Individual Income Tax Returns, 1983: A Demographic Snapshot

By Bryan Musselman and Paul Grayson

Few demographic characteristics can be obtained by analyzing individual income tax returns since only a limited amount of this type of information has to be reported [1, 2]. The demographic data presented in this article are the result of a survey of a small sample of taxpayers. Because many of those in the sample did not respond and because it was not always evident how the data reflected the spouses on joint returns, the distributions shown do not directly reflect the characteristics of all taxpayers. However, they do provide some new insights into the characteristics of the tax filing population [3].

AGE

For Tax Year 1983, the median age was 46.5 for taxpayers filing Form 1040, 33.4 for Form 1040A, and 23.5 for Form 1040EZ. Almost 90 percent of Form 1040EZ filers were under the age of 35, in fact 63 percent of them were under the age of 25 (Figure A). The age group 15 to 34 is expected to peak in 1986, and then decline by approximately 11 percent by the year 2000 [4]. A corresponding trend can be anticipated for filers of Form 1040EZ.

EDUCATION

As shown in Figure B, fully 90 percent of Form 1040EZ filers for 1983 had at least a high school diploma (or equivalent) compared to 78 percent for 1040A filers and 84 percent for 1040 filers. Corresponding figures for persons in the general population age 25 and older are presented in Figure C for comparison. The data show that persons filing tax returns are generally better educated than the population at large: as of 1983, about 28 percent of persons 25 years and older had not graduated from high school. Form 1040EZ filers (younger, single taxpayers) were generally the best educated, having the largest proportion with a high-school-or-better education. While only 16

percent of the 1040EZ group were college graduates, it seems clear that this was because many of them were still relatively young; many of the 33 percent with "some college" undoubtedly would be in the "college graduate" class in another 2 or 3 years [5]. Form 1040A filers were the least well educated, having the largest proportion of persons with less than a high school diploma, and the smallest proportion with some college.

RACIAL OR ETHNIC BACKGROUND

Some substantial differences emerged in the distributions by racial or ethnic background of the three tax filing groups. For 1983, almost 90 percent of those filing Form 1040 were white, compared to 70 percent who filed Form 1040A and 82 percent who filed Form 1040EZ (Figure D). Most interesting is that 19 percent of 1040A forms were filed by blacks, since blacks comprise only 12 percent of the U.S. residential population age 16 and over [6]. This most likely is a reflection of the lower median weekly earnings of full-time wage and salaried black Americans, which were \$257 in 1983 compared to \$309 for workers overall [7].

SUMMARY

For 1983, the median ages reported for respondents in the three form-filing groups were: 46.5 (1040); 33.4 (1040A); and, 23.5 (1040EZ).

About 90 percent of the 1040EZ filers were under age 35. The EZ-filers, as evidenced by their questionnaire responses, appeared to be better educated than their 1040A counterparts: almost 50 percent of the former had at least some college education compared with 32 percent of the latter. Of the EZ-filers, 90 percent had achieved at least a high school (or equivalent) diploma--a better standing than either of the other two groups.

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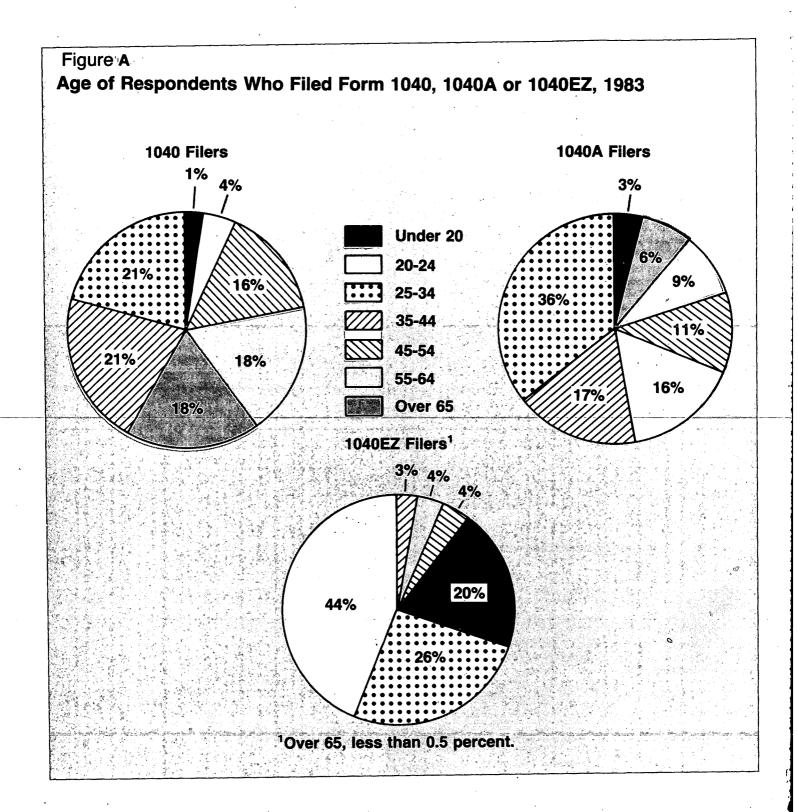


Figure B
Last Grade of School Completed by Respondents Who Filed
Form 1040, 1040A, or 1040EZ, 1983

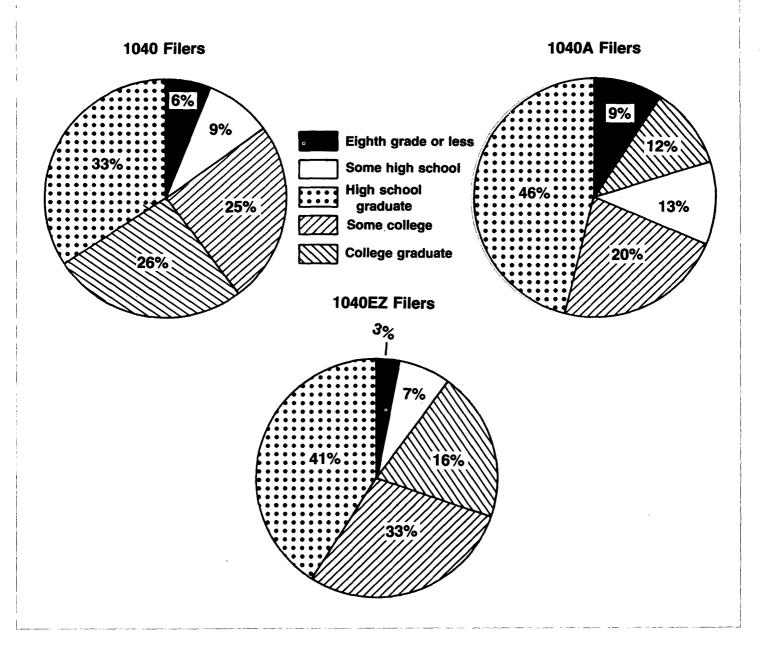


Figure C.--Last Grade of School Completed by Population Age 25 and Older, 1983 $\underline{1}/$

Last grade of school completed	Percentage age 25 and older		
Eighth grade or less Some high school High school graduate Some college College graduate	15.1% 12.8 37.7 15.6 18.8		

1/Source: U. S. Bureau of the Census, unpublished data.

Figure D.--Percentage of Taxpayers, by Racial or Ethnic Background and Type of Return, 1983

Main racial or	Type of Return			
ethnic background	1040	1040A	1040EZ	
	(1)	(2)	(3)	
Total	100%	100%	100%	
White	89 4 3 2 1/	70 19 6 2 1	82 10 5 2 1 1/	

1/Less than 0.5 percent.
NOTE: Detail may not add to total because of
rounding.

Some substantial differences appeared in the distribution by race or ethnic background among the three tax-filing groups. Almost-90 percent of 1040 filers were white, compared with only 70 percent of the 1040A group. Conversely, about 20 percent of the 1040A filers were black, compared with about 5 percent of the 1040 group. Interestingly, 1040EZ respondents reported white, black and Hispanic proportions intermediate between those of the other two groups. One also notes that the 10 percent black proportion of 1040EZ respondents closely approximates the black proportion of about 12 percent in the adult population.

DATA SOURCES AND LIMITATIONS

Data for this article were obtained from the approximately 4,000 respondents to a special survey. This survey used the same sample utilized for the 1983 Taxpayer Usage Study (TPUS), results of which have been previously published in the SOI Bulletin [8]. A total of 6,212 questionnaires were mailed to five groups of individual income taxpayers: those filing

Form 1040 (joint returns), Form 1040 (nonjoint returns), Form 1040A (joint returns), Form 1040A (nonjoint returns), and Form 1040EZ returns. The relationship between the sample and the survey response to the questions covered by this article are shown in Figures E and F.

The survey itself was conducted for the Internal Revenue Service (IRS) by Opinion Research Corporation, a subcontractor of Arthur D. Little, Inc., as part of a research effort relating to tax administration. This survey was conducted in the summer 1984, after the 1983 tax return filing season for most taxpayers was over.

The TPUS returns on which the survey was based were selected from a continuous daily sampling of returns as they were received in the ten Internal Revenue service centers. The sampling was conducted at a designated rate of 1-in-15,000. Because only returns filed through April 1984 were subjected to sampling,

Figure E.--Number of Returns, Number in Sample, and Number of Respondents, by Type of Return, Tax Year 1983

		Returns filed through April 1984		
Type of return	Total returns (000's)	Total (000's)	Sample Respond- Total ents	
	(1)	(2)	(3)	(4)
Total	96,497	90,407	6,212	4,010
Form 1040 Form 1040A Form 1040EZ.	61,186 19,590 15,721	55,853 19,094 15,462	4,072 1,195 945	2,840 651 519

Figure F.--Returns for 1983: Actual Number Compared to Number per Questionnaire, by Type of Tax Form

 	Tax forms filed per questionnaire			Downstage
Tax forms actually filed	Total	Same as actual	Differ- ent from actual	Percentage difference
	(1)	. (2)	(3)	(4)
Total	4,010	3,424	586	15%
Form 1040 Form 1040A Form 1040EZ.	2,840 651 519	2,483 502 439	357 149 80	13 23 15

the TPUS estimates covered about 93 percent of the nearly 97.0 million returns that were filed for Tax Year 1983 during 1984.

The sample was random in that it was selected without regard to income or other stratification criteria. Therefore, only frequency estimates, or the percentages based on them, are provided and these are subject to sampling error. To use these frequencies (and therefore the percentages) properly, the magnitude of the potential sampling error of the frequencies needs to be known. Coefficients of variation (CV's) computed from the sample are used to measure the magnitude of the sampling error. The table below presents approximate CV's for the frequencies that underly the percentages in Figures A, B, and D. The approximate CV's shown are intended only as a general indication of the reliability of the data. For frequencies other than those shown below, the corresponding CV's can be estimated by interpolation.

Number of Responses	Approximate Coefficient of Variation	
4,000	.016	
3,500	.017	
3,000	.018	
2,500	. 020	
2,000	.022	
1,500	. 026	
1,000	.032	
800	. 035	
600	.041	
400	. 050	
200	.071	

The estimates are also subject to several types of nonsampling error. First, they were not adjusted for nonresponse. Overall, the nonresponse rate was 35 percent (generally considered very good for a mail survey), ranging from about one-fourth for jointly-filed Form 1040 filers to nearly one-half for nonjoint filers of 1040A and for filers of Form 1040EZ. Because of these variations in response, no attempt was made to create U.S. totals representing the sum of the three types of return forms. Also, although they are described as representing 1983, the estimates in fact represent only those taxpayers who filed through April 1984; thus, 7 percent of the tax filing population for 1983 is not represented.

Another aspect of nonsampling error is in having to assume, as the percentages imply, that both spouses on a joint return are in the same age group, attained the same educational level, or had the same racial or ethnic background [9]. If the data are assumed to represent just one of the spouses, it is usually assumed to be those for the husband.

This is especially so because the IRS considers the taxpayer whose name appears first in the tax return mailing label on a joint return to be the "primary" taxpayer; usually this is the husband. However, from an analysis of the survey responses it would appear that a considerable number of wives filled out the questionnaire and that, for these respondents, the data reflected in the percentages may often represent wives rather than husbands.

In addition to the above considerations, it is clear that some respondents relied on faulty memory. This is brought out in Figure F which shows that, overall, 15 percent of the respondents did not correctly recall the type of form they had filed for 1983. Among "actual" 1040A filers, this figure reached almost one-quarter. (The demographic data, it should be emphasized, are based on actual filings.)

NOTES AND REFERENCES

- [1] Demographic characteristics that are reported on the tax return include marital status and exemptions claimed (personal, for age 65 and over, and for blindness). In addition, place of residence and taxpayer's sex can be inferred from the name and address; and place of employment and number of jobs held can be obtained from the wage and tax statements (Forms W-2) attached to the return. Occupation is also called for on the return as well as the business activity of self-employed individuals.
- [2] For other recent Statistics of Income Bulletin articles presenting selected demographic characteristics of tax-payers, see Bristol, Ralph B., Jr., "Age and Tax Filing, 1981," Fall 1985; Crabbe, Patricia A., and Gross, Elizabeth L., "Taxpayers Classified by Sex," Spring 1985; and Grayson, Paul E., "Male and Female Operated Nonfarm Proprietorships, Tax Year 1980," Spring 1983.
- [3] This article is based on one previously released in U.S. Department of Treasury, Internal Revenue Service, Trend Analyses and Related Statistics: 1985 Update, February 1985, internal document.
- [4] See U.S. Department of Commerce, Bureau of the Census, Projections of the Population of the United States, by Age, Sex, and Race: 1983 to 2080, 1984, Table 6.
- [5] Bristol, op. cit., notes in his study for 1981 that teenagers (those under age 20) overwhelmingly made use of Form 1040A, and, in more recent years, of Form 1040EZ.

- [6] U.S. Department of Commerce, Bureau of the Census, <u>Current Population Report</u>, series P-25, 1983.
- [7] U.S. Department of Labor, Bureau of Labor Statistics, <u>Employment and Earnings</u>, 1983.
- [8] See Riley, Dorothea, "Taxpayer Usage of Forms 1040, 1040A, and 1040EZ, 1983," Statistics of Income Bulletin, Summer
- 1984. See also, Grayson, Paul E., "The Life Cycle of Individual Income Tax returns," Statistics of Income Bulletin, Spring 1984.
- [9] Riley, op. cit. For 1983, there were 35.9 million out of 55.9 million Form 1040 returns and 8.0 million out of 19.1 million Form 1040A returns that were jointly filed.