

**DIVISION OF THE HUMANITIES AND SOCIAL SCIENCES
CALIFORNIA INSTITUTE OF TECHNOLOGY**

PASADENA, CALIFORNIA 91125

THE CHANGING FACE OF TAX ENFORCEMENT, 1978-1988

**Jeffrey A. Dubin
California Institute of Technology**

**Michael A. Graetz
Yale Law School**

**Louis L. Wilde
California Institute of Technology**



SOCIAL SCIENCE WORKING PAPER 716

December 1989

THE CHANGING FACE OF TAX ENFORCEMENT, 1978-1988

Jeffrey A. Dubin, Michael A. Graetz, and Louis L. Wilde

ABSTRACT

This article examines three aspects of tax administration that are widely thought to play a particularly critical role in tax enforcement: the examination (or audit) function, information reporting and the criminal enforcement process. A careful look at the IRS budget devoted to the first two of these demonstrates that a major shift in tax enforcement policy has occurred during the last decade---fewer people have been audited, but those who have been were punished more severely. This shift in enforcement policy raises important questions both of the efficacy and fairness of the tax administrative process. Although not apparent through budget allocations, a similar pattern has occurred with respect to criminal enforcement. In addition, the shift of IRS resources toward enforcement of nontax crimes and the increased use of grand juries also raises important questions about these IRS criminal enforcement process.

THE CHANGING FACE OF TAX ENFORCEMENT, 1978-1988

Jeffrey A. Dubin, Michael A. Graetz, and Louis L. Wilde*

I INTRODUCTION

Published reports of the so-called "tax-gap," the amount of underreported federal income taxes, now estimated to have been \$83-\$94 billion in 1987, and of taxes due but uncollected, now estimated to have been \$61-\$72 billion in 1987, have raised questions about administration of the federal tax system.¹ In some quarters, these reports have simply led to calls for more funding for the Service. We, however, regard the current public focus on the Service as creating an opportunity for serious discussion of tax administration, a subject long ignored in both scholarly and professional literature.

We propose here to examine three aspects of tax administration that are widely thought to play a particularly critical role in tax enforcement: the examination (or audit) function, information reporting, and the criminal enforcement process. A major shift in tax enforcement policy has occurred during the last decade. Greater reliance has been placed on information reporting; on the hand, fewer people have been audited or criminally prosecuted for tax violations, but those who have been so treated have been punished more severely. These shifts in enforcement policy raise important questions of both the efficacy and the fairness of the tax administrative process.

Before detailing our findings regarding these aspects of enforcement policy, however, we shall provide a brief overview of the Service's budgets during the past decade. We shall then turn to a more detailed examination of the Service's audit and criminal investigation functions, including a presentation of data concerning penalties. Since we have a substantial amount of

*California Institute of Technology, Yale Law School, and California Institute of Technology, respectively. Professor Graetz thanks the National Science Foundation for research support (grant no. SES-870443) as do Professors Dubin and Wilde (grant no. SES-8701027). All authors thank Theodore Seto for helpful comments and Jerry Hauck, Seth Hendon and Michael Udell for research assistance. Professor Graetz is currently serving as Deputy Assistant Secretary (Tax Policy) of the Treasury. This article was written before Professor Graetz assumed that office and does not necessarily reflect the view of the Treasury Department.

¹ The most recent Service estimates of the tax gap can be found in *Internal Revenue Service Income Tax Compliance Research: Net Tax Gap and Remittance Gap Estimates* (Supplement to Publication 7285), Publication 1415, April 1990.

information to present, we have accepted the old saw about saving many words through pictures, and generally have tried to summarize our data in graphs. Finally, we offer some conclusions and suggestions for further research.

II AN OVERVIEW OF THE SERVICE'S BUDGET²

The Budget in General

The Service is an extremely large administrative agency; as of 1988, it had a budget of more than \$5 billion and almost 115,000 employees. Even adjusted for inflation, the operating costs of the Service have increased significantly during the past ten years---by about 40%. In contrast, costs as a percentage of revenues have remained relatively constant over a very long period of time, amounting in 1987 to about 55 cents per \$100 of taxes net of refunds, the same as in 1960. In 1988, this figure increased by about 10% to 60 cents net of refunds.³ Inflation adjusted costs per return filed present a similar pattern, while real net tax collections per capita increased by about 16% during the past decade. Table 1 summarizes the costs of administering the federal tax system for selected years since 1970.

[Table 1 approximately here]

Recent years have produced substantial growth in Service personnel. The method of calculating the number of employees changed between 1982 and 1983, making comparisons before and after that date difficult, but it is significant that the total number of personnel grew by nearly 32,000 employees between 1983 and 1988, from 83,605 to 114,873, amounting to an increase of more than 35%. On the other hand, with the exception of 1988, the costs of collecting \$100 of taxes net of refunds was virtually flat during this period and total returns filed grew only from \$171 million to \$194 million, about 13 1/2%. Graph 1 depicts the number of individual returns filed in the years from 1978 to 1988.

[Graph 1 approximately here]

Budget Allocations

During the past decade, the allocation of the Service's resources has shifted significantly. While "returns processing and computer services" have increased from about one-quarter to more than one-third of the Service's budget, almost all other activities have suffered a decline in budgetary share. The only other activity that has grown significantly is "appeals," up from 2.6% in 1978 to 4.8% in 1988. "Taxpayer service" is down from 8.25% in 1978 to 6.55% in 1988 (up from

² Data used in this section can be found in *Annual Report of the Commissioner of Internal Revenue, 1978-88*. A more extensive discussion can be found in Dubin, Graetz, and Wilde, "The Report of the United States to the International Fiscal Association on the Administrative and Compliance Costs of Taxation," in *Cahiers of the International Fiscal Association, 43 Congress* (Kluwer, The Netherlands, 1989):311-344.

³ This increase may have been related to the costs of administering the 1986 Tax Reform Act.

5.7% in 1987) and "technical rulings and enforcement litigation" is down from 3.3% in 1978 to 1.4% in 1988. Of particular importance, the share of the Service's budget devoted to "examinations" (audits) declined from 34.4% in 1978 to 27.8% in 1988.

Table 2 details the allocations of the Service's budget for the years 1978 through 1988 and shows changes in budget categories in real dollars and as a percent of total costs during that period. Graph 2 depicts the budget allocation of the Service by activity as a percentage of the total Service budget for fiscal years 1978 through 1988.

[Table 2 approximately here]

[Graph 2 approximately here]

These shifts in budget allocations are revealing even at a glance. For example, they foretell significant reductions in audit levels, which we detail in Section III below, and demonstrate increasing Service reliance on computer processing, thereby making clear the necessity for the Service to become and remain technologically up-to-date. Although the budget share devoted to appeals still accounts for a relatively small amount of the overall Service budget, its increase suggests a fruitful avenue for further inquiry; we shall refrain here from offering speculation about the causes of this change.

This division of the Service's overall budget, however, tells only a part of the story. In fact, it sometimes conceals as well as reveals. The proportion of the Service's budget devoted to criminal investigation, for example, has altered only slightly during the past decade, but the criminal investigation process has changed substantially. We shall tell this part of the story in Section V below.

Let us now examine the enforcement process in greater detail. We shall begin with audits.

III THE DECLINE IN AUDITS AS AN ENFORCEMENT WEAPON⁴

Individual Audit Rates

Audits, which---withholding aside---historically have been the Service's principal tax enforcement weapon, have declined significantly over the past two decades. As illustrated by Graph 3, the total audit coverage of individuals has shown a steady decline during the past decade from an audit rate of about 2% in 1978 to 1% in 1988. If one goes back further in time, the decline is even more precipitous; audit coverage exceeded 6% in 1965.

[Graph 3 approximately here]

When the audit coverage data is disaggregated by income bracket, an even more dramatic picture emerges. Direct decade-long comparisons are not possible because, beginning in 1981, the

⁴ Data on audit rates, "no-change" rates, marginal yield to cost ratios, and voluntary compliance rates can be found in *Annual Report of the Commissioner of Internal Revenue, 1978-1988*. Data on information reports and CP2000s was obtained directly from the Service.

Service began classifying individuals for statistical purposes based on total positive income rather than taxable income. Nevertheless, a dramatic decline in coverage is undisputable. As Graph 4 indicates, the audit rate for nonbusiness returns with gross income of \$50,000 or more dropped from almost 8% in 1981 to 2 1/3% in 1988. The audit rate of nonbusiness returns with taxable income in excess of \$50,000 had been more than 10% in 1978. The audit rate for business returns with total positive income in excess of \$25,000 dropped from 4 2/3% in 1981 to about 2 1/4% in 1988. In 1978, the audit rate for business returns with more than \$25,000 of taxable income had been over 7%.⁵

[Graph 4 approximately here]

Audit coverage of Subchapter S corporations and partnerships shows a similar but less precipitous long-term decline, as Graph 5 indicates. The graph reflects the increased audits of tax shelter partnerships during the late 1970s and early 1980s, but the audit rates in both categories converge at about 1% in 1988.

[Graph 5 approximately here]

The Service uses a variety of mechanisms in an attempt to increase audit effectiveness. The most important of these is the Taxpayer Compliance Measurement Program (TCMP), which is a series of special audits that the Service conducts about every three years. For individuals, these audits cover about 50,000, i.e., randomly-selected taxpayers, and are quite comprehensive. The data collected from these special audits are analyzed using a statistical technique known as discriminant function analysis (DIF). The details of the analysis are one of the best kept secrets in government, but the goal is to identify the characteristics of returns that are likely to yield additional revenue if audited. The higher the DIF score associated with a return, the more likely that an audit of the return will yield additional revenue above a threshold amount. The primary use of DIF scores is to select returns for routine audits. Routine audits are considerably less detailed than TCMP audits and typically focus on a fairly narrow range of return items.

There is some evidence that these efforts have been effective. For all individuals, the "no change" rate in 1988 was 14%, down from an historic rate of about 25%. This seems to confirm the Service's claim that it has improved its ability to select those returns for audit most likely to result in change, although the no change rates still ranged from 10% to 22%.

At the same time, the Service recognizes that the no-change rate is not the only relevant measure of audit efficiency. For example, the Service's estimate of voluntary compliance for

⁵ Significantly, the number of returns in the category of nonbusiness returns with total positive income over \$50,000 increased significantly during this period, from about 2.25 million returns in 1981 to 10 million in 1988. By comparison, the \$10,000-\$50,000 nonbusiness category increased only from 47.5 million in 1981 to 56 million returns in 1988 and the category of nonbusiness returns with total positive income under \$10,000 dropped from nearly 37 million in 1981 to less than 30 million returns in 1988. This may explain part of the dramatic fall in audit average of high income individuals, but it is unlikely that it explains it all.

noncorporate businesses is about 15% lower than that for individuals without business income. Even though voluntary compliance is estimated to be lower for noncorporate businesses, marginal yield-to-cost ratios (additional tax and penalty from examinations compared to examination costs) are also lower. This is in part due to relatively higher audit coverage,⁶ but another possible explanation is unreported business income which is difficult to detect by audit.

Information Reports and CP2000s

At least for some taxpayers, the Service has compensated for the decline in audit coverage by matching tax return information with information from third parties (e.g. employers and payors of interest and dividend income). Whenever the discrepancy between the self-reported tax return information and the information reported by third parties is above a threshold, an automatic notice, the CP2000, that taxes are due is sent to taxpayers. CP2000 notices are also used to inform taxpayers that additional taxes are due for certain other reasons, for example, due to mathematical errors. The number of both information returns and CP2000s has increased dramatically in the past decade. As indicated in Graph 6, the total number of information reports per tax return filed increased from around 6 in 1978 to over 9 in 1985 (the latest year for which this data is available), while non-W2 forms by themselves increased from 3.5 to 6. Overall, the number of information reports received by the Service increased from about 600 million in 1980---covering 16 types of income---to about 1 billion in 1988---covering 29 types of income and one deduction (home mortgage interest). The pattern is less clear in the case of CP2000s, shown in Graph 7, although the rate of issuance of CP2000s ultimately increased to 3.58% in 1988, a level that some observers regard as compensating for the declines in individual audit rates. Needless to say, information matching and audits are far from perfect substitutes.

[Graphs 6 and 7 approximately here]

Corporate Audits

The process for auditing corporations is quite different from that for individuals. Most large corporations are audited regularly, and audit rates are quite high for corporations over \$1 million. The marginal yield-to-cost ratios, however, are about the same as the individuals, except for the largest corporations. The estimated marginal yield-to-cost ratio for the very largest corporations (over \$100 million of assets), for example, is too high to measure meaningfully.

The Commissioner's 1988 annual report, however, does show significant declines from the prior year's audit coverage of corporations with assets between \$50 million and \$250 million, a category that recently has produced about \$7 of assessments at the margin for each dollar of

⁶ For individual nonbusiness returns, the audit rate in 1988 varied from 0.35% for the lowest income category Form 1040A returns to 2.32% for returns with total positive income in excess of \$50,000. The audit rate in 1988 for noncorporate nonfarm business returns ranged from 1.45% to 4.20% and for noncorporate farm returns from 0.78% to 2.74%.

examination costs. Overall, the number of corporations audited has decreased from 147,340 in 1977 to 38,076 in 1988.

Because there are far many small corporations than large corporations, that portion of Graph 8 which illustrates the audit coverage of total corporations is best regarded as depicting the audit rate of small corporations. Here the audit rate has declined from 8% in 1978 to 1 1/3% in 1988.

[Graph 8 approximately here]

A more interesting picture emerges when corporate audit rates are disaggregated by corporate size, as in Graph 9. Working from the bottom of this graph to the top, we see that audit rates of small corporations, those with assets of \$100,000 to \$1 million, closely resemble the patterns of total corporations depicted in Graph 8. The audit rate of corporations with assets between \$1 million and \$10 million has declined from 27% to about 3%; the audit rate of corporations with assets of \$10 million to \$100 million has declined from over 40% to less than 20%; and the coverage of corporation with more than \$100 million of assets has declined from almost 80% to just over 50%.

[Graph 9 approximately here]

Yield vs. Costs

As with individuals, therefore, a significant decline in audit coverage of corporations has occurred during the past decade. In both cases, it seems clear that opportunities for productive audits remain. In 1988, the total recommended additional tax and penalties from examinations exceeded \$18.5 billion for an average \$13.72 yield for each dollar of examination cost. Since the audit process is designed to select first returns with the highest potential yield, marginal yield-to-cost ratios are, of course, lower. These marginal yield-to-cost ratios have ranged recently from about \$3 in the least productive individual audit categories to about \$7 in the highest. Corporate marginal yield-to-cost ratios have been about the same as for individuals (except, as noted earlier, for the largest corporations).

These yield-to-cost ratios reflect recommended additions to taxes and penalties. The amounts actually collected apparently are lower. These figures also include only direct Service costs and do not take into account the often quite substantial costs that taxpayer incur when they are audited. On the other hand, the marginal yield-to-cost estimates do not include the general deterrence effects of audits. Our own estimates suggest that these revenues may be significant, perhaps as high as 5 to 1 for the ratio of indirect to direct revenues for individual returns.⁷

⁷ These estimates are presented in Dubin, Graetz, and Wilde (1989), "The Effect of Audit Rates on Federal Income Tax Filings and Collections, 1977-1986."

IV THE INCREASED ROLE OF CIVIL PENALTIES⁸

While the available data is inexact and specific estimates should, therefore, be viewed cautiously, the pattern of increasing civil penalties during the 1980s is indisputable. New and larger penalties enacted during recent years have dramatically increased the gross and net amounts of penalties assessed for both individuals and corporations. Admittedly rough data contained in the *Report of the Commissioner's Task Force on Penalties* suggest that for individuals, the total net amount of penalties (assessments minus abatements) increased from less than \$1 billion in 1978 to more than \$6 billion in 1988 (\$10.9 billion in penalties assessed minus \$4.8 billion of penalties abated).⁹ Nonfraud understatement penalties, negligence penalties and fraud penalties for individuals increased from just over \$40 million in 1978 to nearly \$400 million in 1988. The amount of penalties assessed under section 6661 for substantial understatements of tax rose from \$1.75 million in 1985 to \$114.5 million in 1988. As an average amount of penalty per individual return examined, this represents an increase from about \$22 to \$375.

For corporations, net penalties increased from less than \$18 million to \$118 million and the average amount of penalty per return examined increased from \$120 to \$3,100 during the same period.¹⁰ For example, in 1986, net corporate penalties totalled about \$49 million (\$35 million in 1987) and the average amount of penalty per return examined was about \$835 (\$795 in 1987.)

For individuals, the proportion representing fraud penalties has decreased dramatically, as we would expect due to the enactment of many new nonfraud, nonnegligence penalties. In 1978, for example, fraud penalties accounted for nearly 80% of individual penalties; by 1988 this relationship had reversed, with fraud penalties accounting for only one-quarter of the total. The pattern is not so dramatic for corporations. In 1978, fraud penalties accounted for nearly 90% of the total; in 1988, 62.5%, and in the more typical year of 1986, just under one-half of total corporate penalties were due to fraud.

The relationship of these penalties to the total of additional taxes and penalties due to examinations has also increased substantially. Graph 10 presents rough estimates of the pattern of average penalty rates assessed by examinations for individuals, during the period 1979 to 1988. It shows an average penalty rate of about 2% in 1979 and 14% in 1988.

⁸ Data on civil penalties can be found in *Annual Report of the Commissioner of Internal Revenue, 1978-88* and *Report of the Commissioner's Task Force on Penalties*. We supplemented this data with information obtained directly from the Service to construct the civil penalty rates shown in Graph 10.

⁹ Abatements in any year do not necessarily relate to assessments for that same year.

¹⁰ In 1988, however, the corporate fraud penalty far exceeds any other year and is about four times as great as other years. We have no explanation for this anomaly.

[Graph 10 approximately here]

Similar computations for corporations suggest that penalty assessments are playing a far less significant role. In 1988, corporate penalties accounted for about \$118 million of the total \$11.7 billion of additional taxes and penalties assessed, or about 1% of the total. The comparable numbers for 1987 are \$35 million in penalties compared to \$10.6 billion total additional taxes and penalties, or 0.3%. A penalty rate computation similar to that performed above for individuals produces average corporate penalty rates of 1% for 1988, 0.45% for 1986 and 0.3% for 1980.

A few general observations may be useful. First, the direct revenue impact of penalties, particularly of the more controversial nonnegligence, nonfraud penalties is not large, although it is significantly larger as a proportion of additional taxes and penalties collected for individuals than for corporations. Direct penalty collections, of course, are not an estimate of the revenue effect of penalties because they ignore the effect of the penalties' existence on the amount of tax reported.

Second, the number of penalties assessed and abated has grown significantly in the past decade, from about 17 million in 1978 to more than 30 million in 1988. Employment tax penalties account for a significant proportion of the increase, having risen from 7.3 million in 1978 to 12.6 million in 1988. Failures to pay penalties have also increase substantially, from nearly 7 1/2 million assessed in 1978 to 14 3/4 million in 1988.

In sum, enforcement, especially for individuals, seems to now involve a combination of fewer audits with more frequent and significant penalties imposed on audited taxpayers. Along with the recent disallowance of interest deductions on tax understatements, the expected costs to those taxpayers who are audited have increased significantly. In addition, the increase in the Service's budget allocation for appeals seems to imply, at a minimum, that being audited has become both a more elaborate and more costly enterprise for taxpayers. Of course, to the extent that information matching has replaced simple audits, taxpayers avoid the costs of an audit.

V THE CHANGING FACE OF CRIMINAL TAX ENFORCEMENT¹¹

Let us begin this section of this essay with a group photograph. What do the following people have in common? Al Capone, former gangster; William Campbell, a United State Judge for forty-eight years who had previously been involved in the prosecution of Al Capone; Mickey Cohen, former gangster; Robert B. Anderson, former Secretary of the Treasury; Joseph D. Nunan, Jr., former Commissioner of Internal Revenue; Dave Beck, former President of the Teamsters Union; Chuck Berry, rock and roll star; Albert Nippon, fashion designer; Mario Biaggi, former congressman and, as of 1989, the most decorated New York City policeman; Spiro Agnew, former Vice-President of the United States; Dana Kirk, former basketball coach at Memphis State

¹¹ Data on criminal tax enforcement was obtained directly from the Service.

University; Robert Huttenbach, former Chancellor of the University of California, Santa Barbara; Victor Posner, millionaire industrialist; Harry Reems, co-star of the porn classic "Deep Throat;" Leona Helmsley, the "Queen" of the Helmsley Hotel chain; Moses Annenberg, founder of TV Guide; Pete Rose, former baseball player and manager. Such a list might go on and on; what the foregoing group of people have in common is a conviction for a tax crime.

In a sense, where criminal tax enforcement is concerned, there is nothing new under the sun. The foregoing list deliberately spans more than five decades of criminal tax enforcement, a process which has long been characterized by prosecutions of highly visible individuals who have violated only the tax laws as well as prosecutions for tax crimes of persons engaged in nontax criminal activity. Indeed, violation of criminal tax statutes has long been a natural and frequently inevitable handmaiden of the commission of many nontax crimes.

Recent statutory changes in federal criminal law, however, have multiplied the potential federal criminal violations that may now accompany what historically would have been solely state crimes. The most important of these are RICO (the Racketeer Influenced and Corrupt Organizations statute),¹² the Continuing Criminal Enterprise provisions,¹³ the Bank Secrecy Act,¹⁴ the money laundering prohibitions,¹⁵ the Comprehensive Forfeiture Act¹⁶ and other federal drug offense legislation.

The financial investigation skills of the Service's special agents can and does serve an important function in detecting and successfully prosecuting nontax federal financial crimes, most notably violations of the Bank Secrecy Act and money laundering statutes. Thus, it is no surprise that recent years have witnessed a significant shift of the Service's law enforcement resources in the direction of developing cases against narcotics dealers and other criminals. What is surprising, however, is that this predominantly nontax law enforcement effort may be of sufficient magnitude to raise questions concerning the continuing ability of the Service at current budget levels to use criminal enforcement adequately to fulfill its primary mission of assuring maximum compliance with federal tax laws.

¹² 18 U.S.C. § § 1961 et seq.

¹³ 21 U.S.C. § 848.

¹⁴ 12 U.S.C. § § 1829b, 1951 et seq.

¹⁵ 12 U.S.C. § § 1464, 1730, 1786, 1817, 1818, 3403, 3413; 18 U.S.C. § § 981, 982, 1952, 1956, 1957, 1961, 2516; 31 U.S.C. § § 5312, 5316 to 5318, 5321, 5322.

¹⁶ 18 U.S.C. § 1963; 19 U.S.C. § § 1589, 1600, 1602, 1605 et seq., 1644; 21 U.S.C. § § 824, 848, 853, 854, 881, 970; 28 U.S.C. § 524.

Although the share of the Service's budget devoted to criminal enforcement has remained relatively constant throughout the past decade, at about 5 3/4% of the total budget,¹⁷ the increasing role of the Service in enforcing nontax federal crimes, perhaps in combination with the declining audit rate, has changed the sources of the Service's criminal prosecutions. Far fewer cases now originate with examination. Use of grand juries in tax enforcement has increased dramatically. In addition, the criminal enforcement story shares an important feature in common with the civil enforcement facts we have just presented: those who are caught are likely to face stiffer penalties, in this case, prison sentences.

If one begins by attempting to develop a "criminal enforcement" rate, analogous to an "audit rate," two very different pictures emerge. As Graph 11 shows, the past decade has witnessed a sharp drop, a drop of about two-thirds, in the criminal investigation rate, the number of criminal investigations started as a percentage of returns filed. Because of the corresponding drop in the audit rate during this same time period (as described in Section II, above), however, the number of criminal investigations as a percentage of returns examined does not reflect this same trend.

[Graph 11 approximately here]

If one regards prosecutions or convictions, however, as better measures of the effectiveness of the criminal enforcement effort, the pattern is much more positive. Graphs 12 and 13 show that both the prosecution rate (the number of indictments and informations as a percentage of returns filed) and the conviction rate (the number of convictions as a percentage of returns filed) show a steady increase in recent years, and the data with regard to prosecutions and convictions as percentages of returns examined are also more encouraging.

[Graphs 12 and 13 approximately here]

The data in Graphs 12 and 13 seem to suggest that the Service has become better at selecting its criminal cases, an observation that is confirmed when one looks at the ratio of convictions to investigations started, which has risen from almost 15% in 1978 to almost 50% in 1988.¹⁸

[Graph 14 approximately here]

But the selection of cases for criminal investigation that more frequently lead to prosecution and conviction cannot be attributed solely to the Service's criminal investigation division. Although the entire Service's criminal enforcement program has as its goal improving

¹⁷ Budget data can be found in *Annual Report of the Commissioner of Internal Revenue, 1970-1988*.

¹⁸ These ratios were calculated using convictions in one year divided by investigations started in that year. The results are only slightly different if the ratio is calculated using convictions in one year divided by the investigations started in the previous year (which might more closely approximate the true chronology of a criminal case). Graph 14 plots both ratios.

voluntary compliance with the tax laws,¹⁹ many tax convictions result from the Service's participation in law enforcement efforts directed principally at nontax criminal activity, most significantly involving drugs, money laundering or organized crime. The Service historically has classified cases as in either the General Enforcement Program ("GEP"), the category of cases in which violations of the criminal tax statutes are principally at issue, or the Special Enforcement Program ("SEP"), which includes cases in which a nontax crime is typically coupled with a tax crime.²⁰ Graph 15 depicts the share of total criminal enforcement cases accounted for by the SEP cases during the period 1979 to 1988. As that graph shows, SEP cases began by the late 1980s to approach accounting for one-half of the Service's criminal enforcement activity.

[Graph 15 approximately here]

The targets of SEP investigations typically are selected by law enforcement agencies other than the Service.²¹ As Graphs 16 and 17 demonstrate, these cases are more productive than GEP cases, both in terms of prosecutions and convictions. In 1988, for example, the ratio of indictments to investigations started was 64% in the SEP program compared to less than 51% in the GEP program. The ratio of convictions to investigations started shows a similar pattern (58% versus 46% in 1988).

[Graphs 16 and 17 approximately here]

The recent emphasis by the Service on SEP cases, perhaps in combination with the decline in audit rates, has resulted in a very different pattern of sources for the Service's criminal prosecutions than traditionally has been the case. In particular, there has been a striking decrease in the share of criminal tax cases developed through the examination process. As Graphs 18 and 19 show, this is true for both the percentage of criminal investigations started through audits, which has declined from 30% in 1979 to less than 20% in 1988, and the corresponding percentage

¹⁹ Internal Revenue Manual § 9150.

²⁰ "[The Special Enforcement Program] encompasses the identification and investigation of that segment of the public who derive substantial income from illegal activities and violate the tax laws or other related statutes in contravention of the Internal Revenue laws. The very nature of their operations requires national coordination of enforcement efforts, close cooperation and liaison with Department of Justice and other Federal, State and local law enforcement agencies (see IRM 9400)." Internal Revenue Manual § 9152.

"[The General Enforcement Program] encompasses all criminal enforcement activities of the Criminal Investigation Division except those included in the special enforcement program discussed in IRM 9153. The identification and investigation of income tax evasion cases of substance with prosecution potential is a primary objective. The program also provides for balanced coverage as to types of violations, as well as geographic locations and economic and vocational status of violators as considered necessary to stimulate voluntary compliance." Internal Revenue Manual § 9153.

²¹ "Tax Administration: Investigating Illegal Income---Success Uncertain, Improvements Needed," GAO/GGD-88-61.

of prosecutions, which has declined from nearly 30% to 14% during the same period.

[Graphs 18 and 19 approximately here]

Not only has the nature of criminal tax cases changed over the past decade, but the pattern of punishment for those convicted of tax crimes has also changed significantly. As in the case of civil penalties, persons convicted of tax crimes can expect greater punishment. The likelihood that a person convicted of tax crime will serve a prison sentence has increased significantly, as Graphs 20 and 21 show. In 1988, almost 64% of those convicted of tax crimes were sentenced to prison, compared to 42% in 1979 (down from 48% in 1978).

[Graphs 20 and 21 approximately here]

VI CONCLUSION

Both the audit rate and the rate of criminal prosecutions of tax violators (who have not been engaged in nontax criminal activity) have declined substantially over the past decade. In an apparent effort to maintain deterrence, however, those audited or convicted of a tax crime have suffered increased penalties.

These trends raise a number of important questions. Foremost is the question of the overall effect of these changes on tax compliance. Our own empirical work suggests that the decline in audit rates has been quite costly to the federal government. The increased reliance on third-party information reporting as an enforcement device does not affect the same categories of taxpayers nor does it identify the same types of tax understatements as do audits.

Moreover, the policy of fewer investigations coupled with harsher penalties of those investigated raises issues of both horizontal and vertical equity. When widespread noncompliance is combatted through stiffer penalties on few offenders, issues of fundamental fairness are raised. The penalty reform legislation enacted in late 1989 reflects concern with the Service's increasing reliance on civil penalties during the 1980s.²²

With regard to criminal tax enforcement, it is not clear to what extent the trends reported in Section V reflect deliberate changes in the Service's criminal enforcement policies. Moreover, to date, there is neither theoretical nor empirical scholarship to provide guidance about the effect of these changes on tax compliance. The data, however, suggest that such questions are worth asking.

While the kinds of financial skills located in the Service's criminal investigation division, to be sure, have an important, perhaps even crucial, role to play in this nation's drug enforcement

²² See § § 7711-7743 of P. L. 101-239 ("The Improved Penalty Administration and Compliance Tax Act of 1989"). See also, e.g., Testimony of Michael J. Saltzman, Charles J. Muller and James E. Merrett on behalf of the Penalties Task Force of the Section of Taxation of the American Bar Association, before the Subcommittee on Oversight, Committee of Ways and Means, U.S. House of Representatives, July 28, 1988.

effort, we must be vigilant to ensure that the tax compliance function of the Service's criminal process is not short-changed as a result. The increased use of grand juries in the Service's investigations also raises significant questions. Even in the absence of a sound theoretical or empirical grounding, one cannot help but wonder whether even highly publicized drug enforcement by the Service has a tax compliance deterrent effect as powerful as that of pure enforcement cases. Empirical work addressed at this question is feasible and should be undertaken.

TABLE 1: IRS COLLECTIONS, COSTS, EMPLOYEES, RETURNS FILED AND U.S. POPULATION:
SELECTED YEARS, 1970-88

	Operating Cost (\$ Billions)	Gross Collections (\$ Billions)	Cost Per \$100 Gross Collections	Refunds (\$ Billions)	Net Collections (\$ Billions)	Cost Per \$100 Net Collections	Employees ¹	Real Cost ² Per Emp (\$)	Returns Filed (Millions)	Real Cost Per Return Filed	Pop (Millions)	Real Cost Per Capita (\$)	Real Net Collections Per Capita (\$)
1970	.886	195.722	.45	16.188	179.534	.49	68,683	30,719	113.08	18.65	204.88	10.29	2086.40
1975	1.585	293.823	.54	32.209	261.614	.61	82,339	32,455	125.12	21.35	213.56	12.51	2065.79
1980	2.281	519.375	.44	54.009	465.366	.49	87,464	30,428	143.45	18.55	228.23	11.66	2379.25
1981	2.465	606.799	.41	63.303	543.496	.45	86,156	30,442	166.52	15.75	230.61	11.37	2507.21
1982	2.626	632.341	.42	75.202	557.139	.47	82,857	31,697	170.37	15.39	232.96	11.27	2391.56
1983	2.969	627.247	.47	79.761	547.486	.54	83,605	34,173	171.17	16.69	235.23	12.14	2240.08
1984	3.279	680.475	.46	85.872	594.603	.55	87,635	34,742	172.51	17.64	237.45	12.82	2325.09
1985	3.601	742.872	.48	86.322	656.550	.55	92,254	36,136	178.22	18.17	239.71	13.90	2469.73
1986	3.842	782.252	.49	94.425	687.827	.56	95,880	35,118	188.02	17.90	242.00	13.91	2551.62
1987	4.366	886.391	.49	96.969	789.422	.55	102,188	36,360	193.16	19.23	244.20	15.21	2746.54
1988	5.069	935.107	.54	94.480	840.627	.60	114,873	36,372	194.30	21.50	245.81	17.10	2818.61

Source: Annual Reports of the Commissioner of Internal Revenue, 1970-1988.

1. Figures after 1982 not strictly comparable with prior years due to change in method of accounting for realized positions per requirement of the Office of Personnel Management.
2. Adjusted by GNP implicit price deflator, 1982=100.

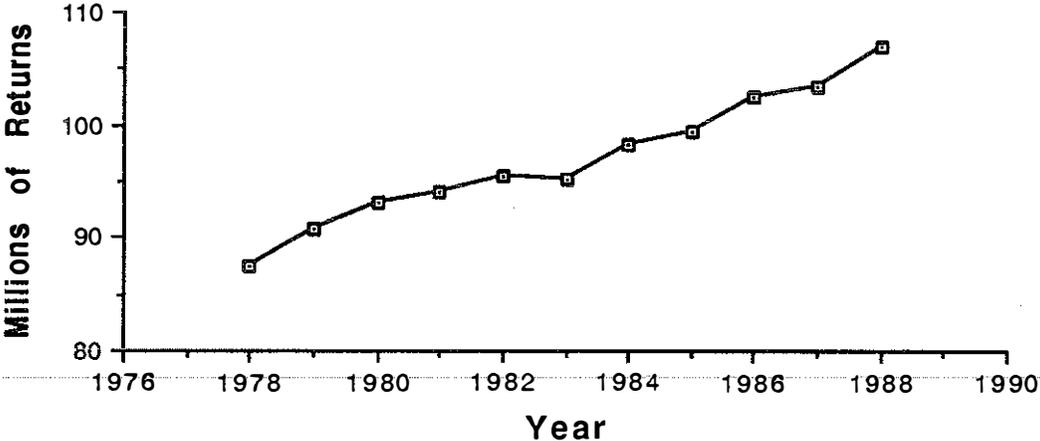
TABLE 2: IRS COST BY ACTIVITY, 1978-88
(thousands of \$)

	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	% Δ 1978-88 Real Dollars	Percent of Total Cost ¹ 1978	1988	Δ Percent of Total Costs 1978-1988
(1) Executive Direction, Management Services, Internal Audit & Security	59,891	65,961	70,156	79,427	78,218	128,080	98,160	104,945	89,475	90,693	88,151	-20	3.05	1.75	-1.30
(2) Returns Processing Computer Service	507,384	535,333	574,179	611,308	650,255	681,802	890,343	1,048,470	1,247,482	1,421,112	1,721,665	17.28	25.85	34.19	8.34
(3) Collection	258,302	208,613	297,947	349,410	410,177	529,416	604,149	613,527	606,498	660,659	799,814	7.27	13.16	15.88	2.72
(4) Taxpayer Service	161,906	197,612	203,687	218,153	206,584	232,660	148,293	169,874	208,212	249,606	329,597	1.15	8.25	6.55	-1.70
(5) Examination	675,253	719,568	779,637	836,416	889,631	958,925	1,025,611	1,114,845	1,139,501	1,304,179	1,399,341	5.27	34.41	27.78	-6.63
(6) Employee Plans & Exempt Organizations	62,247	64,144	66,963	65,126	71,315	80,039	90,431	94,398	99,031	104,980	120,988	.32	3.17	2.40	-.77
(7) Tax Fraud Investigation	121,182	130,185	140,631	153,927	172,176	172,619	204,135	219,951	221,304	245,370	261,585	1.15	6.18	5.19	-.99
(8) Appeals	50,939	50,525	59,750	68,935	67,991	121,332	150,391	167,263	162,639	189,694	241,890	3.10	2.60	4.80	2.20
(9) Technical Rulings & Enforcement Litigation	65,025	72,225	77,889	82,866	79,991	63,653	67,554	67,670	67,841	66,388	72,510	-.7	3.31	1.44	-1.87
Total Cost (000's)	1,962,129	2,116,166	2,280,839	2,465,469	2,626,338	2,968,526	3,279,067	3,600,953	3,841,983	4,365,816	5,035,541	34.52			

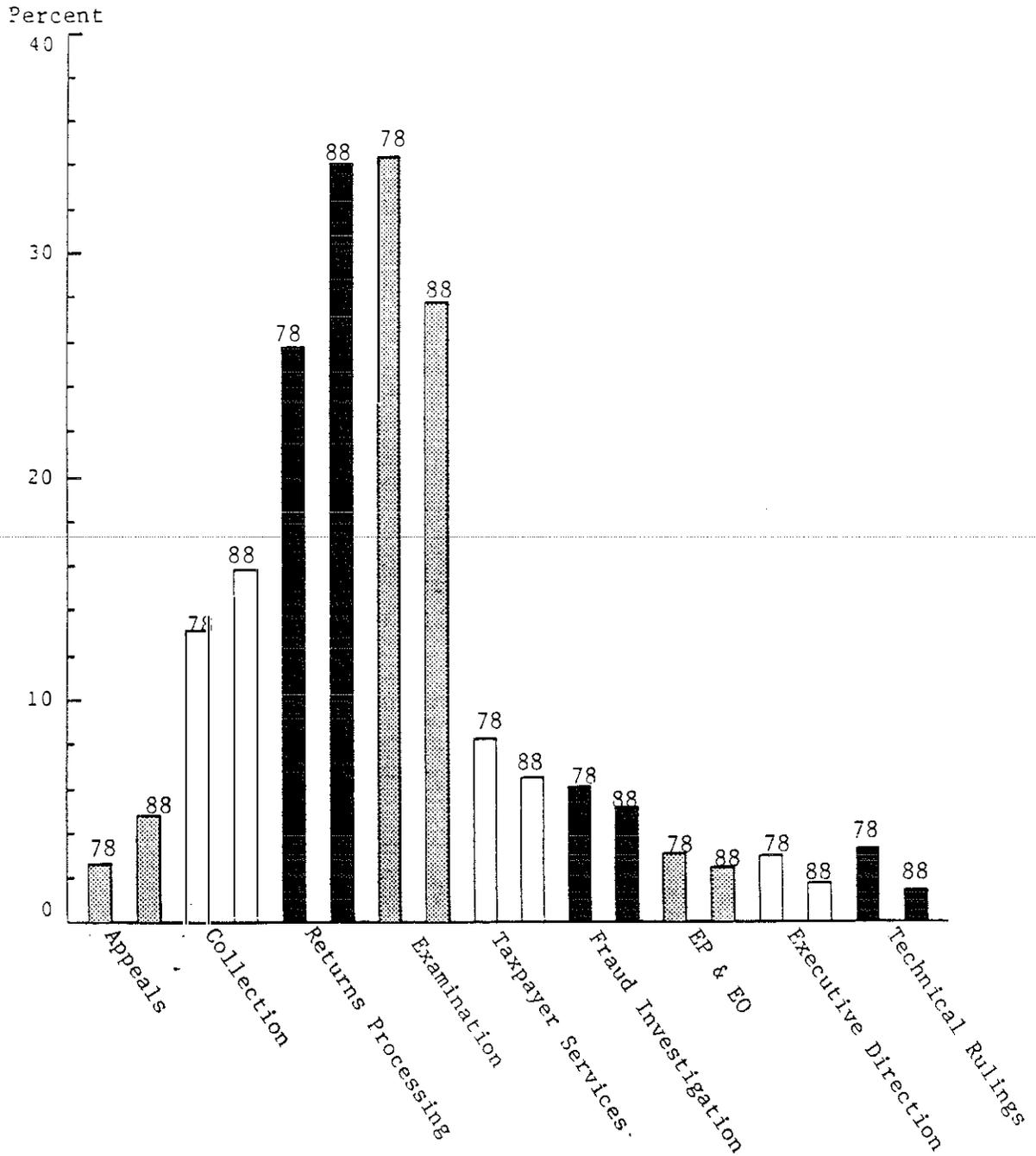
Source: Annual Reports of the Commissioner of Internal Revenue, 1978-1988.

1. Does not total 100% due to miscellaneous costs.

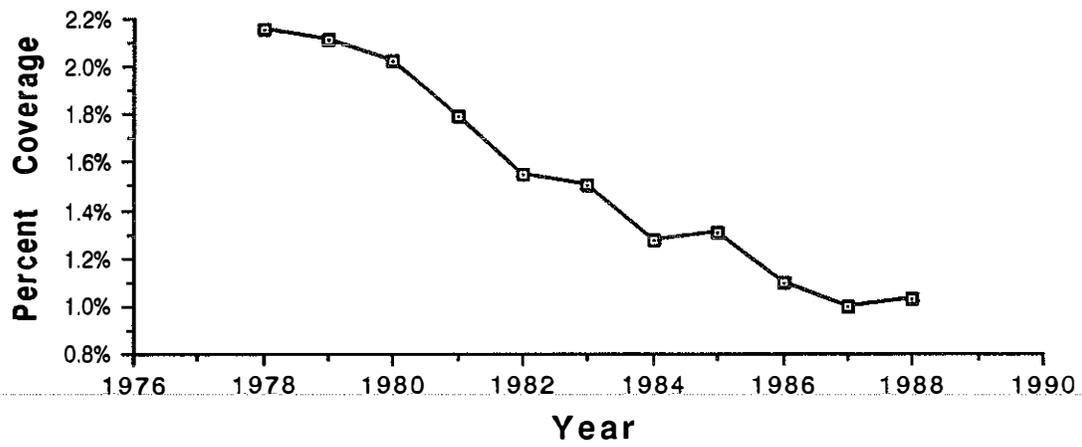
Graph 1: Individual Returns Filed, 1978-88



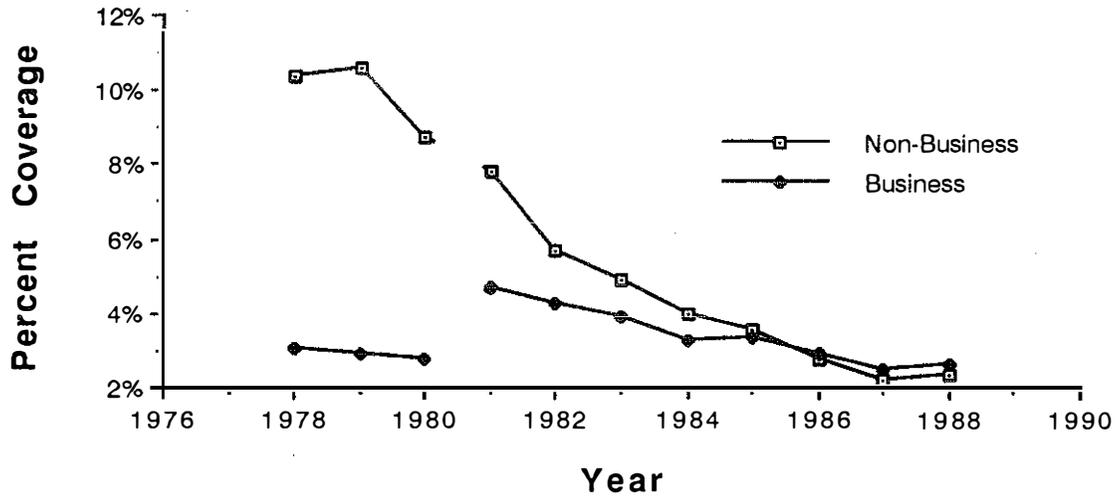
Graph 2: Budget Allocation of IRS Activity as a Percentage of Total IRS Budget for FY '78 and FY '88



Graph 3: Audit Rate, All Individuals, 1978-88

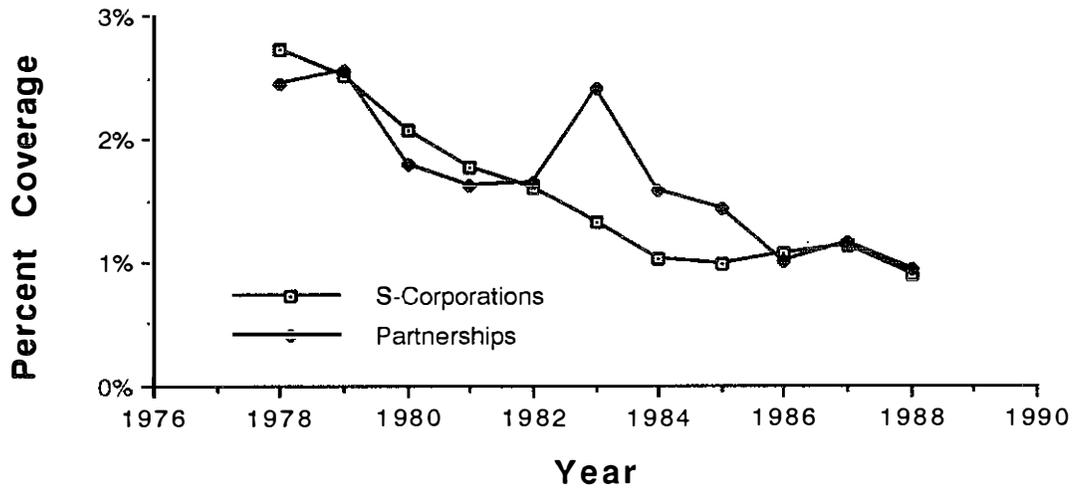


Graph 4: Audit Rate, High Income Individuals, 1978-88*

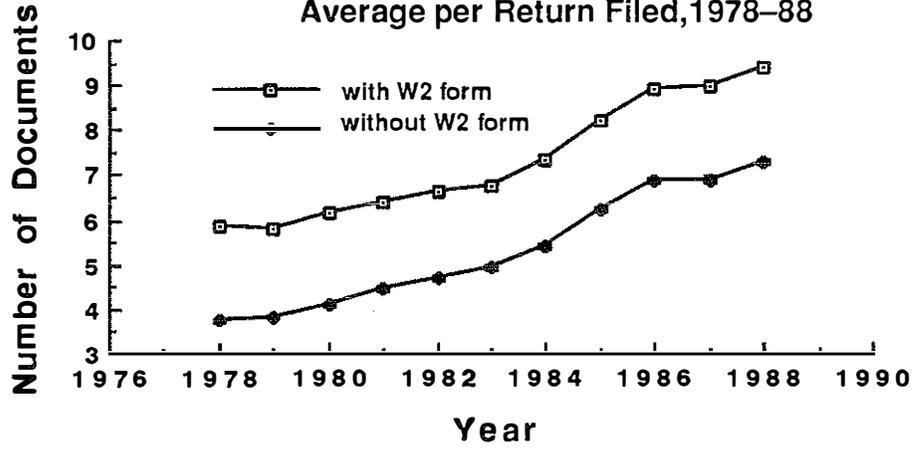


* Series not comparable before and after 1980-1981.

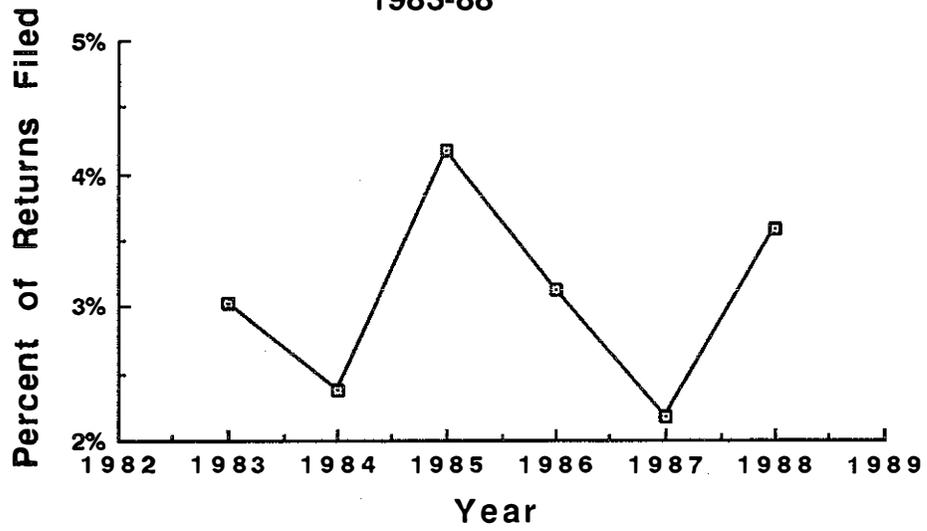
Graph 5: Audit Rates for Subchapter S Corps. and Partnerships, 1978-88



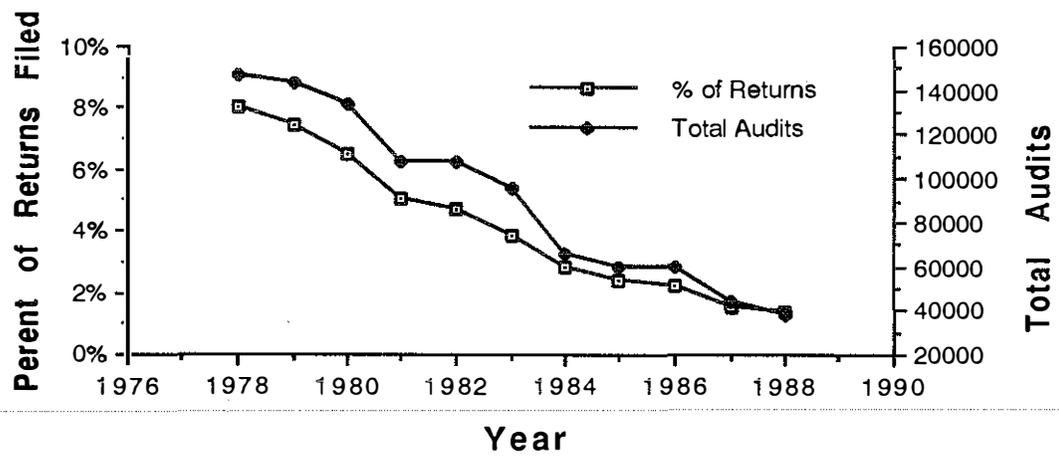
Graph 6: Information Returns Program Documents, Average per Return Filed, 1978–88



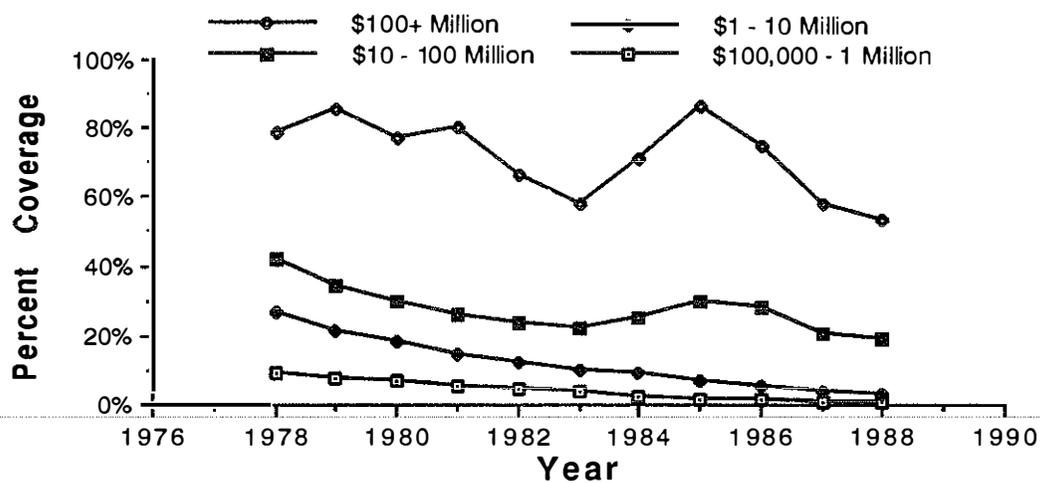
Graph 7: CP2000 Rate per Return Filed,
1983-88



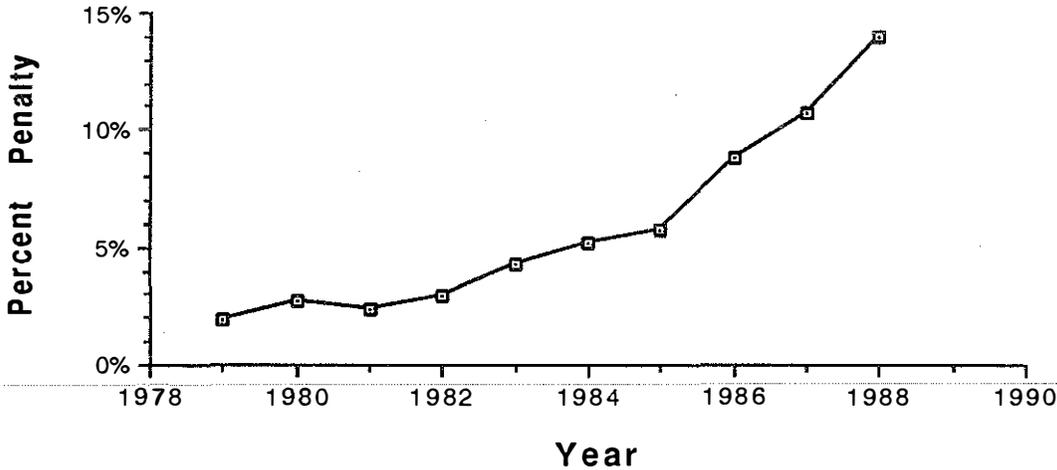
Graph 8: Audit Coverage, All Corporations, 1978-88



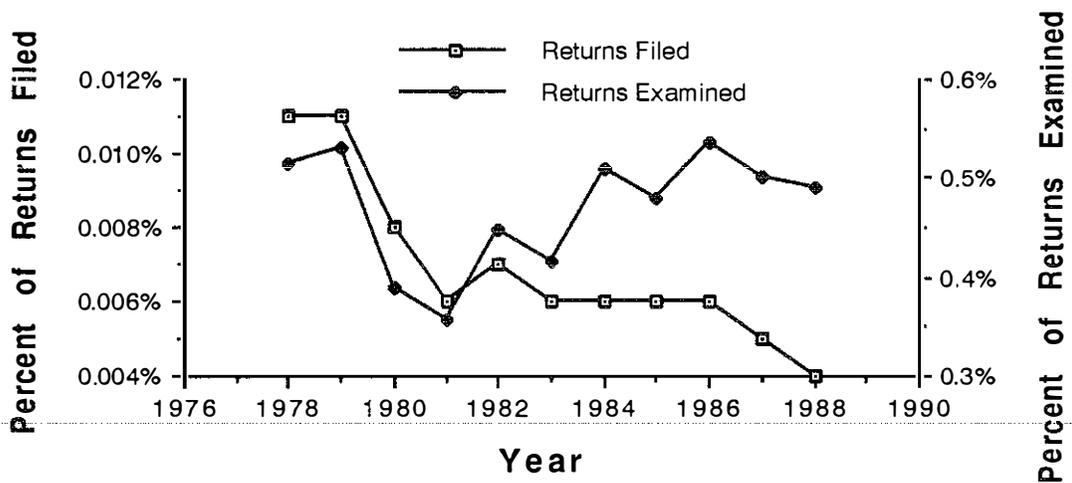
Graph 9: Audit Rate, Corporations by Size, 1978-88



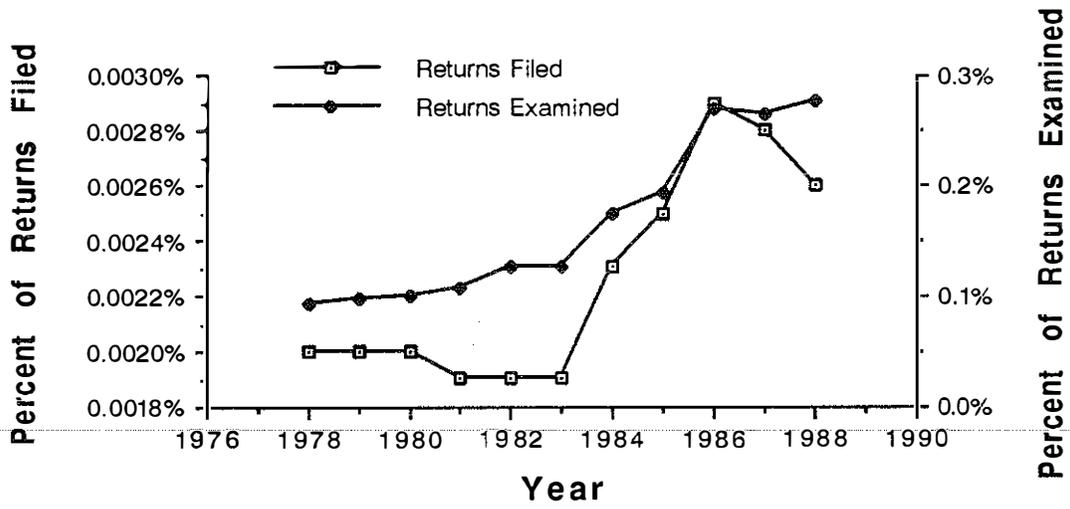
Graph 10: Average Net Penalty Rates, Individuals, 1979-88



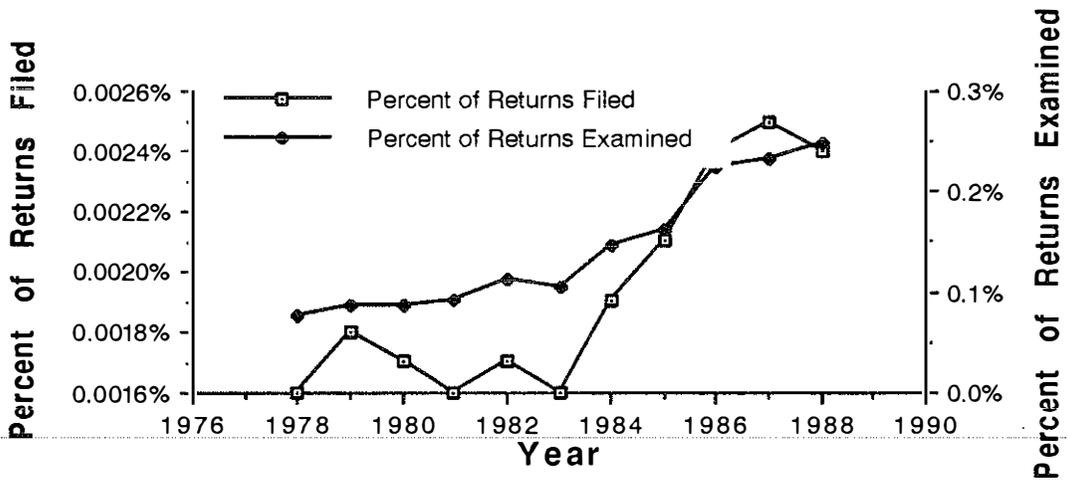
Graph 11: Criminal Investigation Rates, 1978-88



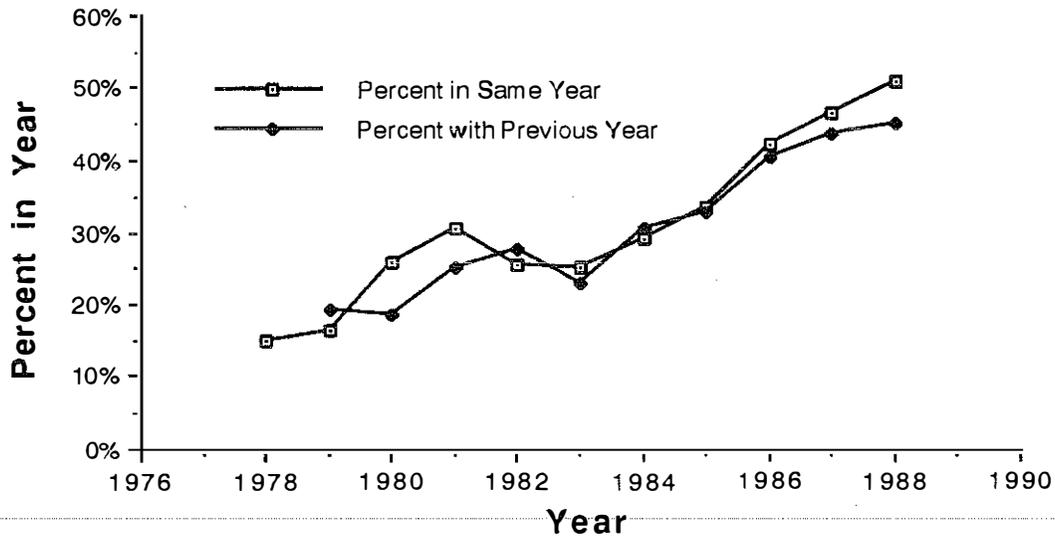
Graph 12: Indictment and Information Rates, 1978-88



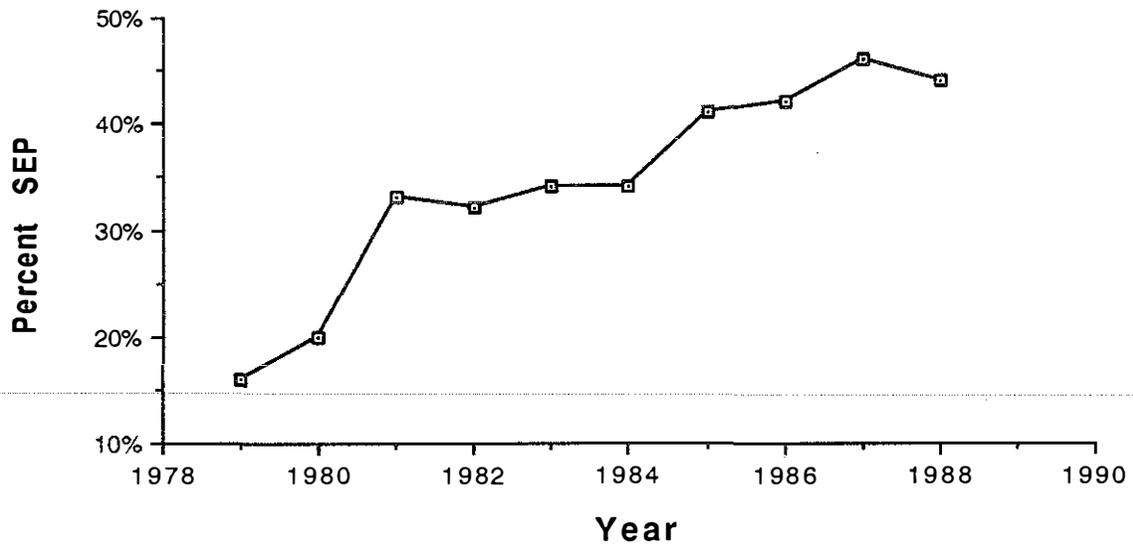
Graph 13: Conviction Rates, 1978-88



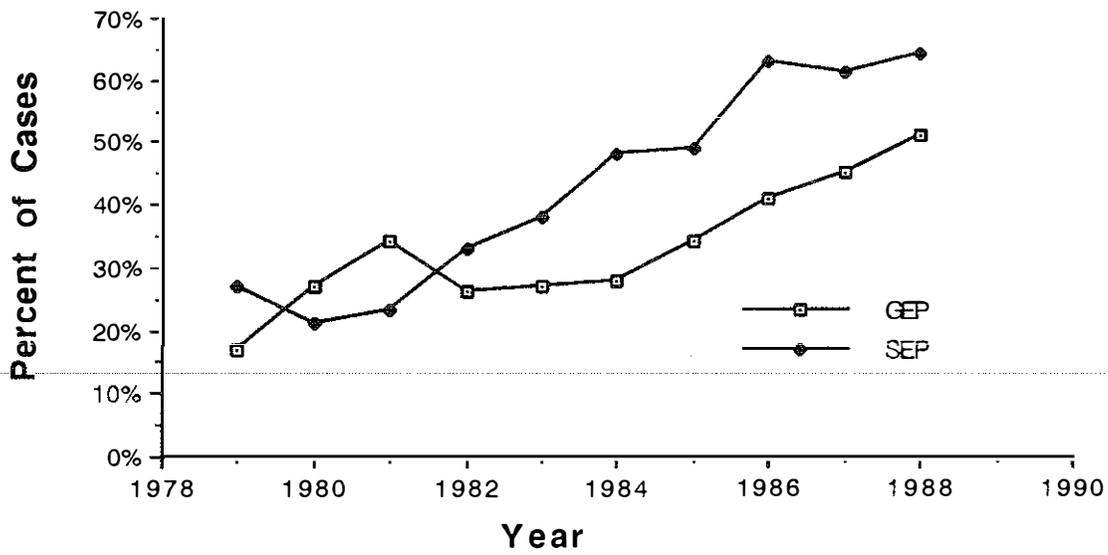
Graph 14: Convictions as a Percentage of Investigations Started, 1978-88



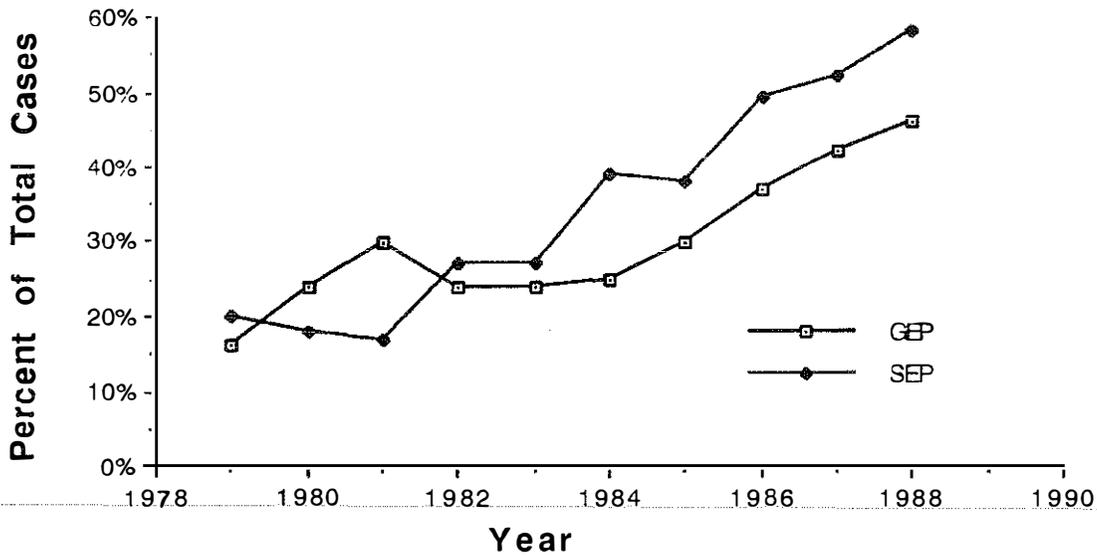
Graph 15: Trend of SEP Investigations as a Percent of Total Investigations (GEP plus SEP), 1979-88



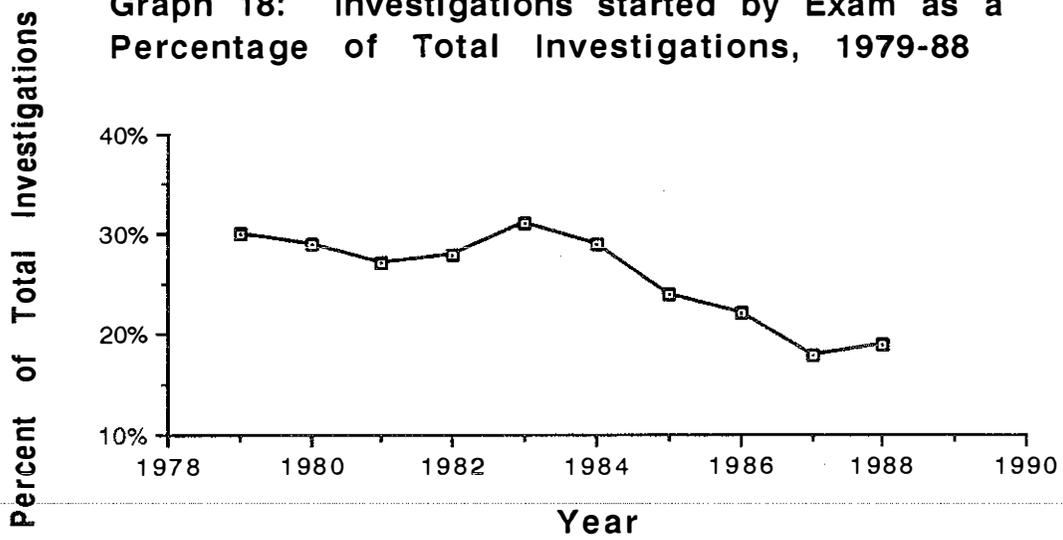
Graph 16: Indictments as a Percentage of Investigations Started in the Same Year, GEP and SEP, 1978-88



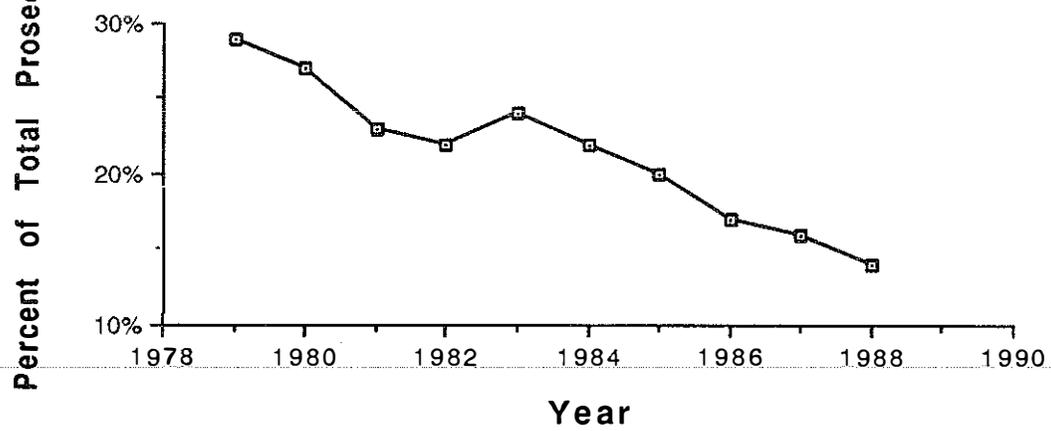
Graph 17: Convictions as a Percentage of Investigations Started in the Same Year, GEP and SEP, 1978-88



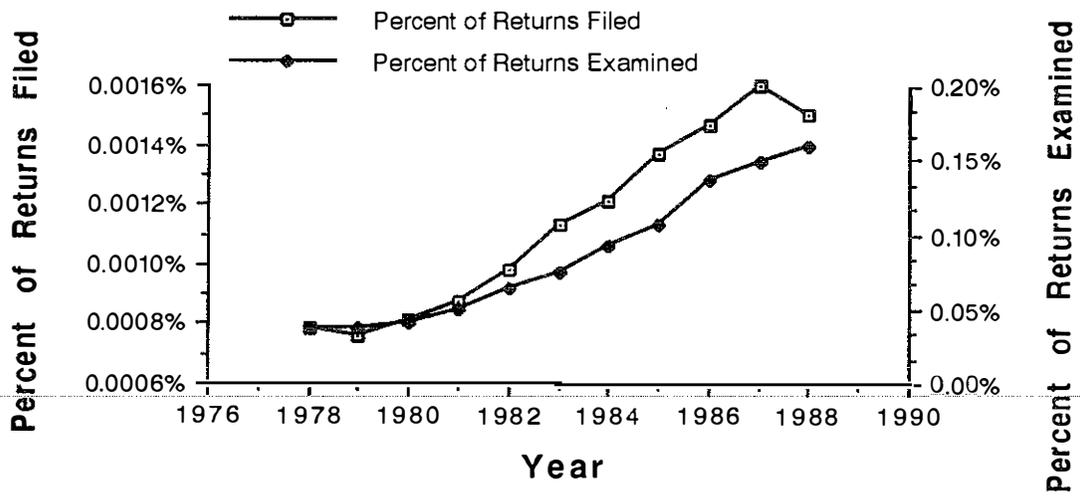
Graph 18: Investigations started by Exam as a Percentage of Total Investigations, 1979-88



Graph 19: Prosecutions Recommended by Exam as a Percentage of Total Prosecutions, 1979-88



Graph 20: Prison Sentence Rates, 1978-88



Graph 21: Prison Sentences as a Percentage of Convictions, 1978-88

