

Norwegian University  
of Life Sciences



# Who Owns Offshore Real Estate?

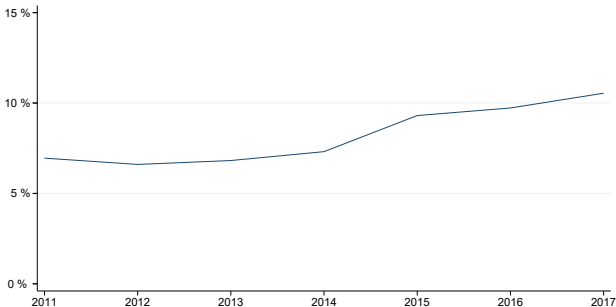
Annette Alstadsæter, Matt Collin, Bluebery Planterose, **Andreas Økland**, Gabriel Zucman

August, 2023 – EEA-ESEM 2023



# Offshore ownership of real estate is a significant and increasing phenomenon

## This example is from Norway and shows real estate owned by companies



Alstadsæter and Økland '22: Foreigners own real estate worth USD 18.8 billion in 2017 of Norwegian real estate with a company as the immediate owner.



This project looks at offshore real estate wealth from the perspective of **the investors' countries**

# The literature on offshore wealth is still immature



- ▶ Around 10 percent of world GDP is held in financial accounts in tax havens (Zucman '13, Alstadsæter et al. '18)
- ▶ But little is known about the extent real estate, art, yachts, private planes, private companies etc.
- ▶ Large **inflows** of foreign investments in major cities.
- ▶ But we do not have have good estimate of the **stock**

## Offshore real estate is a hot topic due to the lack of cross-border exchange of information



- ▶ There is automatic exchange of **financial** information agreements through FATCA and CRS.
- ▶ Was supposed to eliminate offshore tax evasion.
- ▶ But real estate is exempted!
- ▶ This makes real estate assets more attractive for those who want to hide their wealth (Bomare and Le Guern Herry '22, Johannesen, Miethe and Weishaar '22).

# India pushed for information exchange as they held the leadership of G20 recently



## India for expanding scope of AEOI on non-financial assets

ET Bureau · [Last Updated: Apr 28, 2023, 12:20 AM IST](#)

### Synopsis

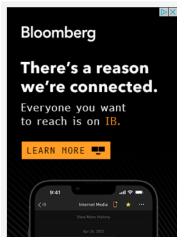
India has pitched for expanding the scope of automatic exchange of info or AEOI on non-financial assets including crypto and properties to plug in tax evasions, revenue secretary Sanjay Malhotra said Thursday.



[India](#) has pitched for expanding the scope of automatic exchange of info or [AEOI](#) on [non-financial](#) assets including crypto and properties to plug in tax evasions, revenue secretary Sanjay Malhotra said Thursday.

He added that flow of information has helped India in increasing tax

collection.





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4. Observe the country distribution of ownership in London (UK), Paris and the Cote d' Azur coast (France), Dubai (UAE), Singapore (Singapore) and Oslo (Norway).
5. Predict the country distribution in the remaining 19 cities using a gravity-like model estimated on these six areas.



## Dubai data give us more detail

6. We show micro evidence on evasion rates, wealth gradient of ownership, and ownership in high-price neighbourhoods for Dubai (United Arab Emirates).



# The 25 global cities

# We focus on the offshore residential real estate in 25 cities



- ▶ We start with the top 20 cities from the Knight Frank City Wealth Index 2022.
- ▶ Add Vancouver, Dubai, Miami, Monaco, Cote d' Azur and Oslo, drop Moscow. [City list](#)
- ▶ Back of envelope calculation indicates that close to half of all offshore real estate globally is concentrated in these cities. [See more](#)



# First observe total residential real estate and offshore residential real estate



These estimates are available for eight cities and areas:

- ▶ London (UK)
- ▶ Paris (France)
- ▶ Cote d' Azur coast (France)
- ▶ Dubai (United Arab Emirates)
- ▶ Singapore (Singapore)
- ▶ Vancouver (Canada)
- ▶ Toronto (Canada)
- ▶ Oslo (Norway)

## Then impute the amount of offshore residential real estate in remaining 17 cities



- ▶ We first collect the value of the total real estate stock for each remaining city.
- ▶ Exceptions: Total real estate stock is imputed based on the population and a nearby, comparable city for Tokyo, Hong Kong, and Munich, due to lack of data.
- ▶ We then use ratio of foreign ownership of corporate equity to foreign ownership of real estate in London (UK), Paris (France), and Vancouver (Canada) to impute for remaining cities – with some adjustments.

## Main methodology

- ▶ The foreign ownership share of real estate is 9.0 percent in London, 5.9 percent in Paris, and 4.5 percent in Vancouver.
- ▶ The foreign share of corporate equity is 46.4 percent in the UK, 15.8 percent in France and 24.2 percent in and Canada.
- ▶ The foreign ownership share of corporate equity is thus 5.1, 2.7, and 5.4 times the foreign share of real estate in the main cities. The average relationship is 4.4.
- ▶ We therefore impute the foreign ownership share of real estate as  $\frac{1}{4.4}$  of the foreign share of corporate equity when we can only observe the latter.



## Exceptions

- ▶ United States: We reweight the foreign share in U.S. cities based on the foreign-born population in the cities.
- ▶ Hong Kong (foreign share of corporate equity is only available for China as a whole): Use the same offshore ownership share as observed in Singapore.
- ▶ Monaco (foreign ownership of corporate equity is not available): We use the share of foreign nationals in the Monaco population in 2016.

# Overview of real estate wealth in the 25 cities and areas



City	Country	Total real estate	Offshore real estate	Offshore share (%)
New York	United States	2,838	247	8.7
Los Angeles	United States	2,289	222	9.7
London	United Kingdom	2,010	182	9.0
Sydney	Australia	1,741	163	9.3
Tokyo	Japan	1,672	67	4.0
San Francisco	United States	1,320	120	9.1
Toronto	Canada	964	23	2.4
Shanghai	China	925	25	2.8
Hong Kong	Hong Kong	922	110	11.9
Chicago	United States	906	47	5.2

# Overview of real estate wealth in the 25 cities and areas



City	Country	Total real estate	Offshore real estate	Offshore share (%)
Paris	France	879	52	5.9
Madrid	Spain	850	56	6.5
Washington DC	United States	826	56	6.8
Boston	United States	815	46	5.6
Beijing	China	799	22	2.8
Miami	United States	774	94	12.1
Vancouver	Canada	745	33	4.5
Singapore	Singapore	719	86	11.9
Berlin	Germany	674	41	6.1
Dubai	UAE	507	136	26.8

# Overview of real estate wealth in the 25 cities and areas



City	Country	Total real estate	Offshore real estate	Offshore share (%)
Cote d' Azur	France	347	39	11.3
Munich	Germany	287	18	6.1
Oslo	Norway	250	5	2.0
Amsterdam	The Netherlands	179	37	20.6
Monaco	Monaco	105	82	77.5
Total		24,344	2,007	8.2

# City-level patterns



## We can see the country distribution in six cities and areas



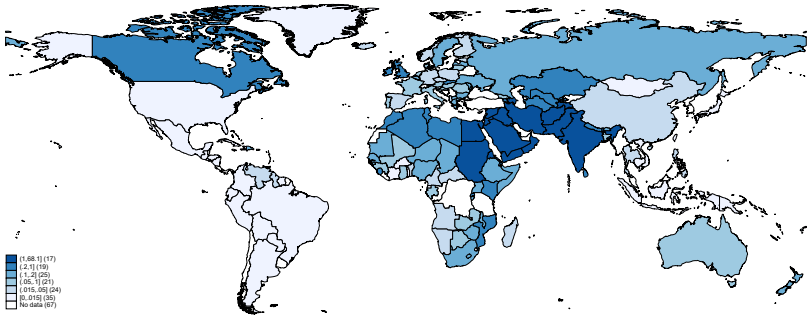
- ▶ **London (UK):** Bomare and Le Guern Herry '22
- ▶ **Paris and the Cote d' Azur coast (France):** Our own calculations based on data from the *Fichiers Fonciers* and from the *Registre national des entreprises (RNE)*.
- ▶ **Dubai (UAE):** Data outlined in the working paper version.
- ▶ **Singapore (Singapore):** Transaction data from Singstat.
- ▶ **Oslo (Norway):** Our calculations with data from Eiendomsverdi AS and Statistics Norway.

# Gravity is an important concept for international trade – and investments!



- ▶ The gravity model was originally developed to explain trade patterns ([Tinbergen '62](#)).
- ▶ Financial Investments: [Lane and Milesi-Ferretti '08](#)
- ▶ Offshore Financial Investments: [Zucman '13](#)
- ▶ Shell companies: [Laffitte '23](#)

A gravity relationship appear evident in Dubai  
when ownership is scaled against GDP



# We estimate a gravity-like model to quantify the underlying dynamics for all cities



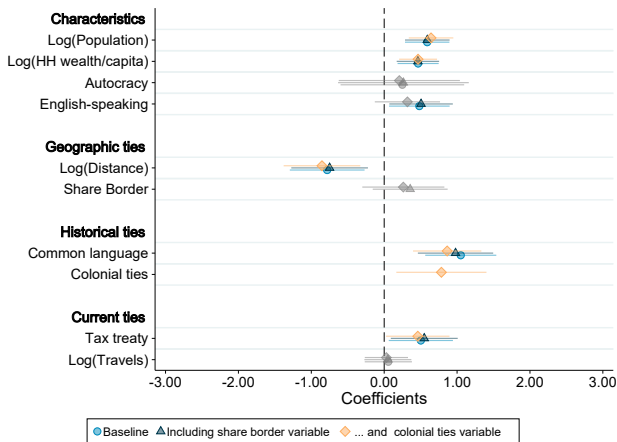
We use Poisson Pseudo Maximum Likelihood (PPML) to estimate  $RE_{i,j}$ , where the value of RE in city  $j$  owned by investors from country  $i$ .

$$RE_{i,j} = \alpha + \beta X_{i,j} + \beta Y_i + \epsilon_i \quad (1)$$

$X_{i,j}$  includes distance (log), indicator variable for sharing border, travels (log), tax treaty, and colonial ties.

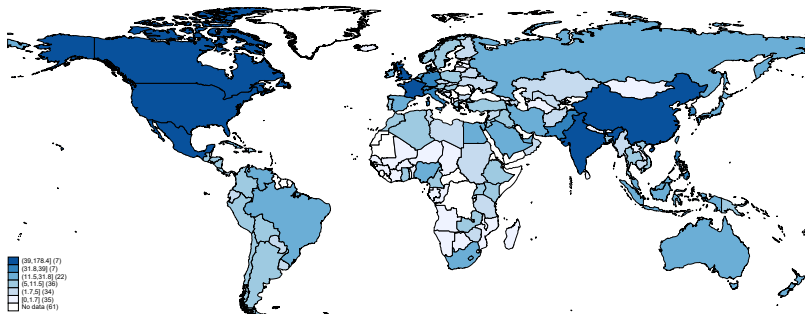
$Y_i$  includes population (log), household wealth per capita (log), indicator variable for English-speaking country and indicator variable for autocratic government.

# It confirms the importance of gravity

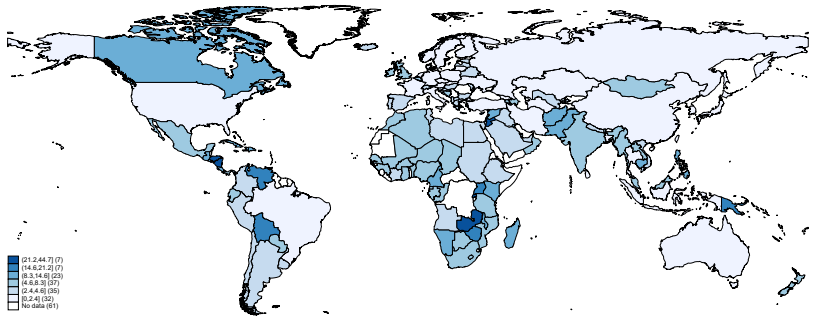


# Global distribution of offshore real estate wealth.

# Largest fortunes in the biggest countries



# Latin American countries and Uganda





# Canada and Asian countries have the largest ownership relative to financial wealth



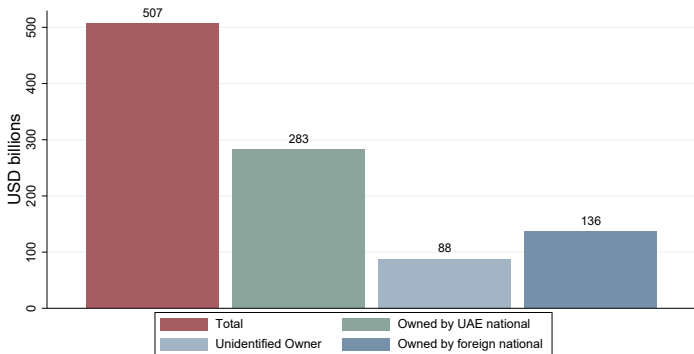
Table 1: Offshore Real Estate Wealth in our cities and areas

	Offshore real estate (2020)	% of GDP	Offshore Fin. Wealth (% of GDP, 2007)
Africa and Middle East	228	5.2	17.2
Asia	721	2.3	4.6
Canada	163	9.7	4.6
Europe	459	2.4	12.8
Gulf countries	70	4.2	54.1
Latin America	211	3.8	13.0
Russia	23	1.4	13.2
United States of America	104	0.5	7.3
Total	1,978	2.3	10.0

# Micro-patterns from Dubai

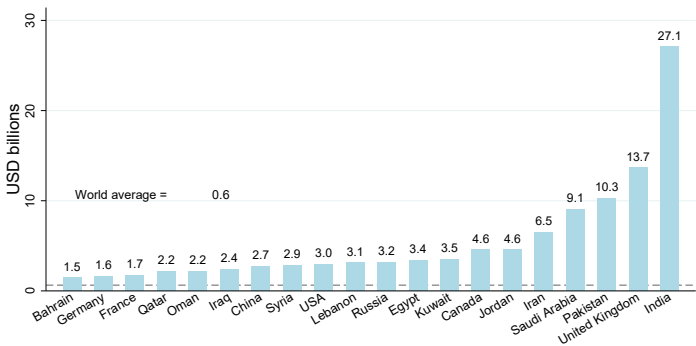
## 27 percent is foreign-owned

Figure 1: Real estate ownership, in USD billions



## India, UK and Pakistan biggest owners

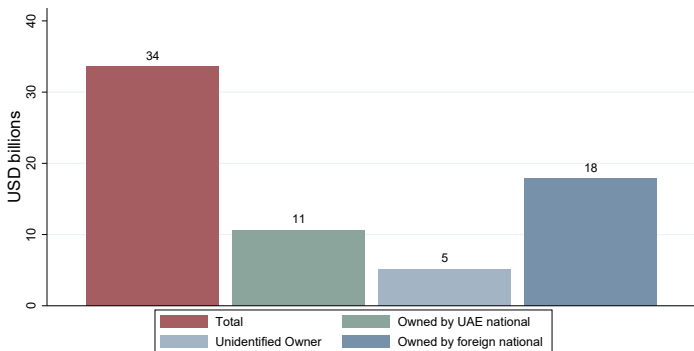
Figure 2: Real estate ownership, in USD billions



# Offshore share exceed 50 % in most affluent areas



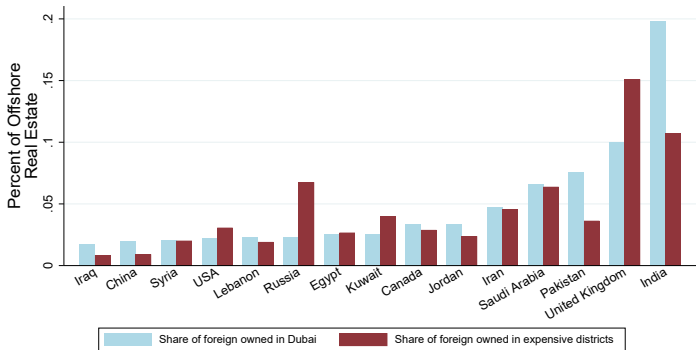
Figure 3: Real Estate Held in Dubai in 2020: Top 20 Countries (Affluent areas vs. All areas)



# And the country distribution is different – Russians and Brits prevalent



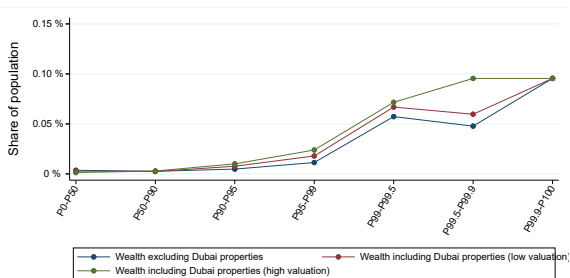
Figure 4: Real Estate Held in Dubai in 2020: Top 20 Countries (Affluent areas vs. All areas)



# Probability of owning offshore Dubai real estate rises with wealth



Figure 5: Ownership of Dubai Properties Across Wealth Groups

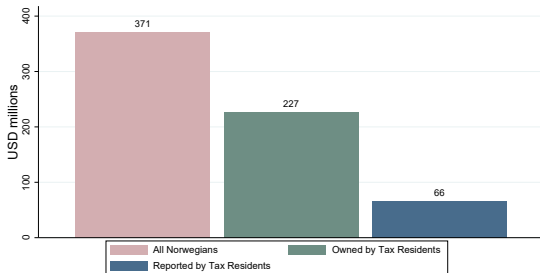


**Notes:** The sample of Norwegian Dubai property owners include the 172 owners of Dubai real estate who are identified as Norwegian tax residents.

# 70% of properties are not reported (number of properties)



Figure 6: Reported vs. Total Dubai Real Estate of Norwegians



**Notes:** This figure compares United Arab Emirates real estate which is reported to the Norwegian tax authorities (no statistic is available for Dubai separately) and Dubai real estate owned by Norwegians in our data.



# Concluding remarks



## Summary of what we find

- ▶ Global offshore real estate worth at least 2.3 percent of world GDP – probably closer to 5 percent.
- ▶ Most prevalent in Africa and Middle East, Gulf countries, Latin America and Canada, in terms of GDP.
- ▶ Almost as important as financial wealth for Asia and for some Latin American economies.
- ▶ In Dubai: Norwegian tax residents report only 30 percent of the properties they own.
- ▶ In Dubai: Probability of owning increase with wealth for the Norwegian sub-sample.



## Key takeaways

- ▶ Offshore real estate is large, although likely to be smaller than offshore financial wealth.
- ▶ This is worrying for tax compliance.
- ▶ United Arab Emirates and other countries participates in the CRS – automatic exchange of financial information – but real estate is not reported. Our results illustrates a major shortcoming of CRS.
- ▶ Policy implication: Need to extend CRS to real estate.

# There is increasing scrutiny towards Dubai



E24

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## EU politicians want to blacklist Dubai

The United Arab Emirates may end up on the same list as North Korea and the Cayman Islands, following exposé about oligarchs and criminal Europeans with property in Dubai.



Politicians from the four largest groups in the European Parliament propose new measures against Dubai to limit money laundering. EU parliamentarian Markus Pieper is the center-right group The European People's Party (EPP). Photo: Torbjørn A. Christoffersen, E24

# Additional slides

## City and area list

- ▶ **North America:** New York City, Los Angeles, Chicago, San Francisco, Washington DC, Boston, Miami (US), Vancouver and Toronto (Canada).
- ▶ **Europe:** London (UK), Paris and Cote d' Azur coast (France), Madrid (Spain), Berlin and Munich (Germany), Amsterdam (the Netherlands), Monaco (Monaco), Oslo (Norway)
- ▶ **Asia:** Tokyo (Japan), Singapore (Singapore), Hong Kong (Hong Kong), Beijing and Shanghai (China), Dubai (UAE), Sydney (Australia)

# Examples of offshore investors in the case of London



- ▶ French individuals who owns a UK property directly.
- ▶ French individuals who owns a UK property indirectly.
- ▶ A UK individual who owns a UK property via an offshore company counts, even though if we observe the final ownership. (Intuition: Same type of obfuscation.)
- ▶ An offshore company that owns UK property but for which we have no ownership info
- ▶ An offshore pension fund or other type of financial institution.