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APPENDIX I: PART A
USES OF WEALTH ESTIMATES

USES OF WEALTH ESTIMATES

As background for the general discussion on uses of wealth estimates in chapter 2, the Wealth Study staff requested several economists connected with organizations which are among the major current or prospective users of wealth estimates to indicate their interest in this type of economic statistics. Specifically, the economists were asked to comment either briefly or in some detail on the following points:

(1) specific uses your organization makes of existing wealth estimates;

(2) potential uses you would have if the wealth estimates were improved and elaborated;

(3) other uses you consider to be of importance; and

(4) the directions in which you think the improvements and elaborations should go—as toward greater accuracy of aggregates; more detail on type of asset, industry, or region, etc.

The replies are reproduced in this appendix as a supplement to the more abstract treatment in chapter 2. It should be understood that the views expressed are those of the individuals and do not necessarily reflect the views of the organizations with which they are connected. Further, their response to this inquiry should in no way be construed as constituting an endorsement of the proposals contained in the report of the Wealth Inventory Planning Study. Nonetheless, they will be of considerable interest and value to those who are working toward better wealth data.

It will be noted that replies have been obtained from persons connected with one or more organizations in each of the major sectors of the economy: business, labor, government, and private nonprofit research organizations. They are presented in that order.

1. STATEMENT BY EMERSON P. SCHMIDT, ECONOMIC CONSULTANT, CHAMBER OF COMMERCE OF THE UNITED STATES OF AMERICA

Only actual experience with periodic wealth inventories would reveal the inevitable numerous uses of such data.

The Chamber of Commerce of the United States issues materials from time to time including estimates of investment per job. It has made several such surveys. It receives many requests for such information. While fairly precise information is available for some industries, overall figures are inadequate and it would be useful to have accurate information, say on a quinquennial basis.

Producers or users of such data generally fail to indicate whether original cost, depreciated original cost, or current replacement cost, is being quoted and used. Since business planning is by definition forward looking, it would be particularly helpful to have detailed data on investment per job in terms of current costs. Industry (or possibly product) breakdowns as well as regional data would be of interest to the national chamber and its members.

Because of the enormous changes in technology and the nature of capital equipment, dollar inventory data should be supplemented by data on performance or capacity. The run-up in BLS reported prices has in numerous cases been fully offset by the rise in capacity. If a time series of wealth estimates were to be issued this problem would have to be engaged.

The Chamber of Commerce of the United States also receives many requests for information on the relative importance of small business, usually without precise definition as to what is small. More up-to-date wealth estimates of investment from time to time in small business assets would be useful.

In the study of debt and in the making of loans, information on wealth holdings is quite important. Here again mere historical costs or depreciated costs would be of less value than current replacement costs.

In the field of property taxation there are enormous variations from State to State and within States as to the methods of tax assessments. Part of the variation proceeds from variations in laws but much of the variation is due to the human factor. It would be hard, perhaps impossible, to find an area in which hunch, politics, and incompetence is as rampant as in this area. This could be greatly illuminated by a periodic wealth inventory based on objective methodology. A comprehensive estimate of wealth inventories across the country, but broken down by States, counties, etc., could be highly useful to students in the social sciences, legislators and tax administrators.

In the study of concentration in the antitrust sense, better information on wealth inventories might be useful. The problem of avoiding disclosure would have to be faced. Data on concentration have been subjected to great abuse, however, and it might be that more data would add to the volume of published material without adding to human insight or understanding!

For domestic reasons as well as international, it would be helpful to have better information on the age composition of productive assets. For example, what proportion of equipment is over 40 years old? Over 30 years old? Over 20 years old? A quinquennial census of this type would be most helpful for analysis and possibly for public policy purposes.

If the task of making a total wealth inventory estimate seems too formidable, possibly a beginning could be made by starting with key sections of the economy. Sample approaches should not be overlooked.

Based on previous experience with other statistical materials and series it is a fair assumption that such statistics as might be developed by an objective and scientific periodic wealth inventory would find innumerable uses, many of which are not now foreseen but would emerge as the data became more widely available, more refined, more reliable and available in greater breakdown by industry, by region, State and perhaps even county, etc. That is, even if the possible uses of wealth inventory data now foreseen may seem limited, this is an inadequate measure of their probably future value and usefulness.

2. STATEMENT BY GEORGE TERBORGH, RESEARCH DIRECTOR, MACHINERY & ALLIED PRODUCTS INSTITUTES

Let me say first of all that our field is primarily business capital goods, and that our interest lies particularly in this area. Let me suggest a few possibilities here:

1. We should very much like to have reliable figures, preferably for several periods or points in time, on the size of the gross stock of business plant and equipment, broken down at least into these two categories, and further, if possible, by major industrial divisions.

2. These capital stock series should be available after depreciation as well as gross.

3. We should appreciate anything that can be developed on the original-service-life composition of the gross stocks or, lacking this, at least average service lives by categories.

4. Similarly, we should appreciate also data on the attained-age composition, again with averages as a minimum.

3. STATEMENT BY FRANK L. FERNBACH, AMERICAN FEDERATION OF LABOR AND CONGRESS OF INDUSTRIAL ORGANIZATIONS

I have discussed your letter and its enclosure with several of my colleagues, and we find ourselves very much interested in what this kind of study might turn up. We can anticipate several areas in which more effective data would be helpful to use in our work.

In the first place, we hope that better information about real capital stock would tell us more about the productivity of capital and the degree to which it is increasing over time. This type of information is highly significant for those who are concerned with the interrelationships of wages, profits, prices, depreciation set-asides and requirements for capital formation generally.

Furthermore, a study of wealth which includes real capital stock estimates would give us more precise information about the amount of capital required per worker in various industries and significant changes over time. Perhaps it would also give us more precise information about the age of our capital stock. Moreover, the study might also provide useful information about the amount of automated equipment in relation to total capital stock. We realize the difficulty of distinguishing between automated and nonautomated equipment in general. However, this difficulty could be overcome, perhaps, by focusing on easily distinguishable types of automated equipment such as computers, numerically controlled machines and transfer lines. We note that some companies are beginning to treat their computer programs as capital expenditures. Such programs, embodied in tapes, should certainly be regarded as a form of tangible wealth, and the possibility of counting them as such should also be explored.

In addition, if the proposed study would increase our knowledge about the productive tangible asset holdings of government at various levels, this too would be of great value to those concerned with budgetary and fiscal problems.

Finally, further information which might be obtained from the study about the wealth holdings of individuals would add significantly to our knowledge in an important area in which Lampman and

others are now pioneering. We are tremendously interested in knowing much more about the magnitude of personal wealth holding, its distribution and changes over time.

All of the areas indicated above involve matters of specific interest to the AFL-CIO. In addition, there doubtless would be many other uses of importance to us to which the findings of the proposed Wealth Inventory Study might be put by us.

4. STATEMENT BY JOHN P. LEWIS, COUNCIL OF ECONOMIC ADVISERS

The development of a comprehensive, reasonably detailed, set of national wealth or national balance sheet estimates is long overdue in the evolution of American social accounting.

Just as a matter of completeness or symmetry, it is strange in a country with as sophisticated and elaborate economic statistics as the United States not to have a set of stock data that are comparable to our highly developed national income accounting system.

But the main case for comprehensive, adequately detailed asset data, of course, lies in the concrete uses that can be made of them. Such uses are many and at least as plentiful for private analysts as public. But from the viewpoint of policy-oriented Government economic analysis I would cite by way of illustration uses of comprehensive national wealth data in the following important areas of economic policy and analysis:

1. *Promoting economic growth*

The study of gross and net capital-output relationships by industries and sectors for such purposes as—

Judging the investment share of gross national product that would be consistent with sustained full employment growth.

Analyzing longer run trends in capital productivity and labor productivity.

Improving our estimates of potential gross national product at full utilization of our productive capacity.

2. *Business conditions forecasting*

The forecasting of expenditures in all of those GNP sectors—including consumer durables, housing, and business fixed investment as well as inventory investment—where there are important stock-flow relationships.

Broadening and improving our measures of capacity utilization by industries and sectors not only to aid in analyzing the current level and trend of economic activity, but in measuring the cyclical impact of variations in utilization on labor productivity and hence labor requirements.

3. *Price-wage policies*

Balance sheet data on fixed assets and total assets by industries together with flow data can be used to—

Estimate the capital requirements and the capital financing requirements of different industries.

Evaluate implications of industry trends in returns to capital for wage-price norms (such as the Johnson administration's wage-price guideposts).

Measures of capacity utilization in different industries are also needed to—

Anticipate potential bottleneck areas where price pressure might develop.

Develop more meaningful estimates of industry cost-profit trends by stripping away the effects of fluctuations in capacity utilization on unit labor costs and rates of return.

4. *Public sector needs*

Detailed knowledge of Federal, State, and local capital stocks used in the multitude of public services these governments perform is necessary in order to—

Measure the efficiency with which services are being provided.

Develop projections of future capital requirements in the public sector.

5. *Problems of equity*

Improved estimates of the asset holdings of individual and family units are a much needed adjunct to income-size classification in evaluating the impact of overall fiscal and monetary policies, and in designing policies to eradicate poverty.

In order to further these and a good many other kinds of analysis I hope that the statistical development this study suggests will be vigorously pursued.

5. STATEMENT BY JACK ALTERMAN, CHIEF, OFFICE OF ECONOMIC GROWTH, BUREAU OF LABOR STATISTICS

The needs of the Interagency Growth Project for wealth estimates may be summarized as follows:

1. Stock of fixed plant and equipment, by industry, are to be used in deriving capital-output ratios.

2. The stock estimates need to be developed on both a gross and net basis, and also on a historical, constant, and current valuation basis. The constant dollar figures can be used in deriving alternative capital output ratios while the current dollar stock estimates would be used in the projections and analyses of distributive shares and returns to property. The net and gross figures are needed to assure consistency with the depreciation estimates.

3. The net capital stock and related depreciation figures should be shown with separate adjustments to exclude the effect of changes in depreciation methods.

4. The capital stock estimates should be further distributed between plant and equipment. The equipment estimates should then be distributed by type of equipment, i.e., by producing industry in order to develop a capital stock matrix (by producing and consuming industry).

5. The detailed plant and equipment estimates should also be distributed by age in order to provide the basis for developing depreciation estimates, and estimates of discards as part of a perpetual inventory approach. This would also be used in evaluating the status of technology in terms of the approach used by Dr. Ann Carter (Harvard Economic Research Project), which associates age distribution of capital stock with differential inputs of labor and materials and differential capital-output ratios.

6. Inventory data should be distributed by holding and producing industry for inventory of materials, and by holding industry for goods in process and finished inventories.

6. STATEMENT BY HERBERT STEIN, RESEARCH DIRECTOR, COMMITTEE FOR ECONOMIC DEVELOPMENT

The research staff of the Committee for Economic Development (CED) has followed with great interest your exploratory work of the wealth study toward the development of wealth estimates for the U.S. economy.

Since its formation over 20 years ago, the CED has been devoting its energies to economic research, with a view to developing understanding of major national economic policy issues, so that informed timely programs of action can be initiated and carried through to the benefit of the people and the Nation. It is in this context that we consider the basic research effort in the field of wealth statistics as promising a new dimension for better understanding the working of our economic system. In combination with the national income statistics, the estimates of wealth will hopefully provide an integrated set of balance sheet and income accounts, which should make possible a new major breakthrough in establishing vital relationships governing the efficient development of our economy.

While we are, of course, vitally interested in information which helps us understand and explain past and present events, the orientation of the work of CED is toward statements on national policy aimed at improving future performance. When I say this, what I have in mind is to stress the need for up-to-date statistics on the performance of the national economy. Hence, we are primarily interested in the global data rather than in the very detailed statistics, and we would urge attention to techniques which will provide such information on a relatively current basis. We recognize that this is still a dream and that before it becomes a reality much spadework, such as is being done by the Wealth Inventory Planning Study Group, must be carried through.

From what I have said, I think it is clear what our major interest is and what our major use of wealth estimates are and will be. I might just call to mind two of our recent statements, "Fiscal and Monetary Policy for High Employment" and "Reducing Taxes for Production and Growth." There is universal agreement among experts on fiscal, monetary, and tax policies that understanding of the relationship of such policies to the performance and growth of the economy would be vastly improved if we had at hand reasonably reliable information on stocks of wealth integrated with the well-established national income and expenditure information presently available to us.

7. STATEMENT BY JOEL DARMSTADTER, RESEARCH STAFF MEMBER, NATIONAL PLANNING ASSOCIATION

1. The immediate, practical, high-priority need, with respect to the National Planning Association long-range economic projections, is the development of a systematic series of private capital stocks—nonresidential structures and producer durables.

2. Such data are indispensable to the making of economic projections.

(a) They are necessary to the development of capital-output ratios which are crucial to the analysis and statistical measurement of economic growth.

(b) They are necessary to estimating prospective level of investment expenditures (both for expansion of capital stock and for withdrawal of obsolescent facilities), and thus have important implications for resource allocational questions, the adequacy of savings, and the role of financial intermediaries.

(c) They provide important clues as to the economy's rate of capacity utilization—hence, its actual operation relative to its potential, which in turn has a strong bearing on economic policy formulation.

(d) They are necessary to make estimates of nationwide depreciation of capital, hence to make estimates of net national product.

3. NPA's National Economic Projections Series has, since its inception in 1959, relied upon whatever estimates of capital stocks were available in order to furnish answers to the points raised above. But there is no question that these estimates are far from satisfactory. If in no other way, this is revealed by the fact that we have been compelled to shift from one capital stock series to another at least three or four times in each of the last 5 years. We have, at various times, used capital stock estimates prepared by the Machinery and Allied Products Institute (which, itself, illustrated its own uncertainty by a fundamental shift in its price-deflation practices a few years ago), the Council of Economic Advisers (Robert Solow), and most recently, the Office of Business Economics. A dramatic example of our uncertainty in this area can be gained by comparing the projected rate of expansion in capital stocks in the 1962 edition of NEPS with that in the 1963 edition. In the earlier case, the 10-year projection was 3.6 percent; in the more recent projection, 3.2 percent. This change was not one of judgment, but rather one arising from the more recent OBE series. Our notation on this change—no doubt unconvincing—ran as follows: the "analysis suggests that, in both historical and projected periods, we may have overstated capital expenditures to expand stocks, and understated capital expenditures serving to replace and modernize stocks. The somewhat additional weight, assigned in this year's report to the latter two factors, is reflected in the fact that, accompanying a somewhat slower rate of increase in capital stocks, the projected level of capital expenditures is essentially unchanged."

4. The unsettled state of capital stock measurement is further illustrated by the fact that in the Jaszi (et al.) article in the Survey of Current Business (November 1962), no less than five alternative estimates of gross stocks are given, depending on alternative assumptions about deflation and service lives; and there are eight alternative estimates of net (depreciated) stocks—the additional alternatives being the consequence of alternative depreciation procedures.

5. From these observations, and other considerations, we can sum up what we regard as needed improvements in capital stock measurement, as an aid to long-range economic projections:

(a) Better approximations of "economic" life than estimates of retirement based largely upon accounting for tax purposes. If possible, this should be a continuing rather than a "one point in time"

analysis. The fixed-life assumption, coupled with the cumulated expenditure procedure of the "perpetual inventory" method, has undoubtedly greatly distorted the long-term measurement of capital stocks.

(b) Some improvement, if possible, in price indexes—particularly in the construction-cost indexes used to measure growth of business plant. The adequacy of the producer-goods deflator, from the standpoint of understanding quality improvement (even when real cost increases are involved) has also been questioned, and might require a wholesale program to refine price index numbers. Of course, improvements are always possible everywhere. But in the case of capital stock measurement, the matter of deflation has critical importance.

(c) Of perhaps a lesser order of priority—but exceedingly important—further disaggregation of capital stock estimates by industry. This would be tremendously useful to our projections of industry outputs, employment, and productivity.

(d) Consideration to supplementing, or at least corroborating, the perpetual inventory method of capital measurement by census-type wealth inventories, which would also provide insight into businessmen's views of capacity conditions and preferences.

6. From the standpoint of NPA's PARM project, two comments may be added:

(a) The collection of wealth statistics on a company basis should be avoided insofar as possible. This basis effectively precludes disaggregation by region and area or resource point as required for emergency damage assessment purposes. The data should be collected on an establishment basis by permanent plant number.

(b) Assuming that wealth data are to be collected by a variety of statistical agencies, exploration is needed of the feasibility and methods of obtaining periodic statements of national wealth by means of a permanent roster, or data bank, in which all agencies would participate.

7. The significance of national wealth inventory statistics for the National Resource Evaluation Center (NREC), Office of Emergency Planning has been developed in a memorandum for Messrs. Green and Coker of OEP, excerpts from which follow. [See Statement 8.]

8. STATEMENT OF JOHN DEWITT NORTON, DEPUTY DIRECTOR, ECONOMIC PROGRAM CENTER, NATIONAL PLANNING ASSOCIATION

The wealth inventory can be expected to contribute much useful data for damage assessment purposes. The commuter routines in use at NREC might also contribute a good deal to the data processing work on the inventory. For these reasons an exploration of mutual interests at first hand is suggested.

(a) *Wealth statistics*.—A census of wealth was one of our oldest economics statistics programs. The last census was conducted in 1923. However, the results were so unsatisfactory that no effort has since been made to repeat it. In the meantime, a national balance sheet has come to be recognized as an essential part of the national accounts. The pioneer estimates of Raymond Goldsmith in "The National Wealth of the United States" have contributed further to an appre-

ciation of the usefulness of balance sheet data in general economic analysis. Consequently, a movement has slowly been gathering support for reinstatement of the census of wealth as a regular, recurring statistical program of the Federal Government. The approach taken by Professor Kendrick's group, however, is that it may be more practical as well as politically more expedient to obtain the same data by developing a systematic set of supplementary questions to be added to existing economic surveys.

(b) *Value of real assets as input to damage assessment.*—It is proposed that the National Wealth Inventory collect data on the value of fixed assets and of inventories of finished goods, goods in process, and materials and supplies. For the most part such value information is now lacking in the NREC resource point file. The incorporation of values as a separate data field would obviously make the file a more effective planning instrument. Original costs or current reproduction cost valuations of resources would facilitate monetary estimates of the extent of damage, aggregation of damage over broader classes of resources, as well as assisting in the estimation of the costs of repair, restoration, or replacement.

(c) *Company or establishment data.*—The contribution of the wealth inventory to NREC will depend on whether the data are collected on an establishment or a company basis. Only establishment data can be identified with a specific resource point. If the company basis is adopted, only information from single establishment companies could be incorporated in the file. The advocates of company statistics can make a strong case for reporting convenience and this seems highly persuasive when the burden on the respondents is considered alone. But the advocates of better regional and area statistics can point out that the collection of data on a company basis effectively precludes the kind of differentiation they are seeking. This phase of the current discussion of the development of the Federal statistical system, incidentally, is one in which NREC has a large stake and in which its needs should be clearly heard.

(d) *Permanent roster statistics.*—One way of reducing the burden on the respondent is never to ask for the same information twice. The major part of an inventory of wealth is concerned with fixed assets. The desired information consists of original costs and additions, retirements, and also depreciation and depletion, as they occur. This information can be maintained in a permanent roster consisting of original entries and changes. The maintenance of such a roster on such a large scale was not really practical when data processing was exclusively a matter of punched cards. Contemporary electronic equipment, however, opens up new possibilities for reporting and accounting for the national wealth. An interesting recent development is the permanent plant file of the Bureau of the Census, but this so far is used primarily for time series data on current operations.

(e) *Coordination of wealth survey data.*—The decision to use, in the main, existing statistical programs to collect wealth data imposes a major problem of coordination. The surveys in which the data originates will be conducted at different dates, for different purposes, and often with different classifications of respondents and items of information. A substantial amount of analysis and of special data

processing would be required to create a consistent statement of the national wealth as of a given date.

(f) *The PARM resource data routines.*—The problem of coordination involved in the wealth inventory is very similar to the one faced in the implementation of the PARM system. Information incorporated in the NREC resource point file is collected by many agencies, at different dates, originally for different purposes, using various classification schemes, and is maintained in many separate categories. In order to provide resource data inputs to the PARM system on a consistent and uniformly updated basis, procedures have been developed for resource file changes, consolidation into a single file, and an edit of national summaries. Resource adjustment factors may be applied to effect changes in a given data field (corrections for price level, underenumeration, etc.) or to impute one data field from another. Although some supplementary routines would be needed, essentially all of the software needed for processing wealth data from diverse sources into consistent national summaries already exists at NREC.

(g) *NREC as a statistical center.*—The computing facilities, including the software, necessary for the consolidation of a national wealth inventory are largely available at NREC. The existing resource point file provides the basis for the establishment of a permanent roster of wealth data. Furthermore, the delegate agency participation in the work of NREC furnishes the basis for the administrative coordination of the wealth surveys and their incorporation into a single data bank. Note, too, that “national wealth inventory” and “national resource evaluation” are virtually synonymous.

(h) *Recommendations—wealth study project.*—The advisability of creating a study panel on the problems of administrative, statistical, and computational coordination of wealth data to be collected by various agencies has been suggested to Professor Kendrick.