Prepared for the 2019 European Real Estate Society (ERES) Refereed Sessions

January 31, 2019

Dear Professor Dr. Nappi-Choulet and the ERES Scientific Committee,

This is a supplemental note to the 2019 ERES Organizers regarding my submissions: the "church"

and the "cemetery" papers. I uploaded two extended abstracts for your consideration.

I would be grateful for the opportunity to present both of my working papers at the meeting.

These submissions are made by a student who is expected to graduate in a few months. I admit

that our institutional support remains scarce, which worsens the possibility of going to conferences.

This is going to be an international trip paid by the student himself, which remains a serious

financial challenge. Nevertheless, I will use this opportunity to invest in my research and myself

as a candidate. I understand that very few conferences permit one person to present two papers.

However, I believe in collecting quality feedback from experienced scholars like yourself. More, I

believe my topics would be of interest to the European students whom I hope to meet at the event.

In closing, I thank you for reviewing my submissions. I hope to show some results that are geo-

graphically meaningful to the ERES community in July.

Sincerely yours,

Chad

The Effect of Ecclesiastical Restructuring on Housing Prices: Evidence from the U.S.

This study examines the impact of repurposed parishes of the Catholic Church on the prices of surrounding houses. We echo Glaeser (2000) and Swedberg (1990)'s view that non-market interactions could influence people's economic decision. Parishes play vital roles in disseminating information, healing divided communities, and supporting the local economy (Grim, 2017). Nonetheless, about 1% of parishes are shuttered every year (Anderson et al., 2008). Numerous reports on dying congregations in the media (e.g., Merritt (2018) addresses the most recent account) and limited coverage of studies using micro-level religious buildings in the finance literature motivate us to fill the gap. Our objective is to quantify the effect of transformed religious identity of a community on local housing markets.

This research is timely because it attempts to capture a transitional culture in our modern society. In particular, this issue must be of interest to social scientists in Europe who must confront the wave of new (im)migrants in both classrooms and personal lives. Our study extends the literature on the Hofstede's work on multinational firms by examining the interaction between individual homeowners and a legacy institution - in this case, the Catholic Church - which remains a major cultural and commercial force in many European countries. Our study provides microscopic evidence of diversified traits of religious and cultural identities in residential neighborhoods. It attempts to answer whether evolving cultural heterogeneity has consequential effects on investors using the frameworks in the behavioral finance and economics literature. In this regard, our study aligns with the mutative power of culture by Baskerville (2003) and Tung (2008) and extends the empirical study of transformative potential of culture by Guiso, Sapienza, and Zingales (2003).

Existing theories explain the nature of cultural transformation. Shils (1981) shows decaying religious adherence leads to changing tradition and declining religiosity in modern societies. Cowen (1998) shows praising commercialization in our culture modifies our interaction to become more transactional and our behavior to become more opportunistic. Using the idea of dwindling human interaction by Putnam (1995) and the social norms theory by Coleman (1990), our study identifies restructured parishes in (sub)urban areas. Furthermore, our study will help us map and quantify

the intensity of religious market competition by capturing parishes that "go bankrupt". This alone provides empirical evidence to Laurence R. Iannaccone's argument that entrenchment of religious leaders could undermine sustainability of their congregation while providing "satisfactory weekly" service to parishioners (Iannaccone, 1991; 1998).

In the real estate finance literature, Do, Wilbur, and Short (1994) and Carroll, Clauretie, and Jensen (1996) have conducted empirical studies resembling what we accomplish in this paper. They find significant, albeit opposite, relationship between house prices and church proximity. We differentiate from their works by (1) expanding our study area from the city level to the national level, and (2) documenting the effect of converted edifices in both urban and rural places. Recently, Been et al. (2016) show heterogeneous responses by local governments to protect culturally significant neighborhoods. Their study motivates us to examine various outcomes in our data. For instance, we discover some parishes were converted to either luxury condominiums or assisted living facilities. These conversions show how (arch)bishops serve the needs of current parishioners while facing secularized communities.

Data and Methodology:

Conducting this research requires us to merge three data sets. First, we scrape dates, prices, and physical characteristics of sold houses from a popular real estate website. Because parishes remain scattered across the country, we retain town-level observations where there exists at least one parish. Scarcity of data on sold houses and recent parish closures narrows our study period to cover the past five years: [2014-2018].

Second, our key regressor contains parish characteristics at the property level. Absence of publicly available information on Catholic buildings challenges us to mechanically collect their locations and closure statuses. We construct individual parish profiles using three sources. The first is an online directory cataloging Catholic parishes and parochial schools worldwide - including almost all European countries. We collect and process these websites to build a global parish database. The second is the Official Catholic Directory, an annual publication of the U.S. Conference of Catholic Bishops (For the 2016 edition, see Official Catholic Directory (2016)). It contains both ethnic affiliation and closure status of each parish. Documents from diocesan offices indicate (arch)bishops

check financial viability as a criterion to identify which parish must be merged, acquired, suppressed, twinned, or closed permanently (For example, see Diocese of Beaumont (2006), O'Donoghue (2009), The Liturgical Commission with the Office of Worship (2016), and The Diocese of Lansing, Michigan (2017)) The institutional law states only (arch)bishops have the legal right to either erect, rename, or close a Catholic parish (The Second Vatican Council, 1983). The third is a database of local newspapers. Using the LexisNexis and Newsbank databases, we analyze their contents to re-confirm structural changes and sales of neighborhood parishes. These clips timestamp the announcements and identify how they were commercialized, allowing us to map gentrification patterns of religious buildings in and across the United States and its territories.

Third, we collect financial, economic, and demographic information from the U.S. Census Bureau and City-Data.com websites. These control variables help us estimate the effect of converted religious sites on housing prices controlling for structural and neighborhood characteristics.

Our econometric model follows the standard hedonic specification used in the literature. We follow Rosen (1974) and setup a regression of parish characteristics on local housing prices, controlling for household, demographic, and regional characteristics. We begin our analysis by introducing the number of parishes in a neighborhood as our key independent variable - the regressor being the proxy for the intensity of religious structures in an area. Later, we introduce more detailed characteristics of parish traits, such as the age of the building, its status of historical preservation, ethnic affiliation, and (foreign) language used at mass. To expand our analysis, we expect to aggregate our unit of analysis at the county-level. Nevertheless, the structure of our church data at the street level allows us to zoom into different neighborhoods to capture the gentrifying effect of religious sites on the values of surrounding properties in both urban and rural areas.

Expected Results:

Rapidly changing neighborhoods encourage us to analyze our data beyond the concepts of radial rings by von Thünen (1966) and of primitive interaction among tribes by Sahlins (1968). Our study unveils the vibrancy of modern communities through residential markets where diverse ethnic and religious groups intersect. Our results show housing markets' (1) adaptability to absorb evolving social groups and (2) agility to stay as cohesive communities as Tocqueville (1841) observed in

American colonies.

In conclusion, we examine the behavior of urban and rural housing markets by pinpointing religious transformation within communities. We believe the Catholic Church's structural reorganization reflects its effort to strengthen its institutional survivability in the midst of cultural shift. Changing tradition propels religious leaders and policymakers to modify networks of religious buildings in their municipalities. Our results reflect heterogeneity in housing markets after the death and resurrection of - or re-purposing of - parishes.

The Current Status of our Data:

About 5.3 million raw websites are being processed to extract parish information from the aforementioned sources. We expect to obtain some preliminary results by the time the ERES Conference is held in early July, 2019. We hope to present interesting results to our European scholars attending the meeting in Cergy, France. On behalf of my dissertation advisors, I am grateful to the Organizers of the 2019 ERES meeting for their patience and attention.

- THE END -

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