

# Amount and Sources of Income of Older Households in Mexico

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*This study investigated the amount and sources of income of households headed by a person age 60 and older in Mexico using the 2002 Household Income and Expenditure Survey of Mexico (N = 3,672). The results suggest that Mexicans do not come from a culture of retirement planning. In households where the head had a source of income, the income was composed of pensions, 24%; wages, 19%; business income, 15%; partnerships, 13%; gifts, 10%; and other sources, 19%. If the head of the household reported no income, he or she was dependent on other earners and gifts. When advising those who were born in Mexico, consumer educators and advisors should realize that these households might expect support from family members instead of saving for retirement.*

*Key Words: Mexican households, older adults, sources of income*

## Introduction and Purpose

Population aging as evidenced by an increase in the median age of the population is occurring in most countries (Clark, Burkhauser, Moon, Quinn & Smeeding, 2004). The Department of Economic and Social Affairs (2002) reported that aging is a result of an increase in the portion of older persons accompanied by a decline in the portion of younger persons. Mexico is not an exception. Because of a decline in the birth rate and an increase in life expectancy, older people represent a larger percentage of the population than in previous years (Ham-Chande, 1996). In 1930, people 65 and over represented 2.6% of the Mexican population, compared to 3.4% in 1970 and 3.7% in 1990. This percentage is expected to increase to 11.7% in 2030 (Consejo Nacional de Poblacion [CONAPO], 2005). The increased proportion of older people in Mexico raises the question: how are older Mexicans providing for retirement through a longer life expectancy?

Research on the economic status of older adults in Mexico should provide insight into the success of the Mexican Pension Reform which occurred in 1991 and 1997. Also, it should be of interest to consumer educators and financial advisors in the United States as Hispanics are the largest minority population in the United States (U.S. Census

Bureau, 2003). In the 2000 Census, Hispanics represented 12.5% of the total population of the United States. Mexicans are the largest Hispanic group in the United States. Mexicans represented 7.5% of the total population (U.S. Census Bureau, 2001). Therefore, this topic should be of interest to researchers and policymakers as well as consumer educators and financial advisors. The purpose of this study is to examine the amount and sources of income of older Mexican households to understand their economic well being and to provide insight in regard to Mexican consumers in the United States.

## Review of Literature

### *Life Expectancy*

Similar to other countries, life expectancy has increased in Mexico. It improved dramatically in the last half of the twentieth century, increasing by 30 years between 1940 and 1990. In 1990, life expectancy at birth was 71 years, and in 2005 it was 75 years (CONAPO, 1992). Currently, women who are 60 years old are expected to live an additional 22.36 years while men who are 60 years old are expected to live an additional 20.51 years (CONAPO, 2005). This increased life expectancy could create a problem if there is a lack of resources to provide for the older population.

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*Pension Reform and Labor Force Participation*

Reform of the Social Security system has occurred in several countries due to problems with old age security programs. In Latin America, the reform started with Chile in 1981, followed by Mexico in 1991, Peru in 1993, and Argentina and Colombia in 1994 (Arrau & Schmidt-Hebbel, 1995). The first pension reform in Mexico in 1991 was followed by another reform in 1997 (Comision Nacional del Sistema de Ahorro para el Retiro [CONSAR], 2005). The first reform resulted in the creation of individual accounts that complemented Social Security pensions. Employers were required to open individual retirement accounts for each employee. The money could be withdrawn from the account by the employee when he or she was eligible for Social Security. The second reform in 1997 ended the pay-as-you-go system and created another individual retirement account for each worker. The workers who accumulated money in their retirement accounts from 1992 to 1997 can rollover that money to the new accounts created in 1997 (CONSAR, 2005).

Pension reform in some countries of Latin America has succeeded in reducing pension fund debt and in creating systems that are fiscally sustainable (Schmidt-Hebbel, 1999). However, system coverage has not increased substantially since the reform. This has raised questions about these reforms as social risk management systems (Holzmann, Packard, & Cuesta, 2000). Pension coverage has remained the same because developing countries in Latin America face a common problem---the informal sector which remains outside of the system.

In Mexico, the informal sector consists of independent workers, domestic workers, and workers in small enterprises. The presence of the informal sector means that a large part of the labor force is not paying payroll taxes and, as a consequence, the tax base is smaller than it should be (Sinha, 2002). In 1990, 27% of Mexico's Gross Domestic Product came from the informal sector (Loayza, 1996). In 1990, there were more individuals employed in the informal sector (55% of total employment) than there were in the formal sector (Sinha, 2002). Currently, only 33% of the Mexican population has Social Security benefits (Instituto Nacional de Estadística [INEGI], 2004). This leaves the majority of the population on their own when it comes to retirement.

Because pensions are not available for the majority of older adults in Mexico, other sources of income are very important. In 2004, almost half of the men age 65 and older and one seventh of the women age 65 and older were participating in the labor force (INEGI, 2004). Although the percentage of men participating in the labor force has decreased since 1991, when it was 55%, the percentage of women has increased slightly from 12% in 1991 to 14% in 2004.

*Income and Poverty in Mexico*

In 2002, the average quarterly income of Mexican households was \$2,301 U.S. dollars, equivalent to an average annual income of \$9,302 (INEGI, 2003). Because of the large variation in income, it is helpful to examine income distribution by deciles. Households in the first decile (with the lowest income) had an average quarterly income of \$376, equivalent to an annual income of \$1,505. Households in the second decile had an average quarterly income of \$669, equivalent to an annual income of \$2,676. In contrast, households in the ninth and tenth deciles had a quarterly income of \$3,779, and \$8,182, respectively, equivalent to an annual income of \$15,117, and \$32,729, respectively. As a point of reference, in the United States, the average annual household income in 2002 was \$57,852. The poverty rate among all households in the U.S. was 12.1% (U.S. Census Bureau, 2004). In contrast, more Mexican households experienced poverty, proportionally.

Poverty and other indicators of well-being vary greatly across Mexico. Compared to the Northern part, which is wealthier, there is a high level of deprivation in the South. This is confirmed by two different indexes (World Bank, 2004). The Mexican index of marginality was developed by the Mexican Population National Council (CONAPO). This index of marginality is based on access to basic infrastructure services, housing conditions, educational attainment, and earnings from wages. It allows for comparison of marginality among Mexican states. For example, in 2000, the highest indexes of marginality for the poorer states were assigned to Chiapas and Guerrero with a score of 2.25 and 2.12, respectively (CONAPO, 2002). Both of the states are in the South. In contrast, the wealthiest states based on the index of marginality were Mexico City and Nuevo Leon (-1.53 and -1.39, respectively).

The Human Development Index from the United Nations Development Programme (UNDP) is based on per capita Gross Domestic Product, educational achievement and enrollment, and life expectancy (United Nations, 2004). This index gives the lowest values, 0.703 and 0.713 respectively, to two states in the South, Chiapas and Oaxaca.

A third indicator that has been used to look at the national poverty level in Mexico is the proportion of employed people earning less than 2 times the minimum wage (World Bank, 2004). In 2002, 35% of the Mexican households reported an income that was lower than 2 times the minimum wage (INEGI, 2003). In 2005, 39% of Mexican households had an income less than 2 times the minimum wage (INEGI, 2005).

The minimum monthly wage in 2002 was 1,264.50 pesos (42.15 pesos per day x 30), equal to \$115 dollars per month using an exchange rate of 11 pesos per 1 dollar. This was the exchange rate in January 2003 (Banco de Mexico, 2006). The minimum quarterly wage in 2002 was \$345. Individuals who report a quarterly income of less than 2 times the minimum wage (\$690) would be in the poverty category.

## Methodology

### *Data and Sample*

The data set for this study was the 2002 Household Income and Expenditure Survey of Mexico (Encuesta Nacional de Ingresos y Gastos de los Hogares: ENIGH). The ENIGH provides information about the distribution, structure and amount of income and expenses of households in Mexico. The Mexican National Statistical Institute (Instituto Nacional de Estadística, Geografía e Informática: INEGI) has conducted the survey every two years since 1992, using the same methodology each time. Data for the 2002 ENIGH were collected from August to November of 2002. To increase the sample size, several government agencies provided funds. Those agencies were: the Department of Social Development (SEDESOL), the Department of Agriculture, Farming, Rural Development, Fishing and Food (SAGARPA), and the Federal Reserve Bank (Banco de Mexico).

The basic unit in the ENIGH is the household. The household is defined as a group of people (with or without kinship) who live together sharing income and expenses. The head of the household is the person that is recognized

as such by the household members. The person could be either physically present or away from the household. The sample consisted of 17,167 households and 72,602 persons who make up these households. A weighting variable is included in the data set in order to make the sample representative both at the national and at the sub national levels of urban versus rural areas. The weighting variable is equal to the inverse of the sample probability.

The focus of this study was to examine the amount and sources of income of older Mexican households. To be eligible for a pension in Mexico, the minimum retirement age is 60 (CONSAR, 2005). Therefore, the sample used in this study included the 3,672 households whose heads were 60 years of age or older at the time of data collection and who provided their complete income information.

### *Method of Analysis*

Descriptive statistics were used to examine the incomes of Mexican households headed by persons age 60 or older. Means, standard deviations, and frequencies were calculated for several variables. The sources of income will be discussed for: (a) all households in the sample ( $N = 3,672$ ), (b) households whose heads had no income ( $n = 470$ ), and (c) households whose heads had their own income ( $n = 3,202$ ). Quarterly household income is reported in U.S. dollars using an exchange rate of 11 pesos per dollar.

## Results

Table 1 shows the weighted descriptive statistics of Mexican households whose heads were 60 years of age and older. The average quarterly income was \$1,589, equivalent to \$6,356 annually. The average age of the household heads was 69.54 years. The average household size was 3.42 people. Almost three fourths (71%) of the households were headed by a male. Marital status of the head was: married, 55%; widowed, 29%; divorced or separated, 7%; living with a partner, 6%; single, 3%; and 1% not reporting their marital status. Educational attainment was as follows: elementary or less, 86%; junior high, 6%; high school, 2%; some college, 3%; college degree, 4%; and some graduate school, 1%.

### *Sources of Income*

The sources of income for Mexican households whose heads were 60 years or older were: wages, 42%; pensions, 14%; businesses, 12%; partnerships, 9%; gifts, 8%; financial assets, 6%; rental property, 4%; government

**Table 1. Weighted Descriptive Statistics of Mexican Households Heads 60 Years or Older in 2002 Using an Exchange Rate of 11 Pesos per \$1 (N = 3,672)**

Variable	<i>M</i>	<i>SD</i>	<i>Mdn</i>	%
Quarterly household income	\$1,589.01	\$2,264.48	\$861.82	
Age	69.54	7.66	68.00	
Household size	3.42	2.16	3.00	
Gender				
Male				70.91
Female				29.09
Marital status				
Married				54.68
Widowed				28.92
Divorced				6.50
Partner				5.66
Single				3.44
Not reported				0.80
Education				
Elementary school or less				85.63
Junior high school				5.86
High school				2.31
Some college				1.75
College				3.50
Graduate school				0.95

transfers, 3%; foreign pensions, 1%; and lump sum distributions, 1%.

The average household size was 3.42 people. Based on the number of people in the household, it was important to investigate if the head of the household was the sole provider or if the household had several earners. Therefore, the sample was divided in two groups: those households whose heads had income ( $n = 3,202$ ) and those households whose heads reported no income, meaning that

the household income must come from other earners in the household ( $n = 470$ ).

#### *Households: Heads Without Income*

For those households whose heads had no income, the average quarterly income was \$1,498, equivalent to \$5,991 of annual income. There may be some seasonal variation in income so the annual amount is an approximation. The average household size of these households was 4.33. The sources of income were: wages, 72%; businesses, 11%; partnerships, 6%; gifts, 4%; financial assets, 3%; pensions, 2%; and other sources such as government transfers, property leasing, foreign pensions, and lump sum distributions, 2%.

#### *Households: Heads With Income*

For those households whose heads had income, the average quarterly household income was \$1,603 (\$6,413 annual income), and the average quarterly income of the heads was \$915 (\$3,662 annual income), representing 57% of the household income, as shown in Table 2. For these households, the average household size was 3.28.

When only the income of the head was considered, the sources of income were: pensions, 24%; wages, 19%; businesses, 15%; partnerships, 13%; gifts, 10%; financial assets, 7%; rental property, 6%; government transfers, 3%; foreign pensions, 2%; and lump sum distributions, 1%.

In summary, the annual income of those households whose heads had income was \$400 higher than the household income of those heads with no income. The main source of income for households whose heads had no income of their own was wages (from other earners in the household). For those households whose heads had income, the main sources of income of the head were pensions, wages, and businesses. The next step was to focus on the sources of income of the heads alone. The number of sources of income of the heads was analyzed, and the average number of sources was 1.71 with a median of 1. Therefore, the next analysis is of those heads that have only one source of income.

#### *Households: Heads Who Had One Source of Income*

There were 1,739 households where the head had only one source of income. The income came from the following sources: pensions, 24%; businesses, 23%; wages, 22%; gifts, 17%; partnerships, 5%; property leasing, 3%; lump sum distributions, 2%; government transfers, 2%; financial

**Table 2. Comparison of Household Income for Mexican Households Whose Heads Were 60 Years or Older in 2002 (N = 3,672)**

	Heads with income (n = 3,302)			Heads without income (n = 470)		
	M	SD	%	M	SD	%
Head quarterly income	\$915.40	\$1,628.12		\$0.00	\$0.00	
Household quarterly income	\$1,603.27	\$2,349.82		\$1,497.82	\$1,612.06	
Age	69.23	7.54		71.53	8.12	
Household size	3.28	2.09		4.33	2.32	
Gender						
Male			73.66			46.74
Female			26.34			54.26
Marital status						
Married			56.86			40.71
Widowed			26.95			41.58
Divorced			6.42			6.98
Partner			5.90			4.14
Single			3.87			0.68
Not reported			0.00			5.91
Education						
Elementary or less			84.00			95.00
Junior high			6.00			2.00
High school			3.00			1.00
Some college			4.00			2.00
Graduate			1.00			0.00

assets, 1%; and foreign pensions, 1%. The average quarterly income for heads with one source of income was \$788 with a median of \$384 (annual amounts would be \$3,152 and \$1,538, respectively). The average quarterly income for the heads with only one source of income was just above the poverty level (\$690). Half of the heads had an income that was categorized as poverty, because it was slightly above 1 times the minimum wage. An examination of the average and median amounts showed that some values were skewed. See Table 3.

Demographic characteristics of heads with only one source of income are shown in Table 4. The average age was

69.34. The average household size was 3.44. Almost three fourths (73%) of the heads were men. Marital status of the head was: married, 56%; widowed, 28%; divorced, 6%; living with a partner, 6%; and single, 4%. Educational attainment of the head was: elementary or less, 84%; junior high, 7%; high school, 2%; some college, 2%; college degree, 3%; and some graduate school, 2%. In summary, those households whose heads had only one source of income had, on average, three and a half members. The average income of the head was just above the poverty level, and the majority of the heads had a level of education of elementary school or less.

**Table 3. Weighted Sources of Quarterly Income for Mexican Household Heads with One Source of Income ( $n = 1,739$ )**

Source	%	<i>M</i>	<i>Mdn</i>
Pensions	24	\$771.83	\$409.09
Businesses	23	\$503.04	\$272.72
Wages	22	\$934.95	\$545.45
Gifts	17	\$330.59	\$218.18
Partnerships	5	\$2,107.07	\$877.27
Property leasing	3	\$2,405.41	\$818.18
Lump sum distributions	2	\$185.90	\$171.82
Government transfers	2	\$157.35	\$113.64
Financial assets	1	\$1,544.19	\$1,636.37
Foreign pensions	1	\$2,413.38	\$1,472.73
<i>Total</i>	<i>100</i>	<i>\$788.00</i>	<i>\$384.54</i>

*Households: Heads Who Had Two Sources of Income*

There were 951 households whose heads had two sources of income. The average quarterly income was \$1,072 (\$4,287 annual income). The average age was 69.52. Seventy five percent of the heads were male. Marital status was: married, 58%; widowed, 25%; divorced, 8%; living with a partner, 5%; and single, 4%. The level of education of the head was: elementary or less, 80%; junior high, 7%; high school, 4%; some college, 3%; and college, 6%. The average household size was 3.04. In summary, heads with two sources of income had a higher income, on average, than those with only one source of income (\$1,072 vs. \$788). The average number of people in the household was less for the heads with two sources of income compared to those with one source of income (3.04 vs. 3.44). See Table 4.

*Households: Heads Who Had Three or More Sources of Income*

There were 512 households whose heads had three or more sources of income. Their average quarterly income was \$1,106 (\$4,424 annual income). Their average age was

68.06. The average household size was 3.12. Almost three fourths (73%) of the heads were male. Marital status of the head was: married, 58%; widowed, 28%; divorced, 5%; living with a partner, 5%; and single, 4%. Educational status of the head was: elementary or less, 92%; junior high, 3%; high school, 1%; some college, 1%; college degree, 2%; and some graduate school, 1%.

There was only a small difference between the average quarterly income of those heads with three or more sources (\$1,106) and those heads with two sources (\$1,072). However, the average household size of heads with three or more sources of income was larger than for heads with two sources of income (3.12 vs. 3.04). The level of education of the head was lower. Ninety-two percent of the heads who had three or more sources of income had only elementary school or less, compared to 80% for those with two sources of income, and 84% for those with one source of income. See Table 4.

**Summary and Implications**

Using the 2002 Household Income and Expenditure Survey of Mexico, this study investigated the amount and sources of income of older households in Mexico. Because some household heads did not have any income of their own, the sample was divided into two categories for analysis. The categories were: heads with income of their own and heads without income of their own. The sub sample of households with their own income was further divided into three categories for additional analysis. Those categories were: one source, two sources, and three or more sources of income.

After examining the results, the main concern should be for households whose heads have no income of their own. These household heads depend on other earners in the family, such as their children. It is likely that the heads in these households depend on their children to supplement their income. The consequences of children leaving home could mean that the older person is left without support. Household size in Mexico decreased from 4.7 to 4.1 between 1992 and 2002 (INEGI, 2003). If the number of earners in the family continues to decline, it could result in less income or no income for older family members.

However, there were older household heads with income of their own. On average, the income of the head represented 57% of the total household income. This group of heads was better off financially, because their average

**Table 4. Comparison of Demographic Characteristics of Mexican Household Heads with 1, 2 or 3 Sources of Income in 2002 (N = 3,202)**

	One source (n = 1,739)			Two sources (n = 951)			Three or more sources (n = 512)		
	M	SD	%	M	SD	%	M	SD	%
Head's quarterly income	\$788.00	\$1,361.18		\$1,071.80	\$1,996.00		\$1,105.91	\$1,673.32	
Age	69.34	7.65		69.52	7.54		68.06	6.87	
Household size	3.44	2.18		3.04	1.97		3.12	1.99	
Gender									
Male			73			75			73
Female			27			25			27
Marital Status									
Married			56			58			58
Widowed			28			25			28
Divorced			6			8			5
Partner			6			5			5
Single			4			4			4
Education									
Elementary or less			84			80			92
Junior high			7			7			3
High school			2			4			1
Some college			2			3			1
College degree			3			6			2
Some graduate school			2			0			1

income was slightly higher than the income of the households whose heads had no income. The analysis showed that the main sources of income for these households were pensions, wages, and businesses. The average amount of a quarterly pension was \$772. This amount is above the poverty level and it is about one third of the \$2,301 average quarterly income of all Mexican households. This suggests that if most of the population were eligible for Social Security, the income sources of the elderly would be more stable (although it still might not be adequate). Only 24% of the household heads had a pension. This percentage is less than the 33% of the

population who receive Social Security benefits. In Mexico, Social Security includes health care and disability, as well as retirement pensions. To be eligible to receive a retirement pension, an individual must have paid Social Security taxes for at least 1,250 weeks (24 years). Therefore, an individual might receive the health or disability benefits from Social Security, but he or she might not be eligible for a pension.

The average amount of quarterly income from wages was \$935. This amount is higher than the average amount of quarterly pensions and it is also above the poverty level. In

contrast, the average amount of quarterly income from businesses was \$503. This amount falls into the poverty category as it is below \$690 (2 times the minimum wage). The average amount is small, because these are self-employed household heads. However, both wage earners and business owners are at risk if the health of the head deteriorates and they cannot work or if they lose their job and are unable to find a new job due to their age. If the household heads are unable to work, not only their income, but the household income will be dramatically reduced. Other sources of income of the heads were financial assets and property leasing, but only a small percentage of the heads had income from these sources.

In summary, many older Mexicans were not financially independent. They relied on family members to provide for them. The United Nations (2005) stated that the most important challenge for social policy in Mexico is the older population. Less than a third of older individuals have a pension. This statistic is important for consumer educators and financial advisers in the United States. Mexicans living in the United States do not come from a culture of retirement planning. When advising older people who were born in Mexico, it is important to consider that they are likely to rely on other family members and that they are unaccustomed to planning for their retirement.

However, a recent survey showed that 4 out of 10 Mexicans save a percentage of their monthly income. More men than women consider themselves to be savers, and more younger people than older people consider themselves to be savers (Consulta Mitofsky, 2004). It would be interesting to learn their motives for saving.

One limitation of this study is that the data set includes only income from one quarter of the year. There may be seasonal variations due to end of year bonuses (aguinaldos which are mandatory by law), commissions, and so forth. Another limitation of the study is that the data set does not provide information that could identify the amount of remittances sent by children living in the United States to their parents living in Mexico.

It would be beneficial to conduct qualitative research with a sample consisting of Mexicans living in the United States and Mexicans living in Mexico. The benefit of doing this would be to better understand expectations for the future and also if there are differences and similarities in the amount saved and the motive for saving between the two samples.

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