IDEOLOGY, RELIGION, AND CHEAP HOUSING: ISRAELI SETTLEMENT OF THE WEST BANK

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2020 Rena Sivitanidou Annual Research Symposium

Summary

- ► How religious belief and national-ideological worldview affect response to economic factors among Israeli West Bank settlers: Non-ideological / Ideological / Ultra-Orthodox settlement
- Economic opportunity (lower housing cost) is an important factor in location choice of household
- Households with religious belief in the West Bank are more sensitive to housing costs

Contribution

- ▶ Israel settlement of the West Bank is a crucial global issue!
- ► Impact of belief (e.g., religion) on the responsiveness to economic incentives, is important, yet understudied
- Limited studies investigate how different belief affects location choice (e.g., housing prices, transportation infrastructure..)

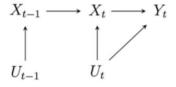
Comments (1): Specification Issue

$$\begin{split} In(\frac{Prob_{ijt}}{Prob_{iit}}) = & \theta + \alpha_1 C_{ijt} + \alpha_2 In(\frac{Z_{jt}}{Z_{it}}) + \frac{\alpha_3}{\alpha_3} PR_{jit} + \vec{\alpha_4} InT_{it} \\ & + \alpha_5 D_{sett,jt} + \alpha_6 D_{Ideosett,jt} + \alpha_7 D_{Ultrasett,jt} \\ & + \alpha_8 VoteNational_{it} + \alpha_9 VoteUltra_{it} \\ & + \alpha_{10}^2 PR_{ijt} * D_{Y,jt} + \vec{\alpha_{11}} PR_{ijt} * Vote_{X,it} \\ & + \vec{\alpha_{12}} D_{Y,jt} * Vote_{X,it} + \vec{\alpha_{13}} PR_{ijt} * D_{Y,jt} * Vote_{X,it} + \epsilon_{ijt} \end{split}$$

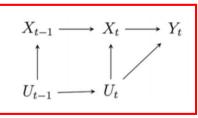
- ► Potential endogeneity
 - Omitted Variable Bias (e.g., positive construction shocks in j, which increase the overall influx of people to destination j, and decrease the housing prices in j)
 - Reverse Causality (e.g., as more people moving from i to j, changes PR_{ijt})
- Lagged variables: not enough to control for the time persistent unobservables

Potential Issues in Lagged Variable

A. Identification for lagged variable



B. Violation of Identification



Y: Prob(moving to j)

X: Relative price in j

U: construction shock

Figure 1: "Lagged Explanatory Variables and the Estimation of Causal Effect" (Bellemare et al., 2017)

Comments (2): Alternative Specification

$$\begin{split} In(\frac{Prob_{ijt}}{Prob_{iit}}) = & \theta + \frac{\alpha_1 C_{ijt}}{\alpha_2 In} + \alpha_2 In(\frac{Z_{jt}}{Z_{it}}) + \alpha_3 PR_{jit} + \frac{\vec{\alpha_4} InT_{it}}{\alpha_4 InT_{it}} \\ & + \alpha_5 D_{sett,jt} + \alpha_6 D_{Ideosett,jt} + \alpha_7 D_{Ultrasett,jt} \\ & + \alpha_8 \textit{VoteNational}_{it} + \alpha_9 \textit{VoteUltra}_{it} \\ & + \alpha_{10}^2 PR_{ijt} * D_{Y,jt} + \alpha_{11}^2 PR_{ijt} * \textit{Vote}_{X,it} \\ & + \alpha_{12}^2 D_{Y,jt} * \textit{Vote}_{X,it} + \alpha_{13}^2 PR_{ijt} * D_{Y,jt} * \textit{Vote}_{X,it} + \epsilon_{ijt} \end{split}$$

Suggestions Introduce fixed effects

- $lackbox{v}_{jt}$: destination-time specific fixed effects
- \triangleright η_{it} : origin-time specific fixed effects
- $ightharpoonup \lambda_{ij}$: origin-destination pair fixed effects (e.g, distance b/w i and j)

Pros Controls for any potential omitted variable bias at origin(destination)-level or origin-destination pair-level

Cons Cannot estimate the colored variables

Comments (3): Intuitions for Findings

- ► The results that national-religious and ultra-orthodox groups are more sensitive to prices are counter-intuitive
 - ► Is it because the religious groups have worse socioeconomic status?
 - ► I would include $PR_{ijt} * Income_{it}$ and check whether the differential impacts across different groups still exist

Comments (4): Settlement Location

- Selection in location choice of different types of settlement
 - "As shown in Figure 2A, many of the large non-ideological settlements were located close to the Green Line, whereas a large number of ideological settlements were established in the highlands of the West Bank in proximity to densely populated Palestinian areas."
- Potential identification threat:
 - e.g., Ideological settlements were located in cheaper part of the West Bank for some reason, and if the ideological groups move to the West Bank for religious reasons?
- ▶ Destination-level fixed effects could control for this issue; religious importance, distance to Jerusalem, stock of (each group of) people living in j (to control for the homophily)

Comment (5): Discrepancies between aggregate and micro-level

	(1) Without Interaction Terms	(2) With Simple Interaction Terms
PriceRatio X Dum_Ideological		4.39*** (0.92)
PriceRatio X Dum_Ultra- Orthodox		4.69***
PriceRatio X Vote_National		0.27 (4.48)
PriceRatio X Vote_Ultra- Orthodox		-37.04*** (1.52)

X: Relative price in j
Y: Prob(moving I to settlement)

Table 6: Results Obtained from the Estin Affordability Measure (Afford)

	(1)
h(t) equals 1 for moving to:	All settlement
Price	.92***
	(.08)
Vote_National	2.80***
	(.17)
Vote Ultra-	.85***
Orthodox	
	(.13)
$Price\ X$.75***
Votes National	(.28)
Price X Vote Ultra-	22*
Orthodox	(.12)

X: Price in i

Y: Prob(moving to settlement)

Figure 2: Aggregate (Left) vs. Micro (Right)

Comment (5): Discrepancies between aggregate and micro-level

Figure 7: Projected Population Moves to Settlements in the West Bank when dividing the Price Ratio Between j and i by 1.1 for Settlements for which PriceRatio<0, by Settlement Type, 2000-2014

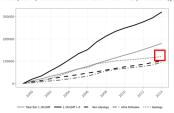
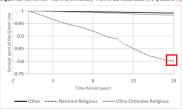


Figure 13: All Movers' Survival Probability West of the Green Line by Population Type, 2000-2015



Nates: Figure 13 presents results of simulation of the hazard model by household belief: for national-religious wastistuting Fore National = 1 and Fore Ultra-Orthodox = 0 for all sample observations), ultra-orthodox replacing Fore National = 0 and Fore Ultra-Orthodox = 1 for all sample observations), and non-ideological Fore National = 0 and Fore Ultra-Orthodox = 1 for all sample observations).

Figure 3: Aggregate (Left) vs. Micro (Right)

Question: Transaction Data

- PriceRatiojit: the log of the ratio between average quality-adjusted house prices in destination j and origin i at time t
- ► How are the settlement area transaction data collected? How is the housing market working in the West Bank?
- Not governed by Israeli government?

