

Gender and Own-Account Employment in Paraguay - Findings from the Encuesta Permanente de Hogares, 2017 and 2018: A Research Note

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Introduction

Own-account employment refers to a business owned and operated by a single person. This is the most common form of business organization around the world and is particularly pronounced in emerging economies. Own-account employment is a form of self-employment, but without paid employees. Unpaid family workers may assist the business, but for all intents and purposes own-account employment means sole ownership of a microenterprise without the paid assistance of others. In this strict sense of self-employment, 22.6% and 19.5%, respectively, of income earners in Paraguay in 2017 and 2018 were own-account sole proprietors.

This important employment segment of the business community is often overlooked, underappreciated, and under researched. In this brief research note, we seek to describe own-account micro-entrepreneurs in Paraguay with a primary focus on gender. The purpose is to provide base data to further the discussion of own-account, owner-operator microenterprises in Paraguay.

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Data

The data is derived from the nationally representative 2017 and 2018 Encuesta Permanente de Hogares (EPH) undertaken by the government's census office the DGEEC (Dirección General de Estadística, Encuestas y Censos) in Paraguay. The EPH is the most accurate and comprehensive data source currently available for the country. In all, 10,812 households comprising 40,244 individuals were randomly sampled in 2017 across the entire nation. In 2018, 4,999 households were surveyed which included 18,563 people. The EPH for 2017 and 2018 contains cross-sectional data only, adjusted for representativeness across the nation. Most departments were surveyed in 2018, but not all, as reflected in the region of residence¹. We include in our findings only those classified as self-employed, without any employees, and who reported positive incomes in the EPH (N=4,490 [2017] and 2,022 [2018]), excluding domestic workers.

Findings from the EPH, 2017 and 2018

The findings for own-account employment are reported for men and women for 2017 and 2018 (see Table). We divide our discussion between three areas: demographic and household characteristics or variables; employment characteristics or variables; and rates of informality. We discuss both years together when appropriate as the data are similar across the two-year period.

i) Demographic and Household Variables:

While more men are owner-operators than women, women comprise a large sub-set of these microenterprises at forty-three percent. There is no significant distinction in age between female and male in 2017 and one year difference in 2018 for own account workers. On average, owner-operators are middle-aged in their early 40s. Female own-account workers possess nearly one more year of education than their male counterparts, an education trend reflective of the country as a whole. Yet on average own-account workers have less than a full middle school education. Guaraní is widely spoken in the homes of own-account workers, more so for men than women. It also appears that own-account women may have a fuller command of Spanish relative to own-account men. There is a large gap between male and female owner-operators regarding their status as a head of the household. Men are far more likely to be household heads. More than two-thirds of female and male own-account workers are married. The differences are related to the death of a spouse (widow) and unmarried or single status, where more men are single and more women are widowers.

Due to the differences in geographical reach, we divide the country into three regions, the metropolitan area (Asunción and the Department of Central), Alto Paraná (the department in which Ciudad del Este is located), and the remainder of the country. The metropolitan region houses about one-third of the self-employed, Alto Paraná about one-tenth and remainder elsewhere in the country. In urban zones, owner-operator women are more highly represented; own-operated men are nearly evenly divided between urban and rural residence.

¹The population weights (or factor of expansion) utilized in the analyses are elaborated by the DGEEC and are based on the population projections derived from the 2012 National Population and Housing Census. The 2018 EPH omits much of the Chaco region.

Most owner-operators own their own home. One measure of home quality is the type of home flooring. Dirt floors typically represent a humble home and a tile floor represents a relatively better built structure. A majority of owner-operator women live in homes with tile flooring with fewer living in a home with a dirt floor. Brick or cement flooring are more common for male owner-operators as are dirt floors compared to their female counterparts. The average number of persons living in households is nearly the same at just over four persons. And very few own-account households receive remittances from abroad, though households of women own-account workers receive slightly more than men (table 1).

ii) Employment Variables:

Own-account workers have a lot of work experience, about thirty years on average. There are large variations in economic activity. As expected, there are more male owner-operator microenterprises in agriculture than for women. Women, nonetheless, are still represented in agriculture as their second most common economic activity. On the other hand, the majority of owner-operator women are engaged in commerce and trade. While men are less proportionally engaged in commerce and trade, this economic activity is the second most common one for men. These two economic activities are essentially flipped for women and men. Own-account women have a higher proportional representation in manufacturing than men and own-account construction and transportation, storage and communications work is nearly completely the domain of men. Few own-account workers are engaged in real estate and finance, but essentially none work in utilities. This is also shown by the small percentage of professionals represented in own-account employment which is slightly higher for women .

While own-account workers have been working for a long time, less than half of that time has been in their present microenterprise. In this case, men have worked much longer in their individual microenterprise. Own-accounts workers on average work a full work week, however the number of hours varies considerably for women as indicated in the large standard deviation. There are distinct differences in poverty, nearly one-third of male own-account workers live in impoverished households, for women this proportion is just over one-fifth. Households in extreme poverty afflict more men than women owner-operators more than twice the rate for men; however, overall the rates of extreme poverty are less than six percent and average closer to four percent for all. Between male and female owner-operators, there was a large gap in earnings between each other and with the legal minimum wage. Male own-account workers earned around usd 300 a month and female own-account workers earned usd 200 a month. Both figures were below the legal minimum wage which may be used as a standard comparison tool. Men on average earned about three-quarters of the minimum wage and women earned about half of the minimum wage (table 2).

iii) Rates of Informality:

In essence, the informal economy consists of market transactions that avoid government regulation, oversight, and/or taxation, though these same transactions may be conducted legally under the full auspices of government monitoring (Portes, Castells, and Benton, 1989). Yet, informal transactions and work activity is not said to be criminal since the product (good or service) or work itself is legal, but it is generally undertaken outside the scrutiny and legal bounds of government mandated regulation and legislation (Portes and Schauffler, 1993). Using the four available proxies for informality as described by Pisani and Ovando (2019),

own-account employment ranges from 79.1% to 100.0% informal or from 0% to 22% as formal.

The four proxies are focused by social benefits, enrollment in medical insurance, enrollment in social security, and organizational practices, is the microenterprise duly registered with the government (i.e., possess a RUC [registro único de contribuyentes]), does the microenterprise provide clients a personalized sales receipt (i.e., a facture). The lowest rate of informality is for female own-account workers in regard to enrollment in medical insurance, more than a ten point difference than for male enrollment in medical insurance. The highest rate is 100% as essentially no own-account workers are enrolled in social security². This is concerned as the average age of own-account workers in 43 years old. Men are slightly more likely to be informal than women, but the overall average is greater than 90% of owner-operated microenterprises are informal (table 3).

²Law 4.933 of 2013 authorizes the voluntary incorporation of own-account workers, employers, housewives and domestic workers into the Retirement and Pension Fund of the Social Security Institute. These contributions allow only access to future retirement and not to health services. Although this law exists, the fact that incorporation is voluntary and does not allow access to health services discourages the incorporation of own-account workers.

Table 1. Own-Account Employment (2017 and 2018) - Descriptive Statistics by Gender, demographic and household variables.

Demographic and Household Variables	2017		2018	
	Male	Female	Male	Female
<i>Gender (%)</i>	56.1	43.9	57.0	43.0
<i>Mean Age - Years</i> <i>(std. dev.)</i>	43.8 (15.5)	43.4 (14.7)	43.3 (16.3)	42.4 (14.5)
<i>Education – Mean Years</i> <i>(std. dev.)</i>	7.3 (4.1)	8.2 (4.5)	7.8 (4.7)	8.5 (4.4)
<i>Language Spoken Most Often at Home (%)</i>				
<i>Guarani</i>	58.3	45.1	57.3	38.8
<i>Guarani and Spanish</i>	24.4	29.7	25.2	38.7
<i>Spanish</i>	14.9	23.0	1.4	1.5
<i>Other Language</i>	2.3	2.3	16.2	21.0
<i>Head of Household – Yes (%)</i>	64.8	39.8	63.7	39.2
<i>Civil Status (%)</i>				
<i>Married/Living Together</i>	66.9	68.2	63.0	66.7
<i>Divorced/Separated/Widowed</i>	5.6	12.4	6.5	12.1
<i>Single</i>	27.5	19.4	30.6	21.2
<i>Region of Residence (%)</i>				
<i>Metropolitan Region</i>	30.3	36.5	26.3	37.2
<i>Alto Paraná</i>	10.9	10.3	10.8	9.1
<i>Rest of the Country</i>	58.8	53.2	62.9	53.7
<i>Urban Residence (%)</i>	52.2	61.3	51.4	64.5
<i>Home Ownership (%)</i>	85.5	83.7	85.6	85.3
<i>Type of Home Flooring (%)</i>				
<i>Dirt</i>	15.6	9.5	13.8	6.8
<i>Wood</i>	1.2	0.5	0.7	0.5
<i>Brick/Cement</i>	42.8	35.5	45.6	38.3
<i>Tile</i>	40.4	54.5	39.9	54.4
<i>Mean Number of People Living in Household</i> <i>(std. dev.)</i>	4.3 (2.2)	4.2 (2.1)	4.3 (2.4)	4.4 (2.1)
<i>Household Receives Remittances – Yes (%)</i>	3.3	5.4	2.8	5.3
N=	4,490		2,022	

Source: Authors' elaboration from the EPH, 2017 and 2018, for those with an earned income.

Notes: Figures for some categories may not add up to 100% due to rounding. Italics indicate significant differences at the $p=.05$ level between males and females (using either comparisons of means for ordinal data or cross-tabulations for categorical data).

Table 2. Own-Account Employment (2017 and 2018) - Descriptive Statistics by Gender, employment variables.

Employment Variables	2017		2018	
	Male	Female	Male	Female
<i>Mean Potential Work Experience (std. dev.)</i>	30.0 (17.2)	29.3 (17.0)	29.6 (18.0)	27.9 (16.6)
<i>Economic Activity (%)</i>				
<i>Agriculture</i>	37.0	17.4	36.6	13.2
<i>Manufacturing</i>	7.1	12.5	7.4	10.7
<i>Utilities (Electricity, gas and water)</i>	0.0	0.0	0.0	0.0
<i>Construction</i>	7.8	0.2	7.2	0.0
<i>Wholesale and retail trade</i>	26.4	50.4	22.4	51.9
<i>Transportation, storage and communications</i>	4.7	0.5	4.6	0.0
<i>Real Estate and Finance</i>	3.0	3.3	5.8	6.2
<i>Other Services</i>	14.0	15.7	16.5	18.0
<i>Professional (%)</i>	6.2	7.2	8.0	8.6
<i>Mean Length of Time of Working at the Same Company- Years (std. dev.)</i>	14.2 (12.8)	9.8 (11.8)	14.8 (13.8)	9.4 (11.9)
<i>Mean Number of Hours Worked per Week (std. dev.)</i>	44.0 (19.2)	40.9 (27.4)	43.6 (38.1)	40.9 (43.1)
<i>Impoverished – Yes (%)</i>	31.2	22.6	25.2	14.9
<i>Extremely Impoverished – Yes (%)</i>	5.7	2.5	4.4	2.7
<i>Average Log of Total Monthly Earned Income (std. dev.)</i>	6.0 (0.5)	5.8 (0.5)	6.0 (0.5)	5.8 (0.5)
<i>Average Monthly Earned Income in Constant US\$ (std. dev.)</i>	295.22 (486.99)	199.83 (262.86)	307.76 (407.30)	210.12 (364.12)
N=	4,490		2,022	

Source: Authors' elaboration from the EPH, 2017 and 2018, for those with an earned income. Notes: Figures for some categories may not add up to 100% due to rounding. Exchange rate used for 2017 is 5,571 and 5,732 for 2018 Gs. Per 1 US dollar. Italics indicate significant differences at the $p=.05$ level between males and females (using either comparisons of means for ordinal data or cross-tabulations for categorical data).

Table 3. Own-Account Employment (2017 and 2018) - Descriptive Statistics by Gender, rates of informality.

Formality Measures	2017		2018	
	Hombres	Mujeres	Hombres	Mujeres
Social Benefits (%)				
<i>Medical Insurance (Yes)</i>	8.2	21.9	<i>8.6</i>	<i>18.3</i>
Pension Plan (Yes)	0.0	0.0	<i>0.1</i>	<i>0.3</i>
Organizational Practices (%)				
<i>RUC (Yes)</i>	<i>11.6</i>	<i>10.5</i>	<i>10.9</i>	<i>9.8</i>
<i>Facturas (Yes)</i>	<i>11.4</i>	<i>10.2</i>	<i>10.6</i>	<i>9.7</i>
N=	4,490		2,022	

Source: Authors' elaboration from the EPH, 2017 and 2018, for those with an earned income.

Notes: Figures for some categories may not add up to 100% due to rounding. Italics indicate significant differences at the $p=.05$ level between males and females (using either comparisons of means for ordinal data or cross-tabulations for categorical data).

Summary and Future Research Directions

As own-account workers are understudied in Paraguay, we hope this short contribution focused on the characteristics of owner-operated microenterprises begins a discussion on issues surrounding microentrepreneurship. The data clearly show the following:

- 1) Own-account employment accounts for more than one in every five businesses in Paraguay;
- 2) Both men and women across the country are engaged in own-account employment;
- 3) There are important differences (heterogeneity) between men and women owner-operated micro-businesses;
- 4) Average education levels of owner-operated firms are below the national average;
- 5) Average monthly earned income for own-account workers is substantially lower than the monthly mandated minimum wage and the monthly national average income; and
- 6) The rates of informality for own-account workers are considerably higher than the national average.

Future research should utilize both qualitative and quantitative designs to better understand the phenomenon of own-account workers. Qualitatively, in-depth ethnographies of micro-entrepreneurs and their micro-businesses across sectors, regions, gender, life stages, and business cycles should be undertaken. Quantitatively, understandings the determinants of own-account employment over time and contemporaneously relative to other income earning choices should be carried out. Triangulating the two paths of inquiry would be even better. Once we better understand owner-operated microenterprises, targeted and appropriate public policy may be developed.

References

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