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Proposition 4, Tax Reduction Mirage:

An Exploratory Note on Its Potential Spending and Tax Impacts

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ABSTRACT. What would the true *government expenditure* and *tax-burden* impacts of California's *Proposition 4* likely be if it (or its equivalent) were enacted in all states? What happened to actual *state plus local government expenditures per capita* over the period FY 1970 – FY 1976 is examined. Next, we examine what would have happened to such expenditures (per capita) *if* Proposition 4 had been in effect over the same period. Comparing the results reveals that Proposition 4 would have exercised no significant impact over per capita state plus local *spending levels*. This implies that such legislation would not have resulted in significant *tax reductions*.

I

Introduction

THE PASSAGE OF PROPOSITIONS 13 and 4 in California has generated a great deal of controversy, fear and concern across the United States.

Presumably, the thrust of Proposition 13 was to provide constitutional protection for taxpayers from "excessive" taxation (1). Proposition 4 presumably is an effort to extend the fundamental objectives of Proposition 13. Among Proposition 4's basic provisions are 1) that it will limit state and local government spending and, 2) that it will limit state and local government taxes.

The objective of this exploratory note is to examine what the true government expenditure and tax-burden impacts of Proposition 4 would likely be *if* it (or its equivalent) were enacted in all states. Naturally, we cannot see into the future with any high degree of certainty on this issue; therefore, this note attempts to gain insights by looking at the recent past. In particular, this note examines what *would have happened* to state plus local government expenditures per capita *if* Proposition 4 had been in effect over the same period. Hopefully, by contrasting these two sets of expenditure data, insights

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Table 1

ACTUAL AND THEORETICAL PER CAPITA EXPENDITURE LEVELS

State ¹	Actual (FY 1970)	Actual (FY 1976)	Theoretical (FY 1976)	Difference
Alabama	\$ 564	\$1002	\$ 835	\$ 167
Alaska	1828	3275	2708	567
Arizona	704	1243	1043	200
Arkansas	508	876	752	124
California	916	1486	1357	129
Colorado	728	1346	1078	268
Connecticut	790	1152	1170	-18
Delaware	921	1458	1364	94
D. C.	1234	2064	1828	236
Florida	613	1099	908	191
Georgia	616	1003	912	91
Hawaii	1126	1915	1668	247
Idaho	639	1141	946	195
Illinois	711	1266	1053	213
Indiana	581	953	861	92
Iowa	690	1235	1022	213
Kansas	646	1193	957	236
Kentucky	577	1006	855	151
Louisiana	678	1207	1004	203
Maine	646	1120	957	163
Maryland	780	1453	1155	298
Massachusetts	783	1378	1160	218
Michigan	757	1390	1121	269
Minnesota	806	1460	1194	266
Mississippi	595	1018	881	137
Missouri	606	942	898	44
Montana	754	1409	1117	292
Nebraska	649	1153	961	192
Nevada	956	1470	1416	54
New Hampshire	615	1116	911	205
New Jersey	711	1327	1053	274
New Mexico	717	1177	1062	115
New York	1075	1795	1592	203
North Carolina	527	982	781	201
North Dakota	726	1308	1075	233
Ohio	584	1109	865	244
Oklahoma	623	1045	923	122
Oregon	756	1414	1120	294
Pennsylvania	681	1166	1009	157
Rhode Island	687	1283	1018	265
South Carolina	501	979	742	237
South Dakota	724	1180	1072	108
Tennessee	570	992	844	148
Texas	564	1003	835	168
Utah	677	1201	1003	198
Vermont	840	1280	1244	36
Virginia	593	1105	878	227
Washington	880	1357	1303	54
West Virginia	634	1083	939	144
Wisconsin	764	1322	1132	190
Wyoming	940	1572	1392	180

1. Data obtained from The Statistical Abstract of the United States.

can be gained as to the probable impact of Proposition 4 on expenditure levels per capita and thus on tax burdens per capita.

II

Analysis

COLUMN 1 OF TABLE 1 provides data, by state, on the per capita expenditures of state and local governments during FY 1970 (July 1, 1970–June 30, 1971) (2). Column 2 of the table indicates, by state, the per capita expenditures of state and local governments during FY 1976 (July 1, 1976–June 30, 1977). As the table clearly indicates, this time period—a period of generally high inflation rates in the United States—was also a period of rapidly rising per capita state and local government expenditures. Indeed, these rapidly rising expenditures (which resulted in rapidly rising tax burdens), when coupled with the direct pressures of inflation, were essentially what led to Proposition 13 and ultimately to Proposition 4.

We now address the potential impact on state and local government expenditures for this time period if Proposition 4 had been enacted in all states. At this point, it is appropriate to cite the following provision in Proposition 4:

The total annual appropriations subject to limitation of the state and of each local government shall not exceed the appropriations limit of such entity of government for the prior year adjusted for changes in the cost of living and population except as otherwise provided in this Article.

Thus, in effect, this measure would have limited the per capita growth in state plus local government expenditures in each state to the percentage increase in the cost of living.

Before proceeding, two points warrant mentioning. First, the “cost-of-living” measure that is adopted for the purposes of this paper is the services price index (SPI). Second, the provision cited above sets a *ceiling* on most forms of state and local government spending. Thus, it is conceivable that state and local governments could increase their expenditure levels (per capita) by an amount less than the growth in the SPI. Nevertheless, since there is no guarantee that they would in fact not go to the limit, in the computations provided below it is arbitrarily assumed that, in each state, per capita expenditures will grow by the maximum permitted under Proposition 4.

Let M_i = the maximum amount by which per capita state plus local government expenditures in state i could have increased from FY 1970 to FY 1976, according to Proposition 4.

In order to compute M_i , we perform the following calculation for each of the 50 states (as well as for the District of Columbia):

$$1] \quad M_i = E_{i(1970)} \cdot \Delta P_{(1970-1976)}, i = 1, \dots, 51$$

where $E_{i(1970)}$ = per capita state plus local government expenditures in i , FY 1970

$\Delta P_{(1970-1976)}$ = percentage change in the SPI from July, 1970, to July, 1976

The present analysis deals with the 50 states and the District of Columbia. The value of $\Delta P_{(1970-1976)}$ is given by

$$2] \quad \Delta P_{(1970-1976)} = \frac{180.7 - 122.0}{122.0} = 48.115\%$$

where the base year is 1967 (1967 = 100.0).

In column 3 of Table 1, the value of M_i for each state and the District of Columbia has been added to the level of E_i for each of these 51 areas. Thus, the figures in column 3 represent the theoretical maximum total level *per capita* to which Proposition 4 would have allowed, in each individual area, state plus local government expenditures to rise over the period (3).

Column 4 indicates the difference between columns 2 and 3, *i.e.*, it indicates the value of the expenditure level in column 2 minus that in column 3 in each case. A positive (negative) value for any given case in column 4 implies that, under Proposition 4, per capita state plus local government expenditures would have been lower (higher) than actually was the case.

Column 4 of Table 1 seemingly indicates that, except for a single case (Connecticut), the presence of Proposition 4 would theoretically have yielded lower per capita state plus local government spending for FY 1976. In other words, in 50 out of the 51 cases, Proposition 4 (or its equivalent) theoretically would have reduced per capita state plus local government spending. Such a conclusion may be misleading, however. Simple observation of a consistent pattern of differences does not necessarily imply that there is a *significant* difference between the two sets of spending figures *as a whole*. Accordingly, the next step in the analysis is, following standard practice, to test formally whether there is in fact a statistically significant difference between the average hypothetical FY 1976 per capita government spending level under Proposition 4 and the average actual FY 1976 per capita government spending level. We begin by postulating the *null hypothesis*: that Proposition 4 would not have had a significant impact on per capita state plus local government *nominal* spending levels over the period FY 1970-1976.

To evaluate (to be able to accept or reject) the null hypothesis, we first compute the means and standard deviations for columns 2 and 3 of Table 1. These are shown for the 50 states plus the District of Columbia in the upper panel of Table 2. The mean and standard deviation for column 2 of Table 1 (for *actual* FY 1976 per capita spending) are \$1284.49 and \$373.09, respectively. Meanwhile, the mean and standard deviation for column 3 of Table 1 (for *hypothetical* FY 1976 per capita spending under Proposition 4) are \$1097.53 and \$324.12, respectively. The difference between the two means is \$186.96. However, the latter value is less than even one full standard deviation for the actual FY 1976 spending. Hence, we cannot reject the null hypothesis at any reasonable level.

Essentially the very same results are obtained when Alaska, with its relatively extreme spending levels, is omitted from the picture. As the lower panel of Table 2 clearly indicates, the differential per capita decline in state plus local government spending (\$179.36) is once again less than one full standard deviation for actual FY 1976 spending (\$244.05). Thus, even without Alaska in the computations, we cannot reject the null hypothesis.

Table 2
MEANS AND STANDARD DEVIATIONS

All 50 States Plus District of Columbia		
	Means	Standard Deviations
(A) Actual Per Capita Expenditures	\$1284.49	\$373.09
(B) Theoretical Per Capita Expenditures	1097.53	324.12
Difference (A) - (B)	186.96	90.99
District of Columbia Plus All States Except Alaska		
	Means	Standard Deviations
(A) Actual Per Capita Expenditures	\$1244.68	\$244.05
(B) Theoretical Per Capita Expenditures	1065.32	230.67
Difference (A) - (B)	179.36	73.77

III

Conclusions

THIS EXPLORATORY NOTE has attempted to examine the potential impact of Proposition 4 on per capita state plus local government spending levels. Under the assumption that state and local government units will spend up to their legal limits under Proposition 4, it has been found that, for the period studied (FY 1970–1976), the existence of Proposition 4 would *not* have resulted in a statistically significant reduction in per capita state plus local government spending. This finding is of obvious importance to the taxpayer. Consider the following provision in Proposition 4:

Revenues received by any entity of government in excess of that amount which is appropriated by such entity in compliance with this Article during the fiscal year shall be returned by a revision of tax rates or fee schedules.

Thus, the chief tax implication of the results in Section II is that, for the period considered, Proposition 4 would *not* have led to a statistically significant reduction in tax levels per capita (where taxes are measured in *nominal* terms). Moreover, the results obtained in Section II imply no substantive reason to expect significant changes in revenue-sharing.

From the experience for the period FY 1970–1976, we may infer that Proposition 4 offers very questionable promise for reducing the *nominal* growth rate (per capita) of either state plus local government spending or of state plus local tax burdens. On the other hand, Proposition 4 may prove to be a viable force in stopping an expansion in these per capita spending and tax levels in *real* terms.

1. Proposition 13 has been the subject of enormous media coverage and debate. In addition, the scholarly literature has begun to direct attention explicitly toward an analysis of Proposition 13; this is best illustrated by the devotion of an entire issue (June, 1979, Supplement) of the *National Tax Journal* to the topic. Other selected scholarly investigations include D. Bails, "Spending Limitations: Their Impact on State Tax Revenues," *Southern Economics Association*, Atlanta, Georgia, 1979; and D. Orr, "Proposition 13: Tax Reform's Lexington Bridge?" *Policy Review*, Vol. 6, Fall, 1978, pp. 57–67. See also the analyses in H. Ladd, "An Economic Evaluation of State Limitations on Local Taxing and Spending Powers," *National Tax Journal*, Vol. 31, March, 1978, pp. 1–18; and P. Shapiro and W. E. Morgan, "The General Revenue Effects of the California Property Tax Limitation Amendment," *National Tax Journal*, Vol. 31, June 1978, pp. 119–28.

2. These consist strictly of direct general expenditures of state and local governments. Included in such outlays are direct expenditures by state and local governments per se on education, highways, public welfare, health and hospitals, as well as on police protection, fire protection, natural resources, local parks and recreation, financial administration, sanitation, and interest on general debt.

3. Clearly, $M_i + E_i = \{1 + \Delta P_{(1970-1976)}\} (E_i)$