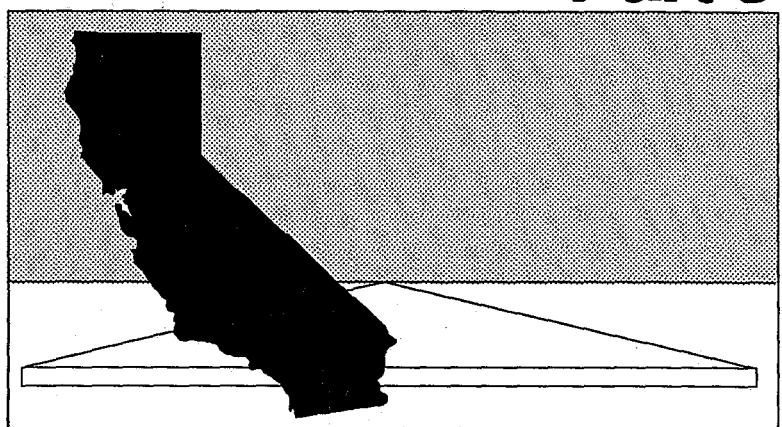
3

Perspectives on the 1989-90 Budget: Revenues

Part 3



Perspectives on the 1989-90 Budget:

Revenues

This section provides an overview of the revenues proposed to fund the spending plan proposed in the Governor's Budget. It first discusses the economic forecast upon which the revenue estimates are based. It next discusses the revenue projections themselves, including the individual taxes and other sources from which they will be derived. Lastly, it discusses that reliability of revenue projections, including their uncertainties and potential error margins. The major findings of this section are that:

- Continued modest economic expansion is assumed for both 1989 and 1990, though at a more subdued pace than in 1988. The budget's economic forecast is generally reasonable, though slightly conservative relative to the consensus forecast of other economists for California.
- General Fund revenues are projected to increase moderately in 1989–90, by 8 percent ($2.9 billion). This reflects the economy's expected modest growth.
- The budget implicitly assumes that 1987–88's $1.1 billion revenue shortfall was primarily due to an overestimate of capital gains income. The budget also assumes that most of this shortfall will be ongoing.
- It is only realistic to expect revenue estimating errors of at least several hundred million dollars, and it is within this band of uncertainty that the budget's revenue estimates should be viewed.

- The revenue estimates are generally reasonable for the Legislature's initial planning purposes, though they have some upward potential. Critical information will become available in April regarding personal income taxes, and the revenue estimates should be revised at that time.

Revenues in 1989-90

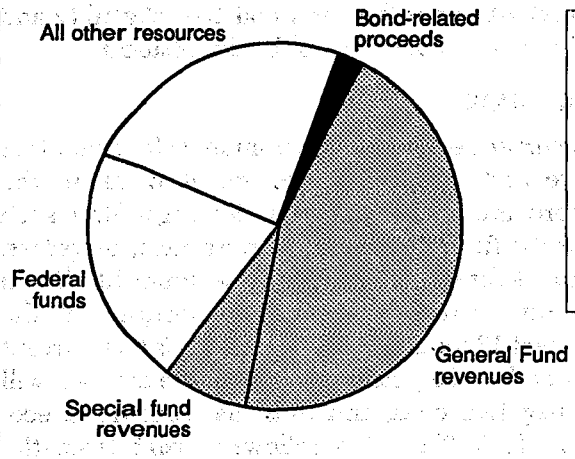
The resources needed to fund the 1989-90 state spending plan will come from a variety of difference sources. The most important of these sources are:

- Revenues from taxes, licenses, fees and investments;
- Transfers of previously accumulated monies out of funds that have been storing them;
- Borrowed money, such as proceeds from the sale of bonds; and
- Federal funds.

Chart 1 summarizes the relative importance that these different types of resources are expected to play in funding the total 1989-90 state spending plan. It shows that the single largest resource category will be state revenues. These revenues account for over half of the state's entire resource base and support both the General Fund and special fund expenditure proposals that are summarized in Part Two.

Chart 1

Resources for Funding the 1989-90 State Spending Plan



Total Resources (dollars in billions)

Funding Source	Amount
General Fund revenues	$38.9
Special fund revenues	7.1
State revenues	($46.0)
Bond-related proceeds	1.7
Federal funds	18.5
Other[a]	20.4
Total resources	$86.6

[a] Includes nonfederal nongovernmental cost-fund monies from public service enterprise funds ($5.9 billion), working capital and revolving funds ($0.8 billion), retirement funds ($4.0 billion) and various other funds ($9.7 billion).

This analysis reviews the budget's estimates of state revenues, including the economic projections and other assumptions upon which they are based. Section I discusses the budget's economic forecast, followed by a discussion of General Fund revenues in Section II and special fund revenues in Section III.

I. THE ECONOMIC OUTLOOK

The Economy's Importance to Revenues

The economy's performance during 1989 and early 1990 is expected to be the single most influential determinant of state revenue collections during the remainder of 1988-89 and throughout 1989-90. This is because most of the state's revenues are derived from sources which directly reflect economic conditions. For example, personal income taxes are influenced by wage levels and the number of people who are employed, sales taxes depend on the level of consumer spending, and corporate taxes depend on the amount of profits that businesses report. Thus, the stronger (weaker) the economy is, the larger (smaller) will be the state's revenue base and the amount of income it generates.

The sensitivity of state revenues to economic conditions also means that inaccurate economic forecasts can result in significant revenue estimating errors. When revenues are overestimated, serious fiscal disruptions can result, including cutbacks in public programs. Alternatively, when revenues are underestimated, time and opportunities may be wasted to move forward with those programs that the Legislature supports and the public values.

Given the above, it is critical that the state's budget plan be based on as accurate an economic forecast as possible, and that the reliability and potential error margins of the economic forecast be understood.

THE CURRENT ECONOMIC CLIMATE

Chart 2 summarizes the current economic environment. It shows that a mixture of both positive and negative forces are at work in the economy. In addition, there are major uncertainties regarding such important considerations as the future course of interest rates, oil prices, consumer spending, federal defense cutbacks and the drought. Given this, considerable uncertainty surrounds anyone's projections of the economy's course over the next 18 months. Nevertheless, it is the current consensus view of economists that the positive factors in the outlook will most likely outweigh the negative ones, and thus that continued economic growth will occur in 1989. This view follows in part from the economy's relatively favorable performance throughout 1988.

1988 In Retrospect

Table 1 shows how the state's economy generally performed in 1988 compared with what was forecast. It surpassed last year's budget forecast for essentially every major economic variable, including income and job growth, unemployment, inflation, housing starts, car sales, taxable sales and corporate profits. For example, personal income growth—the single

Chart 2

Key Factors in the 1989 Economic Outlook

POSITIVE FACTORS

- Continued strength in income and job growth
- Current moderate inflation
- Modest crude oil prices
- Possible further softening in the dollar's value
- Record-low unemployment
- Continued gains in exports
- Strength in California's nondefense aerospace industries like commercial aircraft manufacturing
- Recent improvements in land values, cash flows and debt positions of California's agribusiness sector
- Relative stability in the stock market
- Balanced business inventories
- Positive outlook for capital equipment expenditures

NEGATIVE FACTORS

- Continued large foreign trade deficit
- High consumer debt levels
- Low household savings rate
- International debt problems
- Concerns about solvency of financial institutions
- Reduced defense and military spending in California
- Slow growth in labor productivity
- Persistent large federal budget deficit
- Inflation threat from high factory capacity utilization rates and tight labor markets
- Potential for tighter monetary policy and higher interest rates

MAJOR AREAS OF UNCERTAINTY

- What course will federal monetary policy take and how will this affect interest rates?
- To what extent will the dollar continue to depreciate and the trade deficit improve?
- How strong will consumer spending be, given the positive forces of job and income growth versus the negative forces of high real interest rates, low savings levels and high debt burdens?
- Will world oil prices remain moderate, or eventually trend upward again due to output restrictions by OPEC?
- Will drought conditions continue, and if so, how will this affect agriculture, construction and other areas of the economy?
- What types of federal government spending and tax changes will the new administration propose, and how will they affect the California economy?

Table 1
Accuracy of Economic Forecasts for California in 1988

	Original Forecasts		*Revised*	
Economic Indicator	*Department of Finance*[a]	*Average of Other Forecasters*[b]	*Department of Finance May 1988 Forecast*	*Actual*[c]
Percent change in:				
Personal income	6.5%	7.3%	7.8%	7.4%
"Real" personal income[d]	1.4	2.6	3.6	2.8
Wage and salary jobs	2.6	2.4	4.1	3.4
Consumer prices	5.0	4.6	4.7	4.5
Taxable sales	5.7	—	7.5	8.3
Taxable corporate profits	7.1	—	9.9	8.2
Unemployment rate (%)	5.8	6.0	5.0	5.4
Residential building permits (thousands)	220	210	214	237
New car sales (thousands)	1,211	—	1,278	1,467

[a] *1988-89 Governor's Budget.*

[b] Includes First Interstate Bank, Security Pacific Bank, Bank of America, UCLA, Wells Fargo Bank and the Commission on State Finance. Forecasts were as of approximately year-end 1987, corresponding to when the Department of Finance constructed the economic assumptions contained in the *1988-89 Governor's Budget.* For detail on these forecasts, see *The 1988-89 Budget: Perspectives and Issues,* Table 16, page 53.

[c] As reported in the *1989-90 Governor's Budget.*

[d] Defined here as nominal personal income deflated by the California Consumer Price Index.

most important economic variable for revenue estimating purposes—was nearly a full percentage point above the budget forecast. The department's budget forecast was revised upward in May 1988 because of the strong economic growth that had occurred early in the year. Table 1 shows that these revised projections proved to be overly optimistic. Nevertheless, the economy experienced a very good year in 1988, with moderate gains in real income and employment, modest inflation, and reasonably strong performance in the housing and automobile sectors.

How 1989 Began

California's economy ended 1988 and entered 1989 with considerable forward momentum. As of year-end 1988, California's employment growth was running at a healthy 3-percent pace and its unemployment rate was the lowest in 19 years—4.7 percent. Thus, the economy closed 1988 and entered 1989 on a generally positive note.

THE BUDGET'S ECONOMIC FORECAST

Table 2 summarizes the budget's economic forecast for 1989 and 1990 for California and the nation.

Continued Moderate Expansion Assumed

Neither a recession nor a strong economic upturn is expected in either year. Rather, the department assumes that the current economic expansion will continue throughout the next two years at a moderate pace, with growth being a bit more subdued than in 1988. Both inflation and interest rates are expected to be higher in 1989 than in 1988, though not by enough to derail the expansion.

Highlights of the National Forecast

Table 2 and Chart 3 indicate that for the nation:

- ***Real GNP growth*** is projected to drop from 3.8 percent in 1988 to 2.6 percent in 1989 and 2.5 percent in 1990. (Average GNP growth during the past 10 years has been 3.2 percent, and most economists view growth of under 3 percent as unsatisfactory over the long run.)
- The ***unemployment rate*** is projected to hold fairly steady as the rate of job growth slows to about the same pace as labor force growth.
- The ***prime interest rate*** is predicted to jump from 9.3 percent in 1988 to 10.7 percent in 1989, then decline slightly to 10.5 percent in 1990. (Higher interest rates are one of the factors expected to subdue 1989's rate of GNP growth.)
- The ***savings rate*** (that is, savings as a percent of disposable income) is forecast to inch upward slightly, as consumers become more conservative about borrowing and attempt to reduce their current high household debt burdens. As a result, only modest growth in consumer spending is anticipated.

Table 2

Department of Finance Economic Outlook for California and the Nation 1988 through 1990 [a]

National Economic Indicators	*1988 Estimated*	*1989 Projected*	*1990 Projected*
Percent change in:			
Real GNP	3.8%	2.6%	2.5%
Personal income	7.3	7.3	6.7
Pre-tax corporate profits	6.6	0.4	−7.0
Wage and salary employment	3.6	2.8	2.7
Civilian employment	2.2	2.0	2.0
GNP prices	3.3	3.7	3.1
GNP consumer prices	4.2	4.9	3.9
Consumer Price Index	4.1	4.7	3.9
Unemployment rate (%)	5.5	5.3	5.2
Savings rate (%)	4.0	4.1	4.4
Prime interest rate (%)	9.3	10.7	10.5
New car sales (millions of units)	10.6	10.2	10.1
Housing starts (millions of units)	1.47	1.39	1.49
Net exports (billions of dollars) [b]	−$97.5	−$77.9	−$62.2
California Economic Indicators			
Percent change in:			
Personal income	7.4%	7.5%	7.1%
Wage and salary income	7.2	7.1	7.3
Wage and salary employment	3.4	3.2	3.1
Civilian employment	3.2	3.1	2.8
Consumer Price Index	4.5	5.6	4.6
Key elements of the state's tax base:			
Taxable personal income [c]	7.8	7.6	7.4
Taxable sales [d]	8.3	6.0	6.3
Taxable corporate profits	8.2	8.4	7.4
Unemployment rate (%)	5.4	5.1	5.2
New car registrations (thousands of units)	1,467	1,424	1,460
New building permits (thousands of units)	237	212	249

[a] Source: *1989-90 Governor's Budget* and Department of Finance. Data for 1988 are preliminary estimates.

[b] Defined as United States exports minus imports, measured in constant 1982 dollars.

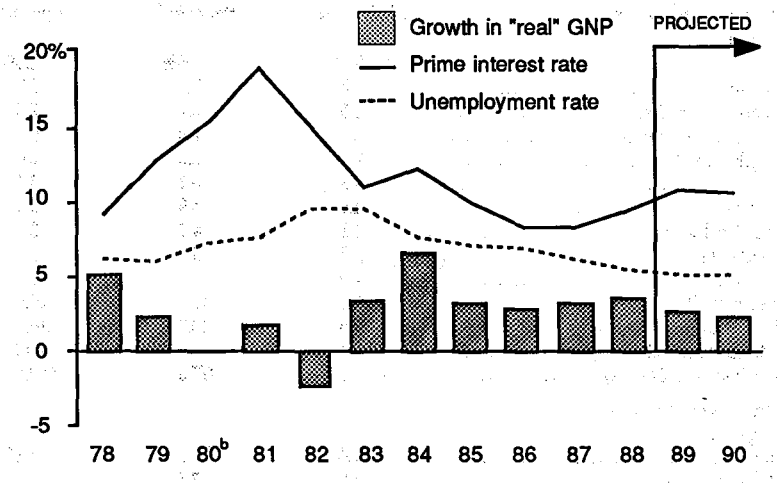
[c] Defined as total personal income plus Social Security contributions, minus transfer payments and certain other nontaxable income components. This income concept historically has shown a strong correlation with adjusted gross income reported for tax purposes in California.

[d] Excludes the Department of Finance's assumptions regarding taxable sales from out-of-state mail-order sales. These assumptions, which include the enactment of federal legislation to require out-of-state retailers to remit taxes on such sales to the state, raise taxable sales growth to 8.4 percent in 1988, 6.4 percent in 1989 and 6.6 percent in 1990.

The 1989 forecast also calls for continuing large (though improving) federal budget and foreign trade deficits, some further decline in the dollar's international value, modest oil prices, fairly stable car sales and housing starts, and softness in corporate profits.

Chart 3

Trends in Key National Economic Variables
1978 through 1990[a]



[a] Source: Department of Finance. Data are estimated for 1988.
[b] "Real" GNP declined by 0.2 percent.

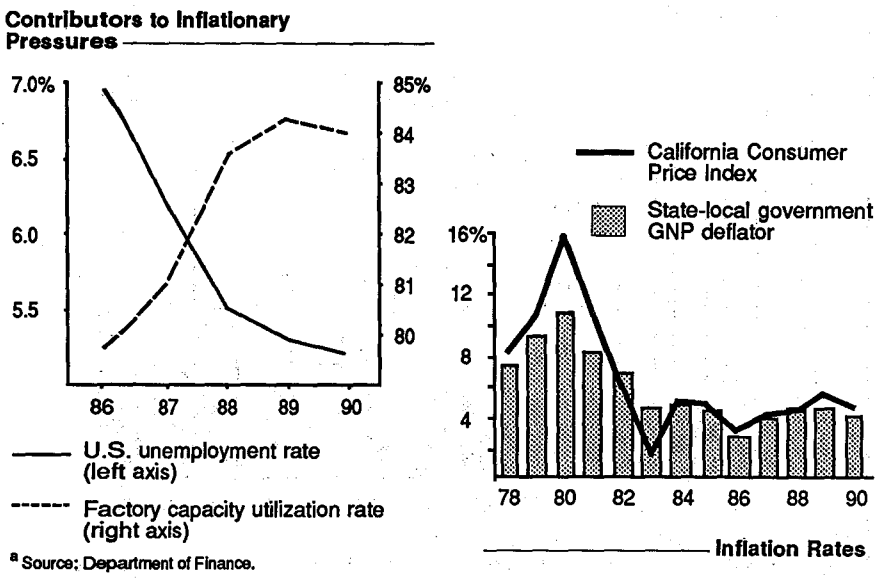
Accelerating Inflation—Will It Be A Problem?

Of all the many current uncertainties regarding the economic outlook, the possibility that inflation might accelerate significantly during 1989 has been one of the greatest concerns of economists. The fear is that the economy's sustained growth during recent years has pushed the unemployment rate down and the factory capacity utilization rate up so far (see Chart 4) that additional growth will result in rising labor costs and input prices, and thus an upsurge in inflation. Many economists believe that this would in turn cause the federal monetary authorities to "tighten up" on the money supply, in an effort to control inflation by slowing down the economy through higher interest rates. The worry is that this could push the economy into a recession.

Moderate Inflation Is Assumed. As shown in Chart 4, the budget assumes inflation will increase only modestly in 1989 and then drift back down in 1990. Thus, the department is not assuming that inflation will become a significant problem during the next 18 months. This is a plausible inflation scenario, given the department's assumption that economic growth will be slower than in 1988. However, if this favorable inflation view proves incorrect and restrictive federal monetary policies are pursued, economic performance could be weaker than assumed.

Chart 4

Factors Relating to Inflation[a]



[a] Source: Department of Finance.

California To Outperform Nation

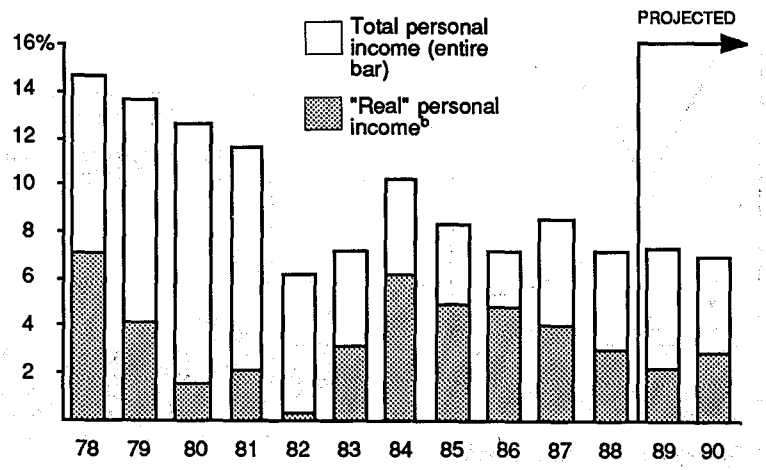
Regarding California, Table 2 indicates that the state is forecast to experience the same modest economic growth as the nation. However, the state's performance is predicted to be a bit stronger than the nation's in a number of respects. For example:

- ***Personal income*** is expected to increase in California by 7.5 percent in 1989 and 7.1 percent in 1990 (see Chart 5). These growth rates are not high by historical standards, but they do exceed the nation's. As a result, California's share of U.S. personal income is expected to reach a record high—over 13 percent (see Chart 6).
- ***Wage and salary employment*** is expected to rise a bit over 3 percent for the state in both 1989 and 1990 (see Chart 7). Again, these predicted gains are not particularly strong for a nonrecessionary period. However, they are greater than the nation's and will raise California's share of U.S. employment to a new high (see Chart 6).
- California's ***unemployment rate*** is projected to remain extremely low by historical standards—only slightly over 5 percent (see Chart 7).

The forecast also assumes that both ***new building permits*** and ***new car sales*** will weaken somewhat in 1989 from their 1988 levels, being constrained by the slow pace of the economy, higher interest rates and consumer debt burdens.

Chart 5

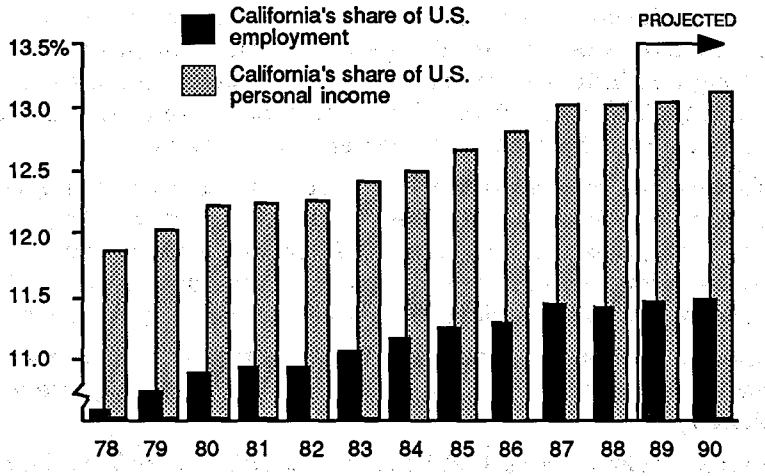
Annual Growth in California Personal Income
1978 through 1990[a]



[a] Source: Department of Finance. Data are estimated for 1988.
[b] "Real" personal income is defined as total personal income deflated by the GNP consumption expenditures deflator.

Chart 6

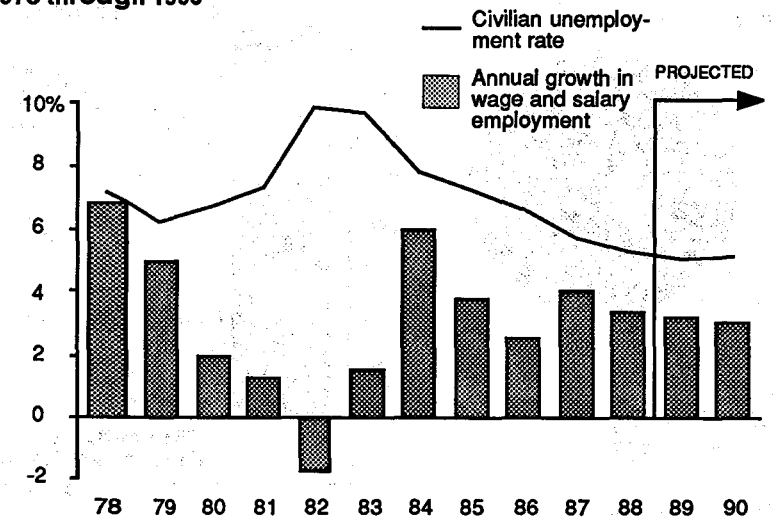
Size of California's Economy Compared to the U.S. Economy
1978 through 1990[a]



[a] Source: Department of Finance.

Chart 7

Trends In California's Employment and Unemployment
1978 through 1990[a]



[a] Source: Department of Finance and Employment Development Department. Data are estimated for 1988.

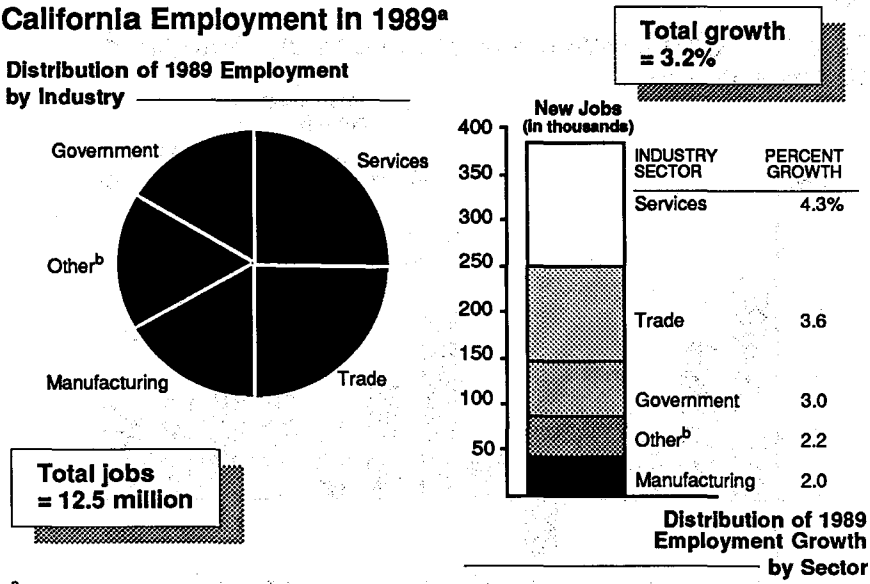
Where Will the New Jobs Be? Chart 8 shows that the majority of new jobs and strongest rates of job growth in 1989 will be in the service and trade sectors. These sectors already account for about one-half of all employment in California. Conversely, Chart 8 indicates that growth in manufacturing employment is expected to be sluggish, due to weaknesses in many durable goods industries caused by the slower economy.

Reduced Defense Spending—How Much Will It Hurt?

Defense Spending in California. Federal defense spending has long been an important source of stimulus to the California economy. Chart 9 shows that defense spending in California recently has been in the range of $50 billion annually, or equivalent to about 8 percent of gross state product (GSP). About half of this amount is for nonprocurement purposes, including pay for defense-related employees and operation of military bases. The remaining spending is for defense contracts, most of which generate jobs in the aerospace industry. California traditionally has received about 15 percent to 20 percent of all federal defense prime contract awards, and around 20 percent of the output produced in California's aerospace sector appears to be defense-related.

Chart 8

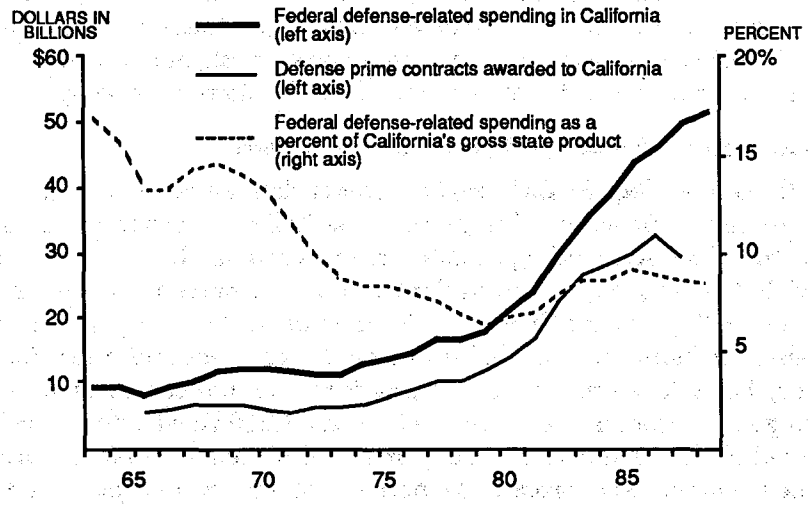
California Employment in 1989[a]



[a] Source: Department of Finance.
[b] Includes mining, construction, transportation-communications-utilities, and finance-insurance-real estate.

Chart 9

Federal Defense-Related Spending in California
Mid-1960s through Late 1980s[a]



[a] Source: Commission on State Finance. Data are for fiscal years ending in years specified.

Cuts Are Coming. Chart 9 shows that throughout most of the 1980s federal defense spending increased rapidly in California, rising at an inflation-adjusted average annual rate of over 8 percent. This contributed greatly to California's strong economic growth during these years. Recently, however, federal budget restrictions have softened the outlook for defense spending in California. For example, the dollar volume of defense contracts and defense spending relative to GSP already have dipped (see Chart 9), and a recommendation has been made to close six California military bases, beginning in 1990, that currently employ over 20,000 civilians and military personnel.

Net Effects—Negative But Not Disastrous. The exact effects of reduced defense spending on California will depend on the eventual magnitude and timing of the cuts. However, California definitely can expect to get much less stimulus from this source in the future than in the past, and defense cutbacks certainly will hurt the state's economy as they unfold. For example, aerospace employment is expected to actually *decline slightly* in both 1989 and 1990, partly due to reduced defense spending. Fortunately for the state, however, the aerospace industry also is expected to enjoy strength from both domestic demand and a strong export market for such outputs as commercial aircraft, computer equipment and parts, and electronics products. This should help to mitigate the immediate economic losses due to reduced defense spending. Likewise, in the longer run the state's ongoing economic growth and economic diversity should soften the negative impacts of the cutbacks on California's economic performance.

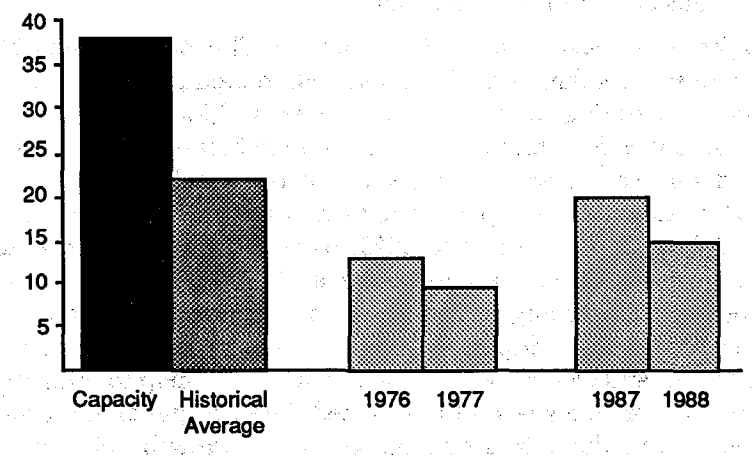
What About the Drought?

The Current Situation. As of early February, it appeared that California might be experiencing its third consecutive critically dry year, which would be the first such occurrence in nearly 400 years. Chart 10 shows that as of the end of 1988, water reservoir storage was about two-thirds of average. This was better than during the last bad drought period in the late 1970s, but was down 25 percent from one year earlier. Recently, the water outlook has appeared to worsen. For example, cumulative precipitation through early February had slipped to less than 80 percent of normal, and water runoff—the principal supply source for dams and reservoirs—was less than 50 percent of normal. Last year, there still was sufficient water storage available to meet most water demands in California. This year, however, water authorities have already told users to expect shortages—40 percent cutbacks for agricultural customers of the State Water Project and 25 percent cutbacks for customers of the federal Central Valley Project. During 1988, 14 counties declared drought emergencies, 42 counties received federal emergency agricultural feed,

and 180 water agencies in 45 counties reported water shortages. These numbers could be considerably greater if the drought continues. In addition, urban water rationing and problems with obtaining groundwater will become more prevalent.

Chart 10

Water Storage in Major California Reservoirs
Selected Years (millions of acre feet)[a]



[a] Source: California Department of Water Resources, as published in *Drought Assistance: A Report to the Legislature in Response to Senate Bill 32*, January 22, 1989. Figures are as of December 31 of years shown.

How Is the Economy Affected? Drought conditions have the potential to negatively affect the economy in many ways. These include destroying fish and wildlife, reducing agricultural and timber production, raising food prices, increasing fire hazards, restricting new construction, making energy more expensive due to less hydroelectric power generation, limiting the use of recreational sites and causing environmental damages. Other effects include reductions in farm proprietors' incomes and reduced federal payments for crop support programs.

Possible Future Effects—Unknown But Potentially Serious. The U.S. Department of Commerce has estimated that nationwide drought conditions reduced real GNP growth by about one-third of a percentage point (nearly $13 billion) in 1988. No estimate is available for California. However, it was undoubtedly less affected because the state's extensive water storage and delivery systems and increased use of wells to capture groundwater enabled severe water shortages generally to be avoided. In addition, Southern California continues to be cushioned from the drought by its access to Colorado River water supplies.

No one has a reliable way of estimating exactly how continuation of the drought will affect California's future economic performance. This is because California has not experienced a persistent drought in recent times. The budget does not assume that the drought will significantly damage the state's near-term economic performance. However, continuation of the drought in 1989 will undoubtedly hurt California's economy much more than in 1988. Thus, the drought is a real "wild card" in the economic forecast.

HOW RELIABLE IS THE ECONOMIC FORECAST?

General Thrust Is Reasonable

Given current economic conditions, the general thrust of the department's economic forecast—continued modest growth—appears ***reasonable*** at this point in time. Table 3 shows that this same basic type of outlook is shared by most other economic forecasters.

Table 3
Comparisons of Different Economic Outlooks for 1989 [a]

	Percent Change In:			*Unemployment Rate*	*New Car Sales (millions)*	*Housing Starts (millions)*
National Forecasts	*Real GNP*	*GNP Prices*	*Pre-Tax Profits* [b]			
Department of Finance	2.6%	3.7%	0.5%	5.3%	10.2	1.39
NABE Survey [c]	2.3	4.4	—	5.6	10.0	1.40
Blue Chip Survey: [d]						
—Average forecast	2.6	4.4	3.3	5.5	10.1	1.43
—Low-end forecast	−1.0	2.8	−7.6	4.7	9.5	1.30
—High-end forecast	4.0	5.4	15.0	6.1	11.5	1.66

	Percent Change In:					*New Residential Building Permits (thousands)*
California Forecasts	*Personal Income*	*Consumer Prices*	*"Real" Personal Income* [e]	*Wage and Salary Jobs*	*Unemployment Rate*	
Department of Finance	7.5%	5.6%	1.8%	3.2%	5.1%	212
Other Forecasters:						
UCLA	8.3	4.6	3.5	2.2	5.7	178
Security Pacific Bank	7.7	4.8	2.8	2.7	—	208
First Interstate Bank	7.2	5.7	1.4	1.9	5.5	184
Bank of America	9.5	5.6	3.7	2.5	5.0	196
Wells Fargo Bank	8.0	5.3	2.7	2.9 [f]	5.2	210
Commission on State Finance	7.8	5.2	2.5	2.6	5.4	203
Average of "Other" Forecasters	8.1%	5.2%	2.7%	2.5%	5.4%	196

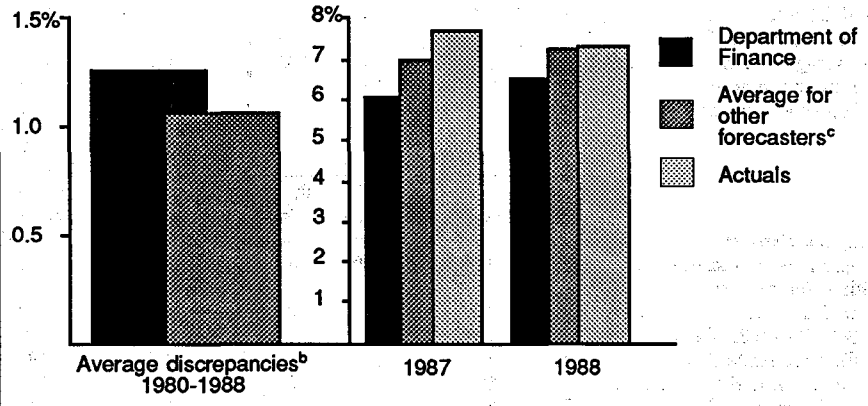
[a] Forecasts available as of approximately year-end 1988.
[b] Defined as pre-tax profits *with* inventory valuation and capital consumption adjustments. This variable is not published by NABE. The most relevant profit measure for revenue estimating *excludes* these adjustments. However, the Blue Chip Survey does not report such a figure. The department's 1989 projection for growth in this latter measure is 0.4 percent.
[c] Consensus median forecasts of a 60-member panel of professional forecasters selected by the National Association of Business Economists (NABE).
[d] Includes the projections of about 50 economists as published in *Blue Chip Economic Indicators.* Permission to reprint data granted by Capitol Publications, Inc.
[e] Defined as personal income adjusted for consumer price inflation.
[f] Figure shown represents civilian employment.

Personal Income Forecast May Be Conservative

Regarding California, however, the department's forecast for 1989 personal income growth—the single most important revenue-determining economic variable—*is somewhat below the consensus view and less than all but one of the other individual forecasts identified.* This is an important difference, since each one percentage point of income growth typically translates into at least $300 million in additional revenues. We have found that the consensus forecast for personal income growth has been slightly more accurate over the past decade than the predictions of any single forecaster, including the department (see Chart 11). Thus, from a revenue estimating perspective, the department's economic forecast may be *somewhat conservative.* Chart 11 shows that this proved to be the case with respect to the budget's economic forecast for personal income in both 1987 and 1988.

Chart 11

Discrepancies Between Projected and Actual California Personal Income Growth[a]



[a] Projections are as of approximately the end of the calendar year preceding the forecast year; actuals are as of January following the end of the forecast year.
[b] Data represent absolute values of percentage-point differences between projected and actual California personal income growth.
[c] Includes UCLA, Security Pacific Bank, First Interstate Bank, Bank of America, Wells Fargo Bank and the Commission on State Finance.

The Uncertainties Are Considerable

Of course, many things could occur during the next year that would dramatically alter the economic environment, including a re-escalation of world oil prices, a retrenchment by consumers, accelerating inflation followed by restrictive monetary policies, severe drought conditions, and

so forth. Such developments, which no economist can accurately predict, obviously could require substantial revisions to the economic outlook. Thus, *there is a large band of economic uncertainty within which the revenue forecast must be viewed.*

II. THE FORECAST FOR GENERAL FUND REVENUES

Table 4 presents the department's forecast for state revenues, by source, for the current and budget years. This section discusses the forecast for General Fund revenues, which account for about 85 percent of all revenue collections.

Table 4
State Revenue Collections
1987-88 through 1989-90
(dollars in millions) [a]

	Actual	Estimated	Projected	Change from 1988-89	
General Fund	*1987-88*	*1988-89*	*1989-90*	*Amount*	*Percent*
Taxes:					
Personal income [b]	$12,947	$14,715	$16,350	$1,635	11.1%
Sales and use [c]	11,631	12,520	13,368	848	6.8
Bank and corporation [d]	4,776	5,215	5,550	335	6.4
Insurance [e]	1,158	1,411	1,279	−132	−9.4
Estate, inheritance and gift	304	376	421	45	12.0
Cigarette	176	172	167	−5	−2.9
Alcoholic beverage	129	127	126	−1	−0.8
Horse racing	110	110	119	9	8.2
Subtotals, taxes	($31,231)	($34,646)	($37,380)	($2,734)	(7.9%)
Other Sources:					
Interest on investments [f]	$428	$452	$532	$80	17.7%
California State University fees	269	327	360	33	10.1
Abandoned property [g]	76	116	250	134	115.5
Oil and gas revenues [h]	101	25	15	−10	−40.0
Other revenues [i]	255	271	262	−9	−3.3
Transfers and loans	174	165	78	−87	−52.7
Totals, General Fund	$32,534	$36,002	$38,877	$2,875	8.0%
Special Funds					
Motor Vehicle Revenues:					
License fees (in lieu)	$1,878	$2,015	$2,165	$150	7.4%
Fuel taxes	1,280	1,304	1,330	26	2.0
Registration, weight and miscellaneous fees	1,096	1,145	1,197	52	4.5
Subtotals, motor vehicle revenues	($4,254)	($4,464)	($4,692)	($228)	(5.1%)
Other Sources:					
Cigarette and tobacco products tax [j]	$75	$373	$696	$323	86.6%
Interest on investments	152	140	131	−9	−6.4
Sales and use taxes [k]	20	73	80	7	9.6
Oil and gas revenues [h]	109	52	38	−14	−26.9
School lease-purchase bond proceeds [l]	600	1,600	—	−1,600	−100.0
Other	1,029	1,197	1,513	316	26.4
Totals, special funds	$6,239	$7,899	$7,150	−$749	−9.5%
Totals, state funds	$38,773	$43,901	$46,026	$2,125	4.8%

[a] Detail may not add to totals due to rounding.

[b] Estimates include special net upward adjustments of $214 million in 1988-89 and $506 million in 1989-90. These adjustments reflect a recent court decision regarding taxation of interest passed through to mutual fund shareholders, the base-broadening revenue effects of tax reform legislation, other legislation, and proposed adjustments and augmentations relating to audit and collection activities by the Franchise Tax Board (FTB).

[c] Estimates include special net upward adjustments of $39 million in 1988-89 and $119 million in 1989-90. These adjustments reflect assumptions regarding the payment of taxes by out-of-state retailers on mail-order sales, new legislation, and increased dollar expenditures on tobacco products due to Proposition 99 (November 1988). For additional detail, see text discussion.

[d] Estimates include the revenue effects of tax reform legislation, and special upward adjustments of $155 million in 1988-89 for settlements regarding tax liabilities and $11 million in 1989-90 for proposed adjustments and augmentations relating to audit and collection activities by the FTB.

[e] Estimates include one-time revenues of $51 million in 1987-88 and $208 million in 1988-89 due to a court decision regarding taxation of "excess risk" arrangements between employers and insurers.

[f] Includes gross interest income earnings under the state's external borrowing program, which are partly offset by borrowing costs. For additional detail, see text discussion.

[g] Includes revenue increases due to Ch 286/88 (AB 3815, O'Connell) of $36 million in 1988-89 and $165 million in 1989-90. This measure shortened the time period after which unclaimed property escheats to the state, from seven years to five years.

[h] Represents oil and gas royalties from state lands, about 80 percent of which come from the state's tidelands located adjacent to the City of Long Beach. Excludes royalties allocated to other funds and federal land royalties.

[i] Includes revenues from various regulatory taxes and licenses, local agencies, user charges for services provided to the public, property-related income and other miscellaneous sources.

[j] Includes revenues due to Proposition 99 (November 1988) of $300 million in 1988-89 and $625 million in 1989-90, and local governments' share of the state's 10-cents-per-pack excise tax on cigarettes. For additional detail, see text discussion.

[k] Reflects allocation of state revenues to the Transportation Planning and Development Account in the Transportation Tax Fund.

[l] Represents bond proceeds under the State School Lease-Purchase Bond Acts of 1986 and 1988. These proceeds are transferred into a special fund prior to their expenditure for purposes designated by the acts.

OVERVIEW

Table 4 shows that General Fund revenues are projected to total $36 billion in 1988-89 and $38.9 billion in 1989-90. Chart 12 indicates that 91 percent of these revenues will come from three large taxes—the personal income tax, the sales and use tax, and the bank and corporation tax. The remaining 9 percent of revenues is derived from the insurance tax, interest income from investments, death-related taxes and various other sources.

Moderate Revenue Growth Expected

General Fund revenues are projected to grow by about 11 percent ($3.5 billion) in 1988-89 and 8 percent ($2.9 billion) in 1989-90 (see Table 4). Chart 13 shows that this growth is moderate by historical standards, both before and after adjustment for inflation. Chart 13 also shows that General Fund revenues will amount to about 6.6 percent of state personal income in both years, similar to the historical average. The outlook for moderate revenue growth is consistent with the moderate growth rates predicted for the economy and such key revenue-determining economic variables as taxable personal income, taxable sales and taxable corporate profits (see Table 2).

Chart 12

1989-90 General Fund Revenues, by Source

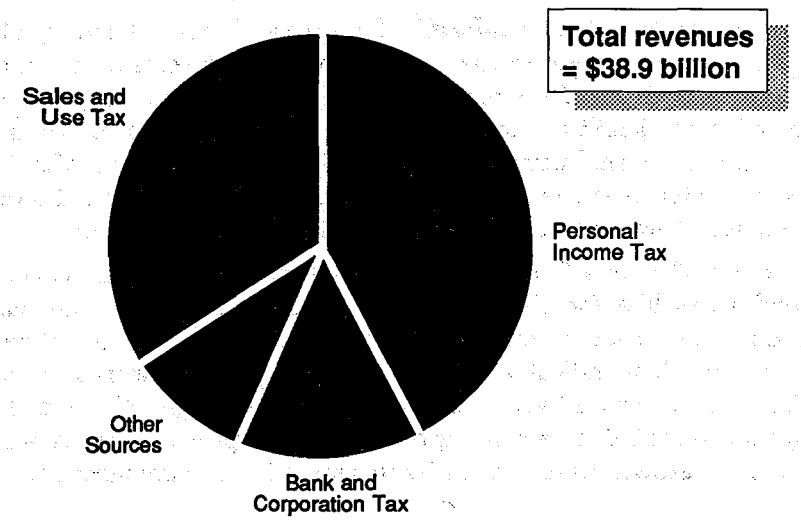
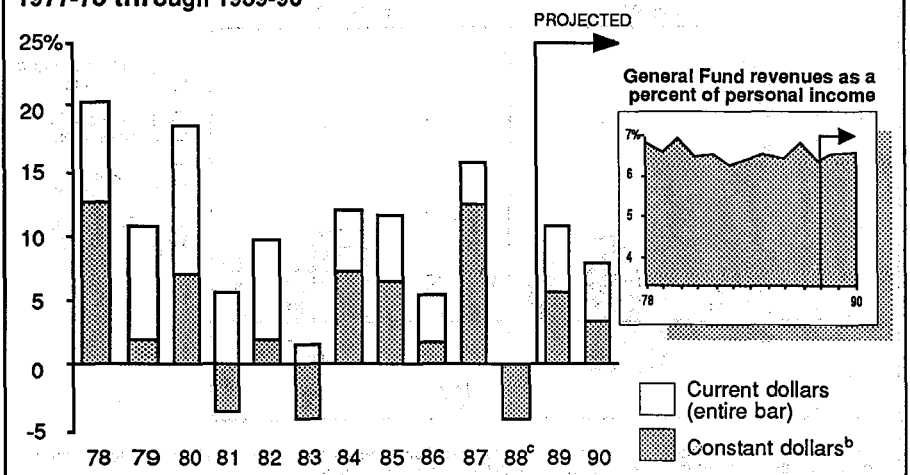


Chart 13

Annual Growth in General Fund Revenues

1977-78 through 1989-90[a]



[a] Source: Governor's Budgets and State Controller's reports. Data are for fiscal years ending in years shown.
[b] Revenue growth adjusted for inflation using the GNP state and local government price deflator.
[c] Current-dollar revenues increased by 0.05 percent.

Special Factors Distort Revenue Trend

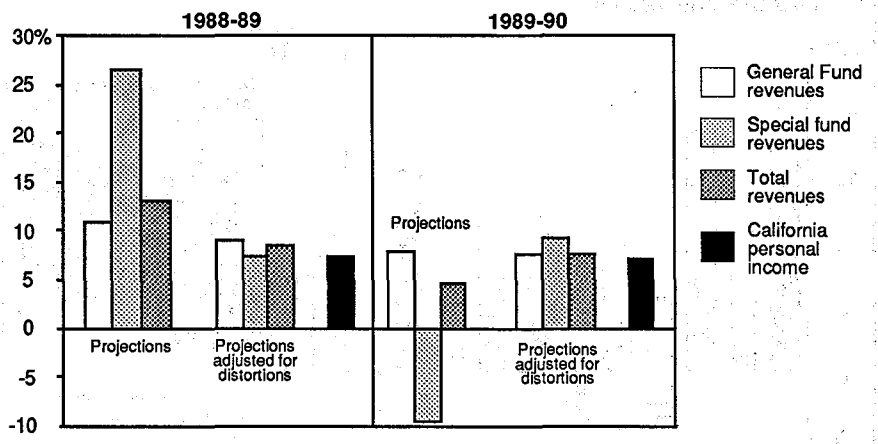
As is true in most years, the projected current-year and budget-year revenue growth rates incorporate various special factors and distortions which cause them to differ from the underlying revenue growth trend.

What Factors Are Involved? The special factors affecting General Fund revenue growth in the current and budget years include, among others, the effects of tax reform and other state legislation, court cases involving tax liabilities, tax audit settlements, expanded use of income-generating external borrowing, and declining oil-related royalty income due to reduced crude oil prices and oil extraction. (These factors are discussed elsewhere in the text and in the notes to Table 4.)

How Is Revenue Growth Affected? Chart 14 shows what the growth trend looks like for General Fund revenues, as well as special fund revenues and total revenues, when the net impacts of these distortions are removed. It indicates that the effect of special factors has been to *slightly raise* current-year General Fund revenue growth, and that the adjusted underlying revenue growth rates are pretty much in line with economic growth as measured by increases in personal income.

Chart 14

Projected Revenue Growth Rates With and Without Distortions
1988-89 and 1989-90[a]



[a] Source: Department of Finance and Legislative Analyst. Distortions include a variety of special factors including those identified in the footnotes to Table 4. For additional detail see text discussions.

What About Last Year's Billion-Dollar Revenue Shortfall?

In May 1988, the department had to adjust downward its estimate of 1987-88 revenues by $1.1 billion, due to huge shortfalls in personal income tax and bank and corporation tax receipts that appeared in March and April. It is important to determine for revenue estimating purposes whether this shortfall represented merely a one-time phenomenon or an ongoing permanent reduction in the state's revenue base. Because economic performance was *stronger* than expected in 1988 (see Table 1), factors other than the economy are responsible for the shortfall.

Possible Explanations. Two primary explanations have been advanced for the shortfall. One is that the state's 1987 tax reform legislation was not "revenue neutral," as it was intended to be. A second theory is that the department simply overestimated the amount of capital gains that would be reported for tax purposes during 1987. (Because tax reform changed both tax rates and the portion of capital gains that is taxable, these two theories are not necessarily mutually exclusive.)

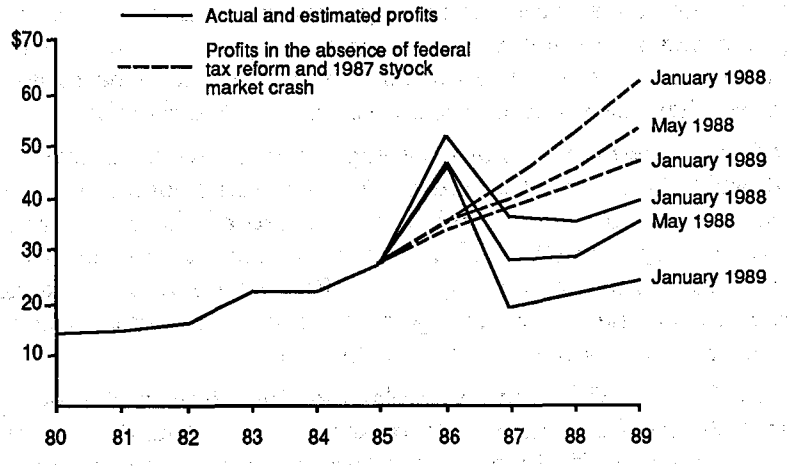
What Do We Know? A complete explanation for the shortfall is not yet available. Both the Franchise Tax Board and the Department of Finance have been reviewing 1987 income tax returns in an effort to answer this question, and a special study by outside consultants is due to be completed this April. Hopefully, these efforts will produce a clearer picture of exactly why the shortfall occurred. However, given the complexity of the issues and the data problems involved, we would not be surprised if a complete explanation for the shortfall is lacking *even after* the special study is completed.

Budget Assumes Capital Gains Were A Key Factor. Although the exact causes for the shortfall are not yet fully understood, the budget implicitly assumes that capital gains were a key factor. Chart 15 shows that the department's current assumptions about the level of capital gains have been reduced from one year ago by $17.1 billion for 1987, $13.8 billion for 1988 and $15.1 billion for 1989. Using the *department's* assumption about the rate at which these gains would have been taxed had they materialized, the revision of the forecast to 1987 capital gains translates into a revenue reduction of over $850 million. However, the department's tax rate assumption appears to be *conservative.* Using a higher tax rate suggests that capital gains may have accounted for nearly *all* of the shortfall. Because the capital gains forecast also has been reduced for 1988 and 1989, *the department is assuming that most of the portion of last year's revenue shortfall attributable to capital gains will be ongoing.*

Chart 15

Changes in Capital Gains Estimates[a]

1980 through 1989 (In billions)



[a] Source: Department of Finance and Franchise Tax Board. Data shown represent profits from the sale of capital assets, and have not been adjusted to reflect the partial exclusions from taxation of medium-term and long-term capital gains that were in effect prior to 1987, or capital losses.

What About the Other Theory? Regarding the theory that tax reform per se contributed to the shortfall, the budget makes *no explicit estimates.* However, given the department's revised assumptions about capital gains, *the budget does not appear to have assumed that tax reform and other factors played a significant role in causing the shortfall.* (Tax reform did, however, magnify the revenue loss caused by the capital gains overestimate due to its repeal of the partial exclusion of capital gains income.)

INDIVIDUAL GENERAL FUND REVENUE SOURCES

The Forecast for Personal Income Taxes—Above-Average Growth

Background. The personal income tax (PIT) is the single largest General Fund revenue source, accounting for over 40 percent of the total. The tax is imposed on income using a progressive tax rate schedule ranging from 1 percent to 9.3 percent, and includes a variety of income exclusions, deductions and credits. In 1987, legislation was enacted which significantly restructured the tax to more closely conform with federal law. This included adopting most of the base-broadening provisions of the federal Tax Reform Act of 1986 (including limiting or eliminating various deductions, making capital gains fully taxable and restricting "passive losses"), conforming to the federal standard deduction, and establishing a number of new tax credits such as for low-income housing and certain

research activities. *These law changes have made it much more difficult to accurately forecast PIT revenues than previously.*

The PIT Forecast. Table 4 indicates that PIT revenues are projected to total $14.7 billion in 1988-89 (14 percent growth) and $16.4 billion in 1989-90 (11 percent growth).

The PIT forecast is constructed using a three-step process. First, estimates must be made of the *income-year tax liabilities* which will be generated from the taxable personal income produced by economic activity. Second, estimates must be made of taxes to be paid on *capital gains*, which have accrued in past years but are just now being realized and reported by taxpayers. Third, *special adjustments* are required for factors like new legislation and audit collections.

Tax Liabilities—Healthy Increases Assumed. Chart 16 (top panel) shows income-year PIT liabilities, by type of income. The bottom panel indicates that total tax liabilities are projected to increase by about 9 percent in 1989 and 10 percent in 1990. It also shows that when the volatile capital gains and preference tax liabilities are excluded, liability growth is reduced and is more in line with personal income growth. These general relationships make sense, as tax liability growth normally should increase slightly faster than income growth due to the state's progressive marginal tax bracket structure.

Capital Gains—Estimates Have Been Lowered. Chart 15 shows the budget's assumptions regarding capital gains. As noted earlier, the estimates of these gains have been reduced substantially during the past year. This is due to difficulties discerning both the underlying trend in these gains, and the effect federal tax reform and the 1987 stock market crash had in causing reported gains to fluctuate in 1986 and 1987.

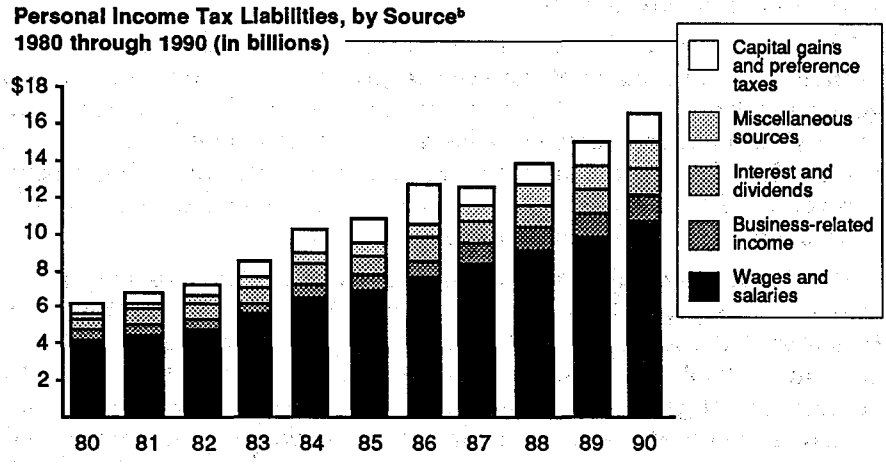
The budget assumes that the underlying growth trend in capital gains will be 10 percent in 1988 through 1990. This compares to an average annual increase of nearly 18 percent over the past 10 years and more than 15 percent during the first half of the 1980s. Projecting capital gains is to a large extent guesswork. *If history is any guide, the budget's assumptions could prove conservative.* Potentially offsetting this factor, however, is the possible negative near-term revenue effect of the President's proposal to reduce the federal capital gains tax rate in the future. *This could cause a reduction in reported capital gains*, if taxpayers wait to realize them until a lower tax rate is in effect. Thus, *the capital gains forecast is uncertain.* Each added (reduced) percentage point in capital gains growth would increase (decrease) annual tax liabilities by over $20 million.

Special Factors Boost Revenue Growth. The budget also assumes that personal income tax liabilities will be higher than in 1987-88 by about $215

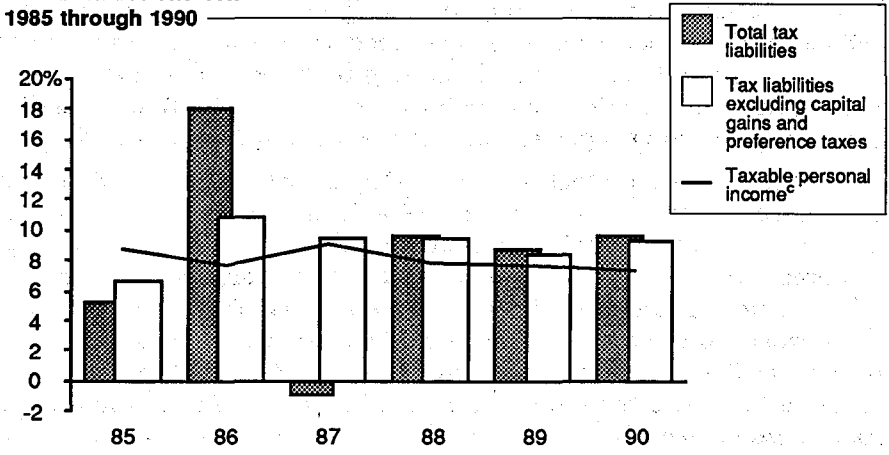
Chart 16

Personal Income Tax Liabilities[a]

Personal Income Tax Liabilities, by Source[b]
1980 through 1990 (in billions)



Annual Growth in Personal Income Tax Liabilities and Taxable Income
1985 through 1990



[a] Source: Department of Finance and Franchise Tax Board. Data shown are on a calendar-year basis. All tax liability data shown are preliminary for 1987 and projected for 1988 through 1990.
[b] Liability shares shown have been allocated using the *average* tax rates applying to taxpayers reporting each type of income.
[c] Defined as total personal income plus Social Security contributions, minus transfer payments and certain other nontaxable income components.

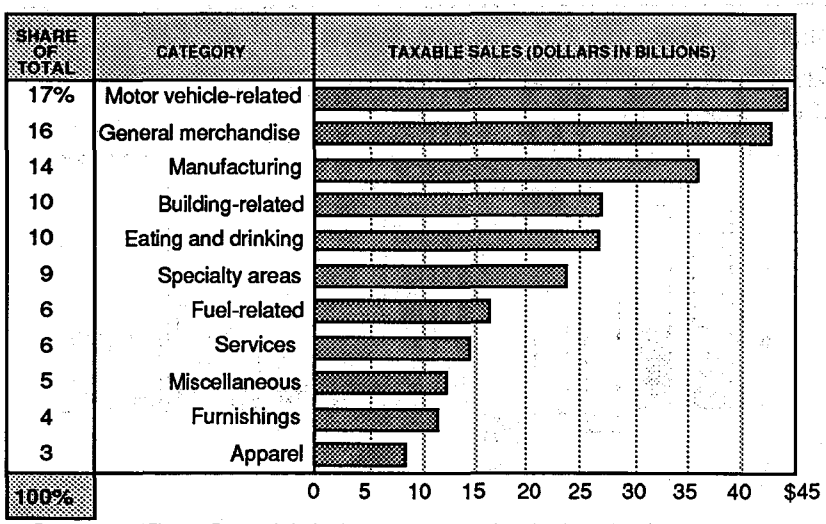
million in the current year and $500 million in the budget year, due primarily to the effects of tax reform. These factors have the effect of raising 1989-90 PIT growth above its underlying long-term trend. In the absence of these factors, budget-year PIT growth would be about 8.6 percent instead of over 11 percent, and thus more reflective of the growth in personal income.

The Forecast for Sales and Use Taxes—Modest Growth

Sales and use taxes are the second largest source of General Fund revenues—around 34 percent of the total—and are projected to reach $12.5 billion (7.6 percent growth) in the current year and $13.4 billion (6.8 percent growth) in the budget year. These revenues are derived from the state's 4.75-percent levy on taxable sales. In addition, sales and use taxes of up to 2.25 percent are levied by local governments and transit districts. The key to forecasting this tax is projecting the level of taxable sales in California. Chart 17 summarizes the expected composition of 1989 taxable sales, by major spending category.

Chart 17

1989 Taxable Sales, by Category[a]



[a] Source: Department of Finance. Data exclude the department's assumptions that there will be $1.4 billion in reported 1989 taxable sales due to mail-order sales by out-of-state retailers. These assumptions include the enactment of federal legislation to require that use taxes on such sales be remitted to the states.

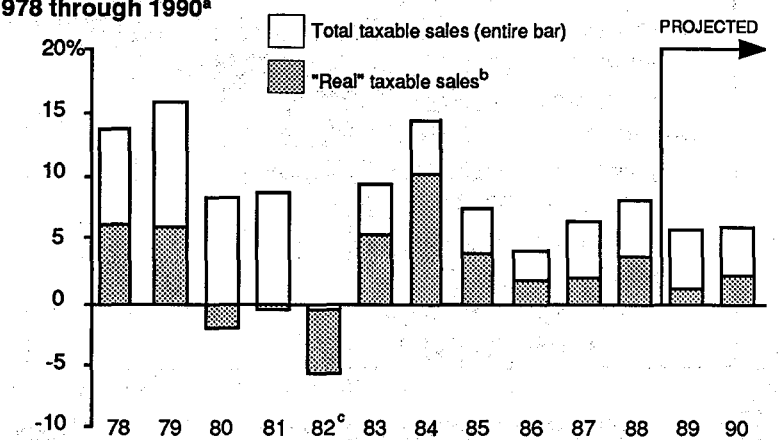
Taxable Sales To Trail Income Growth. The budget predicts that taxable sales will rise by 6 percent in 1989 and 6.3 percent in 1990, well down from 1988's 8.3 percent growth. Chart 18 shows that this growth is *modest by historical standards*, both before and after adjusting for

inflation. Chart 19 also indicates that because taxable sales growth is assumed to be less than personal income growth, the sales-to-income ratio will decline to its lowest level ever. Our own revenue-estimating procedures also suggest that taxable sales growth will trail income growth, though we estimate that the taxable sales growth rate will be a *bit stronger* than the department's.

Special Adjustments May Be Overstated. The budget includes upward adjustments of nearly $40 million in 1988-89 and $120 million in 1989-90 due to special factors. Over $130 million of the two-year total is for taxes on mail-order sales which 1987 California legislation requires out-of-state retailers to collect and remit to the state. This estimate presumes enactment of federal legislation to require such reporting, and thus may or may not fully materialize. In addition, $44 million is included for increased sales taxes on cigarettes, due to higher cigarette prices resulting from the additional 25-cents-per-pack excise tax imposed by Proposition 99 (November 1988). This revenue gain also may be overstated, since the department assumes that the new tax will have an extremely minor effect on cigarette consumption, and increased total spending on cigarettes will cause no reduction whatsoever in other types of spending.

Chart 18

Annual Growth in California Taxable Sales
1978 through 1990[a]



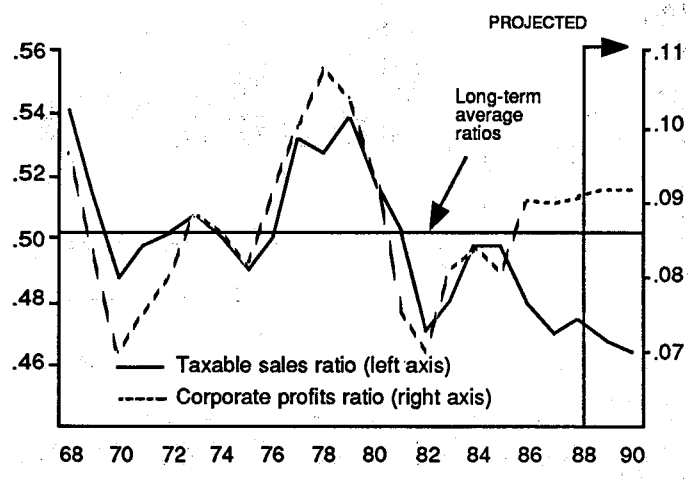
[a] Source: Department of Finance. Data are preliminary estimates for 1988. Data shown exclude the department's estimates regarding taxable mail-order sales by out-of-state retailers. These estimates partly reflect the department's assumption that federal legislation will be enacted to require retailers to remit use taxes on such sales to the states, as California law currently requires.

[b] "Real" taxable sales equal total taxable sales (current dollars) deflated by the GNP price deflator for consumption expenditures.

[c] Total taxable sales declined by 0.5 percent.

Chart 19

Ratios of California Taxable Sales and Corporate Profits to Personal Income
1968 through 1990[a]



[a] Source: Department of Finance. Data are estimated for 1988 and projected for 1989 and 1990.

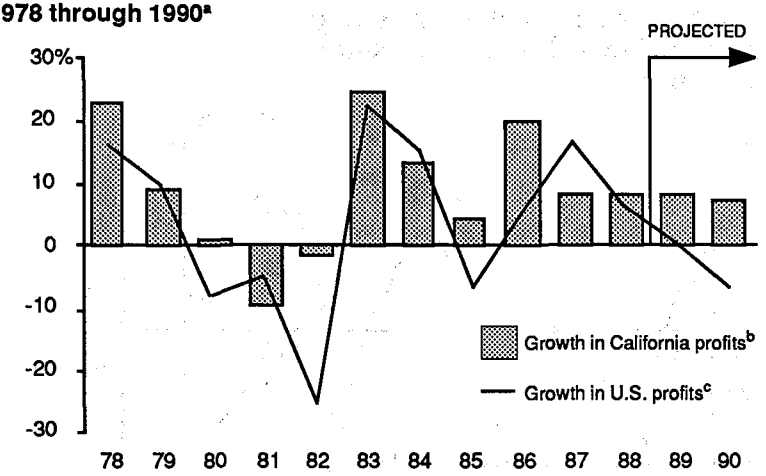
The Forecast for Bank and Corporation Taxes—Moderate Increases

Bank and corporation taxes, the third-largest source of General Fund revenues, are derived primarily from a 9.3 percent levy on the taxable profits of corporations doing business in California. These revenues are projected to total $5.2 billion (9.2 percent growth) in the current year and $5.6 billion (6.4 percent growth) in the budget year. A number of significant changes were made to this tax in 1987 and, as with the personal income tax, *these law changes have made it much more difficult to accurately forecast revenues than before.*

Taxable Profits To Increase Moderately. The key to forecasting this tax is to predict the level of taxable corporate profits. Chart 20 shows that the department assumes that California corporate profits will increase by 8.4 percent in 1989 and 7.4 percent in 1990, following an 8.2 percent rise in 1988. Because these rates of increase are similar to projected personal income growth (see Table 2), the ratio of profits to statewide personal income will remain fairly stable (Chart 19).

Chart 20

Annual Growth in Taxable Corporate Profits
1978 through 1990[a]



[a] Source: Department of Finance.
[b] Data for 1988 are preliminary estimates by the Department of Finance and Franchise Tax Board.
[c] California and U.S. profit data are not strictly comparable in certain years due to definitional differences. Data incorporate the effects of various federal and state tax law changes during the 1980s which revised the definition of taxable corporate profits.

Forecast Contains Offsetting Biases. Chart 20 shows that the level, moderate rate of profit growth assumed for California from 1987 through 1990 differs markedly from the department's predictions of U.S. profit performance—a steady deterioration from 17 percent growth in 1987 to under 7 percent growth in 1988, negligible growth in 1989 and a 7 percent decline in 1990. Although taxable California profits depend upon many factors unique to the state, they also show a significant correlation historically with U.S. profit growth. This is only natural, given California's use of the unitary method and various profit-determining factors that affect both state and national profit performance (such as economy-wide interest rates). As is shown earlier in Table 3, the budget's U.S. profits forecast is consistent with other forecasters. *If the historical correlation continues to be valid, the budget's projected growth rates for California profits in 1989 and 1990 could be overstated.*

Offsetting this factor is the fact that 1987 tax refunds paid out in December 1988 and January 1989 were $90 million *less* than expected. This revenue gain, *which is not reflected in the budget's revenue estimates,* suggests that 1987 profits were stronger than assumed in Chart 20, and thus that the 1988 and 1989 profit growth assumptions should work off a higher base than assumed in the budget.

For the current and budget years combined, the above two biases appear to offset one another.

Insurance Taxes—Proposition 103 Uncertainties

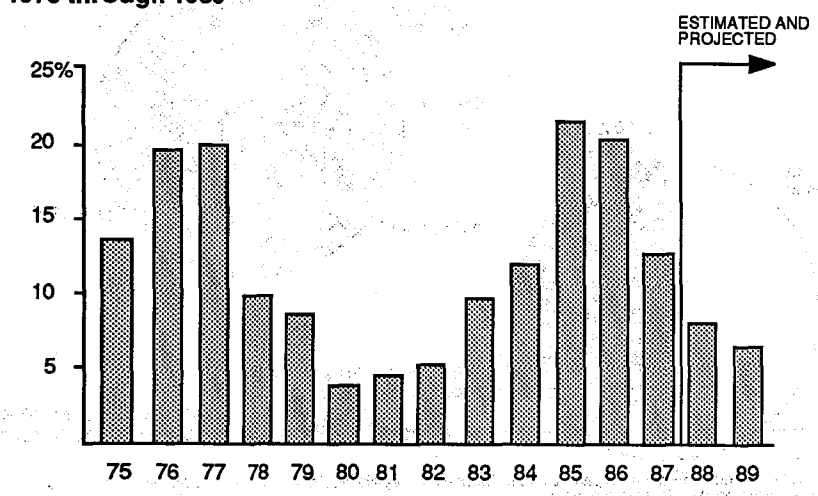
Insurance tax revenues, which primarily are derived from a 2.35 percent tax on the dollar volume of insurance premiums written, are projected to total $1.4 billion in the current year and $1.3 billion in the budget year.

Large One-Time Gains Distort Revenue Trend. A recent court decision regarding the taxation of benefits paid to employees under "excess risk" arrangements between employers and insurance companies has increased revenues by $51 million in 1987-88 and a projected $208 million in 1988-89. Removing these one-time gains shows that underlying revenue growth is moderate—8.7 percent in the current year and 6.3 percent in the budget year.

Insurance Premiums—Slower Growth Predicted. Because of the way in which insurance tax prepayments are computed, 1988-89 revenues primarily depend on 1988 premiums, and 1989-90 revenues will depend primarily on 1989 premiums. The department's forecast for premiums is based on statistical analysis of survey data from firms collecting about one-half of California's insurance premiums. Chart 21 indicates that growth in insurance premiums is assumed to slow from over 12 percent in 1987 to about 8 percent in 1988 and 7 percent in 1989. This growth is slightly less than personal income growth and well below the average for the last 10 years—nearly 11 percent.

Chart 21

Annual Growth in California Taxable Insurance Premiums
1975 through 1989[a]



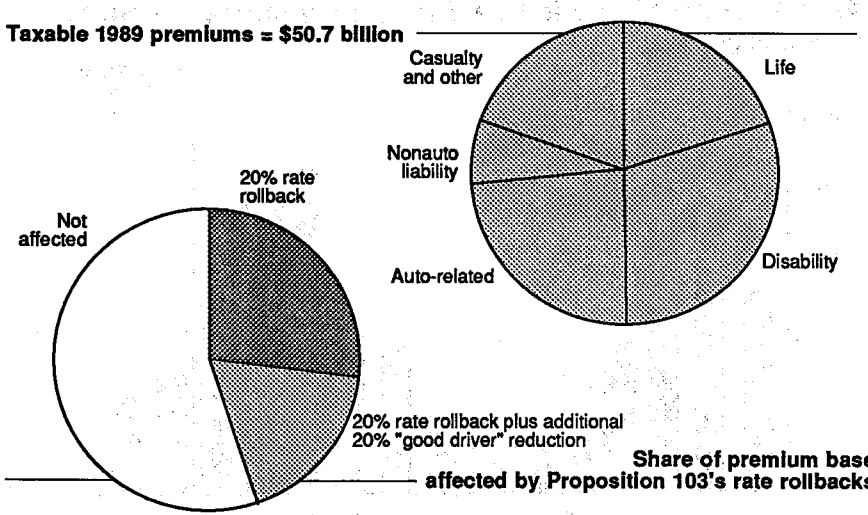
[a] Source: Department of Finance. Data shown are for premiums subject to the standard 2.35 percent tax rate, and exclude certain premiums for pension and profit sharing plans, surplus lines and ocean marine insurance, which are taxed at special rates.

Why the Slowing? Taxable insurance premiums are related both to economic activity and the cyclical financial position of the insurance industry. Our own revenue estimating procedures indicate that (consistent with the department's view) the budget's economic forecast, taken alone, would generate only modest growth in insurance premiums. In addition, however, Chart 21 shows that insurance premiums follow a definite cyclical pattern over time. This is because the industry experiences cycles of underwriting profits and losses, in response to which it continually adjusts its premium rates. Thus, periods of large underwriting losses typically are followed by periods of large premium increases, and vice versa. Chart 21 suggests that the department is assuming that California will remain in the lower part of the cycle. Of course, because of Proposition 103, *the premiums forecast is prone to much greater-than-normal error.*

Proposition 103—Will It Affect Revenues? Proposition 103 (November 1988) mandates reductions in premium rates for certain types of insurance. Chart 22 shows the distribution of California's premium volume by insurance type, and indicates that the rate-reduction requirement will apply to about 45 percent of the premium base. Proposition 103

Chart 22

Taxable Insurance Premiums
By Type[a]



[a] Source: Department of Finance, Department of Insurance and Legislative Analyst. Data regarding Proposition 103 computed using actual 1987 premium data.

provides that the insurance tax rate be adjusted to compensate for any decrease in state revenues which might result from the premium rate reductions. The budget assumes that because of this clause, there will be no state revenue losses due to the measure. However, it remains to be seen exactly how this rate adjustment process will work, including (1) whether it can be timed so that the state will have no initial cash-flow revenue losses, and (2) whether it will be possible to accurately account for not only reductions in premium rates per se, but also their induced effects, and those of other provisions in the measure, on premium sales. It is likely that Proposition 103 will affect state revenues in some manner, *but what this effect will be is unknown.*

Death-Related Taxes—Sizable Gains

Death-related tax revenues are predicted to increase by nearly 24 percent in 1988-89 and 12 percent in 1989-90 (see Table 4). These taxes total in the range of $400 million and account for about 1 percent of all revenues. They include estate taxes, inheritance taxes and gift taxes. Although Proposition 6 (1982) abolished inheritance and gift taxes and replaced them with the estate tax, revenues continue to be collected under the former taxes from unclosed accounts of persons who died before the law was changed.

All Other Taxes—No Growth

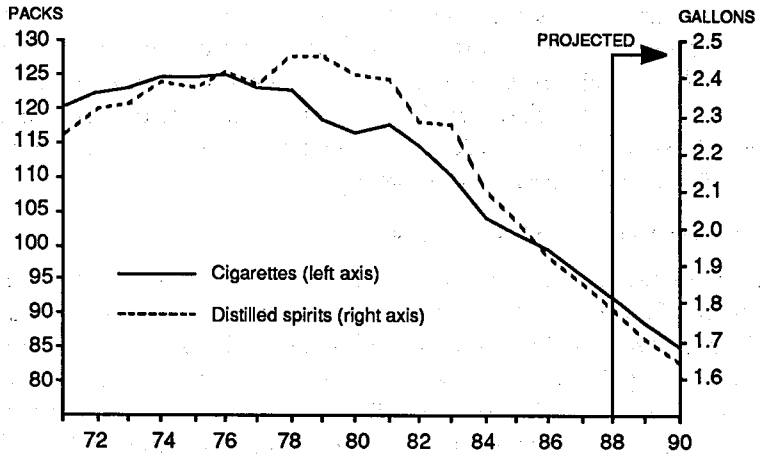
General Fund revenues from the state's remaining taxes are projected to total a combined $412 million in the budget year. This is about 1 percent of total revenues and nearly identical to collections in both the prior and current years. These taxes include the cigarette tax ($167 million), alcoholic beverage taxes ($126 million) and horse racing taxes ($114 million).

Cigarette and Beverage Taxes Are Declining. Both cigarette and beverage taxes are projected to decline in the current and budget years. Chart 23 shows this is because per capita consumption of alcoholic beverages and cigarettes are expected to continue trending downward as in recent years, and by more than the rate of population growth. This, combined with the fact that the General Fund revenues from these sources come from fixed "cents-per-unit-consumed" excise taxes, means that taxes do not increase over time even as the prices for these items rise.

The Effect of Proposition 99. The budget assumes that the 25-cent-per-pack tobacco surtax imposed by Proposition 99 (1988) will cause an ongoing consumption reduction of only about 1 percent. This implies

Chart 23

California Per Capita Consumption of Cigarettes and Distilled Spirits
1970-71 through 1989-90[a]



[a] Source: Department of Finance and State Board of Equalization. Data shown are for fiscal years ending in years specified.

a net General Fund revenue gain in the current and budget years combined of $41 million, representing increased sales taxes of $44 million and reduced excise taxes of $3 million. (The special fund revenues from this surtax are discussed in the next section.) Empirical studies, however, suggest that the consumption decline will be greater than predicted by the department, in which case there might be no General Fund revenue gain.

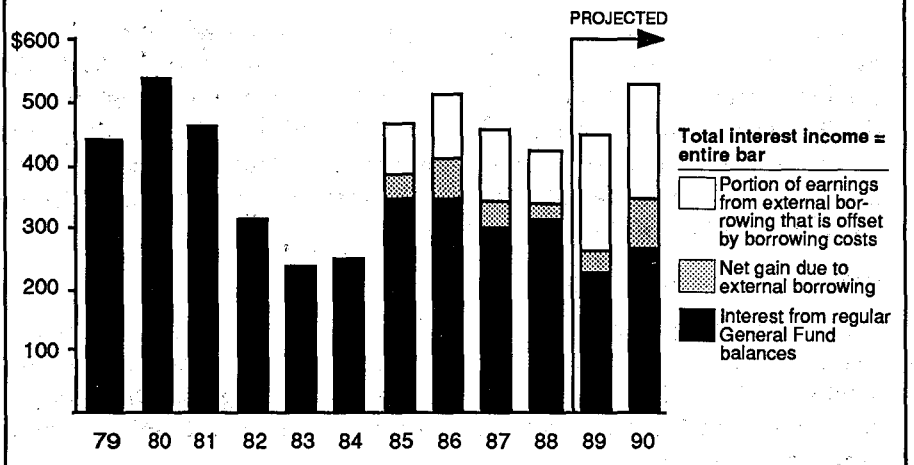
Special Wagering Tax Boosts Revenues. Total pari-mutuel wagering is projected to increase by only about 3 percent in the budget year. This increase is primarily due to increased activity at satellite wagering facilities located at fairs and other sites. However, General Fund revenues are projected to rise by about 8 percent ($9 million). This is due to imposition of a special license fee at the satellite facilities, which is aimed at protecting the General Fund from revenue losses caused by their existence. (Wagering taxes at these satellite facilities primarily accrue to special funds, and such wagering can hurt the General Fund by reducing attendance and wagering at racetracks.) Without this special tax, General Fund revenues would only be up about 3 percent.

Interest Income—Higher Due To Interest Rates and External Borrowing

General Fund interest income accounts for slightly under 2 percent of total revenues. Chart 24 shows that it is projected to total $532 million in the budget year, well up from the current and prior years.

Chart 24

General Fund Revenues From Interest Income
1978-79 through 1989-90 (dollars in millions)[a]



[a] Source: *1989-90 Governor's Budget*, Department of Finance and State Treasurer. Data shown are for fiscal years ending in years specified.

Where Does Interest Income Come From? Interest income is derived from four primary sources: (1) the investment of monies carried over from prior years (such as balances in the Special Fund for Economic Uncertainties); (2) earnings on certain special fund balances to which the General Fund is entitled; (3) investment of incoming General Fund revenues that are temporarily not needed to pay for expenditures; and (4) "arbitrage income" from the short-term investing of temporarily idle monies that the General Fund has borrowed to handle its intra-year cash-flow imbalances. These monies all are invested through the state's Pooled Money Investment Account (PMIA).

Borrowing Profits and Higher Yields to Boost Earnings. The regular General Fund PMIA balance is projected to be $2.8 billion in the budget year, only slightly above the current year's $2.6 billion and far down from the prior year's $4.1 billion. This reduced average balance reflects the tightened budgetary situation. Budget-year interest, however, is assumed to be higher than in either previous year because:

- The PMIA's *average interest yield* is projected to rise to 9.5 percent in 1989-90, well above the 8.7 percent for 1988-89 and 7.9 percent in 1987-88. This yield is consistent with the budget's assumptions regarding economy-wide interest rates in 1989 and 1990.
- The *volume of external borrowing* is assumed to rise to $3.5 billion in the budget year, up from $3.2 billion in the current year and $2.1

billion in 1987-88. Undertaking this volume of borrowing will require a change in existing state laws governing the external borrowing program. Without this change, only about $3.2 billion could be borrowed.

Net Benefits from Borrowing Appear Overstated. The budget's estimates of net profits from external borrowing in 1989-90 assume that the borrowing rate will be only 5.8 percent. This is too low, compared to the 9.5 percent earnings yield assumed for the PMIA. Although adjusting the borrowing rate upward will not affect the total interest income shown in Chart 24, *it will reduce the net gain shown and increase 1989-90 General Fund expenditures accordingly.*

Other General Fund Revenues

The remaining sources of General Fund revenues include a variety of regulatory taxes and fees, California State University fees, monies from local agencies and miscellaneous revenue sources. Together, budget-year revenues from these sources are projected to total $965 million, or 2.5 percent of total revenues.

Big Gain from Unclaimed Property. Revenues have been increased by $36 million in 1988-89 and $165 million in 1989-90 due to Ch 286/88 (AB 3815, O'Connell), which reduced from seven to five years the period of time before unclaimed property held by banks and other financial institutions must be turned over to the state. These revenue gains represent accelerations of revenue collections which would otherwise have been received in future years.

RELIABILITY OF THE GENERAL FUND REVENUE FORECAST

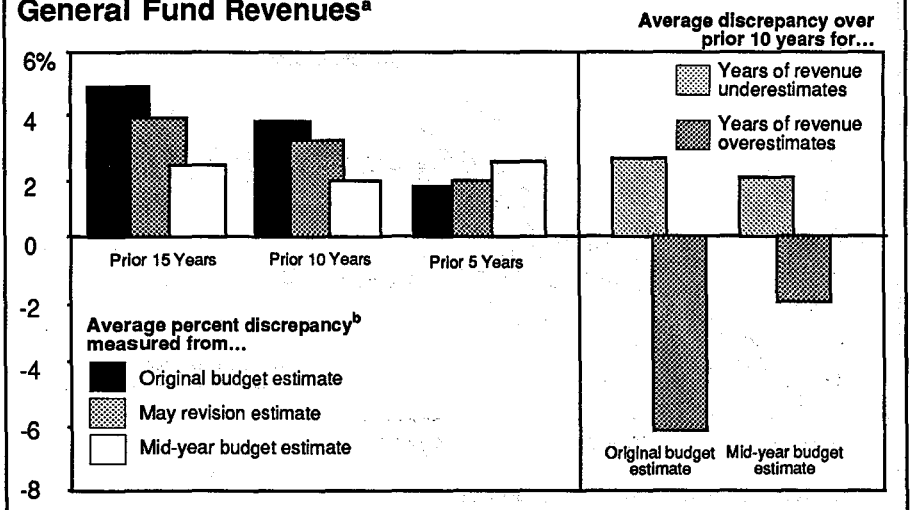
How Reliable Have Past Forecasts Been?

The reliability of past revenue forecasts has been quite variable. This serves as an important reminder that the current forecast also is prone to error. Chart 25 shows what the percentage revenue estimating discrepancies have averaged in past years. For example, it indicates that over the past 10 years:

- The average discrepancy has been almost 4 percent for the original budget estimate and over 2 percent for the midyear budget estimate.
- The average discrepancy in years of *revenue overestimates* has been over 6 percent for the original budget estimate and nearly 2 percent for the midyear estimate.
- The average discrepancy for years of *revenue underestimates* has been a bit under 3 percent for the original budget estimate and over 2 percent for the midyear estimate.

Chart 25

Discrepancies Between Actual and Estimated General Fund Revenues[a]



[a] Source: Estimates by Legislative Analyst, based on analysis of Department of Finance revenue estimates.

[b] Percentage discrepancies shown represent the average absolute values of discrepancies for the years specified that are attributable to economic forecasting revisions and revenue estimating procedures. Data have been adjusted for the initial estimates of new legislation, budget actions, audit settlements and various other factors.

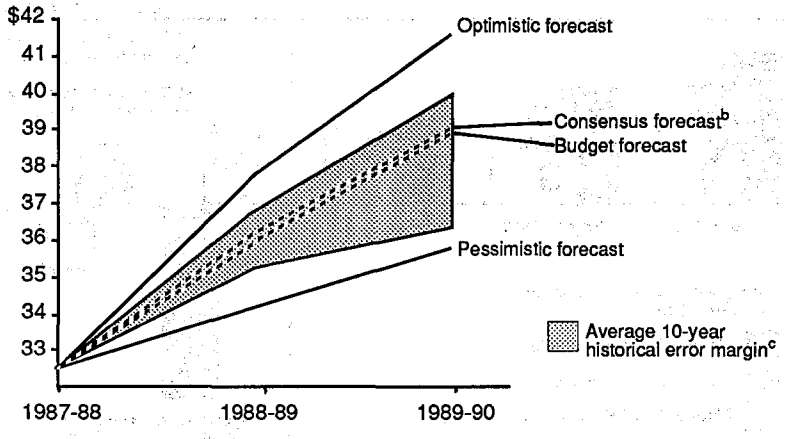
Large Dollar Errors Are Likely

Percentage errors of these magnitudes translate into *very large dollar amounts*. For example, in 1989-90 a forecasting error of only 1 percent will produce a revenue error of nearly $400 million. Thus, a historical average error—4 percent—would cause a revenue error of $1.6 billion. Of course, much larger percentage errors than this have occurred in past years and certainly could occur again.

Chart 26 (see shaded region) indicates how revenues would differ from the budget estimate if the 10-year average percentage errors for years of revenue understatements and overstatements, respectively, were to occur. The combined current-year and budget-year error range shown is $1.9 billion on the upside ($800 million in the current year and $1.1 billion in the budget year) and $3.8 billion on the downside ($700 million in the current year and $3.1 billion in the budget year).

Chart 26

Alternative General Fund Revenue Forecasts
1988-89 and 1989-90 (in billions)[a]



[a] Source: *1989-90 Governor's Budget* and Legislative Analyst.
[b] Reflects consensus economic forecast plus other possible adjustments for which data appear in Table 5.
[c] Upper and lower bounds shown are based on the average percent errors in years of revenue underestimates and overestimates, respectively (see Chart 25).

Even Larger Errors Could Occur

Should the economy follow a significantly stronger or weaker path than assumed in the budget, Chart 26 (outer lines) shows that even larger revenue estimating errors could occur. It indicates that, according to the department's optimistic and pessimistic forecasts, the budget-year error range could be $2.7 billion on the upside and $3.1 billion on the downside.

Given the above, ***it is only realistic to expect revenue-estimating errors of at least several hundred million dollars, and it is within this band of uncertainty that the budget's revenue estimates should be viewed.***

Nevertheless—Are the Revenue Estimates "Reasonable"?

Even though significant error margins surround revenue estimates, it still is necessary that a specific revenue projection eventually be used in developing the state's budget plan. Thus, the relevant question is: *Are the budget's revenue estimates reasonable to use for this purpose?*

Where Might the Estimates Go Wrong? Assessing the reasonableness of the budget's revenue projections involves considering such factors as the consistency of the revenue projections with the budget's economic forecast, the reliability of the economic forecast itself, and how revenues have performed since the revenue estimates were made. Table 5

summarizes some of the possible factors that could give rise to errors in the revenue estimates. It indicates that:

- Our own revenue estimating procedures suggest that the *budget's economic forecast* would generate *$305 million less* revenues than projected. However, use of the more optimistic *consensus economic forecast* would generate *$325 million more* revenues than projected. Thus, accounting for technical revenue estimating adjustments and substituting the historically more reliable consensus economic forecast would put revenues within about $20 million of the budget forecast.
- If the historical-average capital gains growth rate were to occur, revenues would be *higher than estimated* by about $330 million. On the other hand, the response of taxpayers to the President's proposal to reduce the federal capital gains tax rate could *significantly lower* near-term gains reported for tax purposes.
- Recent revenue collections data suggest that current-year bank and corporation tax revenues should be *adjusted upward* by about $90 million. Recent revenue data also indicate that personal income tax estimated payments have been much stronger than expected. If not offset by other factors later this year, this could cause current-year personal income taxes to end up *higher* than assumed.

Table 5
Selected Possible Adjustments to the Department of Finance's General Fund Revenue Estimates
1988-89 and 1989-90
(dollars in millions)

Possible Sources of Adjustments	*1988-89*	*1989-90*	*Two-Year Total*
Technical revenue estimating procedures and methodologies	−$115	−$190	−$305
Use of consensus economic forecast	110	215	325
Subtotals	(−$5)	($25)	($20)
Capital gains:			
—Upward adjustment for historical capital gains growth rate	$100	$230	$330
—Downward adjustment due to proposed reduction in federal capital gains tax rate	—	Unknown potential reduction	Unknown potential reduction
Recent cash revenue trends:			
—Bank and corporation tax	90	—	90
—Personal income tax[a]	Unknown potential gain	—	Unknown potential gain
Proposition 103	Unknown effect	Unknown effect	Unknown effect
Selected other factors[b]	−15	−85	−100

[a] Personal income tax declarations of estimated tax payments for the months of December 1988 and January 1989 increased by 32 percent over the same months one year earlier. The budget assumes that this surge will be offset by reduced final tax payments in April 1989; however, whether this actually will happen is unknown.

[b] Includes assumptions regarding use taxes on out-of-state mail orders and the effects of Proposition 99 on cigarette consumption.

- Proposition 103 could end up *either increasing or decreasing* revenues, depending upon how insurance purchasers and providers respond to the measure, how insurance tax rates are adjusted, and determinations by the courts regarding the legality of the measure's provisions.
- Certain other factors could end up *reducing* revenues over the two-year period by about $100 million.

General Conclusion—Estimates Reasonable With Some Upward Potential

One cannot say with certainty which of the possible revenue adjustments listed in Table 5 actually will materialize. It seems likely, however, that at least some net upward revenue adjustments will result from these sources. Chart 26 shows that if *all* of the possible adjustments for which data are shown in Table 5 were to occur, revenues would be increased by *several hundred million dollars* over the two-year period. Chart 26 also shows, however, that while such gains may be significant in dollar terms, *they are "swamped" by the error margins* within which the revenue forecast should be viewed. Given this, our conclusion is that budget's revenue estimates are *generally reasonable for the Legislature's initial planning purposes, though they have some upward potential.*

April Will Provide Critical Missing Information. During each of the past two years, the budget's revenue projections have been significantly revised in May, following the filing of personal income tax returns in April. This is primarily because recent federal and state tax-law changes have made it difficult to anticipate both the amount of tax liabilities and the timing of tax payments. This year's April revenue data will again provide important information which could *significantly change* the revenue estimates. For example, we will know in April if the large volume of declarations payments in recent months (see Table 5) represents a net gain or not, and whether the budget's assumptions regarding 1988 capital gains are correct. Thus, *depending on what these April data show, the revenue estimates could be subject to considerable revision this May.*

III. THE FORECAST FOR SPECIAL FUND REVENUES

Special fund revenues are projected to total $7.9 billion in 1988-89 and $7.1 billion in 1989-90 (see Table 4). As shown in Chart 14, the volatile growth rates that these projections imply—a 27 percent gain in 1988-89 and 9.5 percent decline in 1989-90—are due to various special factors and distortions. After accounting for such factors, the underlying rate of revenue growth is much more stable and moderate—a bit higher than personal income growth. The growth rates for individual special fund revenue sources differ considerably from one another, however.

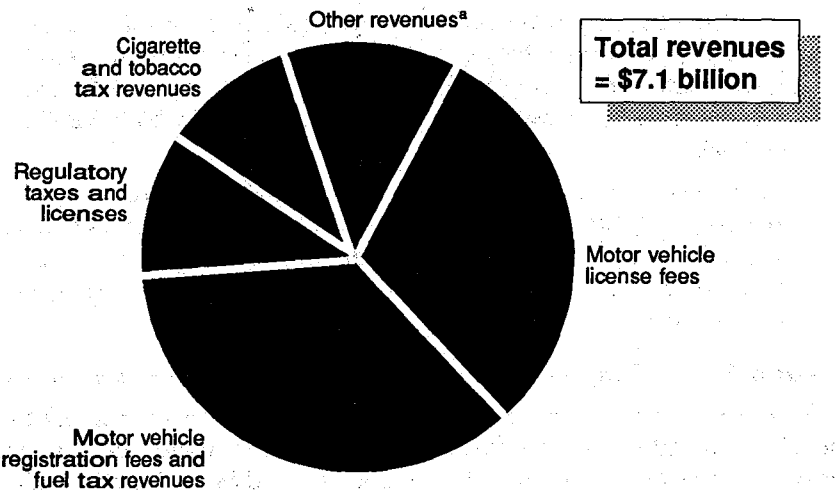
Where Do Special Fund Revenues Come From?

Table 4 and Chart 27 indicate that:

- Nearly two-thirds ($4.7 billion) of special fund revenues are derived from motor vehicle-related sources. These include those dedicated for transportation purposes—namely fuel taxes ($1.3 billion) and vehicle registration and related fees ($1.2 billion). Also included is the vehicle license fee ($2.2 billion), which is imposed on motor vehicles in lieu of the local property tax.
- The remaining one-third ($2.5 billion) of special fund revenues include tobacco-related taxes (about $700 million) and interest income (about $130 million). Also included are oil and gas revenues, state sales and use tax revenues allocated for local transit projects, and other smaller sources such as various business and professional license fees, utility surcharge receipts, and penalties from traffic violations and criminal convictions.

Chart 27

1989-90 Special Fund Revenues by Source



[a] Includes a variety of sources such as interest and property income, state sales and use tax revenues allocated for local transit projects, penalty assessments and user fees.

How Are Special Fund Revenues Used?

Special fund revenues are used for a wide variety of purposes. For example:

- Over half of motor vehicle-related revenues are returned to local governments for transportation-related and other purposes. The remainder is used for various state programs relating to transportation and vehicle use, including support of the Department of Motor Vehicles (DMV), the California Highway Patrol (CHP), and the Department of Transportation (Caltrans).

- Revenues raised by the new tobacco-related taxes imposed by Proposition 99 (1988) are distributed to various state accounts to be spent for health and natural resources-related purposes.
- The local 3-cent share of the basic 10-cent state cigarette tax in effect prior to Proposition 99 is distributed between cities (83 percent) and counties (17 percent).
- Oil and gas revenues are used primarily to finance capital outlay projects.

Mixed Growth Trends for Motor Vehicle-Related Revenues

These revenues are projected to grow by about 5 percent in both the current and budget years. Regarding the individual revenue sources:

- ***Vehicle license fees*** are projected to increase moderately (about 7 percent) in both the current and budget years. These fees—the single largest special fund revenue source—are imposed for the privilege of operating vehicles on public roads in California, and are in lieu of the personal property tax on vehicles. The revenue projections assume that new car sales will be relatively flat throughout the forecast period and car prices (which determine a vehicle's actual license fee) will increase by about 5 percent per year.
- ***Registration fees***, which are levied at a flat per-vehicle rate, are projected to increase by a bit under 5 percent in both 1988-89 and 1989-90.
- ***Fuel taxes***, which also are levied at a flat rate, are projected to increase very little—less than 2 percent per year. Chart 28 shows that this is because of weak growth in gasoline sales. Per capita gasoline consumption is expected to actually decline slightly, despite soft gasoline prices.

Tobacco-Related Taxes—$625 Million In New Proposition 99 Revenues

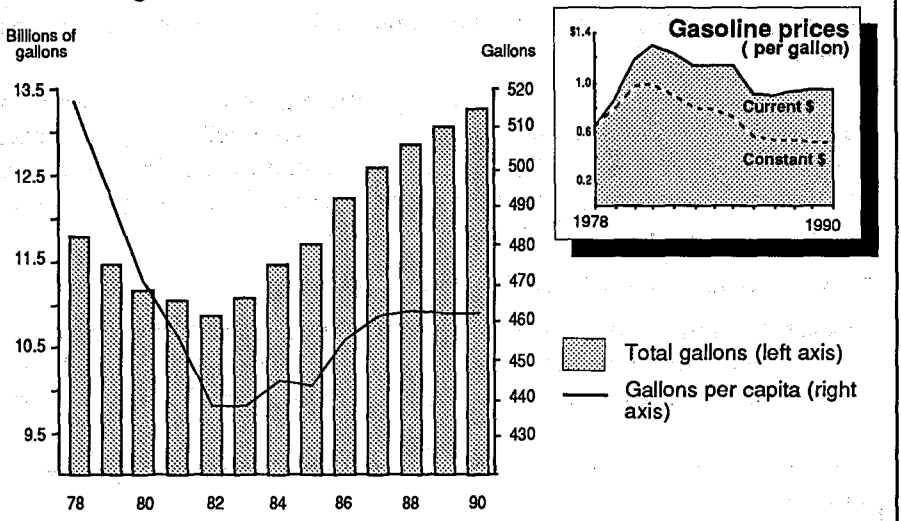
Special fund revenues from tobacco-related taxes are estimated to total nearly $375 million in the current year and $700 million in the budget year. Most of this money—$300 million in 1988-89 and $625 million in 1989-90—is due to Proposition 99. This measure levied an additional cigarette tax of 25 cents per pack and imposed a tax on other tobacco products equivalent to that on cigarettes. Chart 29 shows the trend in tobacco-related revenue collections.

Is the Proposition 99 Estimate Reasonable? The budget's estimates of the revenue effect of Proposition 99 assume that the new tax on cigarettes will increase the average price per pack by a bit over 20 percent, and that this in turn will reduce packs consumed by slightly over 1 percent. Admittedly, predicting the effects of this tax increase is somewhat speculative. Studies by economists, however, suggest that the consumption reduction *may be greater*, especially given the large price increase

Chart 28

California Gasoline Consumption and Prices

1978 through 1990[a]

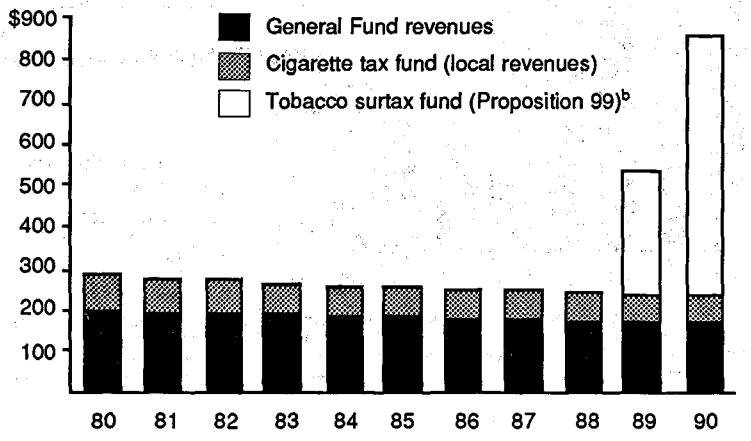


[a] Source: *1989-90 Governor's Budget* and State Board of Equalization. Data are estimated for 1988 and projected for 1989 and 1990.

Chart 29

Cigarette and Tobacco Tax Revenues

1979-80 through 1989-90 (in millions)[a]



[a] Governor's Budgets and State Controller. Data shown are for fiscal years ending in years specified.

[b] The Cigarette and Tobacco Products Surtax Fund was established by the Tobacco Tax and Health Protection Act of 1988, which increased the cigarette tax to $0.35 per pack and added an equivalent tax to other tobacco products. These tax increases became operative January 1, 1989. The revenues from these tax increases are deposited into the fund and subsequently transferred to six separate accounts to finance various program activities.

involved. If these studies are correct, the new tax could reduce consumption by as much as 8 percent, or possibly even more. Each additional 1 percent decline in cigarette consumption beyond that assumed in the budget would reduce Proposition 99 revenues by about $6 million. Thus, for example, an 8 percent decline would reduce revenues by over $40 million.

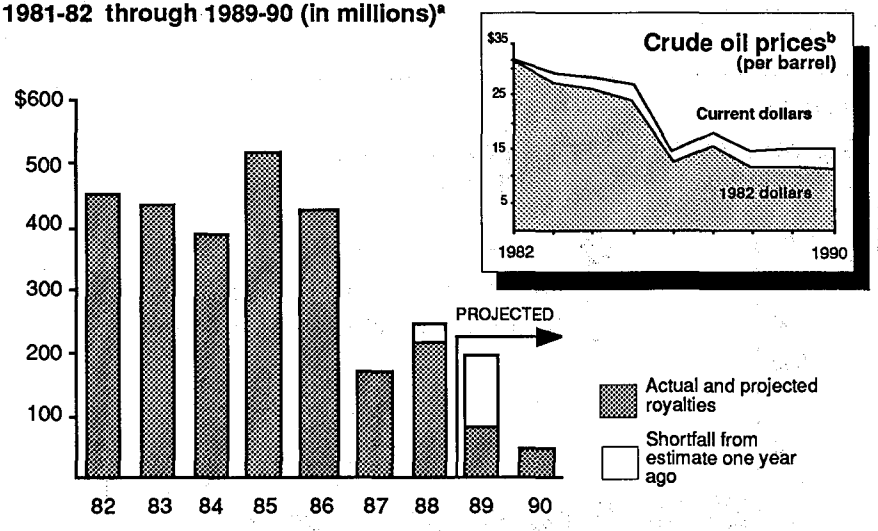
Future Revenues Likely to Decline. Total cigarette consumption has fallen every year during the 1980s due to steady declines in per capita consumption (see Chart 23). If this trend continues, Proposition 99 revenues will experience absolute dollar declines in future years, since the cigarette tax is a fixed cents-per-pack levy.

Oil and Gas Revenues—Extremely Depressed

Chart 30 shows that state oil and gas royalty income has been revised down substantially over the past year and will be far below its high level experienced during the first half of the 1980s. As shown in the chart, this

Chart 30

State Oil and Gas Royalties
1981-82 through 1989-90 (in millions)[a]



[a] Source: *1989-90 Governor's Budget* and State Lands Commission. Data shown are for fiscal years ending in years specified, and include oil, gas and mineral royalties collected by the State Lands Commission.
[b] Source: Wharton Econometrics. Data represent average U.S. refiners' crude oil acquisition prices.

reflects the current modest level of crude oil prices, which reduces both the revenues obtained from oil produced on state-owned lands and the volume of oil that is profitable to extract. Total state oil and gas royalty income is projected to be only $80 million in the current year and $50 million in the budget year. This compares to $220 million in the prior year and an average of $450 million annually for the period 1981-82 through 1985-86.

California State Lottery Revenues

The special fund revenue totals contained in the budget do *not* include any revenues derived from the California State Lottery. This is because lottery revenues have been classified as "nongovernmental trust and agency funds," and monies so designated are not reported in the budget. However, because the lottery is a major source of state income, its revenue outlook is summarized below.

Projected Lottery Sales—$2.5 billion. Lottery sales are projected to total $2.5 billion in both 1988-89 and 1989-90. This is nearly 20 percent above lottery sales in 1987-88, and the current-year estimate is almost 40 percent above the estimate made one year ago. As these estimates indicate, lottery sales have been exceeding expectations. Two-thirds of budget-year sales are expected to come from on-line lotto wagering and one-third from instant ticket sales.

Sales Forecast—Reasonable But Subject To Error. Given recent wagering experience, the budget's estimates are not unreasonable. However, as last year's wagering experience demonstrated, lottery projections are subject to considerable error.

Use of Lottery Proceeds—Nearly $950 Million To Education. Chart 31 shows how the $2.5 billion in budget-year lottery proceeds will be distributed. It indicates that:

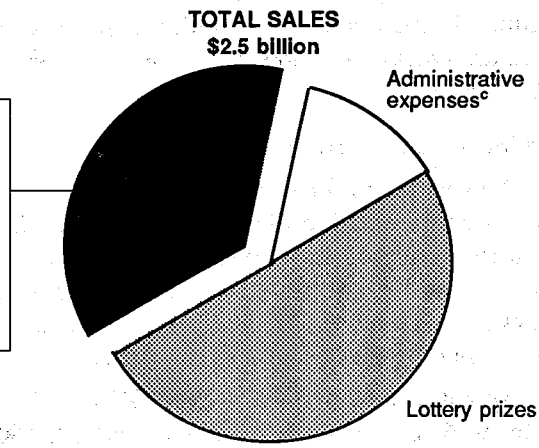
- 50 percent ($1.25 billion) will be paid out in prizes, as statutorily required.
- About 13 percent ($325 million) will be used for lottery-related administrative expenses, including commissions to lottery retailers. (This is about $75 million less than the maximum 16-percent share that current law permits for administrative costs.)
- The remaining 37 percent ($925 million), plus certain interest earnings, will go to public education.

Chart 31

Estimated Distribution of 1989-90 State Lottery Receipts

Revenues to Education (in millions)

K-12 Education	$763
Community Colleges	114
California State University	42
University of California	24
Other[a]	2
Total	**$944[b]**



[a] Includes Hastings College of Law, California Maritime Academy, Department of Youth Authority, and certain state special schools.
[b] Detail may not add to total due to rounding. Total includes $925 million from 1989-90 lottery sales and $19 million in net interest income.
[c] Includes commissions to retailers, instant-game ticket costs, on-line lotto-game costs, and general operating expenses.

Chart 31 also shows how the monies going to education are to be allocated to different educational levels. Existing law provides that this be done on the basis of educational enrollments and attendance. Altogether, the 1989-90 lottery revenues earmarked for education amount to about 4.7 percent of total proposed General Fund educational expenditures.