KEY WORDS: Sensitive questions, income, privacy.

A word history: Money may be the root of all evil, but the root of the word money is a divine epithet. One of the titles of the Roman goddess Juno was Moneta, a name whose exact meaning is not known. Moneta is probably derived from the same root as the verb monere, "to bring to mind, remind." The temple of Juno Moneta was the place where Roman money was coined, and the name Moneta became a word denoting "the mint" and by extension "coined money." Webster's II New Riverside University Dictionary (1988). Boston, MA: The Houghton Mifflin Company, p. 764-5.

Introduction

In the tradition of the eminent psychologist Gordon Allport, it is often invaluable to look up in a dictionary the evolution and historical changes associated with the subject or phenomenon under study. Allport used the Oxford English Dictionary as one of the resources available to researchers in an attempt to take into account the underlying psychological dimensions in the rich and often ambiguous context of culture. In the spirit of Allport, and in light of Webster's historical annotation, 'Money' appears to have very close connections to religious ritual, and the private leanings of one's heart and soul. As with many words, however, money also may carry less favorable connotations, e.g., one is encouraged to save for the future, yet hoarding or miserly behavior are often considered morally and socially undesirable; thus, the love of money is the root of all evil. Nonetheless, try as we might, money is still one of the most profound things in our lives. It is also one of those things that nobody likes to look at, but influences a great deal if not most of how we behave, and what we chose to say, or not say.

Direct references to one's money, financial matters or status tend to be avoided in most social or professional communications. Generally, people are reluctant to discuss debts, wealth, typical spending patterns or, the symbolic meaning of money in their lives with strangers or even those close to them, including spouses. In the field of survey research, this reluctance may be expressed in relatively high nonresponse or incomplete responses to income-related questions. Factors associated with nonresponse to the 'income question' appear varied and complex, and include: 1) psychic costs (guilt, shame, embarrassment, confusion), 2) concrete consequences (discovery of crimes, sanctions), and 3) social costs e.g., loss of face of the group one belongs to, "child abusers" (e.g., Rosenfield, 1979; Steele, 1975). Furthermore, the sensitivity of a given topic hinges on its relationship with the larger social context (Siebert & Stanley, 1988). Thus, studies exploring (1) one's 'private' sphere (2) deviance and social control, (3) impingement on vested interests of powerful persons or the exercise of coercion and domination, and (4) things sacred to those being studied are all potentially sensitive in nature (Lee & Renzetti, 1990). A topic like money crosses all, if not most of these areas. That is, money may be viewed as a highly sensitive topic because of its profound relationship to one's private life, social control, deviance, power, and the almost religious power vested in it by modern day society.

This paper is a first exploration of what aspects may make the income question sensitive to respondents, especially within the context of government surveys. This paper also attempts to explore some of the reasons why some people may avoid disclosing financial information.

Background

The goal of this exploratory investigation was to begin to empirically identify dimensions of the sensitive nature of money as income. To this purpose, the authors developed and pilot-tested a total of 80 questionnaire items. The particular items chosen reflect dimensions that made intuitive sense to the authors, and those reported in the popular and clinical writings on the topic of money and in the literature on privacy, confidentiality, and disclosure in various contexts. These include: 1) negative and positive consequences associated with disclosure, 2) emotions such as shame and stress associated with one's financial standing, 3) cultural stereotypes (e.g., "A penny saved is a penny earned") and, 4) implicit and explicit taboos (e.g., "It is impolite to talk about money"), 5) the perceived impact of one's financial situation on self-concept or self-awareness, and 6) money or income as associated with freedom, power, and authority of self or of others over the self. The main focus of this paper is: what are the underlying factors of individuals' sensitivity towards money and financial matters in general and in the context of a survey setting? Additionally, do the following demographic groups differ in terms of these dimensions: Females/Males, White/non-White, current government employees versus those employed in the private sector, retired, or those not currently in the work force?
Method

Procedure and Demographic Characteristics

An 80-item paper-and-pencil questionnaire was completed by 536 volunteers drawn from prospective jurors from District Courts in Maryland, 43.7% and the District of Columbia (28%), graduate students from University of Maryland (24.4%), people on the street (6.9%), and members of a rural community in Maryland (3.9%). Interviewers verbally introduced the purpose, sponsor, and voluntary and anonymous nature of the questionnaire to potential respondents, and collected the protocols after completion. Data collection occurred over a period of three weeks during Spring, 1993.

Approximately 74 percent of the sample classified themselves as White, 16 percent as African-American, and 11 percent as members of another racial or ethnic group (Hispanic, Native American, or Other). Eight percent of the respondents reported no education beyond the high school level, 24 percent some college or post-high school vocational education or training, 20 percent a college degree, and 32 percent the completion of a graduate degree. Total family income ranged from less than $15,000 to a high of approximately $90,000 or more. Fully 62 percent of the individuals surveyed were employed full-time, 21 percent part-time, and 17 percent classified themselves as unemployed, retired, or 'other'. About one-third of the respondents reported working for either federal, state, or local government. When interpreting the results, the reader is cautioned to keep in mind the likely biases associated with this particular sample.

Results

Which Psycho-Social factors underlie respondent attitudes towards money and financial matters?

A Principal Axis Factor Analysis (PAF) with Varimax rotation was used to identify psycho-social dimensions associated with money and financial matters. Based on the screeplot, Eigenvalues (> 1.0), and theoretical considerations, a total of 5 factors were identified accounting for 39 percent of the total variance. The factors were tentatively labeled: 1) Negative Affect associated with financial status, 2) Authority/Respect assigned to those having money, 3) Positive Self-Concept and Autonomy, 4) Money as Evil/Corruptive, and 5) Social Prohibitions or conversational rules governing communications about financial status. A copy of the questionnaire items comprising each factors is provided in Appendix A.

The factor loadings for the 5 rotated factors are displayed in Table 1, and a copy of the questionnaire items may be found in Appendix A. Of the total variance, the proportion of variance accounted for by the individual factors was: Negative Affect 45%, Authority/Respect 21%, Positive Self-Concept/Autonomy 14%, Evil/Corruptive 11%, and Social Prohibitions 9%.

Which factors underlie respondents' sensitivity to questions about money and financial matters in a survey setting?

A second PAF analysis with Varimax rotation was used to identify potential factors underlying respondents' sensitivity to income and financial status questions in the context of surveys, especially surveys conducted by the government. Based on the criteria mentioned above, a total of 5 factors were identified accounting for 48 percent of the total variance. The factors are tentatively labeled: 1) Resentment about having to disclose, 2) Confidentiality or Information protection, 3) Strategies for avoiding disclosure, 4) Image of Benevolent Government, and 5) Purpose of request or "need to know" for financial information. The factor loadings (> .3) are displayed in Table 1, and a copy of the questionnaire items may be found in Appendix A. Of the total variance, the proportion of variance accounted for by the individual factors was: Resentment 46%, Confidentiality and Information Protection 18%, Strategies 14%, Benevolent Government 13%, and Purpose 10%.

For further analyses, the items comprising each factor were summed and divided by the number of items answered by the respondent, thus creating a mean score for each scale for each individual. This yielded a total of ten scales, with five measuring psycho-social dimensions (referred to from here-on as Psycho-Social Scales), and five assessing dimensions of sensitivity towards sharing information about financial status and money in a survey context (Sensitivity Scales). Cronbach alphas were computed to assess the internal consistency of each scale. Items with low reliabilities were deleted. The coefficients are presented in Table 1, and ranged from .87 (Negative Affect), to .55 (Benevolent Government).

Differences between Groups—Psycho-Social Scales

Three separate Manovas were conducted to investigate differences in mean responses to the five Psycho-Social Scales for the following groups: males/females, current government (Federal, State, or Local) employees versus those employed in the private sector, unemployed or not in the work-force, and Whites/Non-White (African American, Hispanic, Native American and Other). Gender. The results showed females and males differed in terms of their responses to the Psycho-Social Scales (m F = 7.34, df 5, 528, p < .001). Subsequent Univariate F-tests showed the two groups differed significantly on two scales. Specifically, males tended to identify more with statements indicating authority or respect generally accorded to individuals having money (Authority/Respect Scale, F = 3.81, df 1, 532, p < .05). Males also identified more with statements suggesting a relationship between money and a positive self-concept and sense of power and autonomy (Self-Concept Scale, F = 30.99, df 1, 532, p < .0001).

Government versus non-Government. The results indicate that responses to the Psycho-Social Scales
differed between individuals working for local, state, or federal government from those not employed or not currently working for the government (mF = 2.27, df 5, 523, p < .05). Subsequent Univariate F-tests showed the two groups differed significantly on Social Prohibitions. Specifically, individuals currently employed by government identified less with statements indicating money is a sensitive topic and the notion that it is not polite to talk about money in public (Social Prohibitions Scale, F=7.06, df 1, 523, p < .008).

Race/Ethnicity. The third Manova showed Psycho-Social Scale differences between the two racial/ethnic groups (mF = 6.87, df 5, 518, p < .001). Univariate F-tests showed the two groups differed significantly on four of the Scales: Compared to White, non-White respondents reported significantly higher levels of negative affect, i.e., anxiety, stress, and feelings of inadequacy in relation to money and financial matters (Negative Affect Scale, F = 10.11, df 1, 522, p < .002). Non-White respondents also identified more strongly with statements suggesting a relationship between obtaining authority or respect if one has money (Authority/Respect Scale, F=5.71, df 1, 522, p < .017). In contrast, White respondents identified more with statements which associate having money with a positive self-concept, power and autonomy (Self-Concept Scale, F=9.11, df 1, 522, p < .003). White individuals also appeared to identify more strongly than non-White respondents with statements indicating it is impolite to talk about money in public and that money is a sensitive topic (Social Prohibitions, F=7.40, df 1,522, p < .007).

Differences between Groups:— Sensitivity Scales

A second series of Manovas were used to investigate differences in mean responses to the five Sensitivity Scales using the demographic variables of gender, race/ethnicity, and government versus non-government.

Gender. The results showed no significant differences between females and males on any of the Sensitivity Scales (mF= 1.18, df 5, 528, p < .319).

Government versus non-Government. The results from the MANOVA showed significant differences in responses of those currently in government employment from those who were not, or who indicated they were not working (mF = 2.59, df 5, 519, p < .025). Specifically, non-Government respondents identified more strongly with statements suggesting resentment at having to disclose financial information (Resentment Scale, F = 6.5, df 1, 523, p < .012). Non-Government respondents also identified more strongly with statements indicating they use different strategies to avoid disclosure of financial information in a survey context (Strategies Scale, F=7.27, df 1, 523, p < .007). Finally, current government employees agreed more strongly with statements depicting an image of government as benevolent (Benevolent Government Scale, F=4.41, df 1, 523, p < .036).

Race/Ethnicity. No significant differences were found in terms of White and non-Whites' responses to the Sensitivity Scales (mF = 1.50, df 5, 518, p < .188).

Which scales predict how respondents rated topics on a survey in terms of perceived sensitivity?

Respondents were asked to rate the sensitivity of the following topics if they were to appear on a survey: religion, sexual behaviors/preferences, present and past mental health, present and past physical health, financial situation, employment history, drug and alcohol use, political affiliation, political issues (e.g., civil rights, abortion), and demographic information (e.g., age, gender, marital status). A series of stepwise multiple regression analyses were conducted to identify which scales predicted respondents' ratings of a given topic as "sensitive" within a survey context. Only one of the regression analyses turned out to be of practical interest, namely the one in which the ten scales were used to predict the respondents' rating of the sensitivity of financial status as a survey topic. Specifically, the following scales were significant: Resentment (β= .23529, p < .0001), Negative Affect, β= .21E364, p < .0001), Benevolent Government (β= -.15484, p < .0001), and Social Prohibitions (β= -.16097, p < .0005). R² = .264; Because the Pearson correlation coefficients between the sensitivity ratings of the topics were all significant at p < .001, and ranged from r = .28 (Sexual Behaviors/Preferences and Religion) to r = .75 (Mental Health and Physical health), the sensitivity ratings of the topics were summed to create an overall index of topic sensitivity, and the sum subsequently used as the dependent variable in a stepwise regression analysis. The results identified three scales as significant predictors: Resentment (β= .193697, p < .001), Negative Affect (β= -.124165, p < .008), and Social Prohibitions (β= -.120017, p < .01), with R² = .11.

The relationship between Psycho-Social and Sensitivity Scales and reported Income Level

A Pearson correlation coefficient matrix was generated to investigate the relationship between respondent reported income level (Table 1) and their scores on the ten scales. Coefficients for the Psycho-Social Scale were all statistically significant (but perhaps negligible for practical purposes), i.e., reported Income level with: Negative Affect (r = .29), Authority/Respect (r = .11), Self-Concept (.26), Evil/Corruptive (r = .16) and Social Prohibitions (r = .13). Generally the direction of the relationship confirmed our expectations, i.e., the lower reported income level, the higher reported levels of Negative Affect; the higher the reported income level, the greater the identification with statements indicating a positive self-concept, etc. However, these results should be interpreted cautiously and bear replication as the sample used in the study was not representative of the population at large with
Money equates with respect, authority, one's self-concept and autonomy, but the silence about money appears to be a social mechanism for insuring one's privacy. While the opening quote suggests that money may have religious significance, albeit unconscious, it may also signal an unstated dichotomy between a work-ethic mentality and the potential evil, corruptive influences of money. The fact is that survey researchers know almost nothing about how our respondents mentally construct their answers to the income question. While it is curious that some respondents presented a 'bravado' about the topic and were eager to have their views represented, other respondents were quite angry and adamantly told us that this was "none of government's business." Is it that academia should be asking these questions? Or is it that respondents see sponsorship of a survey as one of the more important context variables that allows them to make a decision whether to participate in a survey or not? Clearly, much more research is needed in this area.

We would like to thank Dr. William D. Schafer from the University of Maryland's College of Education, Department of Measurement, Statistics, and Evaluation and Dr. N.J. Scheers from the Consumer Protection Agency for their guidance. We would also like to thank Drs. Clyde Tucker, Brian Kojetin, and Fred Conrad from BLS for their suggestions and thoughtful review, with special thanks to Dr. Kojetin for his valuable assistance with the statistical analyses.

NOTES
1. The views expressed in this paper reflect those of the authors only, and are in no way an expression of views held by the U.S. Government, the Bureau of Labor Statistics, or colleagues.
2. For a complete description of the development and content of the questionnaire items the reader is referred to "Psychological Variables Associated with Respondents' Sensitivity to Income Questions—A Preliminary Analysis," van Melis-Wright & Stone (1993), published elsewhere in this issue.
3. Interested readers may obtain a copy of all factor loadings by writing the authors.
4. Items loading approximately equally on more than one factor were removed from further analysis.
5. The proportion of variance explained by the analyses using the sensitivity ratings of the other topics as dependent variables was negligible ranging from $R^2 = .03$.
6. Space limitations did not allow us to include all correlation matrices. These are, however, available upon request from the authors.

BIBLIOGRAPHY
QUESTIONNAIRE ITEMS

Psycho-Social Scales:

Negative Affect Associated with Money
Q. 2. Right now, talking or thinking about my financial situation makes me feel ashamed of myself.
Q. 7. Talking or thinking about money makes me somewhat anxious or depressed because it makes me realize that some things are out of reach.
Q. 9. Listening to other people talk about their financial situation sometimes makes me feel inadequate about my own situation.
Q. 11. I avoid thinking or talking about money because it might force me to make changes.
Q. 15. Lack of money stands between me and the realization of my goals in life.
Q. 28. Given my current circumstances, I don't like to talk about my financial situation.
Q. 32. Talking or thinking about money makes me anxious because I realize my financial situation is not as good as I would like it to be.
Q. 42. I find handling money (e.g., buying things, paying bills, making donations, etc.) stressful.
Q. 43. Taking this survey makes me think about things I'd rather not think about.
Q. 45. Talking or thinking about my financial situation makes me feel angry.
Q. 56. I get angry or jealous of people who have more money than I have.

Authority/Respect to those with Money
Q. 5. I believe that money makes the world go round.
Q. 16. I believe people judge each other by how much money they have.
Q. 25. When I am around other people I generally act like I have more money than I really do.
Q. 26. I believe the more money you have, the more respect you get from other people.
Q. 53. I believe that wealthy people have better family lives than people with less money.
Q. 66. I believe having money gives a person authority.

Positive Self concept and Autonomy
Q. 3. When I discuss my financial situation with others, I do so on purpose.
Q. 21. Talking or thinking about money makes me feel self-confident.
Q. 35. I generally act as if I have less money than I really have.
Q. 36. I believe that more money you have the more respect you get from other people.
Q. 50. I believe having money makes me feel I've been successful so far.
Q. 40. To me money means freedom.
Q. 47. I believe time is money.
Q. 52. Talking or thinking about my financial situation makes me feel in control of my life.
Q. 58. I enjoy reading the financial section of the newspaper, money magazines, etc.

Money as Evil/Corruptive
Q. 27. I believe that money corrupts.
Q. 31. I believe that love of money is the root of all evil.
Q. 37. I believe that people who want to go into politics better have money, or access to money.
Q. 41. I believe that people in power must have a lot of money to have gotten where they are.
Q. 62. I think people with more money think they are better than people with less.

Social Prohibitions about Money
Q. 12. I feel it is impolite to talk about my financial situation in public.
Q. 30. I think it's impolite to ask others about their financial situation.
Q. 44. I think money is a sensitive topic.
Q. 64. I do not give out financial information to others because they may harass me.
TABLE 1
Psychological Variables Associated with Respondents' Sensitivity to the Income Question
Principal Axis Factor Analysis with Varimax Rotation—Double Loaded Items Eliminated

<table>
<thead>
<tr>
<th>N = 536</th>
<th>Psycho-Social Scales: Underlying Respondents' Attitudes about Money</th>
<th>Sensitivity Scales: Respondents' Sensitivity to the Income and Financial Status Questions</th>
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<td>Negative Affect Associated with Authority/ Respect to those Money</td>
<td>Money as Evil/ Social Prohibitions about Money</td>
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<tr>
<td></td>
<td>Associated with Money</td>
<td>Positive Self Concept and Autonomy</td>
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<td></td>
<td>Q 7 .755</td>
<td>Q 21 .483</td>
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<td></td>
<td>Q 9 .585</td>
<td>Q 35 .317</td>
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<td></td>
<td>Q 11 .386</td>
<td>Q 26 .700</td>
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<td></td>
<td>Q 15 .571</td>
<td>Q 40 .435</td>
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</tbody>
</table>

% Variance Accounted

| Males (n = 227) | X = 2.754* | X = 3.091* |
| Females (n = 305) | X = 2.614 | X = 2.771 |
| F = 3.814 | F = 30.989 |
| p = .051 | p < .001 |

Whites (n = 387)

| X = 2.617 | X = 2.960* |
| Others (n = 136) | X = 2.809* |
| F = 10.114 | F = 9.108 |
| p = .002 | p = .003 |

Gov'T (n = 162)

| X = 3.311 | X = 2.588 |
| Non-Gov'T employees (n = 291) | X = 3.545* |
| F = 7.080 | F = 6.405 |
| p = .008 | p = .012 |

Income Levels (n = 511)

| Income | r = -.2872 | r = -.1090 | r = .2605 | r = -.1556 | r = .1287 |
| p < .001 | p = .015 | p = .001 | p < .001 | p = .004 | p = .006 |

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