Misbe-Haven
Geography of Offshore Tax Evasion in Canada

Research Questions

- What are the spatial patterns of offshore tax evasion in Canada?
- Who are the major actors and where are they located? Why are they there?
- What are the major havens Canadians use?
- How can we research tax evasion given its secrecy and lack of data?

Data

- Data are from the "Offshore Leaks" database compiled by the International Consortium of Investigative Journalists (ICIJ).[1]
- Largest ever leak of tax haven data.[1]
- 2 data types: Nodes (companies/individuals), and Edges (connections between nodes).
- I geocode (map) nodes using their addresses.
- This data is the best source of information we have on offshore tax evasion.[2]

What is offshore tax evasion?

- Companies and individuals avoid taxes by moving money out of its country of origin to a country with beneficial tax or secrecy laws.[3]
- These countries are known as "tax havens".[3]
- Offshore tax evasion is often illegal.[3]
- Almost all activities are secret, and very little data is available on the subject.[4]
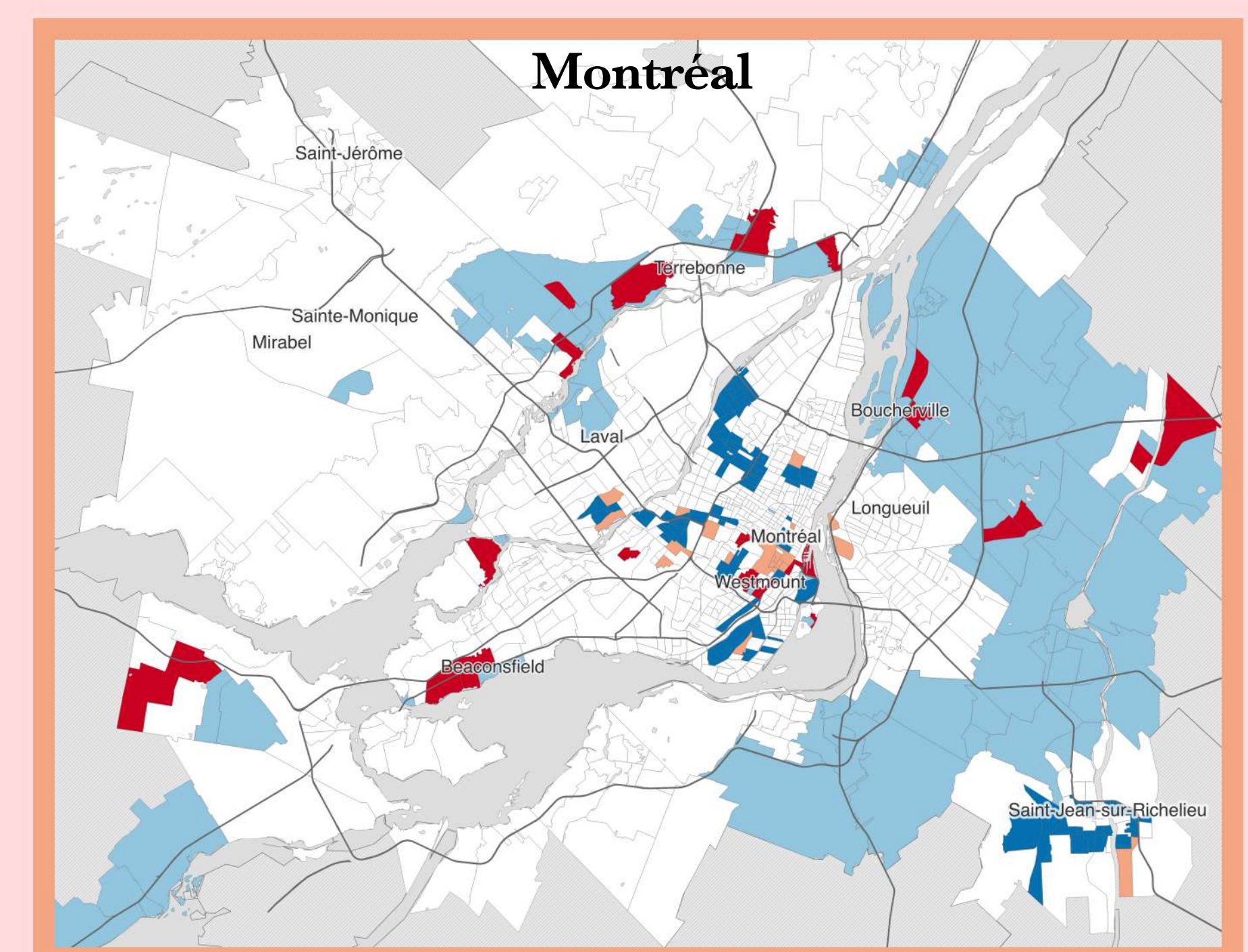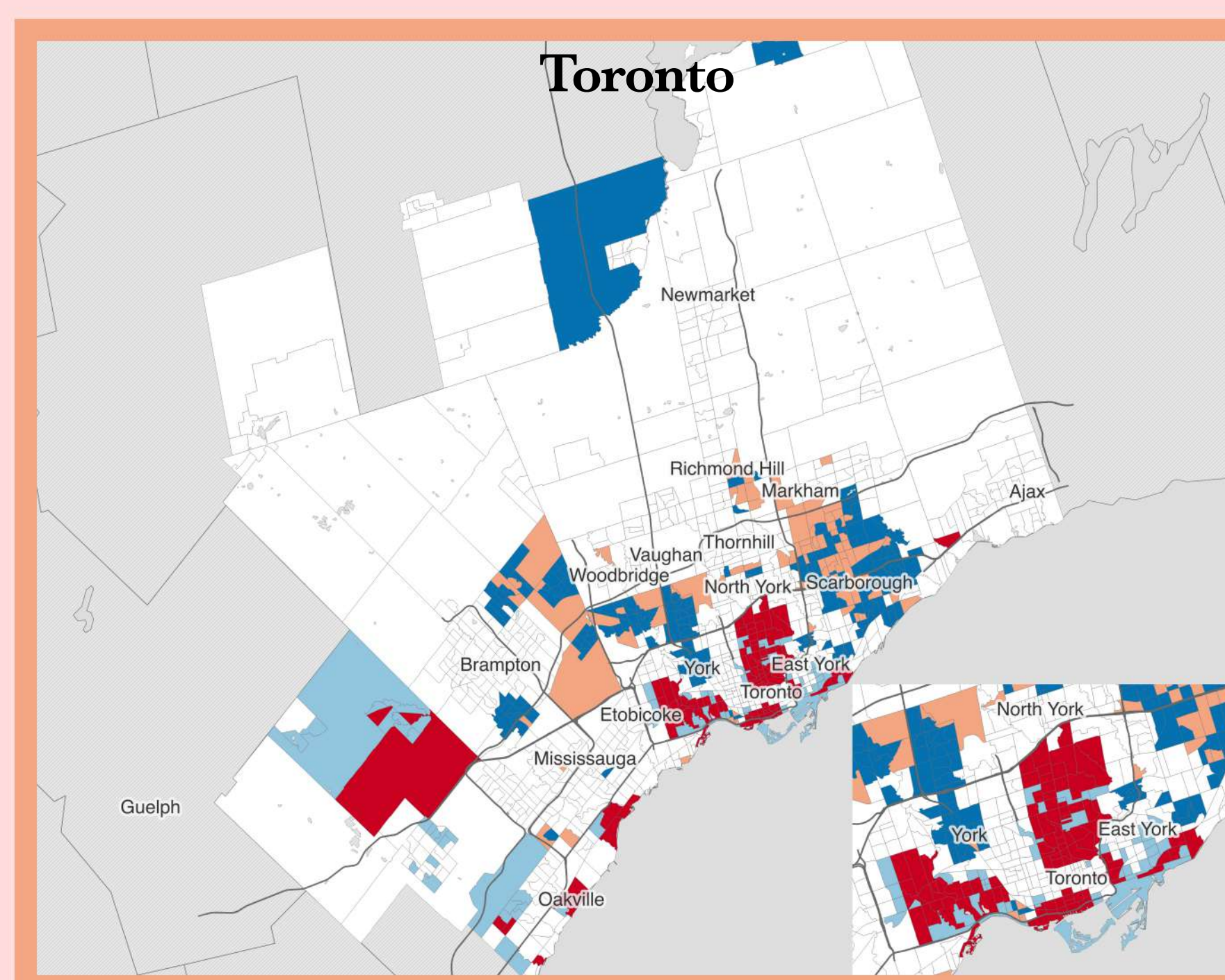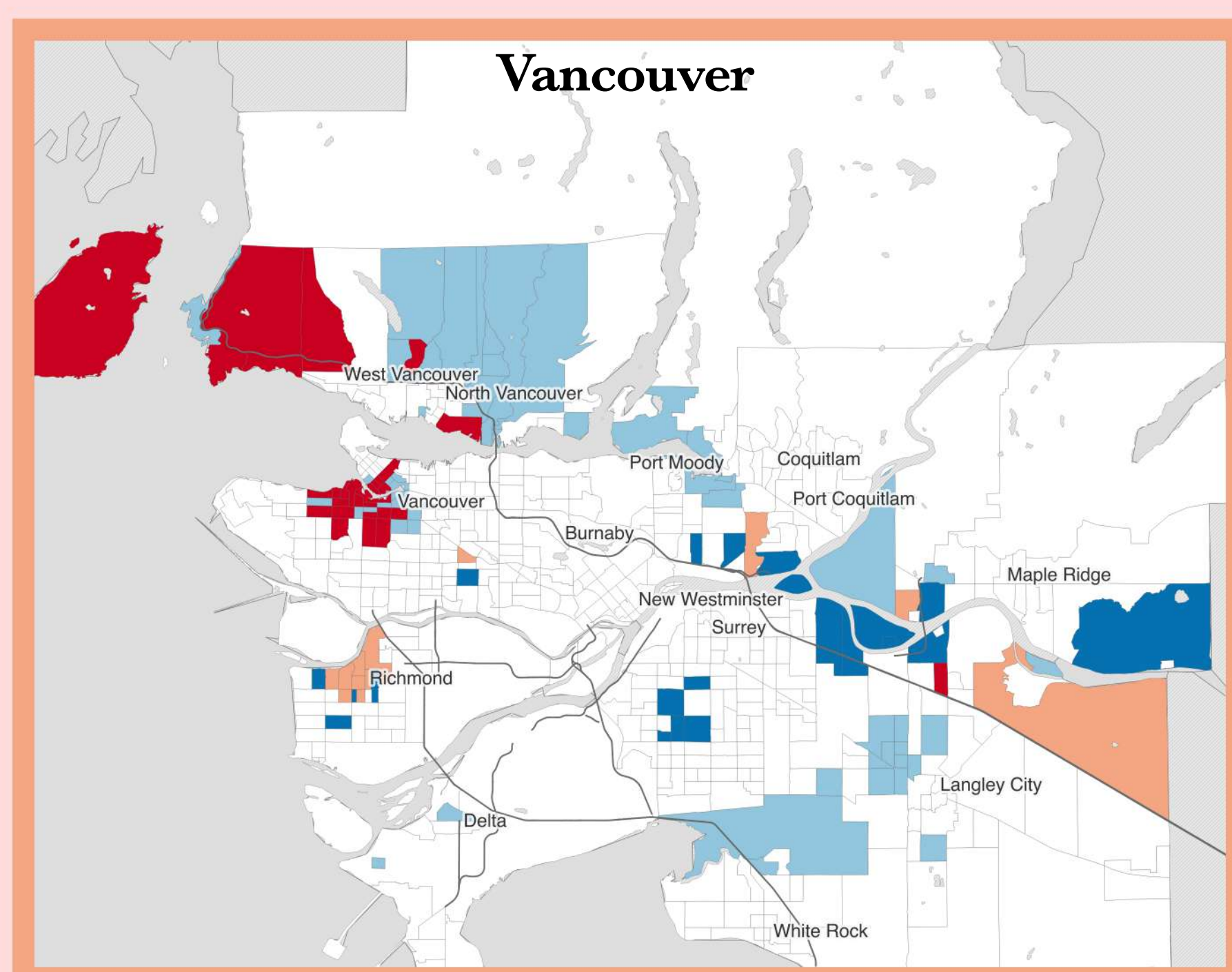
Case studies: tax evasion v.s. income in 3 largest Canadian cities

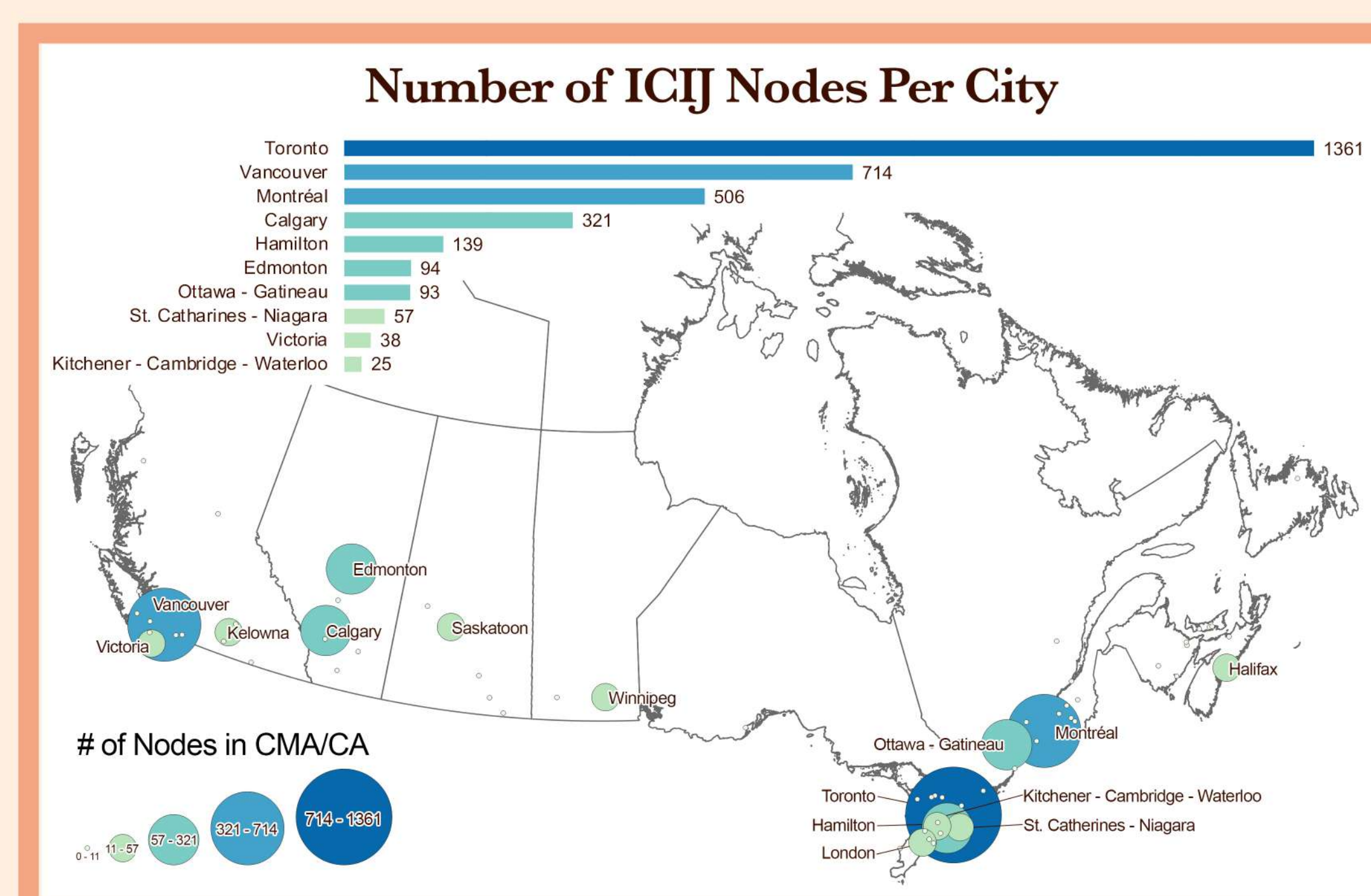Bivariate LISA[5] of nodes vs income

Nodes - Income
- High - High
- High - Low
- Not significant
- Low - High
- Low - Low

$$I_i = \frac{(x_i - \bar{x}) \sum_j w_{ij} (x_j - \bar{x})}{v}$$

Vancouver

Toronto

Montréal

Offshore tax evasion at international and national scales

CANADA — Connections with Canada in ICIJ Data
BERMUDA, BRIT. VIRGIN ISLANDS, CAYMAN ISLANDS, PANAMA, MALTA, EUROPE, ASIA, OCEANIA, UNDETERMINED

Number of ICIJ Nodes Per City

City	Nodes
Toronto	1361
Vancouver	714
Montréal	506
Calgary	321
Hamilton	139
Edmonton	94
Ottawa - Gatineau	93
St. Catharines - Niagara	57
Victoria	38
Kitchener - Cambridge - Waterloo	25

# of Nodes in CMA/CA

Dependent Variable: NODES PER CMA/CA			Number of obs	=	76
			F (7, 68)	=	21.48

Source	Sum of Sq.	df	Mean Sq.		Prob.	=	0.0000
Model	1786056.8	7	255150.971		R-squared	=	0.6886
Residual	807563.362	68	11875.9318		Adj R-squared	=	0.6566
Total	2593620.16	75	34581.6021		Root MSE	=	108.98

Variable	Coef.	Std. Error	t-Statistic	Prob.
Gini	18.40074	8.661528	2.12	0.037
Dum_L	307.1106	68.72008	4.47	0.000
Dum_M	-86.43977	35.82187	-2.41	0.019
NAICS52	45.24616	14.10563	3.21	0.002
NAICS53	22.81107	34.67865	0.66	0.513
NAICS54	-1.252142	10.11196	-0.12	0.902
NAICS55	1.300288	.8756232	1.48	0.142
Constant	-714.4515	245.8908	-2.91	0.005

Discussion

- Offshore tax evasion is difficult to map due to the scarcity of available data.
- This honours thesis attempts to paint a picture of its geography.
- No dollar amounts are available, so number of nodes/edges serve as proxy measurements.

Conclusions

- Nodes are disproportionally located in the three largest cities.
- Nodes are clustered in high-income areas.
- Offshore tax evasion is significantly related to income inequality and finance employment at national scale.
- Traditional tax havens and former British colonies like Bermuda have the most connections with Canada.

Future Research

- This is the first study of offshore tax evasion with quantitative analysis at the sub-national scale.
- More research and data is needed on this subject, as it remains relatively understudied.
- Geographic approaches can be used to find patterns and potentially craft policy.

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Works Cited
[1] ICIJ, 2022
[2] O'Donovan et al., 2019
[3] Shaxson, 2011
[4] Vaithilingam & Nair, 2009
[5] Anselin, 1995

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