Federal funds flow no bargain for Midwest

Eleanor H. Erdevig

The federal government is an important force in the nation's economy. Since 1950, federal government spending has increased more than twenty-fold, from \$43 billion to \$946 billion in fiscal 1985. Currently, expenditures of the federal sector represent about one-fourth of the country's total output or gross national product (GNP); in 1950 the federal sector represented only about one-seventh of GNP. How and where the Congress and the administration decide to obtain revenues and to spend funds can have a significant and varying impact on geographic areas of the country.

Although overall tax receipts must ultimately support total federal expenditures, federal expenditures probably have never closely matched tax receipts within each state and region. In fact, little attempt has been made to do so. Federal legislation has generally not been based on the concept that states or local areas are entitled to a proportional return on the tax dollars that they send to Washington.

During the 1970s, however, policymakers and researchers took a closer look at the redistributive effects of federal taxation and expenditure policies on regional economic performance and job growth in older industrialized areas. Early attention centered on the Northeast, particularly the New England area, which was then experiencing above average unemployment rates and slowing population and employment growth following a decline in manufacturing that had begun shortly after World War II. More recently, attention has focused on the economic problems of the Midwest, particularly during the 1981-82 recession, and on the role that federal funds imbalances have played in perhaps aggravating that economic decline.

The subject of regional disparities in the federal balance of payments—the difference between federal revenues and disbursements in an area—is not a simple issue. The United States is an integrated, open economy and no region, whether in surplus or deficit with the

national government, is isolated from other regions. Federal expenditures in one region will indirectly affect the economies of other regions, although to varying degrees and with different time lags. Economists have had little to say on the normative concept of what a "fair" return on tax dollars ought to be.

Theories of the public economy generally recognize three objectives of federal budget policy, namely, the efficient allocation of resources, the equitable redistribution of income and wealth, and economic stabilization. Procurement of goods and services is expected to be determined by efficiency considerations and perhaps by political influence. The progressive income tax, income support for poorer people, and grants to poorer places are examples of the redistributive objective. Economic stabilization is important to the overall performance of the economy.

Imbalances in federal flows of funds are not inconsistent with the redistributive objective of the public economy. Federal expenditures and assistance to support growth in underdeveloped regions and areas are commonplace. Spending on dams, waterways, rural electrification, agricultural support, and community development block grants are just a few examples. The contribution of the federal government to the development of the South and West prior to and following World War II is well-known. Existing legislation and policies presumably reflect a public consensus based on desired objectives and available information. Over time, however, as the results of current policies become known, objectives change and new policies and legislation are found to be necessary.

This article presents measures of the current regional flows of federal funds, analyzes the sources of existing disparities, and reviews regional efforts to achieve a more favorable flow of funds.

Eleanor H. Erdevig is an economist at the Federal Reserve Bank of Chicago.

Do disparities exist?

A useful measure for interstate comparisons that excludes the effect of population size differences is the ratio of federal funds disbursed within a state to each dollar of federal taxes paid by state residents. If the ratio is approximately one, federal expenditures are about equivalent to federal taxes collected in the state. If the ratio is less than one, less money is spent by the federal government in the state than is collected in federal taxes.

Regional disparities in fiscal 1984 are dramatically displayed in Figure 1. All of the Seventh District states—Illinois, Indiana, Michigan, Wisconsin, and Iowa—received less than 90 percent of federal taxes returned in federal expenditures. In contrast, states receiving 110 percent or more of federal taxes in expenditures are located primarily in the Southeast, although some states in the Southwest, West, and in the New England area were also beneficiaries of federal expenditures by this measure. Between 90 and 110 percent, federal

revenues are roughly equivalent to disbursements in the states.

The ratios in the five District states range from a low of .66 in Illinois to .88 in Indiana. For every dollar that Illinois sends to Washington in federal taxes, only about 66 cents is directly returned to the state in federal expenditures. (See Table 1).

Another frequently used measure for interstate comparisons is an estimate of net federal funds flows the difference between federal tax payments and federal expenditures for individual states. This measure permits an assessment of the magnitude of federal funds im-Here no adjustment is made for differences in population. According to information provided by the Congressional Research Service, Illinois has been the biggest net contributor to the Federal coffers. 1,2 With federal taxes of \$35 billion and federal spending of \$24 billion, there was a net outflow of \$11 billion from Illinois in fiscal 1984. Other large northern industrial states-New Jersey,

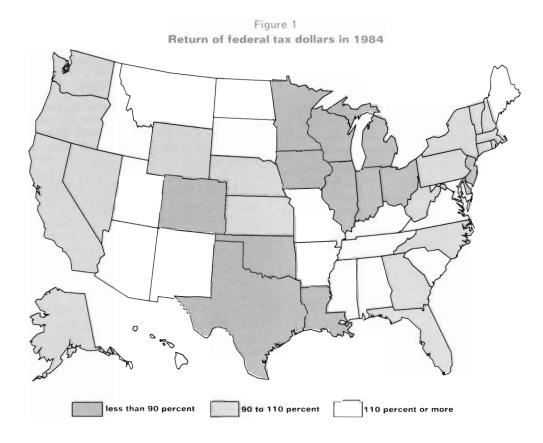


Table 1
Ratio of federal expenditures to estimated tax revenues^{1,2}
Fiscal year 1984

Top ten states ³			Lowest ten states		
Rank	State	Ratio	Rank	State	Ratio
1	New Mexico	1.82	41	Indiana	.88
2	Mississippi	1.69	42	Minnesota	.85
3	Missouri	1.47	43	Ohio	.83
4	Virginia	1.44	44	Wisconsin	.83
5	Hawaii	1.40	45	Delaware	.81
6	Utah	1.34	46	Iowa	.80
7	Maryland	1.29	47	Texas	.78
8	Alabama	1.29	48	Michigan	.78
9	South Dakota	1.27	49	New Jersey	.69
10	South Carolina	1.26	50	Illinois	.66

Assumes tax revenues equal federal expenditures in fifty states and District of Columbia; excludes Postal Service.

Michigan, Ohio, New York, Wisconsin, Iowa, and Indiana—also were major contributors. Texas also showed a large net outflow in 1984, primarily due to federal taxes on the state's energy production.

California has been the biggest gainer. In fiscal 1984 it had a net inflow of \$10.6 billion. Other large gainers were located near Washington, D.C. (Virginia and Maryland), in the South, or were home to major defense companies (Missouri).

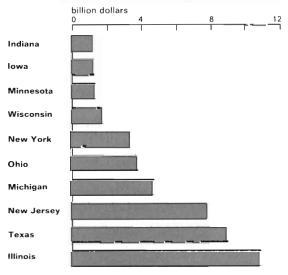
What causes the disparities?

To find the cause of such disparate flows, it is helpful to look at federal taxation and expenditures separately, and to examine individual spending categories.

On the taxation side, differences in the federal tax burden among states contribute to the disparities in the federal balance of payments. About four-fifths of federal revenues are derived from individual income taxes and social insurance taxes and contributions, all of which are dependent on personal income. Per capita personal income in the Midwest, the Mideast, and New England states has historically tended to be above the national average.

In 1984, average per capita income in New England states was the highest in the nation. In most of the Midwest states since 1981 it has declined to slightly below the national average.

Figure 2 Seventh District states among the biggest net contributors to federal treasury in 1984



² Tax burden percentages from Tax Foundation, Inc., Washington, D.C.

³ District of Columbia = 5.17.

Figure 3

California—The biggest winner in 1984

billion dollars
0 4 8 12

California

Virginia

Missouri

Maryland

Mississippi

New Mexico

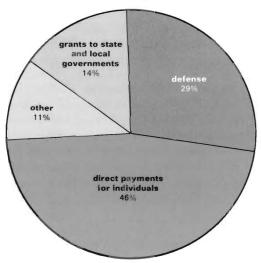
Alabama

Florida

Tennessee

Figure 4

Defense spending was about 29 percent of federal domestic outlays in 1984



The Southeast remains the region with the lowest per capita personal income. Over the long-term, there has been a general convergence toward the national average among states in per capita income. Thus, this source of disparity among states has been gradually disappearing.

Massachusetts

Differences in per capita income and the resultant differences in the tax burden, although important, are not the major cause of the disparities among states in net federal funds flows. California in 1984 had the fourth highest per capita personal income in the country (excluding District of Columbia), yet ranks first in the net inflow of federal funds. Others of the ten states with the highest net inflow of funds in 1984, Massachusetts, Maryland, and Virginia, ranked fifth, sixth, and thirteenth, respectively, in per capita income. The major reason for disparities is the differences in federal expenditures among the states.

But not all federal government spending accounts for the disparities among the states in federal funds flows. The primary sources of the disparities are defense expenditures for procurement, salaries and wages, and research and development (R&D); nondefense procurement and R&D; and a portion of grants to state and local governments. The balance, about two-thirds of the federal expenditures, depend largely on where the recipients reside, for example, holders of public debt who receive in-

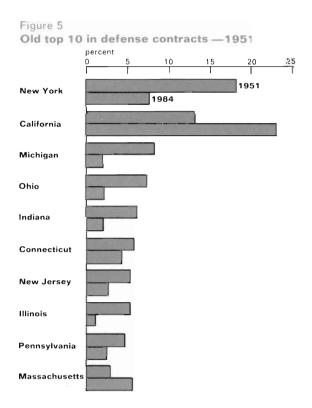
terest payments, and beneficiaries of Social Security and Medicare payments. The small disparities in these outlays among states are primarily the result of a larger proportion of older people in some areas.

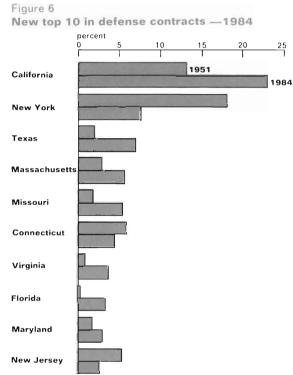
From a policy perspective, the one-third that accounts for the disparities represents the "manageable areas" of government expenditures. These are the areas that can be influenced by federal, state, and local public and private actions.

Defense spending is the major part of the manageable area. During fiscal year 1984, federal expenditures for defense represented 29 percent of total federal domestic outlays. Of the Department of Defense (DOD) domestic spending, 65 percent was spent on procurement contract awards and 27 percent on salaries and wages. DOD procurement represented 78 percent of all federal government domestic procurement contract awards.

Trends in the location of defense spending, the largest and fastest growing component of the federal budget, indicate a major source of the current unequal distribution of federal expenditures among the states.

A comparison of the proportion of total defense contract awards received by firms located in the top ten states in fiscal year 1951 and the proportion in fiscal 1984 dramatically shows the decline in the receipt of defense funds





by companies in northern industrial states. In fiscal 1951, New York, Michigan, Ohio, Indiana, New Jersey, Illinois, and Pennsylvania were all among the top ten states, receiving in the aggregate 56 percent of all defense contracts. In fiscal 1984 the proportion received by these seven states had declined to only 20 percent and only New York and New Jersey remained among the top ten. The New England area fared much better. Massachusetts and Connecticut were among the top ten states in fiscal 1951 with 8.8 percent of total awards and had increased their share to 10.1 percent in fiscal 1984.

The standout performer, however, was California which became the largest recipient of defense awards in fiscal 1953 and has been every year thereafter, including fiscal 1984 when it received 23.1 percent of the total awards. This was a larger share than that of the seven states of New York, New Jersey, Pennsylvania, Illinois, Indiana, Michigan, and Ohio combined.

The decline in the share of defense awards received by the northern industrial states is best explained by examining what DOD purchases.

In fiscal 1983 total prime contract awards by the DOD were \$140 billion. Of this amount, information is available on the state where the contract was performed for \$119 billion or 85 percent. According to this information, the four largest categories of hard goods procurement were aircraft, electronics and communication equipment, missiles and space systems, and ships, which together accounted for two-thirds of DOD awards.

California dominates defense spending. In fiscal 1983 it was the leading recipient of awards for aircraft, missiles and space systems, weapons, and electronics and communications equipment, second in awards for ammunition, third for ships, and fourth for tanks and automotive vehicles.

Midwestern states continued to receive awards for tanks and automotive vehicles. Ohio, Indiana, and Michigan ranked first, second, and third, respectively, and in total received 56 percent of the amount obligated for such contracts. Unfortunately, such combat and noncombat vehicles represented only four percent of the DOD awards. Thus, the changing composition of DOD purchases can have

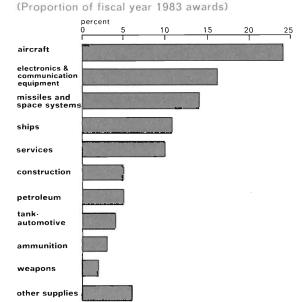
major impact on regional income and employment. The change from tanks and more traditional military hardware to missiles and more sophisticated hardware, which began after the Korean War (1953), resulted in a locational adjustment of production and employment.⁴

Seventh District states, while generally not an important location for the production of the major portion of military hard goods, do provide certain other defense supplies and services. In fiscal 1983, they received four-fifths of the awards for construction equipment, twofifths of the awards for materials handling equipment, and one-fourth of the awards for production equipment. Indiana and Michigan received about one-third of the contracts for separately procured containers and handling equipment. In addition, District states were awarded contracts for about one-sixth of the subsistence supplies, medical supplies, and photographic equipment purchases by the DOD.

Looking to the future, of prime importance to the economic growth and well-being of the northern industrial states is spending for R&D. R&D activities are generally regarded as the basis for innovation and are important to improving the competitive position of the

Figure 7

Defense department contracts emphasize new technologies



region's industries through increased productivity and the development of new products and services.⁵

The federal government provides about one-half of all R&D funds spent in this country. Its purpose is two-fold: first, to meet the direct needs of government agencies and departments such as the defense department: and second, to meet broad national needs where the private sector lacks incentives for adequate investments to assure long-term growth, such as in basic research across all fields of science.

In its fiscal 1986 budget request, the current administration proposed total overall R&D funding of about \$60 billion. The DOD is the major source of federal R&D funds and about 70 percent of all federal R&D spending is defense-related. Most of defense R&D (88 percent) is for development, with industrial firms performing about 70 percent of defense R&D. Basic research accounts for approximately 15 percent of federal R&D funding. Applied research, the balance, has been receiving a decreasing share as government emphasis has shifted to defense-related R&D and basic research.

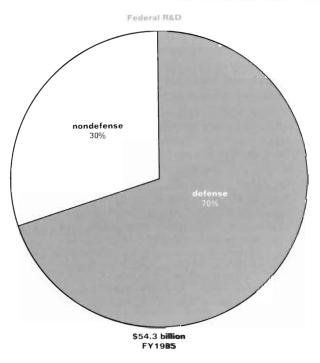
A large part of federal R&D expenditures follow the same regional patterns as defense spending. California dominates defense spending and it also dominates federal R&D spending. If the government buys fewer tanks and trucks and more aircraft and electronic and communications equipment, it will spend less money on the development of tanks and trucks and more money on the development of aircraft and electronic and communication equipment.

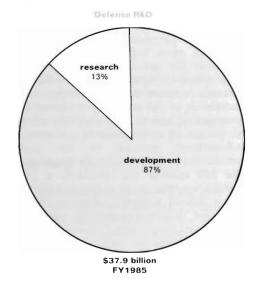
Basic research, while important to long-term economic growth and well-being, receives less than one-sixth of federal R&D funds. The major departments or agencies supporting basic research are Health and Human Services, largely through the National Institutes of Health, the National Science Foundation, Energy, Defense, and the National Aeronautics and Space Administration.

Seventh District states receive above average funding for R&D from these agencies in some instances, primarily from the presence of major individual research laboratories and universities in District states. The Department of Energy (DOE) supports two federally-funded research and development centers (FFRDCs) in Illinois, namely, Fermi National Accelerator Laboratory at Batavia and the Argonne Na-

Figure 8

Defense dominates federal R&D spending





tional Laboratory in Argonne, which help make Illinois a major recipient of DOE R&D funds. Only Wisconsin and Iowa are above the national average in per capita R&D funds to universities and colleges by the Department of Health and Human Services. Indiana, Illinois, and Wisconsin are above the national average in the receipt of R&D funds from the National Science Foundation on a per capita basis.

What is being done?

Short-run prospects for increasing the flow of federal funds into Seventh District states are not very encouraging. Long-term trends cannot be easily reversed. Furthermore, competition is increasing from other states equally desirous of obtaining the "manageable" portion of federal expenditures. However, private and public sector efforts are underway in the District to narrow the size of the disparity.

Among the numerous private groups and government representatives and agencies that have been involved in seeking a larger share of federal expenditures, a few in particular should be mentioned.

The Commercial Club of Chicago, whose members include the city's business and political leaders, following a year-long economic study of the metropolitan area in 1984, recommended that efforts be made to improve the federal funds flows to the area. The project focused on job growth over a 20-year time frame. In the course of the study, members were active in presenting the information on disparities in federal funds flows among the states and the poor position of Illinois to business and governmental leaders in the state and Congress. In the final report, Make no little plans: Jobs for Metropolitan Chicago, it suggested that a task force be established to increase federal expenditures for recurring procurement and research contracts and for on-time disbursements for projects such as the superconducting super collider currently being sought by the Fermi National Accelerator Laboratory in Batavia, Illinois.

Congressional representatives in all states have become increasingly aware of the importance of federal expenditures to their states and districts. In addition to specific assistance to constituents, legislation has been introduced to increase opportunities for procurement. Among these, the Small Business and Federal Procurement Competition Enhancement Act of 1984 was signed into law on October 30, 1984. Its purposes are to eliminate procurement procedures and practices that unnecessarily inhibit full and open competition for contracts, to promote the use of contracting opportunities as a means to expand the industrial base of the country in order to ensure adequate responsive capability of the economy in times of national emergency, and to foster opportunities for participation of small business concerns and disadvantaged persons in the competitive procurement process. In its major provisions, the bill reforms the standards a prospective contractor must meet to become eligible to bid on a federal contract, requires that agencies plan for future competitive procurement of spare parts, prescribes consistent, governmentwide standards for procurement notices, and expands a Small Business Administration pilot program establishing "Breakout Procurement Centers," which serve to expand competition for bidding on spare parts.

¹ Rymarowicz, Lillian, "Federal Tax Payments by State Residents and Federal Expenditures in Individual States, Fiscal Year 1984," Congressional Research Service, The Library of Congress, June 7, 1985. Results were adjusted to exclude U.S. Postal Service expenditures.

² Federal Expenditures by State for Fiscal Year 1984, Issued March 1985, Burcau of the Census, U.S. Department of Commerce, Washington, D.C.

³ Prime Contract Awards by Region and State, Fiscal Years 1981, 1982, 1983, Directorate for Information, Operations, and Reports (DIOR), Department of Defense, The Pentagon, Washington, D.C., 1984.

⁴ Graham, Robert E., "Factors Underlying Changes in the Geographic Distribution of Income," Survey of Current Business, Vol. 44, No. 4, April 1964, Office of Business Economics, U.S. Department of Commerce, Washington, D.C., page 15.

⁵ See Erdevig, Eleanor, "The bucks stop elsewhere: The Midwest's share of federal R&D," *Economic Perspectives*, Vol. 7, November/December 1984, Federal Reserve Bank of Chicago, pp. 13-23.