Historical Perspectives on IRS Wealth Estimates With a View to Improvements

by Fritz Scheuren, Ph.D

My role, in these few minutes Jim Smith has given me, is to provide a short history of IRS estimates of wealth and their limitations. Let me begin with a little background on how IRS started making estate multiplier wealth estimates in 1962. Then we'll look briefly at the handout which you have. This contains the details of exactly what was done and why. Finally, I'd like to reflect with you on the experience.

<u>Contributors to IRS Wealth Estimates</u>

So think back with me to the early 60's. Under the late Ernie Engquist, the IRS Statistics Division, at the suggestion of Raymond Goldsmith, agreed to try to repeat for 1962 the wealth estimation procedures that Robert Lampman had used in his work for 1953. A number of people played important roles in the early planning, including Helen Demond, Jeanette Fitzwilliams, and Dave Cassidy. Jim Smith joined the Statistics Division for a while in 1965-66 and contributed his experience on the 1958 estate tax wealth estimates he had made. He continued to contribute as a technical consultant thereafter. While at IRS, Jim helped set up a cooperative effort to determine the equity values of the life insurance reported on Federal estate tax returns. This study was carried out at the Institute of Life Insurance under the direction of Virginia Holran and Robert Chiapetta.

The late Mortimer Spiegelman at Metropolitan Life also acted as a technical consultant, since Metropolitan Life's policyholder experience played an integral part in the construction of the estate multipliers used. The actual estimates and the 1962 report which resulted were prepared by me under the direction of Staunton Calvert and, later, Keith Gilmour.

Since 1962, estate multiplier wealth estimates have been done routinely at IRS. The work at IRS after 1962 has proceeded under Keith Gilmour and Charlie Crossed, with the very active participation of the Statistics Division's current Director, Vito Natrella.

<u>Description of 1962 Estimates</u>

So much for the credits. Now let me show you a little of the movie. If you will turn to the handout please [see <u>SOI Personal Wealth, 1962</u>].

The paper you have presents a general summary description of the assets and demographic characteristics of living individuals with gross holdings of $60,000 or more in 1962. The focus is on the age, race, sex, and marital status of those "top wealthholders," as well as the size and composition of their wealth.

The estimates of the wealth of the living in the paper are based on Federal estate tax returns filed during 1963 for decedents with a gross estate of $60,000 or more. Each decedent's estate was weighted by the inverse of the mortality rate appropriate to his age and sex. Adjustments were made for social class mortality differentials using Metropolitan's $5,000 or more Whole Life experience for men and assuming the mortality differentials between white men and women in the general population held for top wealthholders as well.

<u>Reflection on 1962 Estimation Procedure</u>

Let me now turn to some reflections on the 1962 wealth estimates. There are many lessons to be learned from the 1962 experience which can be helpful in planning future work.

A great deal of thinking, for example, needs to be done about the valuation problems that exist when using estate tax returns to estimate wealth.

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The wealth concept itself has some unattractive features, in that wealth represented only by an income right is not included. Historical comparisons, particularly concentration estimates, are subject to considerable interpretation problems due to this.

The importance of pension rights, for instance, has grown tremendously in recent years and will become even more important. There is also the effect of transfers in trust which confer an income right on one generation with the remainder interest going to the next. In such cases, the wealth is includable on the Federal estate tax returns only every other generation.

I don't know what can be done about these problems in future estimates, beyond combining the estate multiplier technique with other measuring devices; notably, household surveys which include matching to administrative information (something we are doing a great deal of at Social Security right now).

"Sampling" problems are the area in which I personally have the greatest interest. These principally include deriving a better sense of the selection "probabilities" appropriate for the mortality of the wealthy. Standard concerns such as sampling variability (especially for the young and the very rich) and sample control are also very important and have not been given enough attention. I am particularly concerned with the use of a year's filings to represent a year's deaths. Since there is such a long period in which executors can file, a good deal of uncertainty is introduced by not controlling the sample more. (Also, the very largest estates may never even get into the statistics at all because auditors are reluctant to give them up.)

I've always had the suspicion that Lampman got too many returns filed in 1954 for his 1953 estimates because of the law changes which occurred at that time. When one looks at the estate tax filing historically (1945-1973), there do seem to be little extra increases in filings during the period just before major changes in the law go into effect. However, let me add that I have not really looked closely enough at this phenomenon to say whether or not there is anything to the causal structure I am implying.

The fundamental sampling problem is, of course, what probabilities of selection should we use. I have three things to say about this.

Use of Death Certificates

First, we need to study the mortality of the well-to-do by using the estate tax returns themselves. Unlike any other tax return, the Form 706 has a great deal of demographic information. This, of course, is what makes it attractive as an alternative to household surveys for information on the wealthy. In the past basically only age, sex, and marital status have been edited off the return. Other available data which could be picked up include occupation (even though perhaps only of moderate usefulness except for those under 65), nativity (foreign or native born), cause of death, length of last illness, date and length of widowhood.

The results of a 1965 pilot study on the reporting of these demographic characteristics indicated that, except for cause of death, the response was reasonably good. The proposal I made some time ago, and make again now, which bears on this "cause of death" problem is that the Form 706 be changed to require the executor to submit the death certificate or at least the death certificate number. Since the National Center for Health Statistics (NCHS) codes all U.S. deaths by cause, a computer match with their records would make it possible to obtain this important data item. Except for race, the estate tax return already requires essentially the same information provided on most death certificates, so little if any additional burden is being placed on the executor.

The problems of disclosure in such an arrangement exist and may preclude such a match. As far as I know, NCHS has no problem of this sort.[1] IRS, by providing to NCHS only the date of death and death certificate number, would be disclosing no more than that a particular decedent had an estate tax return filed for him. It may even be possible to buy (or borrow) the NCHS data files and do the matching at IRS.

For literally decades we have been trying to study mortality patterns by socio-economic class.

All sorts of proxies have been used: housing, occupation, income, education, size of insurance. However, it is the estate tax return, itself, which is the best place to look, if not for differential rates, at least for differences in patterns of mortality, in the causes and seasonality of death.

Valuation Study Proposal Sketched

My second point is the following: Certain direct tests should be applied to the mortality differentials that are thought to be appropriate for the estate multiplier. (For example, Jim Smith, in the 1969 work, used 12 different sets of differentials. The choice among these had to be largely subjective.)

The project I have in mind would be carried out jointly by Social Security and Internal Revenue Service, and it could be part of the estate tax program IRS has planned for returns filed in 1977. SSA would provide IRS with a file of 1976 male decedents from its 10 percent Continuous Work History Sample. (For males 35 or older, the reporting of deaths to SSA is about 95% complete. One of the reasons that it is so complete is that, in most cases, the heirs are entitled to a lump sum death benefit of $255.) IRS would then merge this file with their estate tax file of 1976 decedents. SSA will validate and, if necessary, supply the social security numbers for records on the estate tax file so this matching can be carried out. The resulting file, appropriately weighted, will be matched with the 1974 Individual Income Tax Master File. Marital status (type of return), 1974 AGI, wages and salaries, and other income information from the Master Tax File will be added to the decedent file.[2] The weights on this file will be adjusted by mortality multipliers based on age-race-and marital status to produce estimates of all income tax filers for 1974. After this adjustment, IRS would prepare tabulations from this tape of the population by AGI class, etc. These results will be compared to actual totals from Statistics of Income for 1974. Any discrepancies found (aside from those attributable to sampling variability), can be interpreted, with qualifications, as measuring the net impact of the differential mortality which exists within age-sex-race-marital status groups in 1976.

When the discrepancies between the income comparisons of the decedent sample and the basic income tax files have been resolved (using a "raking" procedure developed at SSA), the decedent file may give useful estimates of the distribution of both income and wealth, at least in so far as this is available from the administrative records being used.

The project which I just described briefly is still in the discussion phase. A number of problems must be resolved. Preserving the confidentiality of SSA and IRS data is, of course, an essential legal requirement. Furthermore, it is not clear at this stage whether or not the recently passed Privacy Act will permit the kind of matching we have in mind.[3]

This project has another major deficiency in that it only allows us to test the mortality differentials for men. Deaths for females are not reported very well to Social Security. (For example, only about 2/3rds of the deaths among women in 1972 were reported.) We need to provide some other means of testing mortality differentials for women. One that occurred to me is to use the community property information on the estate tax return to test these female differentials, since conceptually the number of married male top wealthholders with community property (above a certain size) must equal the number of married females with community property. A small and incomplete test of this idea was carried out with the 1969 filings, and I think it has promise for the future work at IRS. (The results of this 1969 work are shown in Table 1 below.)

Overemphasis on Wealth Concentration Estimates

The third thing I'd like to say has to do specifically with the use of the estate multiplier technique for work on wealth concentration. I think that undue emphasis has been given to this aspect in previous research, given the uncertainty that now surrounds the mortality rates that one should use. On the other hand, for looking at patterns of asset holdings among different age, sex, net worth, marital status groups and so forth, the estate multiplier technique seems to be fairly reliable. For example, Jim Smith, in his 1969 work, examined 12 different mortality assumptions. The variance between the total top wealthholder figures was enormous. However, the overall percentage distributions by size of wealth were practically identical for all 12. (See Table 2 below.) This suggests that the analysis of patterns of wealthholding may be robust over a very wide range of reasonable alternative assumptions about what the multipliers are. The overall aggregate estimates are obviously very sensitive to one's assumptions and must be considered (in Kendall's words) to be quite frail.

In saying this, I do not wish to sound as if I favor abandoning the attempt to make wealth concentration estimates using the estate multiplier technique. Rather, I am suggesting that there are a number of other interesting areas which can be productively studied that may not be as sensitive to the uncertainty surrounding what the mortality rates are for "top wealthholders."

ENDNOTES

1. It turns out that NCHS does, as I should have assumed, have such problems, but, if suitable safeguards are instituted, these need not be insurmountable.

2. Our later work indicates that there might be enough of a downturn in income near death to require an earlier master file be used. With the help of Census Bureau staff, therefore, a match will also be made to the 1969 IRS master file as well. Under this revised procedure "weights" would be determined from the 1969 file. The 1974 matched data could then be examined (as weighted) to see what income differences exist between persons who will die two years later and those who will not.

3. It does not cover deceased individuals.

1993 AFTERWORDS

In rereading this long-ago talk, I thought some afterwords might be worth adding about what has happened since 1975.

- First, it is particularly gratifying, thanks to Barry Johnson, Marvin Schwartz, and Louise Woodburn (among others), that so many recommendations made here were actually implemented. Notable among these was the shift to a year-of-death rather than a year-of-filing sample and the establishment of a partnership with the Federal Reserve Board so that their Survey of Consumer Finances can be used jointly with the estate wealth estimates.

- Second, even though nearly 20 years have passed and many heroic efforts have been made, the talk also illustrates all too well a truth of human affairs, "When all is said and done, more is said than is done." For example, while some work was attempted with the National Death Index on directly studying mortality patterns of the wealth from estate returns, this project proved harder and less immediately rewarding than I envisioned. The work of linking together SSA and IRS income and estate files was actually completed and well documented by Keith Gilmour (and the combined file is available at the National Archives); however, to my knowledge, the study called for has not been done, even though the file is available.

- Third, one of the benefits of revisiting something done so long ago is to see how much or how little one's understanding stood the test of time. In some ways my views have stood up fairly well. The dimensions of the problem as I understood them then were roughly right. What I didn't understand were all the new dimensions of wealth estimation that others would bring. Here I'm thinking not only of IRS staff but particularly of Gene Steuerle and, more recently, David Joulfaian and Arthur Kennickell. Whole perspectives (vistas) have been added to my thinking and a deeper appreciation of this subject has been gained from them. I look forward to this kind of change continuing and for still more dimensions to be added by researchers whose names are not yet known.

The 1976 Tax Act unified the estate and gift tax schedules. Transfers made after December 31, 1976, that are not included in the total gross estate, are added to the taxable estate, in order to determine the rate of taxation. (Gift taxes paid on such transfers are then subtracted from the gross estate tax.)

A unified credit was developed to replace the exemption which was previously used to calculate the estate tax due. The exemption, which was applied to the gross estate before the tax computation, was especially favorable to wealthier individuals because it provided a tax savings from the higher tax brackets. The unified credit, which is subtracted from the gross estate tax after the computation of the tax, constitutes a savings from the lower tax brackets. At the same time, the filing requirement was increased from $60,000 to $175,000 over a period of five years. The unified credit was increased in a similar manner.

Year of Death	Filing Requirement	Credit
1976	$60,000	N/A
1977	$120,000	$30,000
1978	$134,000	$34,000
1979	$147,000	$38,000
1980	$161,000	$42,500
1981	$175,000	$47,500

These changes, designed to bring tax relief and fairness to small and medium estates, affect wealth estimates by removing smaller estates from the population. However, our estimates derived from estates above the filing requirement should not be affected, except to the extent that gift-giving is influenced by the unification of the estate and gift tax schedules.

Transfers within Three Years of Death.--Prior to 1977, transfers of property made within 3 years of death were assumed to have been made in contemplation of death and were includable in the gross estate. The executor of the estate could contest the presumption that a gift was made in contemplation of death and sometimes have the value of the transfer removed from the estate. This rebuttable presumption led to a significant amount of litigation. The Tax Reform Act of 1976 amended section 2035 to include in the gross estate all transfers made within 3 years of death, other than bona fide sales, regardless of the decedent's motivation.

In addition, any gift tax paid after December 31, 1976, and within 3 years of death, was also includable in the gross estate. Prior to 1977, gift taxes reduced the total gross estate by the amount paid, regardless of the timing of the transfer. The abolishment of the rebuttable contemplation of death presumption and the inclusion of the gift tax "gross-up" rule served to simplify the valuation of estates and to remove the incentive to make death-bed transfers for the purpose of tax avoidance.

The effect of the changes in the treatment of transfers on wealth estimates is undoubtedly complex. Under the 1976 Act provisions, more transfers are includable in the gross estate and the gift taxes on these transfers are also includable. Thus, we might expect the amount of transferred wealth reported on the estate tax return to increase. Yet, since the tax advantages of making death-bed transfers are eliminated, the amount of transfers might decrease. This would result in a decrease in the wealth reported as transfers and some increase in the wealth reported as other types of assets. The overall effect, regardless of whether or not there is a decrease in gift-giving, should be some increase in the total gross estate. (The extent of the effect is at least partially dependent upon the extent to which individuals make transfers to minimize taxes.)

Joint Property Held by Spouses.--Prior to 1977, the total gross estate included the entire value of property held by the decedent as a joint tenant or tenant by the entirety with a spouse, except for the portion of the property attributable to consideration furnished by the survivor. The 1976 Act replaces the "consideration furnished" rule with a "fractional interest" rule for qualified joint interests. Under the "fractional interest" rule, only one-half of property held entirely by the decedent with a spouse is includable in the gross estate, provided that: the tenancy was created after December 31, 1976, by the decedent, the spouse or both and the creation of the interest constituted a completed gift for gift tax purposes. (Spouses are permitted to dissolve joint interests and recreate them after December 31, 1976, in order to take advantage of the new law.) The donor must have elected to treat the joint tenancy of real property as a taxable event, even if no gift tax is paid due to the annual exclusion, marital deduction or application of the unified credit.

While the entire value of joint property assets is often referred to on Schedule E of the estate tax return, only one-half of the value of a qualified joint interest must be included in the total gross estate. Therefore, our net worth estimates will be reduced to the extent that such interests are created. This reduction may be partially offset by the inclusion of one-half of the property as transferred wealth, when a qualified joint tenancy is created by a decedent within 3 years of death. The net worth of surviving spouses is not affected by the provision, as the entire property will be includable in the surviving spouse's gross estate, if it was not disposed of prior to death.

Special Use Valuation.--Prior to 1977, all assets in the gross estate were included at their fair market or "highest and best use" value. This created severe liquidity problems for some farmers and owners of closely held businesses, forcing them to sell their inherited property in order to pay the estate taxes on it. The 1976 Act allowed executors to refer to the capitalization of earnings or similar methods, as well as to the fair market value, when valuing assets and thereby reduce the value of the property by up to $500,000.

To qualify for special use valuation, the decedent and the heirs must meet stringent requirements regarding citizenship, the size of the property relative to the total estate and

Table 1 -- Number of Married Wealthholders in 1969 in Community Property States by Size of Total Assets

(Numbers in thousands; ratios based on unrounded counts.
Detail may not add top totals because of rounding.)

Total Assets Modified (in dollars)	Community Property States			
	Total	California	Texas	All other (except New Mexico)
	Part I: Married Female Top Wealthholders			
Total	376	226	102	49
60,000 under 100,000	155	97	35	24
100,000 under 150,000	96	60	26	10
150,000 under 300,000	77	41	26	9
300,000 under 1,000,000	40	22	12	5
1,000,000 or more	8	6	2	1
	Part II: Married Male Top Wealthholders			
Total	407	205	101	101
60,000 under 100,000	177	87	47	43
100,000 under 150,000	89	47	22	20
150,000 under 300,000	87	44	20	23
300,000 under 1,000,000	47	23	11	13
1,000,000 or more	6	3	1	2
	Part III: Ratio of Female to Male Top Wealthholders (in percent)			
Total	92.7	110.3	101.6	48.1
60,000 under 100,000	87.7	110.9	75.2	54.4
100,000 under 150,000	108.4	127.4	121.5	49.3
150,000 under 300,000	88.0	93.0	131.8	40.2
300,000 under 1,000,000	85.1	96.3	114.2	41.1
1,000,000 or more	134.9	176.5	149.3	34.0

Note: Total assets was modified for this table by subtracting twice the marital deduction so as to more nearly approximate the community property holdings of married persons. Community property states in addition to California and Texas are Arizona, Idaho, Louisiana, Nevada, New Mexico, and Washington. New Mexico was not included because of the special treatment given community property at death (see STATISTICS OF INCOME 1962 -- PERSONAL WEALTH, p. 74). The mortality rates underlying the estimates in the table are described in detail in STATISTICS OF INCOME, 1969 -- PERSONAL WEALTH, p. 75. See also pp. 57–58 of that same report, where data on Top Wealthholders are presented by State

Generally (except for insurance), whatever property is acquired by the efforts of either the husband or wife during marriage belongs to the marital community, and not to the husband or wife separately. Property acquired either before marriage, or after marriage by gift or inheritance, usually is considered the separate property of the spouse who acquired it and is taxed as such. For estate tax purposes, only half the community property at date of death is included in the gross estate of the decedent. Community property was not shown separately in the estate tax statistics for 1969; therefore, the crude approximation, total assets less twice the marital deduction, was created.

Table 2 -- Percentage Distribution of 1969 Top Wealthholders by Size of Economic Estate

Size of Economic Estate (in dollars)	Estimates of Top Wealthholders for 1969 Under Differing Mortality Assumptions											
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Number of Top Wealthholders (in thousands)	4,964	7,355	8,124	6,139	6,904	5,342	5,187	7,703	8,506	6,424	7,171	5,587
Percent	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
60,000 under 80,000	23.90	23.94	23.88	24.00	24.15	24.05	23.29	23.31	23.27	23.36	23.52	23.40
80,000 under 100,000	18.88	19.03	18.98	19.02	18.69	19.01	18.95	19.08	19.02	19.10	18.77	19.11
100,000 under 150,000	26.95	26.97	26.96	26.96	26.46	26.96	27.28	27.34	27.32	27.33	26.83	27.32
150,000 under 200,000	11.44	11.40	11.36	11.43	11.32	11.45	11.61	11.57	11.52	11.61	11.50	11.64
200,000 under 300,000	8.92	8.91	9.00	8.84	9.26	8.78	8.97	8.96	9.04	8.88	9.32	8.82
300,000 under 500,000	5.67	5.59	5.63	5.59	5.73	5.59	5.65	5.57	5.62	5.56	5.69	5.56
500,000 under 1,000,000	2.88	2.83	2.86	2.82	3.03	2.81	2.89	2.84	2.88	2.83	3.00	2.81
1,000,000 under 2,000,000	0.93	0.90	0.91	0.92	0.94	0.92	0.95	0.92	0.92	0.93	0.95	0.95
2,000,000 under 3,000,000	0.21	0.20	0.20	0.21	0.21	0.21	0.19	0.18	0.19	0.19	0.19	0.19
3,000,000 under 5,000,000	0.12	0.12	0.12	0.11	0.11	0.11	0.12	0.12	0.12	0.11	0.12	0.11
5,000,000 under 10,000,000	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.06	0.06	0.06
10,000,000 or more	0.03	0.04	0.04	0.03	0.03	0.03	0.03	0.04	0.04	0.03	0.03	0.03

Note: Economic estate is gross estate less lifetime transfers, debts and mortgages, and policy loans on insurance. The full face value of the insurance is included, not just the equity amount. The multipliers used in making the estimates were constructed by Smith in his work for 1969. Column-by-column notes are provided on the next page.

MULTIPLIERS FOR EACH COLUMN OF TABLE 2

Column

(1) - Reciprocals of 1969 white age-sex-specific mortality rates.

(2) - Reciprocals of age-sex-specific mortality rates based on the experience of the Metropolitan Life Insurance Company with preferred risk whole life policies. The policy is issued in minimum amounts of $5,000 (later $10,000). The experience over the period 1964 to 1969 was used, but only policies issued before 1960 and which had been in force a minimum of six years were considered. Because the insured were predominantly male, rates for females were calculated by assuming that the same ratio of male to female mortality existed as in the white population in 1969.

(3) - Reciprocals of age-sex-specific mortality rates based on the Metropolitan Life Insurance Company's experience with the broader Preferred Risk category issued since 1960. The policy is issued in a minimum amount of $25,000. Because insured rates were for males, female rates were estimated in the same manner as in (2).

(4) - Reciprocals of age-sex-specific mortality rates calculated by splitting the difference between the rates of (2) and a set of modified occupational class mortality rates based on the work of Moriyama and Guralnick for ages 20-65. For age 65 and on, the rates were calculated by splitting the difference between the rates of (1) and (2).

(5) - Reciprocals of age-sex-specific mortality rates calculated in the same manner as (4), by with the rates of (3) substituted for those of (2).

(6) - Reciprocals of age-sex-specific mortality rates based on the occupational mix of wealth ($600,000 or more) Washington, D.C. decedents in 1967. Due to insufficient observations for ages less than 35 the average of Moriyama and Guralnick's top two occupational classes updated to 1969 were used. For ages 65 and over, (1) rates were used because social class differentials were believed to have disappeared.

(7) - Reciprocal of the rates from (1) adjusted for marital status differentials based on the work of Klebba ("Mortality from Selected Causes by Marital Status," Vital and Health Statistics, Series 20, Nos. 8a and 8b, 1970).

(8) - Reciprocals of the rates from (2) adjusted for marital status differentials.

(9) - Reciprocals of the rates from (3) adjusted for marital status differentials.

(10) - Reciprocals of the rates form (4) adjusted for marital status differentials.

(11) - Reciprocals of the rates from (5) adjusted for marital status differentials.

(12) - Reciprocals of the rates from (6) adjusted for marital status differentials.