

A SUMMARY OF THE ARIZONA STATE GOVERNMENT FISCAL SITUATION

A Report from the Office of the University Economist

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PREFACE

This is a summary of several reports related to government finance in Arizona that have been produced by the Office of the University Economist since December 2008. Some new information has been added in an attempt to provide a complete picture.

The format of this report is a brief summary by issue, sometimes accompanied by a table or chart. References are provided to the report and the page number where additional detail can be found.

The reports are available at <http://economist.asu.edu/public-finance>:

The Economic Effects of Government Spending Reductions Relative to Other Options, February 2009

Presents the results of economic modeling of three scenarios to resolve the state government budget deficit in fiscal year 2010.

Education Funding in Arizona: Constitutional Requirement and the Empirical Record, January 2009

An examination of public funding for elementary and secondary education and higher education in Arizona from historical and interstate perspectives, in light of the funding mandate expressed in the Arizona Constitution. An evaluation of public education in Arizona is included.

Public Finance in Arizona, December 2008

A series of three reports that discuss government finance in Arizona:

Volume I: Facts

Analyses of Arizona state government finance, using data of the Arizona Joint Legislative Budget Committee, and of the combined finances of all state and local governments within Arizona, using data of the U.S. Census Bureau. A historical perspective is provided for both datasets. For combined state and local government finance, comparisons are made to other states and to the national average. In addition, other measures of the tax burden by state are examined.

Volume II: Concepts and Issues

Addresses the conceptual and empirical relationships between taxes, government revenue, and economic growth. Also discusses current issues specific to Arizona state government finance. This is a revised version of the report "Tax Reductions, the Economy, and the Deficit in the Arizona State Government General Fund," incorporating new and updated material.

Volume III: Options for Managing the Arizona State General Fund

Presents options and offers recommendations for managing the Arizona state government general fund. The near-term budget deficit is addressed as well as ways to prevent budget deficits from recurring every time economic growth slows.

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BACKGROUND

Introduction to Data and Terminology¹

Data Sources

While multiple data sources were examined, two primary sources are used in this paper. Both use the July 1 through June 30 fiscal year (FY).

(1) Arizona Joint Legislative Budget Committee (JLBC) — Arizona State Government General Fund. Revenues from FY 1971 through FY 2008 (FY 2009 is projected) and expenditures from FY 1979 through FY 2009 (revised appropriations are used for FY 2009).

(2) U.S. Department of Commerce, Census Bureau — State and Local Government Finance. Comparisons across states require the use of combined state and local government finance data because of variations across states in taxing and spending authority between state and local governments. For state government, general revenues and expenditures are much more broadly defined than the state general fund. Data are available by state from FY 1964 through FY 2006. Expenditures are divided into capital outlays — construction and purchases of land, existing buildings and equipment — and other (current operations).

Measures of Revenues and Expenditures

Adjustments for inflation, population growth, and economic growth all use fiscal year data. Actual data are not available for FY 2009 for any of these measures. Using the Census Bureau data, all of these measures can be expressed as a percentage of (ratio to) the national average and Arizona can be compared to other states.

(1) Per capita (divided by population) — The most basic of measures, this is not widely used in this paper. Change over time is inflation-adjusted by the gross domestic product implicit price deflator.

(2) Per \$1,000 of personal income — Widely reported in this paper, this measure de facto adjusts for inflation, population growth, and gains in real per capita personal income.

(3) Per student and per full-time-equivalent (FTE) student — For elementary and secondary (K-12) education and higher education (community colleges and universities), these measures are more informative than the per capita measure. Some of the enrollment data are available only for limited time periods. Change over time is inflation-adjusted by either the GDP implicit price deflator, or in the case of higher education, the higher education price index.

(4) Per student per \$1,000 of per capita personal income — Used for education, this measure adjusts for inflation-adjusted (real) economic gains as well as inflation and student counts.

¹ For more information, see pages 22 through 27 of “Volume I: Facts” and pages 9 through 13 of “Education Funding in Arizona: Constitutional Requirement and the Empirical Record.” Both reports are from the Office of the University Economist, Arizona State University, <http://economist.asu.edu/public-finance>.

Public Sector²

Value of Public Services

Particularly at the state and local level, many government services directly impact the lives of all: roads and other transportation, police and fire protection, K-12 education, water provision and sewer services, trash collection, the judicial system, the correctional system, etc. Taxes simply are the price paid for public services. The state and local government services that consume most of the public revenue — education, transportation, and public safety — are valued by individuals and businesses alike.

MYTH: Taxes remove money from the economy. Government revenue is spent in much the same way as private-sector revenue, including the payment of employee wages and the purchase of materials and services from the private sector. The in-state multiplier effect is larger for public-sector spending.

In the private sector, demand for goods and services declines during a recession, causing companies to lay off employees. In the public sector, demand does not decline for most services during a recession, and increases in some government programs. Thus, imposed decreases in public spending during recessions come at the same time that demand for public services is stable or rising, resulting in a reduction in the quantity and/or quality of government services. For the most disadvantaged of those consuming public services, real hardship can ensue.

MYTH: The size of government should shrink during recessions. Most businesses experience a decline in demand for their products or services during a recession, and thus reduce the size of their workforce. However, the public sector does not experience lowered demand for its services during an economic downturn. Most government programs serve residents, who continue to require public services. Demand for some government programs, such as unemployment benefits, rises during recessions.

Importance to Economic Development

Many public services — such as education (kindergarten through graduate school) and provision and maintenance of physical infrastructure — are of key importance to businesses, particularly high-technology and other “new-economy” companies. For these types of companies, the quality of public goods is more important than the level of taxes. Thus, business climate benefits from investment in various public programs.

Empirical evidence exists that public infrastructure plays a role in increasing business investment, job creation and economic growth. Similarly, tax reductions financed by cutting education, infrastructure spending, and other services valued by businesses will have a negative effect on economic performance.

An essential feature of the knowledge economy is the importance of a highly skilled workforce, trained in new technologies. In particular, college graduates are of more importance in the new economy than in the old economy. A large number of college graduates with a range of skills are

² For more information, see “Volume II: Concepts and Issues,” Office of the University Economist, Arizona State University, <http://economist.asu.edu/public-finance>.

essential to companies in the knowledge economy. Thus, any action — such as budget cuts — that undermines the success of the state’s universities also impairs the state’s economy.

MYTH: Reduced government size is good for the economy. The public sector provides numerous services, many of which are valued by the private sector. Education and the physical infrastructure are of particular importance to businesses. Taxes are the price paid for these services and need to be evaluated relative to the public programs they fund.

Taxes, Public Revenue and Economic Growth

Nearly any position on the relationship between state and local government taxes and economic performance is supported in the published literature. However, the bulk of the modern literature indicates that state and local government taxes have only a small effect on economic growth. For example, one study suggests that a 10 percent reduction in *all* state and local taxes would increase employment growth over the course of 20 years by 2.5 percentage points over and above the growth that would have occurred without the tax reduction. In a fast-growing state like Arizona, where the 20-year rise in employment from 1987 to 2007 was 98 percent, such an acceleration in growth is inconsequential.

The key factor leading to the conclusion that state and local government taxes have only a small impact on the economy is that state and local government taxes are not that significant an expense to either households or businesses. State and local government taxes are small expenses relative to federal government taxes. Further, taxes merely represent the price paid for government services consumed, with many state and local government services — such as the education of children and the provision of police protection — of high value to individuals and businesses alike.

Relative Size of State and Local Government Taxes

According to the Tax Foundation, *all* state and local government taxes — including those paid by businesses — account for less than 10 percent of income nationally, with the share in Arizona lower at 8.5 percent. The District of Columbia tax burden study indicates that the tax burden to households in Phoenix of most state and local government taxes is about 7 percent of household income except at low income levels.

Despite the attention given to taxes, tax payments are a small expense for most businesses. All state and local government taxes and most federal government taxes — social security and payroll taxes, unemployment insurance taxes, excise taxes, import and tariff duties, business license and privilege taxes, and the environmental tax — account for only a little more than 2 percent of operating income of all businesses.³ (The federal income tax is not included.)

Thus, state and local government taxes are less than 2 percent of business operating income. Therefore, the difference in state and local tax rates between states would have to be very large to have a noticeable effect on a company’s profits. The compensation of company officers is a larger business expense than state and local government taxes.

³ See page 6 of “Volume II: Concepts and Issues,” Office of the University Economist, Arizona State University, <http://economist.asu.edu/public-finance>.

State and local government tax burdens must be far out of line with competitor regions before much of an effect on the economy can be measured. For a state, a tax cut will have little effect on the economy unless the tax burden is comparatively quite high (especially versus competing states) and the tax reduction is very large. In general, tax policy is an inefficient way to stimulate the economy. Investment in physical infrastructure and education has been shown to have a greater effect on economic growth.

MYTH: State and local government taxes are a major expense. Total taxes collected by all state and local governments in Arizona are less than the taxes the federal government collects from Arizonans. For businesses, state and local government taxes typically are less than 2 percent of operating income — less than officers' compensation.

Laffer Curve and Supply-Side Economics

Supply-side economics is based on the concept that tax reductions stimulate economic growth, with the stimulus so great that government revenue rises despite the lower tax rates. The “Laffer Curve” popularized this theory.

The concept is simple. A single tax rate produces the greatest government revenue: the revenue-maximizing rate (RMR). Setting rates below the RMR leaves governments with less than maximum revenue but setting rates higher than the RMR stifles the economy — resulting in lower tax collections despite the higher rate. The relationship between tax rates and revenue collected follows a curve. The exact shape of the curve can vary by specific circumstances, but the end points always are the same: No tax results in no public revenue while a 100 percent tax rate would cause all legal economic activity to cease. The difficulties in real-world application of this relationship are to identify the tax rate that constitutes the RMR, and to describe the exact shape of the curve.

Art Laffer originally discussed the relationship between tax rates and tax revenue in the context of national tax rates, particularly the federal income tax, which was quite high in the 1970s. The concept also is valid at a regional level such as a state. However, state tax rates are low relative to the federal income tax rate. Thus, a decrease in a state tax rate is less likely to have a supply-side effect and any effect likely is small.

On the other hand, a state tax by definition is narrower than a national tax and thus is more likely to have a RMR that is being exceeded in reality. This is because states compete for economic activity, much of which is mobile (not tied to a particular place as in the case of a mine). Capital and labor can move easily throughout the country.

While tax rates may influence capital and labor mobility across the states and give rise to Laffer-type effects, capital and labor move for a host of reasons. The amount and quality of public infrastructure (such as airports, roads, and schools) available in a region — amenities supported by state and local government tax revenue — are among the factors influencing economic growth. So the RMR in a state or region will be the rate that allows sufficient investment in public amenities that foster economic growth without imposing tax burdens that stifle growth.

For a tax cut to result in a positive effect on economic growth and government revenue, the existing tax rate must be higher than the RMR. For much of a positive effect to result, the tax rate must be very high and be lowered to near the RMR. Such a situation is most likely in the case of a narrow tax. In addition, a greater economic impact is likely from a reduction in a business tax with a rate above the RMR than in a personal tax with a high tax rate since one business decision (for example, in site selection) can affect many workers.

The simple concept of the Laffer curve has been lost in some applications. Proponents of limited government erroneously argue that tax rates are always above the RMR and reduced taxation is always better.

MYTH: All tax cuts are good for government revenue. The idea that every tax cut will result in greater government revenue is a distortion of supply-side economics, which was popularized by the Laffer Curve. In reality, any cut in a tax rate that is already below the revenue-maximizing rate will result in lesser government revenue. Most of the reduction in taxes over the last 15 years in Arizona has been to the individual income tax, which had a tax rate below the national norm prior to the first tax cut. Over the last 30 years in Arizona, tax increases have resulted in greater public-sector revenue and tax cuts have led to lesser government revenue.

The Conceptual Basis for Tax Cutting in Arizona

When state government began to reduce the tax burden in 1993, Arizona's overall state and local government tax burden already was less than the national average and lower than it had been in the late 1970s, based on the Tax Foundation's measure of tax burden. Thus, Arizona was not generally in a position to benefit from a series of tax cuts, either in terms of enhanced government revenue or economic performance.

Further, for a *net* positive effect on government finance to be realized from reducing taxes, a region must have underutilized resources. For example, if a state with higher-than-optimal tax rates also has high unemployment and high commercial and industrial vacancy rates, then a reduction in taxes might stimulate economic growth, putting more residents to work and more highly utilizing existing facilities. Since labor to support the faster economic growth would not have to be imported to the state, population growth would not accelerate. Thus, the increase in government revenue would not be offset by the need to increase public spending to support new residents.

Except during recessions, Arizona has had neither high unemployment rates nor high commercial/industrial vacancy rates. The majority of jobs created in Arizona are filled by labor imported into the state from other states and other countries. Thus, even assuming that tax cuts in Arizona had an effect on economic growth, the requirement of excess capacity is not met in order for a net benefit to accrue. If lowered taxes had stimulated the Arizona economy, then labor had to have been imported into the state, both for the construction of the facilities needed to house these economic activities and for the permanent employment created. Thus, while public revenue would have increased, the need for public spending also would have risen. Unless the incomes of the imported workers were well above the existing average, taxes paid by new residents would not have covered the costs of providing them with public services.

Most of the taxes cut in Arizona since the early 1990s have been broad-based taxes applied to individuals. In particular, decreases in the individual income tax have accounted for nearly 60 percent of the tax decreases since 1992. However, even in the early 1990s, the individual income tax rate in Arizona was less than the average of the states. Using the Laffer Curve, this suggests that the individual income tax cuts in Arizona should have decreased, not increased, government revenue.

The remaining 40 percent of the tax cuts since 1992 have been split between the sales tax, the property tax, the vehicle license tax, and the corporate income tax. Like the individual income tax, the property tax rate in Arizona already was relatively low, so this cut is unlikely to have had any positive effect on government revenue or economic performance. The vehicle license tax rate was near the middle of the states, so this tax cut also is unlikely to have had much of any positive effect.

Most of the general sales tax rate decreases occurred in the late 1990s and were due to a reduction in the commercial lease rate and to the passage of sales tax exemptions. Similarly, the corporate income tax rate was relatively high before tax cuts were implemented in the early 2000s and again recently. Thus, while these tax rates might have generated a Laffer Curve effect, the magnitude of any benefit would be small given the very small scale of the tax cuts from the perspective of the size of all business expenses. Further, with most of these cuts occurring at a time of a booming Arizona economy, any economic stimulus created by the cuts would have resulted in an increase in the importation of labor to the state and thus a rise in government expenditures.

Thus, the size, nature and timing of the tax cuts in Arizona, combined with the conceptual basis for supply-side economics, suggest that little positive effect either on government revenue or on economic growth should have occurred as a result of these cuts.

In contrast, the business property tax in Arizona has been demonstrably high relative to other places. The tax disproportionately affects some businesses, particularly manufacturers who use considerable equipment in their operation. High-tech manufacturers, such as semiconductor plants, are among those with considerable equipment. These companies pay high wages. Lower business property taxes might encourage companies to expand facilities in Arizona. Although most of the labor force needed for an expansion would be imported, the high wages of these new workers could result in a net positive effect even on public-sector finance. Fifteen years after the first tax cuts were passed, some reduction in the business property tax currently is being phased in.

Empirical Relationships Between Tax Policy and Economic Growth in Arizona⁴

Historically, Arizona's state and local government tax burden was near the national average. In the last 30 years, the state has had two periods of tax reductions and one period of tax increases. The net result, especially since the early 1990s, has been to significantly lower the tax burden in Arizona. Yet while these reductions have been large from the perspective of state government, they have been small from the perspective of the size of the overall economy. Conceptually,

⁴ See pages 10 through 16 of "Volume II: Concepts and Issues," Office of the University Economist, Arizona State University, <http://economist.asu.edu/public-finance>.

then, one should not expect that the tax cuts in Arizona have had a positive effect either on the economy or on government revenue.

Many factors affect economic growth and it is a challenge to accurately measure the impact of any one factor. However, the tax increases and reductions of the last 30 years have not had any obvious effect on the economy — on either aggregate or per capita/per worker bases. Government revenue, however, has been lowered.

Changes in general fund revenue resulting from tax law changes in Arizona have been inversely related to economic growth: the decreases in taxes have occurred at times of strong economic growth and the tax increases have occurred at times of economic recession. The change in economic performance has slightly preceded the change in taxes. That is, when the economy is strong, surpluses in the general fund are realized, allowing taxes to be cut while still balancing the budget as required by the Arizona Constitution. When the economy is weak, budget deficits occur, precluding tax cuts and sometimes resulting in tax increases.

Despite the significant decline in Arizona's tax burden relative to other states since the mid-1990s, economic growth in Arizona relative to the nation in recent years has not been stronger than the historical relationship. Thus, the empirical evidence in Arizona regarding the lack of relationship between the state's tax cuts and increases and subsequent economic growth matches the conceptual analysis previously discussed.

MYTH: All tax cuts enhance economic growth. Empirical evidence to support this statement has not been found. In Arizona, tax increases and decreases over the last 30 years have had no perceptible impact on economic growth.

Tax and Expenditure Limitations

Some Arizonans have proposed limiting annual increases in government spending to the pace of population growth and inflation. This represents an extreme form of a tax and expenditure limitation (TEL). The purpose of such a measure is to shrink the size of government over time — meaning that the quality and/or quantity of public services will erode over time. Such a measure — known as the Taxpayer Bill of Rights (TABOR) — has caused significant difficulties since it was passed in 1992 in Colorado, causing it to be suspended.

Arizona already has a TEL. Article 9, section 17 of the Arizona Constitution states that “The legislature shall not appropriate for any fiscal year state revenues in excess of seven percent of the total personal income of the state ...” Spending has never reached this limit.

Rather than limiting government spending increases to population growth and inflation, Arizona's existing TEL also considers the rate of real per person economic growth, which averages a little less than 2 percent per year. Real per person economic growth is in essence a measure of productivity growth.

When real per person income advances, government spending can rise without any increase in the tax burden. The revenue generated by these real income advances is significant.

Without the ability to increase spending beyond the rate of population growth and inflation, a state can never improve the quality of its public services. Had this spending restriction been adopted at statehood in 1912, Arizona's physical infrastructure and other public services in 2009 would resemble those of 1912: dirt roads, no modern communication, limited water and wastewater services, school houses with no computers, no airports, etc. While roads, schools and other infrastructure would be more numerous in 2009 than 1912 to reflect the growth of population, spending restricted to inflation and population growth allows only for more of the same to be built; no funding for improvements is available.

Alternatively, Arizona governments could have chosen to improve the existing infrastructure over time, but then they would not have been able to provide infrastructure and services to all of the state's new residents and businesses. Either way, it is unlikely that the state would have experienced much population growth since statehood — few businesses would consider operating with such an inadequate infrastructure and few individuals would choose to live in what now would be seen as Third-World conditions.

Not allowing the public sector to grow commensurate with the pace of technological change is ironic since many of the technological improvements during the last century took substantial public funds to make them a reality. In addition, governments often are criticized for being inefficient — for not operating as a business — but would still be operating at the efficiency levels of a century ago had funding increases been limited to population growth and inflation.

Even at less than 2 percent per year, the difference between the existing TEL and an alternative using only population growth and inflation accumulates rapidly over time. Had the alternative been implemented in 1979 (when the existing TEL was put into effect), and had the TEL applied to all governments in Arizona (like TABOR in Colorado), then total government spending in 2006 in Arizona would have been \$15.4 billion (43 percent) less than the actual figure. Arizona's spending would have been last in the nation — 41 percent less on a per capita basis and 33 percent less relative to personal income than the next lowest state!

Economic

Economic Cycles

Economic cycles have been a feature of human society for at least hundreds of years and presumably will persist for a long time into the future. Cycles consist of an economic expansion that features strong economic growth, a transition period of slower growth, a period of economic decline (recession), and a recovery period.

The economic cycle largely occurs because growth during expansions becomes too strong to be sustained, causing various disequilibriums to occur. A recession is merely a correction period in which the imbalances are worked out, setting the stage for another period of growth.

The imbalances that develop during an economic expansion can vary from one economic cycle to another. In the industrial economy that dominated the United States through the mid-20th century, economic cycles usually were short, involving overproduction in manufacturing establishments that contributed to inflation and a buildup in inventory. More recent cycles have

featured unsustainable investment booms in real estate and stocks. External “shocks,” such as a sharp rise in oil prices, also contribute to economic volatility.

The length of economic cycles has increased since the mid-20th century as the United States has transitioned from an industrial economy to a knowledge economy. While the magnitude of the cyclical swings appeared to be lessening — the economic downturns in the early 1990s and in 2001 were relatively mild and short — the current recession demonstrates that severe cyclicity can still occur.

The timing and magnitude of economic cycles is difficult to forecast, but businesses, households, and government should prepare during economic expansions for the next inevitable downturn in the economy. A lack of preparation intensifies the recession.

Economic Cycles and Public Revenue in Arizona

The timing of economic cycles in Arizona typically is quite similar to the national average, but the magnitude of the swings in the cycle is greater in Arizona. On an aggregate basis, growth during expansions always has been more rapid in Arizona, while the depth of recessions has ranged from not as great to more severe than the national average, as seen in Chart 1. However, per capita economic growth in Arizona consistently has been less than the national average during recessions, and sometimes has been less for extended periods from before to after a recession (see Chart 2).

Arizona has experienced three real estate booms in the last 50 years: in the early 1960s, mid-1980s, and from 2003 to 2006. As seen in Chart 2, such booms have prompted a period of slower per capita economic growth in Arizona; 2007 was the first such year following the latest real estate boom. While state data for 2008 are not yet available, Arizona’s per capita economic decline almost certainly was worse than the national average; such inferior performance likely will persist into 2009 and 2010.

Government revenue goes up and down with the economic cycle, but Arizona state government general fund revenue has been much more volatile than economic growth. Chart 3 shows that declines in revenue have been more severe than economic decreases in each of the last three economic downturns — during the late 1980s and early 1990s, in fiscal years 2001 through 2003, and since fiscal year 2007 — while revenue gains have been greater during economic expansions.

Revenue growth over the last 10 years has been extremely cyclical. Yet personal income growth has not shown unusual fluctuations during this period. The extreme cyclicity of government revenue is in part the result of the many reductions in tax rates since the early 1990s that have narrowed the tax base, making it more cyclical. In addition, capital gains have become much more volatile (see Chart 4), causing income tax collections to be more variable.

Basic and Nonbasic Activities

Regional economic theory states that a regional economy, such as a state, is driven by economic activities that import money into the region through the sales of goods and services to customers who do not live in the region. Such export activities differ from population-driven activities, which sell to and support the local population. “Export” in this usage is not limited to goods and

CHART 1
ANNUAL PERCENT CHANGE IN REAL EARNINGS, 1955 THROUGH 2007,
ARIZONA AND UNITED STATES

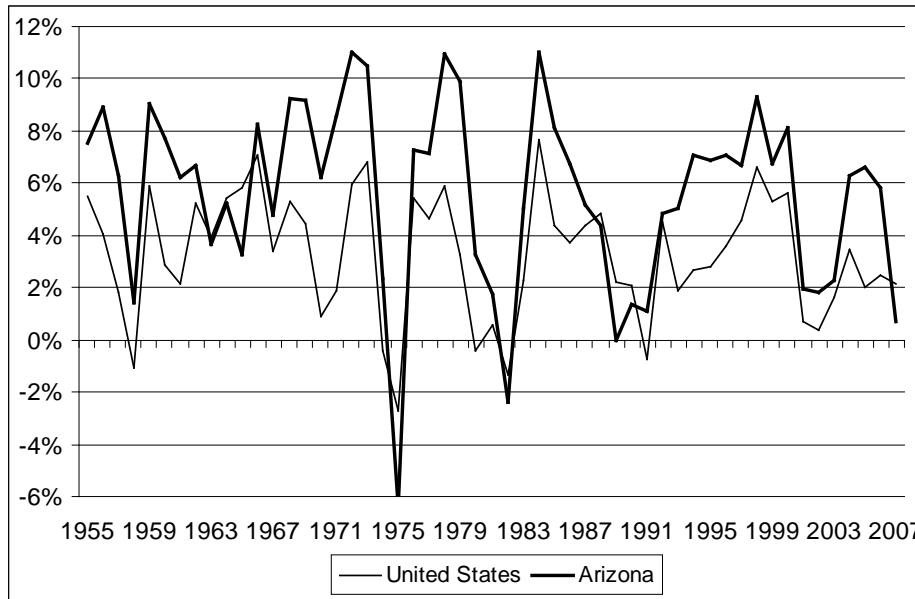
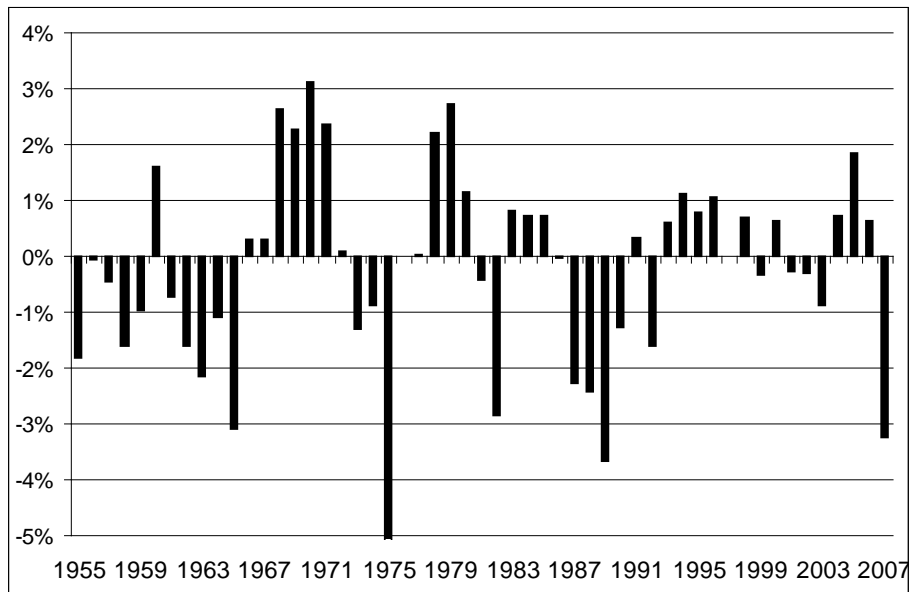
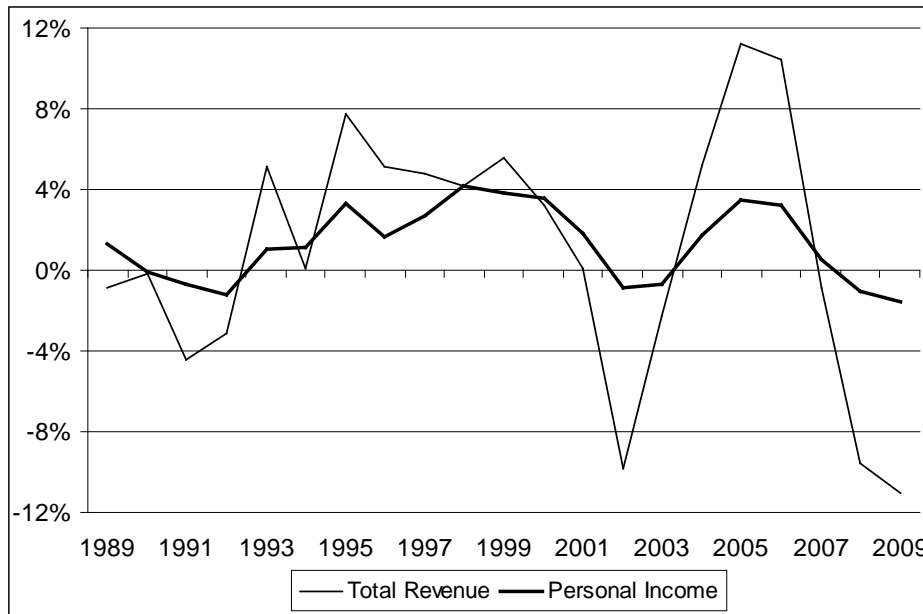


CHART 2
ANNUAL PERCENT CHANGE IN REAL EARNINGS PER CAPITA,
1955 THROUGH 2007, ARIZONA LESS THE NATIONAL AVERAGE



Source (Charts 1 and 2): U.S. Department of Commerce, Bureau of Economic Analysis.

CHART 3
ANNUAL PERCENT CHANGE IN REAL PER CAPITA DOLLARS,
FISCAL YEARS 1989 THROUGH 2009,
ARIZONA GENERAL FUND REVENUE AND PERSONAL INCOME



Notes: Revenue has been adjusted for tax changes; personal income has been projected for FY 2009.

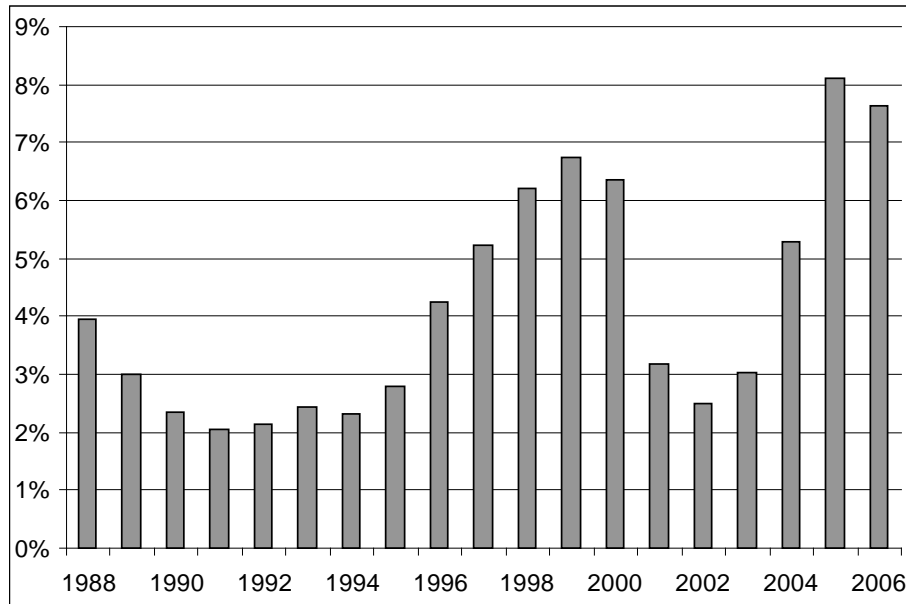
Source: U.S. Department of Commerce, Bureau of Economic Analysis (personal income), and Arizona Joint Legislative Budget Committee (revenue).

services sold to customers from other countries, but includes all sales made to customers outside the region. An export activity sometimes is referred to as a “basic” activity.

Some basic activities, such as a mine or a farm, are tied to a specific location. However, most basic activities, such as manufacturing facilities and export-oriented services, can be located throughout the country or world. Arizona competes with the world for such export businesses. As discussed on page 2, the infrastructure and services provided by the public sector are among the most important location factors. In order to have a strong and growing economy, government must provide a high quality of such public amenities without taxing export companies too much.

In contrast, nonbasic (population-driven) activities respond to the growth created by basic activities. Most economic activities wholly or in large part serve local customers, including construction, real estate, retail sales, and personal services. Since such businesses serve the local population, they locate close to their customers. The region does not compete with other regions for nonbasic economic activities, though municipalities within the region may compete for some of these companies. Thus, while these companies use public infrastructure and public services, these are not major factors influencing location decisions. Similarly, except for decisions on locations close to municipal boundaries, tax rates are not important to the location decisions of such companies.

CHART 4
CAPITAL GAINS IN ARIZONA AS A PERCENTAGE OF PERSONAL INCOME,
1988 THROUGH 2006



Sources: Internal Revenue Service (capital gains) and U.S. Department of Commerce, Bureau of Economic Analysis (personal income).

In order to build and sustain a strong economy, government needs to be especially responsive to the needs of basic economic activities. Tax policy should reflect the importance of such companies.

Shift to Knowledge Economy

To remain competitive, Arizona must transition with the rest of the United States away from an industrial economy to a knowledge-based economy in which science- and technology-based jobs will be key drivers of the economy.

As demonstrated by the severity in Arizona of the current economic downturn, further diversification of Arizona’s economy is desirable. Growth-related (population-serving) activities, particularly constructions and real estate, make up a disproportionate share of the economy, and these activities are particularly cyclical. Knowledge-based industries, which include high-technology manufacturing as well as services, are the activities with growth potential and the ability to drive the Arizona economy. As such, the public sector needs to place high importance on attracting and maintaining such economic activities.

Most of these “new economy” activities place even more importance on public amenities, particularly education, than other basic activities. See page 32 for more detail.

MYTH: All business activities are of equal significance, thus the public sector should not distinguish among economic activities. Basic activities drive the economy; meeting the public needs of such companies is a key to a healthy economy.

PUBLIC FINANCE IN ARIZONA

State Government

History of Tax Law Changes⁵

Arizona state government general fund revenues were reduced significantly between 1979 and 1981: Decreases in property tax rates caused collections to drop in 1979 and 1980, and the sales tax on food to be consumed at home was eliminated in 1981. However, since the general fund budget could not be balanced after implementing these tax reductions, the general sales tax rate was subsequently increased.

In the mid-1980s, spending for the Arizona Health Care Cost Containment System (AHCCCS, the state's alternative to Medicaid) skyrocketed, putting additional strain on annually balancing the general fund, as required by the Arizona Constitution. Combined with a downturn in the economic cycle, tax increases and spending reductions had to be implemented from 1989 through 1991 in order to balance the budget.

After 1992, the Arizona economy began to strengthen, causing a cyclical recovery in revenue to begin. The budget surpluses resulting from the improving economy enabled a series of tax cuts to be passed. Between 1995 and 2001, the annual decreases in revenues ranged from 1.8 to 6.5 percent of the size of the general fund.

An economic recession in 2001 followed by a weak and slow recovery held down state revenue for years, resulting in significant reductions to government spending and precluding new tax reductions of any magnitude to be implemented between 2002 and 2006. However, strong economic gains eventually returned, boosted by the real estate boom. This provided the surpluses necessary to pass additional tax cuts that largely took effect in 2007 and 2008.

The net effects of tax law changes passed by the Arizona Legislature since 1992 have cumulated to \$1.6 billion per year in lost revenue on a nominal basis (see Table 1). Considering inflation and population growth, revenue in the current fiscal year is nearly \$2.6 billion less than it would have been had the long series of tax cuts not taken place.

The historical record indicates that most of the tax cuts occurred at times of strong economic growth when surplus funds were available (actual revenue collected exceeded projections and exceeded the amount spent). Further, the sizes of the surpluses were unusually large from the mid-1990s through 2000 due to the boom in the stock market, which caused capital gains to soar, boosting state tax collections. Surpluses again were very large from 2005 through 2007 and again were due to a surge in capital gains, this time the result primarily of the real estate boom.

The long series of state government tax cuts in Arizona have resulted in a structural budget deficit in the state's general fund. This deficit has been caused not just by lowering tax rates, but by narrowing the tax base, making it more cyclical, and by causing the revenue system to be less responsive to economic growth, resulting in revenue collections falling behind over time.

⁵ See pages 3 through 6 of "Volume I: Facts," Office of the University Economist, Arizona State University, <http://economist.asu.edu/public-finance>.

Despite the need for stable, if not increasing, funding during recessions, ever since the first round of tax cuts were passed in the 1979-to-1981 period, general fund revenue during economic downturns has been inadequate to meet the expenditure needs. The budget deficits during the early 1980s recession and during the late 1980s-to-early 1990s downturn were resolved through a combination of spending reductions and tax increases. In the early 2000s, the deficits were resolved through spending reductions and transfers from the rainy-day fund (which had been created in 1990). So far in the current recession, transfers from the rainy-day fund and spending cuts have been used. The magnitude of the projected deficits in the current and subsequent fiscal year present an enormous challenge: either revenue will need to be raised, or spending cuts will have to be far more drastic than ever before.

Revenue⁶

The general fund of Arizona state government has a very narrow revenue base. As seen in Table 2, half of the revenue in FY 2008 came from sales and use taxes, and 40 percent came from income taxes. The base was broader before the mid-1990s — before the general fund portions of the property and vehicle license taxes were eliminated.

TABLE 1
ESTIMATED DOLLAR VALUE OF TAX CHANGES, FISCAL YEARS 1993
THROUGH 2009, ARIZONA STATE GOVERNMENT GENERAL FUND

Fiscal Year	Tax Change in Millions	
	Annual	Cumulative
1993	-19	\$-19
1994	-25	-44
1995	-121	-165
1996	-285	-450
1997	-175	-625
1998	-172	-797
1999	-142	-939
2000	-105	-1,044
2001	-158	-1,202
2002	-33	-1,235
2003	12	-1,223
2004	57	-1,166
2005	-5	-1,171
2006	-18	-1,189
2007	-194	-1,383
2008	-218	-1,601
2009	-35	-1,636
2009, Adjusted*		-2,579

* Adjusted for inflation and population growth

Sources: Arizona Joint Legislative Budget Committee (tax changes) and U.S. Department of Commerce, Census Bureau (population) and Bureau of Economic Analysis (gross national product implicit price deflator).

⁶ See pages 6 through 12 of “Volume I: Facts,” Office of the University Economist, Arizona State University, <http://economist.asu.edu/public-finance>.

TABLE 2
REVENUE BY SOURCE, FISCAL YEAR 2008,
ARIZONA STATE GOVERNMENT GENERAL FUND

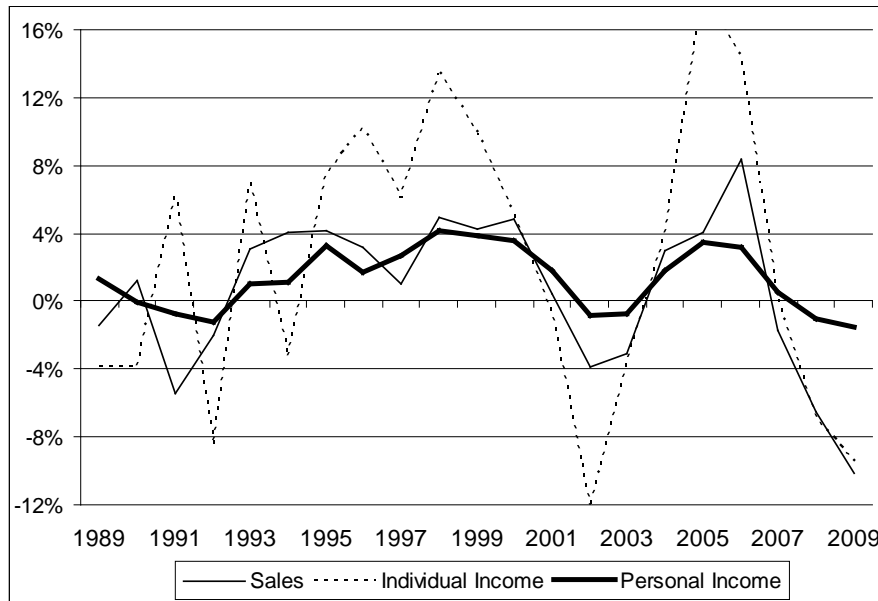
	FY 2008	Share of Total
TOTAL	\$8,742,200,000	100.0%
Total Taxes	8,351,600,000	95.5
Sales and Use	4,353,600,000	49.8
Total Income	3,506,500,000	40.1
Individual	3,406,500,000	39.0
Corporation	784,500,000	9.0
Urban Revenue Sharing	-684,500,000	-7.8
Property	20,000,000	0.2
Luxury	61,000,000	0.7
Insurance Premium	407,000,000	4.7
Estate	300,000	0.0
Other Taxes	3,200,000	0.0
Nontax Revenues	390,600,000	4.5
Lottery	48,200,000	0.6
Licenses, Fees and Permits	140,900,000	1.6
Interest	95,200,000	1.1
Other	106,300,000	1.2

Source: Arizona Joint Legislative Budget Committee.

The substantial cyclicity of the two major revenue sources relative to personal income is shown in Chart 5. Individual income tax collections have been much more cyclical than sales tax collections, except that the current decline in sales tax revenue is matching that of the individual income tax, helping to explain the extremely large size of the current budget deficit. The cyclicity of the corporate income tax is far greater than the individual income tax. The elimination of the general fund portion of the property tax, the third leg of the three-legged stool of revenue across most of the country, prevents comparing the cyclicity of this tax source to the others.

As seen in Chart 6, general fund revenue per \$1,000 of personal income has been cyclical. The highest values occurred in the late 1970s, prior to the first round of tax cuts. A sharp downward trend is obvious since the early 1990s — strong evidence of the lack of a supply-side effect from the tax cuts. Arizona state government general fund revenue per \$1,000 of personal income is at a record low in the current fiscal year. Nine of the 12 lowest figures over the 39-year history have occurred during the last 10 years — only at the peak of the economic cycle in 2006 was revenue per \$1,000 comparable to the historic norm.

CHART 5
ANNUAL PERCENT CHANGE IN REAL PER CAPITA DOLLARS,
FISCAL YEARS 1989 THROUGH 2009, PERSONAL INCOME AND
ARIZONA STATE GOVERNMENT GENERAL FUND REVENUE



Notes: Revenue has been adjusted for changes in the tax code; personal income has been projected for fiscal year 2009.

Sources: Arizona Joint Legislative Budget Committee (revenue) and U.S. Department of Commerce, Bureau of Economic Analysis (personal income).

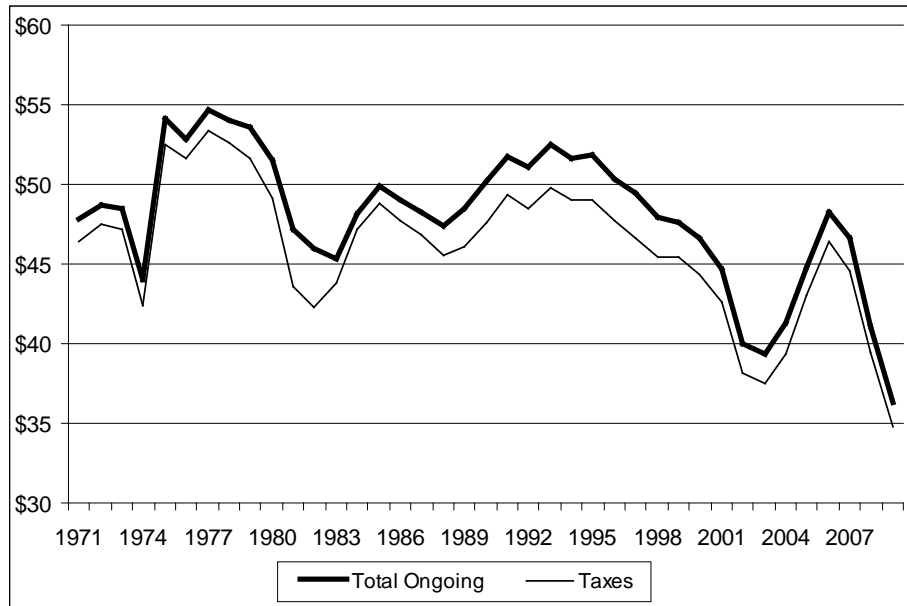
Budget Stabilization Fund⁷

The budget stabilization fund (BSF) was intended to transfer monies to the general fund at times when revenue declines due to cyclical factors, but the amount of money placed in this rainy-day fund has been highly inadequate to close the deficits during the two economic downturns since the BSF was created. The early depletion of the budget stabilization fund in each of the recessions indicates both that a structural deficit exists due to tax cuts not being matched by spending reductions and that the design of the rainy-day fund is not adequate.

A rainy-day fund is needed because government revenue drops during a recession while demand for public services continues to increase. Most public functions experience only a small reduction in the rate of increase in demand during recessions. Most government functions are tied to the population, which continues to grow (though less rapidly) during an economic slump. For example, the number of students to educate does not decline, nor does the need for police, fire and correctional services. Demand for some public-sector functions is countercyclical. For example, the demand for unemployment insurance benefits rises during recessions, as does the

⁷ See pages 13 through 14 of "Volume I: Facts," Office of the University Economist, Arizona State University, <http://economist.asu.edu/public-finance>.

CHART 6
REVENUE PER \$1,000 OF PERSONAL INCOME, FISCAL YEARS 1971
THROUGH 2009, ARIZONA STATE GOVERNMENT GENERAL FUND



Sources: Arizona Joint Legislative Budget Committee (revenue) and U.S. Department of Commerce, Bureau of Economic Analysis (personal income).

number of people eligible for public welfare. Enrollment in community colleges and universities frequently increases during slumps because of limited employment opportunities.

Continued public spending during a recession using rainy-day monies helps mitigate the impact of a recession. When the economy is strong, use of a rainy-day fund helps control public expenditures by setting aside, rather than spending, excess revenue.

According to the original 1990 statute, the balance in the rainy-day fund could reach 15 percent of the general fund budget before further transfers to the BSF were blocked. The size of the cap had been determined from an analysis of prior economic cycles that showed that a rainy-day balance of that size was necessary to prevent the BSF from dropping to zero before the economy recovered from a recession. However, the Legislature reduced the cap to 5 percent in 1995. Subsequently, the limit gradually was raised from 5 percent in 1997 to 7 percent in 2000.

The first payment into the BSF was made in 1994. In the next fiscal year (the one in which the limit was dropped to 5 percent), the cap already was reached. In the next two years (1996 and 1997), the formula called for a transfer to the BSF, but no deposit was made to the fund because of the 5 percent limit. While the dollar limit of the BSF rose gradually each year because of the increasing size of the general fund (before adjustment for inflation or population growth), the fund's interest earnings kept the balance at the limit. In 1998 and 1999, the gradual increase in the percentage limit from 5-to-7 percent allowed some deposits to be made to the fund, though less than those indicated by the formula. With a weakening economy, withdrawals from the BSF

began in 2001. The total transferred to the general fund from 2001 through 2003 was \$455 million, some \$339 million less than called for by the formula. The BSF balance essentially dropped to zero.

Large deposits to the BSF during the economic expansion from 2005 through 2007 again pushed the reserve to the 7 percent maximum allowed. Most of this was used in 2008, leaving little to balance the current year's budget and nothing to assist with next year's projected deficit.

Expenditures⁸

The revised general fund appropriations for FY 2009 are shown in Table 3. More than half of the funding goes to education. The Department of Education (K-12 education) is by far the largest use. Much of this funding is protected by voter initiative. The subcategory including the Board of Regents and the universities continues to receive a declining share of the general fund and represents the second-largest subcategory of unprotected spending.

Much of the spending in the health and welfare category, the second-largest use of state general fund monies, is protected or mandated. The protection and safety category is the other major recipient of state general fund monies. With none of the spending for the Department of

TABLE 3
EXPENDITURES BY CATEGORY AND SELECTED SUBCATEGORY,
FISCAL YEAR 2009, ARIZONA STATE GOVERNMENT GENERAL FUND

	FY 2009	Share of Total
TOTAL GENERAL FUND	\$9,414,808,400	100.0%
Total Education	5,206,963,200	55.3
Community Colleges, Arizona	138,679,800	1.5
Education, Department of	4,007,927,700	42.6
School Facilities Board	87,765,500	0.9
Universities/Regents	938,914,100	10.0
Total Health and Welfare	2,714,548,200	28.8
Arizona Health Care Cost Containment System	1,385,353,300	14.7
Economic Security, Department of	717,924,700	7.6
Health Services, Department of	583,387,800	6.2
Total Protection and Safety	1,068,495,200	11.3
Corrections, Department of	925,624,100	9.8
Juvenile Corrections, Department of	72,200,400	0.8
Public Safety, Department of	55,407,400	0.6
Total Inspection and Regulation	40,691,700	0.4
Total Natural Resources	54,159,400	0.6
Total Transportation	72,500	0.0
General Government	329,480,600	3.5
Courts	121,915,900	1.3
Legislature	51,368,200	0.5
Revenue, Department of	64,433,200	0.7

Source: Arizona Joint Legislative Budget Committee.

⁸ See pages 15 through 21 of "Volume I: Facts," Office of the University Economist, Arizona State University, <http://economist.asu.edu/public-finance>.

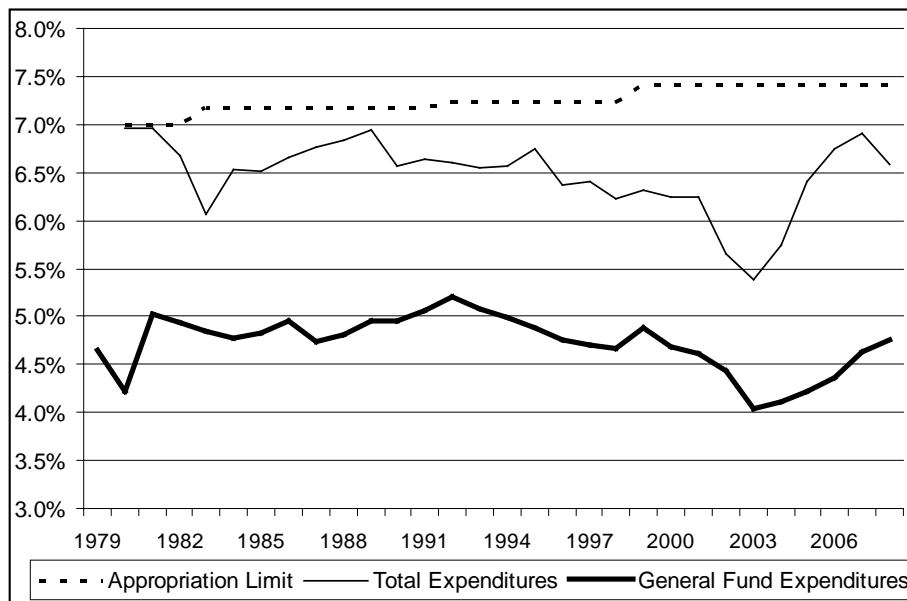
Corrections and the Department of Juvenile Corrections voter protected, this is the largest recipient of unprotected funding.

While much of the rest of the state budget is unprotected, relatively little money is at stake. Outside of the three categories already discussed, all of the rest of state government receives less than 5 percent of the general fund appropriations, or \$425 million in FY 2009. Even if all of this were eliminated — a completely unpractical idea — it would reduce the projected FY 2010 budget deficit by less than 15 percent.

The state constitution has limited appropriations since 1979. The definition of appropriation used in the constitution is broader than the general fund; the expenditures subject to the appropriation limit are shown in Chart 7. Appropriations have been less than the limit by at least 0.5 percentage points in every year since 1990.

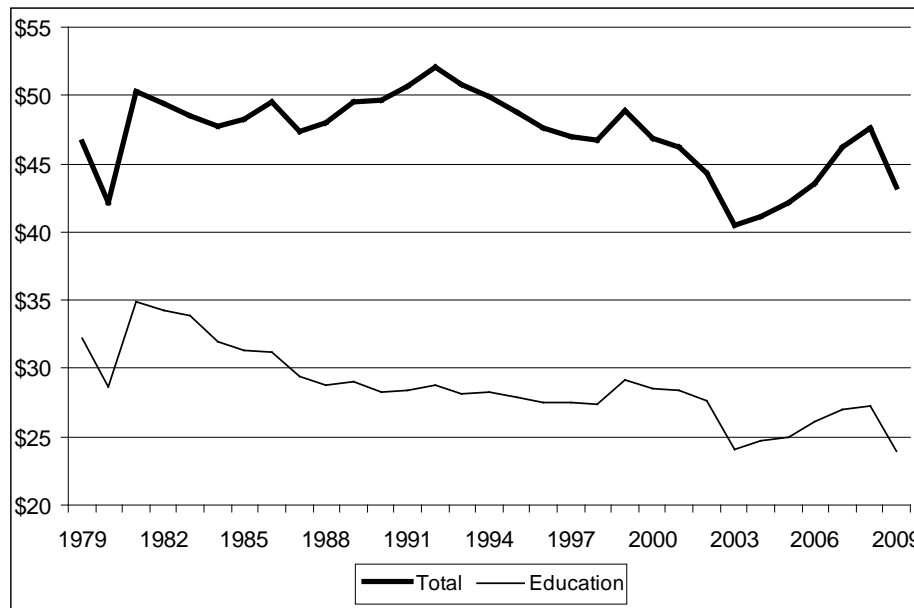
Arizona state government general fund expenditures per \$1,000 of personal income have fallen since the early 1990s, as seen in Chart 8. At the peak of the current cycle in fiscal year 2008, expenditures per \$1,000 of personal income were 17th highest of the last 31 years, including being lower than in 15 of the 16 years between 1981 and 1996. While the FY 2008 figure was up considerably from the FY 2003 figure, expenditures in FY 2003 were at a record low due to the spending cuts implemented at that time in order to balance the general fund during the last economic downturn. The FY 2009 figure is the second lowest of the 31-year history other than the 2003-to-2005 period.

**CHART 7
EXPENDITURES AND CONSTITUTIONAL APPROPRIATION LIMIT
AS A PERCENTAGE OF PERSONAL INCOME, FISCAL YEARS 1979
THROUGH 2008, ARIZONA STATE GOVERNMENT**



Sources: Arizona Joint Legislative Budget Committee (expenditures and limit) and U.S. Department of Commerce, Bureau of Economic Analysis (personal income).

CHART 8
EXPENDITURES PER \$1,000 OF PERSONAL INCOME, FISCAL YEARS 1979
THROUGH 2009, ARIZONA STATE GOVERNMENT GENERAL FUND



Note: Personal income was projected for FY 2009

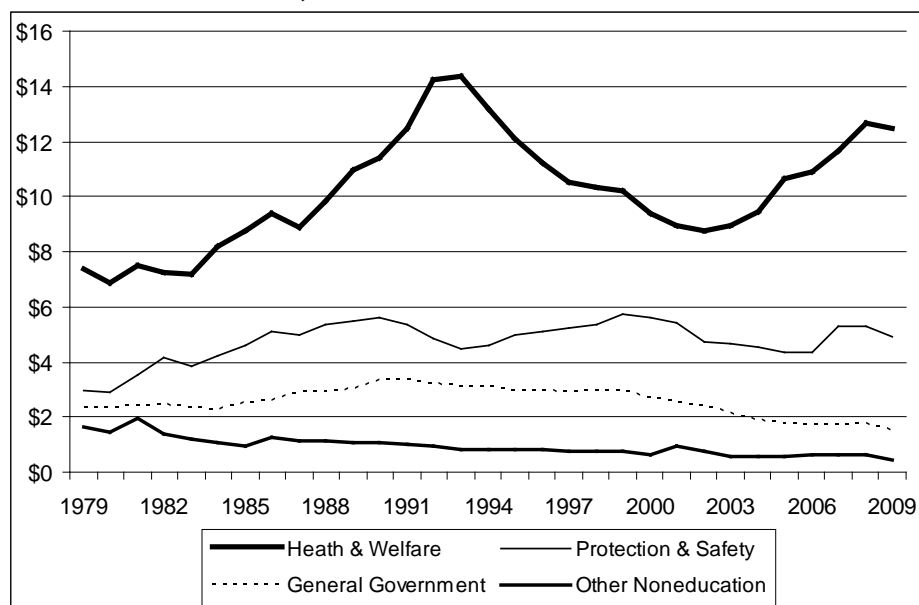
Sources (Charts 8 and 9): Arizona Joint Legislative Budget Committee (expenditures) and U.S. Department of Commerce, Bureau of Economic Analysis (personal income).

Per \$1,000 of personal income, expenditures for education have fallen for more than 25 years (Chart 8). In contrast, expenditures have increased substantially in the health and welfare category, and also have climbed in the protection and safety category (Chart 9).

MYTH: The state government budget deficit is due to “reckless” spending. State government spending per \$1,000 of personal income in fiscal year 2008 was 17th highest of the last 30 years. Spending did increase considerably between 2003 and 2008, but the 2003 figure was the lowest on record, a result of severe spending cuts during the previous economic downturn.

MYTH: State government has plenty of “fat” to cut. Over the last 15 years, expenditures per \$1,000 of personal income have fallen in education, which accounts for more than half of general fund expenditures. Public safety and public welfare are the only categories not to experience decreasing expenditures. Most of the increase in public welfare has been mandated by the federal government and by Arizona voter initiative.

CHART 9
EXPENDITURES PER \$1,000 OF PERSONAL INCOME BY CATEGORY, FISCAL YEARS 1979 THROUGH 2009, ARIZONA STATE GOVERNMENT GENERAL FUND



Note: Personal income was projected for FY 2009

Sources (Charts 8 and 9): Arizona Joint Legislative Budget Committee (expenditures) and U.S. Department of Commerce, Bureau of Economic Analysis (personal income).

Current Budget Deficit⁹

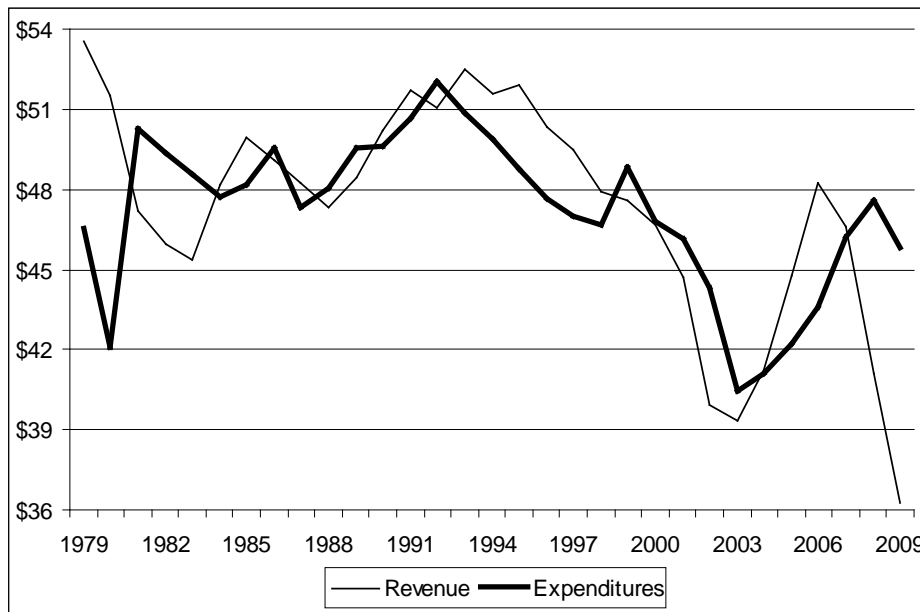
The current budget deficit consists of two parts: a cyclical portion resulting from a sharp decline in revenue due to the economic recession and a structural portion resulting from 15 years of tax cuts. An increase in state government general fund spending has not contributed to the large budget deficits of the last two economic downturns. Expenditures as a percentage of personal income have not been higher than the historic norm, as seen in Charts 7 and 10. Instead, revenue per \$1,000 of personal income has fallen substantially since the mid-1990s (Chart 10).

General fund expenditures in FY 2008 were \$10.1 billion, just short of the long-term norm based on \$48 per \$1,000 of personal income. Based on this norm and projections of personal income, expenditures would have advanced on a nominal basis to \$10.4 billion in FYs 2009 and 2010, with the minimal increase reflecting the weak economy. Instead, the initial budget for FY 2009 was slightly less than \$10.0 billion; it was reduced in February to \$9.4 billion.

In contrast, nominal revenue peaked in FY 2007 at \$9.5 billion. In FY 2008, revenue was down to \$8.7 billion; the budget was balanced through fund transfers and accounting maneuvers. In FY 2009, revenue is down further, to perhaps \$7.5 billion. With projected revenue still substantially

⁹ This is an updated and expanded analysis of that in "The Economic Effects of Government Spending Reductions Relative to Other Options," Office of the University Economist, Arizona State University, <http://economist.asu.edu/public-finance>.

**CHART 10
ONGOING REVENUE AND EXPENDITURES PER \$1,000 OF PERSONAL INCOME,
ARIZONA STATE GOVERNMENT GENERAL FUND**



Note: Personal income was projected for FY 2009

Sources: Arizona Joint Legislative Budget Committee (revenue and expenditures) and U.S. Department of Commerce, Bureau of Economic Analysis (personal income).

below revised appropriations, the balance is being made up partially through fund transfers. Further action — probably an application of federal funds available through the stimulus package — is expected to be needed to balance the budget. Revenue in FY 2010 is expected to be about \$7.4 billion, a nominal drop of \$2.1 billion from the peak.

Tax cuts passed in 2006 and 2007 account for part of the decline in revenue between FYs 2007 and 2009. The estimates of the effects of all tax changes since 1992 were adjusted for the economic cycle, inflation, and population growth. Without the tax cuts, revenue in FY 2007 would have peaked at about \$11.7 billion (\$2.2 billion more than actual). Projected revenue would be \$9.8 billion in FY 2009 and \$10.0 billion in FY 2010. The loss of \$1.7 billion from the peak to FY 2010 should be divided roughly in half to reflect the decline from average to recessionary conditions in order to estimate the cyclical portion of the budget deficit. This suggests that the cyclical portion of the projected deficit for FY 2010 of \$3 billion accounts for less than \$1 billion. Thus, the structural deficit accounts for the majority of the deficit.

Had no tax cuts been implemented after 1992 and had expenditures been at the historic norm per \$1,000 of personal income, revenue would have exceeded expenditures in FY 2008 but would have fallen about \$629 million short of expenditures in FY 2009. All of this would have been covered by transfers from the budget stabilization fund. The shortfall of just more than \$400 million in FY 2010 would have been easily covered by the federal stimulus funds. No spending cuts, sweeps of other funds, or revenue enhancements would have been necessary.

However, the actual budget deficit for FY 2010 is projected to be \$3 billion. Assuming that the February 2009 spending reductions of nearly \$600 million in the current fiscal year will continue, the state government general fund shortfall in the next fiscal year is projected to be \$2.4 billion. Temporary federal assistance of perhaps \$1.3 billion will be available. In addition, fund transfers of more than \$300 million are projected to be available. This would leave less than a \$1 billion shortfall that would need to be closed through spending reductions and/or revenue enhancements.

Since the projected budget deficit has consistently grown over time, the Governor has proposed a larger temporary tax increase of \$1 billion. Assuming that the estimate of federal assistance is accurate and that the federal dollars will be spent, this means that additional spending reductions will not be needed in FY 2010. Even without further spending reductions, however, general fund appropriations still will be close to \$1 billion less than the long-term norm in FY 2010. Thus, in the recommendations section of this paper, a larger tax increase than \$1 billion is recommended.

Comparisons to Other States

According to the Center on Budget and Policy Priorities¹⁰, Arizona's budget shortfalls in the current and following fiscal years are the largest in the nation as a percentage of the general fund. Arizona's 16 percent deficit in FY 2009 is the largest of any state. Its projected FY 2010 deficit of 30 percent is tied with Nevada as the highest of any state at nearly twice the average.

While Arizona's economy has been disproportionately affected by the negative economic conditions, this is not the only reason for its extremely large deficit. The sizable tax cuts of the last 15 years introduced a structural deficit. Arizona also had a disproportionately large deficit in the last economic downturn.

In large part due to the budget deficit, Arizona was not rated favorably in "Grading the States 2008," published by *Governing* magazine.¹¹ In the "money" category, Arizona was assigned a grade of C+. However, 30 states received a higher grade and only eight received a lower grade.

State and Local Governments Combined

To compare government finance in Arizona to other states, state and local government figures must be combined, since the level of government levying taxes and fees and having responsibility for funding programs varies from state to state. This cross-state comparison reveals that not only has government revenues and expenditures relative to the size of the economy declined over time in Arizona, they have decreased relative to the national average. Arizona's revenue and expenditure ranks among all states and among a smaller group of fast-growing and/or western states also have fallen.

¹⁰ See www.cbpp.org/9-8-08sfp.htm (updated February 10, 2009).

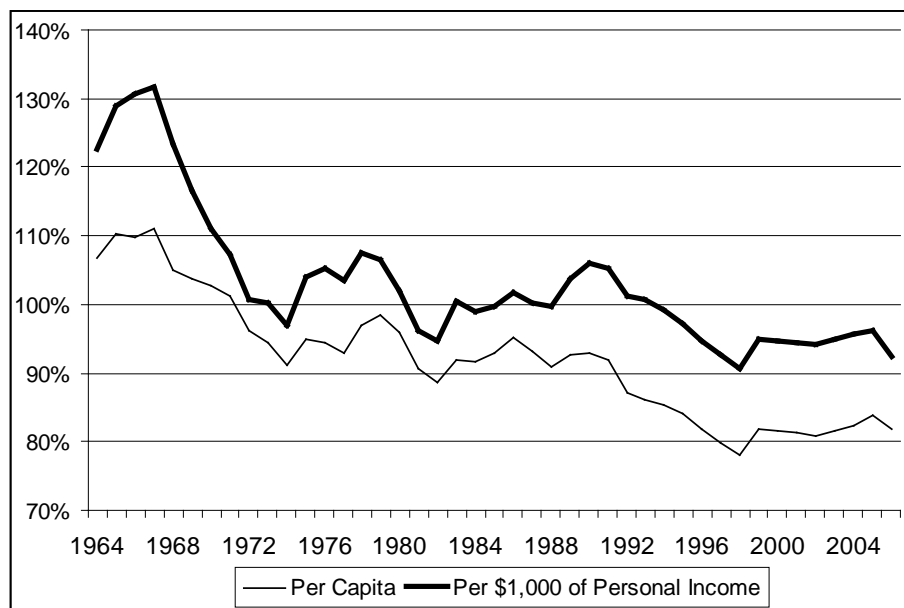
¹¹ See www.governing.com. The information also is available from the Pew Center on the States www.pewcenteronthestates.org.

Revenue¹²

Total state and local government general revenue in Arizona was \$36.5 billion in 2006: \$6,021 per Arizona resident (18 percent less than the national average) and \$190.41 per \$1,000 of personal income (7.5 percent below average). Arizona's per capita figure was second lowest in the nation. The state ranked 39th among the 51 "states" on the personal income measure and ninth among 13 western and/or fast-growing states.

Arizona state and local government revenue per \$1,000 of personal income has been at historic lows since the early 1990s — far below the figures of the 1960s and below the norm of the period from the 1970s into early 1990s (see Chart 11). Arizona's figure has been less than the national average since the mid-1990s. If not for revenue received from the federal government, Arizona would rank even lower: 45th nationally and next-to-last in the comparison group on own-source revenue (tax and nontax revenue combined). Per \$1,000 of personal income, own-source revenue was 12 percent less than the national average in 2006; prior to 1995, it had been average or above average in each year.

CHART 11
GENERAL REVENUE AS A PERCENTAGE OF THE NATIONAL AVERAGE,
FISCAL YEARS 1964 THROUGH 2006,
ARIZONA STATE AND LOCAL GOVERNMENTS



Sources: U.S. Department of Commerce, Census Bureau (revenue and population) and Bureau of Economic Analysis (personal income).

¹² See pages 28 through 32 of "Volume I: Facts," Office of the University Economist, Arizona State University, <http://economist.asu.edu/public-finance>.

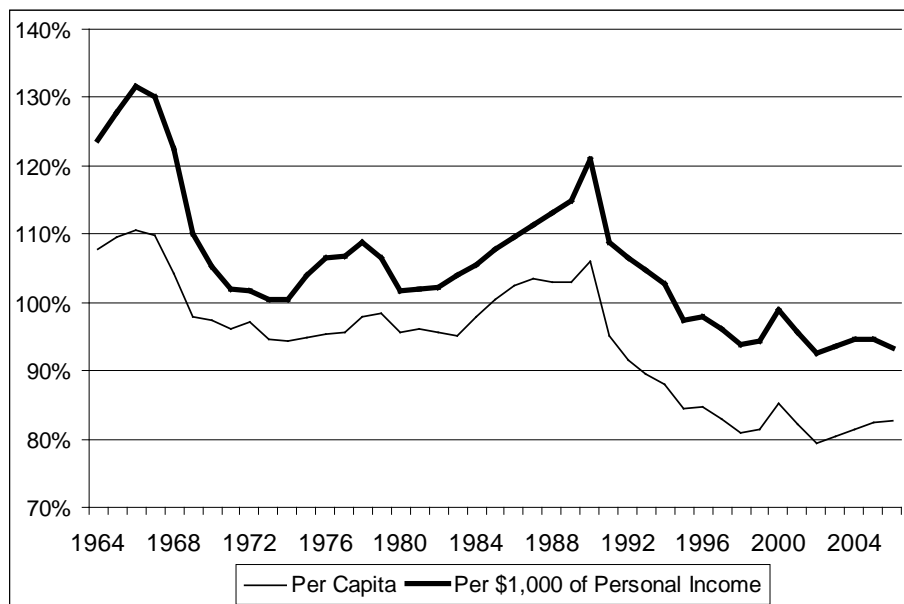
Expenditures¹³

Total state and local government general expenditures in Arizona totaled \$35.7 billion in 2006: \$5,900 per Arizona resident (17 percent less than the national average) and \$186.57 per \$1,000 of personal income (7 percent below average). Arizona's per capita figure was fifth lowest in the nation and third lowest among 13 western and/or fast-growing states. In 2006, the state ranked 36th among the 51 states on the personal income measure and ninth among the comparison states, down from 21st and fifth, respectively, in 1992.

As a percentage of the national average, total expenditures per capita and per \$1,000 of personal income have fallen since the early 1990s in Arizona, as seen in Chart 12. The ratios since the mid-1990s have been the lowest on record. Per \$1,000 of personal income, Arizona's figure has been around 95 percent of the national average since the late 1990s; prior to 1995, the Arizona figure always had been higher than average. Similarly, Arizona's per capita spending figure has been at least 15 percent less than average since the late 1990s, but historically ranged from 5 percent below to above the national average.

Overall expenditures are subdivided into capital outlays and current operations. A capital outlay is defined as a public expenditure for construction, the purchase of land and existing structures, and the purchase of equipment. All other expenditures are classified as current operations.

CHART 12
GENERAL EXPENDITURES AS A PERCENTAGE OF THE NATIONAL AVERAGE,
FISCAL YEARS 1964 THROUGH 2006, ARIZONA STATE AND LOCAL
GOVERNMENTS



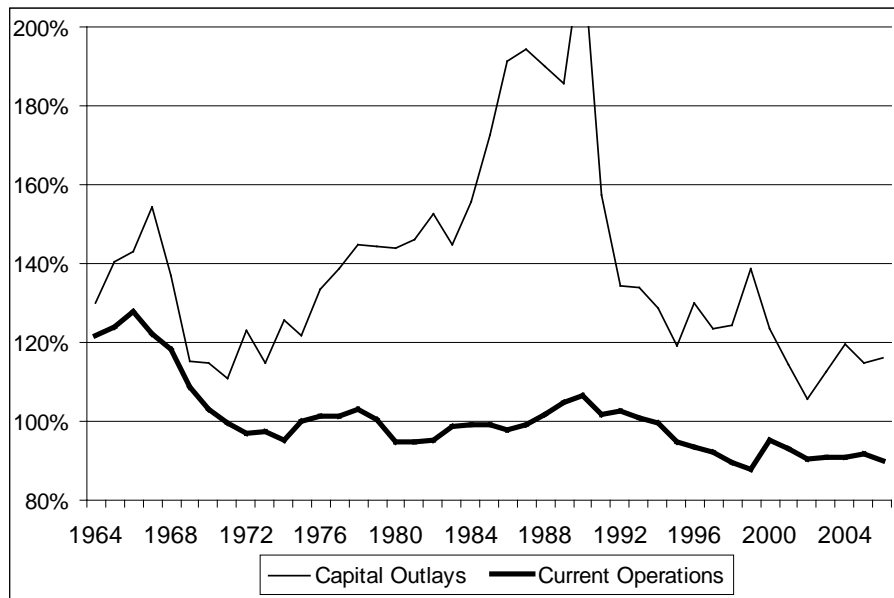
Source: U.S. Department of Commerce, Census Bureau (expenditures and population) and Bureau of Economic Analysis (personal income).

¹³ See pages 33 through 39 of "Volume I: Facts," Office of the University Economist, Arizona State University, <http://economist.asu.edu/public-finance>.

The state's rapid population growth causes above-average needs for capital spending. Though capital outlays are down considerably from the historic norm, the state's capital spending still is above the national average (see Chart 13). This leaves spending on current operations far below the national average and below the historical norm. Arizona's current operations spending per \$1,000 of personal income in 2006 ranked 42nd in the nation and 10th among the 13 comparison states. On a per capita basis, current operations spending was second lowest in the country.

MYTH: Government spending in Arizona is high and rising. State and local government spending per \$1,000 of personal income has been at historic lows since the late 1990s. Further, Arizona's state and local government spending is below the national average and below the norm of other fast-growing and/or western states. Because of the need to build infrastructure to accommodate rapid population growth, Arizona's spending would have to be above average to provide a service level equal to the national average.

**CHART 13
GENERAL CURRENT OPERATIONS SPENDING AND CAPITAL OUTLAYS PER \$1,000 OF PERSONAL INCOME AS A PERCENTAGE OF THE NATIONAL AVERAGE, FISCAL YEARS 1964 THROUGH 2006, ARIZONA STATE AND LOCAL GOVERNMENTS**



Note: Data for 2001 and 2003 are estimated.

Source: U.S. Department of Commerce, Census Bureau (expenditures and population) and Bureau of Economic Analysis (personal income).

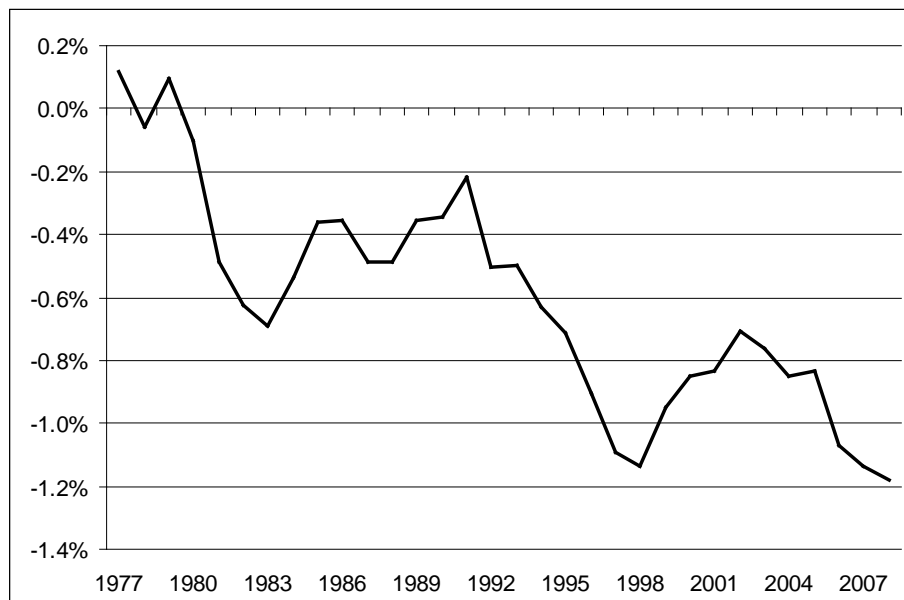
Measures of Tax Burden¹⁴

As calculated by the Tax Foundation, the state and local government tax burden in Arizona — defined as per capita taxes as a share of per capita income — from 1977 (the first year available) through 1980 was about equal to the national average at around 10 percent of income, though Arizona ranked above the median state (between 17th and 21st). State government tax reductions from 1979 through 1981 sent the burden down, to below the national average. Since 1981, Arizona’s tax burden has always been lower than the U.S. average. An inability to balance the budget led to a subsequent tax increase in 1983, but the burden during the 1980s remained less than in the late 1970s (see Chart 14).

When the economy slowed in the late 1980s, state government revenue was insufficient to meet the needs, causing spending reductions and tax increases. The tax burden approached the national average in 1991 when Arizona ranked 25th among the states. However, the tax burden remained below the historical pre-1980 level as well as below the national average.

A series of state government tax cuts began in the early 1990s, lowering the tax burden to below the level of the early 1980s. Since 1991, Arizona’s tax burden has declined from 9.7 percent of per capita income to 8.5 percent in 2008. The national average tax burden barely dropped during this period and was 9.7 percent in 2008.

CHART 14
TAX FOUNDATION TAX BURDEN IN ARIZONA RELATIVE TO NATIONAL AVERAGE, 1977 THROUGH 2008, STATE AND LOCAL GOVERNMENT TAXES



Source: Tax Foundation.

¹⁴ See pages 40 through 45 of “Volume I: Facts,” Office of the University Economist, Arizona State University, <http://economist.asu.edu/public-finance>.

The results of the 2007 District of Columbia study are summarized in Table 4. The overall tax burden in Phoenix was substantially below the norm except in the lowest income category. The income tax and property tax burdens were quite low, the sales tax burden was very high, and the automobile taxes were close to the norm except at the higher incomes.

MYTH: The tax burden in Arizona is high and rising. According to the Tax Foundation, the combined state and local government tax burden in Arizona in 2008 is 12 percent less than the national average. Arizona ranks 41st among the 50 states, the lowest rank on record.

For the broad categories of revenues and expenditures, Arizona's comparison to the national average, to all states, and to the comparison states is summarized in Table 5 for 2006. The change between 1992 and 2006 also is compared.

In 2006, total Arizona state and local government revenue was substantially less than the national average per capita and per \$1,000 of personal income. The percentages of the national average for taxes were similar, while Arizona was further below average on total own-source revenue (due to very low collections of user fees and other revenues). As a ratio to the national average, Arizona's tax burden figures as measured by the Tax Foundation and by the District of Columbia were between the per capita and personal income measures. Arizona's rank in 2006, both among all states and in the comparison group, ranged by measure from well below the median state to near the bottom.

All measures show that the revenue of Arizona's state and local governments declined relative to the national average between 1992 and 2006, by between 5 and 15 percentage points. The state's

TABLE 4
2007 DISTRICT OF COLUMBIA TAX BURDEN STUDY,
STATE AND LOCAL GOVERNMENT TAXES IN PHOENIX, ARIZONA

	Household Income				
	\$25,000	\$50,000	\$75,000	\$100,000	\$150,000
Rank Among 51 'States'					
Income Tax	25	38	39	41	41
Property Tax	*	43	42	42	42
Sales Tax	2	2	2	1	2
Automobile Taxes	27t	24t	17	17	13
Total Taxes	17	42	44	42	41
Total Taxes as a Percentage of Income					
Total	12.6%	6.8%	6.8%	7.2%	6.9%
Difference from Average State	0.7	-2.0	-1.9	-1.7	-2.1
Difference from Median State	1.2	-2.0	-1.7	-1.7	-2.4

* Tax assumed to be equal in all states.
t: tie.

Source: Government of the District of Columbia, *Tax Rates and Tax Burdens in the District of Columbia: A Nationwide Comparison*.

**TABLE 5
COMPARISON OF MEASURES OF GENERAL REVENUE AND EXPENDITURES,
2006, ARIZONA STATE AND LOCAL GOVERNMENTS**

	Percentage of the U.S. Average		Rank Among 51 States		Rank Among 13 States	
	2006	Change from 1992	2006	Change from 1992	2006	Change from 1992
TOTAL REVENUE						
Per Capita	81.9%	-5.1	50	-14	13	-5
Per \$ of Personal Income	92.5	-8.8	39	-13	9	-3
Own Source Revenue						
Per Capita	78.3	-10.4	47	-14	13	-5
Per \$ of Personal Income	88.4	-14.9	45	-27	12	-8
Taxes						
Per Capita	81.9	-9.9	37	-10	10	-4
Per \$ of Personal Income	92.4	-14.4	40	-30	10	-9
Tax Foundation	89.2	-5.8	40	-12	10	-1
District of Columbia*	83.5	na	37	na	9	na
TOTAL EXPENDITURES						
Per Capita	82.7	-8.8	47	-17	11	-3
Per \$ of Personal Income	93.4	-13.1	36	-21	9	-4
Current Operations						
Per Capita	79.9	-8.3	50	-17	13	-5
Per \$ of Personal Income:	90.2	-12.5	42	-20	10	-5
Capital Outlays						
Per Capita	102.9	-12.4	17	-3	6	-2
Per \$ of Personal Income	116.2	-18.0	17	-9	5	-2

Note: Data are for fiscal year, except for Tax Foundation and District of Columbia studies

* Average of the five income levels

na: not available

Sources: U.S. Department of Commerce, Bureaus of the Census and Economic Analysis, Government of the District of Columbia, and Tax Foundation.

rank fell in each case, by between 10 and 30 places relative to all states and by one to nine places relative to the comparison group.

Total Arizona state and local government expenditures also were substantially less than the national average per capita and per \$1,000 of personal income in 2006, with the state ranking quite low relative to all states and to the comparison states. Capital outlays were somewhat above the national average, due to Arizona's rapid growth, with ranks above the median state. In contrast, expenditures for current operations were quite low. Relative to all states, Arizona's spending on current operations ranked second-to-last on the per capita measure and among the bottom 10 relative to personal income.

All measures show that Arizona's expenditures declined relative to the national average between 1992 and 2006, by at least 8 percentage points. The state's rank fell in each case, relative to all states and to the comparison group, with the declines particularly large for current operations.

EDUCATION

Reasons for Highlighting Education

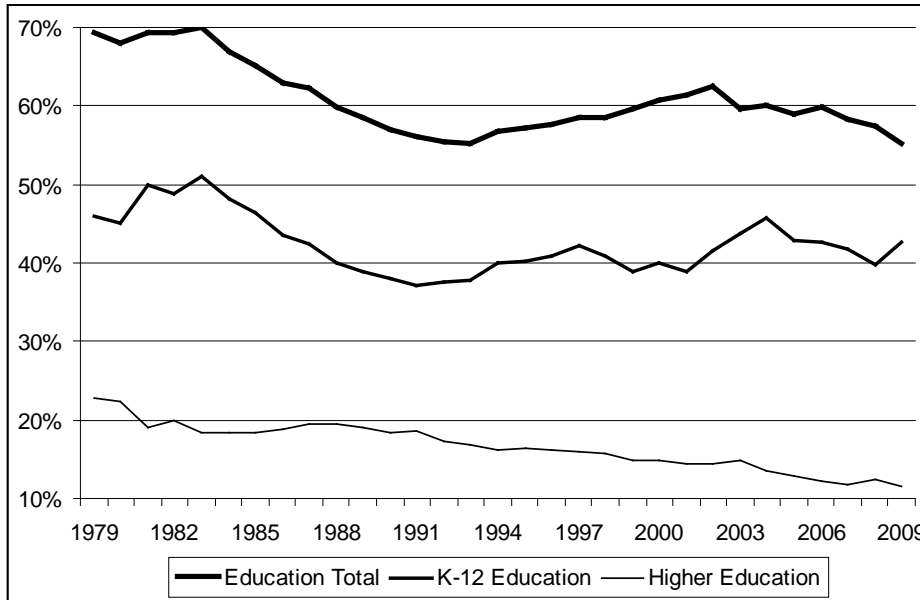
Large Share of General Fund

As defined by the JLBC, the education category is receiving 55 percent of the expenditures from the state government general fund in FY 2009. More than three-quarters of the education expenditures are used for elementary and secondary education with most of the rest going to higher education.

Though sizable, education's share was even larger in the past, at nearly 70 percent in the early 1980s, as seen in Chart 15. The K-12 share fell from the mid-1980s into the early 1990s, but has since increased a bit, in part due to a portion of the K-12 expenditures being protected. In contrast, higher education, which is not protected, has experienced a nearly constant decline in share over the last 30 years.

The general fund is not the only source of state government education funding in Arizona. The educational system receives a relatively small amount of funding from the sale and lease of state trust lands. In addition, the voters of Arizona passed Proposition 301 in November 2000, which raised the state sales tax 0.6 percentage points, earmarking the revenue to be used for education. Local governments help fund the community colleges.

CHART 15
EDUCATION EXPENDITURES AS A SHARE OF THE ARIZONA STATE GOVERNMENT GENERAL FUND, FISCAL YEARS 1979 THROUGH 2009



Source: Arizona Joint Legislative Budget Committee.

The general fund generally excludes capital outlays, but some of the capital expenditures for K-12 (the School Facilities Board) have been included in the general fund since FY 1999.

Importance to Economy

The educational attainment of a region's workforce and the quality of a region's educational system are of key importance to a region's economic development. A study by the Brookings Institution lists "education, education, education" as the most important factor in business site selection. The emphasis on education, training and labor market as a location issue is considered a major change from a number of years ago.¹⁵ A strong K-12 educational system is vital for developing talent and attracting business; specialized talent and training are more important than abundant labor; and universities are the major cause of innovation in almost all regions.¹⁶

The educational attainment of Arizona's workforce is less than the national average and has deteriorated over time relative to the U.S. average. Job quality and average earnings in Arizona also are below the national average. These three factors — job quality, earnings, and educational attainment — are interrelated. On average, the higher the educational attainment of a worker, the higher are his or her earnings. The largest increase by far occurs with the completion of a university degree.

It is likely that the below-average job quality in Arizona disproportionately attracts a workforce with below-average educational attainment, and also that the subpar educational attainment in Arizona disproportionately attracts lower-wage job creation. If the state is to achieve a higher job quality, along with higher wages and an enhanced standard of living for its residents, it likely will be necessary to make changes in economic development policy and to increase the educational attainment of the workforce.

In addition to the earnings boost to an individual from educational attainment, society benefits from an educated populace. The average wage — even for those workers who do not possess much educational attainment — is higher in communities with a substantial proportion of highly educated workers. One explanation for these higher wages is the enhancement of productivity that comes with a workforce with more education and skills.

In addition to the monetary societal benefits of enhanced educational attainment, regions with greater shares of educated workers, especially highly educated workers, experience lower crime rates, fewer demands on social services, greater civic participation, and improved personal health. These benefits accrue to subsequent generations.¹⁷

¹⁵ See "Business Location Decision-making and the Cities: Bringing Companies Back," a working paper prepared for the Brookings Institution Center on Urban and Metropolitan Policy, http://www.brookings.edu/~media/Files/rc/reports/2000/05metropolitanpolicy_cohen/cohen.pdf

¹⁶ See "The competitive advantage of regions," http://www.isc.hbs.edu/pdf/Indiana_Leadership_Summit_2003.05.13.pdf

¹⁷ For more information regarding the value of education, see "The Value of Higher Education: Individual and Societal Benefits," <http://economist.asu.edu/p3/education>.

Disproportionate Cuts to Higher Education¹⁸

Of the spending reductions implemented in FY 2009 and identified as options for FY 2010, those affecting the university system make up a disproportionately large share. The FY 2009 reductions passed in early February account for just less than 6 percent of the total general fund, but the reduction to the university system is 13 percent. The spending reduction options presented for FY 2010 amount to 20 percent of the total general fund but nearly 30 percent of the university system budget. These percentages do not include the effects of fund transfers.

Like most of the public sector, the demand for university services does not drop during recessions. Therefore, any reduction in funding for universities will have a negative and direct effect on students. Significant reductions in state funding, if not substantially offset by higher tuition, likely will result in the elimination of programs, reductions in the quality of other programs, enrollment caps, fewer course offerings, larger class sizes, and the loss of scholarship aid. Indeed, many of these actions have already been announced.

A total reduction in state government spending for the university system of \$387.4 million in the next fiscal year (including the \$141.5 million reduction passed in early February) is identified in the Appropriations Chairmen Budget Options report. This would cause job losses of approximately 8,700 to 12,300, with about 45 percent of the lost employment occurring in the private sector. Gross product would be \$560 million-to-\$593 million lower.

A substantial decrease in state government funding for universities will have negative consequences beyond these short-term effects. Lowered student retention and a declining number of students earning degrees will threaten the state's future economy, as discussed in the preceding subsection.

Expenditures¹⁹

A disproportionately high share of Arizona's children face demographic challenges that have been shown to adversely affect educational achievement, including high poverty rates, low educational attainment of their parents, and lesser frequency of full-time, year-round employment of their parents. In addition, a disproportionately large number of Arizona's children are English-language learners. All else equal, for the state's students to realize achievement levels equal to the national average, these demographic challenges mean that the state's education funding per pupil needs to be greater than the national average.

Instead, per student public funding for education — total current operations spending from all funds by all state and local governments, as reported by the U.S. Census Bureau — is among the lowest in the country in Arizona. Expressed per student per \$1,000 of personal income, funding has dropped over time, relative to past spending in Arizona and particularly relative to the change in spending over time in other states. Education funding per student per \$1,000 of

¹⁸ From "The Economic Effects of Government Spending Reductions Relative to Other Options," Office of the University Economist, Arizona State University, <http://economist.asu.edu/public-finance>.

¹⁹ Expenditures for education are discussed on pages 14 through 38 of "Education Funding in Arizona: Constitutional Requirement and the Empirical Record," Office of the University Economist, Arizona State University, <http://economist.asu.edu/public-finance>.

personal income is low and falling for both public elementary/secondary education and public higher education.

State government general fund data reported by the JLBC reveal a large drop over time in education funding comparable in magnitude to the decline in total public spending for education in Arizona, with the funding expressed per student per \$1,000 of personal income.

Elementary and Secondary Education Funding

Based on Census Bureau data for state and local governments combined, current operations funding for elementary and secondary education in Arizona is very low compared both to other states and to Arizona's historical record. In the most recent year (2006), with ranks calculated among the 50 states and the District of Columbia, K-12 education expenditures in Arizona ranked 50th per capita at 27 percent less than the national average, 48th per \$1,000 of personal income (17 percent below average), 50th on a per student basis (33 percent below average), and 51st per student per \$1,000 of per capita personal income (24 percent below average).

In contrast, K-12 spending in Arizona on each of these measures was above average in the 1960s and 1970s. Since then, public spending for elementary and secondary education has fallen increasingly far below the national average (see Chart 16). Depending on the measure, the state's rank fell between five and 14 places between 1993 and 2006, with the ratio to the national average dropping between 7 and 17 percentage points.

Based on the JLBC data, the general conclusion is the same: K-12 spending in Arizona has dropped substantially over time relative to personal income, and per pupil spending relative to PCPI has decreased considerably as well.

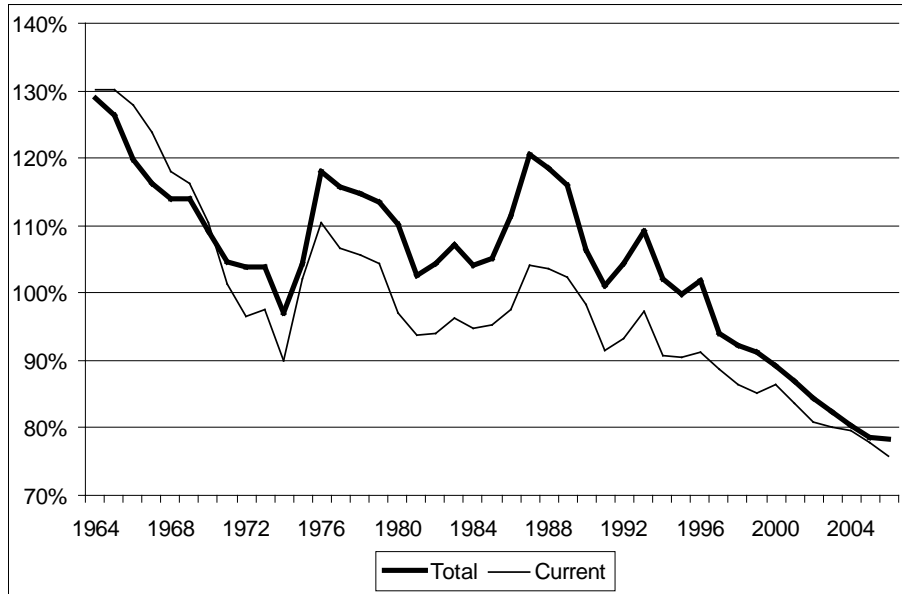
Higher Education Funding

Based on the Census Bureau's data for state and local governments combined, current operations funding for public institutions of higher education (community colleges and universities) is very low in Arizona compared both to other states and to Arizona's historical record. In 2006, with ranks calculated among the 50 states and the District of Columbia, Arizona ranked 51st per student at 24 percent less than the national average, 46th on a per full-time-equivalent (FTE) student basis (13.5 percent below average), 47th per student per \$1,000 of per capita personal income (14 percent below average), and 37th per FTE student per \$1,000 of per capita personal income (2 percent below average).

In contrast, spending in Arizona per FTE student had been above average historically. Current operations expenditures for higher education per \$1,000 of personal income have decreased over time in Arizona, especially during the late 1960s and early 1970s (see Chart 17). Another round of relative spending decreases has occurred since the early 1990s, with ranks falling a few more places and the ratio to the national average also dropping.

As reported by the JLBC, real spending per student has declined since 2000 by similar amounts for the universities and the community colleges, though on an FTE basis the decline has not been as large for the universities.

CHART 16
ELEMENTARY AND SECONDARY EDUCATION EXPENDITURES PER STUDENT PER \$1,000 OF PER CAPITA PERSONAL INCOME, FISCAL YEARS 1964 THROUGH 2006, ARIZONA STATE & LOCAL GOVERNMENTS AS A PERCENTAGE OF THE NATIONAL AVERAGE



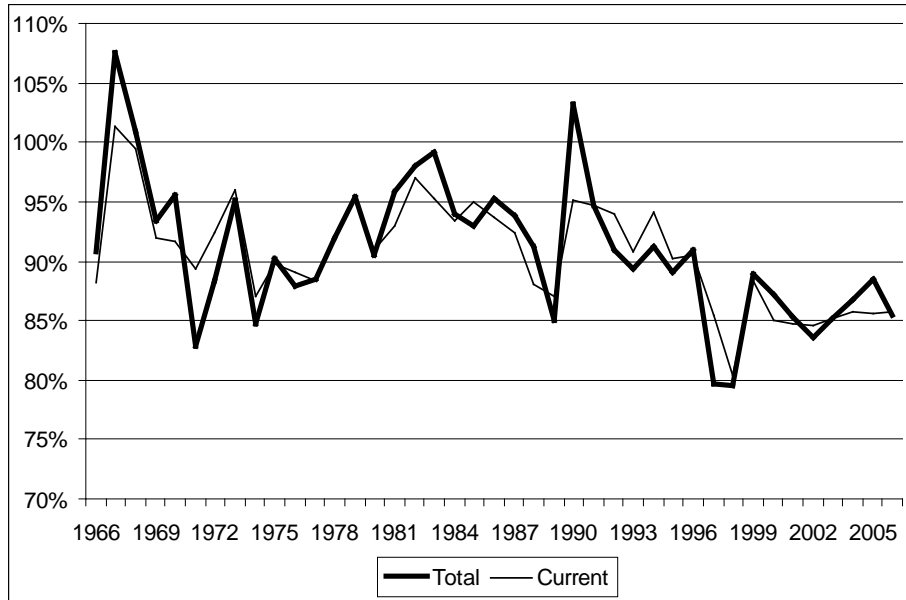
Sources: U.S. Department Of Commerce, Census Bureau (expenditures); U.S. Department of Education, National Center for Education Statistics (enrollment); and U.S. Department of Commerce, Bureau of Economic Analysis (personal income).

Funding for K-12 Relative to Higher Education

Since per student funding is greater for higher education than for K-12 education, the best way to compare the funding between K-12 and higher education is through the ratio to the national average of each. In 2006, using the Census Bureau data, per student K-12 spending was 33 percent less than the national average, while expenditures for higher education were not as far below the norm at 24 percent per student and 13 percent per FTE student. Both rank near the bottom of the states. Higher education has not experienced as much of a decrease since the early 1990s as K-12.

However, the situation is reversed when focusing on the state government general fund as defined by the JLBC. Even before accounting for the higher inflation in higher education, per student spending has fallen much more for higher education than for K-12. Relative to PCPI, per student K-12 appropriations dropped 10 percent between 1992 and 2006 while the higher education decline was 27 percent (29 percent based on FTE enrollment). Between 1979 and 2006, the decrease was only 5 percent for K-12 but 37 percent for higher education.

CHART 17
HIGHER EDUCATION EXPENDITURES PER STUDENT
PER \$1,000 OF PER CAPITA PERSONAL INCOME,
FISCAL YEARS 1966 THROUGH 2006, ARIZONA STATE AND LOCAL
GOVERNMENTS AS A PERCENTAGE OF THE NATIONAL AVERAGE



Sources: U.S. Department Of Commerce, Census Bureau (expenditures); U.S. Department of Education, National Center for Education Statistics (enrollment); and U.S. Department of Commerce, Bureau of Economic Analysis (personal income and gross domestic product implicit price deflator).

Evaluation of Public Education

Evaluation of Elementary and Secondary Schools

Assessments of K-12 education typically include analyses in several categories. In addition to the key category of student performance, system indicators such as overall education finance and teacher quality are included.

Each study analyzed for this report agrees with the conclusion of the education funding section of this paper: the K-12 educational system in Arizona receives among the least resources in the nation and the amount of funding has dropped substantially over time relative to the rest of the nation.

On system indicators other than overall education finance, “Quality Counts”²⁰ ranks Arizona 41st in the teaching profession category and “Educating Arizona”²¹ ranks Arizona 45th on teaching quality. Arizona’s teachers are relatively inexperienced and receive low pay — less relative to the national average than in the past. Average classroom size in Arizona is larger than

²⁰ “Quality Counts 2009,” January 2009, *Education Week*, <http://www.edweek.org/rc/>.

²¹ “Educating Arizona: Assessing Our Education System (Birth-Grade 12),” January 2008, Arizona Community Foundation <http://www.educatingarizona.org/report/>.

the U.S. average, with Arizona ranking among the bottom few states on this measure and on related measures of the number of pupils per full-time-equivalent teacher and per total educational system personnel. Arizona has fewer administrative staff than the norm.

Arizona compares more favorably on the standards, assessments, and accountability category. “Educating Arizona” gives the state near average marks, but “Quality Counts” ranks Arizona eighth in the nation.

One of the key components of student achievement is measured by test scores. Arizona’s elementary school students perform near the national average on norm-referenced tests such as Terra Nova. However, all of the other tests administered to elementary and secondary school students indicate that Arizona students perform among the bottom tier of states.

On the National Assessment of Educational Progress (NAEP) tests administered to fourth and eighth graders, all of the studies agree on Arizona’s poor scores, which are not improving over time relative to other states. On the most recent NAEP tests, Arizona students rank between 37th and 47th. On the Advanced Placement tests, Arizona ranks around 40th. “Measuring Up”²² places Arizona 50th on college entrance exams. While the average score of Arizonans taking the ACT and SAT tests is near average, only a small proportion of high school students in Arizona take the tests.

High school completion rates — high school graduation rates and dropout rates — are other common measures of student achievement. Unfortunately, the data on high school completion rates are not reliable. One related measure is the percentage of high school freshmen enrolling in college four years later. According to “Measuring Up,” Arizona ranks 48th. “Educating Arizona” reports that less than half of those who graduate from Arizona high schools are eligible for admission to the state’s universities and that many of those admitted have deficiencies.

Another means of assessing the high school completion rate is to use the educational attainment measure reported in the decennial census. The educational attainment, as defined by the percentage obtaining a high school diploma or GED, of those who likely received their K-12 education in Arizona was significantly lower in 2000 than the attainment of Arizonans of the same age who likely received their K-12 education in another U.S. state. Of those educated in the same state in which they lived, the percentage of adults who were high school graduates in Arizona ranked among the bottom few states in the nation.

Overall, the preparation for college category of “Measuring Up” ranks Arizona 49th. The K-12 achievement category of “Quality Counts” ranks Arizona 44th in the nation. If not for a somewhat better comparison on the equity portion (poverty-based achievement gaps) of the category, Arizona’s rank in “Quality Counts” would be even lower.

Arizona’s demographics — such as an above-average child poverty rate and an above-average share of English-language learners — contribute to the poor educational achievement of

²² “Measuring Up 2008,” December 2008, National Center for Public Policy and Higher Education <http://measuringup2008.highereducation.org/index.php>. Also known as “National Report Card on Higher Education.”

Arizona's students in aggregate. However, the achievement of those children without such disadvantages is inferior to the performance of their peers nationally.

Evaluation of Higher Education

Data from the National Center for Education Statistics support the conclusion of the education funding section of this paper: the higher education system in Arizona receives resources far below the national average. Total public revenue per FTE student was 28 percent less than the national average of public institutions in 2005. State appropriations per FTE student were 20 percent below the average. Tuition revenue was 18 percent below average at the state's public universities and 28 percent below average at the state's public community colleges.

Participation in higher education at public institutions is quite high in Arizona, despite Arizona's low rankings on the percentage of high school freshmen enrolling in college four years later (48th) and on the percentage of Arizona high school graduates immediately enrolling at an institution of higher learning (44th). Several factors contribute to the high enrollment at public institutions of higher education in Arizona: a higher proportion of those high school graduates from Arizona schools who do go on to college enroll at in-state schools, few private four-year schools are present in Arizona, many of the students enrolled moved to Arizona after completing their K-12 education, many are older than traditional college age, and many are enrolled part time.

Per capita enrollment at Arizona's public institutions of higher education is 22 percent above the national average, though the FTE figure is only 7 percent above average. Arizona's part-time enrollment is 59 percent above average, while the full-time enrollment is 5 percent below average. Enrollment is particularly high at community colleges.

The performance of the higher education system in Arizona is difficult to assess. Achievement test scores do not exist in higher education. Arizona's strong dependence on community colleges and the presence of few private universities relative to many states complicates the analysis.

Arizona ranks a little above the middle of the states on the completion category included in "Measuring Up." However, despite the state's high participation per capita, the number of degrees awarded per capita is slightly below average, with per capita associate's degrees, bachelor's degrees, and advanced degrees all a little below average. The per capita number of degrees is above average in business and education, but is below average in the humanities, social sciences, and natural sciences.

In 2000, the educational attainment, as defined by the percentage obtaining a bachelor's degree, of those who likely received their K-12 education in Arizona was significantly lower than the attainment of Arizonans of the same age who likely received their K-12 education in another U.S. state. Of those educated in Arizona, the percentage with a bachelor's degree ranks among the bottom 10 states in the nation.

Constitutional Requirement²³

Article 11, Section 10 of the Arizona Constitution reads:

“the legislature shall make such appropriations, to be met by taxation, as shall insure the proper maintenance of all state educational institutions, and shall make such special appropriations as shall provide for their development and improvement.”

The constitutional requirement that the Arizona Legislature shall provide funding for public education from tax revenue is clear. No distinction is made between elementary, secondary, and higher education. A determination has not been made whether existing funding appropriated by the Legislature is adequate to provide for the “proper maintenance” and the “development and improvement” of the public educational system.

Despite the demonstrably low public funding for education in Arizona, it might be possible to argue that the constitutional funding requirement is being met if measures of educational achievement indicate that Arizona is in line with the rest of the nation. However, on most measures of elementary and secondary student performance, Arizona ranks among the bottom tier of states.

Given the unusually large demographic challenges faced by Arizona’s children, the poor performance of Arizona’s elementary and secondary school students even after adjustment for the demographic challenges, the very low public spending relative to other states, and the very significant decrease in spending over time, it is doubtful that the “proper maintenance” clause, much less the “development and improvement” clause, of the Constitution is being met for elementary and secondary education.

Funding for higher education is not as far below the national average as K-12 funding, but still is considerably below the median state and has decreased significantly over time. In particular, higher education funding from the state general fund has fallen more over time than has general fund expenditures for elementary and secondary education. Thus, funding for higher education also is probably not meeting the constitutional requirement.

Public appropriations, especially for Arizona’s traditional four-year universities, have not advanced at a rate that allows the state to serve a growing student population while competing for resources in the increasingly costly higher-education marketplace. This suggests that the state has not met its obligation to provide for ‘development and improvement’ of the public university system as mandated by the Arizona Constitution. The declining public support is occurring despite increasing evidence that investments in higher education yield quantifiable societal returns in addition to the widely recognized private financial returns.

²³ From “Education Funding in Arizona: Constitutional Requirement and the Empirical Record,” Office of the University Economist, Arizona State University, <http://economist.asu.edu/public-finance>.

RECOMMENDATIONS

Background

Outdated Revenue Structure²⁴

Like most states, Arizona's revenue system is dated, largely having been put into place decades ago. At that time, a high proportion of consumer spending was for goods, not services. Mining and agriculture were major economic activities. An efficient tax code for the early 20th century is an outmoded system for the 21st century.

Moreover, changes in Arizona's tax system over the last three decades, especially since the early 1990s, have made it less relevant to the contemporary economy and less stable. The state had a reasonably balanced system of tax collections as recently as the early 1990s, with tax revenue coming from multiple broad-based taxes as well as more narrow tax sources.

For the most stability in tax revenue, multiple tax sources should be used. In any economic cycle, different sources of tax revenue do not perform equally. For example, in the slump of the late 1980s and early 1990s, property tax collections suffered due to the decline in the real estate market. In the early 2000s slump, real estate values continue to rise, while income tax collections dropped considerably. In the current recession, collections are down from the income tax and from the general sales tax, which is experiencing a far larger hit than ever before.

Yet state government no longer benefits from using a real estate property tax. This lesser balance among major taxes is complicated by reductions in revenue from sources other than the sales, income, and property taxes. State government no longer receives general fund revenue from the vehicle license tax, a stable source over the economic cycle. Other than the insurance premium tax, revenue is insignificant from all other taxes. In addition, limited revenue is realized from nontax sources.

The state is more reliant than ever on the sales tax, which applies only to goods. This growing dependence results both from increases in the sales tax rate (at both the state and local levels) and decreases in rates of other taxes. As consumer spending shifts to more services, and to the purchase of goods online, growth in sales tax revenue can be expected to lag behind the gains of the general economy. Between 1992 and 2007, real per capita retail sales (a combination of the retail and restaurant and bar categories) rose 24 percent in Arizona, compared to a 33 percent increase in real per capita personal income.

Like the other tax sources, collections from the sales tax are highly cyclical, another reason not to place too much dependence on this source of revenue. Another drawback to the sales tax is that it is not progressive like the property or income taxes, with more of the tax burden falling onto the less affluent.

A further complication to sound tax policy is the requirement that two-thirds of the Legislature vote for a tax increase while a simple majority can approve a tax reduction. In a situation like

²⁴ From pages 18 through 19 of "Volume II: Concepts and Issues," Office of the University Economist, Arizona State University, <http://economist.asu.edu/public-finance>.

that currently faced by state government — a structural deficit that resulted from significant tax cuts and less significant spending reductions — a minority of legislators can dictate fiscal policy, reducing the number of options politically available to resolve the deficit.

Inadequate Budget Stabilization Fund²⁵

Since the Budget Stabilization Fund has not come close to meeting the needs in either of the recessions since the BSF was created, simulations of the operation of the BSF were made under various conditions. The simulated operation of the budget stabilization fund, going back to the early 1970s, was run under three conditions: (1) under the original 15 percent cap, (2) under the current 7 percent cap, and (3) under the 15 percent cap, with general fund revenue adjusted up to reflect lesser tax cuts during the late 1990s. The results of the simulations since the early 1990s were compared to the actual operation of the BSF, as reported by the JLBC.

In each of the three simulations, the BSF was depleted in each recession since the mid-1970s before transferring all of the formula-calculated monies to the general fund. A primary reason for the shortfall in the rainy-day fund is that the balance did not reach 15 percent in any of the economic expansions, and did not even reach 7 percent in two of the four expansions since the mid-1970s. Thus, the design of the BSF is faulty for the stated goal of providing enough monies for the general fund to hold general fund revenue steady in years in which revenue collections decline due to an economic downturn.

In addition, the current 7 percent cap on the BSF clearly is inadequate. Had the cap not been reduced during the 1990s, some of the tax cuts passed during this period could not have been implemented while still balancing the general fund as constitutionally required. In nominal terms, some \$300 million in tax cuts would not have been possible, one-fourth of the reductions implemented during this period.

Adjusting for inflation and population growth, revenue in fiscal years 2002 through 2004, years in which a transfer from the BSF to the general fund was called for, would have been approximately \$425 million to \$450 million higher in each year. During these three years in which balancing the budget was difficult and involved substantial spending reductions, revenue would have been about \$1.3 billion higher and an additional \$350 million would have been available to transfer from the BSF to the general fund.

In the current downturn, the 7 percent cap did not affect the balance in the BSF since the depletion of the fund during the previous downturn and the formula transfers would have produced a BSF balance of only 4 percent. (The Legislature did not follow the formula for fund transfers and funded the BSF at 7 percent.) However, by not making the \$300 million in tax cuts during the late 1990s, inflation- and population-adjusted revenue would be around \$500 million per year higher. Spending cuts and/or revenue enhancement still would be needed to balance the budget in the next fiscal year, but the magnitude of the deficit would not be as large.

That a sizable deficit remains even in the scenario of a higher BSF cap and lesser tax cuts during the late 1990s indicates not only that the operation of the BSF is faulty, but that the adjusted

²⁵ From pages 20 through 21 of "Volume II: Concepts and Issues," Office of the University Economist, Arizona State University, <http://economist.asu.edu/public-finance>.

amount of tax cuts implemented since the early 1990s still was much too large given the amount of spending reductions implemented.

Economic Effects of Spending Reductions and Tax Increases

According to Nobel Prize winner Joseph Stiglitz:

“Basic economic theory suggests that direct spending reductions will generate more adverse consequences for the economy in the short run than either a tax increase or a transfer program reduction. The reason is that some of any tax increase or transfer payment reduction would reduce saving rather than consumption, lessening its impact on the economy in the short run, whereas the full amount of government spending on goods and services would directly reduce consumption.”²⁶

This conclusion was verified for Arizona by two economic forecasting/economic impact estimating models (REMI and IMPLAN). The results of modeling the actual state government spending reduction of \$584.5 million in FY 2009 and spending reductions and/or revenue increases of \$1.6 billion in FY 2010 are shown in Table 6.²⁷ The negative economic effects are most severe in the scenario that reduces government spending, and least serious in the scenario that raises public-sector revenue.

While total job losses are least in the revenue enhancement scenario, private-sector job losses are somewhat greater in that scenario than in the other two scenarios. However, government absorbs a disproportionate share of the job losses in each scenario. Compared to a 13 percent share of total employment in 2007, government would account for 22 percent of the job losses in 2010 in the revenue enhancement scenario, 41 percent in the mix of spending reduction and revenue enhancement scenario, and 55 percent in the spending reduction scenario.

The revenue enhancement scenario assumes a personal tax increase. Currently, personal tax burdens in Arizona are very low compared to other states, while corporate tax burdens in Arizona do not compare so favorably. Increases in business taxes instead of personal taxes will result in greater negative effects than public spending reductions.

Government spending reductions have more severe negative effects than tax increases for reasons beyond that cited by Stiglitz. Less spending for goods and services by governments will result in reduced demand for private-sector goods and services. If spending reductions are accomplished by employee layoffs, then private-sector businesses are affected further as laid-off workers either leave the state or cut back substantially on their purchases. It is not realistic to expect that many laid-off government employees will find jobs in Arizona until the recession has ended.

Government spending reductions severely affect a small number of businesses and state residents (state government employees and workers at businesses that sell to the state). In contrast, a

²⁶ Peter Orszag and Joseph Stiglitz, “Budget Cuts vs. Tax Increases at the State Level: Is One More Counter-Productive than the Other During a Recession?” Center on Budget and Policy Priorities, November 6, 2001, www.cbpp.org/10-30-01sfp.htm.

²⁷ From “The Economic Effects of Government Spending Reductions Relative to Other Options,” Office of the University Economist, Arizona State University, <http://economist.asu.edu/public-finance>.

TABLE 6
ECONOMIC EFFECTS OF BALANCING THE ARIZONA STATE GOVERNMENT
GENERAL FUND IN 2009 AND 2010

	1st Scenario: Spending Reduction	2nd Scenario: Revenue Enhancement	3rd Scenario: Mix of Both
EMPLOYMENT			
2009 REMI	-30,570	-23,540	-27,050
2010 REMI	-49,020	-36,250	-42,660
2009 IMPLAN	-37,887	-23,324	-30,605
2010 IMPLAN	-58,727	-29,991	-44,359
GROSS PRODUCT (in millions)			
2009 REMI	\$-1,906	\$-1,683	\$-1,794
2010 REMI	-3,125	-2,793	-2,963
2009 IMPLAN	-2,111	-1,421	-1,766
2010 IMPLAN	-3,261	-1,905	-2,583

Source: Calculated from REMI and IMPLAN models.

personal tax increase will spread the negative effects throughout the state, with the effect on any individual and on any business being minor. In addition, a high percentage of state government expenditures are made directly to state residents and local businesses, while some of the expenditures of individuals quickly leave the state. Also, a personal tax increase may be deductible from federal taxes and therefore exported to the federal government. A portion also may be exported to tourists and other nonresidents.

Cutting the public-sector workforce does not improve public finance as much as it might seem at first glance. The savings to state government of not paying the former workers' salaries and benefits are partially offset by rising payments to the ex-workers for unemployment insurance and other public health and welfare programs. Further, public-sector revenue declines as the laid-off workers spend less and experience losses in income.

MYTH: Taxes should not be increased during a recession. A tax increase is less harmful than public spending cuts, which damage the economy by reducing government purchases from the private sector and by diminishing consumer expenditures made by laid-off government workers. By spreading the negative impact broadly, a tax increase is less likely to have a significantly detrimental effect than spending cuts, which are absorbed by a smaller number of individuals and businesses.

Total Effects of Government Spending Reductions²⁸

State government is not the only government in Arizona anticipating the need to reduce spending. Many city and county governments already have announced plans to reduce spending

²⁸ See "The Economic Effects of Government Spending Reductions Relative to Other Options," Office of the University Economist, Arizona State University, <http://economist.asu.edu/public-finance>.

in order to balance their budgets. Thus, the magnitude of the negative economic effects of government spending reductions on the state's economy is understated by considering state government only.

While a total of local government spending reductions is not available, a figure of \$900 million was estimated based on the amount of cuts announced in various cities and counties across the state. Such spending cuts in 2009 would cost 21,100 jobs and \$1.1 billion in gross product — beyond the negative effects reported on page 42 from state government spending reductions. The total negative effect in 2009 of state government spending reductions of \$1,384.5 million (the first scenario) and local government cuts of \$900 million is a loss of 51,700 jobs and \$2,600 million in gross product. Total negative effects will be greater in 2010.

For perspective, a loss of 51,700 jobs amounts to 1.5 percent of total employment in 2007 and 2 percent of Arizona's total wage and salary employment in December 2008. While a 2 percent decrease may not seem large at first glance, it is the result of a decline in economic activity in just one sector: government. Further, Arizona has rarely experienced a decrease in employment in the past. Annual average total employment fell in only one year (1975) between 1970 and 2007. Based on the wage and salary employment estimates for December 2008, the decrease in employment was 152,300 since December 2007. Thus, a loss of an additional 51,700 jobs due to government spending reductions during 2009 would substantially worsen and extend the state's economic recession.

Historical Perspectives on Fiscal Reform

During the two prior economic recessions, the severity of the state's budget shortfall prompted efforts to study the issue and recommend solutions. In 1989, the Arizona Joint Select Committee on State Revenues and Expenditures ("Fiscal 2000") was formed. Some of its recommendations were adopted, with spending reductions and tax increases resolving the existing structural deficit.

A new structural deficit was created by the tax reductions implemented since the early 1990s. In response, the Citizens' Finance Review Commission (CFRC) was formed in 2003. It focused on the state government revenue system. Without addressing the issue of the overall amount of revenue to be collected by the state, the Commission made a series of recommendations, few of which have been acted upon.

The need for fiscal reform in Arizona is greater now than it was in 2003. No new study group has been formed, but such an effort is not needed because the current issues are so similar to those in 2003. The CFRC's recommendations are as timely today as when they were written.

In this section, a number of recommendations — mostly matching the CFRC's recommendations — are made. However, this report goes further than did the CFRC by addressing the structural deficit between state government general fund revenue and expenditures.

The problem is much deeper than a short-term imbalance between revenue and expenditures. Due to a sizable structural deficit, the state faces the prospect of needing to make difficult decisions to balance the budget every time economic growth slows.

The structural deficit in part is the result of an outdated tax code that creates large cyclical swings in revenue and that causes revenue to grow more slowly than the pace of the overall economy. Much of the structural deficit, however, results from numerous and substantial tax reductions passed by the Arizona Legislature over the last 15 years that were not matched by spending reductions of a commensurate size. Given the increasing population-driven demands for public services and infrastructure, such as health care, education, and public safety, and the amount of the state government general fund expenditures that are off limits to spending reductions due to voter initiatives or statutory mandates, it will not be possible to resolve the budget deficit by spending reductions alone — at least not without decimating entire programs.

State government general fund revenue relative to the size of the Arizona economy has fallen significantly since 1995 and currently is at a historical low. Expenditures, too, have declined since 1995 relative to measures of the size of the Arizona economy. From any historical perspective it is clear that spending increases beyond the needs of a growing state did *not* cause the current cyclical deficit or the long-term structural deficit.

Other actions also have contributed to the near-term dilemma. For example, the Legislature weakened the provisions of the original legislation setting up the budget stabilization fund. The result is less monies available for transfer from the rainy-day fund to the general fund during a recession and a greater need for spending reductions or revenue enhancements to balance the budget.

Short Term Recommendations²⁹

Immediate action needs to be taken to resolve the budget imbalance in fiscal year 2010. Given the very low level of state government general fund expenditures, no further spending reductions beyond those recently put into effect are recommended. Instead, the budget deficit could be resolved largely through a combination of federal government stimulus monies and revenue enhancement.

The most effective way of raising revenue in the near-term is an increase in the transaction privilege (general sales) tax rate. Though not recommended as a long-term strategy, an immediate increase in the state sales tax rate is the best way to quickly increase revenue. A temporary increase in the sales tax rate also will provide additional funding to local governments due to the distribution of a portion of state government general sales tax revenue to counties and municipalities, most of which also face budget deficits.

The rate increase will need to be significant; if a tax increase is not implemented by the start of FY 2010, then the magnitude of the increase will need to be even larger to avoid further spending reductions. This temporary surcharge in the general sales tax rate is proposed only as a stop-gap measure, to be replaced by an extensive overhaul of the revenue system to be implemented within the next two years.

²⁹ The discussion in “Volume III: Options for Managing the Arizona State Government General Fund” (page 22) has been updated. Also see “The Economic Effects of Government Spending Reductions Relative to Other Options.” Both reports are from the Office of the University Economist, Arizona State University, <http://economist.asu.edu/public-finance>.

1. Temporarily Increase the General Sales Tax Rate by Two Cents per Dollar

Increasing the rate two cents on the current distribution base under current economic conditions would generate approximately \$1.6 billion for the state general fund and an additional \$425 million to be distributed to counties and municipalities per year. The higher tax rate should be a temporary surcharge that expires at the end of fiscal year 2011, assuming that comprehensive reform of the revenue system has been completed. Otherwise, the sales tax surcharge should be phased out over the next two years (FYs 2012 and 2013).

A tax increase of \$1.6 billion equates to less than \$250 per Arizona resident, or less than \$675 per household. The actual tax increase on individuals would be less, given that businesses and visitors to the state would pay a portion of the \$1.6 billion. Even assuming that no other state raises taxes, Arizona still would rank as a low-tax state at 34th, based on Tax Foundation data. A tax increase of this magnitude would offset only a portion of the state tax cuts implemented between 1993 and 2008 and would be smaller in magnitude than the federal income tax rebate distributed in 2008 and the federal income tax reduction of 2009.

2. Mitigate the Regressive Effects of the Higher Sales Tax Rate by Increasing the Low-Income Tax Credit

In order to offset the higher tax burden that higher sales tax rates place on low-income households, the tax increase should be returned to very low-income taxpayers by increasing the low-income tax credit. This provision will somewhat reduce the net revenue realized by the general fund from increasing the general sales tax rate. The increase in the tax credit should expire at the same time as the sales tax surcharge.

Long Term Recommendations

Permanent changes in the revenue system need to close the structural budget deficit, cause the revenue stream to be less cyclical, and result in revenue growing at the pace of the overall economy. The ideal revenue system will have a very broad and varied tax base, but apply low tax rates. It will better balance business taxes with personal taxes — currently, business taxes are high relative to personal taxes. More broadly, it should promote a business climate conducive to the growth of basic economic activities. Other aspects of an improved system will be to ensure a progressive tax structure — either explicitly or through the use of low-income tax credits. In general, however, tax credits and tax exemptions should be minimized. More generally, the guiding principles adopted by the CFRC should be widely applied in creating a new revenue system.

A key recommended change in the revenue system is to reinstitute the state property tax, but to lower property taxes on businesses. Another is to broaden the general sales tax base by including some services and eliminating some exemptions, but to reduce the general sales tax rate. Other suggestions include expanding the use of debt financing for capital outlays, eliminating tax credits, and raising revenue from nontax sources.

Such reforms to the revenue system will not be adequate to create a well-functioning fiscal system. In addition, either of two alternatives should be implemented:

1. In addition to creating a revenue system that eliminates the structural deficit, grows with the economy and is not too cyclical, the preferred alternative anchors general fund revenue at a certain percentage of the state's economy, such as 4 or 4.5 percent of Arizona gross domestic product. Further, expenditures will be limited to a formula that consists of the sum of population growth, inflation, and real per person economic growth. Core expenditure needs could be met by spending growth at the pace of inflation and population. The real per person economic growth portion (which averages nearly 2 percent per year) will provide for productivity-enhancing investments and other needs. Once in place, these fiscal guidelines will ensure that spending and revenue capacity will grow at the overall pace of the Arizona economy, meeting requisite public-sector needs and avoiding the catastrophic structural imbalances that exist today.

2. The second alternative is less ambitious in that it suggests fewer changes to the status quo. In addition to creating a revenue system that eliminates the structural deficit, grows with the economy and is not too cyclical, it strengthens the budget stabilization fund so that more monies will be available to transfer into the general fund at times of economic weakness.

Revenue Enhancements and Expenditure Reductions³⁰

Multiple options exist to remove the structural deficit in the state general fund in the longer term, and to modernize the tax code, provide a less cyclical revenue stream, and cause revenue to grow at the same pace as the economy. Tax increases should be focused on individuals. Negative effects from revenue enhancement thus will be limited because of the state's very low existing tax burden on individuals. In addition to the listed recommendations to enhance revenue or reduce general fund spending obligations, the tax burden on businesses — particularly those engaged in exporting — should be lowered. In particular, property taxes assessed on businesses should be reduced.

The following alternatives are listed in recommended order based on a number of factors, including the likelihood of passage and the degree to which the recommendation would eliminate the structural deficit and achieve the other goals. A summary of the 10 suggestions is shown in Table 7.

1. Reinststitute the State Property Tax, Eliminate the 1-Percent Constitutional Cap on the Residential Property Tax, and Phase Out the Homeowner's Rebate

The Citizens' Finance Review Commission recommended each of these actions. Residential property tax burdens in Arizona are low compared to most of the nation and less than in the past. A modest state property tax rate in conjunction with the other actions would raise several hundred million dollars per year, though care needs to be taken so that this proposal does not unduly affect low-income homeowners.

2. Increase the Use of Debt Financing for Capital Outlays (Including School Construction and Renovation)

The CFRC also made this recommendation. Capital investments that will benefit generations of taxpayers generally should be funded through long-term financing. If all school construction and renovations were financed by long-term debt, a few hundred million dollars of spending obligations initially would be removed from the general fund, but this amount would shrink over time as debt

³⁰ Considerable detail on each possibility is provided on pages 21 through 43 of "Volume III: Options for Managing the Arizona State Government General Fund," Office of the University Economist, Arizona State University, <http://economist.asu.edu/public-finance>.

payments mounted. An alternative is to finance school construction and renovations from the general fund when a surplus exists. This selective use of bonding would reduce the size of debt repayments and would allow savings to be expended when most needed.

3. Broaden the General Sales Tax Base, Lower the Tax Rate, and Increase the Use of Low-Income Tax Credits

Each of these actions was recommended by the CFRC. A net increase of several hundred million dollars to the general fund easily could be realized, though care must be taken that the state's revenue base is not overly dependent on the general sales tax. An additional benefit of widening the tax base is that revenues from the 0.6 percent earmarked to education would increase by more than \$200 million. The tax base would be broadened by applying the sales tax to certain services and to food to be consumed at home. In addition, some of the other general sales tax exemptions — labeled by the CFRC as ineffective or inexplicable — would be eliminated.

4. Eliminate Selected Credits from the Income Tax

The CFRC recommended phasing out the majority of income tax credits. Individual and corporate tax credits currently amount to about \$350 million. In particular, the two school-related credits total close to \$100 million not being placed into the general fund.

5. Widen the Application of, and Raise, User Fees

The CFRC recommended that the use of user fees be examined due to the low collections in Arizona compared to other states. While the amount of revenue enhancement is unclear without further study, it appears that the figure could reach \$375 million even without considering university tuition.

6. Increase the Vehicle License Tax Rate

As defined by the Census Bureau — fees for title registration, license plates, vehicle inspection, vehicle mileage and weight taxes on motor carriers, highway use taxes and off-highway fees, but not personal property taxes on motor vehicles — the vehicle license tax burden in Arizona is low compared to most states and lower than in the past. Without placing the tax rate out of line with other states or with Arizona's historical rate, \$200 million could be raised.

7. Improve Money Management and Long-Term Planning

Several suggestions to achieve these goals were recommended by the CFRC. Two actions — enhancing revenue enforcement and maximizing interest earnings — could raise substantial, though unknown, amounts of revenue.

8. Increase Federal Funding

The CFRC recommended a more centralized effort to increase federal funding. While the state could gain \$1 billion in federal funds without exceeding the national per capita average, to realize the federal funds, the state would need to increase its own spending. Realistically, it is unclear how much net revenue might be gained through this option.

9. Increase Collections from Selective Sales Taxes

The selective sales taxes should be indexed to inflation as recommended by the CFRC, but this will have little impact on revenue in the short term. The motor vehicle fuel tax and the tax on alcoholic beverages, which are somewhat below the national average, could be increased to the national

average, but probably would raise less than \$100 million per year. Further, unless the increase in rates is specified to go into the general fund, most of these additional monies would be placed in other funds.

10. Raise the Personal Income Tax Rate

While the personal income tax burden in Arizona is quite low compared to other states and to the past, calls to increase the tax rate are likely to elicit a strong reaction. While the passage of a “fairness tax” — a form of alternative minimum tax to ensure that filers at very high income levels pay at least their fair share in total income taxes — is more feasible, the revenue enhancement from this source likely would be less than \$100 million per year.

**TABLE 7
SUMMARY OF REVENUE ENHANCEMENTS/REMOVAL OF SPENDING
OBLIGATIONS, ARIZONA STATE GOVERNMENT GENERAL FUND**

	Possible Net Effect
1. State property tax	\$500 million
2. Debt financing	>\$300 million in selected years
3. General sales tax	>\$500 million
4. Tax credits	>\$100 million
5. User fees	Uncertain, but <\$375 million
6. Vehicle license tax	\$200 million
7. Money management	Uncertain
8. Federal funding	Uncertain
9. Selective sales tax	<\$100 million, little to general fund
10. Personal income tax	<\$100 million in “fairness” tax

Regulating Revenues and Expenditures³¹

With a modernized tax code that employs a broad tax base, supplemented by expanded nontax sources of revenue and improved planning and money management, policymakers could be assured of general fund revenue that averages a particular percentage of the state’s GDP and that does not vary too widely in any year from the target percentage. If controls also were placed on spending, then the size of cyclical budget deficits would be minimized and the rainy-day fund cap could remain at 7 percent.

1. Adopt Revenue Enhancements Such That General Fund Revenue Is Approximately Equal to 4-to-4.5 Percent of Gross State Product

The revenue enhancements that come from the preceding list will widen the revenue base and bring the tax code into the 21st century, with the result being revenue streams that better match the size of the state’s economy. The total amount of net revenue enhancement should be targeted to bring total revenue equal to 4-to-4.5 percent of the state’s GDP. Establishing a tax base that grows with — neither faster nor slower than — the pace of the Arizona economy is the essential ingredient to re-establishing fiscal order.

³¹ Background on this proposal is on pages 4 through 11 of “Volume III: Options for Managing the Arizona State Government General Fund,” Office of the University Economist, Arizona State University, <http://economist.asu.edu/public-finance>. The proposal is discussed on pages 14 through 20 of the same report.

2. Control Spending Increases to the Sum of Population Growth, Inflation, and Real Per Capita Economic Growth

A spending rule that consists of the sum of population growth, inflation, and the average per capita real growth of the economy (close to 2 percent per year) would allow expenditures to rise on average at the same pace as revenue. Together with a fixed revenue growth rule, this spending rule will allow the state to live within its means while meeting the needs of a growing Arizona.

Budget Stabilization Fund³²

If the recommendations to target general fund revenue at a constant share of Arizona's economy and to tie spending increases to a formula are *not* adopted, then little regarding the functioning of the state general fund has changed even if the structural deficit is eliminated. In this case, improving the operation of the rainy-day fund will be necessary to avoid large budget deficits during economic downturns.

The BSF is designed to serve one very important purpose: to hold general fund revenue relatively constant across the economic cycle. If this purpose were achieved, then the difficult spending decisions and the hardships caused by budget cuts during an economic downturn could be largely avoided.

1. Return the Budget Stabilization Fund Cap to 15 Percent, or Higher

The CFRC recommended that the current limit on the budget stabilization fund be returned to its original 15-percent cap. Since a 15 percent cap will not guarantee adequate funds to balance the budget in all recessions, a higher cap may be prudent.

2. Safeguard the Operation of the Budget Stabilization Fund

The CFRC recommended that the state "take measures to make 'raids' on the fund more difficult." Further, the Legislature has reduced the effectiveness of the BSF through statutory changes. These issues could be resolved by specifying the operation of the BSF in the Arizona Constitution rather than in statute.

3. Seed the Budget Stabilization Fund With Additional Deposits

Following an economic recession during which the BSF balance drops to a few percent or less of general fund revenue, the BSF will not be able to attain at least a 15 percent balance during the next economic expansion if transfers to the fund are limited to those specified in the formula included in the 1990 legislation. This supplemental seeding also should be specified in the constitution.

4. Create Additional Contingency Funds

A contingency fund under the discretion of the Legislature could be created to resolve unpredictable fluctuations in expenditures. An additional contingency fund could be used to smooth out more predictable cyclical fluctuations in expenditures. Alternatively, the latter function could be added to the design of the BSF by modifying the formula dictating transfers to and from the BSF and raising the cap.

³² For more information, see pages 13-14 of "Volume III: Options for Managing the Arizona State Government General Fund," Office of the University Economist, Arizona State University, <http://economist.asu.edu/public-finance>.

5. Minimize Permanent Tax Reductions or Spending Increases

Any future permanent tax reduction should be accompanied by a permanent reduction in spending, and any future spending increase should be accompanied by a permanent increase in revenue. In years in which a surplus remains even after standard and supplemental transfers to the rainy-day fund and other contingency funds, the excess funds should be used for a rebate to taxpayers or for one-time spending.