

New Age Informality: Hispanics and the Sharing Economy

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ABSTRACT

The purpose of this study is to advance understanding of the Hispanic contribution to the engagement and production of the sharing and informal economies in the US. The study is situated within the domains of the sharing economy and informality within a broader frame of entrepreneurship. Specifically Hispanic participation rates rationale for engagement and the major drivers of involvement in the production of the sharing and informal economies are analyzed. To evaluate this data are reported from a nationally representative subsample of Hispanics derived from the US Federal Reserve Board's Enterprising and Informal Work Activities Survey (EIWA) conducted in the late fall of 2015. The finding is that more than one-third of Hispanics engage in EIWA. Hispanics participate in EIWA primarily as a means to earn extra income or as a key avenue to earn a living. By choice relatively affluent Hispanics have the largest stake in sharing and informal economies. However it is the lowest income Hispanics that engage in EIWA out of necessity. The major drivers of EIWA participation among Hispanics are revealed. This is the first known study with a nationally representative sample of Hispanics focused on participation rates rationale for engagement and drivers of involvement in the production of new age sharing and informal economies.

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1. INTRODUCTION

While informal markets are as old as the government institutions created to regulate them informality in the age of the smartphone began not long ago in 2007. Noted globalization observer Thomas Friedman(2016) has argued that the smartphone was instrumental in creating the age of accelerations in the contemporary global marketplace; the smartphone certainly changed the conduct of business (Morris2017). In essence the smartphone ushered in and standardized the technological sharing economy. Unfamiliar a decade ago these sharing economy companies are ubiquitous today Uber Airbnb Etsy and Lyft. Recent Pew Research surveys reported that 36% of US adults had used ride sharing (Jiang 2019) and that 72% of Americans had participated as consumers in the sharing economy as of 2016 (Smith2016a).

Sundararajan(2016 p. 2) argues that “a radical shift is underway” fueled by the sharing economy that he argues achieved scale by 2010 and that this radical shift is transforming the nature of employment. Employment and especially earnings within the sharing economy is under-reported and oftentimes goes unreported to government authorities enhancing the informal nature of much of the sharing economy. In this article the popular term sharing economy is used extensively. Alternate terms for this phenomenon include crowd-based capitalism gig economy and collaborative consumption among others (see Gobble2017).

As a first step in understanding the scope of this transformational shift the Consumer and Community Affairs division of the US Federal Reserve Board undertook a national survey in the late fall of 2015 targeted at the sharing economy (see Robles and McGee2016). In addition this survey the Enterprising and Informal Work Activities (EIWA) survey also explored more traditional offline informal economic activities such as landscaping child and elder care and selling goods at flea markets. The economic target of the survey encapsulated the sharing and informal economies.

Stephany (2015 p. 9) defines the sharing economy as: “the value in taking underutilized assets and making them accessible online to a community leading to a reduced need for ownership of those assets”. In essence the sharing economy allows for innovative asset sharing or co-utilization while reducing transactions costs in part through rental management and enhanced inventory control. Schor(2020 p. 16) adds that the sharing economy “denotes peer-to-peer sites serving individuals (consumers) in offline [market or gift] exchanges”. Woodcock and Graham(2020 p. 3) define the sharing or gig economy as labor markets “that are characterized by independent contracting that happens through via and on digital platforms”. Finally Hamari et al.(2016 p. 2047) note the sharing economy as “peer-to-peer-based activity of obtaining giving or sharing access to goods and services coordinated through community-based online services”. As to economic informality Richardson and Pisani(2012 p. 19) define informality as “work that is in itself legal but avoids government regulation oversight and/or taxation” in the production of a licit good or service.

The sharing and informal economies in the US are present across regional geographies and ethnicities. Our focus in this article is to spotlight and better understand the engagement and participation of Hispanics in this new age of informality particularly within the lens of the sharing economy. Illustrating Hispanic participation in the production of the sharing economy seven percent of Lyft drivers and nearly six percent of Uber drivers in the US are Latino (Dickey2017). The terms Hispanic and Latino are used interchangeably throughout this article.

As informal work and portions of the sharing economy seek to remain hidden from government authority it is difficult to measure informality and ethnic inclusion precisely. Regional estimates in heavily populated Hispanic areas provide some perspective. For example it is estimated that the informal economy comprises more than sixteen percent of the Los Angeles workforce (Klowden and Wong2005) to upwards of twenty-five percent of the entire economy of Hispanic South Texas (Richardson and Pisani2012). Additionally a recent national study estimates that perhaps as many as one-third of Latino-owned businesses are unregistered enterprises (Pisani and Morales2020). The sharing economy provides one new pathway into the informal economy.

So as there is overlap and interconnection between the sharing and informal economies does this interconnection differ by ethnicity? It is clear that Hispanics are part of the sharing and informal economies; yet almost nothing is known of Hispanic engagement and business participation in these economies. To our knowledge this is the first academic work focused on Latino participation as consumers of goods and services and suppliers of labor in the sharing economy. In essence I seek to explore how Hispanics engage the sharing economy as a first step forward in understanding the relationship between Hispanic ethnicity the sharing economy and informality. Three research questions (RQ) guide the exploration:

- RQ #1: Do Hispanics differ from other racial/ethnic groups in their participation in the sharing and informal economies?
- RQ #2: What is the rationale of Hispanic participation in the sharing and informal economies?
- RQ #3: What are the major drivers (i.e. determinants) of Hispanic participation in the sharing and informal economies?

As this research is exploratory I believe answering foundational research questions may build momentum in future research toward more formal hypothesis testing with further understanding of ethnicity and engagement with the sharing and informal economies. The remainder of this article is organized as follows: section two reviews the pertinent literature. Section three details our sample and methodology. Results and a discussion of the findings are detailed in section four. The last section concludes the article and offers a perspective on policy implications.

2. LITERATURE REVIEW

The sharing economy and informality literature inform our study and are reviewed in this section.

A. The Sharing Economy

Sharing has been a fundamental component of economies for millennia (Sundararajan 2016). What is new in the present-day sharing economy is “the technological breakthroughs of the internet economy including electronic payments and ubiquitous access to information and communication through mobiles [smartphones]” (Hira and Reilly2017 p. 2). More fundamentally sharing economy enhances the efficiency and productivity of idle or slack resources be they cars home spaces or labor and reduce related transactions costs.

Sundararajan(2016 p. 27) argues that the sharing economy has five fundamental characteristics: (1) it is largely market based; (2) it engages high impact capital; (3) it employs decentralized crowd-based networks; (4) it blurs the lines between the personal and professional; (5) it blurs the line between fulltime and part-time labor. Sundararajan further suggests that sharing economy transactions are mostly synchronous (that is market exchanges that occur in real time) high stakes and proximity critical. For example the ride-sharing service Uber

requires a match of time involves strangers that do not know one another and takes place within a connected geographical space. Trust engineered through brand management reputation and performance is often the missing link or competitive advantage that sharing economy aggregators (or intermediaries) rely upon (Albinsson et al.2019). Non-synchronous entities such as eBay and Craigslist from Sundararajan’s perspective are seen as precursors to the sharing economy though these non-synchronous online enterprises that are often included in sharing economy. Labor is not to be lost within the gig economy framework.Chai and Scully(2019) insist that sharing economy service providers or labor should be considered distinct from the gig platform or capital (ownership).Woodcock and Graham(2020) further the distinction of labor by illustrating the often precarious nature of sharing economy work around the world.

The consumption of goods and services in the sharing economy in the US was described in a 2016 Pew Research report. It noted that the heaviest users of the sharing economy are college graduates those with households with incomes over USD 100,000 persons under 45 years of age and urbanites (Smith2016a). This same report broke out the sharing economy use for Hispanics and the population as a whole. Rates of consumption are similar between Hispanics and the general US population (see Table1 Panel A). Another 2016 report by Pew noted Hispanics participated at comparable levels to the general population for those earning income from the sharing economy (see Table1 Panel B) (Smith2016b).

Table 1. Use of and Participation in the Sharing Economy.

Panel A: Use of the Sharing Economy	Latinos (%)	US (%)
Have used a ride-hailing app	18	15
Have used a home-sharing app	9	11
Bought used items online (e.g. eBay, Craigslist)	48	50
Bought handmade goods online (e.g., Etsy)	20	22
Hired someone online for a task (e.g., TaskRabbit, Fiverr, Amazon Mechanical Turk)	5	4
Panel B: Earned Income Participating in the Digital Economy	Latinos (%)	US (%)
Online gig platforms	11	8
Online sellers (used/second hand goods, handmade items, consumer goods, other)	16	18

Source: AaronSmith(2016a,2016b).

Katz and Krueger(2016) find a rise in the contingent workforce (or alternative work arrangements) in part attributable to the sharing economy. They report that the percentage of workers engaged in alternate work arrangements increased from 10.7% of the labor force in 2005 to 15.8% in 2015. Katz and Krueger find that 19.4% of employees were engaged in selling directly to customers with 7% reporting using an online or offline aggregator (or intermediary). Of those utilizing an aggregator Katz and Krueger report one-third utilize an online aggregator for a total of 0.5% of all workers identifying customers using this method.Robles and McGee(2016) provide an excellent overview of the overall results of the EIWA survey. They report that 36.0% of Americans participate in the sharing and informal economies; most of those who participated in EIWA were already gainfully employed and earnings were primarily part of a strategy to make extra money. In our study we build upon and move beyond Robles and McGee(2016) to focus specifically upon Hispanics and extend their work through the employ of multivariate analyses.

B. Informality

KeithHart(1970,1973) coined the phrase “informal economy” derived from his field work in West Africa. Since the early 1970s, the study of the informal economy has matured with major contributions from economists sociologists and anthropologists. Two early edited works (Portes et al.1989;Rakowski 1994) illustrate informality as a global phenomenon present in both developed and developing markets though much more prevalent in the latter. Theoretical lenses are also explored from dependent (Marxist) relationships to market-based relationships.De Soto (2000) popularized informality as a rational response to stifling regulations and government corruption. More recently Williams and Horodnic(2016) extend the drivers of informality to large differences in state and civic morality.

Portes and Schaufler(1993) argue that informal activity represents work that itself could be undertaken within the bounds of government legislation but is instead undertaken outside of the purview of government oversight. The informal economy consists of market transactions that avoid government detection while noting that these same transactions could have been conducted under the auspices of government monitoring. Hence informality refers to “off the books” exchanges. From dichotomy (Geertz1978) to heterogeneity (Tokman1989) to continuum (Pisani et al.2008;Williams and Youssef 2014) evolving scholarship continues to refine our understanding of informality. Today more research emphasis is placed on the entrepreneurial nature of informal production (or suppliers) of goods and services (Thai and Turkina2012) relatively absent are the consumers of informal goods and services (Pisani2013).

Losby et al.(2002) conducted a comprehensive literature review of informality within the United States and uncovered the following patterns: (1) there is a natural link between informality and microenterprise entrepreneurship that is very small businesses lend themselves to low levels of visibility and high levels of ignorance of governmental regulations and authority; (2) the general level of informal activity is large (roughly 10%) and constant within a sea of similar sized business (75% of US business establishments employ ten or fewer employees); (3) informal businesses may thrive in environments that (a) meet the needs of high-income consumers who seek customized goods and services (this is the case for our present study); (b) serve low-income price-sensitive households; (c) serve commuters and tourists in urban centers through low-cost operations.

Gunter(2017) sheds light on participation rates and movement between informal and formal earnings for urban fathers and mothers in the US utilizing a panel study over a recent nine-year period. Gunter found that 53% of fathers and 32% of mothers have participated in informal economy at one time or another. The rate for Hispanics was slightly lower with 48% of fathers and 27% of mothers as informal economy participants. Participation is not confined sectorally as informal participants may move back and forth between the formal and informal sectors or be engaged in both simultaneously (Gunter 2017;Richardson and Pisani2012).Gunter(2017 p. 17) adds:

“Simultaneous participation in the regular and informal sectors and the relationship between regular-sector occupation changes and participation in informal work both suggest that regular-sector positions provide individuals with access to short-term informal-sector opportunities. Although participation in informal work is driven in part by individuals who face barriers to work in the regular sector or who have exited the formal sector entirely many informal workers appear to use the skills or relationships they gain through regular employment to take advantage of alternative earning opportunities.”

In their book-length manuscript of Hispanic informality in South TexasRichardson and Pisani(2012) explore the many faces of informality with a focus on informal activities informality and legal status informal housing informal health care cross-border informality and welfare and informality. They find that the informal economy is part and parcel of South Texas economy and generally accepted feature of the economic landscape. SimilarlyHondagneu-Sotelo(2007) Staudt(1998) Ward(1999) study informality in Hispanic regional populations across various sectors. Because of its early stage of development the online-based sharing economy was not considered.

As many as 2.5 million participate in the sharing economy (Bruckner 2016). Because as many as 60% of sharing economy earners do not receive a completed US Internal Revenue Service Form 1099-K (to document card payment transactions) or Form 1099MISC (to document direct sales and contract work) from their online platform these sharing economy participants are not prompted to file taxes on their gig economy earnings (Bruckner 2016). Additionally 88% of gig economy workers earned less than USD 15,000, well below the USD 20000 or 200 transaction thresholds that online platform companies have to report to the IRS (Bruckner 2016;Sullivan 2016). Hence many sharing economy workers knowingly or not do not report gig economy earnings and are thus an integral part of the informal sector. Additionally the federal government has little incentive to force tax compliance on small scale gig economy earners who average between USD 3768 and USD 6635 annually (Bruckner2016) as enforcement costs (and possible deductions and rebates) would outweigh potential tax collections.

3. METHODOLOGY: SAMPLE INSTRUMENTATION AND DESCRIPTIVE STATISTICS

The genesis of the Enterprising and Informal Work Activities (EIWA) survey began with the Consumer and Community Affairs division of the Board of Governors (BoG) of the US Federal Reserve System (Much of the detail in this section relies upon Robles and McGee 2016). The survey’s creation development and deployment were led by the Consumer and Community Development research section of the BoG. Survey administration (fielding) was outsourced to GfK a large global online consumer research firm which obtained a nationally representative sample of 6898 respondents aged 18 and over in the late fall of 2015. Hispanics comprised 1032 of the total or fifteen percent of all respondents. The reported non-response rate was 44.7% The collected responses were adjusted for non-respondents and weighted by demographics age gender race and ethnicity education residence and income and Internet access. The data source for this study is the Board of Governors of the US Federal Reserve System and in May 2017 the Enterprising and Informal Work Activities codebook and survey data were released for public download. The codebook and data may be accessed at<https://www.federalreserve.gov/consumerscommunities/communitydevelopmentpublications.htm>(accessed on 15 June 2017). I utilized the post-stratification sample-based weight for total respondents (weight 1) in the analyses.

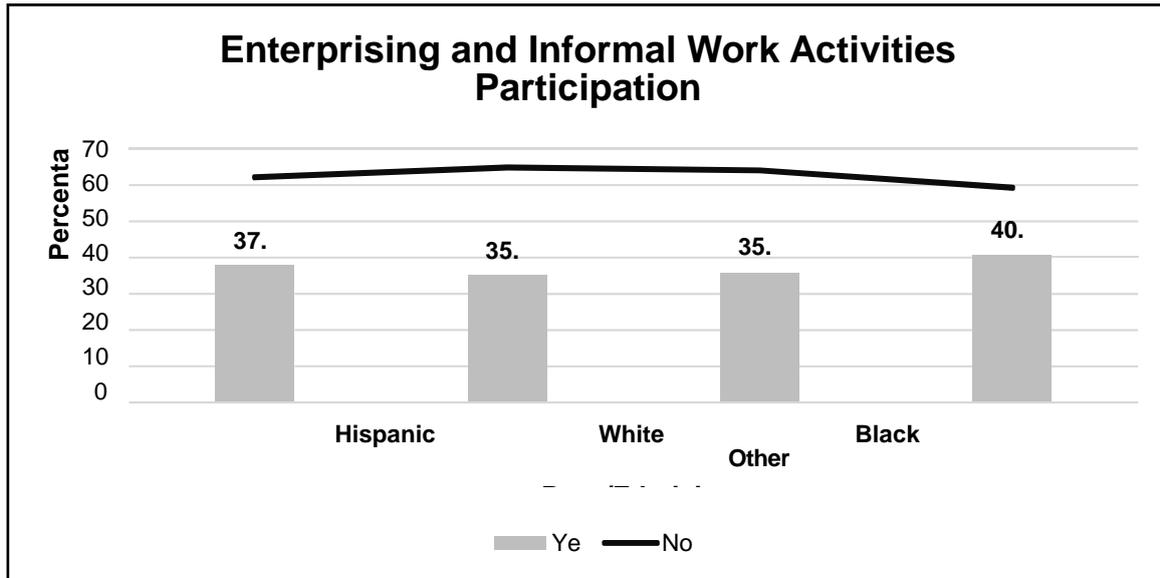
Table 2. EIWA Participation Rates by Race/Ethnicity.

	Hispanic	White	Black	Other *	Total
EIWA Participation					
Yes %	37.8	35.1	35.9	40.7	36.0
No %	62.2	64.9	64.1	59.3	64.0
N	1032	4519	802	545	6898

Cross-tabulation: Pearson Chi-square = 8.339 $p = 0.040$.

Source: EIWA Survey, fall 2015. * Denotes: (a) Other, non-Hispanic; (b) 2 or more races, non-Hispanic.

Figure 1. US Participation rates of EIWA by Race/Ethnicity.



The survey instrument contained five modules: EIWA screening questions (eleven questions focused on three areas these include personal services online and online sharing economy and selling goods offline over the last six months); employment (eight questions focused on the last six months of employment); self-employment two modules (twenty-four questions focused on the last six months of self-employment); side jobs and informal activities (ten questions focused on EIWA earnings over the last six months). Ten demographic questions were also asked (i.e. age gender education ethnicity/race etc.). The EIWA survey was conducted in English the median time to complete the survey was six minutes and the survey was completed asynchronously (at one’s own timing) online.

The Hispanic participation rate of 37.8% in enterprising and informal work activities was just above the national rate of 36.0% and surpassed both Whites and Blacks (see Table2). Note that both White and Anglo are used interchangeably throughout the article. Anglo is commonly referenced in contrast to Hispanics as terms of ethnicity among scholars of Latino studies (see Richardson and Pisani2017). Though statistically different the rates of participation for the groups in Table2hover between 35% and 41% suggesting a broad consensus in the participation of EIWA actions. In graphical form the data in Table1 is presented in the accompanying figure (see Figure1). This partially answers our first research question of Hispanic participation rates in EIWA with regard to other racial and ethnic groups. We detail a further breakdown of specific EIWA activities in the next section.

In Table3 we report the descriptive statistics for Hispanics in the survey those engaged and not engaged in EIWA. We also report all survey respondents for comparison. Briefly EIWA participants are significantly younger than non-EIWA participants (significant differences between participants and non-participants are denoted by italics in Table3). A little more than one-third of Latinos and Latinas participate in EIWA and no significant difference exists by gender. EIWA participants are generally less educated with more household members than non-participants. However those with less than a high school education have the highest participation rates for Hispanics. Single and divorced/separated Hispanic respondents have higher rates of EIWA participation than married or widowed Hispanics. While there are no significant differences by housing type Hispanic respondents living in mobile homes and attached one-family units report higher rates of EIWA participation. Internet access is a clear divide between EIWA participants and non-participants. Rural (non-metro) Hispanics and renters participate at greater levels in EIWA than Hispanic urbanites and home owners.

Hispanics in the Midwest have the highest percentage of EIWA participants. Generally those Hispanics not working have higher participation rates than Hispanics who work for a wage or salary. Additionally Hispanics with the highest household incomes have the highest EIWA participation rates.

Table 3. EIWA Demographic Statistics for Hispanics and All Respondents.

Variable	EIWA Participant	Hispanic Non-EIWA Participant	All Respondents
<i>Mean Age (std. dev.)</i>	39.6 (16.0)	43.8 (16.0)	42.2 (16.1)
Gender %			
Male	37.1	62.9	50.8
Female	38.4	61.6	49.2
Education %			
Less than High School	45.9	54.1	22.6
High School	35.8	64.2	30.7
Some College	35.8	64.2	30.0
BA/BS or Higher	33.9	66.1	16.8
<i>Mean Household Size (std. dev.)</i>	3.3 (1.8)	3.1 (1.6)	3.2 (1.7)
Civil Status %			
Married/Living with Partner	33.5	66.5	50.8
Widowed	34.1	65.9	4.0
Divorced/Separated	42.0	58.0	15.6
Single, Never Married	43.3	56.7	29.6
Housing Type %			
Detached 1-Family Home	37.4	62.6	61.9
Attached 1-Family Home (to one or more houses)	44.0	56.0	7.3
Apartment	36.5	63.5	25.2
Mobile Home	44.2	55.8	5.0
Boat, RV, Van	0.0	100.0	0.6
Internet Access at Home %			
Yes	40.8	59.2	77.2
No	27.5	72.5	22.8
Residence (Urban/Rural) %			
Urban	37.1	62.9	93.5
Rural	47.8	52.2	6.5
Residence (Ownership) %			
Owned/Purchasing	34.9	65.1	57.3
Rented	41.7	58.3	38.1
Occupied, No Rent	41.7	58.3	4.6
Residence (US Location) %			
Northeast	30.6	69.4	15.5
Midwest	42.0	58.0	7.9
South	40.6	59.4	37.7
West	37.1	62.9	39.0
Employment Status %			
Wage and Salaried	33.7	66.3	53.7
Self-employed	41.0	59.0	5.9
Working Status %			
Temporarily Laid-off	40.7	59.3	2.5
Looking for Work	54.1	45.9	8.2
Retired	31.3	68.7	9.5
Disabled	44.7	55.3	9.1
Other	43.9	56.1	11.0

able 3. Cont

Variable	Hispanic EIWA Participant	Hispanic Non-EIWA Participant	All Respondents
Annual Household Income %			
Under USD 15,000	34.8	65.2	15.4
USD 15,000 to USD 34,999	40.7	59.3	19.2
USD 35,000 to USD 49,999	42.4	57.6	13.5
USD 50,000 to USD 74,999	33.2	66.8	19.9
USD 75,000 to USD 99,999	32.9	67.1	14.7
Over USD 100,000	43.0	57.0	17.3
N	390	642	1032

Source: EIWA Survey, fall 2015. Note: *Italics* signify statistical difference between participants and non-participants at the $p < 0.10$ level.

Annual Household Income %

Source: EIWA Survey fall 2015. Note: *Italics* signify statistical difference between participants and non-participants at the $p < 0.10$ level.

4. RESULTS AND DISCUSSION

In this section we present our results in subsections based upon our three research questions focused on the racial and ethnic differences in participation in the sharing and informal economies (RQ#1) the rationale of Hispanic engagement in the sharing and informal economies (RQ#2) and the drivers of Hispanic participation in the sharing and informal economies (RQ#3). We also include a discussion at the end of this section.

Table 4. EIWA by Category for Hispanics and Other Racial/Ethnic Groups.

	Percent Participating			
	Hispanic	White	Black	Other *
Personal Services				
<i>Babysitting, Child Care, Dog Walking, House Sitting</i>	7.9	5.1	9.2	7.2
<i>Disabled Adult, Elder Care Services</i>	4.4	3.3	7.2	4.6
<i>House Cleaning, House Painting, Yard Work, Landscaping, Property Maintenance Work</i>	13.4	8.9	9.1	9.5
<i>Other Personal Services, Picking up Dry Cleaning, Helping People Move, Running Errands, Booking Travel</i>	6.3	4.3	7.3	5.3
Subtotal of Any Personal Services	21.7	15.2	19.5	17.1
Online and Online Sharing Economy				
<i>Completing Online Tasks through websites (e.g., Amazon Services, Mechanical Turk, Fiverr, Task Rabbit) and other tasks such as Editing Documents, Reviewing Resumes, Writing Songs, Creating Graphic Designs, Rating Pictures, Posting Videos, Blog Posts, etc.</i>	4.9	3.7	6.7	9.2
<i>Renting Out Property (e.g., your car, your place of residence, or other items you own) through websites, newspaper ads, flyers</i>	3.9	3.3	3.2	9.0
<i>Selling New/Used Goods, Handcrafts, etc. Online (e.g., through eBay, Craigslist, or other websites)</i>	13.2	11.9	7.8	12.1
Other Online Paid Activities	6.6	7.0	6.8	8.1
Subtotal of Any Online and Online Sharing Economy	22.2	21.2	18.6	27.8
Selling Goods Offline				
<i>Selling goods (such as food, handcrafts, etc.) or services at flea markets, swap meets, garage sales, mobile vans/trucks, stalls/kiosks, or other temporary physical outlets/locations</i>	6.1	6.2	3.5	6.6
<i>Selling used goods (such as clothes, wedding dresses, handcrafts, etc.) at consignment shops or thrift stores</i>	3.1	5.3	3.7	7.3
Other paid activities	2.4	2.7	2.9	3.5
Subtotal of Selling Any Goods Offline	10.3	11.9	8.8	13.4
N	1032	4519	802	545

Source: EIWA Survey, fall 2015. * Denotes: (a) Other, non-Hispanic; (b) 2 or more races, non-Hispanic. Note: *Italics* signify statistical

4.1. EIWA Differences across Racial and Ethnic Groups

In this section we report the engagement in EIWA for Hispanics and other racial and ethnic groups. For comparison Whites Blacks and others are included as they are the distinguishable groups in the data set (though other refers to “other non-Hispanic” and those of “two or more races other than Hispanic” and does not offer much further detail). The first module of the EIWA survey contained eleven questions in three categories: personal services online and online sharing economy which captures asynchronous online market exchanges (e.g. eBay Craigslist) and real time synchronous market exchanges (e.g. Uber Lyft) and selling goods offline (see Table4). Personal services included four questions focused on in-home services (e.g. childcare elder care house cleaning landscaping) and reports that 21.7% of Hispanic respondents engaged in at least one of these activities a higher rate than in other groups. The online sharing economy has the highest participation rate of 22.2% of Hispanic respondents engaging in at least one of the four areas of consideration: completing online tasks renting out a property selling new or used goods or other online paid activities. Hispanics participate in asynchronous online and real time online sharing economy at higher rates than Whites and Blacks. More traditional methods of selling goods offline netted 10.3% of Hispanic respondents a rate in between Whites (11.9%) and Blacks (8.8%). As previously stated 37.8% of Hispanics participate in the sharing and informal economies a rate higher than Whites and Blacks.

With regard to the online sharing economy two websites have the highest Hispanic participation as income earners: Craigslist and eBay (see Table5). Latinos participate at a higher rate than Whites and Blacks in all but one of the listed online EIWA areas except for eBay where Whites participate at a slightly higher level. Sundararajan suggests that Craigslist and eBay online platforms are precursors to the sharing economy because they are low risk asynchronous retail exchanges where proximity is not very important. These activities nonetheless may be gateway actions that permit a deeper future engagement with the mainline sharing economy Sundararajan describes as reported in Table5.

On average Hispanics engaged in EIWA spend 14 h per month working in the sharing and informal economies (see Table6 Panel A). On average this compares to 12.2 h for Whites 19.3 h for Blacks and 16.0 h for others per month (Panels A–D). Latino households with the least income (5.8 h) and most income (6.1 h) work the fewest hours in EIWA per month. Hispanic households earning between USD 75,000 and USD 100,000 work on average the most hours at 29.7 per month or about the equivalent of one full 8 h day per week. For Whites the general pattern of hours worked in EIWA decreases with household income. Hourly participation rates for Blacks vary considerably by income with no discernable pattern. The other group pattern more closely aligns with Latino households. At the request of a reviewer a more focused univariate (cross-tabulation) look at gender differences within Hispanics only is reported here by EIWA sub-category. Women are 1.3 times more likely than men to be engaged in personal services; men are 1.2 times more likely than women to be engaged in the online sharing economy; women are 1.1 times more than men likely to be selling goods offline; there are virtually no gender differences for total combined EIWA activities.

Table 5. Specific Online EIWA for Hispanics and Other Racial/Ethnic Groups.

	Percent Participating			
	Hispanic	White	Black	Other *
Earned money over the last 6 months with . . .				
<i>Airbnb</i>	1.1	1.0	0.7	3.2
<i>Amazon Mechanical Turk</i>	2.1	2.2	3.5	6.4
Care.com	1.4	0.9	0.7	2.3
<i>Craigslist</i>	17.9	16.4	6.0	13.6
eBay	13.0	15.0	12.7	12.6
<i>Etsy</i>	3.3	1.8	0.0	3.2
<i>Fiverr</i>	2.8	0.1	0.3	2.3
<i>Freelancer.com</i>	2.3	0.6	0.3	4.5
<i>Uber</i>	4.4	1.3	0.3	5.5
<i>Lyft</i>	2.9	0.6	1.1	2.7
<i>Sittercity</i>	2.5	0.3	0.7	2.3
<i>Task Rabbit</i>	2.8	0.4	0.7	1.8
<i>Upwork</i>	2.8	0.9	0.7	0.5
Other websites	5.3	4.4	4.2	7.2
N	390	1580	287	222

Source: EIWA Survey, fall 2015. * Denotes: (a) Other, non-Hispanic; (b) 2 or more races, non-Hispanic. Note: *Italics* signify statistical difference between participants and non-participants at the $p < 0.10$ level.

Table 6. EIWA and Hours Worked Usually Spent on Paid Work Activities or Side Jobs, Other than Primary Job for Hispanics and Other Racial/Ethnic Groups Over Last 6 Months.

Panel A: Hispanics	
Annual Household Income	Mean Monthly Hours Worked (std. dev.)
Under USD 15,000	5.8 (10.7)
USD 15,000 to USD 34,999	20.4 (67.2)
USD 35,000 to USD 49,999	16.8 (34.7)
USD 50,000 to USD 74,999	9.6 (27.6)
USD 75,000 to USD 99,999	29.7 (53.3)
Over USD 100,000	6.1 (14.4)
All (n = 390)	14.3 (41.4)
Comparison of Means, ANOVA: $F = 3.115, p = 0.009$	
Panel B: Whites	
Annual Household Income	Mean Monthly Hours Worked (std. dev.)
Under USD 15,000	17.6 (46.4)
USD 15,000 to USD 34,999	14.3 (42.2)
USD 35,000 to USD 49,999	15.4 (37.5)
USD 50,000 to USD 74,999	12.5 (28.8)
USD 75,000 to USD 99,999	10.3 (18.6)
Over USD 100,000	9.5 (22.7)
All (n = 1586)	12.2 (31.0)
Comparison of Means, ANOVA: $F = 2.268, p = 0.046$	
Panel C: Blacks	
Annual Household Income	Mean Monthly Hours Worked (std. dev.)
Under USD 15,000	22.6 (57.3)
USD 15,000 to USD 34,999	17.9 (49.3)
USD 35,000 to USD 49,999	29.3 (60.3)
USD 50,000 to USD 74,999	13.2 (27.8)
USD 75,000 to USD 99,999	1.0 (2.2)
Over USD 100,000	19.3 (32.2)
All (n = 288)	18.3 (44.3)
Comparison of Means, ANOVA: $F = 1.296, p = 0.266$	
Panel D: Other *	
Annual Household Income	Mean Monthly Hours Worked (std. dev.)
Under USD 15,000	5.2 (14.2)
USD 15,000 to USD 34,999	19.8 (35.9)
USD 35,000 to USD 49,999	10.3 (17.1)
USD 50,000 to USD 74,999	13.5 (23.6)
USD 75,000 to USD 99,999	6.3 (15.0)
Over USD 100,000	16.0 (31.8)
All (n = 222)	13.3 (27.2)
Comparison of Means, ANOVA: $F = 1.331, p = 0.252$	

Source: EIWA Survey, fall 2015. * Denotes: (a) Other, non-Hispanic; (b) 2 or more races, non-Hispanic.

4.2. Hispanic Participation in EIWA The Rationale

Earning extra money is the focal aim of participating in sharing and informal economies for Hispanics. The extra money may be a primary source of income supplemental household income or income to help family members (see Table7). Of the categories in Table7 reporting over twenty percent only to help earn extra money for family members shows a slight difference in reporting by gender with women slightly more likely than men to undertake EIWA activities to financially help a family member. About one-fifth of Hispanics engage in EIWA just for fun or as a hobby. As earning extra income is important for Hispanics I calculate annual household income earned through EIWA. On average 14.3% of Hispanic household income for those Hispanics participating in the sharing and informal economies was generated through EIWA, and EIWA reached 25% of household income for households earning USD 75,000 to USD 100,000. Dollar ranges by household EIWA earnings are reported in Table8. Over half of the respondents thought they would stay engaged in EIWA at the same pace and three income groups (from USD 15,000 to USD 74,999) believed they would increase their participation (see Table9). Only the most heavily engaged income group believed they would taper off in their rates of EIWA participation.

Table 7. Stated Reasons (Rationale) for Engaging in EIWA for Hispanics.

Stated Reason (Rationale)	All That Apply (%)	Main Reason (%)
To earn money as a primary source of income	26.9	23.2
To earn extra money on top of pay from a current job, retirement, pension, disability, or other regular source of income	28.9	24.5
To earn extra money to help family members	20.5	16.4
To maintain existing job-related skills	1.7	0.2
To acquire new job-related skills	8.8	3.9
To network/meet people	3.6	1.2
Just for fun (as a hobby)	22.9	16.8
Other	13.0	13.8
N	390	355

Source: EIWA Survey, fall 2015.

Table 8. Percentage of Annual Household Income Usually Received from Paid Work Activities or Side Jobs via EIWA for Hispanics.

Annual Household Income	% of Income (std. dev.)	Potential Range (USD)
Under USD 15,000	13.8 (24.6)	0–2070
USD 15,000 to USD 34,999	22.0 (36.5)	3300–7700
USD 35,000 to USD 49,999	10.1 (20.8)	3535–5050
USD 50,000 to USD 74,999	11.4 (24.6)	5700–8550
USD 75,000 to USD 99,999	25.0 (37.1)	18,750–25,000
Over USD 100,000	5.2 (15.8)	5200 and higher
All	14.3 (28.3)	–

Comparison of Means: ANOVA, $F = 4.457, p = 0.001$

Source: EIWA Survey, fall 2015.

Table 9. Household Income and Future EIWA for Hispanics

Annual Household Income	Six Months from Now, Do You Expect to Devote More, the Same, or Less Time to Paid Work Activities or Side Jobs Other than Your Primary Job Compared to Today?		
	More (%)	Less (%)	Same (%)
Under USD 15,000	14.5	36.4	49.1
USD 15,000 to USD 34,999	22.5	21.3	56.3
USD 35,000 to USD 49,999	25.9	19.0	55.2
USD 50,000 to USD 74,999	29.5	9.8	60.7
USD 75,000 to USD 99,999	30.0	40.0	30.0
Over USD 100,000	9.1	23.4	67.5
All	21.3	24.1	54.6

Cross-tabulation, Chi-Square = 34.293, $p = 0.000$

Source: EIWA Survey, fall 2015.

4.3. Hispanic Participation in EIWA The Drivers

Hispanic participants in EIWA were asked variations of the importance of the income earned from EIWA. Reported in Table 10, Panel A are the results of how EIWA income may have offset any negative economic household shocks over the past six months. Those respondents with the lowest household incomes found the greatest income support from EIWA. However, a plurality (i.e., largest response group) of respondents indicated across all incomes no discernable impact. Table 10, Panel B focused on the importance of EIWA earnings as a significant source of household income. Here a majority of all income groups noted that EIWA was not a significant source of household income, though about one quarter indicated that EIWA income was somewhat or very much significant for household income. Lastly, Panel C of Table 10 reports the regularity and consistency of EIWA income for household earnings. For about one-fifth of the lowest household income respondents, EIWA earnings were very much a regular component of household income. For sizable portions of all income groups, EIWA earnings were at least a somewhat regular component of household income.

To discern the major drivers (i.e., significant variables or determinants) of Hispanic EIWA participation, more advanced analyses of the survey data were undertaken. As the dependent variable is dichotomous (participates in EIWA = 1, or does not participate in EIWA = 0) with multiple independent variables, we employed a binomial logistic regression model. The independent or predictor variables are age, gender, education, civil status, housing and ownership type, Internet access, urban or rural residence, regional residence, employment status, and annual household income. Categorical variables were assigned a reference category. The assigned reference categories are: gender = female; education = BA/BS or Higher; civil status = married/living

with partner; housing type = detached 1-family house (boat, van, omitted because of a very low response rate); Internet access at home = yes; urban residence = urban; residence ownership = owned/purchasing US residence location = west; employment status = working wage and salaried; annual household income = under USD 15,000. As this is an exploratory study, these variables were chosen due to their availability and connection to the sharing and informal economies literature. Logistic regression predicts the odds of an event occurring, in the present case the odds or likelihood of Hispanic EIWA participation.

Table 10. Household Income and Importance of EIWA for Hispanics.

Panel A	Over the Last 6 Months, to What Extent Have EIWA Helped You Offset Any Negative Effects of Unemployment Spells, Loss of Working Hours, Loss of Benefits, or Frozen Wages in a Formal Job?				
	Annual Household Income	Very Much (%)	Somewhat (%)	Not at All (%)	Does Not Apply (%)
	Under USD 15,000	10.9	25.5	25.5	38.2
	USD 15,000 to USD 34,999	7.6	24.1	24.1	44.3
	USD 35,000 to USD 49,999	0.0	27.3	32.7	40.0
	USD 50,000 to USD 74,999	6.2	18.5	40.0	35.4
	USD 75,000 to USD 99,999	4.0	22.0	54.0	20.0
	Over USD 100,000	5.1	14.1	26.9	53.8
	All	5.8	21.5	32.7	40.1
Cross-tabulation, Chi-Square = 31.228, $p =$					
0.008					
Panel B	Over the Past 6 Months, to What Extent Has the Money Earned from EIWA Been a Significant Source of Household Income?				
	Annual Household Income	Very Much (%)	Somewhat (%)	Not at All (%)	Does Not Apply (%)
	Under USD 15,000	7.3	29.1	32.7	30.9
	USD 15,000 to USD 34,999	6.3	22.5	35.0	36.3
	USD 35,000 to USD 49,999	5.3	21.1	35.1	38.6
	USD 50,000 to USD 74,999	0.0	23.0	54.1	23.0
	USD 75,000 to USD 99,999	4.0	30.0	44.0	22.0
	Over USD 100,000	0.0	17.1	48.7	34.2
	All	3.7	23.2	41.7	31.4
Cross-tabulation, Chi-Square = 22.193, $p =$					
0.103					
Panel C	Over the Past 6 Months, to What Extent Has the Money Earned from EIWA Been a Regular/Consistent Source of Household Income?				
	Annual Household Income	Very Much (%)	Somewhat(%)	Not at All(%)	Does Not Apply (%)
	Under USD 15,000	18.2	20.0	29.1	32.7
	USD 15,000 to USD 34,999	6.3	25.0	35.0	33.8
	USD 35,000 to USD 49,999	1.8	22.8	43.9	31.6
	USD 50,000 to USD 74,999	0.0	22.4	49.3	28.4
	USD 75,000 to USD 99,999	3.9	27.5	54.9	13.7
	Over USD 100,000	2.6	15.6	46.8	35.1
	All	5.2	22.0	42.9	30.0
Cross-tabulation, Chi-Square = 38.689, $p = 0.001$					

Source: EIWA Survey, fall 2015.

Table 11 displays our logistic regression results for Hispanics engaged in EIWA. Significant variables include age, education, civil status, Internet access, residence ownership type, regional residential location, employment status, and annual household income and are described below. Gender is an insignificant variable in this analysis. Each additional year of age reduces the likelihood of EIWA participation by 2.2%. This is calculated as $1 - \beta$. For age, see Table 11, row 3. The $\exp(\beta)$ found in column 6 is 0.978. Thus 10.978 equals 0.022. As the variable age is a count variable in one-unit increments beginning at 18, a 25-year-old is 15.4% less likely than an 18-year-old to participate in EIWA ($25 - 18 = 7$; then $7 \times 0.022 = 0.154$). The reference category for education is a college degree or higher, hence, those Hispanics with less than a high school education are 63.9% more likely to be EIWA participants than college graduates. Divorced and separated respondents are 88.9% more likely to participate in EIWA than married and couples living together. Those respondents without Internet access at home are 43.8% less likely to be EIWA participants than those respondents with home-based Internet access. Renters and those respondents living in rent-free spaces are 56.2% and 79.7%, more likely to participate in EIWA, respectively, than home-owning respondents.

Table 11. Logistic Regression of Hispanic EIWA (EIWA Participants = 1).

Variable	β Exp(β)	S.E.	Wald	Sig.	
Constant	-0.822	0.482	2.901	0.089 *	0.440
Age	-0.023	0.006	12.271	0.000 ***	0.978
Gender (Female = 1)	-0.036	0.145	0.060	0.806	0.965
Education			5.693	0.128	
Less than High School	0.494	0.245	4.076	0.043 **	1.639
High School	0.090	0.219	0.171	0.679	1.095
Some College	0.076	0.216	0.124	0.725	1.079
Household Size	-0.006	0.046	0.019	0.892	0.994
Civil Status			9.165	0.027 *	
Widowed	0.163	0.394	0.171	0.679	1.177
Divorced/Separated	0.636	0.212	9.022	0.003 ***	1.889
Single, Never Married	0.173	0.185	0.874	0.350	1.188
Housing Type			4.491	0.213	
Attached 1-Family Home	0.423 0.441	0.275	2.581	0.108	1.555
Apartment Mobile Home	-0.036	0.214	0.029	0.865	0.964
Home		0.331	1.629	0.202	1.526
Internet Access at Home (Yes = 1)	-0.576	0.201	8.244	0.004 ***	0.562
Urban Residence	0.401	0.285	1.974	0.160	1.493
Residence Ownership Type			7.142	0.028 **	
Rented	0.446 0.477	0.183	5.949	0.015 **	1.562
Occupied, No Rent	0.587	0.347	2.856	0.091 *	1.798
US Regional Residence Location			10.806	0.013 **	
Northeast	-0.359	0.227	2.510	0.113	0.698
Midwest		0.265	3.246	0.072 *	1.612
South	0.304	0.163	3.494	0.062 *	1.355
Employment Status			15.637	0.016 **	
Working Self-Employed	0.508	0.301	2.841	0.092 *	1.662
Not Working Temporarily Laid-off	0.493	0.447	1.214	0.271	1.636
Not Working Looking for Work	0.783	0.260	9.078	0.003 ***	2.189
Not Working Retired	0.666	0.305	4.780	0.029 **	1.947
Not Working Disabled	0.603	0.274	4.838	0.028 **	1.827

As compared to US residence in the West the odds of EIWA participation increase by 61.2% and 35.5% for residence in the US Midwest and South respectively. Regarding those respondents working full time for a wage and salary the self-employed and those not working and (a) looking for work (b) retired and (c) disabled are all more likely to be EIWA participants. The odds of greater EIWA participation are 66.2% for the selfemployed 118.9% for those looking for work 94.7% for the retired and 82.7% for the disabled. Respondents with annual household earnings of less than USD 15000 served as the reference category for income. Hispanic households earning between USD 15000 and USD 34,999, USD 35,000 and USD 49,999 and over USD 100,000 were 61.04%, 83.2% and 155.4% respectively more likely to participate in EIWA than the lowest earning Hispanic households. The model diagnostics appear at the bottom of Table1 and fall within acceptable ranges. This also includes checks for multicollinearity where the correlation matrices for the various binary logistic regression estimates fall within acceptable ranges.

We also estimated logistic regression models for the three subcategories of EIWA: personal services the asynchronous online and real-time sharing economy and selling goods offline (described in Table4). The results are briefly reported here in condensed form the tables may be viewed in AppendixA. Hispanics that have participated in any of the personal services were less likely to participate if they were men and as respondents aged (see TableA1). Increasing the odds of participating in personal services were those with less than a high school education single individuals who had never married those living in mobile homes respondents who were rented their housing respondents living in the Midwest the self-employed those out of work and those looking for a job and those with household incomes above USD 15,000 except for those households earning between USD 50,000 and USD 74,999. Hispanics that participate in any aspect of the online and sharing economy were more likely to do so if they rent or occupy rent-free housing live in the South were laid-off from work were retired and were part of household that earned USD 100,000 or more per year. Decreasing the odds of participating in the online and sharing economy for Hispanics was increasing age status as never married single and lack of internet access at home (see TableA2). The odds for Hispanics participating in the selling of goods decreased for those living in urban environments and for those without Internet access at home (see TableA3). Conversely Hispanics were more likely to sell goods offline if they possessed less than a high school education lived in households with more members present were divorced or separated occupied free rent housing and were out of work for an unspecified reason.

A simplified summary table of all the logistic regression models is provided in Table12). Where a variable is significant either a “+” or a “-” is inserted to indicate more likely or less likely to impact the odds of participation. For all but one variable the directionality of signs are in concert with one another. The results generally indicate an increase in age lessens the odds of EIWA participation respondents with less than a high school education were active EIWA participants divorced or separated Hispanics participated in EIWA lack of internet access at home decreased EIWA participation rental housing increased participation in EIWA Midwest and Southern locations increased EIWA participation the self-employed and out of work were likely EIWA participants and higher income households were more likely to participate in EIWA. More specifically men were less likely to provide personal services larger member households were more likely to be involved in selling goods offline living in a mobile home or an urban environment was likely to enhance participation in personal services. Mixed findings for singles meant singles who were more likely to participate in personal services and less likely to participate in online and sharing economy.

Table 12. Logistic Regression of Hispanic EIWA (EIWA Participants = 1) Summary Results.

Variable	Model 1 All EIWA	Model 2 Personal Services	Model 3 Online and Sharing Economy	Model 4 Selling Offline Goods
Constant	-	-	-	-
Age	-	-	-	
Gender (Female = 1)		-		
Education				
Less than High School	+	+		+
High School				
Some College				
Household Size				+
Civil Status				
Widowed				
Divorced/Separated	+			+
Single, Never Married		+	-	

Housing Type			
Attached 1-Family Home			
Apartment			
Mobile Home		+	
Internet Access at Home (Yes = 1)			
	-		-
Urban Residence			
		+	
Residence Ownership Type			
Rented	+	+	+
Occupied, No Rent	+		+
US Regional Residence Location			
Northeast			
Midwest	+	+	
South	+		+
Employment Status			
Working—Self-Employed	+	+	+
Not Working—Temporarily Laid-off			+
Not Working—Looking for Work	+	+	
Not Working—Retired	+		+
Not Working—Disabled	+		
Not Working—Other			+
Annual Household Income			
USD 15,000 to USD 34,999	+	+	
USD 35,000 to USD 49,999	+	+	
USD 50,000 to USD 74,999			
USD 75,000 to USD 99,999		+	
Over USD 100,000	+	+	+
Reference categories: Gender = Female; Education = BA/BS or Higher; Civil Status = Married/Living with Partner; Housing Type = Detached 1-Family House (boat, van, omitted); Internet Access at Home = Yes; Urban Residence = Urban; Residence Ownership = Owned/Purchasing; US Residence Location = West; Employment Status = Working Wage and Salaried; Annual Household Income = Under USD 15,000. Note: + more likely; - less likely.			

4.4. Discussion

Hispanics have higher rates of EIWA participation than African Americans and Anglos in the US economy. This higher rate also holds for personal services and for the online and online sharing economy. Higher personal services rates for Hispanics may reflect more recent immigrant experiences including challenges associated with work authorization which are important in connecting economic participation. The EIWA survey did not ask questions of work authorization or immigration history so this direct connection is left unanswered in the EIWA survey. Latino engagement in the online and online sharing economy illustrates a willingness to pursue income earning opportunities innovatively and asynchronously. Asynchronous online participation allows for the juggling and management of time altering the scheduling of time from one of reaction to pro-action. Innovations such as involvement in Craigslist or eBay provide a safe first step into the online environment that may provide greater confidence in the participation in EIWA activities creating a gateway to further more sustained and perhaps synchronous future involvement. Additionally this online activity has been accomplished with the constraint of internet usage and broadband access gaps between Hispanics and African Americans and Anglos where Hispanics lag behind. However these gaps are quickly narrowing and may disappear in a few years (Brown et al.2016). Selling goods offline is an American tradition be they yard sales flea markets or pulgas craft fairs or food stands and selling goods offline is not highly distinguishable especially among Hispanics and Anglos.

Time committed to EIWA activities varies substantially by ethnic and racial group. While Whites may be using EIWA to supplement incomes so that lower income households devote more time to EIWA the households of Latinos and Blacks on the other hand may find their time involvement constrained or augmented by additional factors. These may include access to the sharing and informal economies perhaps stunted or augmented by internet availability available income earning opportunities and market information. Focusing on Hispanics the EIWA survey clearly indicates that the motivation for EIWA involvement is to earn income be it as a primary or secondary income with the intention to continue or accelerate EIWA participation.

One of the more interesting findings is that relatively affluent Hispanic households (USD 75000 to USD 99,999 annual incomes) are the most engaged in EIWA by time spent and income earned. This in part may reflect the added stress of incomes keeping up and catching up to others in America where many households are still digging out from the economic and housing crisis of 2008/2009 and the malaise in income growth over the past decade. Other economic stresses such as college education for children may also be at play. The added income may simply help to maintain a middle-class lifestyle in America. For many extra income earned in EIWA for this group most of it likely unreported is perhaps a rational economic response and strategy to get ahead. Gender differences are mostly muted perhaps a fertile area for future investigators to explore and explain.

Our multivariate statistical results indicate those variables critical to EIWA participation. It is certain that youth matters as younger respondents were more likely to engage in EIWA. This result may in part have to do with technological familiarity for the online sharing economy and possibly immigrant status and ease of employment access for personal services. Where education and income tend to be highly correlated earning extra household income for those respondents with less than a high school education seems to be a plausible supplemental income strategy. This may be true of renters and those that occupy rent-free residences as well as those not working. The divorced and separated may find time spent previously with family may now be reoriented to EIWA. With little doubt home-based internet access is the gateway to the online sharing economy. While public access to the internet allows some to participate in EIWA the convenience of and ready access to home-based broadband internet is a key element in EIWA engagement. Respondents in the Midwest and South find themselves more engaged in EIWA perhaps an area for more study to uncover the reasons for this phenomenon. Additionally as stated and described above it is not the poorest households that are the most engaged in EIWA.

5. CONCLUSIONS AND POLICY IMPLICATIONS

Hispanics similar to other groups in the US are active participants in the informal and sharing economies. This study is an exploratory first step to place Hispanics within the growing new age informality centered on the online sharing economy as a complement to the informal economy. In total 37.8% of Hispanics are involved in the informal and sharing economies caring for and cleaning others selling on eBay or Craigslist driving for Uber or selling goods at pulgas or vending from food trucks. Upper middle-class Hispanics are the most engaged in time and earnings in the sharing and informal economies. As such the sharing economy provides a conduit to engage more widely with innovative incomeearning opportunities across income groups perhaps demystifying the sharing economy as one that services the affluent with the labor of the masses. Upper and middle-class Latinos participate in the sharing and informal economies to earn extra income that most likely goes unreported to government authorities. However some of the notions of the sharing economy persist where younger single and less educated Latinos more widely participate than older married and more educated Latinos.

Simply put increased internet access provides great engagement in the sharing economy. While access to broadband and usage rates of the Internet for Hispanics is improving there still exists a technological divide a digital gap inhibiting Hispanics from even greater participation in the online sharing economy. Perhaps this digital divide has created a lag in participation for Hispanics in the synchronous sharing economy not evident in the asynchronous online sphere. Public policy directed toward the greater inclusion of all and especially for Hispanic communities in the internet age will broaden opportunities for all to participate in and profit from the growing gig economy. For Latinos to show the participation levels they do indicates resilience in the face of structural online access barriers.

Undoubtedly unreported income will surge with the growth of the sharing economy where already nearly 40% of households earn a portion of income. Many who participate the self-employed and those not working easily fall under and avoid government radars. Cooperation between app providers and government is required to enforce the present tax regime. Perhaps beginning with the most ubiquitous apps such as Uber Lyft and Airbnb operating in plain sight (Williams and Horodnic2017) to report all earnings to the federal government for all contract workers and providers may assist with pertinent income tax filings and transition informal activities to formal ones. After all these sharing economy transactions are digitally constructed exchanged and recorded. Such tax filings are not an especially onerous administrative requirement for app providers who already do so for contract workers who annually earn above USD 20000 or have undertaken 200 or more transactions. Notwithstanding these digital filings it is more challenging to deal with the monitoring of the informal economy where a third-party intermediary is more often than not absent and transactions are more likely to occur in cash. Where informal earnings are relatively large government tax enforcement efforts may be worthy of additional focus and resources. On the other hand small-time informal actors may be better handled by permissive legislation that allows for some informal earnings without engaging the formal tax bureaucracy. Such legislation may allow time and space for budding entrepreneurs who start out using a small corner of the house (such as Phil Knight of Nike) or garage (such as Steve Jobs and Steve Wozniak of Apple) to eventually outgrow their informal roots to become formal and upstanding enterprises without reprisal.

Further research should consider the impact of the COVID-19 pandemic and immigrant work authorization on Hispanic and other minority group participation in the production (supply side) of the sharing and informal economies. Complementary studies that examine the demand side (consumers) of the sharing and informal economies are needed to extend our understanding of the sharing and informal economic marketplace.

Conflicts of Interest:

The author declares no conflict of interest.

Appendix A

Table A1. Logistic Regression of Hispanic EIWA Personal Services (Personal Services = 1).

Variable	β	S.E.	Wald	Sig.	Exp(β)
Constant	-1.885	0.580	10.581	0.001 ***	0.152
Age	-0.021	0.007	7.576	0.006 ***	0.980
Gender (Female = 1)	-0.354	0.176	4.033	0.045 **	0.702
Education			14.792	0.002 ***	
Less than High School	1.015	0.303	11.246	0.001 ***	2.759
High School	0.302	0.284	1.134	0.287	1.353
Some College	0.335	0.282	1.406	0.236	1.398
Household Size	-0.075	0.056	1.804	0.179	0.928
Civil Status			4.326	0.228	
Widowed	0.158	0.434	0.133	0.716	1.172
Divorced/Separated	0.400	0.253	2.495	0.114	1.492
Single, Never Married	0.383	0.218	3.070	0.080 *	1.466
Housing Type			2.996	0.392	
Attached 1-Family Home	0.108	0.355	0.093	0.761	1.114
Apartment	-0.047	0.251	0.035	0.851	0.954
Mobile Home	0.600	0.364	2.717	0.099 *	1.822
Internet Access at Home (Yes = 1)	0.106	0.227	0.219	0.640	1.112
Urban Residence	0.580	0.307	3.563	0.059 *	1.785
Residence Ownership Type			5.438	0.066 *	
Rented	0.488	0.218	5.029	0.025 **	1.629
Occupied, No Rent	0.496	0.398	1.556	0.212	1.643
US Regional Residence Location			15.355	0.002 ***	
Northeast	-0.438	0.290	2.291	0.130	0.645
Midwest	0.790	0.305	6.691	0.010 ***	2.203
South	0.448	0.196	5.224	0.022	1.566
Employment Status			23.835	0.001 ***	
Working—Self-Employed	0.875	0.338	6.707	0.010 ***	2.398
Not Working—Temporarily Laid-off	-0.246	0.567	0.188	0.665	0.782
Not Working—Looking for Work	1.188	0.276	18.462	0.000 ***	3.280
Not Working—Retired	0.199	0.392	0.258	0.612	1.220
Not Working—Disabled	0.389	0.310	1.575	0.209	1.476
Not Working—Other	0.186	0.274	0.464	0.496	1.205
Annual Household Income			16.957	0.005 ***	
USD 15,000 to USD 34,999	0.623	0.278	5.011	0.025 **	1.864
USD 35,000 to USD 49,999	0.700	0.306	5.227	0.022 **	2.014
USD 50,000 to USD 74,999	-0.144	0.325	0.195	0.659	0.866
USD 75,000 to USD 99,999	0.560	0.338	2.743	0.098 *	1.751
Over USD 100,000	0.843	0.332	6.431	0.011 **	2.322
Model Statistics					
-2 Log Likelihood = 956.659, Cos and Snell R Square = 0.110; Nagelkerke R Square = 0.170; $p = 0.000$					
Classification Table (Hit Ratio) Percentage Correct: No = 96.5; Yes = 19.7; Overall = 79.7					
Reference categories: Gender = Female; Education = BA/BS or Higher; Civil Status = Married/Living with Partner; Housing Type = Detached 1-Family House (boat, van, omitted); Internet Access at Home = Yes; Urban Residence = Urban; Residence Ownership = Owned/Purchasing; US Residence Location = West; Employment Status = Working Wage and Salaried; Annual Household Income = Under USD 15,000. Note: ***, **, * signify statistical significance at the 0.01, 0.05, and 0.10 levels.					

Table A2. Logistic Regression of Hispanic EIWA Online and Online Sharing Economy (Online and Sharing Economy = 1).

Variable	β	S.E.	Wald	Sig.	Exp(β)
Constant	-1.025	0.571	3.218	0.073 *	0.359
Age	-0.024	0.008	9.166	0.002 ***	0.976
Gender (Female = 1)	0.164	0.168	0.951	0.330	1.178
Education			0.403	0.940	
Less than High School	-0.167	0.286	0.341	0.559	0.846
High School	-0.083	0.248	0.113	0.736	0.920
Some College	-0.034	0.243	0.020	0.888	0.966
Household Size	-0.014	0.054	0.069	0.793	0.986
Civil Status			9.549	0.023 **	
Widowed	-1.060	0.701	2.285	0.131	0.346
Divorced/Separated	0.335	0.245	1.862	0.172	1.397
Single, Never Married	-0.409	0.217	3.539	0.060 *	0.664
Housing Type			3.212	0.360	
Attached 1-Family Home	0.207	0.311	0.443	0.506	1.230
Apartment	-0.330	0.245	1.818	0.178	0.719
Mobile Home	-0.172	0.439	0.153	0.696	0.842
Internet Access at Home (Yes=1)	-0.787	0.255	9.521	0.002 ***	0.455
Urban Residence	0.474	0.334	2.015	0.156	1.606
Residence Ownership Type			21.633	0.000 ***	
Rented	0.932	0.210	19.686	0.000 ***	2.539
Occupied, No Rent	1.028	0.401	6.578	0.010 ***	2.795
US Regional Residence Location			6.784	0.079 *	
Northeast	-0.022	0.266	0.007	0.933	0.978
Midwest	0.480	0.311	2.381	0.123	1.616
South	0.428	0.190	5.079	0.024 **	1.534
Employment Status			15.536	0.016 **	
Working—Self-Employed	0.587	0.338	3.015	0.082 *	1.798
Not Working—Temporarily Laid-off	1.417	0.483	8.615	0.003 ***	4.127
Not Working—Looking for Work	0.372	0.302	1.518	0.218	1.451
Not Working—Retired	0.960	0.357	7.240	0.007 ***	2.612
Not Working—Disabled	0.317	0.325	0.951	0.329	1.372
Not Working—Other	0.104	0.275	0.143	0.705	1.110
Annual Household Income			8.723	0.121	
USD 15,000 to USD 34,999	-0.048	0.296	0.026	0.872	0.953
USD 35,000 to USD 49,999	0.385	0.314	1.500	0.221	1.469
USD 50,000 to USD 74,999	-0.073	0.313	0.054	0.816	0.930
USD 75,000 to USD 99,999	0.338	0.328	1.061	0.303	1.402
Over USD 100,000	0.591	0.326	3.288	0.070 *	1.806
Model Statistics					
-2 Log Likelihood = 1006.307, Cox and Snell R Square = 0.079; Nagelkerke R Square = 0.120; $p = 0.000$					
Classification Table (Hit Ratio) Percentage Correct: No = 98.3; Yes = 7.6; Overall = 78.1					

Reference categories: Gender = Female; Education = BA/BS or Higher; Civil Status = Married/Living with Partner; Housing Type = Detached 1-Family House (boat, van, omitted); Internet Access at Home = Yes; Urban Residence = Urban; Residence Ownership = Owned/Purchasing; US Residence Location = West; Employment Status = Working Wage and Salaried; Annual Household Income = Under USD 15,000. Note: ***, **, * signify statistical significance at the 0.01, 0.05, and 0.10 levels.

Table A3. Logistic Regression of Hispanic EIWA Selling Goods Offline (Selling Goods Offline = 1).

Variable	β	S.E.	Wald	Sig.	Exp(β)
Constant	-2.985	0.773	14.902	0.000 ***	0.051
Age	-0.014	0.011	1.725	0.189	0.986
Gender (Female = 1)	0.247	0.238	1.079	.299	1.280
Education			12.114	0.007 ***	
Less than High School	0.932	0.4004	5.322	0.021 **	2.540
High School	0.335	0.382	0.768	0.381	1.398
Some College	-0.174	0.401	0.188	0.665	0.841
Household Size	0.207	0.067	9.692	0.002 ***	1.231
Civil Status			6.256	0.100 *	
Widowed	0.204	0.715	0.082	0.775	1.227
Divorced/Separated	0.742	0.325	5.226	0.022 **	2.101
Single, Never Married	-0.159	0.310	0.263	0.608	0.853
Housing Type			0.685	0.877	
Attached 1-Family Home	-0.087	0.449	0.038	0.846	0.916
Apartment	-0.236	0.342	0.475	0.491	0.790
Mobile Home	-0.318	0.611	0.270	0.603	0.728
Internet Access at Home (Yes = 1)	-0.976	0.389	6.297	0.012 **	0.377
Urban Residence	-0.990	0.548	3.265	0.071 *	0.371
Residence Ownership Type			4.523	0.104	
Rented	0.397	0.283	1.963	0.161	1.487
Occupied, No Rent	1.007	0.528	3.646	0.056 *	2.738
US Regional Residence Location			5.771	0.123	
Northeast	-0.101	0.390	0.066	0.797	0.904
Midwest	0.830	0.382	4.721	0.030 **	2.293
South	0.333	0.266	1.569	0.210	1.395
Employment Status			8.578	0.199	
Working—Self-Employed	-0.582	0.617	0.892	0.345	0.559
Not Working—Temporarily Laid-off	0.563	0.676	0.695	0.405	1.757
Not Working—Looking for Work	-0.325	0.434	0.562	0.453	0.722
Not Working—Retired	0.532	0.498	1.141	0.285	1.703
Not Working—Disabled	0.311	0.433	0.516	0.473	1.365
Not Working—Other	0.656	0.329	3.964	0.046 **	1.927
Annual Household Income			5.463	0.362	
USD 15,000 to USD 34,999	-0.337	0.391	0.741	0.389	0.714
USD 35,000 to USD 49,999	-0.128	0.419	0.094	0.759	0.880
USD 50,000 to USD 74,999	0.285	0.390	0.532	0.466	1.329
USD 75,000 to USD 99,999	-0.079	0.447	0.031	0.860	0.924
Over USD 100,000	-0.518	0.481	1.161	0.281	0.596
Model Statistics					
-2 Log Likelihood = 607.967, Cox and Snell R Square = 0.071; Nagelkerke R Square = 0.147; $p = 0.000$					
Classification Table (Hit Ratio) Percentage Correct: No = 100.0; Yes = 3.8; Overall = 90.0					

Reference categories: Gender = Female; Education = BA/BS or Higher; Civil Status = Married/Living with Partner; Housing Type = Detached 1-Family House (boat, van, omitted); Internet Access at Home = Yes; Urban Residence = Urban; Residence Ownership = Owned/Purchasing; US Residence Location = West; Employment Status = Working Wage and Salaried; Annual Household Income = Under USD 15,000. Note: ***, **, * signify statistical significance at the 0.01, 0.05, and 0.10 levels.

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