

Housing Market Institutions Drive Race and Ethnicity Differences in Energy Consumption

Michael Edwards

James Woods

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Abstract

When socio-demographic factors are considered in any kind of analysis of household electric and gas utility data, it is common to observe differences in energy use between households with different self-reported race and ethnicity compositions. These differences persist controlling for structure type, e.g., single family dwelling, age and size of housing units, and, other common control variables. Without the information necessary to better explain these differences, they are commonly summarized simply as cultural differences. This paper demonstrates that these differences can be partially explained by differential sorting by structure and ownership, i.e., endogenizing housing choice and rental decisions. We will show that these differences in energy consumption may be because of housing market institutions and restrictions.

1 Introduction

[12]

Figure 1: Annual kWh by Rent/Own and Race

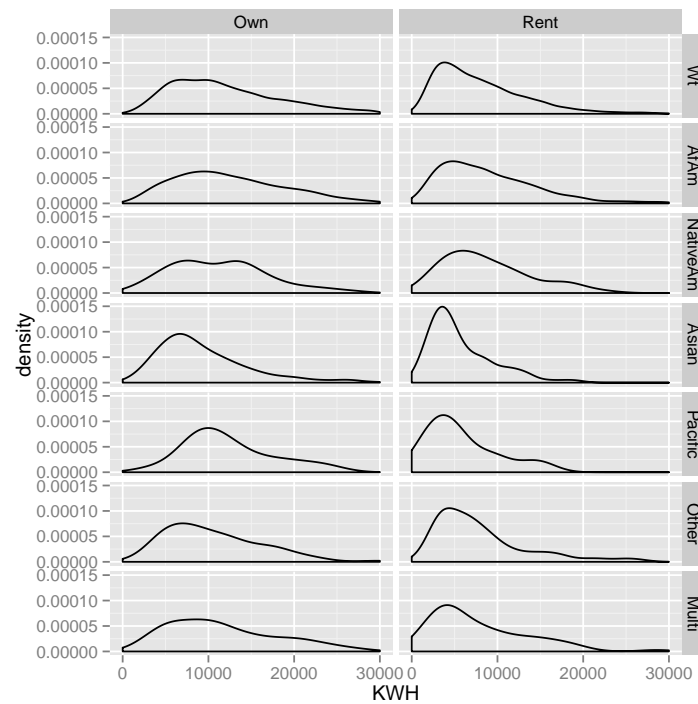
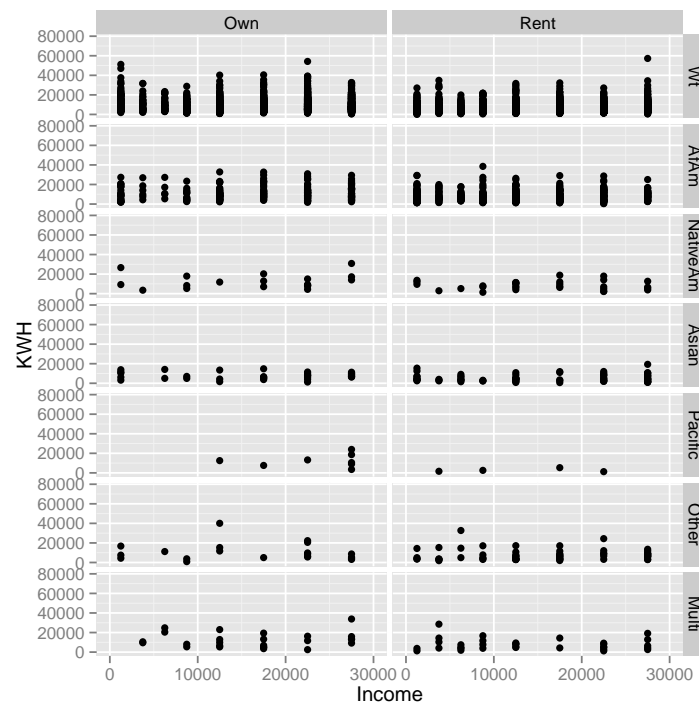


Figure 2: Annual kWh by Income



	Wt	AfAm	NativeAm	Asian	Pacific	Other	Multi
Mobile	468	27	9	1	1	8	7
SFDetached	6424	762	52	236	24	100	97
SFAttached	649	131	12	48	2	20	16
SmApartment	614	179	13	52	3	29	16
LgApartment	1283	390	24	114	10	53	31

Table 1: Count of Observations by Race and Structure Type

1.1 Race and Ethnicity in Conditional Demand

1.2 How Race and Ethnicity are Interpreted

2 RECS

2.1 Race and Ethnicity Differences in Equipment and Structure

2.2 Differences in Reported Behavior

3 Conditional Demand Estimation

3.1 Orthodox Results

3.2 Single Equation Methods

3.3 Multiple Equation Methods

4 Summary and Conclusions

References

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