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Proposition 13— Genesis and Consequences

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California's voters recently enacted a revolutionary measure for reducing the level and growth of state-and-local government expenditure, and for sharply restricting the use of the property tax as a source of government revenue. The Jarvis-Gann Amendment (Proposition 13): (1) restricts the property tax rate to no more than one percent of assessed value;1 (2) sets assessed value for a property which has not been transferred since 1975-76 equal to its 1975-76 fairmarket value plus two percent per year (compounded)-or in the case of subsequent transfer, sets assessed value equal to market value at time of sale plus the two-percent growth factor; and (3) requires that new taxes or increases in existing taxes (except property taxes) receive a two-thirds approval of the legislature in the case of state taxes, or of the electorate in the case of local taxes.²

These provisions have had an enormous fiscal impact. First, the rate limitation alone cut property-tax collections by half,³ since the effective rate of property tax previously had averaged about 2.5 percent statewide. Moreover, the reduction was accentuated by the fact that the rollback of assessments applied to a period when property values had escalated rapidly. Hence, the overall impact amounted to a 57-percent (\$7 billion) reduction in property-tax receipts. This constituted nearly 20 percent of the total revenues raised by all levels of California governments, and 37 percent of the revenues raised by local governments alone.

Before the fact, Proposition 13's critics had predicted disastrous fiscal consequences from such a massive reduction in local-government revenues. They predicted a loss of more than 200,000 public-sector jobs, on the assumption

that slightly more than half of the lost \$7 billion would have been spent on payroll (the national average is 57 percent). The total employment loss was estimated at 400,000 public and private jobs, allowing for such indirect effects as the money public employees would no longer spend. Equally important, the critics predicted that a massive disruption of public services would accompany the revenue shortfall. San Francisco officials, for example, estimated that outlays on police and fire services would be cut by onethird, the budget for libraries cut by 80 percent, the city zoo entirely eliminated, and funds for other recreation and cultural activities reduced by two-thirds.⁴ These dire forecasts have not yet materialized, because of substantial State relief-and because of a number of other factors discussed in this paper. However, the critics argue that severe consequences can still be expected, since the State program was only enacted for one year and the surplus from which it was financed may not recur.

While Proposition 13's employment and public-expenditure effects have received the most attention, numerous other ramifications also demand attention. The amendment, for example, has major implications for financial markets, for individual taxpayers, for the housing market, for state and local governments, and perhaps, most dramatically, for the Federal Government. Because of this complexity, it would be foolish to attempt a comprehensive evaluation in the space available here. Instead, the paper will focus upon three broad questions or issues:

1. What was the general fiscal climate during the period in which the amendment was formulated and debated?

2. To what extent will Proposition 13 succeed in reducing the size and growth of California's public expenditures?

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3. What does the amendment imply for California's future revenue structure?

The answer to the first question should help to resolve a basic controversy—was Proposition 13's success due to fiscal conditions characteristic of state-and-local governments in general, or was it simply a response to fiscal tensions unique to California? The evidence presented below supports the latter position. More specifically, we argue that California's fiscal climate in the pre-Proposition 13 period was characterized by: a) a heavy and growing state-and-local tax burden during a period when such burdens had levelled off in most other states; b) a massive shift of property taxes towards homeowners; and c) a rapidly expanding State budget surplus.

Although difficult to quantify, each factor undoubtedly contributed to Proposition 13's emergence and eventual adoption. More importantly, however, the second and third factors were almost unique to California. The fact that other states considered similar measures, therefore, is more a reflection of their attempt to replicate California's "success" with voterinduced tax reduction than a response to similar fiscal pressures. Largely for this reason, California's experience provides little guidance for other communities. For example, unless they amass a substantial budget surplus somewhere in the state-local fiscal system, as California has done, they cannot avoid painful disruptions in public services.

This leads us to the second question-the

impact on the size and growth of public expenditure. Some Proposition 13 advocates have argued that one of its major effects will be a curb on the growth of the public sector. Our evidence suggests that such effects are and will continue to be relatively minor. Specifically, in its first year, Proposition 13 reduced the level of public services by roughly 3 percent, and in subsequent years, it may reduce the growth rate of public services by less than 1 percentage point. Such results primarily reflect the significant earlier build-up in the State government's budget surplus, the highly responsive character of the State revenue system, and the substantial growth expected in future property-tax revenues.

Despite this small expenditure impact, Proposition 13 has affected the revenue structure of California governments in a major way. Because it largely substitutes State revenues for local revenues, the share of local-government expenditures financed by local sources has dropped precipitously. This has obvious consequences for home rule. In addition, the progressivity of the state-local revenue system has increased, because State revenue sources tend to be more progressive than the local property tax. Finally, property-tax proceeds have come to be shared, on a defacto basis, by local-government units within a county area. In effect, Proposition 13 has introduced tax-base sharing at the county level. This important (although unintended) effect has tended to strengthen fiscally weak jurisdictions (e.g., central-city governments) at the expense of the more affluent (e.g., suburbs).

I. California Tax Climate

In this section we focus upon three major facets of California's fiscal climate: (1) the behavior of the total state-local tax burden over the past two decades; (2) the behavior of the relative property-tax burden of owner-occupied residential property; (3) the recent growth of the State surplus and fiscal prospects for the near-term future.

Total state-local tax burden

California governments collected \$20.8 billion in taxes in fiscal year 1975-76, more than their counterparts in any other state.⁵ California's per capita tax collection of \$965 placed it behind only Alaska (\$1,896) and New York (\$1,139). Accordingly, per capita taxes in California stood 32 percent above the national average and 44 percent above the state median. In relation to personal income, a similar picture emerges. Californians paid 14.9 percent of their personal income in 1975-76, ranking behind only New York and Vermont residents—and standing 19 percent above the national average. Thus, regardless of the measure, California emerges as a high-tax state.

Additionally, the tax burden has increased sharply in recent years. Without Proposition 13, California governments would have absorbed

nearly 16 percent of the state's personal income in fiscal year 1978-79, as compared to 9.3 percent in 1957—an increase of more than 6.5 percentage points. (Table A.1 and Chart 1). For the U.S. as a whole, this measure also increased during the period, but at a much less rapid pace. Thus, the differential between California and the rest of the nation widened from 1 percentage point to more than 4 percentage points over the past two decades, with much of that widening occurring just within the past five years. While the effective tax rate elsewhere actually decreased slightly during the seventies, California's effective rate continued to grow as rapidly as before. This suggests that California has gotten out of step with the rest of the country in recent years. Proposition 13 may thus reflect taxpayers' attempts to bring their government back into line with historic relationships.6 But even after the adoption of the amendment, as Table A.1 indicates, California's tax rate remains above the average for the rest of the nation.

Property tax burdens

Consequently, significant pressures for tax relief have developed in California during recent years. But where would we expect those pressures to erupt? The sharpest increase in recent years has occurred in property taxes, especially those affecting homeowners. Thus, it is not surprising that the taxpayer chose this particular avenue for tax reduction.

The property tax plays a major role in the California tax structure, comprising approximately 41 percent of total state-local tax revenue in 1975-76.7 The corresponding figure for the U.S. as a whole is 36 percent.8 And since California is a high tax state, its property-tax burden is relatively high. In per capita terms, California's 1975-76 property tax receipts of \$415 stood 47 percent above the national norm, and were surpassed only by New Jersey (\$446) and Alaska (\$1,048).9 As a share of personal income, the relevant figures are 6.4 percent for California and 4.5 percent for the nation as a whole (see Appendix Table A.2 and Chart 1). The introduction of General Revenue Sharing narrowed this gap in the early seventies, but it widened again after 1973.

The growing burden was especially heavy for homeowners. In the absence of Proposition 13,



Source: U.S. Bureau of Census; 1977-79 data estimated by author (see Tables A.1 and A.2). Effect of Proposition 13 not shown on chart.

the share of property taxes accounted for by single-family dwellings would have risen from 32 percent in 1973-74 to 44 percent in 1978-79 (Table A.3 and Chart 2). Thus, relative to total state personal income, homeowner property taxes increased 38 percent over the same period.¹⁰ The single-family share of total assessments had been relatively constant during the sixties and early seventies, despite substantial adjustments in the shares of other types of property. Indeed, an increase in the homeowner's exemption caused the share to dip momentarily in 1973-74, but then it began a rapid rise because of an unparalleled boom in the single-family housing market. Prices for existing homes in the San Francisco area, for example, jumped 120 percent between April 1973 and April 1978-roughly 18 percent a year¹¹—and the Los Angeles area experienced even faster growth. The price upsurge could not be attributed to inflation alone, since the GNP price deflator increased only 55 percent over the same five-year period. The boom was confined primarily to single-family housing, and did not spill over into nonresidential building.

Because reassessment in California is conducted on a three-year cycle, the full effects of the housing price upsurge had not yet been felt by the fiscal year 1978-79. Given a 9-percent annual rate of property appreciation—a conservative estimate—and given a continuation of the recent pace of construction activity, the single-family share of assessments (without Proposition 13) would have risen to about 48.6 percent in the year 1981-82. (In contrast, the combined share of assessments, for homeowners and renters alike, amounted to only 47 percent for the nation as a whole in 1975.)¹² In the space of only seven years, then, the homeowner's share of the property tax would have risen 54 percent.

Therefore, it is not surprising that California's taxpayer revolt focussed upon property-tax reduction. The property-tax burden generally was heavier than elsewhere, and in addition, the rapid escalation of real-estate prices had created a massive shift of the property-tax burden toward homeowners. As a class, homeowners were made better off by the capital gains on their homes, but most were not in a position to realize them. Consequently, a large number of homeowners found themselves with property-tax bills doubling and even tripling without a corresponding increase in their income flow. Thus considerable pressures arose for some form of property-tax relief.





State budget surplus

No story about California's fiscal climate would be complete without a discussion of the budget surplus accumulated by the State government in the past several years. Without the passage of Proposition 13 and its impact on the 1978-79 budget, the cumulative surplus would have grown to at least \$10.1 billion by 1979-80 (Table 1)¹³. That amount would have been almost as great as the combined yield (\$11 billion in 1979) of the State's two major revenue sources, the personal income tax and the general sales tax.¹⁴

The growth in the State surplus reflects a virtual explosion of California tax revenues (Table 2). Between 1975-76 and 1977-78, three of the State's major revenue sources showed growth rates of 43 percent or more, and a fourth grew by about one-third. Overall, growth of revenues amounted to a staggering 40 percent. More impressively, this growth was accomplished without any rate increases and was accompanied by an increase of only 23 percent in state personal income. In the aggregate, the latter implies a revenue elasticity of 1.75. Although State expenditures also grew rapidly over the same period (27 percent), this growth was not sufficient to prevent the accumulation of a considerable surplus.

The rapid growth of State-tax revenues can be explained in part by the rapid recovery of the national and regional economies from the severe 1974-75 recession. Corporate profits and per-

Table 1Budget Surplus of the State of California,
Prior to Adoption of Proposition 13,
1975-76 to 1979-80
(\$ millions)

Fiscal Year	Cumulative Surplus At Beginning of Fiscal Year	Change in Cumulative Surplus from Preceding Year		
1975-76	570			
1976-77	1,211	641		
1977-78	3,800	2,589		
1978-79 a	7,100	3,300		
1979-80a	10,100	3,000		

a Does not allow for \$4,100 million Proposition 13 relief and temporary income-tax cut of \$1,000 million, both for fiscal year 1978-79.

Source: (1975-76) and (1976-77), California Legislature, Analysis of the Budget Bill, July 1, 1978 to June 30, 1978; (1977-78) to (1979-80) San Francisco Chronicle, August 25, 1978.

sonal income, of course, are highly sensitive to aggregate economic conditions. But as the economy approaches full-employment, revenue increases from these sources should slow down. However, one other factor tends to keep state revenue growth above that of personal income inflation. Since the State's personal income tax is steeply progressive over a wide range, increases in income due to inflation generate disproportionately large increases in tax receipts. Specifically, the elasticity of the State income tax with

Table 2Growth of Major State Taxes in California1975-76 to 1977-78

Tax Source	Receipts 1977-78 (\$ millions)	Change Since 1975-76 (\$ millions)	Percent Growth 1975-76 to 1977-78 (percent)
Personal Income Tax	\$ 4,391	\$ 1,432	48
General Sales Tax	5,020	1,278	34
Selective Sales Taxes	2,234	672	43
Corporation Income Tax	1,900	616	48
Death and Gift Taxes	369	48	17
Property (auto excise) Tax	445	70	19
TOTAL	14,359	4,116	40
Item: California Personal Income			23

Sources; U. S. Bureau of the Census, Governmental Finances; Economic Report of the Governor, 1978.

respect to personal income has averaged about 1.7 over the last decade. This means that for every one-percent inflation-induced growth in personal income, income taxes have increased by 1.7 percent— a 0.7-percent bonus for the State. At inflation rates of 7 to 8 percent, this translates into an additional 5-percent real increase in the State government's revenue.

Inflation makes the short-term outlook for State revenue growth particularly bright. Continued inflation should enable the State to sustain personal-income growth of 11 percent, its average for the past five years. If the growth of other tax revenue matches the growth of personal income, total tax revenue could expand 13.5 percent per year-nearly doubling within five years.¹⁵ More importantly, if State Government expenditures grow in proportion to State personal income, the budget surplus would continue to expand. By the year 1983-84, the annual surplus would rise to \$6.3 billion, and the cumulative surplus to more than \$30 billion (Table 3). In other words, the budget surplus would grow to untenable levels without some action to reduce taxes. Of course the State government could increase expenditures more rapidly than the 11 percent assumed in our projections. But this would run counter to the national trend-a falling share of income absorbed by state and local taxes (see Table A.1). The State, alternatively, could provide greater financial relief to local governments, but this would only shift the locus of the surplus. Tax reduction of some form appears inevitable. Indeed, this helps explain the recent one-time-only State income tax cut of \$1 billion, at a time when government finances were supposedly in a state of crisis. A glance at Table 3 suggests that this action was no more than a "drop in the bucket."

Three major factors

We can now weave together the three major strands of our fiscal-climate story. Not only were taxes considerably higher in California than elsewhere, but they were also diverging from the national norm. Pressures therefore were developing to bring the state back into line. In effect,

More than anything else, Proposition 13 has been interpreted as a measure to reduce the level

Table 3 Projected Budget Surplus of the State of California 1978-79 to 1983-84 (\$ millions)

Cumulative					
Fiscal	End-of-Year	Yearly			
Year	Surplusa	Surpiusa			
1978-79	\$ 7,100	\$3,300			
1979-80	11,202	4,102			
1980-81	15,767	4,565			
1981-82	20,846	5,079			
1982-83	26,489	5,653			
1983-84	32,780	6,291			

a For derivation see text. No allowance is made for State relief or tax-cut programs enacted for fiscal year 1978-79,

this amounted to resistance to abnormally high levels of government expenditure.¹⁶ At the same time, the combination of economic recovery and inflation had produced a substantial budgetary surplus which, if left unchecked, would have soon grown to unreasonable proportions. Hence, pressures were building to bring taxes back into line with expenditure. Finally, a boom in the single-family housing market produced a sharp jump in the homeowner's share of the property-tax burden. Thus, there was considerable pressure to provide tax relief to this subset of taxpayers.¹⁷

Proposition 13, then, was California's method of dealing with these diverse pressures. It accomplished the necessary tax reduction, and at the same time provided a change in tax structure designed to promote equity. This is not to say, however, that the amendment was the optimal way of achieving these goals. The fact that no provision was made for a redistribution of taxes from the State to local governments threatened a considerable disruption in the delivery of public services. However, given the diverse objectives to be served and differences of interests among voters, a comprehensive approach may not be proven politically feasible. Moreover, the State did redirect substantial revenues to local government. Viewed in this light, Proposition 13 was successful in liquidating the State surplus.

II. Expenditure Impacts

and control the growth of government spending. In this section, we offer quantitative estimates of the expenditure impacts of the amendment in both the short and medium term. It will be seen that the pre-election estimates were grossly exaggerated, and that Proposition 13's impact on the size of California's public sector has been relatively modest. (For those readers who wish to skip the sometimes complex detail, the main conclusions are summarized in the last part of this section.)

Early estimates of impact

As noted earlier, the Jarvis-Gann Amendment initially had been expected to reduce localgovernment property-tax revenues by 57 percent (\$7 billion) in fiscal year 1978-79. This would imply a 23-percent reduction in local expenditures, allowing for the fact that the property tax produced 40 percent of all local revenues. A reduction of such magnitude was not required. however, because the State government, by liquidating some of its surplus, allocated \$4.1 billion in direct assistance and \$0.9 billion in emergency loans to local governments. Actually, the State relief package amounted to only \$4.1 billion, since no local units availed themselves of the loan funds, which would have required repayment in any case. With the \$4.1 billion in hand, local governments faced a projected revenue shortfall of \$2.9 billion in the first year after the passage of Proposition 13-which implies a 9.5-percent reduction in total expenditures.

An across-the-board cut of 9.5 percent would appear to be manageable, although somewhat painful. However, the problem is complicated by the fact that a large fraction of local expenditure is outside the control of local authorities, because of Federal or State mandates and/or grant funds which are not fungible. Consider for example, public welfare. Half of the welfare program's support comes from the State, and support levels and eligibility requirements are determined by Congress and the State Legislature. Hence, the major discretion left to the localities lies with administration, which amounts to less than 5 percent of total welfare outlay.¹⁸ And efforts to trim administration may backfire, because payments to ineligible households could increase without proper supervision. The problem is further complicated by the legislative requirement that local communities maintain the quality of police and fire services as a condition for receiving emergency State assistance.

For those reasons, uncontrollable expenditures may amount to as much as 60 percent of local budgets. Hence, the remaining 40 percent would have to bear the full brunt of the \$2.9billion revenue shortfall. This would involve cuts of nearly 25 percent—not 9.5 percent—so that serious disruptions could be expected to follow.

Despite these somber circumstances, localgovernment employment dropped by only 7,000 workers during July, the first month of operation under Jarvis-Gann.¹⁹ With a \$2.9-billion shortfall, local employment presumably eventually would have had to drop by 80,000, more than ten times what actually occurred. (Even though the 7,000 drop reflects only the first month under the amendment, its permanent character would require much of the adjustment to be made early.) While local governments undoubtedly have some flexibility in substituting workers for other inputs, reducing overtime, etc., a discrepancy of 73,000 could not be due to such factors. Rather. the discrepancy must be explained in terms of an error in the official projection—in other words, the \$2.9-billion figure is a gross exaggeration of the local-government revenue gap.

Impact on existing service levels

There are two ways to estimate Proposition 13's public-expenditure impact. The first is to compare public-service levels with those which had prevailed in fiscal year 1977-78, the year prior to implementation of the amendment. This comparison would help measure the magnitude of the disruption in the flow of public services resulting from the action. A second approach is to compare public services with what they would have been in the absence of Proposition 13, which should enable us to discern the expenditure impact of the amendment. Clearly the two measures will be the same if the level of public services remains constant over time. However, some growth in public services has been occurring and can be reasonably expected to continue into the future. For these reasons, both measures are examined below.

First, consider the impact on the existing level of public services. Between the 1977-78 and 1978-79 fiscal years, Proposition 13 was expected to reduce local-government revenues by \$6,048 million (Table 4). From this must first be subtracted the State relief package of \$4,100 million. But a second adjustment must be made for the fact that officials underestimated actual property-tax collections for 1978-79. Because of the rollback in assessments required by the amendment, officials projected the growth of assessments at only 1.3 percent, as compared to the 12.5 percent which would have been expected in the absence of Proposition 13.²⁰ In fact, fiscal 1978-79 assessments increased by a healthy 9 percent.

This discrepancy reflected the fact that, despite a three-year reassessment cycle, many properties had been underassessed relative to their 1975-76 values as late as the Spring of 1978, when the rolls for the 1978-79 fiscal year were taken. Furthermore, because of the assessment lag, many of the properties transferred during the 1975-78 period had not been reassessed at their value at time of sale. Since market values had escalated rapidly during this period, the degree of underassessment would be considerable. In

Table 4Reduction in the Average Level ofLocal Public Services Caused byProposition 13(\$ millions)

Changes in Local Revenues Caused by Proposition 13

1977-78 Property Tax Collection 1978-79 Officially Estimated Property Tax Collections Net Change	\$11,452 5,404	-\$6,048
Adjustments		
State relief	4,100	
Additional Property Tax Revenue	405	
Due to Higher Assessments		
Total		4,505
Projected Increase in Other Revenues		1,716
Net Change in Revenues		173
Changes in Revenue Necessary to Maintain		
1977-78 Service Levels		
.08 × 1977-78 Expenditure	2,288	
Less Wage Share (55%)	1,258	1,030
Revenue Deficiency	857	
Percent Revenue Deficiency	2.8%	

both such cases, Proposition 13 allows assessors to adjust prevailing assessments for past errors and as a result, a large number of properties showed higher assessments after Jarvis-Gann passed than they would have in its absence.²¹ Consequently, property-tax revenues in fiscal 1978-79 will be \$405 million higher than initially projected.²²

A further adjustment must be made to allow for the growth of non-property tax revenues. Since the latter are not directly affected by the amendment, we assume that they will grow by 10 percent between 1977-78 and 1978-79—their average rate of growth since 1974-75.²³ This will produce an additional \$1,716 million for use in 1978-79. Thus, the net change over the year in *total* local government revenue amounts to \$173 million.

To complete this calculation, we must compute the growth of revenues which would have been necessary to sustain 1977-78 public-service levels. With an 8-percent expected rate of inflation, a revenue increase of \$2,288 million would be necessary to maintain services. However, as part of its relief measure, the State Legislature prohibited cost-of-living adjustments for localgovernment employees, so that extra revenues would be needed only for the increased costs for materials and supplies. Since wages comprise 55 percent of total expenditures, the requisite increase is only \$1,030 million.²⁴ Thus, the overall revenue deficiency is \$857 million (\$173 million less \$1,030 million), or 2.8 percent.

It could be argued that the wage freeze will have to be made up sooner or later, and should therefore be excluded from consideration. This objection would be valid if local governments purchased labor services on competitive markets. However, wages in California's public sector run 23 percent above the national average,²⁵ while wages in its private (manufacturing) sector run only 9 percent above the national average. It would seem, therefore, that California's public-sector workers could live with a oneyear wage freeze, because their wages are considerably above those dictated by a free market.

In summary, Proposition 13's actual effect was only a 2.8-percent reduction rather than the 23percent initially-estimated shortfall in localgovernment revenues. Even allowing for the fact that mandated programs pushed the brunt of the adjustment upon 40 percent of local governments' budgets, the implied reduction amounted to 7.0 percent for those activities subject to cuts. Such an adjustment would seem to be achievable without major disruptions. And since many local governments responded to the revenue shortfall by imposing new schedules of fees, much of the remaining reduction may yet be avoided.²⁶

The employment data cited above are consistent with this finding of only small impact of the Jarvis-Gann amendment on the level of public services. Further support is provided by the budget of the City and County of San Francisco. Although accounting procedures make year-toyear comparisons difficult, San Francisco's total budget showed only an \$8-million decline, to \$823 million, for fiscal 1978-79. Moreover, the budget for permanent employees' salaries remained unchanged from a year earlierimplying no layoffs. Furthermore, the City rescinded several emergency tax measures adopted at the time the amendment was first passedwhich would hardly imply fiscal distress. Finally, there is some evidence that the City actually budgeted a considerable surplus for the year.^{27, 28}

Impact on 1978-79 service levels

To determine the amendment's impact on 1978-79 planned local expenditures, we must calculate the loss of local revenue caused by Proposition 13 plus any State-mandated expenditure cutbacks (Table 5).²⁹ According to official estimates, the 1978-79 property-tax revenue loss amounts to \$12,448 million, but from this we subtract State relief and the property-tax receipts not officially anticipated. The resulting figure, \$2,469 million, is thus a first approximation of the reduction in local-government revenues from what would have prevailed without the amendment.

This figure overstates the impact on public services, however, because it fails to allow for the wage freeze imposed by the State Legislature. This action freed up funds which could be used for other purposes, and is thus tantamount to a State grant to local governments of an amount equal to the wage savings. Hence, it must be subtracted from the revenue shortfall. This yields a net reduction in public services of \$1,281 million from the level that would have prevailed

Table 5Local Public Expenditure Beforeand After Proposition 13 (1978-79)(\$ millions)

Changes in Local Revenues Caused by Proposition 13		
Officially Estimated 1978-79 Property Tax Collections	9	512,448
Officially Estimated 1978-79 Property Tax Collections Under Proposition 13	_	5,404
		7,044
Less:		
State Relief	4,100	
Additional Property Tax because of		
Higher Assessments	405	
Savings because of Prohibition on		
Cost-of-Living Increases	1,258	
TOTAL		5,763
Net Revenue Shortfall		1,281
Projected 1978-79 Local Revenue		31,473
Percent Net Revenue Shortfall		4.0%

without Jarvis-Gann—only a 4.0 percent shortfall from projected 1978-79 revenues. That cutback seems modest, indeed, when compared with the figures seen in the popular press—or when compared with what Proposition 13's supporters had hoped to achieve.

Future service-level impacts

Even though the first-year expenditure impact is minimal, it could be argued that Proposition 13 will still have a major impact in subsequent years. This view is based upon several considerations: (1) the State relief package was for a single year only; (2) the State surplus from which existing relief was drawn will be depleted in future years; and (3) the amendment's restrictions on assessments will inhibit the future growth of property-tax receipts.

A crucial question concerns the magnitude of surplus State funds, which helps determine the availability and the extent of future State assistance. Some analysts believe only modest amounts will be available, especially since the surplus available to the State Legislature in July 1978 was the result of several years' accumulation. However, there is ample reason to believe that the State could continue or even *increase* existing levels of assistance without increasing tax rates. To analyze this possibility, we project the State surplus under two alternative sets of assumptions about the growth of personal income and State relief. The first assumes growth rates of 12 percent and 10 percent, respectively; the second uses 10 percent and 8 percent.

How valid are these assumptions? While 12percent personal-income growth is slightly higher than the 11 percent experienced over the past five years, the recent upsurge in inflation makes such an assumption quite plausible. The 10percent growth in aid, on the other hand, would correspond to the pre-Proposition 13 average growth of property-tax receipts. If State aid grows at a 10-percent rate, therefore, any reduction in the growth of local expenditures would be the result of the failure of locally raised revenues to keep pace with the growth they would have experienced without the amendment. The second set of assumptions is more conservative. The 10-percent personal-income growth figure has been surpassed every year since 1973, and the 8percent growth of State aid would do nothing more than maintain the *real* value of relief under present inflationary conditions.

State expenditures are assumed to grow at the rate of personal income, while revenues grow at

the same rate multiplied by the revenue elasticity, following the procedure used for Table 5. However, we must also adjust for two post-Proposition 13 developments—the one-timeonly tax cut of \$1 billion, and the indexation of income-tax brackets for the first three percentage points of inflation. Hence, we reduce the elasticity of the income tax from 1.7 (as in Table 5) to a figure of 1.5, and thus obtain a total State revenue elasticity of 1.166.

Under the first set of assumptions, therefore, the State can adequately fund the program without an increase in tax rates (Table 6).³⁰ Although annual expenditures would exceed revenues between 1978-79 and 1984-85, the carryover surplus would be sufficient to fund the deficits—and thereafter, annual revenues would begin to exceed expenditures. Under the second set of assumptions, cumulative deficits would begin to emerge in the mid-eighties, but the \$170million deficit in 1984-85 would amount to only .006 percent of State revenue and 2.6 percent of the State relief program. Since the deficit would disappear by the following year, the program appears to be fundable.

Whether or not the State can offset a constant proportion of local-government property-tax losses, then, hinges critically upon the growth of

Table 6 Projected Surplus of the State of California,* 1978-79 to 1986-87 (\$ millions)

	Assumption A	Assum	Assumption B		
Fiscal Year	Yearly Cumulative Surplus Surplus	Yearly Surplus	Cumulative Surplus		
1978-79	-\$1,800 a \$2,000	-\$1,800 a	\$2,000		
1979-80	-468 1,532	516	1,484		
1980-81	-427 1,105	-474	1,010		
1981-82	-372 733	420	590		
1982-83	-298 435	-354	236		
1983-84	-203 232	-271	35		
1984-85	-83 149	-170	-205		
1985-86	65 214	49	-2,54		
1986-87	n.c.	96	-158		

Assumption A: 12-percent growth of State personal income and 10-percent growth of State aid.

Assumption B: 10-percent growth of State personal income and 8-percent growth of State aid.

n.c.-Not calculated

a Reflects a \$1-billion tax cut for 1978-79 only.

*Source: see derivation in text.

personal income. If this growth is as high as 12 percent, the State can meet its objective without an increase in statutory tax rates. If, on the other hand, income growth is only 10 percent, aid can grow at only 8 percent per year. In other words, relief would fall 2 percentage points below the level necessary to keep local public expenditures growing at the rate which would have prevailed in the absence of Proposition 13.³¹

Another crucial question concerns the potential problems caused by the amendment's 2percent annual limit on property reassessments (unless the property is transferred). On its face, this might seem to limit property-tax revenue to 2-percent annual growth, but such is not the case. The growth of property-tax receipts will reflect the degree of underassessment as of 1978-79, the rate of increase of property values, the turnover rate of existing property, and the rate of new construction.

Consider, first, the growth of residentialproperty assessments. As the appendix shows, aggregate assessments for existing houses could grow at a rate equal to 90 percent of the underlying appreciation rate of housing prices in the first year following the reassessment limitation. Moreover, in subsequent years, assessments could continue to increase until reaching the appreciation rate. Thus, if housing values are increasing at a 10-percent annual rate, the assessed value of the housing stock in place during 1978-79 will grow by 9 percent in 1979-80. These results are based on two assumptions, both of which conform with recent experience-a 25percent initial under-assessment of the existing housing stock, relative to its 1978-79 value, and a 15-percent annual turnover rate of existing housing.32

The rapid increase in the assessed value of the existing housing stock reflects the much larger (although less frequent) reassessment of homes under the amendment. For example, if a house is sold every seven years and housing prices grow at 10 percent per year, the assessed value of such a house will double at the time of sale. If, on the other hand, the house were assessed annually, the increase in assessment would be only 10 percent each year, leading to the same result over time. Thus, Proposition 13 would cause a much smaller reduction in the growth of the assessed

value of existing homes than perhaps some of its framers intended. We must also consider the growth caused by new construction, which amounts each year to between 2 and 4 percent of California's existing housing stock. If housing prices rise 10 percent per year, which is modest by recent standards, the total residentialproperty tax base will then increase by 11 to 13 percent per year, not much below its recent performance.

The situation is much different with nonresidential properties, which are transferred much less frequently than housing. Hence, the taxable base for this class of property probably will grow at about the 2-percent allowable annual rate, plus any growth due to new construction, which normally accounts for about 2 percent of the existing stock. Thus, we could expect the non-residential property tax base to rise about 4 percent annually.

The *total* property-tax base, given our assumptions about the growth of the (relatively comparable) residential and non-residential components, could increase annually by $7\frac{1}{2}$ percent to $8\frac{1}{2}$ percent—say 8 percent. This is only 2 percentage points below what would have been expected without Proposition 13. But this gap will now pose a much less serious problem than before, because the property tax now accounts for only 20 percent of total localgovernment revenues, as compared with 40 percent in the pre-amendment period. This means that the annual revenue shortfall caused by the reassessment provision should amount to only 0.4 percent—scarcely a startling effect.

Under our assumption of 10-percent annual growth in state aid, the reduction in the growth of public expenditure would reflect the reassessment provision alone—only 0.4 percent. But with 8-percent annual growth in state aid, the total reduction will be 0.7 percent.³³ By either standard, the reduction appears insignificant in relation to the 10-percent anticipated annual growth in local public expenditures.

Overall impact

Altogether, Proposition 13 has had, and will probably continue to have, only minor effects upon the size of California's public sector. Public-service levels in 1978-79 are only about 2.8 percent below those prevailing in the year

before the amendment took effect-or only about 4.0 percent below if allowance is made for increases in public services which would have occured in the absence of Jarvis-Gann. The future expenditure effect, on the other hand, will hinge largely upon what happens to the State relief program. Since the State will probably continue to amass surpluses, it will probably continue to make aid available to local governments. The major source of expenditure constraint, however, will be the slowdown in the growth of property-tax revenues. But even this shortfall should amount to only 0.4-0.6 percent of the total revenue requirement of local governments. And in view of the availability of other revenue sources-such as charges, fees, and wage taxes-even this minor shortfall could be resolved.

Two caveats are in order, however. First, our calculations were done entirely at the aggregate level, whereas some individual government units could experience considerable reductions in expenditure. Secondly, no allowance was made for the possibility of recession. A major recession could wipe out much of the carryover surplus which is providing the funding for the State relief program. However, even during the 1975 recession, California personal income grew by 101/2 percent-which is above our minimum-growth assumption. This reflected the inflation which kept nominal incomes rising in the face of recession. Since substantial inflation could continue for the next four or five years, even the occurrence of a recession during this period need not invalidate our conclusions.

III. Tax Structure Impact

In contrast to Proposition 13's relatively minor impact upon the level of government expenditure, it will have a substantial impact upon the state-and-local tax structure, and also upon the distribution of revenue-raising responsibility between the State and local governments (Table 7). The local share of total revenues in 1978-79 drops 12 percentage points, to 37 percent, as a result of the amendment. (In contrast, the national average share was 46 percent in 1975-76.) This understates the extent of the

actual reduction, however, because without the amendment the State would probably have taken steps to liquidate its surplus. With a \$4.1billion reduction in the surplus-the actual amount of local relief-the local share of statelocal revenue would have been considerably higher, so by that standard Proposition 13 lowered the local share by nearly 20 percentage points. And the situation is even more dramatic for specific local functions. For example, the share of education financed locally drops from

	State-Loo	cal Division of Reve in California	nue Raising Res 1, 1978-79	ponsibility	
	Sourc	e of Total Own-Source F (\$ millions)	levenue	Share of Ele Secondary Ec	ementary and fucation Costs
	Without Amendment Without With Tax Reduction Tax Reduction*		With Amendment	Without Amendment	With Amendment
	(1)	(2)	(3)	(4)	(5)
Local	\$16,983 (49%)	\$16,983 (56%)	\$10,483 (37%)	52%	28%
State	17,675 (51%)	13,575 (44%)	17,675 (63%)	n.c.	ndeed my Adam ng Suite n.c. Nagasan a da synamica sa sag
Total	34,658	30,558	28,158		

Table 7

n.c.-Not calculated

*Assumes \$4.1 billion in State tax reduction.

Source: U.S. Bureau of Census, Government Finances, and estimates by the author.

52 percent to 28 percent because of the amendment,³⁴ placing California below all but six other states in this regard.³⁵

Political theory suggests that the control of public expenditure ultimately rests with the body which is responsible for raising the revenue. If this is correct, Proposition 13 will lead to a major shift towards State control. The prohibition against employee cost-of-living increases and against reductions in public safety may be just the tip of the iceberg for future state interventions. Local control or "home rule" could become a thing of the past in California.³⁶ Any judgment here, however, must remain in the realm of speculation. Our experience with Federal Revenue Sharing has shown that revenue-raising and expenditure authority can at least sometimes be kept separate.

Less uncertainty surrounds the tax-structure consequences of Proposition 13, which tends to substitute State tax sources for the local property tax. More specifically, in the absence of this measure, the State probably would have cut income taxes.³⁷ Since the income tax tends to be more progressive than the property tax, such a substitution presumably would have favorable equity consequences.³⁸

Again, given the fact that income-tax reduction was the major alternative to Jarvis-Gann, areas which are relatively property intensive should now gain relative to those areas which are income intensive. Since cities and rural areas have a larger share of the statewide property-tax base than of the income-tax base, taxes consequently would be shifted towards the suburbs. Given the poor fiscal condition of many central cities, such a shift would provide welcome relief.

Further relief for fiscally disadvantaged jurisdictions should come from a little-noticed feature of the State relief measure, which allocates relief roughly in proportion to previous property-tax collections.³⁹ Because of the massive reduction in property-tax receipts, it was necessary to specify how the remaining revenues from this source were to be allocated. Basically, the State Legislature decided to allocate these proceeds among counties in proportion to their total assessed valuation. This precluded intercounty tax transfers. Within each county, however, tax proceeds were divided roughly in proportion to previous property-tax collections; i.e., each local unit suffered the same percentage revenue loss. If this arrangement is continued, therefore, *future* increases in assessable base will be shared by all units within a jurisdiction.

In effect, California has developed a system of tax-base sharing similar to that in operation in the Minneapolis-St. Paul area, whereby increments to the metropolitan tax base are shared by all local units within the urban area. (However, the Twin City program is on a metropolitan rather than county basis.) Base sharing has been widely touted as a technique to cope with the adverse fiscal consequences of suburbanization, so that a central city does not suffer revenue losses if its tax base moves to the suburbs.⁴⁰ Moreover, the city reaps part of the benefit of whatever net growth occurs in the metropolitan area. Perhaps unwittingly, therefore, California with Proposition 13 has radically changed fiscal relationships in its metropolitan areas.⁴¹

In summary, the adoption of Proposition 13 may profoundly affect the system of governance of California. On the one hand, it could lead to a substantial loss in local control, while on the other, it could significantly affect fiscal relationships within metropolitan areas. Finally, it should increase the equity of California taxes, among persons and among political jurisdictions.

IV. Summary and Conclusions

This paper has shown that the emergence of the Jarvis-Gann Amendment cannot be attributable to a single cause, but rather to several different forces. First was a high and growing state-local tax burden during a period when similar burdens in other parts of the country were levelling off. Second was a substantial shift in the distribution of property-tax burdens towards homeowners at a time when inflation was already causing budgetary problems for many households. Lastly was the emergence of a significant State surplus which, if left unchecked, would have grown to unreasonable proportions.

Each of these factors contributed to the different perspectives which voters had of the measure. By placing a ceiling on the property-tax rate, restricting the growth of assessments, and increasing the political majorities required for new taxes, the amendment promised to restrict the size and growth of the public sector. By focusing tax reduction upon property taxes, it provided the relief sought by homeowners. And finally, by placing local governments in an intolerable fiscal situation, it forced the State to liquidate much of its surplus.

Proposition 13 apparently has achieved two of its objectives—reduction of property taxes and liquidation of state surpluses—but to date it has had only a minimal effect upon the growth of public expenditures. In its first year, it required only a 2.8-percent reduction in the average level of public services; in the near future, barring a major recession, it may have little effect unless the State withholds the relief it can afford and which it seems already committed to provide.

In effect, then, Proposition 13 emerges primarily as a tax-reform measure—one which shifts the emphasis from the property tax to the income tax. Moreover, by shifting a major portion of local revenue-raising responsibility to the State, the amendment may seriously erode local control. The measure has also had some unintended consequences for fiscal relations at the local level, since the property taxes that remain are to be shared on a county-wide basis. This will tend to augment the resources of fiscally weak governments at the expense of the more affluent.

These unintended consequences aside, Proposition 13 emerges as a unique California phenomenon. The combination of factors which gave it birth are unlikely to be matched in any other state. The same can be said of its consequences. The existence of a significant State surplus has mitigated its potentially disruptive impacts upon the delivery of public services. This carries an important lesson for other states that have been considering measures similar to Proposition 13. Unless a considerable surplus already exists somewhere in their state-local system, they cannot expect to match the relatively smooth transition experienced by California. Without such a surplus, their citizens and public officials must be prepared to face considerable disruptions in the flow of public services.

Appendix Behavior of Residential Investment

Let V(t) be the market value of a home whose assessed value at t = (T-1978) = 0 is equal to k%of its true market value. Furthermore, assume homes appreciate at the constant rate g% per year, so that

$$V(t) = V(0)(1 + g)^{t}$$
 (1)

Under Proposition 13, the assessed value of such a home is equal to

$$A(t, u) \begin{cases} = (1.02)^{t-u} V(u) & \text{if } u \ge 1 \\ = (1.02)^{t} k V(0) & \text{if } u = 0 \end{cases}$$
(2)

where u is the year of the last sale of the home. Let the probability that a home is sold during a given year be given by s(t), and assume that s(t) = s, for all t. Then the probability that, at time t, the house would have last been sold (t - u) periods earlier is given by

$$p(t, u) \begin{cases} = s(1-s)^{t-u} & \text{if } u \ge 1 \\ = (1-s)^{t} & \text{if } u = 0 \end{cases}$$
(3)

The *expected* assessment of the home at time t is given by

$$A(t) = \sum_{u=0}^{t} p(t, u)A(t, u).$$
(4)

Morever, since

$$p(t - 1, u) = (1 - s)^{-1}p(t, u)$$
 (5)

$$A(t - 1, u) = (1.02)^{-1} A(t, u)$$
 (6)

we can express (4) as

$$A(t) = (1.02)(1 - s)A(t - 1) + sV(0)(1 + g)^{t},$$
(7)

which is a first-order linear differential equation.

Assume there are two classes of residential property which differ only in their ratio of assessed value to market value. The first class, denoted by the subscript 1, has an initial assessment ratio of 1, while the other, denoted by 2, has an initial ratio of k. Then the expected aggregate assessed value is

$$B(t) = [wA_1(t) + (1 - w)A_2(t)] \cdot N$$
 (8)

where w is the share of homes in class 1 and N is the number of homes. For convenience we normalize so that N = 1.

Using (7), we can express (8) as

$$B(t) = (1.02) (1 - s)B(t - 1) + sV(0)(1 + g)^{t}$$
(9)
which has the solution

(10)

$$B(t) = [B(0) - (\frac{bz}{z-a})]a^{t} + (\frac{b}{z-a})z^{t+1}$$

where

a = (1.02)(1 - s)	
$\mathbf{b} = \mathbf{sV}(0)$	
z = (1 + g)	
Now let us normalize B such that	
$B(0) = wA_1(0) + (1 - w)A_2(0)$	
= wV(0) + (1 - w)kV(0)	
= 1	(11)

Then

$$V(0) = \frac{1}{w + (1 - w)k} = \frac{1}{r}$$
(12)

where r is the aggregate assessment ratio at t=0.

Substituting from (11) and (12) into (10), and setting t = 1, we obtain

$$B(1) = \frac{1}{z - a} [z(1 - \frac{r}{s}) - a^2 + \frac{r}{s} z^2]$$
(13)

Since we have set B(0) = 1, (11) represents one plus the growth rate of the aggregate assessments for the first year. Choosing s = .15, g = .1, and r =.75, yields B(1) = 1.087. With r = .74, B(1) = 1.09.

It remains to examine the subsequent growth of B(t). Clearly, if 1 + g > (1 - s)(1.02), which is to be expected,

$$\lim_{t \to \infty} \frac{B(t) - B(t-1)}{B(t-1)} = g$$

Moreover, it is easy to show that if the same condition holds

$$d\left[\frac{B(t)}{B(t-1)}\right] = 0$$

Table A.1 State and Local Taxes as a Percent of Personal Income, 1957-78

Year California		Other U.S.	Difference	
	(1)	(2)	(1-2)	
1957	9.31	8.14	1.17	
1962	10.46	9.32	1.14	
1963-64	12.07	10.13	1.94	
1964-65	11.98	10.24	1.74	
1965-66	12.47	10.43	2.04	
1966-67	11.98	10.32	1.66	
1967-68	13.37	10.49	2.88	
1968-69	13.71	10.91	2,80	
1969-70	13.38	11.44	1.96	
1970-71	13.73	11.66	2.07	
1971-72	14.94	12.42	2.52	
1972-73	14.91	12.71	2.20	
1973-74	14.01	12.16	1.85	
1974-75	14.59	12.00	2.59	
1975-76	14.89	12.17	2.72	
1976-77	15.78 c	12.38 a	3.40	
1977-78	15.96 c	12.11 a	3.85	
1978-79	15.97 c	11.93b	4.04	
1978-79	12.64d	11.93b	0.71d	

Source: U.S. Bureau of Census, Government Finances

a Based on U.S. Commerce Department estimates, reported in *Survey of Current Bušiness*.

b Same as a, but first quarter 1978 used to project entire year.

c 1976-78 tax receipts based on author's estimates using California State Comptroller Reports. Personal income for 1978 from *Economic Report of the Governor*, 1978.
d After Proposition 13.

Table A.2Property Taxes as aPercent of Personal Income,1957-78

Year	California	Other U.S.	Difference	Year	California	Other U.S.	Difference
	(1)	(2)	(1-2)		(1)	(2)	(1-2)
1957	4.39	3.61	.70	1970-71	6.75	4.49	2.26
1962	5.61	4.17	1.44	1971-72	7.11	4.65	2.46
1963-64	6.04	4.41	1.63	1972-73	7.02	4.58	2.44
1964-65	5.93	4.43	1.50	1973-74	6.28	4.30	1.98
1965-66	6.26	4,44	1.82	1974-75	6.27	4.25	2.02
1966-67	6.16	4.28	1.88	1975-76	6.41	4.29	2.12
1967-68	6.19	4.21	1.98	1976-77	6.56a	4.18b	2.38
1968-69	6.33	4.26	2.07	1977-78	6.44a	4.09b	2.35
1969-70	6.27	4.36	1.91	1978-79	6.32a,c	3.97b	2.35

Source: U.S. Bureau of Census, Government Finances

a Estimated using State of California data on property-tax collections.

b Estimated using U.S. Commerce Dept. data.

c Without the passage of Proposition 13.

Table A.3Distribution of Net* Assessed Value and Property Tax Burden
on Single-Family Dwellings in California,
1964-65 to 1978-79

	Share of Total Net Assessed Value			Share of Property Taxes	Taxes on Single-Family	
Period	Single-Family Oth Residences Reside	Other Residences	Other Non- lesidences Residential	State Assessed f	of Single-Family Dwellings	Dwellings as a Percent of Personal Income
	(1)	(2)	(3)	(4)	(5)	(6)
1964-65	34.8%	12.3%	40.8%	12.1%	36.2%	1.97%
65-66	34.5	12.6	41.4	11.5	34.8	2.01
66-67	34.0	13.3	41.8	10.9	35.3	2.04
67-68	33.6	13.7	42.6	10.1	35.0	2.05
68-69 a	34.0	13.8	42.6	9.7	35.4	2.11
69-70b	32.2	14.4	44.0	9.5	33.5	1.98
70-71c	33.5	14.8	42.9	8.8	34.8	2.24
71-72	33.7	14.5	43.8	8.1	35.0	2.37
72-73	34.0	13.9	44.4	7.6	35.2	2.35
73-74d	31.6	13.8	46.9	7.7	32.1	1.88
74-75e	32.9	13.4	46.4	7.3	33.9	1.98
75-76	35.2	13.2	44.7	6.9	36.2	2.16
76-77	39.5	12.9	41.0	6.6	40.4	2.48
77-78	41.0	12.6	39.6	6.7	42.2	2.53
78-79	43.0	12.6	38.3	6.4	44.3	2.60

* Net of exemptions

a First significant "open space" assessments.

b Introduction of \$750 homestead exemption; 15-percent inventory exemption.

c With 30-percent inventory exemption.

d With \$1,750 homestead exemption; 45-percent inventory exemption.

e With 50-percent inventory exemption.

f State-assessed property is mainly personal property of utilities. Beginning in 1964 and ending in 1974, the assessment ratio on this class was lowered until it reached the ratio applying to other classes.

Source: California Board of Equalization; author's estimates for years 1975-76 to 1978-79.

1. This rate limitation does not apply to the debt service on outstanding debt.

2. This description of the Amendment is only meant to be suggestive. For a more thorough discussion see the Beebe article in this **Review**.

3. It is estimated that a levy of 1/4 percent would be necessary initially to service outstanding debt.

4. "Analysis of the Fiscal Impact of the Proposed Jarvis-Gann Amendment", **Report to the Bureau of the Budget to the Board of Supervisors**, San Francisco, March 1978. The unevenness of these cuts reflects the fact that not all services are equally funded by the property tax, as well as the existence of a myriad of State and Federal mandates.

5. U.S. Bureau of the Census, Government Finances in 1975-76.

6. This conjecture is rejected by the U.S. Congressional Budget Office, which using unpublished data concludes that tax burdens in California have been growing about the same rate as elsewhere. Curiously, a 67 percent difference in growth rates of tax burden is interpreted as a 2.2 percent differential (i.e., 5.5 percent vs 3.3 percent). See "Proposition 13: Its Impact on the Nation's Economy, Federal Revenues, and Federal Expenditures", Congressional Budget Office, July 1978.

7. U.S. Bureau of the Census, op. cit.

8. Ibid.

9. Ibid.

10. Since the homeowners' share of State personal income is unknown it was not possible to construct an index of homeowner tax burden per se. Nevertheless, if income shares were constant over the period, the 30 percent figure is a measure of the *increase* in homeowner burden.

11. Real Estate Research Council of Northern California, **Northern California's Real Estate Report,** Vol. 30/Number 1.

12. This figure for 1975 is the latest year for which national data is available. While the California number for that year is close to the national average, the recent upsurge in residential share in California is unlikely to be matched nationally because the boom in real estate prices was much more pronounced in California than elsewhere. Advisory Commission on Intergovernmental Relations, **Significant Features of Fiscal Federalism**, 1976-77, Vol. II, p. 106.

13. The term "at least" is used because the State's projections, from which our figures were drawn, have proved markedly conservative in the past.

14. Economic Report of the Governor, 1978, Sacramento, 1978, p. A-55.

15. To arrive at this figure, multiply the 11 percent by 1.7 to obtain the growth of Personal Income Tax receipts—18.7 percent. Since the latter accounts for 1/3 of total general revenue, the growth of total revenue is simply $(1/3 \times 18.7) + (2/3 \times 11.0) = 13.5$.

16. Although our argument has been couched in terms

of taxes, it applies equally well to government expenditures because taxes and expenditure move together. An exception to the latter occurs after the 1977-78 fiscal year when substantial surpluses emerge. However, the gap between tax burdens in California and the rest of the U.S. had already opened substantially by 1977-78.

17. Another element which may have played a role is the Serrano decision on the finance of elementary and secondary education. To implement Serrano, the State had planned to redistribute property taxes from rich to poor districts. Such action was to begin in the fiscal year 1978-79, but because of Proposition 13's restriction on property tax receipts, it had to be tabled. One might argue that support for Proposition 13 came from those who saw the impending State action as eliminating the connection between their property tax payments and the level of educational services they received. It should be noted, however, that under the State plan, local overrides to increase educational expenditures were permitted. See Analysis of the Budget Bill, California State Legislature, Sacramento, 1978, p. 720.

18. The localities also have control over a modest General Relief Program. However, the amounts here are too small to warrant explicit discussion.

19. "Recent National, Regional and International Developments", Federal Reserve Bank of San Francisco, September 5, 1978.

20. Legislative Analyst, "An Analysis of Proposition 13: The Jarvis-Gann Property Tax Initiative", Sacramento, May, 1978.

21. Since the California Board of Equalization makes annual surveys of assessment ratios, one would have expected such widespread underassessment to show up in their data. However, figures for fiscal year 1977-78 only indicated underassessment of 8 percent in terms of *current* prices. See **Annual Report**, State Board of Equalization, 1976-77.

22. Total assessments for 1978-79 were \$116.2 billion compared with the estimate of \$108.1 billion. At a tax rate of \$5 per \$100 valuation, the extra \$8.1 billion would yield \$405 million.

23. Excluding Special Districts, for which data were unavailable, non-property tax receipts grew as follows: 1974-75—1975-76—12.6%; 1975-76—1976-77—10.2%; 1976-77—1978-79—20.7%.

24. The 55 percent wage share was taken from **Govern-**mental Finances, op. cit., p. 30.

25. U.S. Bureau of the Census, **Public Employment in** 1976.

26. A survey by the **Los Angeles Times** showed that California cities increased expenditure by 4.6 percent and counties by 5.3 percent over 1977-78 levels. By our estimates such increases were sufficient to maintain *real* 1977-78 spending levels. **Los Angeles Times**, October 1, 1978.

27. The City Auditor is quoted as saying that the City "would probably have a surplus of \$51 million", **San Francisco Chronicle**, September 6, 1978.

28. The situation with the San Francisco Unified School District is similar. The budget for 1978-79 actually appears to be higher than for the preceding year.

29. Legislative Analyst, op. cit.

30. Of course, because of the progressivity of the income tax, effective rates increase.

31. This assumes locally raised revenue also grows at without-Amendment rates. Otherwise, the 2 percentage points is added to the gap left by the latter revenues. See below.

32. Study by San Mateo County Manager, May 8, 1978. While one would expect turnover rates to be reduced somewhat because reassessment is triggered by transfer, the effect is likely to be small. Most property transfers involve employment transfers, retirement, or death. Moreover, the maximum savings from maintaining ownership is 1 percent of the value of the home—a figure which may be small compared to the benefits of upgrading one's housing.

33. To arrive at this figure the shortfall in relief growth of 2 percentage points must be translated into a fraction of total local revenue. This is done by observing that State relief is 70 percent of the size of local property tax receipts. Hence, the shortfall in State relief is equivalent to a 1.4 percentage point shortfall in property tax receipts. Since property taxes constitute 20 percent of local revenues, we have a *revenue* shortfall of .28 percent because of State relief. The latter is then added to the reassessment result and rounded.

34. There is some reason to believe, however, that the figures in Table 7 may overstate the effects of the Amendment on education finance. In response to the Serrano decision the State had decided to redistribute property tax receipts among local school districts beginning with fiscal year 1978-79. Because of the limitation on the level of property taxes imposed by Jarvis-Gann, this action had to be shelved. Strictly speaking those funds which were to be redistributed should be counted as State as opposed to local funds. Unfortunately, estimates of the extent of such redistribution

were not available at the time this paper was written.

35. Advisory Commission on Intergovernmental Relations, op. cit.

36. This home-rule effect of Proposition 13 is reinforced by the Serrano school finance decision, which requires greater uniformity of expenditures among school districts.

37. While any of the major State taxes could, in principle, be cut, the California Legislature has cut income taxes three times in the past decade. It seems reasonable, therefore, to view income taxes as the marginal instrument.

38. Recently, it has been argued that the incidence of the property tax rests upon the owners of capital. However, this outcome is based upon the premise of a nationally applicable property tax. Since the case at hand is restricted to a single state, its major consequences will be upon output and input prices, as the orthodox theory would predict.

39. An exception is with aid to education. Here relief was allocated according to a complex formula which reflected an attempt to equalize resources between school districts. See SB 154, California State Legislature, 1978.

40. Unless the suburb was located in another county. Note that city-counties such as San Francisco obtain no benefit from this provision.

41. Since the relief measure is for the first year only, it is conceivable that the State Legislature might change the distribution formula in future relief measures. For example, county property tax revenues could be divided among local units in proportion to a unit's share of aggregate assessments. Because the jurisdictional boundaries of many local units overlap, however, such an approach might produce nonsensical results. Moreover, if the objective of the relief was to minimize disruption of public service flows, the present allocation formula may be optimal.

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