

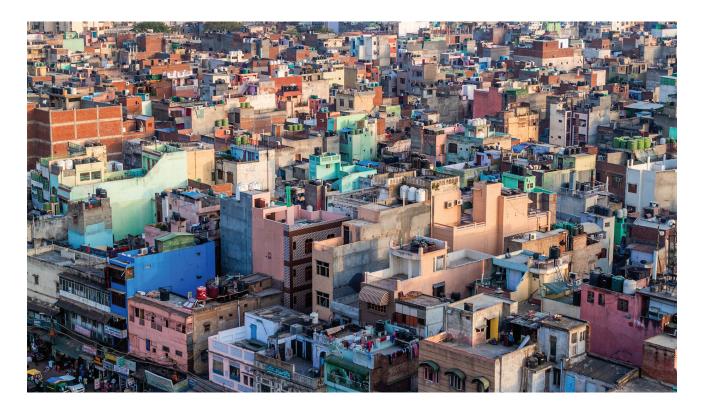
Policy Brief | February 2021

# India's housing paradox: Empty houses and housing shortages

## Sahil Gandhi, Richard Green and Shaonlee Patranabis

Note: This policy brief draws heavily on the empirical findings of the CSEP working paper, "India's housing vacancy paradox: How rent control and weak contract enforcement produce unoccupied units and a housing shortage at the same time" by the same authors to propose relevant policy recommendations. The working paper can be accessed at https://csep.org/jbp38Lm

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# Key takeaways

- The housing market in India suffers from distortions. The rate of vacancy is high (12.3%), as is the need for affordable housing (18.78 mn units).
- Landlords are disincentivised from renting their houses because of the legacy of stringent protenant rent control and inadequate state capacity for enforcement of contracts.
- Improving rent control legislation and rationalising the process of contract enforcement could result in bringing vacant houses into the market.

India will nearly double the size of its urban population between 2018 and 2050. Over half of the Indian population will be facing a significant challenge soon — finding affordable and sufficient housing.

## Introduction

"India will contribute most to the urban population increment with the addition of 416 million urban dwellers, nearly doubling the size of its urban population between 2018 and 2050", the World Urbanisation Prospects report noted in 2018 (United Nations 2018, p. 43). Over half of the Indian population will be facing a significant challenge soon — finding affordable and sufficient urban housing.

On the other hand, in 2012, a Government of India report estimated that 18.78 million more houses were needed to bridge the housing gap (MHUPA 2012). Our analysis of 2011 Indian Census data reveals a paradox—an urban housing shortage of nearly 19 million units coexisting with 11 million vacant units. Every house brought into the market will better serve the population. So, why are these houses not occupied? What will it take to get them into the market?

As the Government of India turns its focus to developing affordable rental housing projects with the Pradhan Mantri Awaas Yojana (Urban), we undertook a study on the existing distortions in the housing markets. This policy brief conveys the results of recent research published in a working paper at the Centre for Social and Economic Progress, which investigates the reasons for vacant housing in India. In the working paper, we find that rent control measures and the state of contract enforcement in India lead to the high number of vacant houses—numbers that go well beyond the frictions typically seen in housing markets.

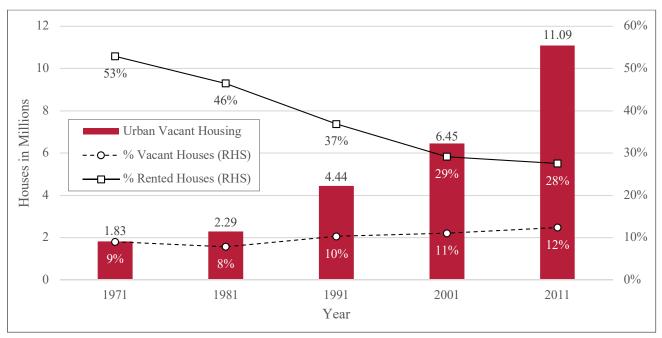
# The problem

In 2011, 11.09 million urban housing units were empty, or 12 percent of the urban residential stock. This is sufficient stock to house as many as 50 million people – 13 percent of the urban population.

Not only are an alarming number of houses vacant in the country, but the number has also been rising between 1971 and 2011, while the proportion of rental dwellings to occupied residential stock declined from 53% in 1971 to 28% in 2011 (Tandel et al. 2016), as shown in Figure 1.

There is substantial variation in vacancy across districts in India, with districts in the western regions showing higher vacancy rates as compared to the rest of the country - it is as high as 19% of the urban residential stock in Gujarat and 16% in Maharashtra. Cities on the peripheries of metropolitan cities have higher vacancy rates than central cities.

Vacant housing has often been framed as a result of market frictions ("unintentional" vacancy) and as a result of rational decisions of landlords to withdraw their property from the market ("intentional" vacancy). In our study, we focus on the possible causes that lead to intentional vacancy, exploiting the variation in vacancy across cities, districts, and states in India. We specifically look at tenant protection laws and judicial infrastructure as policy instruments that could affect intentional vacancy.



### Figure 1: Percent vacant and rental houses in urban India

Gandhi S., Green, K. R. & Patranabis, S. 2021. India's housing vacancy paradox: How rent control and weak contract enforcement produce unoccupied units and a housing shortage at the same time. CSEP Research Foundation Working Paper.

### Limitations

The primary limitation of the empirical study comes from the scarcity of data. The latest available data on vacant housing was from the Census of 2011, and no reasons for vacancy were noted. Therefore, it uses the regulatory context before 2011.

The study and, hence its recommendations, are limited to the formal private housing market. There exist a large number of informal or unregistered rental contracts, as well as rental contracts registered as leave and license contracts. However, little information is available regarding the proportion of these to formal contracts. Therefore, we limit ourselves to the formal private housing market. All policy recommendations put forth in this policy brief should be read in this context.

### **Empirical evidence**

Rosen and Smith (1983) show that in well functioning markets, higher turnover leads to higher vacancy rates; however, we find the opposite to be true for India – indicating that the rental market is distorted. Delving further into these distortions, we find that vacancies in India are strongly related to pro-tenant rent control measures and poor contract enforcement.

In Gandhi et al. (2021), we use regressions to establish relationships between percent vacant housing with proxies of the strictness of rent control and state capacity to enforce contracts, controlling for a range of demographic factors, types of uses for buildings, and access to services. We also control for differences between states, using a fixed-effects model.

### 4.1. Rent control

India has a long legacy of rent control, initially stemming from a post-war shortage of housing and fears of exploitation of tenants. Over the years, the rent control laws have failed to keep up with the housing market. Instead of facilitating housing, they have become a hindrance to it. Our analysis finds that pro-tenant legislation is strongly related to high rates of vacancy.

# 4.2. Poor state capacity for contract enforcement

Legal disputes in India suffer from long-drawn-out court proceedings. The average commercial civil suit took 1445, days in a district court, according to the World Bank's Ease of Doing Business report (World Bank 2019). As a consequence, Indian Legal disputes in India suffer from long drawn-out court proceedings. The average commercial civil suit took 1445 days in a district court.

firms face high resource inefficiencies (Boehm and Oberfield 2020) and tend to eschew formal contracts. Similarly, in rental markets, landlords often feel that it may be better to not rent their property at all, because rental contracts take time and resources to enforce and are, therefore, unattractive. We find strong empirical evidence that districts with fewer judges per thousand people tend to have higher vacancies, lending credibility to this hypothesis (Gandhi et. al. 2021, p.22)

The analysis of the impact of rent control on vacancy (Gandhi et. al. 2021, p.19) reveals that the following measures are vital to improving the housing market:

- Reduction in months of non-payment allowed: Landlords must be able to evict tenants in a short time if they fail to pay their rent (a onemonth reduction in time to issuing eviction notice reduces vacancy by 0.78% to 1.31%). For example, in Vishakhapatnam (A.P.), 9% of the urban residential stock is vacant, where only one month of non-payment is allowed; while in Jaipur (R.J.), the vacancy rate is at 17.38% where five months of non-payment are permitted.
- Allow revision of rents. The landlord should be able to increase rents (districts with strict rent revisions have 0.69% to 1.87% more vacancy).
   For example, Lucknow (U.P.) has a pro-tenant rent revision clause, and 11.79 % vacant housing, while Madurai (T.N.) has a relatively pro-landlord clause, and 6.76 % vacant housing.
- Improve contract enforcement. Better contract enforcement measured by the number of judges will lead to faster resolution times, creating an enabling environment for formal rent contracts. (1 more judge per 1000 urban persons reduces vacancy by between 4.48% to 14.96%)

# Recommendations and policy discussion

### 5.1. Data

A challenge our study faced was the lack of a comprehensive database of vacant houses. The census is the only database that counts vacant houses. However, it is deficient on three fronts – geographical depth, reasons for the vacancy, and frequency.

#### International precedents

To give one contrast, the United States compiles and releases the American Community Survey, which includes data on housing characteristics, vacancies, and finely grained geography, every year. Further, the Housing Vacancies and Homeownership database is available both annually and quarterly, allowing for robust monitoring of the housing market. Additionally, cities collect information on the housing markets in their jurisdiction, an example being the Department of Consumer and Regulatory Affairs<sup>1</sup> in the District of Columbia, USA.

Presently, we can also use data from administrative databases as proxies for vacant housing in India, e.g. water meter information was used by Prosper Australia<sup>2</sup> to study vacancy in Melbourne.

A one-time survey like the Technical Assistance for Policy Reform surveys in Egypt can also add to our knowledge of the market. This survey should include questions on the attitudes towards renting and the causes for withholding units from the market.

#### Data plan for India

We suggest a three-point plan for improved housing data for the Ministry of Statistics and Programme Implementation, Census authorities and the Ministry of Housing and Urban Affairs<sup>3</sup>:

- To release data at the sub-city and sub-market level: Since the census collects housing and vacancy data at the sub-city level, it can release the data at this granular level. The data will help us understand the spatial distribution of vacant houses within the city, allowing for more informed policy discussions.
- To collect and disseminate reasons for vacancy: While the census surveyors in India note the reason for the vacancy in Column 7 of the house-listing questionnaire, the information is not digitised and released. If released, we can understand if a vacancy is for want of tenants or if properties are withheld from the market voluntarily.

• Generation of high-frequency data on housing: The census data is decadal, which further complicates the study of any housing market, making it impossible to do time-series analysis, or understanding the impact of specific policy reforms. As housing is a leading indicator for the overall economy, it would be critical to know vacancy data at a higher frequency. Data should be collected annually, at a minimum.

At present, one way forward is to *l*everage listing website data (e.g. magicbricks.com, 99acres. com) to gauge frictional vacancy.

# 5.2. An agenda for reform: Law and contract enforcement

The empirical results from Gandhi et al. (2021) imply that the governance of rental contracts and their enforcement needs to be overhauled.

We take into account the changes in rental regulations only till 2011 in our analysis because the latest estimates of vacant housing available are for that year. Between 2011 and 2020, nine states have passed new rent control laws or amended them.<sup>4</sup>

The Model Tenancy Act 1992 and 2020<sup>5</sup> (MTA) take significant steps in the direction of policy reform that we suggest. While the Jawaharlal Nehru National Urban Renewal Mission mandated key areas of rental reform as part of a "Reform Checklist"<sup>6</sup>, the Pradhan Mantri Awaas Yojana -(Urban)<sup>7</sup> requires the adoption of the MTA as is or in a requisitely amended form. These fiscal incentives have played a part in the reform of the rent control acts in the last decade and a half.

# Improving rental regulations and contract enforcement

Pro-tenant rent regulations reduce the incentives of landlords to provide their premises on the rental market. Specifically, states need to improve the incentives to landlords to rent their premises out and make it easier to revise the rent to improve rental yields.

<sup>3</sup> Ministry of Housing and Urban Affairs, Government of India

- <sup>6</sup> From the Checklist of Reforms: Rent Control, MoHUA, http://mohua.gov.in/upload/uploadfiles/files/16STATE\_REFORM\_CHECKLIST\_RENT\_CONTROL. pdf, accessed October 19th, 2020.
- <sup>7</sup> See: PMAY-U Guidelines, pg. 15, Clause 11.5. https://pmay-urban.gov.in/uploads/guidelines/18HFA\_guidelines\_March2016-English.pdf, accessed September 21, 2020.

<sup>&</sup>lt;sup>1</sup> The latest such data set is the "Vacant Buildings 2nd Half Fiscal Year FY 2019 – as of April 1, 2019" by the Department of Consumer and Regulatory Affairs, District of Columbia. See: https://dcra.dc.gov/node/1409161, accessed September 22, 2020.

<sup>&</sup>lt;sup>2</sup> Prosper Australia. 2017. The economics of empty homes. See: https://www.prosper.org.au/2017/04/the-economics-of-empty-homes/, accessed September 22, 2020.

<sup>&</sup>lt;sup>4</sup> Jharkhand (2011), Jammu and Kashmir (2012), Madhya Pradesh (2012), Punjab (2012), Arunachal Pradesh (2014), Kerala (2014), Chhattisgarh (2015), Andhra Pradesh (2017) and Tamil Nadu (2017).

<sup>&</sup>lt;sup>5</sup> Model Tenancy Act, 2019. Ministry of Housing and Urban Affairs. See: http://mohua.gov.in/upload/uploadfiles/files/Draft%20Model%20Tenancy%20 Act%2C%202019(1).pdf, accessed September 21, 2020.

On the other hand, tedious processes of litigation cause landlords to fear the loss of property and revenue if they do rent their houses. Poor state capacity in the form of too few tertiary judges harms the rental market, as well as all other markets.

Thus, any policy agenda to improve housing will require the following:

- *Make it easier to penalise tenants for late rent payments.* Landlords must be able to evict tenants if they do not pay their rent, in a short period.
- Remove impediments to the revision of rents. The landlord should be able to increase rents at a reasonable frequency, without an increase in taxes or physical additions to the premises or other conditions.
- *Improve contract enforcement*. More district level judges are required to ensure that rental contracts are fulfilled.

# 5.3. The Model Tenancy Act – a move in the right direction

The MTA 2020 takes positive steps towards solving the challenge of revising rents as well as improving contract enforcement. It removes government intervention in setting the rent, as well as revising it, stating, "*Revision of rent between the landowner and the tenant shall be as per the terms set out in the Tenancy Agreement.*"<sup>8</sup>

As noted in Table 6, the improvement of rent regulation alone may not solve the vacant housing challenge. Egypt presents a particular case since vacant housing there was attributed to stringent rent control laws. The Egyptian government abolished rent control in 1996, after half a century of rent control (World Bank 2007). In 2006, the vacancy rate was noted to be 32% in the census; this had fallen to 27% in 2016. However, the old contracts under rent control were grandfathered in and incentivised multi-generational rental agreements.9 The abolition of rent control was noted to have a minimal effect. It is one of the few examples of policy focused on vacant housing in developing countries. The MTA 2020 is also envisioned to be applied prospectively<sup>10</sup>, keeping the legacy of rent control alive.

The MTA 2020 addresses contract enforcement by setting up a parallel system of dispute resolution in all matters falling under its jurisdiction. Further, the Act states that all cases under these tribunals

would have to be disposed of within 60 days. This alternative time-bound structure may satisfactorily resolve the contract enforcement problem in the rental housing market. Prospectively, the old rent control system is removed under the MTA 2020 in a two-pronged manner – both the law, and the court systems that implemented the law are replaced.

### 5.4 Time for a vacant housing tax?

Vacant housing is not a problem limited to urban India. Many governments have implemented policy measures to address the issue. Table 1 summarises the experience of some of these cities/ countries.

As noted in the table, vacant housing taxes have been levied with some success. The reduction of vacant housing has been directly attributed to the tax only in Vancouver and France. While vacant housing in Washington D.C. fell after the introduction of the tax, Mallach (2018) notes that this decrease may also be attributed to improving real estate markets. Vacancy taxes have high investments attached to them (Vancouver Sun, 2019). Still, they have been seen to work, increasing supply in the rental market.

There is a widespread trend of housing policies with a focus on ownership across the developing world, but tackling high vacancy rates has not been a priority yet. For example, vacant housing is a well-documented problem in South America, with countries noting high rates of vacancy, viz. 18 % in Argentina, El Salvador, and Uruguay and 20% in Mexico (Cibils et al. 2014). To our knowledge, there exist no specific policy responses to address the issue of vacant housing in developing countries, barring the slow abolition of rent control in Egypt and the introduction of the MTA in India. However, some cities have experimented with vacant land taxes — Visakhapatnam, Sao Paulo<sup>11</sup>, Bogota, and Marikina City (Hass and Kopanyi, 2017), to name a few.

A vacancy tax bundled with incentives for homeowners who rent their homes, may be considered for India (Gandhi et al. 2021). However, further study in the matter is required before such a measure is adopted. The tax could encourage landlords to rent their vacant houses. This push is necessary, given the low rental yields. On the other hand, reforming rent control and contract enforcement would assure them of the security of their investments.

<sup>&</sup>lt;sup>8</sup> The Model Tenancy Act, 2020, Section 9, Clause (I)

<sup>&</sup>lt;sup>9</sup> The old rent control legislation allowed rental contracts to be passed on to heirs. The tenants, thus have incentives to continue the old tenancies over generations.

<sup>&</sup>lt;sup>10</sup> See "Background note on MTA 2020" from the Ministry of Housing and Urban Affairs, at : http://mohua.gov.in/upload/uploadfiles/files/1%20 Background%20Note%20on%20MTA%20(English).pdf

<sup>&</sup>lt;sup>11</sup> Progressive Taxation of Vacant Land, The World Bank. See : https://urban-regeneration.worldbank.org/node/38, accessed September, 23, 2020.

## Conclusion

A policy plan to resolve India's vacant housing paradox must push landlords to rent their houses by creating appropriate disincentives for leaving their property empty. It must allay their fears about lost investments by creating an institutional framework that protects their rights and possible returns from rental contracts. It must also ensure that tenants' rights remain in balance.

In our study, we find two significant drivers of vacant housing:

These two factors significantly increase the risk to landlords while renting out their property, leading to lower risk-adjusted returns on housing. However, there is still a need for further enquiry into the reasons for low rental yields in urban India. We may infer the impact of recent changes in rent control from the Census of 2021. As we wait on these data, it is essential to respond to the challenges highlighted by the data from the Census 2011, and ensure that no stone is left unturned to improve the urban housing markets in India.

- The legacy of rent control
- Poor contract enforcement

City / Country	Problem	Policy Response	Impact
Washington DC, USA	15% vacancy rate (2010)	<ul> <li>Policy type: Tax</li> <li>Vacant properties taxed at 5% of the assessed value<sup>13</sup></li> </ul>	The vacancy rate reduced to 10% in 2011 and is 9.7% as of 2019.
Vancouver, Canada	8.2% (2016)	<ul> <li>Policy Type: Tax and allied services.</li> <li>Self-declared vacant properties are taxed 1% of the assessed value.</li> <li>Random audits of declarations.</li> <li>Allied renter's services and social and cooperative housing.</li> </ul>	<ul> <li>High compliance rate for declaration (95% in 2018)</li> <li>47% of houses vacant in 2017 were occupied in 2018.</li> <li>Approx. CAD 39M in revenue raised in 2017 and 2018.</li> <li>Only CAD 22M collected in 2018, CAD 33.6M in 2017.</li> </ul>
Oakland, USA	8.6% (2018), 7.8% (2019)	<ul> <li>Policy type : Tax (Nov, 2018)</li> <li>\$6000 on vacant residential/non-residential parcels.</li> <li>\$3000 on condos or duplexes not occupied for more than 50 days a year.</li> </ul>	Unknown
France	Around 8% (1997)	<ul> <li>Policy Type: Tax</li> <li>12.5%-25% of rental value, dependent on years of vacancy.</li> </ul>	13% decrease in vacancy rates between 1997 and 2007
Egypt	27% (2016)	<ul> <li>Policy Type: Regulatory Reform (1996)</li> <li>Abolition of restrictive rent control.</li> <li>Old rent-controlled contracts grandfathered in for their term.</li> </ul>	Minimal

### Table 1. Policy responses to vacant housing<sup>12</sup>

<sup>12</sup> Refer to appendix 1 for sources.

 $^{\scriptscriptstyle 13}$   $\,$  The tax on vs. 0.85% for occupied residential properties.

### References

Boehm, J., & Oberfield, E. (2020). Misallocation in the Market for Inputs: Enforcement and the Organization of Production. The Quarterly Journal of Economics, 135(4), 2007-2058

Gandhi, S., and Munshi, M. (2017). Why are so many houses vacant, The Leap Blog, 3<sup>rd</sup> May.

Gandhi S., Green, K. R. & Patranabis, S. 2021. India's housing vacancy paradox: How rent control and weak contract enforcement produce unoccupied units and a housing shortage at the same time. CSEP Research Foundation Working Paper No.3.

Hass, A., & Kopanyi, M. (2017). Taxation of Vacant Urban Land: From Theory to Practice. *International Growth Center, London School of Economic and Political Science: London, UK.* 

Mallach, A. (2018). The empty house next door. *Lincoln Institute of Land Policy*. https://www. lincolninst. edu/publications/policyfocus-reports/ empty-house-next-door

Ministry of Housing and Urban Poverty Alleviation (MHUPA) (2012). Report of the Technical Group on Urban Housing Shortage (TG-12) (2012-2017). September 2012. URL: nbo.nic.in/pdf/urbanhousing-shortage.pdf

Rosen, K. T., & Smith, L. B. (1983). The priceadjustment process for rental housing and the natural vacancy rate. *The American Economic Review*, 73(4), 779-786.

Tandel, V., Patel, S., Gandhi, S., Pethe, A., & Agarwal, K. (2016). Decline of rental housing in India: the case of Mumbai. *Environment and Urbanisation*, 28(1), 259-274.

United-Nations (2018). World urbanisation prospects: The 2018 revision. URL: https://population. un.org/wup/Publications/Files/WUP2018-Report.pdf, accessed 22<sup>nd</sup> September 2020.

World Bank. 2007. Arab Republic of Egypt: Analysis of Housing Supply Mechanisms, Final Note. Washington, DC. © World Bank. https:// openknowledge.worldbank.org/handle/10986/7554 License: CC BY 3.0 IGO, accessed 21st September 2020

World Bank, Ease of Doing Business: India Report. 2019. URL: https://www.doingbusiness.org/content/ dam/doingBusiness/country/i/india/IND.pdf

# Appendix 1: Sources for vacant housing policy

### Egypt

Peppercorn, I. G., & Taffin, C. (2013). *Rental housing: Lessons from international experience and policies for emerging markets.* (pp.39). The World Bank.

World Bank. 2007. Arab Republic of Egypt: Analysis of Housing Supply Mechanisms, Final Note. Washington, DC. © World Bank. https:// openknowledge.worldbank.org/handle/10986/7554 License: CC BY 3.0 IGO, accessed 21st September 2020

The Built Environment Observatory. (2016). Statistics of Vacant units in Egypt. http:// marsadomran.info/en/facts\_budgets/2016/11/507/, accessed 23rd September 2020.

### Mexico

Cibils, V. F., Blanco, A. B., Miranda, A. M., Gilbert, A., Webb, S., Reese, E. & Mora, P. (2014). *Rental Housing Wanted: Options for Expanding Housing Policy*. Inter-American Development Bank.

Monkkonen, P. (2019). Empty houses across North America: Housing finance and Mexico's vacancy crisis. *Urban Studies*, *56*(10), 2075-2091.

### Argentina, El Salvador and Uruguay

Cibils, V. F., Blanco, A. B., Miranda, A. M., Gilbert, A., Webb, S., Reese, E., & Mora, P. (2014). *Rental Housing Wanted: Options for Expanding Housing Policy*. Inter-American Development Bank.

### Washington DC

Bell, M. (2018). Washington DC. *Lincoln Institute* of Land Policy. https://www.lincolninst.edu/sites/ default/files/dc\_feb\_2018.pdf, accessed 20th September 2020

Mallach, A. (2018). The empty house next door. *Lincoln Institute of Land Policy*. https://www.lincolninst.edu/publications/policyfocus-reports/empty-house-next-door., accessed September 20, 2020

U.S. Census Bureau. (2019). 2019 American Community Survey 1-Year estimates Data Profiles [Online Data Profile]. https://data.census.gov/ cedsci/table?q=washington%20dc&t=Housing%20 Units%3AVacancy%3AVacancy%20 Rates&g=310M400US47900&tid=ACSDP1Y2019. DP04&moe=false&hidePreview=true, accessed 21st September 2020.

### Oakland

Measure W, the Oakland Vacant Property Tax ("VPT"). *Oakland City Council Resolution*. 24<sup>th</sup> February 2018: https://www.acvote.org/acvoteassets/02\_election\_information/PDFs/20181106/ en/Measures/19%20-%20Measure%20W%20 -%20City%20of%20Oakland.pdf, accessed 21st September 2020.

U.S. Census Bureau. (2019). 2019 American Community Survey 1-Year estimates Data Profiles [Online Data Profile]. https://data.census.gov/cedsci/ table?q=oakland%20california&t=Housing%20 Units%3AVacancy%3AVacancy%20Rates &g=310M400US47900&tid=ACSCP1Y2019. CP04&moe=false&hidePreview=false, accessed 24th September 2020.

Vancouver

Amendments to Vacancy Tax By-Law. (2017). Administrative Report to the Select Committee on Policy and Strategic Priorities, City of Vancouver. https://council.vancouver.ca/20170628/documents/ pspc6.pdf, accessed 25th September 2020. Housing Vancouver. (, 2020). *Empty Homes Tax Annual Report 1st January 2018 to 31st December 2018 Tax Year*, City of Vancouver. https://vancouver. ca/files/cov/vancouver-2019-empty-homes-taxannual-report.pdf, accessed 21st September 2020

Vancouver Sun (2019) Andrey Pavlov: Vacancy tax a good idea that's been badly implemented. Vancouver Sun, 1st February. URL: https:// vancouversun.com/opinion/op-ed/andrey-pavlovvacancy-tax-a-good-idea-thats-been-badlyimplemented, accessed 22nd September 2020.

#### France

Segú, M. (2020). The impact of taxing vacancy on housing markets: Evidence from France. *Journal of Public Economics*, 185, 104079.

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