FURTHER EXAMINATIONS OF TAX SHELTERS IN THE POST-REFORM WORLD

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The concept of horizontal equity, that people in equal positions be treated equally, has a long history of acceptance as a basic principle of taxation [1]. Although recent arguments have been raised that the concept can be improperly applied if it does not account for such phenomenon as propensities toward risk [2], acceptance of the concept remains widespread. In the late 1970's and early 1980's, concerns were raised that provisions of the Internal Revenue Code allowed for increasingly divergent levels of effective taxation by individuals who could generally be classified as "equals." A perception that the principle of horizontal equity, or the overall fairness of the tax system in general, began to be questioned by an increasing number of taxpayers.

The Tax Reform Act (TRA) of 1986 was a major legislative change toward restoring greater equity to the Federal tax code by reducing tax shelter benefits. Initial examinations of data on tax shelter partnerships, the most prevalent type of such activities, have indicated mixed results [3,4]. While individual investors have shown a propensity to steer away from these tax shelters, loss-generating businesses in industries that fostered these tax shelters have continued to realize large losses despite their diminished capability in sheltering income from taxation. This paper is an extension of previous investigations further examining loss-generating partnerships and discussing the use of these losses as means for individuals to shelter income from taxation.

The first section of this paper provides background information on partnerships, the taxation of partnership income, tax shelters, and the 1986 Tax Reform Act. The second section examines time series data on partnerships and partnership income and losses received by individual partners to ascertain how the post-reform years compare with those in the pre-reform period. The final section summarizes results and presents conclusions.

I. PARTNERSHIPS AND THE TAXATION OF PARTNERSHIP INCOME

A partnership is not a taxable entity. Each partnership annually files an information return (Form 1065) with the Internal Revenue Service (IRS) which shows the partnership's taxable income or loss for the year. Partnerships compute the distributive allocation to each partner and provide a Schedule K-1, which identifies the partner's share of the total partnership's business activity. As partners calculate their annual tax liabilities, they include their distributive shares of income and deductions from the partnership along with income from other sources. Partners can be individuals, corporations, other partnerships or virtually any other legal entity, though the focus of this work is on individual partners.

Tax Shelters and the 1986 Tax Reform Act

Tax shelters are generally defined as investments "in which a significant portion of the investor's return is derived from the realization of tax saving with respect to other income, as well as the receipt of tax-favored (or, potentially, tax-exempt) income from the investment itself" [5]. Tax shelters commonly involve:

- Deferral of tax liability through the use of tax provisions or tax preferences that accelerate deductions.
- Conversion of ordinary income into capital gains or other forms of income subject to lower rates of tax.
- Leveraged purchasing which magnifies the other tax advantages.

Because of its nature as a flow-through entity and its flexibility in allocating income among partners, the partnership form of business provides an attractive structure for tax shelters. Individuals with large incomes from other sources could invest in partnerships and reduce their taxable income with tax losses from partnership investments.

One of the main goals of the 1986 Tax Reform Act was to limit the ability of individual taxpayers to reduce their tax liabilities through the use of tax shelters [5,6]. The Tax Reform Act of 1986 took several steps to diminish the attractiveness of tax shelters, including imposing limitations on "passive losses."

While the passive loss limitations apply to most forms of flow-through business, they particularly affect partnerships. These limitations prevent passive partners--ones who do not "materially participate" in the business of the firm--from using any temporary losses generated by the business to offset income from other sources, such as wages and salaries, interest, or dividends [7,8,9]. Although some relief has been provided through phase-in rules [10], it was hypothesized that the future of tax shelter partnerships was seriously endangered by these provisions.

Piecing together the picture of partnership and partner financial flows can be quite complex and costly. Data from the partnership information return (Form 1065) is needed to understand the overall financial picture of the business, its legal type (general or limited status), and its principal business activity. Information from partnership Schedule K-1 is needed to examine partnership distributions to each partner and other information, such as the legal type of each partner. Data from the partner's tax return (Form 1040 in the case of in-

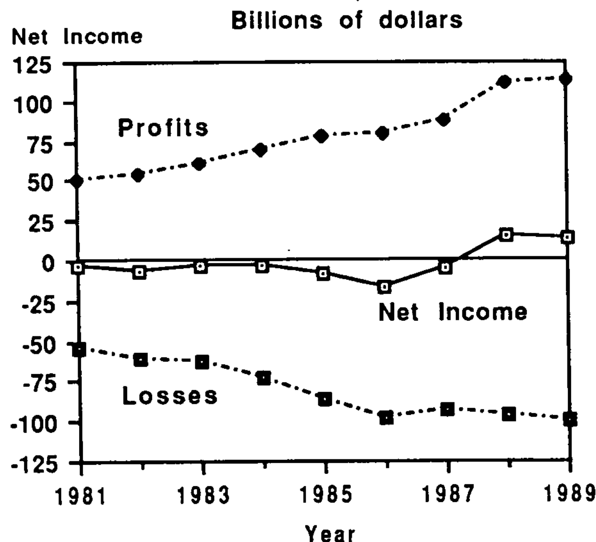
dividual taxpayers) is needed to ascertain the effective tax consequences of the income or losses generated by the partnership and distributed to each partner.

An ideal information system for the partnership and partner financial flows can thus be quite complex and costly since each return or schedule provides only some of the desired information. In the absence of such an approach, an alternative approach, as reflected in this paper, examines tax return data on partnerships and partners from before and after the enactment of TRA for evidence of the anticipated response. Specifically, it would be expected that the numbers of partnerships and partners and the amounts of losses would decline as partnership losses have a diminished capability in sheltering other income from taxation.

II. EXAMINATION OF PARTNERSHIP AND PARTNER DATA

This section focusses on time series data on partnerships and partners for the period 1981-1989. Figure 1 presents the net income of partnerships. Overall, partnerships had losses on net income in each year except for 1988 and 1989. These losses peaked in the 1982 recession, declined for 1983, then began a period of steady and uninterrupted growth culminating with a record loss of $17 billion for 1986. Between 1986 and 1989, the first 3 years in which provisions of the reform were in effect, net income moved strongly positive, going from negative $17 billion to approximately $14 billion for both 1988 and 1989.

Figure 1.— Net Income of Partnerships, 1981-1989



Total partnership net income is also separated into gains and losses in the figure. Gains or profits increase in every year throughout the 1981-1989 period. Losses, on the other hand, grew in every year through 1986, but then dropped by $4.6 billion for 1987. This was an anticipated response to tax reform; however, increases in losses for 1988 and 1989 were not expected and are in need of further investigation.

In Figures 2-4, partnerships were classified by legal type (whether they were limited or general partnerships) and by profitability (whether they had positive or negative net income). With limitations on personal liability, limited loss-generating partnerships are most apt to show activities consistent with tax sheltering motives prior to TRA. As a result, we would expect limited partnerships to more likely show a response to TRA.

Figure 2 breaks net income into these four types of legal and profitability status. Despite the somewhat erratic trends in total net income, the picture by these four types of partnerships is a little more clear. Net income for profit-generating partnerships (both general and limited) grew in every year,

Figure 2.— Partnership Gain or Loss in Ordinary Income by Type of Partnership and Profitability, 1981-1989

(Billions of dollars)

Year	Total	Type of Partnership			
		General		Limited	
		Gain	Loss	Gain	Loss
1981 ..	- 2.7	42.8	-29.8	7.8	-23.5
1982 ..	- 7.3	44.4	-34.2	9.2	-26.7
1983 ..	- 2.6	48.6	-32.5	11.7	-30.4
1984 ..	- 3.5	55.7	-36.6	14.0	-36.6
1985 ..	- 8.9	60.5	-42.4	16.6	-43.5
1986 ..	-17.4	63.5	-45.3	16.8	-52.3
1987 ..	- 5.4	66.2	-43.4	21.5	-49.6
1988 ..	14.5	81.2	-42.7	30.1	-54.2
1989 ..	14.1	80.9	-45.2	33.0	-54.6

For data sources, see note following Figure 4.

except for a very modest decline among general partnerships for 1989.

Losses for both general and limited loss-generating partnerships also increased in every year through 1986, except for the post-recession year of 1983. For 1987, the first post-TRA year, losses of both types of loss-generating partnerships declined. Losses of general partnerships continued to decline for 1988; however, losses increased for limited partnerships for 1988 and 1989 and general partnerships for 1989.

Figure 3 presents data on the numbers of partnerships by legal type and profitability. The total number of partnerships grew steadily in the 1981-85 period. However, amid the widespread public debates and eventual passage of TRA in late 1986, the total number of partnerships dropped for the first time in 1986, the first such decline since

Figure 3.— Number of Partnerships by Type of Partnership and Profitability, 1981-1989

(Thousands of Partnerships)

Year	Total	Type of Partnership			
		General		Limited	
		Gain	Loss	Gain	Loss
1981 ..	1,461	677	576	75	133
1982 ..	1,514	707	581	87	139
1983 ..	1,542	707	601	82	152
1984 ..	1,644	750	636	101	157
1985 ..	1,714	774	660	107	173
1986 ..	1,703	766	663	92	181
1987 ..	1,648	769	617	96	166
1988 ..	1,654	782	587	119	166
1989 ..	1,635	770	571	128	166

For data sources, see note following Figure 4.

Figure 4.— Number of Partners by Type of Partnership and Profitability, 1981-1989

(Thousands of Partners)

Year	Total	Type of Partnership			
		General		Limited	
		Gain	Loss	Gain	Loss
1981 ..	9,095	2,883	2,036	1,628	2,548
1982 ..	9,765	2,886	2,167	2,027	2,684
1983 ..	10,589	2,939	2,216	2,488	2,947
1984 ..	12,427	3,527	2,215	3,082	3,603
1985 ..	13,245	2,990	2,340	3,680	4,234
1986 ..	15,301	3,061	2,426	4,709	5,105
1987 ..	16,963	3,185	2,255	6,054	5,469
1988 ..	17,291	3,421	2,197	6,664	5,009
1989 ..	18,432	3,150	2,058	7,656	5,568

Sources For Figures 2-4: Internal Revenue Service, Statistics of Income (SOI) Bulletin, selected issues; Internal Revenue Service, 1978-82, Partnership Returns; and unpublished data from Office of Tax Analysis and SOI tabulations of the SOI Partnership files.
"Profitability" is defined as gain or loss in ordinary income. Zero is included with loss.

1967. For 1987, the number of partnerships dropped substantially, gained modestly for 1988, but dropped again for 1989 [11].

The data for each of the four types of partnerships show where these changes occurred. All four types generally registered increases through 1985, with limited partnerships (both gain and loss) rising at more rapid rates than general partnerships. The recession of 1982 appears to have contributed to the overall decline in the number of profitable partnerships for 1983. After 1985, however, profitability appears to be the determining factor for increasing or decreasing numbers. While the modest overall decline for 1985-86 may have appeared to be a response to TRA, this decline is actually the result of decreases in both limited and general profitable partnerships with continued growth among both types of loss-generating partnerships. For 1987 and 1988, the circumstances reversed with profitable partnerships growing and loss-generating partnerships declining for both years. For 1989, only limited profitable partnerships registered an increase.

Despite the growing losses of loss-generating partnerships throughout the pre-TRA period, the number of such partnerships increased. Such behavior defies conventional economic motives which would have predicted that resources (firms and investors) would flow to profitable activities and away from such loss-generating activities. This pattern is instead consistent with tax sheltering motives in which partners appear to have been seeking tax losses, not a positive return on their partnership investments.

The overall number of partners, as shown in Figure 4, exhibited substantial and uninterrupted growth throughout the entire period, even in years in which the number of partnerships dropped. The number of partners in limited partnerships grew much more rapidly and consistently than those of general partnerships, apparently due to the growth of tax shelters. The number of partners in general profitable partnerships declined for 1985 mirroring a similar increase in the number of partners in limited profitable partnerships. In the post-TRA period of 1987-1989, the number of partners in limited profitable partnerships increased in every year while the number of partners in general profitable partnerships increased in two of the three years (though the reason for their decline for 1989 is not clear). The number of partners in general loss-generating partnerships declined in each year in the post-TRA period, as did the number of partners in limited loss-generating partnerships (except for a large reversal for 1989).

Figures 1-4 clearly indicate a response to TRA but some indicators have not been consistent. To further investigate, industry data are evaluated. The year 1985 was the last year totally unaffected by both the publicity as well as the provisions of TRA (since public debate of the Act was quite visible throughout 1986 right up to its passage in November). For 1985, the losses of oil and gas extraction and real estate operators and lessors, two industries known for their tax sheltering activities, were the largest reported. Oil and gas extraction had losses of $5 billion. Real estate operators and lessors had losses of $43 billion, which accounted for half the gross losses of all partnerships. Clearly, these two, and particularly the latter, had an enormous impact on partnership profitability.

Now the question is that, if loss-generating partnerships in these two industries are really the largest proponents of tax shelters, how has the growth in their numbers, their numbers of partners, and the size of their losses changed over time, specifically before and after TRA? These data are

presented in Figure 5 in which the 1981-1989 period has been divided into three intervals:

1. The pre-reform period (1981-85);
2. The transitional year (1986); and
3. The post-reform period (1987-1989).

The number of oil and gas loss-generating partnerships declined modestly in the pre-reform period, probably due to market conditions which bottomed-out in late 1985. In 1986, the number of loss-generating partnerships increased by nearly 4 percent before declining at an annual rate of over 17 percent in the post-reform period.

Figure 5.—Annual Growth Rates and Average Annual Losses for Oil and Gas and Real Estate Loss Partnerships

Year	Annual Growth Rates (%)		Average Annual Loss
	Partnerships	Partners	
Oil and Gas Partnerships			
1981-85 ...	-0.9	-4.2	-9.6
1986	3.8	19.2	-7.3
1987-89 ...	-17.4	-2.3	-5.4
Real Estate Partnerships			
1981-85 ...	5.9	13.1	-27.1
1986	6.2	18.1	-50.6
1987-89 ...	-4.0	*	-51.3

* = less than 0.1

The number of partners in oil and gas loss-generating partnerships, declined by 4 percent in the pre-reform period. For 1986, their number of partners increased by over 19 percent, which, again, appears to be more of a reaction to market conditions. In the post-reform period, the number of partners declined at just over 2 percent per year.

Oil and gas loss-generating partnerships averaged annual losses of $9.6 billion in the pre-reform period. These losses declined to $7.3 billion for 1986, and continued declining annually to an average loss of $5.4 billion in the post-reform period.

Real estate loss-generating partnerships grew in number at annual rates of approximately 6 percent in the pre-reform period and for 1986. In the post-reform period, however, they have declined at an annual rate of 4 percent per year.

Real estate loss-generating partnerships gained partners at an annual rate of over 13 percent per year in the pre-reform period and 18 percent in 1986. This is further evidence of sheltering behavior since it is attributable to an addition of 2 million investors in loss-generating businesses. In the post-reform period, the numbers of partners have shown no growth.

The losses of these real estate loss-generating partnerships averaged $27 billion annually in the pre-reform period. Within this period losses increased steadily from $15 billion to $43 billion. For 1986, the losses increased to nearly $51 billion and have increased slightly in the three post-reform years.

What do these figures indicate about the response to TRA? Oil and gas losses did decline from 1986 to 1989. As previously noted, part of this is attributable to the energy sector's recovery from an oil price decline in late 1985. Nevertheless, oil and gas was one of the few industries granted major exceptions to the passive loss limitations. Losses from most general partnerships in oil and gas could continue to offset income from other sources, while losses from limited partnerships in oil and gas could not. Thus, despite some continuation of pre-reform benefits, losses have still declined, which is consistent with the overall intent of TRA.

Real estate has contributed heavily to partnership losses, yet the losses have leveled off, not declined. Does this mean that the real estate industry was not affected by tax reform? The fact real estate losses have essentially shown no growth is a sharp reversal of the trend in the pre-reform period in which losses grew substantially. Also, the number of partners has ceased to keep pace with its dramatic growth of the pre-reform period further reveals the effects of reform. This lack of growth occurred despite the fact that some partners in real estate general partnerships could qualify for a special $25,000 exemption from the passive loss limitations for losses from "active" real estate activities.

The real estate industry has experienced depressed demand in certain geographic areas, partially due to overbuilding caused by the pre-TRA tax benefits. Partners in loss-generating real estate partnerships may have found a "buyers market" in their attempts to sell off their partnership interests. The result may be that TRA has left many such investors with no recourse other than to sell off their investments at a fraction of their original cost or to ride out the soft real estate market absorbing continued losses even with their diminished capability to offset other income.

Another indicator of the impact of tax reform is the birth rate of new firms in these industries. In Figure 6, the percentage distribution of partnerships is presented for all partnerships, oil and gas extraction, real estate operators and lessors, and the total excluding these two industries. Even if the tax shelter industry is not contracting, we would expect growth among new such firms to be appreciably less than for other types of businesses.

Overall, nearly 29 percent of all partnerships were established in the 1987-1989 post-reform period. Of this 29 percent, 11 percent were formed in 1989 and 17 percent in 1987-1988. For oil and gas extraction, almost 20 percent were formed in the post-reform period, while for real estate operators and lessors, 19 percent were created in this period.

Figure 6.— Number of Partnerships and Partnership Birth Rates in the Pre- and Post-Reform Periods

Item	All Industries	Oil & Gas Extraction	Real Estate	Other
No. of Firms (1,000's)	1,635.2	42.5	589.8	1,002.9
Births (Percentages)				
Pre-TRA ...	71.4	80.3	80.8	65.4
Post-TRA:				
1987-89 ...	28.6	19.7	19.2	34.6
1987-88 .	17.4	14.8	11.3	21.1
1989	11.2	4.9	7.9	13.5

If we exclude these two industries from the total, a clearer picture emerges. Nearly 35 percent of partnerships in this other group were formed in the post-reform period.

Thus, in the post-reform period, birth rates in these tax shelter industries were substantially below those for other industries. Of course, economic conditions could be contributing as well. For the oil and gas industry, they appear to have obscured the effect of TRA, because the passage of the Act coincided with the beginning of a period of recovery. Continued diminution of oil and gas losses supports this notion. For real estate, on the other hand, the passage of TRA has coincided more with an industry downturn, partly attributable to overbuilding caused by pre-TRA incentives. Thus, losses have persisted at pre-reform levels by the combined effects of TRA and a slumping market.

Evidence from Individual Tax Returns

Clearly, the intent of the passive loss provisions were to curb the alleged abuses of individual taxpayers' use of partnership losses to offset income from other sources. Figure 7 plots time series data on ordinary income and losses from partnerships as reported on individuals' income tax returns [12].

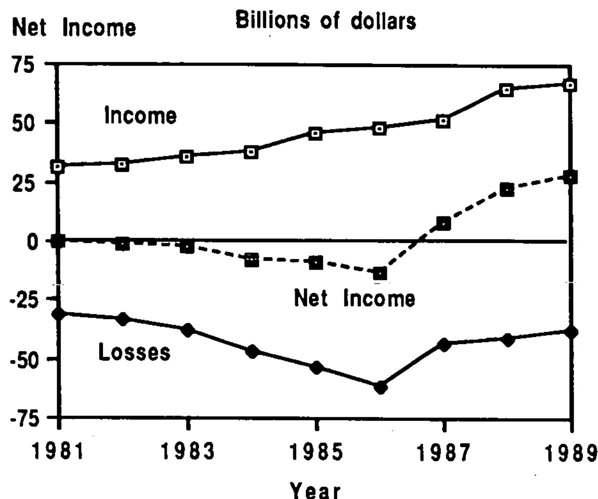
The most striking aspects of this plot are:

- the overall similarity to partnership income over time, as displayed in Figure 1; and
- the fact that individuals claimed overall net losses for each year in the pre-reform period.

For 1987, the net income claimed by individuals shifted strongly positive. Since these amounts are after adjusting for disallowed passive losses, this trend is a very strong indication of a response to TRA.

Total partnership profits reported by individuals increased steadily and consistently throughout the entire period; the largest increase was a $13 billion increase for 1987. This may be due to individual partners who restructured their portfolios to obtain additional partnership passive gains, thus allowing continued write-offs of their passive losses.

Figure 7.– Partnership Income or Loss Reported on Individual Income Tax Returns, 1981-1989



Partnership losses reported by individuals grew throughout the pre-reform period, reaching a low of $61 billion in 1986. Losses declined by $17 billion for 1987 and continued their decline, though much more modestly for 1988 and 1989.

The passive loss limitations are undoubtedly responsible for much of the reversal in losses, though their precise effect can only be estimated. For 1987, the Treasury Department estimated that approximately $10 billion in passive partnership losses were disallowed [3]. With the phase-in of the passive loss limitations progressing, the amount of disallowed passive losses will likely increase [10].

It should be noted that for 1987 and later years, the partnership figures do not include "portfolio income" (interest, dividends, and royalties) earned by partnerships, as do the figures for earlier years complicating the interpretion of these figures. This would tend to understate the gains and overstate the losses in 1987 and later, relative to previous years.

Taxpayers could have indirectly responded to the the passive loss limitations by diverting investments into other activities, further reducing partnership losses. Other provisions of TRA, such as the reduction in accelerated depreciation, would have reduced the tax losses associated with new investments. Improvements in general economic conditions could have contributed to the change in net income as well. Separating the response to TRA from the effects of other factors and estimating the amount of disallowed passive losses are, however, beyond the scope of this paper.

III. SUMMARY AND CONCLUSIONS

The goal of this paper was to see if, after three years, the 1986 Tax Reform Act was achieving its

intended effect of curbing the abuses of tax shelter partnerships. The paper presents evidence suggesting that this has begun to happen, although there are instances where the results were not as prominent as had been hypothesized.

At this point, the consequences of TRA are more evident among individual partners than among the partnerships themselves. However, such a response was expected since the passive loss limitations directly affect the tax liabilities of individuals, giving them incentives to move out of tax shelters. Because corporate and other types of partners can still benefit from the tax advantages of tax shelter partnerships, many partnerships have less incentive to eliminate tax losses than do their individual partners.

As the phase-in of the passive loss limitations proceeds and partners are able to restructure their investment portfolios, partnership losses, the number of partnerships, and the numbers of partners can be expected to continue to decline in those industries in which pre-TRA provisions contributed largely to their attractiveness. If, however, the elimination of tax shelter benefits coincides with real economic declines in these industries, as has apparently happened in real estate, large losses may persist, and the actual effect of TRA may never be fully ascertained.

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[10] In 1987, 65 percent of passive losses from pre-TRA investments were allowed; in 1988, 40 percent; in 1989, 20 percent; in 1990, 10 percent; and none in 1991.

[11] An undetermined number of partnership returns were mistakenly rejected from the 1987 sample, lowering the population estimate. If this downward bias on the population estimate is between 6,000 - 55,000, which appears to be reasonable, the partnership population would have shown a steady decline from 1985 forward. See McMahon, Paul, "Statistics of Income Partnership Studies: Sampling Plan Redesign II," *1991 Proceedings of the Section on Survey Research Methods,* American Statistical Association.

[12] Net income or loss on individuals' returns (Figure 7) differs from the comparable figures for partnerships (Figures 1, 2, and 5) because not all partnership income goes to individuals and because of income definitional differences.