

# Anonymous Capital Flows and US Housing Markets

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*The views expressed are solely those of the authors and do not necessarily reflect those of Zillow, the Federal Reserve Bank of New York, or the Federal Reserve System.*

July 23, 2018

# Some Examples of US Housing and Hidden Capital Flows

## Argentina's former leader stashed 'dirty money' in Miami, official says before election



BY KYRA GURNEY AND NICHOLAS NEHAMAS  
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A shadowy network of South Florida properties worth tens of millions of dollars and revealed in the Panama Papers could become a campaign issue in Argentina as former president Cristina Fernández de Kirchner makes her political comeback while fighting corruption indictments.

Fernández de Kirchner is running for Argentina's Senate in an Oct. 22 election but is opposed by the party of current president Mauricio Macri.

Now, the nation's top anti-corruption official, Laura Alonso, has made a stunning claim on national television, saying Fernández de Kirchner owns more than 60 properties in Miami bought with "dirty money." Alonso said investigators had linked the properties to a top aide to Fernández de Kirchner's husband, Néstor Kirchner, who preceded her as president.

## Paul Manafort indicted: NYC real estate money laundering charges

*The former Trump campaign aide was indicted on 12 counts on Monday*

By Amy Plitt | [@plitter](#) | Oct 30, 2017, 10:45am EDT

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The brownstone at 377 Union Street in Carroll Gardens is one of the properties named in Robert Mueller's indictment of Paul Manafort. |

# US Housing and Hidden Capital Flows

One way to secretly hold a US asset (and not be vetted by a US regulatory authority) has been residential real estate

- ▶ Rather than deposit \$1 million in a bank, buy a \$1 million residential property using a shell company and pay "all cash":
  - you don't become the seller's bank's customer and identity is shielded. House is now held by "SH LLC" in public records
- ▶ Note: Forming an LLC is relatively cheap
- ▶ Many reasons to desire anonymity

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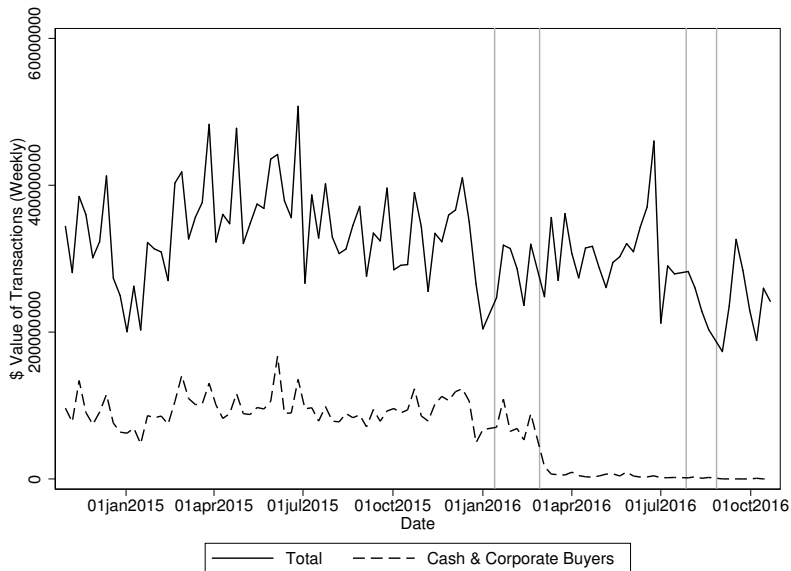
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# Introduction

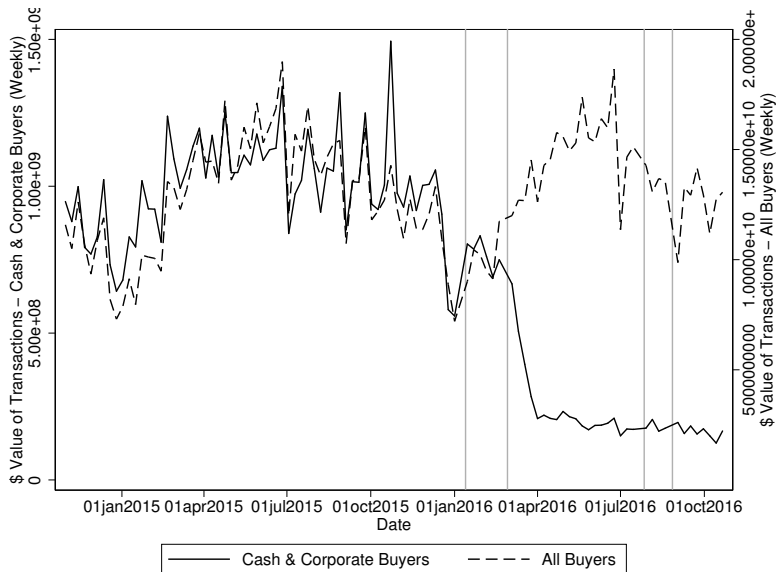
- ▶ Research Question: what is the volume and price impact of anonymized flows into US Housing Markets?
- ▶ How we answer it:
  - ▷ Exploit quasi-experimental variation from a regulatory shock to anonymity
    - ▷ shock we study only affects secrecy of buyers from US authorities
    - ▷ and only affects cash purchases using a corporate entity, not those already touching banking system through a mortgage
  - ▷ usual methods: RDD, Diff-in-Diff (or DDD)



# Preview: Weekly Volumes in Miami-Dade



# Preview: Weekly Volumes in Nationwide Sample



# Contributions

- ▶ measure secretive “shell buyer” flows
  - ▷ Known hole: cross-border holdings of resi. real estate largely untracked. US example: BEA surveys track FDI in commercial real estate or into firms with sales/revenue
  - ▷ Future push: see if we can indirectly approximate domestic v foreign composition Lucas 1990, Zucman 2013
- ▶ test/measure impact of these flows on house prices Favilukis and Van Nieuwerburgh 2017, Ramadorai and Badarinza 2016
- ▶ side benefit: evaluates regulatory (FinCEN) policy

# Why buy US real estate with an LLC?

- ▶ US as Safe Haven (property rights)
- ▶ US as Safe Haven (illegitimate funds / corruption / inquiries at home)
- ▶ Hide assets from creditors
- ▶ Tax Evasion
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  - ▷ *“One thing about being a high-end broker is we have to protect the privacy of our clients”*; ‘secret’ elevators/multiple entrances in Time Warner building NYT

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- ▶ Share ownership, transfer wealth, liability management

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- ▶ ~~Shield personal financial info.; taste for privacy~~
- ▶ ~~Share ownership, transfer wealth, liability management~~
  - ▷ ...this policy only affects secrecy from US Authorities



# Our variation: a change to secrecy by the Treasury Department

- ▶ “FinCEN Takes Aim at Real Estate Secrecy” announcement January 2016
  - ▷ First Geographic Targeting Orders (GTOs) “inform broader efforts to combat money laundering in the real estate sector”
  - ▷ “The information gathered from the GTOs will advance law enforcement’s ability to identify the natural persons involved in transactions vulnerable to abuse for money laundering.”
- ▶ Requires identification of beneficial owner (submitting an IRS form) for any cash purchase by corporate entity such as an LLC
- ▶ Price thresholds: only “high-end” residential real estate
- ▶ Leverages Title Insurance companies for the practical reason these were entities FinCEN has authority over
- ▶ Various potential loopholes

# Policy Changes in 2016

**Table:** Geographic Targeting Orders and County-Specific Price Thresholds

<b>California</b>	<b>Florida</b>	<b>Texas</b>	<b>New York</b>
<b>\$2 Million</b>	<b>\$1 Million</b>	<b>\$0.5 Million</b>	<b>\$1.5 Million</b>
Los Angeles	Broward	Bexar	Bronx
San Diego	Miami-Dade		Brooklyn
San Francisco	Palm Beach		Queens
San Mateo			Staten Island
Santa Clara			
			<b>\$3 Million</b>
			Manhattan

# Why these counties?

County	Corp. Purchases \$	\$ Fraction	FIPS
Los Angeles County, California	9,606,972,617	0.163	6037
New York County, New York	7,516,132,863	0.433	36061
Miami-Dade County, Florida	6,023,723,449	0.327	12086
San Diego County, California	2,677,926,168	0.108	6073
Orange County, California	2,438,462,446	0.09	6059
Maricopa County, Arizona	2,421,851,829	0.095	4013
Palm Beach County, Florida	2,170,032,672	0.17	12099
Broward County, Florida	1,912,084,589	0.151	12011
Clark County, Nevada	1,881,364,473	0.146	32002
King County, Washington	1,634,941,038	0.081	53033

# Data

## ▶ ZTRAX

- ▶ Assessors records: sq. ft., year built, # beds/baths, ...
- ▶ Transaction Records: sales price, mortgage amount, buyer name/type, title insurance, dates, ...
- ▶ allows us to identify all-cash transactions, locations, type of buyer, rich property attributes for hedonic pricing,...
- ▶ dataset is free (monetarily) for academic research

## ▶ House Price Indices (Zillow, Core Logic)

## ▶ Core Logic Deeds 2015 as a data check

# RDD to test for aggregate effects

$$V_{ct} = \alpha + \beta \mathbb{1}\{R_{ct} > 0\} + \gamma R_{ct} + \delta \mathbb{1}\{R_{ct} > 0\} R_{ct} + \varepsilon_{ct} \quad (1)$$

- ▶ where  $R$  is running variable of weeks centered around first GTO
- ▶ we use two different approaches to bandwidth: local and data-driven Calonico et al 2014
- ▶ seasonally adjust volumes based on 5 year historicals

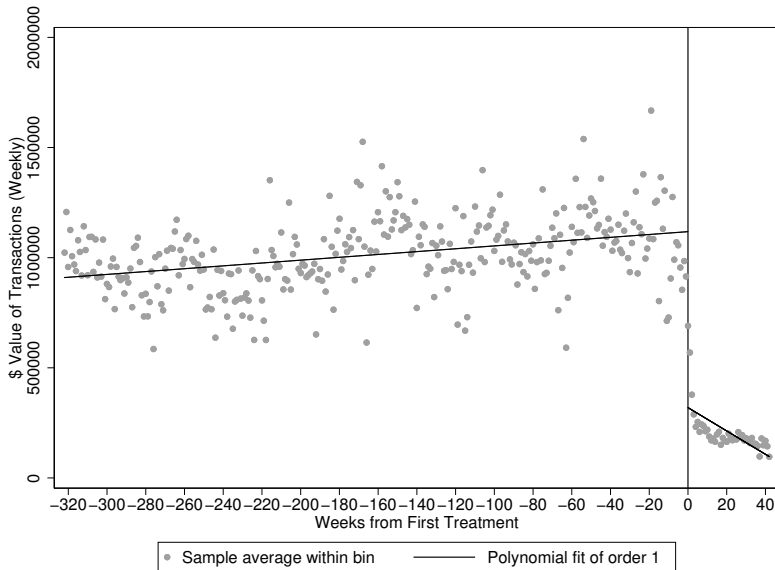
# Difference-in-Differences

allows us to test for marginal differences associated with timing

$$y_{ct} = \alpha_t + \alpha_c + \beta_0 \textit{Treated}_c \textit{After}_t + \beta_1 \textit{Treated}_c \textit{After}_t \textit{Treat}_{ct} + \varepsilon_{ct} \quad (2)$$

- ▶ where  $c$  is county-price bracket,  $t$  is week, *After* refers to first GTOs (March 2016)
- ▶ or we can use DDD set-up with pre-existing exposure to anonymous buyers as “treatment intensity”
- ▶ also allow for state-varying seasonality ( $\alpha_{S(c,t)}$ )

# Result 1: Decline in all-cash Corporate Purchases



# 1. Decline in Volumes cntnd.

	(1)	(2)
	Weekly Volume Cash, Corporate Buyer, \$	
RDD Estimate	-402,103 <sup>+</sup> (211,530)	-652,273*** (197,394)
<i>N</i>	275,210	275,210
Bandwidth	CCT	Local (+/- 1 year)
Order of Polynomial	Linear	Linear

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## 2: Test for changes in House Prices

Table: Panel A: OLS of Monthly HPA using Zillow Top-Tier Price Index

	(1)	(2)
$treated_c \times after_t$	-0.00350** (0.00135)	-0.00483* (0.00201)
$treated_c \times after_t \times treat_{ct}$		0.00226 (0.00166)
County FEs	YES	YES
Month FEs	YES	YES
$N$	51,778	51,778
$R^2$	0.0998	0.0999

# Other findings

- ▶ Same results when looking at larger set of states and only using “corporate” flag
- ▶ Doesn't appear to be large circumvention through obvious substitutes. E.g. non-GTO counties. Reason why unclear, but consistent with strong readings of FinCEN statements, and what would have been valid fears of secret/confidential expansions in GTO policy
- ▶ individual cash purchases do increase (a bit)
- ▶ Possibly (limited) substitution into individual purchases in cash, only temporary substitution in untargeted counties away from TI or into trusts
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# Conclusion

Anonymity-seeking investors (and AML Policy) appear to have economic implications

- 1 We place magnitudes on anonymity-seeking flows into US housing markets

A lower bound of 5%+ of total housing purchases

- 2 Test for and find evidence of some price impact

2%+ lower sales prices for one std deviation in pre-existing exposure to these flows (Miami-Dade vs LA)



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