SUBJECTIVE ASSESSMENTS OF ECONOMIC WELL-BEING: UNDERSTANDING THE MINIMUM INCOME QUESTION

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Introduction

The "minimum income question" (MIQ) is a survey question designed to directly assess the delicate balance between what people earn and what they spend. The question reads, "Living where you do now, what is the smallest income you and your family would need (before any deductions) to make ends meet each month?" Researchers have used this question and other similar subjective measures to gain a fuller and more realistic understanding of one's economic situation than what would result if they simply asked one to state his or her household income. Such subjective measures are used to help determine the poverty level cut-off in Problems arise, however, when some countries. individuals vary in their interpretation of any one or more of the components of this question. When a subjective measure is used in place of an objective one, its effectiveness depends upon clear, precise, and unambiguous language and upon clearly defined concepts.

This question, and questions similar in scope, have been part of a number of government and academic surveys. The MIQ was added to the Bureau of the Census' Research Panel of the Income Survey Development Program, and then to the 1982 Consumer Expenditure Interview Survey. Currently, the question is asked for research purposes on the Survey of Income and Program Participation (SIPP) and the General Social Survey (GSS). Other countries have likewise adopted this type of measure. The MIO is used on Statistics Canada's Survey of Consumer Finances and government surveys in Australia and the Netherlands. For all of these surveys, the main objective for inclusion of subjective measures is to find stable, reproducible estimates of what ordinary people experience with their family budgets, as opposed to what official experts define as what the public needs in order to get along and prosper.

In spite of the use of these questions over the past twenty years to assess the economic well-being of individuals and households, relatively little research has been done on the reliability or validity of these particular questions. There are, however, a few notable exceptions.

Using supplements to the 1983, 1986, 1987 and

1988 Survey of Consumer Finances, Morissette and Poulin (1991) looked at alternative low income measurement methods. They found that when the same question wording was used over time, no notable changes appeared in the answers to the MIQ. Garner and de Vos (1995), using data from the United States and the Netherlands, found that question wording, design of the survey, and data collection instruments are likely to contribute to variations in response. Using econometric analysis, they found differences between the two countries in terms of what respondents considered "necessary," as well as their general interpretation of the MIO.

While some previous research has attempted to quantify the efficacy of the MIQ, the Office of Management and Budget (OMB) recommended that additional testing be conducted before this and other subjective income questions could be integrated into federal data collection. The purpose of this research was to gain an understanding of the cognitive processes that survey respondents go through when deriving their answer to the MIQ. We were particularly interested in looking at how respondents interpreted such terms as "minimum income," "necessary expenses," and "making ends meet;" how accurately respondents were able to describe their economic situation; and how difficult they found the process of answering the MIQ.

Methods

Based on the results of 48 cognitive interviews and 9 focus groups conducted on behalf of the Bureau of Labor Statistics between May and September, 1996, this paper examines the effectiveness of the minimum income question as a survey question. Using cognitive interviewing techniques, individuals were asked to answer the MIO in a "think-aloud" fashion, verbalizing their thought processes as they developed their answer to the question, and were asked to assess the difficulty of the task. Cognitive interviews and focus groups are particularly useful approaches to understanding how people think about a given topic and the language they use to express their thoughts, feelings, and opinions that are not readily apparent to the researcher. Such qualitative techniques can help uncover awkward or ambiguous question wording and variability in respondents' interpretations of concepts.

Since we suspected one's economic situation might be related to one's interpretation of the MIQ, we wanted to be sure to capture a large range of household types reflecting diverse expenditure patterns. The research was conducted among respondents of nine possible income and household combinations in five cities across the country. The nine cells were based on three different levels of income (low, medium and high) for each city, and three different types of household structure (single person households, households with children under 18, and households without children). Within each of the nine cells, we conducted one focus group and at least five cognitive interviews.

Results

Through the use of the think-aloud task and probing questions, we learned that the MIQ is not as simple as it first may seem. The question as it reads now contains many segments, making it complex and somewhat burdensome. We found that in order to provide a meaningful answer to the MIQ, the individual must first work through a series of judgments, answering for themselves the following questions:

- 1. Does the phrase "to make ends meet" mean only the minimum expenses necessary for survival or is it asking me to begin with my current expense level?
- 2. What expenses are necessary for me to survive? What are my current expenses and what could I do without?
- 3. How much money would I need in a month to cover each particular expense?
- 4. What is the total for all of these expenses added together?

The following sections describe the processes respondents worked through when making the judgments and review the interpretations of the various components of the question.

Judgment #1: Making Ends Meet

As mentioned earlier, at the heart of the MIQ is the thorny problem of deciding what expenses are needed to "make ends meet." Fundamentally, there were two major interpretations of what it meant "to make ends meet." On the one hand, some respondents thought this phrase meant covering all the expenses necessary to maintain their current or, at least, a comfortable lifestyle, as long as they were living within their income

and not going into debt. Other respondents interpreted this phrase as asking for a lifestyle in which they met just the basic necessities, with "no gravy," or even perhaps one in which they would fall behind in their bills. In these cases, respondents often talked about meeting their "basic necessities."

Focus group participants likewise offered these two different interpretations of the question. About half of the participants interpreted the question as asking for the bare minimum with which to survive. These participants interpreted the phrase "to make ends meet" as meeting only the most basic needs, such as "food on the table and shelter in which to live." A second large group of participants interpreted the question as including "the gravy." As one participant put it, "I just calculated what I would need not to have to worry about expenses at all."

Closely related to the interpretation of the phrase "making ends meet" was respondents' interpretation of the phrase "smallest income." Respondents heard a variety of different messages when asked about the "smallest income needed to make ends meet." In many cases, the message seemed to be that we were asking for the amount of money they would need to cover the barest necessities. As a low-income single Miami respondent put it, "that means hanging on by the skin of your teeth." In other cases, it was interpreted to mean the amount of income required to maintain their current lifestyle. According to a high income Detroit respondent with children, "the smallest would be what we need to maintain the lifestyle we have now."

We found the same variation in interpretation in the focus groups when we asked them to describe what "absolute minimum income" meant to them. For example, one participant in the low income groups interpreted the phrase as "just house bills, but not really any money for leisure" while another in the middle income group described absolute minimum as "just scal[ing] down a bit." A participant in the high income groups suggested "my bare minimum is really not doing anything differently than I'm doing now...just maybe a little less." Hence, the interpretation of "absolute minimum" varied widely across individuals.

Judgment #2: What expenses are necessary?

Determining which expenses are necessary was one of the more difficult judgments for respondents. Towards the end of the interview, we asked participants to tell us what they thought was the hardest part of the interview. Without prompting, a substantial number of the participants reported that deciding which expenses were necessary in the MIQ was the hardest task. One participant commented, "it was hard thinking about what my necessities are and what I spend each month

on necessities." Another remarked, "I don't even know what I would consider necessary." Many respondents, particularly those in the middle and upper income groups, never had to think in such terms before and expressed perplexity over defining the lower boundaries of financial existence. Since many respondents maintain a quality of life well beyond the fulfillment of bare necessities, the identification of that most basic level of existence is a predicament that many seem unwilling or unable to negotiate.

Complications also arose because many respondents saw "necessary expenses" as pertaining to things other than mere survival. These other interpretations included expenses necessary for things like their careers, their quality of life, their happiness, and even their legal obligations. In each of these contexts, the phrase "necessary expenses" had real and legitimate meaning for the respondents. Consequently, if we want all respondents to be thinking in the same terms when they answer this question, it is clear that the question will need to plainly specify which types of necessary expenses are being queried.

When working through the "think aloud" task, most respondents first would itemize a short list of necessary expenses and then would assign a dollar estimate for each item in order to arrive at their final sum of monthly expenses. Interviewers were instructed to probe for common expenses that may have been omitted from the list. In many cases, respondents expressed "amazement" that they had omitted a given expense. By working through this exercise, it became apparent that not all "necessary expenses" spring readily to mind without cues and probes from the interviewer, and that many expenses that may not be "necessary" do come to mind instead.

While nearly all respondents across all income levels and household types mentioned items such as housing, utilities, phone, food, and gas, respondents also came up with a range of other expenses that they deemed necessary to make ends meet. These items ranged from dining out, entertainment, and credit card payments, to parking expenses, clothing, tuition, books, charitable donations, gifts, and hair care. Thus, while respondents may say that "making ends meet" means just the basic necessities for survival, they are not necessarily taking that definition into account when answering the MIQ.

Items that were frequently forgotten included incidentals such as personal toiletries, automobile maintenance and fuel, insurance payments, and legal obligations such as loan repayments and taxes. Other expenses, classified as "necessary" by most respondents, were simply forgotten until probed by the interviewers. In these cases, after several prompts had

given them more time to consider the topic, respondents remembered that they had forgotten to include expenses such as utilities, telephone bills, laundry expenses, and church contributions.

We investigated the meaning of "necessary expenses" in the focus groups too, but with a different approach. We led focus group participants through a two-step process of itemizing monthly expenditures in order to understand which expenses they considered "necessary expenses." First, we asked participants to identify those expenses that could be regarded as necessary for "making ends meet." Next, we asked them to single-out only those expenses that they would consider "absolutely necessary."

When asked to list "monthly expenses," we found that focus group participants, like the personal interview participants, listed out the basic necessities such as housing (rent or house payment), groceries, and transportation. The focus group members, though, included a much longer and very likely a more complete listing of expenses than that of any individual who took part in a personal interview. For example, focus group participants were more likely to include items such as home improvement and internet provider services than those who participated in the cognitive interviews. The detailed representation of all monthly expenditures may have been because they were asked to list all their monthly expenses. However, it could have also resulted from participants working together and drawing upon each other's contributions. It was not unlikely to find one person's responses triggered by another participant's answers. In all likelihood, individuals living in multiple-person households may produce "better" answers to the MIO if they work together with other household members.

When asked to single out "necessary expenses," we found that in many situations, focus group participants shortened their list of monthly expenses substantially, at times, by one-half to one-third. Typically, when asked to indicate the absolute necessary expenses, participants would "do without" entertainment, clothing, and tuition. In contrast, some participants simply made adjustments by quantity and quality rather than dropping the item altogether. For instance, participants in middle income households with children group suggested that they would reduce coverage on insurance policies or buy generic brand foods.

When asked to think about necessary expenses, most respondents in the individual interviews made another important omission when constructing their response to the MIQ. Even though we asked respondents to think about necessary expenses in the context of income "before any deductions" were taken

out, the vast majority admitted they had not been thinking in these terms when they answered the question. Most respondents seemed to understand that "income before deductions" meant gross income, but almost none of them used that piece of information to answer the question. It is interesting to note that when the National Opinion Research Center (NORC) at the University of Chicago uses the MIQ in the General Social Survey (GSS), the instruction is to estimate the "smallest amount of income per month -- after taxes." Several other international researchers also take this approach. Clearly, this is the way respondents think about their money when making their estimates.

Judgments #3 and #4: How much would I need to cover each expense and what is the total for all of these expenses added together?

Once respondents generated a list of items they deemed necessary, they were asked to assign approximate dollar values to each monthly expense. Some participants found it difficult to assign dollar figures to necessities. As one participant in the high income household with children reported, "(the most difficult part was) trying to get dollar figures to what we consider necessities. It's such a subjective kind of thing."

In order to make these judgments, respondents needed a context in which to assess their expenses. The MIQ provides both a geographic and a temporal context in which to do so, yet both seemed to lead respondents to varying interpretations of the question.

An integral feature of the MIQ is the introductory clause, "living where you do now..." This phrase serves the purpose of indirectly encouraging respondents to think about their current expenses in their present living situation without giving them explicit instruction. This link with current expenses emerges from the fact that most respondents mention their rent or mortgage as their single largest monthly expense. The difficulty of using this oblique anchoring technique, however, emerged when respondents explained what the phrase meant to them.

When asked to tell us what was meant by "living where you do now," respondents offered three types of answers, as well as a few more idiosyncratic interpretations. The most frequent interpretation of the phrase was one's house or apartment. This is an important interpretation in order to anchor a respondent's thought processes to the current level of expenses, since rent or mortgage payments are generally the single largest monthly expense. The second most frequent response was one's neighborhood. Again, this would probably have the same effect of roping respondent's thoughts to current

expenses, since homes within a neighborhood are often similar in price. Differences might appear, however, if a neighborhood is comprised of both rental property and owned single-family homes. In this case, there might be very different expenses generated within the same neighborhood, so that a person might be led to think about the rental property within a neighborhood and decide that much less income is needed to survey than if the single-family owned homes were being considered. The result of this would be to potentially disengage the respondent from consideration of current expenses, since one could sell the home, move into rental property within the same neighborhood, and thus require a lower dollar amount to "make ends meet."

The third most frequent response was to interpret the phrase as one's **city**. This option carries the same potential difficulties as the neighborhood interpretation, since there are clearly more expensive and less expensive parts of any city. Consequently the numeric answer generated by the respondent would be without context and essentially without meaning. Other interpretations included the **state** of residency and one's **lifestyle or position in life**. The varying interpretations appeared to be distributed among the different family types and income levels.

The second context provided by the MIQ is a temporal one. The question asks respondents to think about their expenses in monthly terms. While most respondents agreed that it was easier for them to think about their expenses in monthly terms, there were some disagreements. About one third of the low income and middle income respondents suggested that itemizing their expenses would be easier on a weekly basis than on a monthly basis. One person noted, "I could have broken it down easier (on a weekly basis). That's really what I have to deal with -- on a week-to-week Another respondent offered that weekly estimates would be easier for some items, such as groceries, but monthly would be easier for other expenses such as mortgage payments or insurance payments. While none of the high income respondents reported that itemizing expenses on weekly basis would be easier than on monthly basis, about one third of the high income respondents reported that yearly estimates would be easier for them than monthly estimates. One respondent explained that it would be easier to consider expenses on a yearly basis since taxes are computed that way. Another advocate of yearly estimates explained that his income varies from month-to-month.

The process of determining expenses is not always dependent on the income level or family structure of the respondent, but may hinge on the individual's knowledge of his or her household's finances. The bill payer is typically the most knowledgeable person about

household finances. If a random respondent is chosen from the household, however, that person will not necessarily be the bill payer. By not screening for bill payers in this study, we have simulated the typical survey situation. In the cognitive interviews, it was clear that when the respondent happened to be the designated bill payer in the household, this person seemed able to generate more complete lists of expenses and provide the required dollar amounts. While respondents themselves pointed out this role of family bill payer and suggested that the bill payer might be able to provide more accurate estimates than they could, further research would be necessary to quantify the differences in the estimates between the bill payer and other household members.

In the interviews, we had the opportunity to gain insight into the difficulties that may result from asking the MIQ of the non bill payer. In one case, we interviewed separately both a husband and his wife who was the household bill payer. For the non bill paying husband, his estimate of what the couple would need to make ends meet was \$2,000. The bill paying wife estimated that they would need \$4,000.

Discussion

It seems likely that nothing would be lost to the subjective nature of the question if we first clarified for the respondent the answer to the first judgment. That is to say, researchers must decide whether they want to ask respondents about their "current lifestyle" or the "bare minimum needed for survival." If it is decided that "minimum expenses necessary for survival" is the preferred piece of information, the heart of the subjective assessment is found in the second question. "what expenses are necessary for me to survive?" The follow-up estimate of the dollar amount is a matter of estimating minimum expenditures once the respondent has decided upon which elements to include, such as monthly mortgage payment, amount spent on food, utilities, and insurance, etc. As such, the estimate might be assisted by separating the two questions and providing cognitive cues for the formulation of the response. For example, the respondent might be presented with a series of items and be asked to answer "yes" or "no," indicating whether or not that particular item should be included as absolutely necessary for survival. After each "yes," the respondent would then be asked to estimate a range of dollar amounts necessary to cover that expense each month. In this way, the judgment process would be simplified for the respondent since only one item would be considered at a time. Likewise the estimation of dollar amounts should be more accurate since only one item would be considered at a time and there would be no need for the respondent to make the final arithmetic tabulation. As discussed, the respondent should be asked if he or she is the primary bill payer in the household or if someone else fills that role. This distinction may allow us to measure the accuracy with which the responses are being provided.

References

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