All authors execute a publication permission agreement taking sole responsibility for the information in the manuscript. Jordan Whitney Enterprises, Inc is not responsible for the content of any individual manuscripts. Any omissions or errors are the sole responsibility of the individual authors.

The Academy of Economics and Economic Education Proceedings is owned and published by Jordan Whitney Enterprises, Inc., PO Box 1314, Arden, NC 28704, U.S.A., (828) 507-9770. Those interested in the *Proceedings*, or communicating with the *Proceedings*, should contact the Executive Director of the Allied Academies at info@alliedacademies.org.

Copyright 2013 by Jordan Whitney Enterprises Inc, Arden, NC
# Table of Contents

**ETHICS AND CULTURAL DIFFERENCES BETWEEN CHINA, MEXICO, AND THE USA**................................................................. 1  
Jon Austin Gastrock, University of Texas at Dallas  
Carmen Moreno, University of Texas at Dallas  
Nicole Jaime, University of Texas at Dallas  
Alejandra Serrate, University of Texas at Dallas  
Brian Cunningham, University of Texas at Dallas  
Natalyn Nijwanger, University of Texas at Dallas  
Mauricio Soto, University of Texas at Dallas

**VARK LEARNING STYLES AND STUDENT PERFORMANCE IN PRINCIPLES OF MICRO- VS. MACRO-ECONOMICS**............................... 5  
Ambrose Leung, Mount Royal University  
Maureen McGregor, Mount Royal University  
David Sabiston, Mount Royal University  
Stefano Vriliotis, University of Calgary

**EXCHANGE RATES AND TOURISM: EVIDENCE FROM GUAM**................................. 7  
Maria Claret M. Ruane, University of Guam

**SCAREDY CATS TO COOL CATS: HOW TIME PERSPECTIVE MATTERS IN ATTITUDE AND INTENT TOWARD FINANCIAL DECISIONS**......................... 13  
Marilyn Spencer, Texas A & M University-Corpus Christi  
Valrie Chambers, Texas A & M University-Corpus Christi  
Bilaye Benibo, Texas A & M University-Corpus Christi

**AN ANALYSIS OF US HOUSEHOLD SOCIOECONOMIC PROFILES BASED ON MARITAL STATUS AND GENDER**................................................................. 15  
Sumaria Mohan-Neill, Roosevelt University, Chicago  
Indira Neill Hoch, University of Illinois, Chicago  
Meng Li, Roosevelt University, Chicago
ETHICS AND CULTURAL DIFFERENCES BETWEEN CHINA, MEXICO, AND THE USA

Jon Austin Gastrock, University of Texas at Dallas
Carmen Moreno, University of Texas at Dallas
Nicole Jaime, University of Texas at Dallas
Alejandra Serrate, University of Texas at Dallas
Brian Cunningham, University of Texas at Dallas
Natalyn Nijwanger, University of Texas at Dallas
Mauricio Soto, University of Texas at Dallas

ABSTRACT

In the current paper we examine variations in ethics and cultural variations between business people and expatriates in China, Mexico, and the USA. We find that the ethical structures are highly similar between the USA and Mexico but they are quite different between China and the USA and China and Mexico. We also found differences in terms of whether assessments are done in rural, suburbs, or urban areas – with larger variations within the countries than between the countries.

REFERENCES


VARK LEARNING STYLES AND STUDENT PERFORMANCE IN PRINCIPLES OF MICRO-VS. MACRO-ECONOMICS

Ambrose Leung, Mount Royal University
Maureen McGregor, Mount Royal University
David Sabiston, Mount Royal University
Stefano Vriliotis, University of Calgary

ABSTRACT

Principles of economics courses are known to be taught primarily using a lecture-based format with strong emphasis in the presentation of visual materials such as graphs and tables. While students with certain learning styles can likely appreciate this unique style of presentation, others may find it difficult to comprehend and become frustrated. Evidence has shown that a mismatch between the method used to present course materials and a student’s learning style can adversely affect the student’s performance in a principles of economics course. However, the literature has not distinguished the potential difference of student performance in principles of micro- versus macro-economics and its relationship with student learning styles.

Using a sample of students from principles of economics courses taught at Mount Royal University in Calgary, Alberta, we examine the relationship between student learning styles, using the VARK (visual, aural, reading/writing, and kinesthetic) inventory, and their performance in principles of micro- versus macro-economics courses. The purpose of this study is to identify whether different student learning styles are related to the performance of students in principles of micro- versus macro-economics.
EXCHANGE RATES AND TOURISM: EVIDENCE FROM GUAM

Maria Claret M. Ruane, University of Guam

ABSTRACT

Guam is a U.S. territory in the Western Pacific region. It is a small island economy that, like many island economies around the world, lacks diversification and mostly relies on a few economic activities, especially tourism. Worse yet, Guam’s tourist markets also lack diversification, with approximately 70% accounted for by tourists from Japan. With the significantly stronger U.S. dollar (USD) and weaker Japanese yen (JPY) since September 2012, the cost to Japanese tourists of visiting Guam had increased by 33%.

Given Guam economy’s heavy reliance on Japanese tourism, this study aims to use available time series data and Ordinary Least Squares regression models to quantify the effect of the significantly stronger USD/weaker JPY in the past year on the number of Japanese tourists visiting Guam. The results of this study will be useful in formulating economic policies in Guam and also in other economies that are similar to Guam for their use of the USD as their local currency or as a peg to their local currencies as well as their tourist-oriented economies that cater to Japanese tourists.

INTRODUCTION

Guam is a U.S. territory in the Western Pacific region. It is an island economy that is small both in terms of its economic size (its latest real GDP at $4 billion in 2005 prices) and in terms of its population (160,000 residents according to the 2010 U.S. Census data). Like many island economies around the world, Guam’s economy lacks diversification and mostly relies on a few economic activities, one of them being tourism. In 2012, Guam was destination to 1.3 million tourists, with approximately 70% of these tourists visiting from Japan.

In the past year, Japan’s central bank, i.e., the Bank of Japan (BOJ), has pursued a policy of increasing money supply in order to boost Japan’s economy, which has been sluggish for 15-20 years. This policy is designed to fight the deflationary tendencies of Japan’s economy by raising the inflation rate to its target of 2% per year. As a result of this policy, the U.S. dollar (USD) has strengthened and the Japanese yen (JPY) has weakened significantly from 1USD = 77.61 on September 28, 2012 to 1USD to 103.18 JPY on May 23, 2013. This represented a 33% stronger USD/weaker JPY. For Japanese visitors who make purchases in USD, including those who visit Guam and other locations that use the USD as their local currency, the JPY cost had just increased 33%, even if the USD prices have not change. Since then, the Japanese yen has fluctuated around 100 JPY to 1USD, the exchange rate that the BOJ and many Japan economy experts believe is the exchange rate that will boost domestic spending in Japan’s economy sufficiently to yield a 2% inflation rate.

Given Guam’s heavy reliance on Japanese visitors, this study aims to quantify and analyze the effect of the significantly stronger USD/weaker JPY in the past year on the number of Japanese tourists visiting Guam. The study is organized as follows. Section II presents an overview of...
Guam’s economy, which highlights its lack of economic diversification. It also provides details on Guam’s tourism sector, to which Japanese tourists contribute a large share. Section III starts off more generally by presenting the theoretical background on the relationship between exchange rates and tourism and then proceeds to narrow down the focus to changes in the exchange rates between the USD and the JPY in the past five year but, more importantly, in the past year. Section IV reviews the literature on the relationship between exchange rates and tourism, which confirms that many studies used tourist arrival to a destination economy as the dependent variable, and considered the effects of independent/explanatory variables such as exchange rates (which is the variable of interest in this study), tourists’ income and others variables on tourist arrival data. Section V constructs an empirical model for analyzing the effect of the exchange rate between the USD and the JPY on Japanese tourist arrival in Guam and discusses the results of using monthly data from October 2003 to July 2013 in Ordinary Least Squares regression models. Section VI concludes the study and discusses policy recommendations.

GUAM’S ECONOMY AND TOURISM

Guam is an island economy that is small both in terms of its economic size (its latest real GDP at $4 billion in 2005 prices, U.S. Department of Commerce, Bureau of Economic Analysis, 2012, September 24) and in terms of its population (160,000 residents according to the 2010 U.S. Census data). These figures suggest Guam’s annual per capita real income of USD25,000 in 2005 prices.

Like many island economies around the world, Guam’s economy lacks diversification and mostly relies on a few economic activities that serve primarily three groups of customers: local residents, U.S. Federal government (including military) personnel and their families, and tourists.

Local Residents

Local residents provide strong support for retail trade and many different service industries in Guam, including health, education, financial, legal, etc. Another advantage of this class of customers is their contribution to the overall economy tends to be more stable and less vulnerable to external shocks that affect the other two economic activities, U.S. Federal Government, including Military, which depends on congressional decisions and budgetary resources from Washington, D. C., and also affected by U.S. economic, political and military allies around the world; tourism in Guam depends on economic and other factors (including natural disasters) that affect countries and economies from where tourists originate.

U.S. Federal Government including Military Personnel and Family Members

As a U.S. territory, Guam benefits from receiving funding from the U.S. Federal Government for a wide array of activities, including the military presence on the island. The U.S. Federal Government contributed 41% of Guam’s approximately USD4 billion real GDP in 2010 (U.S. Department of Commerce-Bureau of Economic Analysis, 2012 September 24) and accounts for 6.7% of 60,220 total employment in Guam in June 2013 (Guam Department of Labor-Bureau of Labor Statistics).
Tourists

Tourist Markets
For years, the majority of visitors to Guam come from Japan, although this share has decreased from as high as 85-90% decades ago. The most recent data for the current fiscal year-to-date (October 2012 to July 2013) show that Guam welcome 1.087 million visitors who arrived by air, 68.39% were from Japan.

Tourist Spending
One of the economic benefits to the destination economy (Guam, in this case) of tourism is the amount that tourists spend during their visit. For Guam during the current fiscal year, this amount is estimated at USD633.65 million of total tourist expenditure (with Japanese tourists contributing USD456.08 million). Using the spending multiplier of 1.3 (Ruane, 2011, December), the resulting increase Guam’s Nominal Gross Domestic Product (GDP), which was last estimated in 2010 at USD4.577 billion, would be approximately USD823.75 million or 18%.

As the economy expands, more jobs are created. Available data show that in Guam, 1 job is created for every USD73,115 worth of economic activity. This suggests that tourist expenditures in fiscal year 2013 would create 8,666 jobs, accounting for 13-14% of jobs in the Guam economy.

In addition to jobs created by tourism, additional taxes are due to the government of the destination economy, which then finance a wide array of economic and social programs for the local residents. The two most obvious taxes earned by the local government from the additional GDP resulting from tourist expenditures for fiscal year 2013 are Gross Receipts Tax (GRT) and Hotel Occupancy Tax (HOT), estimated at USD33 million and USD24 million, respectively.

All these benefits are summarized in Table 1.

| Table 1: Economic Benefits from Tourism in Guam Based on USD633.65 million of tourist expenditures in fiscal year 2013 |
|--------------------------------------------------|------------------|
| Type of Benefit                                  | Estimated amount |
| Direct, indirect and induced spending and income | USD823.75 million (18% of Guam’s GDP) |
| Taxes due to local government (GRT and HOT)      | USD 57 million   |
| Jobs created                                     | 8,666 jobs (13-14% of total jobs) |

Note: author’s calculation

EXCHANGE RATES AND TOURISM

Theoretical Background
The nominal exchange rate is defined to be the number of local currency used to buy/exchange for a foreign currency. Since this study involves only two currencies (USD and JPY), this measure of exchange rate is appropriate to use. This measure also works well when the inflation rates in the two countries are low, which is the case for the U.S. and Japan, so that the differential inflation rate, when it exists, is minimal.

When one currency (in this case, USD) strengthens, the other currency (JPY) weakens, which means one requires more JPY now than before to buy the same 1USD or to pay for products priced in USD, even if the USD price has not changed. For example, an item that is priced USD100 would have cost JPY7,600 in September 2012 but would cost JPY10,000 now that the exchange rate is around JPY100 to 1USD. As is illustrated in this example, a stronger USD translates to a weaker JPY, which means that the cost to a Japanese visitor to Guam has increased.
With this higher cost, it is hypothesized to affect Japanese tourism in Guam in some way. As already noted, the USD has strengthened and the JPY weakened by 33% since September 2012.

**EMPIRICAL MODEL OF JAPANESE TOURISM IN GUAM**

Given Guam’s heavy reliance on Japanese visitors and the significantly stronger USD/weaker JPY in the past year, which for Japanese visitors makes a visit to Guam more expensive, this study has been guided by existing empirical studies in its construction of an Ordinary Least Squares regression model. Using monthly data from October 2003 to July 2013 (a period of 115 months), the model is used to measure the effect of a stronger USD/weaker JPY on the number of Japanese tourists visiting Guam.

The Empirical Model

In this study, the regression equation is

\[
\text{Japanese Tourist Arrival in Guam}_t = a_0 + a_1 \text{USD/JPY}_{t-i} + a_2 \text{Japanese Growth}_t + a_3 \text{Tohoku Disaster} + a_4 \text{Trend} + a_5 \text{Monthly Seasonality} + a_6 \text{Japanese Tourist Arrival in Guam}_{t-1} + \epsilon_t
\]

where the dependent variable is **Japanese Tourist Arrival in Guam** = number of Japanese tourists arriving in Guam in month \( t \).

The independent/explanatory variables in the regression equation are:

- **USD/JPY** = Nominal exchange rate between JPY and USD (how many JPY is required to buy 1USD) at time \( t-i \), where \( i = 1 \) to 12 to indicate 1 to 12 month lagged effect of exchange rate. Data was downloaded from the Federal Research Bank of St. Louis, Federal Reserve Economic Data (FRED2), series ID: EXJPUS.
- **Japanese Growth** = Growth of Japanese tourists’ real income, proxied by Japan’s monthly industrial production index, which was downloaded from the Federal Research Bank of St. Louis, Federal Reserve Economic Data (FRED2), series ID: JPNPROINDMISMEI (2005=100).
- **Tohoku Disaster** = dummy for the March 2011 earthquake and tsunami disaster in northeastern Japan (Tohoku area), which noticeably reduced the number of Japanese visitors to Guam in the three months following the disaster, i.e., April, May and June 2011.
- **Trend** = index for months of time series data, from 1=October 2003 to 115=July 2013. Figure 3 shows the trend of the dependent variable (Japanese Tourist Arrival in Guam) to mimic a cubic function.
- **Monthly Seasonality** = dummy for the monthly seasonality in the dependent variable (Japanese Tourist Arrival in Guam). Figure 3 shows monthly seasonality around the cubic trend displayed by Japanese Tourist Arrival in Guam. A separate regression analysis shows particular seasonality for the months of January, February, March, April, May, June, August and October compared to the month of December. On the other hand, the months of July, September and November did not show significantly different seasonality than that for the month of December.
- **Japanese Tourist Arrival in Guam** = introduced to capture any autoregressive pattern of the dependent variable.

The error term is indicated by \( \epsilon_t \) in the regression equation.
The Results

This study finds the following:

a stronger USD/weaker JPY reduces the number of Japanese tourists arriving in Guam, with the short-run effect occurring as soon as two months after the exchange rate changed and the long-run effect occurring nine months following the change between the USD and the JPY;

an increase in Japanese tourists’ real income, as proxied by growth in Japan’s monthly industrial production, encourages visits to Guam, suggesting “travel to Guam” is viewed as a normal good by Japanese tourists;

the earthquake and tsunami disaster that affected northeastern Japan on March 11, 2011, resulted in approximately 10,000 less Japanese visitors to Guam during the months of April, May and June, 2011;

the Japanese tourist arrival time series data exhibits a cubic function with respect to its monthly trend;

there are monthly seasonality in Japanese tourist arrivals in Guam, with March being the busiest month and representing the highest arrivals, followed by August, then January and February and all these months outperforming the months of July, September, November and December. April was found to be the slowest month in terms of Japanese tourist arrival in Guam, followed by May, June and October, with these months corresponding to Japanese tourist arrival in Guam to be lower than those during the months of July, September, November and December; and

on average, Japanese tourist arrival in Guam in any particular month is affected by arrival during the previous month.

REFERENCES


SCAREDY CATS TO COOL CATS: HOW TIME PERSPECTIVE MATTERS IN ATTITUDE AND INTENT TOWARD FINANCIAL DECISIONS

Marilyn Spencer, Texas A & M University-Corpus Christi
Valrie Chambers, Texas A & M University-Corpus Christi
Bilaye Benibo, Texas A & M University-Corpus Christi

ABSTRACT

The widely broadcast evidence of a looming economic downturn in late 2008, with a magnitude and length most of us had never before experienced, provided an unusual opportunity to measure the financial decisions of middle income, relatively well educated Americans in a time of financial crisis. The degree of devastation and even panic some “scaredy cat” individuals felt about their financial security and their financial future during the economic meltdown in the late summer and fall of 2008, and the continually higher unemployment rates until late 2010, surely affected decisions about saving and investing funds. This study utilizes the Zimbardo Time Perspective Index (ZTPI) developed by Zimbardo and Boyd (2008), to measure the influence of time perception on financial decisions in that very uncertain environment, while statistically correcting for demographic influences. Although numerous studies have attempted to explain what propels an individual’s decisions concerning how much to spend or save, and how risk seeking or risk averse they are, none have utilized the psychology of time perspective. The two original issues examined in this study are (1) the intent to change jobs, and (2) the intent to move funds. As the recession lingered well beyond fall 2008, a refinement of the instrument was used to examine intentions concerning job changes. (Funds would likely already have been moved.) Using the ZTPI questions as a starting point, this study created and tested a second set of tailored questions that included 21 questions specific to time perspectives of financial issues, in an attempt to provide a more accurate picture of the influences of time perspective on the intent to change jobs. Then in late 2012, a third set of data was tested, using 60 modified-ZTPI items. By that time the economy had stabilized and unemployment was inching downward. Those results showed less predictability than when the job market was in crisis, indicating the return to a less emotional, “cool cat” decision-making process. However, taken together, these three sets of results indicate both the promise of time perspective on the intent to change jobs, and the usefulness of questions that more directly measure time perspective with regard to finances, in times of general financial crisis.

Key words: time perspective, job, asset allocation, risk
AN ANALYSIS OF US HOUSEHOLD SOCIOECONOMIC PROFILES BASED ON MARITAL STATUS AND GENDER

Sumaria Mohan-Neill, Roosevelt University, Chicago
Indira Neill Hoch, University of Illinois, Chicago
Meng Li, Roosevelt University, Chicago

ABSTRACT

Previous studies have reported that there are significant differences in income and wealth based on marital status and marital history (Wilmoth & Koso, 2002; Gustman & Juster, 1995; Seigel, 1993; Holden & Kuo, 1996). A more recent Pew Research study has explored changes in household economics (between 1970 and 2007) as it relates to gender and marital status (Fry & Cohn, 2010). This paper utilizes more current (2010) Federal Reserve’s Survey of Consumer Finances (SCF) data to evaluate the profiles of households based on marital status and gender differences. In particular, it will examine the correlation of those variables with age, education and number of children, income and wealth. Married head of household (HH) families are financially better off than single HH families. However, when gender is introduced, gender seems to subtract from the gains of marriage. For example a married female HH is worse off than married male HH, and is close to single male HH in income. Furthermore, married female HH has less net worth than single male HH. Single female HH has lowest income and wealth of all groups, and this group is almost a quarter of all households. They also have a significant number of children, which has implications for reduced investment in education and greater risk for inter-generational propagation of poverty.

INTRODUCTION

Wealth inequality in the US has been increasing in fits and starts since the 1930s and particularly since the 1980s (Wolff, 1992). Increasing wealth inequality in the United States is driven by the top tail of the distribution becoming increasingly wealthy, resulting in a long tail of those with low or negative wealth (Diaz-Gimenez, Glover & Rios-Rull, 2007). Americans desire less inequality than currently exists (Norton & Ariely, 2011). The social and political implications of wealth inequality extend beyond wealth accumulation (Neill Hoch & Mohan-Neill, 2013). Wolff (1998) argues that “in a representative democracy, the distribution of power is often related to the distribution of wealth.” Likewise, social and political factors that contribute to the unequal distribution of income and wealth are varied and interlocking. For these reasons, it is important to understand the demographic populations that currently show signs of difficulty in accumulating wealth.

Family structure has been shown to correlate with wealth. Married households, with or without children, are wealthier than single households (Diaz-Gimenez et al., 2007). Those married continuously are wealthier than those who have had a marriage dissolve, either by divorce or death (Wilmoth & Koso, 2002). Remarriage mitigates some of the losses accrued by marriage dissolution, but not all. Single individuals who have never married see less wealth accumulation than do those who have been married and reaped the benefits of pro-marriage policy for at least part of their lives. Cohabitation with a partner does not show similar benefits to marriage (Wilmoth
& Koso, 2002). Cohabitating, non-married partners (also called Living with Partner or LWP) may share some expenses, but such sharing does not translate into increased wealth accumulation over time. Notably LWP cohabitation does not carry the same tax and policy advantages that marriage does. Women who have never been married see an 86% reduction in their overall wealth, pre-retirement, as compared to men who see a 61% reduction (Wilmoth & Koso, 2002), suggesting a gender bias in wealth accumulation.

Changes in family structure may contribute to increased inequality (Esping-Anderson, 2007; McLanahan, 2004). Single parent households have increased over time, from both never married individuals raising children and marriage dissolution. Single females with children may have increased the number of low income households (McCall & Percheski, 2010). Single females with children see the greatest intragroup income inequality of all family structures (Diaz-Gimenez, Glover & Rios-Rull, 2007). McCall and Percheski (2010) argue that there is “strong support for the hypothesis that increases in single mother families and decreases in married couple families have increased income inequality (p. 337). Wilmoth & Koso's (2002) findings that women, with or without children, see a significant reduction in wealth when they remain unmarried supports the idea that marriage encourages wealth accumulation. Because LWP has not shown to produce similar benefits, it may be that policy benefits awarded to married couples that are not extended to cohabitating couples encourage wealth accumulation.

The wealthy are more educated (Diaz-Gimenez et al., 2007). However, education alone does not always translate to increased wealth. When considered with age, the young educated tend to have little wealth as they pay back debt acquired during schooling or establishing their households. Wealth being strongly correlated with education should not be taken as a magic bullet for addressing wealth inequality. While education increases earning potential, such education may not translate to financial literacy and increased saving behavior (Lusardi & Mitchell, 2007). In education, as in other variables, contribution to wealth accumulation interlocks with additional variables. There is no straight path to predicting wealth.

In light of previous research, this paper uses 2010 Federal Reserve’s Survey of Consumer Finances (SCF) data to illuminate correlations and differences in wealth, income, age, number of children, and education based on marital status and gender of head of household (HH).

**CONCEPTUAL MODEL AND METHODOLOGY**

Figure 1 illustrates the variables and relationships which will be analyze and tested in this paper. Marital status and Gender of head of household (gender HH) are the two variables which will be used to compare differences in profiles of US households.

**FIGURE 1. TEST RELATIONSHIPS BETWEEN VARIABLES IN US HOUSEHOLDS**

---

RESEARCH QUESTIONS

This paper will address the following specific research questions concerning the demographic and economic status of US households in 2010:

What is the impact of marital status on household socioeconomic profiles? Using marital status as an independent classification variable, it will compare the differences in profiles of single head of household (HH) versus married HH, with respect to age, education, number of children, income and wealth. It will also test whether the differences in profile variables (e.g., age, education, number of children, HH income, and net worth) of single HH versus married/LWP households are statistically significant.

What is the impact of gender on household socioeconomic profiles? Using gender of HH as an independent classification variable, it will compare the differences in profiles of male (HH) versus female HH families, with respect to age, education, number of children, HH income and net worth. It will also test whether the differences in profile variables (e.g., age, education, number of children, HH income, and net worth) of male HH versus female HH households are statistically significant.

What is the impact of marital status and gender simultaneously on household socioeconomic profiles? It will examine the combined effect of marital status and gender and compare the differences in profiles of households with respect to age, education, number of children, income and wealth.

What are the societal and personal (HH) implications, with respect to the current state and trajectory of US household socioeconomic stratification?

DATA


A little less than two-thirds (62.8%) of SCF sample have a married HH. So, more than one-third of sample US households have a single HH (37.2%). Approximately 23% of all households are headed by a female HH and 77% have a male HH. This paper will examine the impact of marital status and gender separately and then also explore magnitude of their combined effect on household socioeconomic profile and both prospects.

Both mean and median values of central tendency will be reported in this paper. However, due to the large variance in some economic variables, median values are the preferred measure to reflect the central tendency of groups. For example, the very large variance in variables such as income and wealth within the same categories highlight the great differences (i.e. inequality) in measures such as income and wealth. Median values are used to characterize the profile of different groups in the overall discussion. However, the mean values of all variables are also given in tables to illustrate that while the mean and median values are similar in some measures such as education, the differences in income and wealth between those groups are sometimes quite large due to variance in those economic measures.
### TABLE 1. COMPARISON OF HOUSEHOLD PROFILES BASED ON MARITAL STATUS OF HH

<table>
<thead>
<tr>
<th>Marital Status</th>
<th>Age of HH</th>
<th>No of Children (inclusive)</th>
<th>EDUCATION</th>
<th>INCOME (last 12 months)</th>
<th>NET WORTH</th>
</tr>
</thead>
<tbody>
<tr>
<td>MARRIED=married /LWP</td>
<td>Mean</td>
<td>50.96</td>
<td>1.10</td>
<td>14.03</td>
<td>$826,238.48</td>
</tr>
<tr>
<td></td>
<td>Grouped Median</td>
<td>50.89</td>
<td>.83</td>
<td>14.56</td>
<td>$81,227.70</td>
</tr>
<tr>
<td></td>
<td>% of Total N</td>
<td>62.8%</td>
<td>62.8%</td>
<td>62.8%</td>
<td>62.8%</td>
</tr>
<tr>
<td>SINGLE=unmarried /not LWP</td>
<td>Mean</td>
<td>50.24</td>
<td>.52</td>
<td>13.44</td>
<td>$252,099.06</td>
</tr>
<tr>
<td></td>
<td>Grouped Median</td>
<td>49.71</td>
<td>.34</td>
<td>13.28</td>
<td>$29,454.38</td>
</tr>
<tr>
<td></td>
<td>% of Total N</td>
<td>37.2%</td>
<td>37.2%</td>
<td>37.2%</td>
<td>37.2%</td>
</tr>
<tr>
<td>Total</td>
<td>Mean</td>
<td>50.69</td>
<td>.89</td>
<td>13.81</td>
<td>$612,774.12</td>
</tr>
<tr>
<td></td>
<td>Grouped Median</td>
<td>50.51</td>
<td>.61</td>
<td>13.93</td>
<td>$55,754.71</td>
</tr>
<tr>
<td></td>
<td>% of Total N</td>
<td>100.0%</td>
<td>100.0%</td>
<td>100.0%</td>
<td>100.0%</td>
</tr>
</tbody>
</table>

### TABLE 2. RESULTS OF NON-PARAMETRIC TEST OF MEDIAN DIFFERENCES BASED ON MARITAL STATUS (COMPARISON BETWEEN MARRIED VERSUS SINGLE HH HOUSEHOLDS)

<table>
<thead>
<tr>
<th>Hypothesis Test Summary</th>
<th>Null Hypothesis</th>
<th>Test</th>
<th>Sig.</th>
<th>Decision</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>The medians of Age of HH are the same across categories of Marital Status.</td>
<td>Independent-Samples Median Test</td>
<td>.000</td>
<td>Reject the null hypothesis.</td>
</tr>
<tr>
<td>2</td>
<td>The medians of EDUCATION are the same across categories of Marital Status.</td>
<td>Independent-Samples Median Test</td>
<td>.000</td>
<td>Reject the null hypothesis.</td>
</tr>
<tr>
<td>3</td>
<td>The medians of No of Children (inclusive) are the same across categories of Marital Status.</td>
<td>Independent-Samples Median Test</td>
<td>.000</td>
<td>Reject the null hypothesis.</td>
</tr>
<tr>
<td>4</td>
<td>The medians of INCOME (last 12 months) are the same across categories of Marital Status.</td>
<td>Independent-Samples Median Test</td>
<td>.000</td>
<td>Reject the null hypothesis.</td>
</tr>
<tr>
<td>5</td>
<td>The medians of WAGEINC are the same across categories of Marital Status.</td>
<td>Independent-Samples Median Test</td>
<td>.000</td>
<td>Reject the null hypothesis.</td>
</tr>
<tr>
<td>6</td>
<td>The medians of NET WORTH are the same across categories of Marital Status.</td>
<td>Independent-Samples Median Test</td>
<td>.000</td>
<td>Reject the null hypothesis.</td>
</tr>
</tbody>
</table>

Asymptotic significances are displayed. The significance level is .05.

### TABLE 3. COMPARISON OF HOUSEHOLD PROFILES BASED ON GENDER (MALE VS. FEMALE HH)

<table>
<thead>
<tr>
<th>Gender of Household</th>
<th>HH (Head of Household)</th>
<th>Age of HH</th>
<th>No of Children (inclusive)</th>
<th>EDU</th>
<th>INCOME (last 12 months)</th>
<th>NET WORTH</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>Mean</td>
<td>50.4</td>
<td>.93</td>
<td>14.0</td>
<td>$779,759</td>
<td>$9,373,940</td>
</tr>
<tr>
<td></td>
<td>Grouped Median</td>
<td>50.4</td>
<td>.65</td>
<td>14.4</td>
<td>$69,534</td>
<td>$196,280</td>
</tr>
<tr>
<td></td>
<td>% of Total N</td>
<td>77.0%</td>
<td>77.0%</td>
<td>77.0%</td>
<td>77.0%</td>
<td>77.0%</td>
</tr>
<tr>
<td>Female</td>
<td>Mean</td>
<td>51.5</td>
<td>.73</td>
<td>13.3</td>
<td>$55,263</td>
<td>$558,410</td>
</tr>
<tr>
<td></td>
<td>Grouped Median</td>
<td>50.8</td>
<td>.50</td>
<td>13.1</td>
<td>$26,853</td>
<td>$23,250</td>
</tr>
<tr>
<td></td>
<td>% of Total N</td>
<td>23.0%</td>
<td>23.0%</td>
<td>23.0%</td>
<td>23.0%</td>
<td>23.0%</td>
</tr>
<tr>
<td>Total</td>
<td>Mean</td>
<td>50.7</td>
<td>.89</td>
<td>13.8</td>
<td>$612,774</td>
<td>$7,342,098</td>
</tr>
<tr>
<td></td>
<td>Grouped Median</td>
<td>50.5</td>
<td>.61</td>
<td>13.9</td>
<td>$55,755</td>
<td>$124,355</td>
</tr>
<tr>
<td></td>
<td>% of Total N</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
</tr>
</tbody>
</table>
TABLE 4. RESULTS OF NON-PARAMETRIC TEST OF MEDIAN DIFFERENCES BASED ON GENDER OF HH (COMPARISON BETWEEN MALE VERSUS FEMALE HH HOUSEHOLDS)

<table>
<thead>
<tr>
<th>Null Hypothesis</th>
<th>Test</th>
<th>Sig.</th>
<th>Decision</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>The medians of Age of HH are the same across categories of Sex of HH (Head of Household).</td>
<td>Independent-Samples Median Test</td>
<td>.133</td>
</tr>
<tr>
<td>2</td>
<td>The medians of EDUCATION are the same across categories of Sex of HH (Head of Household).</td>
<td>Independent-Samples Median Test</td>
<td>.000</td>
</tr>
<tr>
<td>3</td>
<td>The medians of No of Children (inclusive) are the same across categories of Sex of HH (Head of Household).</td>
<td>Independent-Samples Median Test</td>
<td>.000</td>
</tr>
<tr>
<td>4</td>
<td>The medians of INCOME (last 12 months) are the same across categories of Sex of HH (Head of Household).</td>
<td>Independent-Samples Median Test</td>
<td>.000</td>
</tr>
<tr>
<td>5</td>
<td>The medians of WAGEINC are the same across categories of Sex of HH (Head of Household).</td>
<td>Independent-Samples Median Test</td>
<td>.000</td>
</tr>
<tr>
<td>6</td>
<td>The medians of NET WORTH are the same across categories of Sex of HH (Head of Household).</td>
<td>Independent-Samples Median Test</td>
<td>.000</td>
</tr>
</tbody>
</table>

Asymptotic significances are displayed. The significance level is .05.

THE COMBINED INFLUENCE OF MARITAL STATUS AND GENDER

Figure 2 illustrates the frequency distributions of household when marital status and gender are classification variables. The majority of married HH are headed by male HH (99.1%) and less than 1% are female HH. There are female HH in single HH (about 60%) compared to about 40% male HH in the single HH marital status category. So, obviously the distribution is weighted to more single female HH and more married male HH.

FIGURE 2. FREQUENCY DISTRIBUTION OF HOUSEHOLDS BY MARITAL STATUS AND GENDER
Table 5 illustrates the differences when gender of HH is introduced as second classification variable. Based on Figure 2 less than 1% of married HH has a female HH.

<table>
<thead>
<tr>
<th>HH GROUP</th>
<th>% OF N</th>
<th>AGE of HH</th>
<th># of Children</th>
<th>EDU</th>
<th>INCOME</th>
<th>NET WORTH</th>
</tr>
</thead>
<tbody>
<tr>
<td>MARRIED Male HH</td>
<td>62.2%</td>
<td>Mean</td>
<td>51.0</td>
<td>1.11</td>
<td>14.0</td>
<td>$ 832,954</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Grouped Median</td>
<td>51.0</td>
<td>.83</td>
<td>14.6</td>
<td>$ 81,441</td>
</tr>
<tr>
<td>MARRIED Female HH</td>
<td>0.6%</td>
<td>Mean</td>
<td>44.2</td>
<td>1.73</td>
<td>13.6</td>
<td>$ 93,867</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Grouped Median</td>
<td>44.0</td>
<td>.52</td>
<td>14.2</td>
<td>$ 35,324</td>
</tr>
<tr>
<td>MARRIED TOTAL</td>
<td>62.8%</td>
<td>Mean</td>
<td>51.0</td>
<td>1.10</td>
<td>14.0</td>
<td>$ 826,238</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Grouped Median</td>
<td>50.9</td>
<td>.83</td>
<td>14.6</td>
<td>$ 81,228</td>
</tr>
<tr>
<td>SINGLE Male HH</td>
<td>14.7%</td>
<td>Mean</td>
<td>48.0</td>
<td>.20</td>
<td>13.7</td>
<td>$ 554,532</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Grouped Median</td>
<td>48.1</td>
<td>.14</td>
<td>13.7</td>
<td>$ 34,476</td>
</tr>
<tr>
<td>SINGLE Female HH</td>
<td>22.5%</td>
<td>Mean</td>
<td>51.7</td>
<td>.73</td>
<td>13.3</td>
<td>$ 54,283</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Grouped Median</td>
<td>51.1</td>
<td>.50</td>
<td>13.0</td>
<td>$ 26,934</td>
</tr>
<tr>
<td>SINGLE TOTAL</td>
<td>37.2%</td>
<td>Mean</td>
<td>50.2</td>
<td>.52</td>
<td>13.4</td>
<td>$ 252,099</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Grouped Median</td>
<td>49.7</td>
<td>.34</td>
<td>13.3</td>
<td>$ 29,454</td>
</tr>
<tr>
<td>Male TOTAL</td>
<td>76.9%</td>
<td>Mean</td>
<td>50.4</td>
<td>.93</td>
<td>14.0</td>
<td>$ 779,759</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Grouped Median</td>
<td>50.4</td>
<td>.65</td>
<td>14.4</td>
<td>$ 69,534</td>
</tr>
<tr>
<td>Female TOTAL</td>
<td>23.1%</td>
<td>Mean</td>
<td>51.5</td>
<td>.73</td>
<td>13.3</td>
<td>$ 55,263</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Grouped Median</td>
<td>50.8</td>
<td>.50</td>
<td>13.1</td>
<td>$ 26,853</td>
</tr>
<tr>
<td>Total SAMPLE</td>
<td></td>
<td>Mean</td>
<td>50.7</td>
<td>.89</td>
<td>13.8</td>
<td>$ 612,774</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Grouped Median</td>
<td>50.5</td>
<td>.61</td>
<td>13.9</td>
<td>$ 55,755</td>
</tr>
</tbody>
</table>

CONCLUSIONS AND IMPLICATIONS

FIGURE 3: SUMMARY OF COMPARISONS

<table>
<thead>
<tr>
<th>MARRIED Male HH= MM GROUP 1</th>
<th>MARRIED Female HH=MF GROUP 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>62.2%</td>
<td>0.6%</td>
</tr>
<tr>
<td>M Age = 51.0 years</td>
<td>Age = 44.0 years</td>
</tr>
<tr>
<td>A Childern= 1,11 ( mean)</td>
<td>Children= 0.73 ( mean)</td>
</tr>
<tr>
<td>R Education= 14.6 years</td>
<td>Education= 14.2 years</td>
</tr>
<tr>
<td>RI Income= $ 81,400</td>
<td>Income= $ 35,300</td>
</tr>
<tr>
<td>E Net Worth= $ 271,200</td>
<td>Net Worth= $ 15,600</td>
</tr>
<tr>
<td>D MARRIED Male HH= MM GROUP 1</td>
<td>MARRIED Female HH=MF GROUP 2</td>
</tr>
<tr>
<td>Highest income</td>
<td>Much less income than MM</td>
</tr>
<tr>
<td>Highest wealth</td>
<td>Income close to SM</td>
</tr>
<tr>
<td>Most educated</td>
<td>Much less wealth than MM</td>
</tr>
<tr>
<td>Highest number of children</td>
<td>Less wealth than even SM</td>
</tr>
<tr>
<td>2nd oldest group</td>
<td>2nd highest Education</td>
</tr>
<tr>
<td></td>
<td>Children 2nd and tied with SF</td>
</tr>
<tr>
<td>SINGLE Male HH=SM GROUP 3</td>
<td>SINGLE Female HH=SF GROUP 4</td>
</tr>
<tr>
<td>14.7%</td>
<td>22.5%</td>
</tr>
<tr>
<td>SI Age = 48.1 years</td>
<td>Age = 51.1 years</td>
</tr>
<tr>
<td>N Childern= 0.20 ( mean)</td>
<td>Children= 0.73 ( mean)</td>
</tr>
<tr>
<td>G Education= 13.7 years</td>
<td>Education= 13.0 years</td>
</tr>
<tr>
<td>L Income= $ 34,500</td>
<td>Income= $ 26,700</td>
</tr>
<tr>
<td>E Net Worth= $ 42,600</td>
<td>Net Worth= $ 23,500</td>
</tr>
<tr>
<td>SM Single Male HH is better off than Single Female and close to or better off than Married Female HH.</td>
<td>Single has lowest income and wealth. Also is the oldest group 2nd highest group with child; tied with MF</td>
</tr>
<tr>
<td>Least children</td>
<td>Lowest education</td>
</tr>
</tbody>
</table>
Overall, *married HH* families have significantly higher incomes and wealth than *single HH* families. However, when gender of HH is introduced the results change dramatically. For example, *Married Male HH* (Group 1) still have significantly higher incomes (about $81,000) and wealth (about $270,000) but there are significantly lower median values for *married Female HH* (Group 2) income (about $35,000) and wealth (only about $16,000). Furthermore, *Married Female HH* (Group 2) has income is closer to *Single Male HH* (Group 3) ($35,000) and has less wealth than Group 3’s $42,000 median value. The lowest income, is *Single Female HH* (Group 4) (income= about $28,000) and median wealth is around $24,000. The lowest wealth group overall is the married female HH (median wealth=$16,000).

Both groups headed by women have the 2nd highest number children (0.73) compared to the highest married male HH (1.11) and lowest single male HH (0.20). What are the implications for the Female HH groups where income are lower, but the presence of children is significant. It may be particularly distressing single female HH which constitute 22.5% of all households, when a mean of 0.73 children and a median income of less than $28,000. What are the implications for lack of resources for educating and raising children and circumventing inter-generational propagation of poverty?

**REFERENCES**


