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## Observing attitudes, intentions and expectations (1945-1973)

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OBSERVING ATTITUDES, INTENTIONS AND  
EXPECTATIONS (1945-1973)

BY JOSÉ M. EDWARDS

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CENTER FOR THE  
HISTORY OF POLITICAL ECONOMY  
AT DUKE UNIVERSITY

**Observing Attitudes, Intentions and Expectations (1945-1973)**

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Abstract of

**Observing Attitudes, Intentions and Expectations (1945-1973)**

By

José M. Edwards

Although involved in projects of influent institutions like the Cowles Commission, the NBER, and the Michigan Survey Research Center (SRC), George Katona, the “pioneer student and chief collector of consumer anticipations data” (Tobin, 1959, p. 1) is virtually absent from accounts of the topics he explored, including the study of the consumption function and the development of behavioral economics. This essay argues that such an absence is partly explained by the theoretical underpinnings of Katona’s project, which were incompatible with the economic views of behavior that dominated from the mid-1940s to the mid-1970s. It compares alternative survey programs funded by the Federal Reserve during that period, and analyzes the ensuing controversy on the purposes of the observation of attitudes, intentions and expectations. It claims that understanding Katona’s approach “required a real restructuring of thought – a genuine paradigm shift” (Simon, 1979, p. 12), which gives specific interest to this historical episode.

Key words: George Katona, Michigan Survey Research Center, Subjective Data, Behavioral Economics

JEL codes: B23, B31, B41

# Observing Attitudes, Intentions and Expectations (1945-1973)

## 1. Introduction

The economic use of data on attitudes, intentions and expectations is an interesting vehicle for analyzing some of the multiple purposes of observation in economics. However, and although the history of the collection and analysis of this kind of facts has been greatly influenced by the economic effects of the Great Depression and World War II, it has been studied mainly by historians of psychology (Herman, 1995), statistics (Converse, 1987; Desrosières, 1998), market research (Arvidsson, 2004), and social studies (Bulmer *et al.*, 1991; Igo, 2007)<sup>1</sup>. According to that literature, the analysis of public opinions and attitudes began during the nineteenth century and its history is characterized, first, by a turning point during the 1930s with the “scientific measurement” of subjective outcomes (Converse, 1987, p. 125) and, second, by an upsurge during WWII, usually “treated as ‘Year One’ in the history of government and behavioral expertise” (Herman, 1995, p. 53). These two features relate to the two purposes of observation that are discussed in this paper: the use of attitudinal data for “understanding” aggregate consumption and their use for “predicting” durable goods sales as distinguished by George Katona [1901-1981], the main character in this essay.

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<sup>1</sup> J. Converse’s *Survey Research in the United States* (1987) is focused on the kind of surveys that are the object of this paper (i.e. gathering subjective data). See Boulier and Goldfarb (1998) for a methodological account of the economic use of subjective facts; Bulmer *et al.* (1991), Desrosières (1991) and Duncan and Shelton (1992), for accounts on the pre-history of the academic use of surveys and the development of sampling methods; Bateman (2001) for a focus on the history of social surveys, and the contributions of M. Rutherford and T. Stapleford to this volume for accounts of surveys related to labor issues and poverty.

The following texts explores a small part of the history of the economic use of subjective facts by presenting Katona's views and focusing on three different survey programs sponsored by the U.S. Federal Reserve from the mid-1940s to the early-1970s: the Survey of Consumer Finances (SCF) conducted by the University of Michigan Survey Research Center (SRC), and the Surveys of Consumer Buying Intentions and Consumer Buying Expectations (SCBI and SCBE) conducted by the U.S. Census Bureau. The failure of these programs contrasts with the success of the Surveys of Consumer Attitudes (SCAs) conducted by the SRC since the early-1950s and used for constructing the widely used Index of Consumer Sentiment (ICS).

As shown below, the development of these surveys was intertwined with discussions about the purpose of the observations. According to Katona and his associates in the Economic Behavior Program of the SRC, sample interview surveys should be used to gather "clusters" of attitudes and financial variables in order to "understand" consumer behavior as suggested by Gestalt-type theories of learning (Katona, 1940). This view, which dominated the design of the SCF from the mid-1940s through the 1960s, was challenged by the SCBI and the SCBE. Opposing Katona's aim of understanding consumer behavior, these two surveys were designed as means for forecasting durable goods sales.

Section 2 begins by presenting the theoretical underpinnings of the SCF. It introduces the early work of Katona in his attempt to develop a program of "economic psychology" out of the analysis of interviews exploring the attitudes of businessmen and consumers. It presents Katona's original incursions to the analysis of economic subjects, as his interests switched from Gestalt psychology (*Organizing and Memorizing*, 1940), to the analysis of wartime inflation (*War without Inflation*, 1942) and the effects of price controls (*Price Control and Business*, 1945). It

then focuses on the SCF as designed by Katona and his associates at the SRC (1946) and shows that the purpose of that project was to observe interactions between attitudes and financial variables, in order to explain aggregate consumption in the terms of Katona's Gestalt theory of learning (i.e. not as an independent phenomenon, but as being part of a more general configuration).

Section 3 argues that, ironically for a psychologist of learning by understanding, Katona was arguably misunderstood by economists who focused on other aspects of consumption. During the mid-1950s, a Consultant Committee on Consumer Survey Statistics evaluated the SCF on request of the Federal Reserve Board. However, according to the Committee's criteria, the "usefulness" of SCF should be evaluated by testing the individual predictive power of the different attitudes, intentions and expectations. The differences between these two views led to a controversy. The analysis of "clusters of attitudes" (SCF) on one hand, and of "buying intentions" (SCBI) and "purchase probabilities" (SCBE) on the other, resulted in two different approaches, neither of which was successful.

The final section proceeds by briefly comparing the history of failure of the Federal Reserve programs presented throughout the paper to the success of the SCAs conducted also by the SRC since 1951, but under the auspices of private institutions like the Ford Foundation. Unlike the other survey programs, the SCAs were designed for gathering general information on "consumer optimism and confidence" (Mueller, 1963, p. 899) that served as raw data for producing the Index Consumer Sentiment (ICS). Interestingly, and despite Katona's downplaying of its importance, the ICS eventually became "one of the most closely watched indicators of future economic trends" (Curtin, 2004, p. 136).

## 2. From Gestalt Psychology to Katona's Program of Behavioral Economics

### *Katona's Gestalt Theory of Teaching and Learning by Understanding*

Basic knowledge of Katona's academic and professional background is necessary to clarify the main features of the project that generated the SCF. Born in Hungary in 1901, Katona moved to Germany in 1919 where he graduated in experimental psychology (U. of Göttingen, 1921). However, he worked as an economic journalist during the 1920s and early-1930s in a context of hyperinflation that could not be accounted for by standard tools of economic analysis (Wärneryd, 1982; Curtin, 1983). After immigrating to the U.S. in 1933 Katona worked as an economic advisor for European investors in New York. It was only a serious illness that forced him back to academic work in psychology (1936-1940) with the aid of a grant obtained by M. Wertheimer: his "beloved teacher and friend" who was also one of the founding fathers of the Gestalt movement (Katona, 1972, p. 13).

*Organizing and Memorizing* (1940), Katona's main contribution to the psychology of learning, was part of the Gestalt movement in America and as such it challenged the dominant learning theories of that time that were based on "behavioristic associationism" (Katona, 1940, p. 25)<sup>2</sup>.

Unlike the behaviorist-type theories that used conditioning as "the fundamental principle of

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<sup>2</sup> With the advent of the Nazi regime in 1933 the departure of the Gestalt theory leaders: M. Wertheimer, W. Köhler and K. Koffka, led German experimental psychology to America at a time when behaviorism was "too new, too successful, too exciting an enterprise not to fight back spiritedly against the foreign invaders" (Mandler, 2007, p. 143). According to historians of psychology, the Gestalt approach was strongly resisted by American scholars and the movement ended up being no more than a group of figures that "might have fallen apart much faster had it not been held together by the common experience of the immigration" (*ibid.*, p. 163). The influence of the German approach became significant only in the long run as it contributed to the "brew of information-processing, cognitive, and constructivist psychologies that made up the 'cognitive revolution' within a generation of their arrival" (*ibid.*, p. 164). See Sokal (1984) for a detailed account of the reception of the main Gestalt psychologists in America.

learning” (*ibid.*), Katona thought that subject-matters should be taught “as parts of whole processes” rather than as being independent elements (*ibid.*, p. 26).

The application of gestalt principles to the psychology of learning will lead to a fuller characterization of the learning process. We shall endeavor to accomplish this by analyzing the results, qualities, and laws of that kind of learning which consists of understanding organized wholes. (*ibid.*, p. 31)

The main argument of *Organizing and Memorizing* was that “learning by memorizing” was a “different process from learning by understanding” (*ibid.*, p. 53) and its main result was that pupils “should learn to learn by understanding” rather than “merely learn to memorize” (*ibid.*, p. 260). As shown below, Katona proceeded by systematically applying this concept of understanding to economic subjects: being that in his New School course on psychology of the war economy (1940-1942), his price control studies at the Cowles Commission (1942-1944), or in the inception of the SCF at the U.S. Department of Agriculture (1945).

### *From Psychology to Economics*

*War without Inflation* (1942), Katona’s first academic attempt to apply his theory of learning to economic subjects, came out of his economics and psychology course taught at the New School. It analyzed wartime inflation in the U.S. and stated that inflation was “not the automatic effect of economic factors” (Katona, 1942, p. 4). For Katona, the economic account was based on “an incomplete conception of the origins of inflation” (*ibid.*). Instead of exclusively quantifying aggregates like “available income”, “supply of civilian goods” and “armament production”,

Katona claimed that economists should incorporate elements such as the past inflationary experiences of the public, and their understanding of the whole wartime setting:

More money in the hands of the people, less merchandise in the stores, these are stimuli to which sellers as well as buyers respond. How they respond depends on many factors, among which are the past experience of the responding persons, the setting of the stimuli, and the way in which the stimuli are understood. [...] different behaviors in the same objective situation, are possible. This does not mean that there are no scientific laws of human behavior, but only that these laws are more complex than the mechanistic and invariable connection between a specific stimulus and a specific response. (*ibid.*, pp. 6-7)<sup>3</sup>

Katona considered variations in economic aggregates as conditions for “potential inflation” (*ibid.*, p. 7) that would lead to “actual inflation” only if supported by “inflationary expectations” (*ibid.*, p. 14). Besides the usual price control policies of taxation and price fixing, Katona thought that it was necessary for the authority to make the public understand the purposes of such measures. In line with his psychological theory of learning by understanding, Katona argued that governments should instruct people by having active roles as announcers:

Government publicity [...] must be directed toward achieving the coöperation of the public. For that purpose the material must be presented to the people in such a way that they will be able to make up their own minds. The objective, then, is not to elicit thoughtless acceptance

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<sup>3</sup> This argument is obviously related to the distinction advanced by Gestalt psychologists between their own work and the behaviorist approach.

but to encourage thinking, to the end that the essential points of the situation may be grasped.

(*ibid.*, pp. 159-160)<sup>4</sup>

At this point, the main purpose of Katona's recommendations was of improving the effectiveness of wartime economic policies by encouraging a double understanding: not only of the attitudes, intentions and expectations of the public, but also of the purposes of the price control policies. The psychological approach was presented as a means to produce that missing and valuable information:

In order to determine the best ways of insuring public cooperation with specific regulations and appeals, more accurate information about the attitudes of various population groups is desirable. Before private business enterprises introduce a new product or policy, psychological studies – market research – are frequently undertaken to determine the probable reception, as well as the best possible method for obtaining one. Government should be at least as much interested in the response to its measures as is business. (*ibid.*, 172)

### *Price Control and Business (1945)*

From 1942 to 1944 Katona became a research associate at the Cowles Commission involved in a project organized by T. Yntema and supervised by J. Marschak, who was also a former member of the New School. The aim of the study was of analyzing the “actions of American businessmen

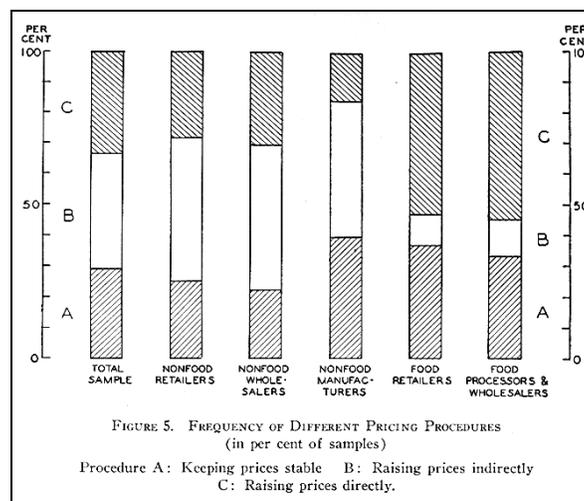
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<sup>4</sup> Wartime inflation, he claimed, was largely the outcome of expectations formed by the government and the media: “Government officials, politicians, newspaper editors and radio commentators have supplied much material for the creation of a framework from which inflationary expectations can be derived [...]. Without the existence of certain economic and political facts accounting for them, enduring expectations of inflation cannot emerge” (Katona, 1942, p. 15).

as affected by price regulations and other wartime conditions” by applying “psychological methods to economic research” (Katona, 1945, p. viii).

Katona’s monograph aimed not only at collecting data to support war planning but also at testing the method of interviews as a “legitimate tool of economic research” (*ibid.*, p. 5)<sup>5</sup>. He used questionnaires designed to make businessmen interact with qualified interviewers who were granted a “relatively wide freedom” (*ibid.* p. 8) and the study produced, for the most part, data on costs and prices the analysis of which gave information about different pricing procedures for different types of business (i.e. “nonfood retailers”, “nonfood wholesalers”, “nonfood manufacturers”, “food retailers” and “food processors and wholesalers”). The pricing procedures were divided in three categories: “direct price increases, indirect price increases, and price stabilities” (*ibid.*, p. 31).

**Figure 1 (Katona, 1945, p. 94)**



<sup>5</sup> See Stapleford’s contribution to this volume for an analysis of different historical configurations of the collection of survey data, which are related to the different qualification degrees required in the interviewing process. See also Stapleford’s (2009) study on the production and analysis of cost-of-living statistics and the ensuing debates between the U.S. Bureau of Labor Statistics and labor organizations during the 1940s for a complementary account on the importance of developing statistics for price control, especially during and after WWII.

As shown in the figure, the pricing policies (A, B, C) differed for the different types of business. However, further analysis of the data showed that they varied also within categories, and even for businessmen facing the same regulation conditions. In order to explain such differences, Katona turned to the analysis of attitudes that originated his program of economic psychology:

We must go further in the study of psychological factors by analyzing the businessmen's attitudes toward price control. Without them the list of variables that influenced pricing actions cannot be complete because the pricing decisions of different firms differed greatly even where the objective conditions (given type of regulation, certain supply and demand conditions, etc.) appeared to be the same. (*ibid.*, p. 157)<sup>6</sup>

Attitudes towards price controls were classified in three categories (cooperative, intermediate, hostile). Figure 2 shows the direct relation obtained between the attitudes and the pricing procedures: the more cooperative the attitudes the more stable the prices.

**Figure 2 (Katona, 1945, p. 171)**

ASSOCIATION BETWEEN ATTITUDES AND PRICING PROCEDURES				
Pricing Procedures \ Attitudes	Fully Cooperative	Intermediate	Hostile	Total Number of Interviews
A. ("Stability")-----	57	62	6	125
B. ("Indirect Increases")-----	23	104	22	149
C. ("Direct Increases")-----	4	72	73	149
Total Number of Interviews--	84	238	101	423

Because the attitudes explained pricing procedures that affected the relative positioning of the firms, Katona concluded that the analysis of subjective facts was a worthwhile approach for

<sup>6</sup> See Boulier and Goldfarb (1998) for a methodological discussion about the subjectivity of different types of survey data.

studying economic phenomena. In line with his previous research, he concluded that the “understanding by both businessmen and consumers of the need for and the purposes of price control” was among the main factors behind the success of the price regulation plan (*ibid.*, p. 217). The failure to “evoke full understanding of the functions of price control” was indeed claimed to be “largely responsible for occasional waves of hoarding and inventory accumulation and the resulting price increases” (*ibid.*, p. 221).

#### *Observing Attitudes at the Survey Research Center*

Right after his price control studies Katona moved to the Division of Program Surveys of the U.S. Department of Agriculture in 1945 where he directed the Survey of Liquid Asset Holdings, Spending and Saving (1946)<sup>7</sup>. The aim of that survey, which used the sample interview method, was of collecting both financial data of “individual economic units”, and their “motives for, attitudes toward, and expectations of saving” (Katona and Likert, 1946, p. 197). Its main purpose was to explore the household’s plans for spending the considerable amounts saved during WWII (i.e. War Bonds), which was one of the main uncertainties arising after the war’s close, especially for Federal Reserve analysts studying inflation and willing to “assess the probability that consumers would attempt to purchase large amounts of consumer durable goods” (Likert, 1972, p. 4).

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<sup>7</sup> The first (and only) national Survey of Liquid Asset Holdings, Spending and Saving was conducted under the auspices of the Federal Reserve Board. The senior officials of the Division of Program Surveys were A. Campbell, G. Katona and R. Likert. It must be pointed out that the U.S. Department of Agriculture (USDA) also hosted one of the main training programs in sampling techniques. See Rutherford (forthcoming) for an account of the USDA graduate school training in statistics and economics (1921-1945).

But the postwar period was also characterized by the migration of survey research from government agencies to universities<sup>8</sup>. In 1946, Katona co-founded the SRC at the University of Michigan where the Survey of Liquid Assets turned into the Survey of Consumer Finances (SCF)<sup>9</sup>. The design of the SCF (1947-1971) was clearly influenced by Katona's background as a theorist of learning by understanding<sup>10</sup>. It encouraged the respondents' understanding of the questionnaires (Katona and Likert, 1946, p. 197) and, for that reason, it included personal questions that were initially discarded by the Federal Reserve, which was "not interested in the collection of data measuring consumer intentions to buy durable goods" but on financial variables only (Likert, 1972, p. 5). That attitude changed, however, after Katona's successful challenge to forecasts showing that the U.S. economy headed for a "serious recession" in 1949 (*ibid.*). Katona's prediction "impressed the [Federal Reserve's] research staff sufficiently so that, when planning the 1950 study, they asked to have the consumer intentions data made available to them as soon as possible" (*ibid.*, p. 7).

It is worth noting that the Federal Reserve staff was impressed by the SCF potential as a forecasting tool, but not really interested in the role given to it by Katona (i.e. as a composing part of the Economic Behavior Program of the SRC). Rather than merely collecting consumer intentions data, the idea behind the design of the SCF was that, unlike "routine behavior",

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<sup>8</sup> See Converse (1987, pp. 239-379) for an account of the migration of survey research from government agencies to universities like Columbia (Bureau of Applied Social Research), Michigan (Survey Research Center) and Chicago (National Opinion Research Center).

<sup>9</sup> The SRC was founded by A. Campbell, G. Katona and R. Likert, and completed the first annual SCF in 1947. Sponsored by the Federal Reserve Board, the SCF was systematically (though only partly) published in the *Federal Reserve Bulletin*. The original version of the SCF was discontinued in 1971, which coincides with Katona's retirement year. See Kennickell and Starr-McCluer (1994), for an account of the current design of the SCF, as conducted since 1992 by the National Opinion Research Center at the University of Chicago.

<sup>10</sup> See Katona and Likert (1946, pp. 197-198) and Curtin (2004) for accounts of the design and inception of the SCF. See E. Didier's contribution to this volume for a detailed account of the different stages involved in this kind of survey research.

“genuine decisions” were made simultaneously by large numbers of both businessmen and consumers. The importance of empirically analyzing attitudes was justified by the fact that attitudes “bringing forth new economic decisions [were] not an everyday occurrence” (Katona, 1946, p. 53). Attitudes tended to “change infrequently, radically, and simultaneously” for an important part of the population (*ibid.*, p. 54) and, consequently, a theory of general attitude change was essential to explain shifts in aggregate consumption.

Katona’s findings supposedly demonstrated that the “economics without psychology” approach was insufficient for studying aggregate consumer behavior. He claimed that just like psychology: “the study of behavior” (Katona, 1947, p. 455), economic psychology: “the study of economic behavior” should be an empirical discipline producing “information concerning attitudes, motives, plans, intentions and expectations” to be used in conjunction with “micro-economic data on the distribution of income, savings, and liquid asset holdings” (*ibid.*, p. 456). The main aim of the SCF was to “determine the relation of attitudinal and financial data” (*ibid.*) in order to supplement (not supplant) the analysis of traditional economic variables (*ibid.*, p. 459). It was not designed as a forecasting tool providing “measures of what will happen”, but as a means “to obtain as complete an account as possible of the psychological field as it prevails at a given moment” (Katona, 1951, p. 174)<sup>11</sup>.

In his *Psychological Analysis of Economic Behavior* (1951), Katona presented the SCF as part of a research program that challenged the “widespread use” of equations like “ $C = fY$  or  $S = fY$ ” (*ibid.*, p. 172). Interestingly, Katona’s critique of the use of consumption functions paralleled

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<sup>11</sup> It must be noted that it was also during the early-1950s that the Surveys of Consumer Attitudes (SCAs), discussed in the final section of this paper, began to be collected by the SRC on request of private institutions. Unlike the SCF, the SCAs were straightforwardly conceived as means for predicting trends in consumption.

wider economic debates on the use of Keynesian-type approaches for forecasting postwar demand. Following Smithies (1945), Mosak (1945) and, especially, Woytinsky (1946), who claimed that there was “no positive correlation between the savings rate and real income” (Woytinsky, 1946, p. 10), there were many different attempts to decompose aggregate data on income, consumption and savings, as, for instance, between different kinds of population groups (Bean, 1946; Brady and Friedman, 1947) and time periods of “prosperity” and “depression” (Friend, 1946; Bennion, 1946). Those studies, which aimed at accounting for apparently inconsistent observations of family budget data, generated a controversy on the use of regression formulas for estimating consumption<sup>12</sup>.

While the early economic discussion on the consumption function (i.e. during late-1940s and early-1950s) turned around the “relative” vs. “absolute” income interpretations (Duesenberry, 1949; Tobin, 1951; Reid, 1952), the debate then generated an “intellectual tension between a liquidity and a wealth interpretation of income as the primary determinant of consumption” (Tobin, 1972, p. 39). That tension led to adjustments in the mainstream approach, as evidenced in Modigliani and Brumberg’s (1954) “life-cycle” and Friedman’s (1957) “permanent income” hypotheses. Interestingly, none of the economic views in question were endorsed by Katona, who entered the dispute by bringing “quite a different bag of tools and insights from those of the technical economists” (Tobin, 1972, p. 37)<sup>13</sup>.

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<sup>12</sup> See Cook (2000), Mason (2000) and Drakopoulos (2010) for accounts of this controversy on the consumption function.

<sup>13</sup> There is an interesting opposition to draw between Katona’s distinction of “understanding” vs. “predicting” consumer behavior and Friedman’s (1953) essay on the methodology of positive economics. As shown in the next section, the economic reception of Katona’s “tools and insights” seems to conform to Friedman’s claims that “theory is to be judged by its predictive power” (Friedman, 1953, p. 8), and that a “hypothesis is important if it ‘explains’ much by little” (*ibid.*, p. 14). In *The Mass Consumption Society* (1964), Katona explicitly opposed Friedman’s focus on the predictive power and simplicity of a theory rather than its “explanatory power”.

Katona's critique of the economic approach was directed against the exclusive use of regression formulas for estimating consumption. Such a method, he claimed, implied "projecting past relationships" to the analysis of current outcomes (Katona, 1951, p. 172). Because shifts in aggregate consumption could not be explained without taking attitude changes into account, it was impossible to get "a correct picture of future relationships" by using regression formulas (*ibid.*). Katona considered that the "preponderant use of the time-series approach" had "done disservice to economic research by impeding the study of the 'wanderings' of the consumption function" (*ibid.*, p. 173). It is worth noting at this point that that even if Katona's approach failed to penetrate the economic theory of consumer behavior, "many of the kinds of survey and panel data in which Katona and his organization pioneered" (Tobin, 1972, p. 38) were subsequently explored by the Federal Government and other agencies (*ibid.*).

### **3. Predicting Durable Goods Sales**

#### *The Smithies Report (1955)*

In 1954, the Subcommittee on Economic Statistics of the U.S. Congress requested the Board of Governors of the Federal Reserve to evaluate the "adequacy" of "statistical information in the fields of savings, business inventories and business and consumer expectations" (request letters; Smithies *et al.*, 1955). In response to that request, the Board organized a Consultant Committee on Consumer Survey Statistics aimed at exploring the "usefulness of consumer survey statistics

in general” (Smithies *et al.*, 1955, p. 1)<sup>14</sup>. The committee focused mainly on the SCF, and, to a less extent, on the “interim surveys” of attitudes (i.e. the SCAs) conducted by the SRC under the auspices of private institutions like the Ford Foundation<sup>15</sup>.

In line with Katona’s project, the Smithies report suggested that the “relatively expensive” SCF data should “supplement rather than replace the traditional kinds of information” (*ibid.*, p. 9)<sup>16</sup>. However, instead of testing the survey according to its intended purpose (i.e. as being a composing part of the Economic Behavior Program of the SRC), the committee proceeded by testing the individual predictive power of the different attitudes. In evaluating the attitudes collected in the SCF, the Smithies report was clear in stating that “buying intentions should be distinguished from less specific attitudinal data” (*ibid.*, p. 37) thus disregarding the theory supporting the SCF, which drew from Katona’s holistic approach.

The report came to favorable conclusions concerning the predictive value of “buying intentions” data but disapproving of the “less specific” attitudes. That result was confirmed by comparing the buying intentions data with subsequent purchases of “automobiles”, “furniture”, “major household equipment” and “houses” (*ibid.*, pp. 46-52) and by checking the accuracy of other projects gathering buying intentions, such as the “Crowell-Collier automotive survey”:

The success of the Crowell-Collier survey argues strongly for the validity of intentions data as predictors. [...] a survey devoted entirely to one subject, as the Crowell-Collier survey is to

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<sup>14</sup> The Consultant Committee, best known as the Smithies Committee, was composed by A. Smithies (chairman), H. Kyrk, G. Orcutt, H. Passer, B. Seidman, S. Stouffer and J. Tobin.

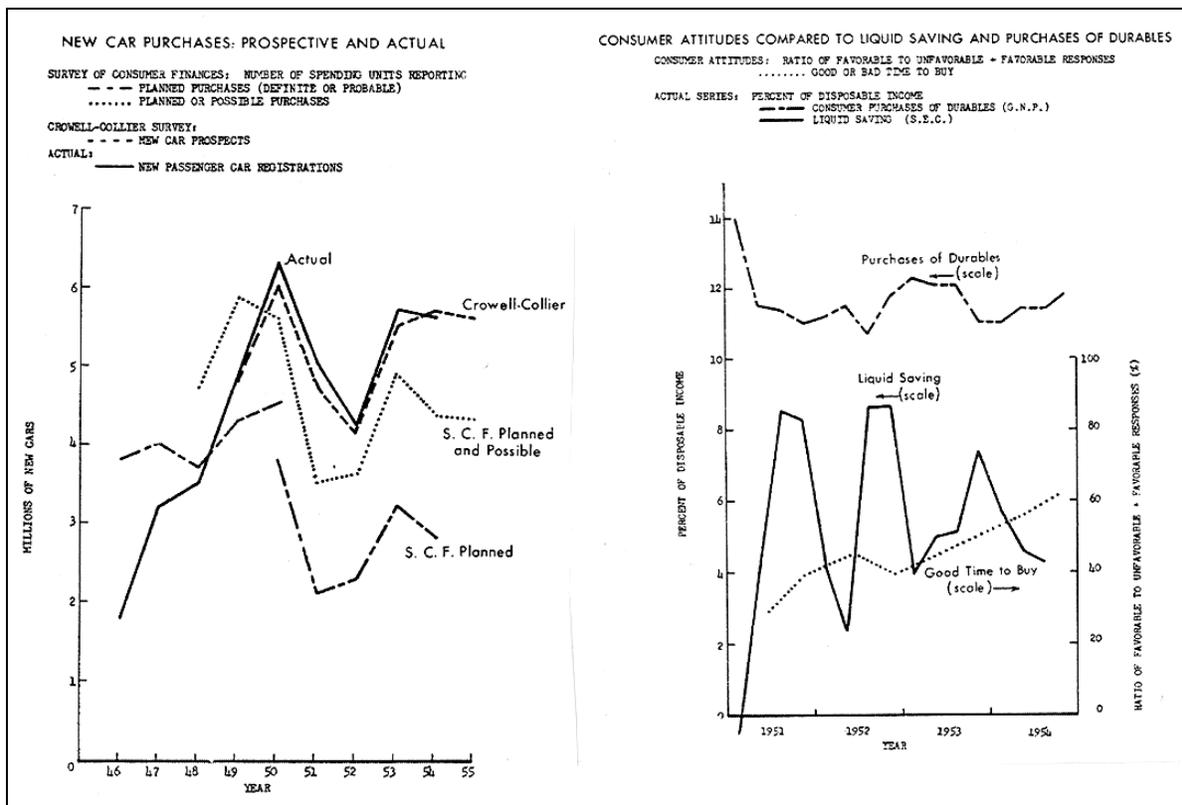
<sup>15</sup> As shown below, unlike the SCF the SCAs were developed as means to gather general data in order to account for “‘waves’ of optimism and pessimism” affecting consumer behavior (Mueller, 1963, p. 899).

<sup>16</sup> According to the Smithies report, the annual budget for the SCF was \$150,000 for 3,000 interviews. The interim surveys were part of a study on “The Relation of Attitudes to Economic Actions” financed by the Ford Foundation at a cost of \$148,500 (Smithies *et al.*, 1955, p. 77).

automobiles, may be able to elicit more considered anticipations than a survey, such as the Survey of Consumer Finances, in which this is just one subject among many. (*ibid.*, p. 47)

Charts as the following supported the committee’s analysis of the predictive power of buying intentions (left) vs. that of the “less specific” attitudes (right).

Figure 3 (Smithies *et al.*, 1955, p. 47, 60)



As shown in the left side chart, the SCF data on “planned” and “planned or probable” car purchases (i.e. “buying intentions”) were less accurate than those of the Crowell-Collier survey, but still considered appropriate for predicting changes in car purchase trends.

Charts like the one on the right side supposedly demonstrated the uselessness of the “less specific” attitudes (“Good Time to Buy” in this case) for predicting or even explaining changes in economic aggregates such as “Purchases of Durables” vs. “Liquid Saving”:

No clear picture emerges from these [right side] Figures. On the whole, these attitudinal series conform less well to ‘actual’ series than do purchase intentions. It would be difficult to say whether there is more conformity of favorable attitudes to subsequent durable goods expenditure or to subsequent liquid saving. (*ibid.*, pp. 53-54)

As a consequence of this kind of tests, the committee concluded that the “less specific” attitudes were useless for predicting durable goods sales, however useful they were for noneconomic purposes such as building rapport between interviewers and respondents. This kind of attitudes were supposed to have “considerable descriptive interest in themselves” as measures, for instance, of the “households’ assessments of their own well-being” (*ibid.*, p. 66). However, they were not among the Federal Reserve’s priorities in the subsequent design of its survey programs.

### *The Economic Expectations Controversy*

In reviewing the Smithies report, Katona claimed that the committee had overlooked the “socio-psychological” character of the SCF by comparing it to “more narrowly conceived economic studies” (Katona, 1957, p. 40). The report, he argued, was excessively focused on the use of attitudes as forecasting tools, without considering “explicitly the basic problems of cross-disciplinary or behavioral research” (*ibid.*). By this, he meant that the committee had overlooked the use of the attitudes for understanding consumption as it resulted from both the “ability” and the “willingness” to buy:

The research work of the Survey Research Center on expectations is based on a psychological theory and is undertaken to develop further this theory [...]. Today in the United States consumer expenditures, and especially postponable expenditures are not rigidly tied to income. They are a function both of resources ('ability to buy') and of psychological factors ('willingness to buy'). Enabling conditions set more or less flexible limits to the rate of spending; the use consumers make of this latitude depends on their attitudes. (*ibid.*, p. 41)

As noted above, Katona's "attitudes" were considered as current outcomes that had an influence on the agents' "perceptions, cognitions, and behavior" (*ibid.*). Even expectations, a "subgroup of the more general concept of attitudes", were conceived as part of a program designed to understand consumers' current evaluations of their past, present and future situation rather than as forecasting devices (*ibid.*):

Expectations – intentions as well as other notions about the future – are current data which help to understand what is going on at the time when the expectations are held. Good diagnosis, of course, helps in making predictions. But forecasting remains a separate step, *additional to and different from* the measurement of prevailing expectations and intentions. (*ibid.*, emphasis added)

In criticizing the atomistic viewpoint of the Smithies report, Katona argued that the charts presented (e.g. Fig. 3) were "based on the assumption that each individual attitude, taken in isolation, should have a specific relation, not changing over time, to action variables" (*ibid.*, p. 43). This was altogether different from Katona's aim in designing the SCF, which was of "clustering" attitudes to study the different possible configurations of them in conjunction with financial data gathered in the same surveys:

The basic tenet of Gestalt psychology in which our studies originated is [...] that a part or item may change its meaning and function according to the whole to which it belongs. Thus, it is not at all surprising that expecting prices to rise was at certain times a factor promoting and at other times a factor retarding consumer purchases [...]. Instead of testing the predictive value of each attitude separately, the relation of clusters of attitudes to behavior should be studied.

(*ibid.*)

For Katona, the SCF was a means for developing a theory of economic psychology capable of generating an understanding of the prevailing attitudes in a given context. According to that view, attitudes such as “buying intentions” were not always to be considered as data reflecting future purchases, but its function could be analyzed by taking into account the whole “cluster” of attitudes.

Katona’s position generated a set of reactions by academic economists. J. Tobin for instance, replied with a new study exploring whether the answers to attitudinal questions provided “information of value in predicting the buying behavior of households” (Tobin, 1959, p. 1)<sup>17</sup>. Tobin compared the SCF data with information of actual purchases gathered in reinterviews but insisted in separating buying intentions from the “less specific” attitudes. Besides replicating the Smithies Committee’s procedures, he literally did not see what Katona’s aim was in designing the SCF, which demonstrates how different their views were about the purpose of the observations:

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<sup>17</sup> Other reactions to Katona’s position may be found in the proceedings of the 1957 NBER conference on “The Quality and Economic Significance of Anticipations Data” (NBER, 1960). That conference was animated, namely, by A. Hart, F. Modigliani, G. Orcutt, G. Katona, E. Mueller, I. Friend, R. Ferber, T. Juster, and A. Okun. Tobin’s (1959) paper drew largely on Okun’s contribution to that conference: “The Value of Anticipations Data in Forecasting National Product”, which claimed that the predictive success of the SCF was “due entirely to its buying-intentions components”, while the “more diffuse attitudinal indicators, ma[de] no net contribution” (Tobin, 1959, p. 5).

I do not see how the predictive value of these data can be adequately appraised without confronting the attitudes and intentions of individual households with the record of their subsequent behavior. But it is possible to interpret George Katona, the pioneer student and chief collector of consumer anticipations data, as challenging this point of view. (*ibid.*)

In line with the Smithies report (of which he was a co-author), Tobin concluded that, unlike other attitudes, buying intentions did have “predictive value” (*ibid.*, p. 10). By confirming its main conclusions (*ibid.*, pp. 10-11), he set in motion a sort of “official” position towards the collection of attitudes that had an impact in the subsequent development of the Federal Reserve survey programs.

#### *Observing Intentions and Expectations at the U.S. Census Bureau*

In 1960 the Federal Reserve interrupted most of its funding for the SCF (Juster, 1964), which was finally discontinued in 1971 (Curtin, 2004). It sponsored instead the “Quarterly Survey of Consumer Buying Intentions” (SCBI) that was first conducted by the Census Bureau in 1959 (McNeil, 1974). Unlike the SCF, which consisted of detailed interviews designed for collecting different kinds of attitudes, the SCBI adhered to the Smithies report’s guidelines and collected only “buying intentions” through mailed questionnaires<sup>18</sup>. During the following years, T. Juster and J. Byrnes from the Census Bureau recognized the existence of two different approaches to the analysis of attitudes: the SRC approach, on one hand, and that of J. Tobin, A. Okun, L. Klein,

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<sup>18</sup> Juster (1960) also analyzed an NBER study of attitudes using mail interviews that preceded the SCBI.

J. Lansing, S. Whitey and T. Juster himself, on the other, that focused on the predictive power of the observations:

One view is that consumer attitudes (thought of as generalized feelings of well-being reflecting relative optimism or pessimism) are fundamental determinants of spending and saving behavior and that both expectations (judgments about the course of events external to the household) and intentions (judgments about events internal to the household) are basically attitudes carrying a time dimension [...]. An alternative viewpoint is that attitudes, expectations, and intentions should be taken at face value. That is to say, expectations reflect the household's judgment about the future course of events external to the household; intentions, on the other hand, reflect tentative plans to undertake specified actions in the light of these judgments. (Juster, 1964, pp. 140-141)

Unlike Katona's view, according to which the different attitudes were understood as indicators of "the psychological field as it prevails at a given moment" (Katona, 1951, p. 174), Juster and his associates considered the buying intentions of the SCBI as predictors of future purchases. But based on his own evaluations of the results of the surveys, Juster (1964, 1966) suggested a new method based on the elicitation of "subjective purchase probabilities" rather than on the yes/no replies of the buying intentions questionnaires:

a reasonably good proxy for household purchase probability can be obtained from a survey of subjective purchase probabilities. The data indicate that a survey of buying intentions is simply a less efficient way of getting an estimate of purchase probabilities than a survey of explicit probabilities. Intentions seem to have no informational content that a probability

survey does not also have, and the probability survey is able to extract information that is not obtainable from intentions surveys. (Juster, 1966, pp. 660-661)

Following Juster's studies, the Census Bureau discontinued the SCBI and replaced it with the "Survey of Consumer Buying Expectations" (SCBE) in 1966. Switching from the analysis of "buying intentions" to that of "subjective purchase probabilities", the Federal Reserve reaffirmed its aim of developing tools for predicting durable goods sales. Unlike the SCF, which drew from the Economic Behavior Program of the SRC, the SCBE aimed at straightforwardly predicting purchase rates:

The objectives of a probability survey are, in principle, quite straightforward. An unbiased estimate of the future purchase rate is required, hence the survey should yield an estimate of mean probability which is on average equal to the observed purchase rate. (*ibid.*, p. 666)

However, the "legitimate reasons for optimism" that followed the first versions of the SCBE (McNeil, 1974, p. 5) turned into suspicion during the late-1960s, especially after the "failure of the series to provide an advance signal or even to move with the decline in new car sales which began in late 1969" (*ibid.*). Accordingly, the Census Bureau expressed its concern over the performance of the "expected car purchases" data (*ibid.*) and in 1972, it discussed the "predictive value" of the survey together with "data users from industry, government, universities, and private research organizations" (*ibid.*). The last SCBE was conducted in 1973, interrupting the Federal Reserve's attempts to collect data on attitudes, intentions and expectations. According to McNeil's account, the Census Bureau program "survived for 15 years because the early part of that period was marked by a high correlation between plans and purchases" (McNeil, 1974, p. 9). When the SCBE series "lost the strong trend factors which had been present for much of the

1960s”, it “became apparent that aggregate purchase plans were not a good predictor of aggregate purchase behavior”, as it had been predicted by Katona and his associates at the SRC (*ibid.*).

#### **4. Conclusions**

Despite both the failure of the Economic Behavior Program in imposing Katona’s behavioral economics (Curtin, 2004), and the interruption of Katona’s version of the SCF (now conducted by the National Opinion Research Center at the University of Chicago), attitudinal data are still produced by the SRC and used as composing parts of the widely used Index of Consumer Sentiment (ICS). Two main issues arise from the success of the ICS, as opposed to the failure of the survey programs presented throughout the paper.

##### *The ICS as a “third way”*

The history presented throughout this paper is intertwined with that of the Surveys of Consumer Attitudes (SCAs) conducted by the SRC since 1951 under the auspices of private institutions like the Ford Foundation<sup>19</sup>. Unlike the SCF, the SCAs were straightforwardly conceived as tools for forecasting future economic developments, with the idea that consumers, like businessmen, were “subject to ‘waves’ of optimism and pessimism” (Mueller, 1963, p. 899). The SCAs were initially used for constructing the “Index of Consumer Attitudes” (ICA), first published in 1954. The ICA turned into the ICS during the 1960s (Curtin, 1983), which represented an alternative to

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<sup>19</sup> See Mueller (1963), Curtin (1982, 1983, 2004), Dominitz and Manski (2003) and Juster (2004) for accounts of SCAs and their use for constructing the ICS.

both the study of the “clusters of attitudes” that characterized the SCF, and the analysis of intentions and expectations (SCBI and SCBE) as directly informing about future purchase trends. Unlike the observations obtained with the other survey programs, the Indexes were conceived as summaries of a few attitudinal questions that were supposed to affect the “marginal buyer” (i.e. not all buyers) of durable goods (Mueller, 1963). As noted by Mueller, besides appropriately accounting for “*fluctuations* in durable goods sales”, they also revealed the inconsistency of the “buying intentions approach” (Mueller, 1963, p. 901):

shifts in opinions and perceptions among consumers – such factors as concern about unemployment, cold war worries, satisfaction with prices – may induce “autonomous” shifts in consumer demand [...]. Consumer buying intentions appear to make a net contribution to the forecast in some of the regression equations examined, but these are largely equations not including the Attitude Index. When attitudes are also taken into account, the predictive performance of buying intentions is not consistent from one test to another. (Mueller, 1963, p. 916)

#### *The SCF as composing part of Katona’s behavioral economics*

However, consequent with the development of his program of behavioral economics, Katona “believed that the use of the Index alone had limitations, since the surveys yield[ed] much more information than what was summarized in the Index” (Curtin, 1983, p. 507). As noted throughout this essay, Katona made a clear distinction of “understanding” vs. “predicting” demand fluctuations, and he believed that “additional information was necessary for a complete understanding of the movements in the overall Index and its implications on spending behavior

(*ibid.*). Katona considered the ICS as being just part of a program the purpose of which was “not only to find out what [would] happen to discretionary demand, but also to find out *why*” (Katona, 1967, p. 13). In Curtin’s terms, to “place the entire empirical focus on predictive tests would ignore the importance Katona placed on the explanation and understanding of economic behavior” (Curtin, 1983, p. 508).

For Katona, the “major task” of behavioral economics was the analysis of the “reasons for observed changes” in demand (Katona, 1967, p. 13). This was a fundamental factor in the design of the SCF, and Katona considered that what both policy makers and the public opinion needed were not just the ICS prospects, but also knowledge about the underlying forces explaining “large or small changes in the one or the other direction” (*ibid.*). Katona maintained this position throughout his career as evidenced in *Essays on Behavioral Economics* (1980), his last academic contribution. It is ironic that despite the effort invested in advancing the program, Katona’s behavioral economics was overshadowed by the use of the ICS, which became “one of the most closely watched indicators of future economic trends” (Curtin, 2004, p. 136).

The lag in acceptance may be due to the stubbornness of economists; I prefer to attribute it to the originality of George’s approach, which required a real restructuring of thought – a genuine paradigm shift – before it could begin to be assimilated (Simon, 1979, p. 12).

This quote by H. Simon summarizes the difficulty met by Katona’s project. Unlike the use of indexes of consumer sentiment, the understanding of Katona’s behavioral economics required knowledge about Gestalt principles of teaching and learning by understanding.

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