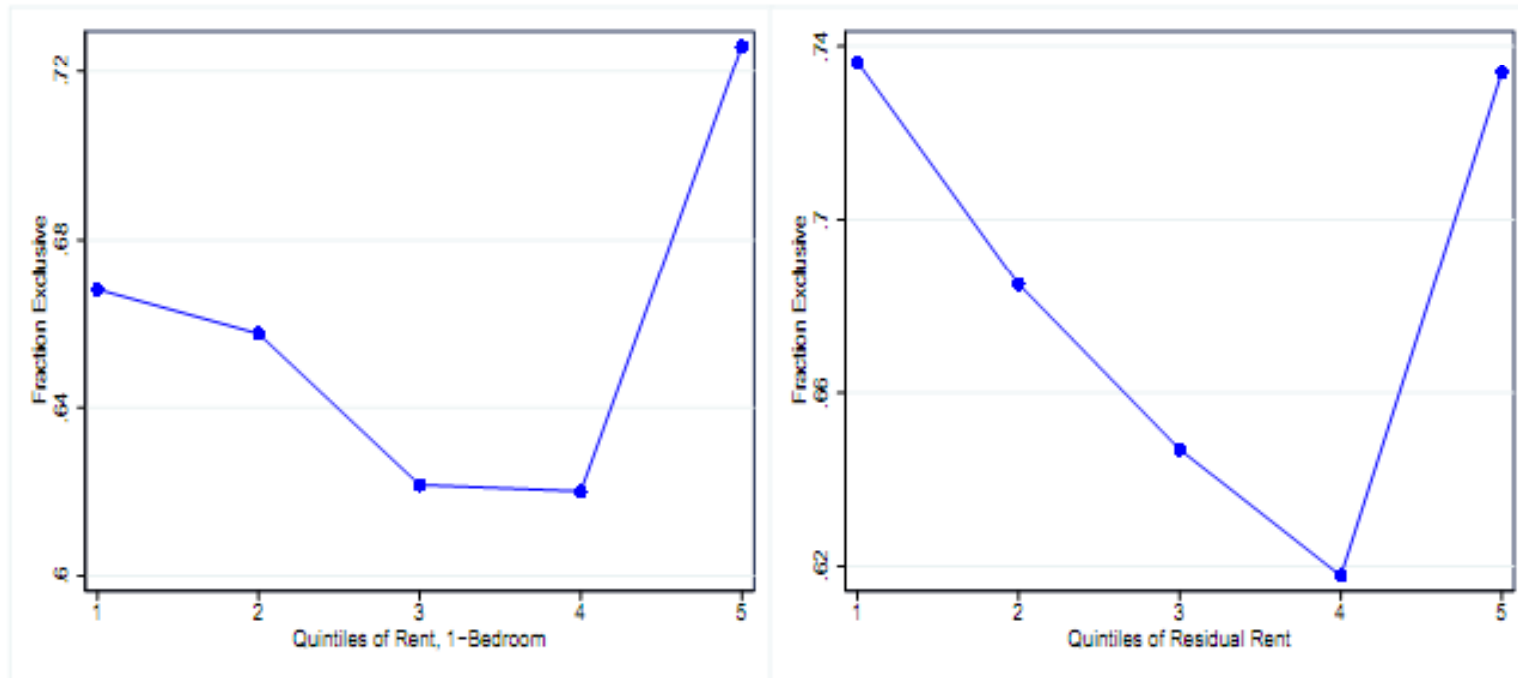


FIG. 2: The left panel displays the fraction of one-bedroom apartments with exclusive agreements by quintiles of rent. The right panel displays the fraction of apartments with exclusive agreements by quintiles of residual rent.

An index of thickness/typicality

- Construct “bins” grouping according to:
 - Number of bedrooms (from one to seven or more)
 - Number of bathrooms (one to four or more)
 - Monthly rent (ten deciles)
 - Furnished or not
 - Neighbourhood (16 categories)
- $7*10*4*2*16=8960$ possible bins,
- 1,233 are non empty,
- Count of how many listings in a bin (i.e. how many similar listings) is our measure of typicality
 - Mean 149, stdev 176

Regression

Probit/OLS

$$EXCLUSIVE_i = f(\beta_0 + \beta_A THICKNESS_i + \beta_X X_i)$$

- X_i includes rent, number of bedrooms, number of bathrooms;
 - sometimes neighbourhood, month-of-listing, building

EXCLUSIVE	(1)	(2)	(3)	(4)	(5)	(6)
THICKNESS/100	-.04820 (.01731)	-.05060 (.01667)	-.04988 (.01944)	-.02174 (.00615)	-.01241 (.00532)	-.00463 (.00184)
MONTHLY RENT/1000	.05604 (.01574)	.05869 (.01591)	.05908 (.01651)	.00297 (.00138)	.00070 (.00113)	.00005 (.00054)
NUMBER OF ROOMS	.66610 (.03860)	.63999 (.03782)	.63928 (.03933)	.09289 (.00774)	.07577 (.00608)	.01922 (.00396)
NUMBER OF BEDROOMS	-.63814 (.04964)	-.62238 (.04866)	-.64693 (.04855)	-.09260 (.01109)	-.07008 (.00838)	-.02342 (.00509)
NUMBER OF BATHROOMS	-.14370 (.06953)	-.12241 (.06928)	-.13089 (.06969)	-.00889 (.01456)	.00181 (.01043)	.00368 (.00708)
FLOOR NUMBER	-.00391 (.00063)	-.00383 (.00062)	-.00317 (.00056)	-.00093 (.00016)	-.00070 (.00012)	-.00010 (.00005)
FURNISHED	.98129 (.10921)	.96179 (.10762)	.98434 (.10168)	.20779 (.01565)	.17262 (.01330)	.03091 (.00793)
PET ALLOWED	.49995 (.06419)	.47288 (.06406)	.44436 (.06540)	.14913 (.02184)	.19019 (.01580)	-.00305 (.02235)
ELEVATOR	-.14550 (.08661)	-.17082 (.08555)	-.16129 (.08110)	-.05080 (.02618)	-.06703 (.02188)	
ELEVATOR AND DOORMAN	.24939 (.07146)	.27340 (.07201)	.35678 (.06943)	.12008 (.02216)	.15455 (.0207)	
MONTHLY FIXED EFFECTS	NO	YES	YES	YES	YES	YES
ZIPCODE FIXED EFFECTS	NO	NO	YES	YES	YES	N/A
STREET FIXED EFFECTS	NO	NO	NO	NO	YES	N/A
BUILDING FIXED EFFECTS	NO	NO	NO	NO	NO	YES
LOG LIKELIHOOD	-12,926	-12,471	-11,703			
R ²				.2124	.4108	.8611
# OBS	23,594	23,594	23,594	23,594	23,594	23,594

Notes: This table investigates how market thickness affects whether apartment listings are exclusive or not. The dependent variable is equal to one if the listing is exclusive, and zero otherwise. Specifications (1)-(3) present the coefficients of maximum-likelihood probit regressions, and specifications (4)-(6) presents the coefficients of OLS linear probability regressions. The standard errors in parentheses are clustered at the bin level.

Discussion

- More unusual, bigger, more expensive, larger, doorman building more likely to be exclusive
- Example: (5) with street fixed; one standard deviation increase (2.2 percent) in thickness decreases exclusivity by 3.2 percent
- Effects even within-building

Fee/No fee

- There is a public register of rent-stabilized buildings that we are in the process of matching to our data
- Rent stabilization:
 - Can change status if rent rises above 2,000
- Theoretically not obvious what “selection” for renewing-types should mean, empirically pattern may emerge if purge stabilized
- Consistent anecdotal evidence that in “hot” markets with low vacancy rate mostly renter pay fee, whereas “no fee” i.e. landlord pays in cold markets

NO FEE	(1)	(2)	(3)	(4)	(5)	(6)
THICKNESS/100	.05110 (.01371)	.05171 (.01414)	.02872 (.01452)	.00891 (.00404)	.00423 (.00312)	.00164 (.00354)
MONTHLY RENT/1000	-.06542 (.01549)	-.06587 (.01546)	-.05234 (.01428)	-.00381 (.00103)	-.00169 (.00087)	-.00259 (.00100)
RENT ABOVE \$1,500	.34641 (.08123)	.35253 (.08121)	.28085 (.06573)	.07154 (.01680)	.05725 (.01439)	.00667 (.01130)
RENT ABOVE \$2,000	.30623 (.09193)	.30767 (.09165)	.28369 (.05864)	.07184 (.01607)	.03424 (.01347)	-.00732 (.00740)
RENT ABOVE \$2,500	.08566 (.08843)	.09417 (.08611)	.14589 (.05151)	.03779 (.01503)	.02772 (.01226)	-.00543 (.00784)
RENT ABOVE \$3,000	.06223 (.06976)	.05160 (.06790)	.08112 (.04889)	.00646 (.01370)	.00119 (.01803)	-.00792 (.00880)
NUMBER OF ROOMS	-.13474 (.03002)	-.11360 (.03054)	-.10284 (.02932)	-.02360 (.00522)	-.01631 (.00497)	-.00062 (.00522)
NUMBER OF BEDROOMS	.07048 (.03938)	.05199 (.04013)	.03803 (.03670)	.00636 (.00801)	.00727 (.00770)	.00429 (.00639)
NUMBER OF BATHROOMS	.02760 (.06048)	.01109 (.06034)	-.02769 (.05501)	-.01983 (.01165)	-.02082 (.00972)	.00357 (.00907)
FLOOR NUMBER	.00704 (.00161)	.00637 (.00160)	.00154 (.00148)	.00048 (.00041)	-.00016 (.00030)	-.00047 (.00024)
FURNISHED	-.81209 (.07029)	-.80880 (.06882)	-.86345 (.05685)	-.18129 (.01131)	-.14731 (.00969)	-.03617 (.00945)
PET ALLOWED	.13214 (.05777)	.15572 (.05722)	.21526 (.05668)	.06099 (.01580)	.02666 (.01219)	.01710 (.03412)
ELEVATOR	-.29640 (.07710)	-.28798 (.08012)	-.26107 (.07861)	-.06590 (.02003)	-.05317 (.01925)	
ELEVATOR AND DOORMAN	.30319 (.05554)	.30267 (.05709)	.20994 (.05381)	.05373 (.01318)	.04458 (.01408)	
MONTHLY FIXED EFFECTS	NO	NO	YES	YES	YES	YES
ZIPCODE FIXED EFFECTS	NO	NO	YES	YES	YES	N/A
STREET FIXED EFFECTS	NO	NO	NO	NO	YES	N/A
BUILDING FIXED EFFECTS	NO	NO	NO	NO	NO	YES
LOG LIKELIHOOD	-11,886	-11,694	-10,910			
R ²				.1407	.3055	.6226
# OBS	23,556	23,556	23,556	23,594	23,594	23,594

Notes: This table investigates how apartment characteristics affect whether the owner pays brokers' fees or brokers collect fees from the tenants. The dependent variable is equal to one if the owner pays brokers' fees, and zero otherwise. Specifications (1)-(3) present the coefficients of maximum-likelihood probit regressions, and specifications (4)-(6) presents the coefficients of OLS linear probability regressions. The standard errors in parentheses are clustered at the bin level.

Other things we've done/intend to do

Robustness

- Interact thickness with characteristics and find that has more of an effect for expensive, large apartments with fewer bedrooms
- Similar effects if look only within one bedroom apartments (and construct thickness index within one bedrooms)
- Similar if restrict to apartments without doorman
- Redo with last six months of data and find similar effects

On the agenda

- Match with public register of rent stabilized apartments
- Try to get some more time series to explore changes in hot/cold markets
- Different measures of atypicality (open to suggestions ...)
- Look at dataset by focusing on brokers ... do they specialize, evidence of relationships with landlords etc

Conclusions

So far still work in progress but ...

- Thickness effect on exclusivity
 - Suggestive of specific investment
- Interesting institutional features
 - More theory and facts on fee/no fee

Thank you