

SOCIAL INDICATORS AND POLICYMAKING  
Some Comments on Social Indicators 1973

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Social Indicators 1973 is a first effort of limited purpose -- the first volume of its kind to be published by the Federal Government. Quite naturally, it is open to criticism -- but any praise, condemnation, evaluation, or criticism should remember this firstness, and thus be offered in a positive nature aimed at improving Social Indicators 1976. These remarks are intended to be taken in that light. To paraphrase Marc Antony, I come to praise indicators, not to bury them.

Chinitz has said that "the demand for instant wisdom where there is monumental ignorance is infinitely elastic".(1) In addition to seeming to respond to such a demand, Social Indicators 1973, especially in a policymaking sense, seems more of an overview of some prior social scene, rather than an indicator of actionable areas as one might expect from the title. Who was the expected audience? What was the expected purpose of the volume? Would OMB/SPD have been better advised to be less pretentious, or less ambitious, in putting out this volume which could be expected to be a definitive chronicling of the social status of the nation? Can one realistically produce a set of indicators or summary information measures, that are so universale that they can serve all audiences and all purposes simultaneously? The volume seems to have been shaped by data collectors and data presenters, rather than by researchers or policy analysts. This may be due partly to an intention to rely solely on available data. Since a social indicator can be constructed only if one knows how to construct it and if the data needed for its construction exist, many desirable indicators simply are not available.

#### Background

Social Indicators 1973 finally appeared in February 1974 but its history can be traced back at least to 1969 testimony by the then Bureau of the Budget that they were in the process of developing "a publication on social statistics" which would "contain regular series on the most significant" social topics. It would also serve "as a clearinghouse for the results of individual studies that should provide insights into social problems as well as some possible solutions."  
". . . The first task is to organize what is available . . . over the years, as statistical gaps are identified, new statistical series will be developed and initiated to fill the gaps".(2) In a recent paper, Dan Tunstall stated that Social Indicators 1973 "is primarily a book of statistics. The statistics were chosen to be indicators of major national social concerns and to show change in social conditions over time. The focus of the publication is the American people. . . . Given a framework of national social concerns we went about the task of selecting one or more indicators

for each concern. Social indicators are defined as statistical measures of the most important aspect of a concern."(3) Elsewhere in the paper, he went on to say that he interpreted "social reporting to mean something quite different. I defined social reporting as a process of informing the public about the conditions and trends of its society."

These two statements seem to fit the volume which has appeared in that the term "reporting," or the term "inform," seems to be much more applicable to this volume than does the term "indicators." Indicators, if they are to serve policymakers should, at a minimum, help delimit problems and problem areas and suggest action potential. If one raises the question: Is anything actionable from this volume or are the data of the volume only indicative of the social scene?, one has to state the latter to be the case. Its information areas are worthy of attention, but there is no indication derivable from the volume of any action or intervention strategies. Although this can be taken as a criticism, the fact that the volume is more information-oriented seems entirely consistent with the two quotations mentioned earlier.

In terms of its informational usage, approximately half of the first printing run of 10,000 were distributed to persons involved in policy formulation and execution such as members of Congress, senior committee staffs, agency heads, select assistant secretaries, Governors, state budget officers, mayors, etc. And, indeed, there have been stories of at least a few recipients of the volume having received some informational insights.

#### Definitions of Indicators

Although many persons feel that the use of the term indicators in the title of this volume is inappropriate, there is a major dilemma in substantiating that position. Both the term indicators and the term policy have a major commonality in that all of us know what each term means, but none of us can commit to writing a definition which will be universally acceptable.

The definitions of "indicator" put forth to date include that presented by Bauer in the 1966 volume he edited which suggested that social indicators are "statistics, statistical series, and all other forms of evidence that enable us to assess where we stand and are going with respect to our values and goals and to evaluate specific programs and determine their impact."(4) Biderman in an article in the same volume described his focus as being "quantitative data that serve as indexes to socially important conditions of society."(5) Another definition was put forth by Sheldon and Moore in 1968 -- "Such indicators would give a reading both on the current state of some segment of the social universe and on past and future trends,

whether progressive or regressive, according to some normative criteria."(6) In 1969 Towards a Social Report included the statement that "a social indicator, as the term is used here, may be defined to be a statistic of direct normative interest which facilitates concise, comprehensive and balanced judgments about the condition of major aspects of society. It is in all cases a direct measure of welfare and is subject to the interpretation that, if it changes in the right direction, while other things remain equal, things have gotten better, or people are better off. Thus, statistics on the number of doctors or policemen cannot be social indicators, whereas figures on health or crime rates could be."(7) In 1972, Campbell and Converse saw two distinctive emphases associated with the definition of social indicators. "First, the term is intended to convey a stress on descriptive measurement which is much more dynamic than most social science research has been to date. . . . Second, and perhaps more noticeable, the call to arms represented by the social indicator movement lays a heavy stress on policy relevance."(8) In the volume under discussion, the authors say that their choice of indicators is based upon two criteria: "That the indicators measure individual and family (rather than institutional or governmental) well-being and that they measure end products of, rather than inputs into, social systems. In education, for example, the indicators were selected to measure individual achievement and attainment rather than inputs, such as school budgets, classroom construction, and the number of teachers."(9)

But every one of these definitions can be criticized in some manner or other. Use of the term normative, for instance, presents problems in that the normative of today may not be normative of tomorrow, or the normative of one policymaker or branch may not be the normative of others charged with action in the same problem area.

Whatever definition one chooses or might eventually evolve to lend more order to the indicator field, one has to agree that social indicators are constructs with a theory behind their choice or construction. The theory may be explicit and formally expounded as part of the discussion or presentation of the indicators, or it may be implicit in the minds of those who have selected the chosen indicators for whatever purposes they may be trying to advance. Indicators may be a simple presentation of data or they may be synthetic in that they are constructed from several series. They must have a sense of time and be based on observations, usually quantitative, whether they be objective in purporting to show what a position is or how it is changing or whether they be subjective in the sense of purporting to show how the objective is regarded by the community in toto or in constituent groups. Social indicators have to relate to some area of social concern and have to be value- or action- or theory-oriented--at least in the eyes of those putting forth the indicator because even those espousing a purpose of satisfying curiosity or providing understanding undoubtedly have some end objective in mind, and thus some potential policy.

## Role of Indicators

In commenting on policy implications or policy considerations of Social Indicators 1973, I think one has to face not only the question of what indicators are, but also the question of what the role of indicators should be. One view is that "The major purpose of social indicators is to affect the general image of society and the fund of knowledge about social changes intelligent people have. If the thousands of actors whose work on interactions aggregate to 'social policy' know what society is all about and if the publics to whom they relate share these understandings of what is important and why it is important, policy will improve."(10) This is somewhat different from the view that it is "meaningless to speak of a measure or an observation of condition, that is an indicator, which is value- or action- or theory-free."(11) That would seem to abide with the feeling that the role of indicators should be just that -- to indicate problems and interrelationships or even non-problems, assuming that there is potential to change the conditions which have produced that which is being indicated.

Springer specifies "two essential components of information: (1) specific items of data, and (2) inference structures that order these data items in some model of the relationships between goals and means" and further that "the characteristics of the demand for indicators -- the perspectives, the needs, and interests of our presumed clients -- should guide our work."(12) This seems to tie the two previous positions at least closer together, for even those advocating indicators which serve solely a curiosity or understanding function require a theoretical or interpretational structure for the selection of a specific element or subset of the data series and constructs, actually or potentially available. And whatever the theory or action-motivation involved on the part of the producers or conveyers of summary information or indicators, they ignore at their peril the fact that a consumer of that selective bit of information will have his or her own attitudes, preconceptions, understandings, biases, etc. which have derived from personal knowledge and experience.

Economic indicators, which those in the other social sciences are attempting to imitate, have uses beyond the direct policy or direct action uses in that they are seen not just by policymakers or the Council of Economic Advisors but are released to the press and the public. Thus there are many persons outside of direct policy roles who can make their own attempts to suggest or impact on policy. Indeed "a social report or a set of social indicators to tie the two previous positions at least closer two ways. First, it gives social problems more visibility and thus makes possible more informed judgments about national priorities. Second, by providing insight into how different measures of national well-being are changing, it may ultimately make possible a better evaluation of what public programs are accomplishing."(13) This role would also serve well a dictum put forth by George Washington. applicable to policymakers even today, which says that the people must feel before they will see.

Social indicators thus seem to have roles in serving the needs of curiosity, of understanding, and of action or any combination of them. And, one can tie all three together by noting that curiosity and the wish for understanding frequently arise from a desire for action.

### Research-Policy Interrelations

An aspect of the research-policy interaction which plagues the researcher is the problem of having findings considered. A classic case of positive and significant research findings (which could have been in the form of indicators) being ignored, is the inconsistency of interpretation of school-enrollment and teaching manpower data in the late 60's. All elementary school enrollees for the next five or six years were then alive, and projections showed an upcoming decline in enrollment; but despite the obvious implication of a decreasing need for teachers, policy encouraged the expansion of teacher training. By 1972 the supply of newly trained elementary and secondary school teachers was running twice what was needed -- up from about an even match in 1968. One aspect of the problem was that although this trend was very evident at the national level, most of the action potential is at the state and local level -- but the state population estimates and projections of the Census Bureau contained no age detail; there was no mid-decade census as a reference point; and the 1960 census data were too old to show the trend.

Another case in point is the Big Steel strike of the late 40's where a major issue was pensions. Big Steel rejected the idea out of hand rather than admit to an absence of information on the age structure of their work force, and thus the cost impact of yielding on the pension issue. Just over a year ago at a meeting of regional policymakers and planners a member of a state legislature mentioned the passage of a bill to provide tax breaks for the elderly residents of their state even though they were unsure of the financial impact -- although enthusiastic, they passed the legislation on faith, for they did not know how or where to ask about the number of elderly the state then had or were expected to have in future years.

There is more to having indicators, or information, or data than just creating them. They have to be communicated, as Social Indicators 1973 does so well. Statisticians need to be more alert to this need, but at least an equal portion of the problem lies with those who complain about the absence of data, or those who bemoan the supposedly excessive expenditures on data acquisition which then can not be used to answer any policy question. Both sides of a dialogue have to be aware of the interests, needs, and problems of the other if communication is to be effective.

Can we bridge the communication gap between the statistician or researcher and the policymaker? On one side of the gulf is the social scientist who is concerned with studying the existence of a problem and its causal and interactive aspects but who adheres to the traditional role of the academician by not including policy commentary, and not

proposing remedies or evaluating the impact of alternate remedies. On the other side of the communications gap is the policymaker who is concerned more with action for a politically live problem area (possibly more so than with effective action actually to attack the real problem); or who may be concerned with producing change or improvement. (Or, as has been commented, policymakers are "concerned with changing society rather than understanding it." (14)) If social scientists or statisticians are to get involved with applied or policy research, there would appear to be a need to change some of the ground rules so that, at a minimum, questions can be properly posed and answers can have proper relevance (or the Type III error: the right answer to the wrong question can be avoided).

Policy research is different from discipline research in that:

- o decision deadlines dictating that partial information at decision time is more useful than complete information two days later;
- o elegance is less important than correctness of the predictions or results;
- o redundancy is important; and
- o the objectives are not a substantial contribution to existing knowledge but the modification of social policy.

As contrasted to disciplinary research, in policy research the problem should be formulated outside the discipline. As stated by Lord Rothschild, Head of the Central Policy Review Staff of the British Government:

"The research worker should not formulate the objective, although he can and should help. The research worker should not decide that the objective requires research for its achievement. He should not decide that the research should be done, assuming it is necessary. He should not decide when to stop. Nor should he decide to change the objective in mid-stream, however desirable it may seem to him to do so." (15)

As true as this is or should be, there still remain some of the traditional roles of the researcher. Coleman defined the split between potential forensic activity and detached objectivity by stating, as a principle of policy research:

"Those stages of policy research that lie in the world of action, formulation of the research problem, posing conditions for communication of the research results back into the world of action, and making policy recommendations based on the research results, should be governed by the investigator's personal values and appropriately include advocacy, though stages which lie within the disciplinary world, execution of the research and statement of the research results, should

be governed by disciplinary values and do not appropriately include advocacy."

I admit to being very mindful of the dictum that the role of statistics is to produce information, not to make decisions, and the concluding statement in Towards a Social Report says "that social reporting cannot make the hard choices the nation must make any easier, but ultimately it can help to insure that they are not made in ignorance of the nation's needs." (17) I am also aware of the recent statement of President Ford that he believes that truth is the glue that holds the government together, but it seems to me that policy-makers have the right and responsibility to argue or to ask whose truth; to ask who determines which is the real truth and how much reliance is to be placed on competing versions or values.

As to the role of the researcher, Nassau Williams Senior wrote in 1836 that "the business of a political economist is like a jurymen, to give deliverance true according to the evidence and allow neither sympathy with indigence, nor disgust at profusion or at avarice, neither reverence for existing institutions nor detestation of existing abuses, neither love of popularity nor of paradox nor of system, to deter him of stating what he believes to be the facts or from drawing from those facts what appear to him to be legitimate conclusions. To decide in each case how far these conclusions are to be acted upon belongs to the art of government." (18)

Although the realities of internal and external politics may dictate that a report such as Social Indicators 1973 be as bland as it is, I would prefer to have seen alternative interpretations or evaluations included in the volume for the reader or policymaker to take under advisement. I happen to agree with those who are attempting to redefine the proper role of the researcher, especially the academic researcher to a forensic structure which permits or encourages advocacy. My beliefs here are best summarized in the words of Rupert Vance, who said, "thus, in spite of his modesty, the social scientist who uncovers and analyzes social facts will be asked, 'what do you recommend?' As an honest man who values his own integrity, as a citizen who admits of public duty, and as an expert in whose training society has made an investment, the social scientist, after admitting his reservations of ignorance and bias, must indicate his choices for policy, whatever they may be worth. Nor should he be overwhelmed by this assumption of high responsibility, for he may rest assured that even his facts will be discounted by practical men of affairs as impossible theory, while his cautious recommendations will be regarded as partisan statements by every faction whose interest they oppose. But if his facts are facts and still disregarded, he may take what consolation he can to himself in the knowledge that what they will also count in the long run to come." (19)

#### SOCIAL INDICATORS 1973

Turning more specifically to Social Indicators 1973, the extreme neutrality of the volume--except

for the underlying assumptions implicit in the given data series and in their selection for inclusion in the volume--is bothersome, as is the absence of commentary or interpretation. People in general and policymakers in particular are expected to know what economic indicators mean, and eventually social indicators may have the same statement made of them. It is one thing to present trends which this volume does magnificently with charts and figures; and another to have them interpreted or perceived as having any relevance to problems facing decisionmakers. Failure in this sense may well derive naturally from the political realities with which the Statistical Policy Division staff had to live.

Additionally, interpretations of social data, trends, or indicators are always or continually befogged by ambiguity and the differences in the interpreter's background, capability, responsibility, or interests. To indicate possible methods of interpreting indicators does not require policy commentary, nor should it. But this should not be an excuse for avoiding commentary, for as Parke and Sheldon state: "if the careful documentation of methodology is the primary responsibility of the statistician, surely a close runner-up is the responsibility to utilize accepted analytical techniques and methods of data presentation which will enable the data to tell the story that will not be told in the absence of analysis." (20)

#### Use and Usefulness

Nathan Caplan, from a study of the use of scientific information by government executives (21), concludes that five out of ten Federal officials fall into a low-usage group and thus represent a sizable challenge to the producers of scientific information. Further, while such officials are eager for more information, they may not be able to assimilate it effectively. If one is to reach the low-usage half at all, and to help the other half of decisionmakers, there needs to be some discussion of either how to interpret the indicators or of what alternate interpretations might mean. To introduce interpretive analysis, possible or suggested methods of usage, and alternate implications for the future, one option might be a companion volume or quarterly journal--if policy implications are to be avoided in the basic volume. It could also report on actual uses of the information presented in volumes such as Social Indicators 1973.

#### Statistical Considerations

Another reason for advocating some commentary is that there should have been a fuller treatment of what is and what is not measured by any given indicator, and also the possible relevance to various sets of consumers of the information contained in the indicator. This volume must be criticized for the absence of measures of accuracy of the reported indicators. If policy makers are to use indicators effectively, the sources or structure of error in indicators must be discussed because the assessment of the accuracy of indicators has to be an important part of decision making.

Indicators, to be useful in a policy-making sense, have to address the future. That is, those who present indicators, for whatever their purpose, should also present the future or alternate futures under alternative policy assumptions. Policymaking is aimed at changing a trend and altering the future, and thus, to be really useful, indicators must tell not only where we are today as a result of policy but also where we might go as a result of policy changes. Both positions in time may involve projections and estimates, especially if the data base on which the social indicators are based is one or two or more years old. Policymaking by the Legislative Branch, with the larger time frame required to enact new laws, especially requires knowledge of the dimensions of the problem without action as well as the dimensions under possible aspects of the proposed legislations.

The question of currency of background information poses a special challenge for social indicators, especially uses for policymaking purposes where the user has to look to the future. This issue underlines the need for a quinquennial census--it is hard to imagine the usefulness of Social Indicators 1976 which will have to use the 1970 decennial census as its primary reference for major sections of the report, let alone Social Indicators 1980.

In summary I feel the presentation of interesting summary measures (which a good many of these are) without estimates of error, without the means or manners of alternative interpretations, without forecasts of alternative futures and the conditions and assumptions implicit in these forecasts, produces a volume of limited usefulness to policymakers.

#### Disaggregation

Towards a Social Report states "if the nation is to be able to do better social reporting in the future and do justice to all the problems that have not been treated here, it will need a wide variety of information that is not available now. It will need not only statistics on additional aspects of the condition of the nation as a whole, but also information on different groups of Americans. It will need more data on the aged, on youth, and on women, as well as on ethnic minorities. It will need information not only on objective conditions but also on how different groups of Americans perceive conditions in which they find themselves." (23) But those wanting indicators to be used for more than curiosity purposes need not only national data but also regional data and disaggregations beyond the age, race, and sex breakdowns used in Social Indicators 1973. If social indicators are to be used for social policy purposes, there must be actionable data for comparable areas. Any political jurisdiction contemplating action needs the ability to compare current conditions of life with standards and goals. Indicators need to indicate the status of population sub-groups in an ethnic or socio-economic sense and/or in a geographic sense. As has been demonstrated in the past, national rates for unemployment can be at acceptable levels, while local areas or specific sub-groups may have a serious problem--e.g., such

as black teenagers or a particular occupation group. Finally, if the New Federalism concept continues or expands, it is important that there be comparable information at all the appropriate levels of policy action, especially for the states and cities.

In making this argument, one must concede, however, that this might not be the role of a national volume such as Social Indicators 1973. This does not lessen the need to insure that there is a potential for sub-groups of the population to have their status indicated in a similar manner. When information is available only at a national level and when the policy arena is at a lower political level, the measure could be a highly misleading "indicator", and, if not excluded, included to point out the need for additional detail. One way to produce the sub-national detail is exemplified by the national assessment of educational progress. While the program aims primarily at national assessment, some of the resources are used to provide technical assistance to states and counties to use the national model and technology to conduct their own assessments. Select states and other school jurisdictions have been able to assign their own priorities to assessment measures, and thus been permitted their own interpretation of the data.

#### Policy Areas

Social Indicators 1973, from its introduction, is as a book of statistics and describes eight major social areas, or "broad areas of interest or social concerns." The taxonomy used represents recognized areas of social concern but for policymaking there is no sense of perception of any problem in these areas; nor is there any parallel structure of policy mechanisms from which one can adduce concerns, an agenda, or the needs of policy and data.

In contrast to the discipline-oriented taxonomy used, one could have hoped for a problem-oriented taxonomy such as Kermit Gordon's listing of the problems facing this country in the next decade: inflation, performance of the public sector, distributive equality, and the inter-related questions of environment, energy, resource depletion, and economic growth. (23) Should not a volume of this ambition and under OMB sponsorship have been more problem-oriented? For instance, the volume does not include any data dealing with the social or economic consequences of inflation. It could have explored, for instance, the consequences of inflation on diet patterns, consumption patterns, or on housing expenditures as a percentage of disposable income.

#### OMB's Role

The question must be raised as to the role of an indicator effort within the Office of Management and Budget. One can argue that OMB has an overall management responsibility in the federal government as well as a coordinative responsibility in multi-agency areas of interest, and thus is an appropriate home for an effort such as Social Indicators 1973 and the promised Social Indicators 1976. In looking to the future, one hopes that

they can overcome the dual problems of (1) data which are, to be charitable, somewhat out of date at the time of presentation, and (2) the multi-year gaps between the production of this series of volumes. Many of the data, as has been mentioned earlier, were three to four years out of data by the time the volume appeared.

It would be interesting to know OMB's perspectives on why it was producing this volume--was it to produce assistive measures for the policy mechanisms of OMB, the Executive Office of the President, or the Executive Branch in general? Or was it just a volume of some interest to an ill-defined someone which was published with an attractive cover? Might there be a special analysis of the Federal Budget which ties social indicators to a budget cross-cut?

Whatever the motive, why was it not directly supported at an adequate level in the past? To produce Social Indicators 1973 most of the resources were borrowed from other agencies, rather than supported directly. Similarly, if Social Indicators 1976 is to appear, support for that volume will have to be obtained from outside of the Statistical Policy Division of OMB. Since a social audit crosses the interests of all Federal government departments, one has to ask what can be done to get direct support, sufficient in level to permit more timely and more useful volumes?

#### CONCLUSION

As John Dewey once pointed out, the ideal to be sought, is not a planned society but a continuously planning society. In such a society the various groups and individuals undergo a continual process of adjustment and readjustment, and without this continual adjusting and readjusting, the balance that produces integration and equilibrium will not be achieved. In a continually planning society there is a definite role for the production of summary information measures, or indicators, which either (a) represent qualitative social change, (b) measure public policies and programs for evaluative purposes, or (c) provide data for judging the effectiveness of the political process. Social Indicators 1973, unfortunately, attempts none of these. It thus contributes to a major problem facing the indicator movement (and indeed the whole of social sciences) in their attempts to impact on policymaking processes: the potential is well indicated, but delivery on the promise is lagging. The integration of indicators and policymaking must go forth, although neither can, nor should, dictate to the other its total content or rationale for existence. Policymaking is an art requiring "the compromise of conflicting claims or rival parties and groups in the interest of the total welfare" (24) and must not be totally dependant on any given set of quantitative information. On the other hand, indicators and their supporting data system have more uses than mere support of the efforts of a given set of policymakers at a given point in time.

In closing, I must agree with Dan Tunstall's comments in his June 1974 paper, that there is a need, not limited to OMB or the government, to inform Americans about the State of the Nation--

not in terms of indicators selected to support administration policies, past, present, and future, but in terms of "social reporting that is as practical as the early censuses and as relevant to meeting national needs as economic reporting became after the depression." (25) The production of social information, its dissemination, and its use by individual citizens, by policymakers, and by the media which bridge the two groups should be an important part of any reshaping of the federal or any data system. If this volume can help trigger such considerations for expansion of the social information system and increased use and usefulness of its content, then Social Indicators 1973 will have more than justified its publication.

#### Footnotes

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