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# STATE POLICY & ECONOMIC DEVELOPMENT IN OKLAHOMA: 1990

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# OKLAHOMA 2000, INC.

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**O**KLAHOMA 2000, INC., affiliated with the Oklahoma State Chamber of Commerce and Industry, is a nonpartisan, nonprofit corporation created to promote and perform research regarding the role of industry in the civic, sociological and cultural betterment of the State of Oklahoma. OKLAHOMA 2000, INC. makes the results of its studies available to members of various State and Federal government agencies, legislators and the general public.

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# STATE POLICY AND ECONOMIC DEVELOPMENT IN OKLAHOMA: 1990

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## A REPORT TO OKLAHOMA 2000, INC.

by

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## PREFACE

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Each year Oklahoma's state government establishes policies having significant long-term impacts on business and economic development. These policies are the product of administrative procedures, legislative action, regulatory rulings and court decisions. The purpose of this publication is to examine eight of these issues that are likely to have significance in 1990. Some of these actions are likely to lead to further important policy considerations over the next year or so. Opposing viewpoints are normally presented.

This current project was conducted by professors at two of Oklahoma's institutions of higher education. Alexander Holmes, A.J. Kondonassis, David R. Morgan, and David Penn are from the University of Oklahoma; Larkin Warner, Kent W. Olson, Daniel S. Tilley, Daniel D. Badger, and Robert E. England are from Oklahoma State University. As in previous years, the research team, in conjunction with members of the Board of Directors of Oklahoma 2000, Inc., selected a list of potential topics for the 1990 study. The final topics were selected following some preliminary investigation.

The views expressed herein are those of the authors and should not be attributed to the officers or directors of Oklahoma 2000, Inc.

# INTRODUCTION

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Economic development remains central to many policy debates, but the actions of state government have moved from the planning activities that dominated the aftermath of the sharp economic decline of the early 1980s to the implementation policies. Many of these policies relate to the needs and problems associated with diversification of the state's economy. In this, the 1990 edition of the *State Policy & Economic Development in Oklahoma* are articles by nine investigators at the University of Oklahoma and Oklahoma State University regarding issues associated with these economic development policies. In each article, the long-term development implications are the major concern of the authors.

As the framework for state economic policy, Larkin Warner reviews the work of the Constitution Revision Study Commission and the prospects for constitutional reform in Oklahoma. Dr. Warner specifies the merits of three important reform proposals for a new state Ethics Commission, extensive reorganization of the executive branch and business regulation. He notes that the voters will have their ultimate say in 1990.

In a conceptual article, David Penn investigates the meaning of economic diversification. He observes that reducing the reliance on agriculture and petroleum does not result necessarily in the best mix of industries for Oklahoma. For example, reducing the reliance on agriculture and petroleum may reduce growth instability, and he cautions that state policymakers should be careful to cultivate industries that are resilient to cyclical changes in the U.S. economy.

As Oklahoma seeks ways to develop new sectors of growth, the international markets are of increasing importance. In that context, the changes in Europe are important to Oklahoma businesses looking to expand in overseas markets. A.J. Kondonassis reviews the planned changes to the European Economic Community in 1992, with special attention as to how

Oklahoma's share of exports may be affected. Dr. Kondonassis also points out a number of difficulties that the EEC will face in trying to achieve the 1992 objectives of a single Europe.

Alexander Holmes discusses recent changes in capital budgeting and the management of the state's debt and the links of these changes in the state's efforts to meet infrastructure needs. He points out one benefit of these steps is the AA bond rating from Standard and Poor's in 1989 and Oklahoma's solid credit rating.

Existing industries in Oklahoma have potential for expansion with differing prospects for growth. Daniel Tilley explains the prospects for expanding the processing of agricultural products in Oklahoma, and Daniel Badger investigates the potential recovery in the coal mining industry. The agricultural processing sector in Oklahoma has been targeted by several state policy groups for expansion. Dr. Tilley discusses the requirements and role of the food processing industry. Coal mining in Oklahoma has declined sharply in recent years, but the resource is sizeable. Dr. Badger proposes several policy concepts designed to breathe new life into the coal industry in the state.

Kent Olson investigates how the state's child care policy affects Oklahoma business expansion. A topic, often viewed as more of a social issue, is shown to be inescapably important to the state's economic development. Dr. Olson argues that management and personnel practices will increasingly force child care to the forefront as an economic issue.

Robert England and David Morgan describe the economic development issues of the 42nd Oklahoma Legislature as ". . . not monumental in scope." The authors argue that Oklahoma has taken the easy first step of putting the institutional framework for economic development in place, but that the next measures will be the hard ones. In essence, the other authors have addressed some important considerations for these next measures.

## OKLAHOMA CONSTITUTIONAL REVISION 1988-1989

In a 1988 nationwide public opinion poll, only 44 percent of the respondents were aware that their state has its own constitution.<sup>1</sup> It is problematical whether the percentage would be higher or lower in Oklahoma. However, many Oklahomans are aware of specific effects of the state's Constitution even though they may not link their concerns directly to a constitutional feature. A business person irritated at the complex bureaucracy of state government may not be aware of the extent to which the Byzantine structure of the state's executive branch is dictated by constitutional requirements. A parent concerned over inadequate schools may not realize that the local property tax millage for the school district has long been at its constitutional maximum. The Oklahoma Constitution permeates the civic life of the state and has significant impacts on the state's business environment.

Throughout the nation, state constitutions fill in the details left unfilled by the broad wording of the U.S. Constitution. In fact, Oklahoma's Constitution fills in a somewhat larger number of details than is the case in many other states. At a length of 68,800 words on Dec. 31, 1987, Oklahoma's Constitution was nearly the longest in the nation — exceeded only by Alabama and New York. Thirty-nine states were getting along with constitutions less than half as long as Oklahoma's.<sup>2</sup> Moreover, since its adoption in 1907, Oklahoma's Constitution has expanded a good deal as a result of amendments. Through 1989, the people have voted on 274 proposed amendments and have approved 133.

During 1988 and 1989, ten amendments were submitted for a vote and nine were approved. In 1988, a Constitutional Revision Study Commission was appointed by the Governor to recommend a complete overhaul of the document. Three of the Commission's recommendations will probably be submitted to a vote

of the people in 1990. At least five more amendments remain to be submitted at the polls. Additional amendments may flow from a special session of the Oklahoma Legislature dealing with educational reform. The purpose of this report is to provide an overview of these major constitutional developments.

### PREVIOUS OKLAHOMA 2000 CONSTITUTIONAL REPORTS

This is the third in a set of reports on the Oklahoma Constitution which have appeared since the 1983 inception of the annual *State Policy and Economic Development in Oklahoma* volumes. In 1984, Holmes raised doubts about the compatibility of the Oklahoma Constitution with modern state and local economic development policies.<sup>3</sup> Noting that the original framers of the 1907 constitution were openly hostile to business, he pointed out how the document impedes cooperation between state government and the business sector in such fields as taxation, business finance, and infrastructure development. Subsequent constitutional amendments provided property tax exemption for new and expanded manufacturing facilities, and greatly expanded state government's authority to provide financial assistance to business firms.

In 1988, Clark provided further analysis of the need for constitutional reform in Oklahoma.<sup>4</sup> Clark argued that a good state constitution should be brief, readable, provide for an effective executive branch, and not need to be amended frequently. It should not contain unnecessary detail. Three parts singled out as being in specific need of reform are Art. IX dealing with corporations, Art. X on revenue and taxation, and the provisions relating to executive branch organization and powers found primarily in Art. VI.

### MAJOR DEVELOPMENTS: AN OVERVIEW

A significant amount of constitutional change was instituted during 1988 and 1989, and is on the horizon

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for 1990. Measures with significant direct implications for economic development approved in 1988 and 1989 include the following:

- Additional state financial backing for business investment and public infrastructure development was provided through a \$100 million credit enhancement reserve fund involving general obligation bonds to be issued by the Oklahoma Development Authority (SQ 610, 1988).
- Innovative grants, loans, and equity investments by the Oklahoma Center for the Advancement of Science and Technology are intended to generate economic development (SQ 611, 1988).
- The Legislature was given the power to define the meaning of "manufacturing facility" as it relates to the five-year property tax exemption available to new or expanded facilities; this presumably means that any private activity whatsoever could be declared to be "manufacturing" as long as its function was "to promote full employment of labor resources within the state" (SQ 618, 1988).
- The state was put in a better position than in the past to selectively facilitate economic development through its massive holdings of school lands; school lands can be leased for up to 55 years for commercial purposes (SQ 617, 1988).

At least two other constitutional amendments are significant to the state's business community and economic development. Over the years, constitutional reform measures in Oklahoma have reduced the number of elected officials. Shortening the ballot meant less confusion over candidates by the electorate. One of the offices shifted from elective to appointive status in 1975 was the post of Commissioner of Labor. However, in 1988, the people of Oklahoma voted to again make this position elective (SQ 613). As chief administrator of the Department of Labor, the Commissioner oversees the enforcement of the state's labor laws and some aspects of business safety inspection.

With substantial financial support from the business community,<sup>5</sup> an amendment was passed in 1988 limiting the length of the annual legislative session to a period between the first Monday in February and the last Friday in May (SQ 620, 1988). Prior to this, the Constitution called for the session to begin on the first Tuesday after the first Monday in January, but set the limit at 90 "legislative days." With recesses and normal four-day weeks, this occasionally meant that the Legislature was still in session in early July after the new

fiscal year had begun. Approval of the shorter session was viewed as a public manifestation of disapproval of the Legislature. Arguably, the shorter session requirement may enhance the relative power of the Governor at the expense of the Legislature.

The year 1990 will witness additional votes on the Oklahoma Constitution. Four state questions were developed by the 1989 session of the Oklahoma Legislature. SQ 623 is aimed at improving the operation of juries in criminal trials, and S.Qs 625 and 626 deal with bond elections and procedures for issuing municipal bonds. SQ 624 adds detail to the determination of compensation to owners when government takes their property for public use.

An effort is being made to put to a vote of the people a proposal to limit legislative service to a maximum of twelve years. Supporters of the measure argue that members of the Legislature with long tenure gain too much power and tend to become self-serving. Opponents of the measure emphasize the high turnover among members in recent years and the degree to which the legislative leadership must be answerable to the members.<sup>6</sup> Such a measure would also limit the right of the people to choose their representatives.

Further constitutional amendments may be submitted as a result of the action of the Legislature in response to the efforts at educational reform spelled out in the recent Task Force 2000 report. These could include (1) making the office of Superintendent of Public Instruction appointive rather than elective, (2) the exemption of household personal property from the property tax, (3) an increase in the millage cap for property taxes for local schools and legislative control over the cap in the future, (4) abolition of all supermajority requirements for school bond elections, (5) removal of constitutional compulsory school attendance, and (6) the channeling of school property tax receipts for high-value properties into a fund for statewide distribution.<sup>7</sup>

From a reform point of view, the most comprehensive state questions in 1990 will be the three developed by the Constitution Revision Study Commission. The balance of the report describes the Commission and reviews the three reform measures.

## THE CONSTITUTION REVISION STUDY COMMISSION

In late September 1988, Governor Henry Bellmon and Attorney General Robert Henry formed a Constitution Revision Study Commission. The Commission is chaired by Robert Henry, with Governor Bellmon and Senator David Boren as cochairmen.

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The four purposes of this advisory group specified in the Governor's original letter of appointment were to:

- (1) Shorten the Constitution into a workable document;
- (2) Create a governing charter which will grow with the times rather than prevent growth;
- (3) Protect the essential rights of the people; and
- (4) Produce a dynamic government which is responsive and responsible to the people.

In order to understand the role of the Commission, it is first necessary to note the procedures by which the Oklahoma Constitution is changed. The structure and procedures of the Commission are described with emphasis on the guiding principles which helped direct the work.

### **How the Oklahoma Constitution is Changed**

At the most fundamental level, a majority of the citizens voting on the question in a regular general or special election must approve any changes in the Constitution (Art. XXIV § 1). There are three principal procedures by which a proposed amendment may be submitted to a vote of the people. (1) The bulk of amendments are proposed through majority votes in the two houses of the Legislature; (2) A petition signed by 15 percent of the legal voters may be submitted for a vote (Art. V § 2). The percentage requirement is applied to the number voting in the latest general election. The Secretary of State must certify the validity of the names on the petition, and the Supreme Court must grant approval before submission. (3) The Legislature may vote to have the electorate vote on the establishment of a constitutional convention to propose amendments or a new constitution. The proposals of the convention are then to be submitted to a vote of the electorate. The Constitution directs the Legislature to have the electorate vote on the creation of such a convention "at least once every twenty years" (Art. XXIV § 2). Such proposals were rejected in 1926, 1950, and 1970.<sup>8</sup> Presumably such a question will again be submitted in 1990.

There are, in fact, two other ways that the Oklahoma Constitution can be changed. First, five of the amendments approved by the people became inoperative or invalid as a result of decisions by the Supreme Courts of either Oklahoma or the United States.<sup>9</sup> Second, there are some components of the state's Constitution which are worded so as to give the Legislature the power to actually change the Constitution as though it were changing the Oklahoma Statutes. For example, Art. X § 9 B.E. on vocational-

technical school districts states "The Legislature may alter, amend, delete, or add to the provisions of this section by law." A similar right of legislative amendment is found in Art. XII § 3 dealing with homesteads and Art. IX, § 34 relating to the Corporation Commission.

Difficulties in amending the Constitution are magnified by the requirement that state questions proposing change should apply to only "one general subject," although a single, entire article is deemed to fall under the one subject constraint (Art. XXIV § 1). This greatly complicates any anticipated comprehensive reform of the Constitution. Basic subjects such as education and taxation are treated in more than one article.

Finally, there is, of course, nothing in the Constitution prohibiting private groups from being formed to analyze and recommend changes through any of the three principal procedures. Although appointed by the Governor, and led by elected public officials, the Constitution Revision Study Committee was a strictly private, advisory, non-governmental entity with no legal power whatsoever.

### **Commission Organization**

The Constitution Revision Study Commission consists of thirty-five members. The membership is representative of a broad spectrum of economic and social interests and regional concerns. The Commission is administered by Nancy Davies, and is financed solely by private funds. Members donate their time.

As a private entity, the Commission's procedures are not subject to the same legal constraints as are placed by law on public bodies. There was some discussion of closing meetings to the public in the initial stages of deliberation so that members could be more forthcoming in their discussions and positions. Criticism from the press was immediately intense and all Commission deliberations were held subject to the provisions of Oklahoma's Open Meeting Act applying to government boards, commissions, etc. even though the Commission was a private entity. There was no discernible evidence that the publicness of proceedings in any way inhibited members or impeded the Commission's progress.

The commission was divided into eight committees to reflect major topics of the Constitution. These committees were: (1) ethics in government and the judicial branch (2) legislative branch, separation of powers and impeachment (3) executive branch and separation of powers (4) finance and revenue (5) education and school land (6) bill of rights, suffrage and constitution amendments (7) business and regulation, and (8) federal, local, and tribal relations.

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the Speaker of the House of Representatives, and the Chief Justice of the Supreme Court. There will be staggered five-year terms for the members. The Commission will be bipartisan, with no more than three of the five members from a single political party. No more than one member can be drawn from a U.S. congressional district. Since six districts are likely to continue to characterize the state during their five-year terms, with removal only being possible through the same impeachment proceedings which apply to elected state officials.

The Commission will have broad powers to establish rules for ethical conduct of campaigns and by elected state officials and state employees. A novel procedure will provide legislative-executive checks and balances over Commission rules. By joint resolution, the Legislature may reject a rule. The Governor may cause the rule to become effective by vetoing the joint resolution; the Legislature may again cause the rule to be rejected by overriding the Governor's veto. Rules become effective automatically unless the Legislature acts during the legislative session when the rules are submitted. Rules may be overturned later by normal legislative process.

The Ethics Commission will have considerable power to enforce its rules and to levy civil penalties (including fines) against violators. It will have the power to prosecute in District Courts. The establishment of the Commission is not intended to interfere with other statutory provisions relating to conduct of candidates and officials, both state and local, including provisions with criminal penalties.

Funding procedures are always important whenever a "watchdog" type of agency is established. The proposed Ethics Commission will, of course, need an adequate, well-paid staff to implement and enforce its rules. The Constitution Revision Study Commission initially considered a system of funding which would have automatically earmarked revenue to the Ethics Commission based on the aggregate level of reported campaign expenditures. Since a significant share of the new agency's activities will involve monitoring political campaigns, this procedure appeared to provide revenues roughly linked to administrative costs. By taking the funding out of the legislative appropriations process, this procedure also would insulate ethics enforcement from vindictive budget cuts by legislators unsympathetic to ethics policy. In spite of these advantages, the Constitution Revision Study Commission opted for a more traditional funding approach, with proposed Art. XXIX § 2 requiring that the Ethics Commission "receive an annual appropriation by the Legislature sufficient to enable it to perform its duties

as set forth in this Constitutional Amendment."

Earmarking state revenue to any function of government has two very serious difficulties. First, the earmarking formula may or may not provide adequate funding. For example, earmarking revenue to ethics policy based on campaign expenditures might provide too many funds following a period of hotly-contested elections, but might generate insufficient resources when campaign outlays are low. More important, the Constitution Revision Study Commission accepted the proposition that it is desirable to subject the Ethics Commission to the kind of accountability to the representatives of the electorate inherent in the annual legislative appropriations process. Finally, in the unlikely event that the Legislature should attempt to quash the Ethics Commission through providing inadequate appropriations, the courts could be called upon to force the Legislature to abide by the constitutional requirement that the appropriations be "sufficient to enable it to perform its duties." Just as the Legislature cannot, for example, use the appropriations process to put the Governor out of business, so too, the Ethics Commission could not be effectively abolished through the appropriations process.

### **Executive Branch Reorganization**

Concern over a poorly organized executive branch is certainly not new in Oklahoma. During the first months of the administration of Governor E.W. Marland, private contributions of \$57,000 were used to hire the (still) prestigious Brookings Institution to study the organization and administration of government in Oklahoma. The result was a 483 page report published in 1935 which, 55 years later, remains one of the best, most comprehensive, most relevant, documents on the state's government. In initial comments on the Oklahoma Constitution, the Brookings report makes the following observation.

When the Constitution of Oklahoma was written and adopted, the country was on the eve of an administrative awakening. Two or three years later, states began to establish legislative and executive commissions for the purpose of reorganizing their administrative agencies.

A number of administrative agencies ... are frozen into Oklahoma's Constitution; and, in other respects the document contains a mass of material which should have been left to the Legislature or to administrative agencies. The Constitution, therefore,

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must be viewed as one of Oklahoma's fundamental problems; and, in some directions, no substantial progress can be made until constitutional obstacles have been removed.<sup>12</sup>

In 1984, the Commission on Reform of State Government echoed the Brookings study with the following set of propositions:<sup>13</sup>

- There are too many agencies of government.
- There are too many state elected officials.
- There are too many boards and commissions responsible for conducting the people's business, but not directly responsible to the people.
- There is too much legislative branch encroachment into the role of the executive branch of government (mostly brought about in good faith to achieve accountability, but actually resulting in greater dilution of executive accountability).

Fundamental to a more efficient, accountable executive branch is the need for the chief executive, i.e. the Governor, to be accountable through a cabinet system for major executive functions of state government. A newly-elected governor in Oklahoma faces an executive branch consisting of over two-hundred separate agencies and departments with chief administrators appointed by boards or commissions themselves appointed by the previous Governor(s) with terms of appointment extending well into and often even beyond the new Governor's term of office. A study of the appointment powers of governors relating to sixteen major functions and offices rated Oklahoma next to the bottom of the fifty states; in most states, the governor has a good deal more control over the personnel administering the executive branch.<sup>14</sup> A recent analysis of the growing importance of state governments in the U.S. system of federalism emphasizes the implications of limited appointment power.

The power of appointment and removal of the heads of state agencies, boards, and commissions is probably the most fundamental of all within the governor's managerial and policy-making command. Without that authority a governor holds little leverage to direct the actions of executive agencies.<sup>15</sup>

With the need to streamline the executive branch in mind, the Constitution Revision Study Commission drafted and approved a major revision of Art. VI of the Oklahoma Constitution dealing with the "Executive Department."

**Appointment Power.** To assure that he or she will be the chief executive officer of the state in fact as well as in name, the proposed amendment will grant the Governor the beginning-of-term power to appoint a simple majority of the members of every executive branch board or commission for which the Governor has the appointment power (except for those discussed below not touched by the proposed amendment). Terms of all appointed board and commission members appointed by the Governor will be limited to four years. The Governor may then appoint the remainder of members over which he has appointment power at the beginning of the third year of his or her term of office. The Commission rejected the proposal that a new Governor should be able to immediately appoint all board and commission members. Such a policy would destroy the continuity necessary for efficient and consistent policy making.

Under current conditions, a number of appointive positions in the executive branch require Senate confirmation. Sometimes, the Senate fails to act expeditiously on such nominations, so that appointees occasionally serve long periods in "acting" official capacities. The proposed amendment creates automatic confirmation if the Senate fails to act on a nomination within ninety days.

**Cabinet System.** The improved appointment power would be difficult to translate into effective management under the existing executive branch structure with 246 boards and commissions.<sup>16</sup> With HB 1944, the 1986 session of the Oklahoma Legislature established a system of essentially voluntary quasi-cabinet organization for the executive branch. Cabinet "secretaries" are on the Governor's staff or are heads of a large agency in a particular cabinet area. In 1989, these areas consisted of Administration and Regulation, Commerce, Education, Finance and Revenue, Human Resources, Natural Resources, Safety and Security, Social Services, and Transportation. While this system has resulted in better planning and administration, its voluntary nature and the weak appointive power of the Governor continue to mean that Oklahoma does not have a "management team" for its executive branch.

The proposed amendment provides for the temporary continuation of an arrangement essentially similar to the current weak cabinet system. However, the Governor is required to get to work immediately on the establishment of a strong, coherent cabinet system. The proposal specifies that:

On the first day of the second legislative session during the term of the first Governor to serve after this section is effective,

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the Governor shall present to the Legislature a reorganization plan for the Executive Branch. The plan shall allocate the resources, functions, powers and duties of the Executive Branch . . . among the cabinet departments and may consolidate, abolish, or otherwise affect existing agencies, boards and commission . . . The plan shall take effect upon adjournment sine die of that session of the Legislature except as the Legislature may modify the plan. Thereafter, the allocation of resources, functions, powers, and duties among cabinet departments shall be made or modified by law.

Thus the first Governor to administer the state under the proposed amendment is given great latitude in designing and attempting to initiate efficient reorganization of the executive branch. The only major constraints contained in the proposed amendment involve excluded units and the requirements that the system include no more than fifteen departments, ten of which must include Public Safety, Transportation, Health, Commerce, Management and Budget, Human Services, Education, Natural Resources, State, and Financial Regulation. "Secretaries" will head each cabinet department.

The Legislature, however, will, if it chooses, be able to exercise checks and balances with respect to the Governor's plan. No doubt it will so choose. The Governor developing the reorganization plan will face a very difficult set of choices with respect to the degree to which legislative input and tentative approval is sought during the planning process.

**Lieutenant Governor and Succession.** Instead of the current practice of the Governor and Lieutenant Governor running on separate tickets, the proposal would have the two candidates run as a team. The role of the Lieutenant Governor as an assistant to the Governor is made emphatic with the requirement that he or she "shall have duties assigned by the Governor."

Art. VI § 16 in the current Constitution provides that the Lieutenant Governor should succeed the Governor in the event of death, resignation, or impeachment. These are conditions easy to identify. However, there is also provision for succession in the case of "inability to discharge the power and duties of the office." No procedure is specified for determining this latter condition. The proposed amendment would remedy this deficiency by the following:

When the Governor or three-fourths of the

cabinet state in writing that the Governor is unable to discharge the duties of office by reason of mental or physical disability, the Lieutenant Governor shall serve as Acting Governor until the Governor or a majority of the cabinet state in writing that the Governor's disability has terminated.

Note that it is more difficult for the cabinet to relieve the Governor of his or her duties than it is to reinstate.

**Veto Power.** Interaction between the Legislature and the Governor is likely to become more efficient as a result of changes in the procedure by which the veto power is exercised. Under the current Constitution, bills presented to the Governor at the close of the legislative session must be signed within fifteen days or they are automatically null as a result of the "pocket veto." At the end of every legislative session there is a rush to pass bills developed during the previous interim between sessions and during the current session. Thus, a mass of legislation is placed on the Governor's desk; with only fifteen days, the Governor and staff may not be physically able to devote sufficient attention to reviewing the bills. The proposed constitutional change would allow the Governor twenty days instead of fifteen to act on legislation at the end of the session.

**Untouched Features.** As noted above, shortening the ballot is a standard feature of state constitutional reforms. The proposed amendment does shorten the ballot by causing the Governor and Lieutenant Governor to run on a single ticket. Fairly good cases can be made for making appointive several of the currently elective positions in the Oklahoma executive branch. Such posts could include the State Treasurer, the Insurance Commissioner, the Labor Commissioner and the Superintendent of Public Instruction. Because of the degree to which they monitor and enforce laws with respect to other parts of state government, the case is strong for keeping the State Auditor and the Attorney General empowered with the independence that goes with being chosen at a statewide election.

The Constitution Revision Study Commission chose not to disturb the existing pattern of statewide elected officers. It is said that "politics is the art of the possible," and the Commission concluded that shifting elective positions to appointive status would generate too much highly-focused opposition to constitutional reform. For example, the State Treasurer objected vigorously to any change in the status of his office, and representatives of the insurance industry were strongly opposed to appointment of the Insurance Commissioner.

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Oklahoma's system of higher education is established in Art. XIII. However, the provisions creating and specifying the membership of the Board of Regents for Agricultural and Mechanical Schools and Colleges are found in Art. VI on the "Executive Department." Since no amendment to Art. XIII was being proposed, the anomalous placement of the A&M Regents is to remain intact.

### Reforming Business Regulation

The third state question to amend the Constitution proposed by the Constitution Revision Study Commission involves a virtual scrapping of Art. IX dealing with corporations. Three short sections are proposed to substitute for the current Constitution's thirteen-page article. There are two principal reasons for reforming Art. IX. First, it contains extensive detail which either should be moved to the Oklahoma Statutes or abolished completely. Second, as currently worded, some of its 1907 verbiage is reminiscent of a political setting inimical to corporate business — a setting hardly consistent with Oklahoma's modern concerns for economic development.

The tendency for state constitutions to contain too much detail has already been mentioned. Throughout its entire length, the Oklahoma Constitution is full of detail which should be placed in the Oklahoma Statutes or should be deleted completely for lack of contemporary relevance. Art. IX § 30 for example, contains an extensive prohibition against railroads and communications companies charging more for a short haul than for a long haul over the same line.

Worse still, Art. IX, § 13 prohibits railroads from giving free rides as a general matter, but sets forth a lengthy list of exceptions to the prohibition including "traveling secretaries for railroad Young Men's Christian Associations . . . members of volunteer fire departments and their equipage . . . [and] newsboys on trains." And §26 mandates that railroad depots "shall be kept well lighted and warmed for the comfort and accommodation of the traveling public." Contemporary Oklahoma has no railroad passenger service at all and the prospects for such service in the future are quite slim!

Anachronisms in the Oklahoma Constitution do no substantive harm — other than possibly tagging the state as being unprogressive. However, the placement of technical legal detail in the Constitution rather than in the Statutes robs the state's policy framework of needed flexibility. Serious harm can also result from constitutional provisions involving business regulations which impede economic development.

A corporate executive concerned about maintaining competitive labor costs might have second thoughts about Oklahoma after reading Art. IX § 42.

Every license issued or charter granted to a mining or public service corporation, foreign or domestic, shall contain a stipulation that such corporation will submit any difference it may have with employees in reference to labor, to arbitration, as shall be provided by law.

Certainly the Oklahoma Constitution does not project a totally friendly image to businesses considering incorporation in the state. Art. IX § 47 suggests a potentially adversarial relationship between state government and business.

The Legislature shall have the power to alter, amend, annul, revoke or repeal any charter of incorporation . . . whenever in its opinion it may be injurious to the citizens of this State . . .

The two sections quoted above and a good deal of similar language would simply be repealed by the proposed amendment. Of course, if the Legislature and Governor choose to put such material in the Oklahoma Statutes, they could do so through normal legislative procedures.

Finally, the proposed amendment maintains the three-member elected Corporation Commission intact as Oklahoma's regulatory arm with jurisdiction over "railroads, transportation companies, public utilities, motor carriers and public service companies" and "such other matters as the Legislature may from time to time direct." Sections 17-25 of the current Art. IX specify regulatory and other legal procedures to be used by the Corporation Commission; these provisions will be moved automatically to the Statutes if the proposed amendment passes.

The Constitution Revision Study Commission considered but rejected two frequently-mentioned proposals for change with respect to the Corporation Commission. The first is the proposal that the Corporation Commissioners be appointed by the Governor with the advice and consent of the Senate. Supporters of this proposal argue for the need to guarantee that Commissioners have high levels of technical expertise needed to deal with complex issues of regulatory accounting and economics. Opponents emphasize that the Corporation Commission exercises too much power over ordinary people's lives to have decisions left to non-elected technocrats.

One of the Corporation Commission's principal statutory responsibilities involves the regulation of

many technical and economic aspects of oil and natural gas production within the state's borders. The second proposal for Corporation Commission reform splits the agency into two separate agencies, one for oil and gas production, and one for standard public utility regulation. This idea was rejected. However, nothing in the proposed amendment would prohibit the Legislature from taking such action in the future. A constitutional provision requiring such a split would add the very sort of inflexibility to government structure which reform should be eliminating.

### CONCLUSION

In spite of the extensive actions being taken on the Oklahoma Constitution in 1990, the final report of the Constitution Revision Study Commission will emphasize that much remains to be accomplished. Without an equal protection clause, the Constitution's Bill of Rights (Art. II) remains incomplete. Article X (Revenue and Taxation) contains much that is superfluous and much that should be statutory rather than constitutional. And the amendment process itself probably needs to be made less cumbersome.

What are the prospects for constitutional reform in Oklahoma? One of the more frequently used adages in the state is "If it ain't broke, don't fix it." Although the grammar suggests the need for improved school finance, an important point is made. Much legal precedent has accumulated on the basis of the Oklahoma Constitution as it currently exists. Political relationships are structured and special interest groups are more or less satisfied with how their influence is felt in state government. The three state questions resulting from the work of the Constitution Revision Study Commission (as well as other amendments) will disturb the status quo. Moreover, the executive branch restructuring proposed in one of the amendments may represent a nearly impossible task for the Governor and the Legislature — given the specified time limits.

In late 1989, it appeared that the business community and much of the press were behind the three amendments of the Constitution Revision Study Commission. In 1990, the voters will have their say.

### NOTES

<sup>1</sup>U.S. Advisory Commission on Intergovernmental Relations, *State Constitutions in the Federal System* (Washington, D.C.: ACIR, A-113, 1989), p. 7.

<sup>2</sup>The Council of State Governments, *The Book of the States, 1988-89 Edition* (Lexington, Kentucky), p. 14.

<sup>3</sup>Alexander Holmes, "Oklahoma's Constitution and Economic Development Policies: Are They Compatible," *State Policy and Economic Development in Oklahoma: 1984* (Oklahoma City: Oklahoma 2000, Inc., 1985), pp. 21-28.

<sup>4</sup>Will Clark, "Constitutional Reform and Economic Development in Oklahoma," *State Policy and Economic Development in Oklahoma: 1988* (Oklahoma City: Oklahoma 2000, Inc., 1988), pp. 17-21.

<sup>5</sup>"Business Backing Constitutional Amendment Drive with Cash," *The Daily Oklahoman*, November 6, 1989, p. 16.

<sup>6</sup>"12-Year Limiting Plan Irks Legislatures," *Tulsa World*, October 22, 1989, p. 6A.

<sup>7</sup>"Proposed State Question Would Drop Household Property Tax," *The Daily Oklahoman*, November 22, 1989, p. 7; "Constitution Changes Introduced in House," *Tulsa World*, November 22, 1989, p. A1.

<sup>8</sup>Jack W. Strain, Leroy Crozier, and Carl F. Reheman, *An Outline of Oklahoma Government* (Edmond, Oklahoma: Central State University, 1982), p. 21.

<sup>9</sup>Council of State Governments, *The Book of the States, 1988-89 Edition* (Lexington, Kentucky), p. 15.

<sup>10</sup>"Petition Vote on Constitution Changes Certified," *Tulsa World*, November 23, 1989, p. A-33.

<sup>11</sup>Alexander Holmes, "The Oklahoma Ethics Commission: Toward Greater Confidence in the Public Sector," *State Policy and Economic Development in Oklahoma: 1986* (Oklahoma City: Oklahoma 2000, Inc., 1986), pp. 33-38.

<sup>12</sup>The Brookings Institution, *Report on a Survey of Organization and Administration of Oklahoma* (Oklahoma City: Harlow Publishing Corporation, 1935), p. 6.

<sup>13</sup>Commission on Reform of State Government, Oklahoma, *Report and Recommendations to Governor George Nigh* (Oklahoma City, 1984), p. 42.

<sup>14</sup>Joseph A. Schlesinger, "A Comparison of the Relative Positions of Governors," in *The American Governor in Behavioral Perspective*, Thad Beyl and J. Oliver Williams, eds. (New York: Harper & Row, 1972), p. 145.

<sup>15</sup>Ann O.M. Bowman and Richard C. Kearney, *The Resurgence of the States* (Englewood Cliffs, N.J.: Prentice-Hall, 1986), p. 58.

<sup>16</sup>Oklahoma Department of Libraries, *Directory of Oklahoma, 1989-90, State Almanac* (Oklahoma City, 1989), pp. 299-305.

## STATE DEBT MANAGEMENT AND BUDGETING FOR CAPITAL NEEDS IN OKLAHOMA

**I**t is a truism of economic development that without a proper infrastructure, economic development cannot proceed. To this end, incentives have been created at both the state and federal level to provide for such basics as highways, industrial parks, sewers, water distribution and other infrastructure needs. More recently, some of the "quality of life" projects have been included in the definition of infrastructure needs, such as parks, civic centers, and other places of cultural and pastime activity. However defined, without a developed infrastructure, economic development will either decline or cease to exist altogether.

Infrastructure projects are capital projects and, consequently, are typically supported through debt issuance. This is the case in virtually all city governments in Oklahoma. Thus, infrastructure development is tied to the issue of debt management. At the state level, debt management includes these concerns of debt for infrastructure as well as debt issued for so-called private activity bonds to be loaned for businesses and obligations to cover future payments for pension and retirement systems. Private activity bonds, or Industrial Development Bonds (IDB's), are issued through a network of state beneficial trusts, county and city trust authorities and the constitutionally created Oklahoma Industrial Finance Authority.<sup>1</sup>

Fundamental to the question of infrastructure development is the issue of debt creation and debt capacity, as well as issues of the appropriate management of debt creation at the state level. Oklahoma's Constitution provides very strict limitations on state general obligation debt.<sup>2</sup> It is, by and large, these limitations that have spawned the creation of state beneficial trust authorities with the capacity to issue revenue bonds not supported by tax dollars. The three largest debt-creating entities in Oklahoma are the Grand River Dam Authority, the Oklahoma Develop-

ment Finance Authority (previously the Oklahoma Development Authority) and the Oklahoma Turnpike Authority. These entities were designed to provide for the development of infrastructure, primarily roads, electric generating capacity and private activity bonds for business development, without recourse to the voters to either support or authorize these bonds. These enterprises are supported through revenues from the sale of services or through the repayment of the debt that has been re-loaned to a business enterprise.

### CAPITAL BUDGETING HISTORY

Infrastructure can be funded through one of two methods—either through the issuance of debt or through a pay-as-you-go process of capital appropriations. Table 1 presents the history of capital appropriations in Oklahoma from Fiscal Year 1981 through Fiscal Year 1990. As can be seen, Oklahoma's capital appropriations have been made as a residual of the budget process. That is to say, when the operating needs of the state have been met, capital appropriations are made. There has been no long-term capital budgeting at the state level. Some state agencies have developed three and five-year capital budgeting plans, but these have not been approved by the Legislature nor have they been instituted in any systematic way. Furthermore, there is no normal centrally-mandated analytic process to develop long-term capital budgeting proposals. To a large degree, this deficiency is because no set-aside pool of funds has been made for capital appropriations. No general revenue funds are dedicated to capital, either tacitly or by statute. As shown in Table 1, capital budgeting has been an extremely erratic process, providing no incentive for state agencies to develop systematic capital funding proposals.

The other method of funding infrastructure is through the issuance of debt. As discussed above, Oklahoma is very restricted in how debt supported as a general obligation of the state can be issued. For a general obligation bond to be issued by the state, it

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must first be approved by the Legislature and the Governor and then approved by a vote of the people. The last general obligation bond issued by the state was in 1968. These bonds were known as the HERO (Health and Education for a Richer Oklahoma) Bonds. These bonds were used to fund several state office buildings and some of the major construction at the University of Oklahoma Health Sciences Center. This debt is being paid off through a dedicated cigarette tax. It is, however, a general obligation of the state and, consequently, if there should be a failure of the cigarette tax to cover the debt service, any and all other state revenue is pledged to make the payments. There is no chance that the cigarette tax will come short of paying the debt service of these bonds. Table 2 shows the existing debt service requirements. As can be seen, these bonds will be paid off in Fiscal Year 1997. For Fiscal Year 1990, only \$13.4 million is necessary to make the debt service, while the cigarette tax is estimated to generate some \$69 million in revenue.

**TABLE 1**  
**Capital Appropriations**  
**Fiscal Years 1981-1990**  
**(millions of dollars)**

Year	Amount
FY-81	\$ 59.5
FY-82	88.5
FY-83	140.6
FY-84	20.7
FY-85	22.4
FY-86	49.9
FY-87	1.8
FY-88	1.5
FY-89	40.2
FY-90	19.4

**TABLE 2**  
**Required Debt Repayment**  
**General Obligation Bonds**  
**(millions of dollars)**

Year	Amount
FY-90	\$13.4
FY-91	10.1
FY-92	7.3
FY-93	5.1
FY-94	3.5
FY-95	3.2
FY-96	2.0
FY-97	0

## RATIONALE FOR DEBT ISSUANCE

There are two primary reasons for the use of bonds to pay for infrastructure development. First, and perhaps the most pragmatic, is the need for significant revenue to build most infrastructure projects. If they were to be constructed out of current revenues, it would seriously impair the ability of the state to deliver other services for the years during which the construction costs were incurred. The issuance of debt allows the spreading of these costs over a number of years.

The second fundamental rationale for the issuance of debt, rather than the use of pay-as-you-go capital budgeting, is one of equity. If the taxpayers in the year the projects were built were charged the full cost of the project through their taxes, or the reduction of other public services, they would be providing a benefit to future generations, which would not be paid for by those future users. Infrastructure projects are long-lived, providing useful services often decades into the future. The issuance of debt allows the inter-generational transfer of the cost of public services to those who will be receiving some of the benefits. The general principle is that expenditures for operations provides services primarily during the year they are incurred, but expenditures for capital projects provide benefits over many years and therefore should be paid for by the people who receive the services when delivered. The issuance of debt provides a vehicle for spreading the costs to those who receive the benefits.

There are other benefits to the issuance of debt rather than the use of current revenues to fund infrastructure capital projects. One, of course, is the incentive to develop a multiple year capital budgeting plan. If funding is to come from current revenues as discussed above, the incentive for long-term capital budgeting does not exist at either the state agency level or state level. A well-defined capital budgeting process must include both a careful analysis of the projects to be funded, as well as provide the financial support for these projects.

## CURRENT LEVEL OF OKLAHOMA TAX-SUPPORTED DEBT

Tax-supported debt in Oklahoma comes from the Constitutionally-authorized general obligation debts, contractual obligation debt, and lease-purchase debt supported through lease payments paid by state agencies from appropriated dollars. Net tax-supported debt is the best measure of the state's outstanding debt obligation and is the foundation for the state's bond rating by such groups as Moody's and Standard &

Poor's.<sup>3</sup> These rating houses recognize that the debt of the state extends beyond general obligation bonds to include both contractual debt obligations and lease-purchase obligations. This is because state appropriations will in all likelihood include payments for these other debt obligations. Table 3 shows the net tax-supported debt outstanding as of June 30, 1988. Included in this table is the Industrial Finance Authority's financial obligations which are general obligations of the state, but are supported by payments from businesses to whom loans were made. These bond payments do not reduce the revenues of the state in

order to pay for these loans.

While general obligation debt is strictly controlled by the Constitution, in recent years lease-purchase obligations have increased dramatically. To some degree, this is a result of the low capital appropriations made by the state, in combination with the lack of any general obligation debt issues by the state. Lease-purchase debt, financed sometimes through local development authorities or directly by privately placed lease-purchase obligations, or more recently, certificates of participation (COPS), do result in reduced state revenues for non-capital purposes. As Table 3

**TABLE 3**  
**Oklahoma Net Tax-Supported Debt**  
Outstanding as of June 30, 1988  
(thousands of dollars)

<b>General Obligation</b>	
State Building (Medical Center) bonds .....	\$ 1,000
Institutional, Building and Refunding bonds .....	54,460
Industrial Finance Authority .....	26,575
<b>Gross General Obligation Debt .....</b>	<b>\$82,035</b>
<b>Contractual Obligation Debt</b>	
Capital Improvement Authority:	
Series A 1972 .....	\$13,335
Series A 1973 .....	10,700
Interim Revenue Bonds Series A 1986 .....	4,873
Series 1988 (9/88, Private Placement) .....	2,500
<b>Gross Contractual Obligation Debt .....</b>	<b>\$31,408</b>
<b>Lease/Purchase Debt (public Sales)</b>	
Oklahoma Development Finance Authority:	
Series 1985 A .....	\$ 0
Series 1986 A .....	7,319
DHS Revenue Refunding Bonds Series 1987 A .....	2,590
DHS Certificates of Participation (11/88) .....	1,670
State of Oklahoma Certificates of Participation, Lease Rentals Series 1988 (7/88 State Finance) .....	3,275
State of Oklahoma (11/88 Department of Public Safety) Certificates of Participation .....	485
Enid Improvement & Redevelopment Authority DHS Revenue Bonds, 8/87 Series 1987 .....	3,685
Claremore Industrial & Redevelopment Authority (Veteran Center Revenue Refunding Bonds 12/87) Series 1987 .....	12,000
Okmulgee County Public Buildings Authority (DHS project) Revenue Bonds, Series 2/1988 .....	1,025
Cleveland County Public Facilities Authority Revenue Refunding (DHS) Series 1988 (5/88) .....	1,150
<b>Gross Public Lease/Purchase Debt .....</b>	<b>\$33,199</b>
<b>Lease Purchase Debt (privately placed)</b>	
<b>Gross Lease Purchase Debt Privately placed .....</b>	<b>15,323</b>
<b>Total Tax-Supported Debt .....</b>	<b>\$161,965</b>

Source: Stan Provus, State Bond Advisor *The State of Oklahoma: Debt Capacity and Control Analysis*, March 1989.

Note: Includes subsequent public sales through November, 1988.

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shows, lease-purchase obligations are nearly as great as the general obligations of the state when the Oklahoma Industrial Finance Authority is netted out.

What cannot be seen from Table 3 is the rapid pay-off schedule of Oklahoma's tax-supported debt. In four years, fifty percent of the outstanding debt will be retired and in eight years, seventy-two percent of the outstanding debt will be retired. Debt service requirements will drop from \$26.4 million in FY-90 to only \$6.9 million in FY-96.

A complete list of state debt obligations might also include the debt which is issued by state beneficial trusts. This is sometimes referred to as a moral obligation of the state. This would include the debt issued by all state beneficial trusts, which is revenue bond debt. An accounting of all state beneficial debt is provided annually in the Executive Budget of the state.<sup>4</sup>

Finally, the State of Oklahoma has in place a number of pension systems for state employees, judges, schoolteachers, police officers, firefighters and law enforcement officials. The assets of these pension systems exceed \$5 billion. Nevertheless, the unfunded liabilities of the pension systems constitute in the minds of the bond rating houses an obligation of the state.

Table 4 shows the unfunded liability of the pension systems. While no universally agreed-upon measure of the proper level of fundedness of a pension system exists, assets as a percentage of pension benefit obligation is the most useful yardstick. Column 4 shows that for the six pension systems listed, assets as a percentage of pension benefit obligations ranges between 42 percent and 87.9 percent. For public pension systems it is considered appropriate for pensions to be funded in the range of 60 percent to 80 percent.<sup>5</sup> As a measure of Oklahoma's debt, therefore, one concludes that the pension systems are reasonably sound and do not constitute a serious threat to Oklahoma's underlying fiscal structure and, therefore, bond rating.

By comparison to other states, Oklahoma's debt burden, by whatever measure, is extremely low. In 1988, Oklahoma's debt per capita was 16 percent of the median for all states. This ranks the state's per capita debt burden at 45th lowest of all states in the nation. One concludes that the capacity for carrying greater debt is significant in Oklahoma.

### **RECENT CHANGES IN CAPITAL BUDGETING AND DEBT MANAGEMENT**

The Governor's Fiscal Year 1990 Executive Budget included, for the first time, a capital budget proposal.<sup>6</sup> The Executive Capital Budget Proposal recognized the relationship between infrastructure development and

economic development. The Capital Budget proposal was developed from state agency capital requests and was submitted to the Legislature. It called for the issuance of general obligation bonds as well as the issuance of revenue bonds for the Tourism and Recreation Department to enhance the state parks. While the Executive Capital Budget Proposal, as recommended by the Governor, was not accepted in total by the Legislature, certain portions were enacted into law and significant changes in the management of debt were made. The Legislature did authorize the Department of Tourism and Recreation to issue the \$5 million in revenue bonds recommended to upgrade the state's parks. The recommendation to issue general obligation bonds for higher education and other capital needs of the state was, however, not acted upon.

Embedded in the Governor's capital proposal was a mechanism for creating a capital pool for future capital projects. The proposal recognized that the Constitutional Reserve Fund, made up of revenues in excess of the annually certified level of funds available for state appropriation, could be used in part for capital funding. The Constitutional Reserve Fund is composed of two halves for two different purposes: budget stabilization and emergency needs.<sup>7</sup> The budget stabilization half of the Constitutional Reserve Fund is reserved in case there should be a decline in revenue certification of the state budget from the previous year. This half of the Constitutional Reserve Fund cannot be spent by the Legislature.

The second half of the Constitutional Reserve Fund, the so-called "Emergency Fund," can be used by the Legislature if the Governor declares an emergency and the Legislature agrees through a two-thirds vote in both houses. This has been done twice since the first deposit in 1987. In both cases the Emergency Fund was used for capital needs in the prison system. (The Legislature may appropriate from the Emergency Fund without the Governor's approval, with a three-quarters positive vote. This has been attempted once and failed.)

The Governor's FY-90 Executive Capital Budget Proposal recommended using half of the Emergency Fund in every year as a capital pool for funding infrastructure in the state. This would provide a continuing capital pool that would, therefore, mandate long-range capital budgeting on the part of state agencies.

No legislation was required to develop this methodology of capital funding although legislative intent was made clear in House Bill 1065 that capital budgeting should become a normal part of the budget process.

**TABLE 4**  
**Assets and Unfunded Liability:**  
**Comparison of the Oklahoma Retirement Systems**  
**As of July 1, 1989**

Retirement Systems	Total Market Value of Assets (1)	Total Pension <sup>a</sup> Benefit Obligation (2)	Unfunded Pension Benefit Obligation (1-2) (3)	Market Value as a Percentage of Total Pension Benefit Obligation (1/2) (4)	Amortization of Unfunded Liability (5)
Teachers	\$1,807,960,253	\$4,108,284,000	\$2,384,353,933	42.0%	\$205,012,610 (40 years from 7/1/87)
Public Employees	1,552,417,396	1,765,963,720	213,546,324	87.90%	45,343,355 (25 years from 7/1/87)
Firefighters	405,811,811	836,264,589	430,452,778	48.53%	43,468,014 (30 years from 7/1/88)
Police	379,490,000	467,771,478	136,558,030	81.10%	16,354,104 (20 years from 7/1/88)
Law Enforcement	143,505,500	190,614,261	47,108,761	75.30%	7,428,190 (20 years from 7/1/88)
Judges and Justices	43,171,810	49,300,509	6,128,699	87.60%	1,100,406 (20 years from 7/1/88)
<b>TOTAL</b>	<b>4,332,356,770</b>	<b>7,418,198,557</b>	<b>3,218,148,525</b>	<b>NA</b>	<b>318,706,679</b>

<sup>a</sup>From Government Accounting Standards Board (GASB): Statement No. 5.

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House Bill 1065 also created very strong oversight of debt management in state agencies.<sup>8</sup> As discussed earlier, the use of lease-purchase or certificates of participation had begun to proliferate as a capital budgeting tool among state agencies. This caused significant concern because analysis showed that state agencies were often making lease-purchases at extremely high interest rates. In one case, the effective percentage rate on a \$30,000 lease-purchase was in excess of 22 percent. Further, state agencies unsophisticated in such financing methods were often making lease-purchases for periods of time well beyond the useful life of the capital equipment.

House Bill 1065 mandated that no state agency enter into a lease-purchase agreement for any item costing less than \$50,000. Further, no lease-purchase agreement would extend beyond either the lesser of three years or the useful life of the purchase. For property, the term is to be no longer than ten years. Lease purchase agreements in excess of \$50,000 can be authorized, but only through specific legislation. This will go a long way in controlling the issuance of this type of debt and managing the capital budgeting process in a more orderly way.

House Bill 1065 further mandated that a capital budgeting process be instituted at the state agency level and complete disclosure of all lease-purchase contracts would be made in their FY-91 budget request documents submitted to the Office of State Finance. This anticipates strict lease-purchase limits on state agencies, legislated on an agency by agency basis similar to the full-time employment and total expenditure limits that are currently placed on state agencies in their appropriations bills.

### **CREATING A CAPITAL BUDGETING REVENUE POOL**

The Legislature did not specifically affirm the Governor's proposal to designate one-half of the Emergency Fund as a capital pool. They did, nevertheless, recognize the need for specific funds for capital budgeting and, therefore, the need for the creation of a capital pool for such expenditures. Senate Bill 31 creates a capital budget pool from gross production tax revenues and cigarette tax revenues, if the growth in cigarette taxes exceeded the decline in debt service requirements for outstanding general obligation bonds.<sup>9</sup>

In a way, this is legislative affirmation of a proposal put on the ballot in 1982. That proposal would have created a "Rainy Day Trust Fund" from "excess" state growth revenues. The constitutional proposal

recognized that the gross production tax was growing at an unprecedented rate, but was based on a depleting natural resource and, further, is a very volatile tax source, thus providing instability to general operating budgets. This trust fund proposal, therefore, was made to provide orderly growth for state budgets and could generate a pool of funds to return back in the form of infrastructure resources for the state's future economic development. This proposal was defeated at the polls.

For Fiscal Year 1991, it is estimated that the gross production tax on natural gas will generate \$261 million and the gross production tax on oil will generate \$131 million; \$18 million of which is dedicated to local school districts. Of the \$261 million from natural gas taxes, \$145 million is estimated for funding the Teachers Retirement System. The remainder goes to the State's General Revenue Fund and local school districts. Combined, the State's General Revenue Fund is estimated to receive \$191 million from oil and gas gross production taxes.

Senate Bill 31 caps the State General Revenue Fund revenues from gross production taxes at \$190 million and dedicates the excess to the Capital Preservation and Economic Enhancement Fund. This should put in place an annual pool of funds for capital budgeting. It is estimated that at the end of FY-90, there will be deposited \$2.8 million to the Capital Preservation and Economic Enhancement Fund and just under one million dollars in FY-91. With growth in gross production tax revenues, particularly in the area of natural gas, and the decline in debt service obligations from the cigarette tax, larger deposits will be made to the Capital Preservation and Economic Enhancement Fund. This fund should quickly begin to play an important role in providing a capital pool to fund the critical infrastructure needs of the state.

### **SUMMARY**

Oklahoma policymakers have recognized the link between debt creation and economic development through the expansion of Oklahoma's infrastructure. This positive link between debt creation and economic development, however, requires important oversight in order that debt creation not be carried beyond the capacity of the state. Oklahoma's debt capacity is significantly greater than the current debt level, and by comparison with other states, Oklahoma could carry many more times its current debt levels.

The important strides recently made in the area of debt management include the development of an executive capital budget and the creation of a capital

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funding revenue pool. These build on the efforts made in the 1987 legislative session which created the Office of State Bond Advisor. All state debt creation must be reviewed by the Office of State Bond Advisor, providing important oversight as well as vital research in the methods to finance debt most effectively and inexpensively.

To an important degree, Oklahoma's efforts in the area of debt management have generated the positive result of a AA bond rating from Standard & Poor's in 1989. Oklahoma had not sought a Standard & Poor's bond rating previously and, thus, this AA bond rating is an important affirmation of the financial soundness of the state and a tribute to the debt management efforts of the state in recent years. The various efforts to properly evaluate capital projects and to manage the state's debt coupled with the research showing the ability of the state to carry greater debt than currently obligated should result in a more favorable environment for the expansion of Oklahoma's infrastructure.

It is, as indicated earlier, a truism of economic development that without an expanding infrastructure, economic development will cease. The corollary is that without debt creation, infrastructure development will cease. Oklahoma is in an ideal position, because of previous low level of debt creation, to be able to expand her infrastructure in order to promote future economic development without impairing the

state's good credit rating or fiscal soundness.<sup>10</sup>

## NOTES

<sup>1</sup>A more detailed discussion of debt creation by private activity bonds for business development through trust authorities is contained in Alexander B. Holmes' article, "Tax Exempt Bond Financing — A New Era for Oklahoma Trust Authorities," *State Policy & Economic Development in Oklahoma: 1988, A Report to Oklahoma 2000, Inc.* (Oklahoma City: Oklahoma 2000, Inc., 1988), pp. 1-7.

<sup>2</sup>Robert K. Carr, *State Control of Local Finance in Oklahoma* (Norman, Oklahoma: University of Oklahoma Press, 1937).

<sup>3</sup>Stan Provus, State Bond Advisor, *The State of Oklahoma: Debt Capacity and Control Analysis*, March 1989.

<sup>4</sup>*Executive Budget, FY-91*, Office of State Finance, January 23, 1989.

<sup>5</sup>*The Condition of the Pension Systems of the State of Oklahoma, December 31, 1988*, Office of State Finance, August 1, 1989.

<sup>6</sup>*Executive Capital Budget, FY-91*, Office of State Finance, January 23, 1989.

<sup>7</sup>*On the State of Oklahoma's Fiscal and Economic Performance; Report of Governor Henry Bellmon to Moody's Investor Services*, Office of State Finance, May 3, 1989.

<sup>8</sup>O.S.L., HB 1065, Chapter 300, p. 983, 42nd Legislature, First Regular Session, 1989.

<sup>9</sup>O.S.L. SB 31, Chapter 279, p. 835, 42nd Legislature, First Regular Session, 1989.

<sup>10</sup>*Moody's Municipal Credit Report*, various specific reports, March 1989.

# THE EUROPEAN ECONOMIC COMMUNITY IN 1992: SOME INFLUENCES ON THE USA AND OKLAHOMA ECONOMIES

## INTRODUCTION

About 40 years ago the U.S., under the visionary leadership of Secretary of State General George Marshall, initiated the Marshall Plan aid program. It is well known that this aid program was aimed at helping the reconstruction of war-ravaged Europe and the 17 nations which received the \$13.3 billion of aid experienced remarkable economic reconstruction and recovery. In addition to the rather immediate tangible economic benefits that accrued to Western Europe, a new spirit of cooperation was also a side-product of the Marshall Plan program. This new spirit manifested itself in the signing of the Treaty of Paris on April 18, 1951 which gave rise to the European Coal and Steel Community in 1952. Because of the success of this venture, its founders, Belgium, the Federal Republic of Germany, France, Italy, Luxembourg and the Netherlands decided to widen its scope and to cover their entire economies. Thus, on March 25, 1957 they signed in Rome two treaties which led to the establishment of the European Economic Community (EEC) and of the European Atomic Energy Commission (EAEC) in 1958.

This study reviews the objectives, accomplishments and difficulties of the EEC; and it assesses the likely influences of the recent amendment to the EEC, the Single European Act, on member and non-member countries, e.g., the U.S.A. and the State of Oklahoma.

## THE EUROPEAN ECONOMIC COMMUNITY

The basic purposes of the EEC, as provided in Article 3 of the Treaty of Rome,<sup>1</sup> include the following:

- (1) the elimination of customs duties and of quantitative restrictions on the import and export of goods;
- (2) the establishment of a common customs tariff and of a common commercial policy toward third countries;
- (3) the abolition, between member states, of obstacles to freedom of movement for persons, services and capital;
- (4) the adoption of a common agricultural policy;
- (5) the adoption of a common transport policy;
- (6) the creation of a European Social Fund in order to improve employment opportunities;
- (7) the establishment of a European Investment Bank to facilitate the economic expansion of the Community; and
- (8) the association of the overseas countries and territories in order to increase trade with them and to promote jointly economic and social development.

To help implement the purposes of the EEC a number of institutions were created including the European Parliament, the Council, the Commission and the Court of Justice.

The European Parliament has a consultative and supervisory role in the EEC. Its 518 members are elected for five years by direct universal suffrage. The Council tries to ensure coordination of the member countries' general economic policies. The Commission sees to the proper functioning and development of the common market and has the right to initiate EEC policy. It represents the day to day aspects of EEC operations. Finally, the Court of Justice upholds the law in the implementation and interpretation of EEC treaties. It consists of 13 judges who are appointed for a six year term.

The major accomplishments of the EEC are both political and economic. Politically, a reconciliation between France and Germany has been achieved ending the conflicts which had led to wars in Europe every

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few decades. Economically, the EEC has made progress toward a large single market. Since 1970 the EEC tariffs between the original six members have been eliminated. A common external policy has become operational. There has been some freedom in the movement of workers and some liberalization of capital movements. The European Investment Bank has played an important developmental role particularly regarding the less developed areas of the EEC and the establishment of the Lome' Convention has been a significant step in EEC's assistance of poor countries in Africa, Caribbean and the Pacific. The group of the original members, Belgium, the Federal Republic of Germany, France, Italy, Luxembourg and the Netherlands, has been enlarged three times. In 1973, Denmark, Ireland and the United Kingdom joined. In 1981, Greece did. Finally, in 1986 Spain and Portugal joined the EEC.

Over the years, the EEC has evolved into a major force in international trade. In 1987, the EEC was the world's largest exporter accounting for about 20 percent and Japan for 9 percent of world trade respectively. EEC exports contributed 10 percent of its GNP as compared to the contribution of U.S. exports which was 5 percent of the U.S. GNP.<sup>2</sup> The EEC trade balance had a surplus of 10.95 billion ECU's in 1986 while the U.S.A. had a deficit of 155.19 billion ECU's.<sup>3, 4</sup>

The EEC efforts toward integration have been plagued by a number of problems or difficulties. They include the following:

(1) A troublesome area and one of great concern to the U.S.A. has been the EEC Common Agricultural Policy (CAP). It will be remembered that developing a common agricultural policy was a main objective of the Treaty of Rome. This policy emphasizes the need to increase agricultural productivity and the standard of living of community farmers. Its implementation, however, has included a rather generous system of import levies and export refunds. A result of this system has been that about \$50 billion a year of the EEC budget is used to support the Common Agricultural Policy.<sup>5</sup> The critics of CAP see the import levies as a major bottleneck to non-EEC agricultural imports and the export refunds as export subsidies designed to increase EEC's share of world agricultural exports. A related consequence of CAP is the generation of large agricultural surpluses. There have been surpluses of wheat, barley, sugar, beef, wine and dairy products<sup>6</sup> which seek outlets in overseas markets. In this regard, it may be pointed out that the U.S. share of wheat in the world market has fallen from 49 percent in 1981-1982 to 36 percent in 1984-5 while the EEC

share has increased from 14 percent to 16 percent.<sup>7</sup> Again the critics of CAP urge that EEC agricultural products be sold in the world markets without subsidies. For instance, on July 6, 1987 the U.S. proposed in Geneva, Switzerland that all forms of agricultural subsidies be eliminated within 10 years. Notwithstanding the intra-EEC political pressures in support of the CAP, the EEC Commission has made a number of proposals which if adopted would freeze support prices for agricultural products and thus help reduce agricultural surpluses.<sup>8</sup> However, given the present structure of the EEC, continuation of the basic objectives of the CAP is most likely.

(2) The enlargement of the EEC to 12 members has posed a number of problems. A major problem derives from the considerable disparities in the size of population and in the per capita output of the member countries. For instance, in 1986 the population of the Federal Republic of Germany, Italy, United Kingdom and France was 60.9 million, 57.2 million, 56.7 million and 55.4 million respectively. On the other hand, Greece, Belgium, Denmark and Ireland had a population of 10 million, 9.9 million, 5.1 million and 3.6 million respectively.<sup>9</sup> Moreover, GNP per capita in 1986 varied from \$12,600, \$12,080 and \$10,720 for Denmark, the Federal Republic of Germany and France to \$5,070, \$3,680 and \$2,250 for Ireland, Greece and Portugal respectively.<sup>10</sup> The 12 member countries represent 10 cultures, 9 official languages and 9 currencies.

The expanded EEC comprises more Mediterranean countries, i.e., Greece, Spain, Italy and France (Southern France) and more peripheral countries, i.e., United Kingdom, Denmark, Ireland, Portugal, Spain, Italy and Greece. Differences in social and economic structure and the rule of unanimity have precluded EEC's functioning in a decisive manner on a variety of issues involving the development of common policies. Because of these differences, which have given rise to conflicting interests, each enlargement of the EEC has been marked by long periods of accommodation and adjustments.<sup>11</sup>

To address the income disparities and to promote the economic development of the Mediterranean member states, the European Investment Bank and the European Regional Development Fund have allocated about 45 percent of their resources to Mediterranean projects. The European Social Fund has also provided assistance in job training and retraining in Greece and Southern Italy. During the 1975-81 period the Mezzogiorno area of Italy and southern parts of France and Greece have received more than 3.8 billion ECU's in EEC loans. On July 23, 1985 the



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so-called Integrated Mediterranean Programs (IMPs) were approved by the EEC Council. The targets of these programs are agriculture, infrastructure, crafts, industry, fisheries and tourism. For the 1986-1993 period 6.6 billion ECUs are to be allocated for the IMPs.<sup>12</sup> The general objective of these programs is to promote the development of the less developed areas of the EEC and to bring about greater harmony between the North and the South. This is a goal which undoubtedly will require persistence and a long run perspective.

(3) Another problem is that, although on paper a customs union has been in existence for more than 15 years, the reality at intra-EEC frontiers is not unlike that at EEC's frontiers with non-members. Member EEC states impose separate national import quotas on a variety of products including steel, textiles, Japanese cars, Eastern European cars. In addition, EEC members impose national export restrictions on military sensitive goods because of their NATO membership.<sup>13</sup> All and all a plethora of non-uniform standards and different regulations and tax systems prevail.

The above relatively brief comments and analysis suggest that during the last 30 years the EEC has experienced some successes but also continuing problems. Recognizing the reality that it has not become a truly integrated single market, the EEC endorsed the European Commission's *White Paper on Completing the Internal Market*. As a result, a comprehensive detailed legislative program signed early in 1986 and ratified in July 1987 has come to be known as the Single European Act.

### THE SINGLE EUROPEAN ACT

The Single European Act is an amendment of the 1957 Treaty of Rome. It also represents a recommitment of the EEC to complete the internal market by 1992. It crystallized when it also became clear that the European economies needed a stimulus toward more rapid economic growth and higher levels of employment. The program encompasses about 300 points and deals with improvement in the functioning of EEC institutions, with removal of all barriers to the free movement of goods, persons, services and capital, with cooperation in economic and monetary policy and with improved cooperation in the areas of social cohesion, research and development, the environment, foreign policy and defense.

A recently completed study by Paolo Cecchini<sup>14</sup> attempts to quantify the costs and benefits of the EEC with and without frontiers. It focuses on market barriers arising from red tape and delays created by

customs formalities, from restrictive practices in public procurement, from divergent product standards and from conflicting business and tax regulations inhibiting transborder business activity.

Microeconomically, the study estimates the cost of border formalities and red tape at 1.8 percent of the value of goods traded within the EEC. The average cost to companies of technical regulations and similar barriers to cross-border trade is valued at about 2 percent of their total expenses. Furthermore, the study estimates that industries and services which are now subject to market-entry restrictions will experience cost and price reductions of 10 percent to 20 percent in a more competitive environment. Finally, the cost savings benefits to industry from economies of scale are estimated at about 2 percent of Gross Domestic Product.

According to the study the macroeconomic influences of the Single Market are no less impressive. It is estimated that in the medium-term the downward pressures on prices and costs would result in a 6 percent cumulative decline on consumer prices; about 2 million jobs would be created; government balances would improve by about 2.2 percent of Gross Domestic Product; and EEC's external balance of goods and services would improve by 1 percent of Gross Domestic Product. Overall, EEC's Gross Domestic Product would be increased by about 5 percent.

The substantial benefits from the Single Market as outlined in the Cecchini study are premised on a number of required changes and/or reforms. Many of them are unresolved issues that have confronted EEC since its inception. These include changes and/or reforms in the Common Agricultural Policy and in the use of the structural funds. The EEC Commission has repeatedly underscored that the effectiveness of the Single Market depends in no small measure on reforms in agricultural policy (CAP). These reforms must aim to make European agriculture more competitive, to eliminate the large agricultural surpluses and to check the increase in the burden that the agricultural policy imposes on the EEC budget. In addition, the increased use of structural funds in the EEC budget to assist the less developed areas of the EEC e.g., Portugal, Ireland, Greece, parts of Spain, the South of Italy and Northern Ireland, is also viewed as a necessary condition for a successful single market. Other key issues that need to be addressed are monetary and fiscal harmonization, the development of internationally competitive enterprises and the avoidance of protectionism.

The Treaty of Rome in 1957 was not concerned with the goal of monetary integration. At a time of

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fixed exchange rates, the possibility of a common monetary policy took second place to other objectives such as a customs union and a common agricultural policy. But with the collapse of the Bretton Woods system in 1973 the Europeans have gradually recognized that floating exchange rates represented a risk and a cost to their economies which were involved in a large volume of intra-EEC trade. Thus, through a series of initiatives they eventually agreed to establish the European Monetary System (EMS) in 1979.

The primary purpose of the EMS is to promote monetary cooperation and monetary stability in Europe. It is comprised of three components: the European Currency Unit (ECU), the exchange-rate mechanism and the financial solidarity mechanisms. ECU, which is an artificial monetary unit, is calculated as a basket of set amounts of each EC currency (10 EC currencies). It is used for fixing central rates in the exchange rate mechanism and for denominating creditor and debtor balances in the process of intervention in EC currencies; also, it serves as a reserve and settlement instrument among the central banks in the EMS.<sup>15</sup> Although there have been a number of exchange rate readjustments among the EC currencies since 1979, and the non-participation of the sterling in the EMS has been a negative influence on its functioning, a substantial degree of exchange rate stability has been attained. But now, given the objective of the Single Act for economic and monetary cooperation leading to a union, greater progress in exchange rate stability will be needed. In addition, the establishment of the ECU as a common currency, the liberalization of capital movements among the EEC countries and the creation of a European central bank are issues that will need to be moved forward. Their resolution will require, apart from coping with a myriad of technical details, a spirit of supranationalism as the transferring of monetary and fiscal authority from the national governments to European institutions takes place.

Another issue is the establishment of uniform value added taxes (VAT) among the member countries. Currently there is wide variability in these taxes. Some countries have high VAT and others quite low.<sup>16</sup> Some depend on VAT for a large source of their revenues and others not so much. To reduce the variability and the height of these taxes and to move toward fiscal harmonization is not going to be easy. However, without such changes tax evasion would be encouraged and the smooth functioning of the Single Market would be jeopardized.

A common assumption of the establishment of a Single Market of 320 million people is that it will induce the formation of large-size enterprises via

mergers and consolidations and will bring about corresponding economies of scale to these firms. Notwithstanding the possibility that these firms may become internationally competitive, there are a number of potential problems associated with this eventuality. One of them is that the emergence of large European firms may have deleterious effects on the large numbers of small-size firms prevalent in the countries of Southern Europe. Many of these small firms have operated in an environment of red tape and bureaucracy for quite some time. They are local in scope and undercapitalized. Located in the periphery, they are not the beneficiaries of externalities as the firms of the center are, i.e., Northern Europe. What it comes down to is whether the small businesses of Southern Europe, under the impetus of the Single Market, will be able to restructure and become competitive by 1992. If not, would they be eliminated or would they seek the protection of their governments which in turn may ask for exceptions?

In this connection, Pierre Pescatore, former Judge on the Court of Justice of the European Communities, expresses his concern about the effectiveness of the Single Act by pointing out that a number of exceptions are allowed in the Final Act for unilateral protective measures under the guise of "safety" and "protection of the environment."<sup>17</sup> He further emphasizes that unilateral reservations about the Single Act have already been expressed and recorded by Denmark, Greece and Portugal.<sup>18</sup> In this regard, it should be pointed out that the Final Act, which is a document attached to the Single Act, contains twenty declarations. Some of them are interpretations of the Single Act and others are reservations by individual countries regarding the Single Act. These declarations are likely to generate difficulties in the implementation of the Single Act.

One related issue has to do with the so-called qualified majority system which the Single Act has introduced to take the place of the unanimity rule of the past. According to this new system, each member country is allocated a given number of votes according to its size. For instance, France, Italy, Germany and the United Kingdom are assigned ten votes each. Belgium, Greece, Netherlands and Portugal have five votes each, Spain has eight votes, Denmark and Ireland three votes each, and Luxembourg has two votes. Decisions can be made by a minimum of 54 votes out of the possible 76. It takes 25 votes to block a motion by a large country. Given the differences in the economic and social structure among the 12 members, the likelihood for deadlocks is real.

## IMPLICATIONS FOR THE U.S. AND OKLAHOMA ECONOMIES

At this juncture, it is not clear whether Europe 1992 would be open or restricted to non-European firms, financial or non-financial, and whether it will discriminate against U.S. made products. A great deal of speculation exists on these issues. In this regard, some argue that Europe 1992 would be a Fortress Europe and others that it would be a Partnership Europe. The fears of a protectionist Europe are premised on that all the documents dealing with the Single Market make no references or provide no specifics on the stance that Europe 1992 will take regarding non-member countries.

However, one thing is clear from the data in Tables 1-4, that U.S. and Oklahoma trade with the European Economic Community represent an important economic activity. More specifically, the following are

worth noting:

- (1) U.S. exports with the EEC as a percent of total U.S. exports were significant, but relatively constant, 23.88 percent in 1981 and 23.95 percent in 1987.
- (2) Manufactured exports to the EEC as a percent of total U.S. exports to the EEC increased from 67.88 percent in 1981 to 79.04 percent in 1987, while agricultural exports decreased from 19.64 percent in 1981 to 11.32 percent in 1987.
- (3) Beginning in 1984 the U.S. experienced persistent and increasing trade deficits with the EEC.
- (4) The data show that Oklahoma agricultural exports were \$342.2 million and manufactured exports about \$843 million in 1987.<sup>19</sup> Of the \$843 million manufactured exports, about 31

**TABLE 1**  
**U.S. Merchandise Trade**  
**(billions of dollars)**

Year	World					
	Exports			Imports		
	Total	Manufactures	Agricultural Products	Total	Manufactures	Agricultural Products
1981	\$238.68	\$171.74	\$43.81	\$273.35	\$156.38	\$18.80
1982	216.44	155.30	37.01	254.88	158.08	17.28
1983	205.63	148.46	36.45	269.87	178.44	18.10
1984	223.99	163.59	38.23	346.36	241.82	21.58
1985	218.82	167.91	29.61	352.46	269.47	22.02
1986	226.82	179.93	26.61	382.96	308.86	23.11
1987	252.86	200.04	29.13	424.08	337.74	22.62

Source: U.S. Department of Commerce, *United States Trade, Performance 1987*, June 1988.

**TABLE 2**  
**U.S. Merchandise Trade**  
**(billions of dollars)**

Year	European Economic Community (12)					
	Exports			Imports		
	Total	Manufactures	Agricultural Products	Total	Manufactures	Agricultural Products
1981	\$57.01	\$38.70	\$11.20	\$45.58	\$34.99	\$2.84
1982	52.36	34.58	10.39	46.41	35.09	3.12
1983	48.43	33.56	9.18	47.87	37.24	3.39
1984	50.49	36.72	8.19	63.41	50.91	4.08
1985	48.99	36.84	6.40	71.61	59.75	4.49
1986	53.15	40.74	6.71	79.52	69.14	4.63
1987	60.57	47.88	6.86	84.87	74.02	4.66

Source: U.S. Department of Commerce, *United States Trade, Performance 1987*, June 1988.

percent, or \$266 million were with the EEC. In addition, as the U.S. Department of Commerce estimates, a substantial amount of Oklahoma sales of manufactures to other U.S. industries became inputs of manufactures for export by these industries. For instance, these Oklahoma indirect export sales were estimated at \$1.2 billion in 1984.<sup>20</sup> If we assume that about 25 percent of Oklahoma agricultural exports have been sold to the EEC and that indirect export manufactures in 1987 were about equal the amount of direct export sales (\$266 million), as they were in 1984, then the total export activity of Oklahoma (agricultural and manufactures exports) with the EEC can be estimated to be about \$618 million.<sup>21</sup>

- (5) Both in 1984 and in 1987, Oklahoma's largest manufactured export earnings were generated by the non-electric machinery industry (more than one-third).
- (6) Both in 1985 and in 1987, wheat exports represented the most important agricultural export of Oklahoma. Wheat exports contributed about 75 percent in 1985 and about 57 percent in 1987 of agricultural export earnings.

Given the above information, it is obvious that what will happen to Europe in 1992 will be quite important to both the U.S. and Oklahoma economies. Specifically, possible changes to the Common Agricultural

**TABLE 3**  
**Oklahoma Manufactures Exported to the**  
**European Economic Community**  
**1987**  
**(millions of dollars)**

Major Industries	Dollars	Percent
Food Products	\$ 2.37	.89%
Apparel Products	1.26	.47
Furniture	5.54	2.08
Paper Products	12.57	4.72
Chemical Products	77.81	29.18
Petroleum Refining	3.85	1.44
Rubber & Plastics	3.45	1.30
Primary Metal Products	2.64	.99
Fabricated Metal Products	3.44	1.29
Non-Electrical Machinery	106.64	39.99
Electric & Electronic		
Machinery	12.04	4.52
Transportation Equipment	15.27	5.73
Scientific Instruments	11.42	4.28
Other	8.36	3.12
<b>Total</b>	<b>266.66</b>	<b>100.00</b>

Source: U.S. Bureau of the Census, 1987 (computer tape).

Policy will have direct relevance to Oklahoma agriculture.

If the Single European Act is implemented and Europe 1992 becomes an open single market of 320 million people, U.S. firms which operate in it are likely to experience substantial benefits as the Cecchini study has shown. These may be the result of the following: (1) economies of scale; (2) the new competitive environment of Europe 1992; (3) cost reductions because of the adoption of uniform standards, certification procedures and regulations; (4) cost effective advantages because of the development of EEC-wide networks of production and distribution. U.S. banks licensed to operate in Europe 1992 may also experience lower costs and higher profits. Large and efficient U.S. banks may do well against the small and less competitive European banks, especially in the small European countries.

**TABLE 4**  
**Oklahoma Major Agricultural Exports**  
**(millions of dollars)**

	1985	1986	1987
Wheat	\$353.2	\$203.6	\$196.3
Soybeans	11.8	11.6	13.7
Peanuts	10.1	9.7	11.7
Cotton	27.7	14.7	35.1
Live Animals &			
Meat	18.1	20.6	24.7
Hide & Skins	17.5	20.0	24.1
Poultry	3.2	3.5	6.7
Fats	9.0	7.3	6.8
Other	20.2	20.0	23.1
<b>Total</b>	<b>470.8</b>	<b>311.0</b>	<b>342.2</b>

Source: U.S. Department of Agriculture, *Foreign Agricultural Trade of the U.S.*, March/April, 1988.

If Europe 1992 is protectionist, U.S. and Oklahoma exports to the EEC are likely to be discriminated against. Discrimination may take the form of standards based on European practice and experience and of legislation which may require that the output of goods and services traded freely in the Single Market include total or partial inputs from European firms. A major source of EEC protectionism which affects Oklahoma wheat exports is the Common Agricultural Policy. Given that the CAP has been a champion of protectionism, if no reforms are made, continuation of subsidies, input barriers, quotas and other trade distorting barriers is certain. It was mentioned before that as Europe moves toward a Single Market and mergers and consolidations take place, the small-size and relatively inefficient firms of the less developed areas

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of the EEC may attempt to slow down their integration in order to protect themselves from intra-market and extra-market competition. In this regard, all indications are that legislation toward the creation of the Single Market, because of the fears of national governments on local industries, is moving slowly.

Various spokespersons in Brussels have tried to allay the fears of a Fortress Europe by stressing the fact that the EEC is the world's largest exporter, i.e., about one-fifth of world trade, and because of that it has a vested interest in free trade.<sup>22</sup> In a recent visit to Washington, D.C., EC Commission President Jacques Delors has underscored the importance and desirability of a true and friendly partnership with the U.S.A.<sup>23</sup> Notwithstanding these reassurances, there appears to be little doubt that the benefits of Europe 1992 will not be given away to all and especially to those whose markets are closed to Europe. A likely scenario is the strategy of reciprocity, that is, the benefits of Europe 1992 to firms of non-members will be conditional upon a guarantee for similar opportunities in those firms' own countries.<sup>24</sup> Given the fact that there is a certain degree of ambiguity with the concept of reciprocity, attempts to define it, especially as it pertains to financial firms, include the following possibilities.

- (1) Reciprocity may mean that the treatment of non-member firms in the EEC will mirror the treatment the EEC firms receive in other countries. In this regard, if financial regulations in the U.S. do not correspond to those of the EEC the mirror approach may prove discriminating to U.S. firms in the EEC. To avoid this, the U.S. will have to change financial regulations to mirror EEC practices in order for its firms to be given equal access to Europe 1992.
- (2) Reciprocity may mean that non-member firms will be accorded national treatment in the EEC. This implies that U.S. banks will be treated the same way as EEC banks. This approach will make it possible for U.S. banks to compete equally with the EEC banks throughout the Single Market.
- (3) Rules of reciprocity may not be applicable to non-member firms which are already operating in the EEC.

In the final analysis, the challenge facing the EEC and its trade partners, e.g., the U.S.A., is to help accentuate the positive aspects of the Single Market and to enter into discussions and/or negotiations in order to avoid the adoption of standards and restrictive practices which may lead to the establishment of a protec-

tive wall. In this connection, increased understanding of the workings of the EEC and vigilance on developments leading to the Single Market is necessary.

## CONCLUSIONS

There is no doubt that the establishment of the European Economic Community has meant increased cooperation for Europe. It has attained some of the goals of the Treaty of Rome but not others. It certainly has become a loose customs union, that is one with several frontiers rather than one. Its Common Agricultural Policy has been a boost to the incomes of the European farmers but has encouraged large agricultural surpluses and has also imposed a great burden to the EEC budget. The enlargement of the EEC to 12 members has increased the size of potential market but also the economic, social and political diversity of the EEC.

The Single European Act represents a recommitment to the general goals of the Treaty of Rome and a concerted effort to amend it in order to attain an integrated Europe. The potential benefits of the Single Market, both on the micro and macro levels, to member and non-member countries e.g., the U.S.A., may be substantial. However, these potential benefits are premised on a number of changes and/or reforms in areas such as agricultural policy, monetary and fiscal harmonization and international openness and competitiveness. In turn, the implementation of these changes depends on the political will of the members to act in unison. If there are differing perceptions in the distribution of these benefits among the member countries, national concerns leading to exceptions may dilute European initiatives, and the required changes may be postponed or delayed. If this proves to be the case, the establishment of a Single Market and of an integrated and openly competitive Europe may continue to be an elusive goal with adverse influences on internal and external trade, and on U.S. and Oklahoma exports to the EEC. In that event, Europe, and the trading community at large, may have to be satisfied with a half loaf rather than a full loaf, at least in the short run. Thus, a loose customs union or free trade area may continue until Europe attains greater social and economic cohesion and learns to embrace and practice supranationalism.

## NOTES

<sup>1</sup>*Treaties Establishing the European Communities*, abridged edition (Luxembourg: Office for Official Publications of European Communities, 1987), pp. 125-126.

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<sup>2</sup>EC Office of Press and Public Affairs, *European Community News* (Washington, D.C., October 20, 1988), pp. 1-7.

<sup>3</sup>See Eurostat, 1988.

<sup>4</sup>The exchange rate ECU/U.S. dollar varies daily as the various EC currencies that make up the ECU vary against the dollar. One ECU was worth \$1 from 1960 to 1972, \$1.24 in 1975, \$1.12 in 1981, \$.98 in 1982, \$.89 in 1983, \$.79 in 1984, \$.76 in 1985, \$.98 in 1986 and \$1.15 in 1987.

<sup>5</sup>Axel Krause, "U.S. - EC Strains Seen Continuing Into The Fall," *Europe* (September 1987): 14.

<sup>6</sup>Mark Clinton, "Farm Trade: Return to Gatt Urged," *Europe* (March 1986): 16-17 and 48.

<sup>7</sup>*Ibid.*, p. 48.

<sup>8</sup>Axel Krause, "U.S. - EC Strains Seen Continuing Into The Fall," *Europe* (September 1987): 14-15.

<sup>9</sup>World Bank, *World Development Report 1988* (Oxford University Press, 1988), pp. 22-23.

<sup>10</sup>*Ibid.*

<sup>11</sup>A.J. Kondonassis, "The European Economic Community & Greece: Toward a Full Membership?," *Economia Internazionale* (May-August, 1977): 1-11.

<sup>12</sup>C. Arvanitopoulos and P. Yannas, "EC Policy Sets Special Programs for Mediterranean," *Europe*, (December 1986): 28-29.

<sup>13</sup>Paul Cheeseright, "The EEC is Removing Internal Barriers,"

*Europe* (March-April 1985), 28-29.

<sup>14</sup>Paolo Cecchini, *The European Challenge, 1992* (Aldershot, England: Wildwood House, 1988), 3-127.

<sup>15</sup>European Affairs/Dossier, "The European Monetary System," *Europe* (December 1987): 22-25.

<sup>16</sup>For instance, a liter of pure alcohol in the United Kingdom is subject to 24.83 ECUs in tax, in France 11.49 ECUs and in Greece .48 ECUs.

<sup>17</sup>Pierre Pescatore, "Some Critical Remarks on the Single European Act," *Common Market Law Review* (1987): 12.

<sup>18</sup>*Ibid.*, p. 17.

<sup>19</sup>See U.S. Bureau of the Census, 1987 (Computer Tape).

<sup>20</sup>U.S. Department of Commerce, "U.S. Manufactured Exports and Export-Related Employment," 1984.

<sup>21</sup>Because indirect export sales are involved in both the agricultural and manufactured exports of Oklahoma, estimates must be viewed as tentative.

<sup>22</sup>EC Office of Press and Public Affairs, *European Community News* (Washington, D.C., October 20, 1988), p. 1.

<sup>23</sup>Carola Kaps, "Delors Proposes New Partnership with U.S.," *Europe*, (July-August 1989): 14.

<sup>24</sup>EC Office of Press and Public Affairs, *European Community News* (Washington, D.C., October 20, 1988), p. 1.

## CHILD CARE: WHAT ROLE FOR STATE GOVERNMENT?

By the mid-1990s, an estimated two-thirds of all preschool-age children will need some type of nonparental child care, due to the labor force participation of their mothers. Concern about the accessibility, affordability and quality of this care has already prompted both state and federal legislators to consider many options for improving the U.S. system of child care. In 1987, alone, state legislatures passed 112 pieces of legislation dealing with child care issues, and nearly 100 proposals relating to child care were introduced in the 100th Congress.

Up to now, the child care issue has received somewhat limited attention in Oklahoma. This situation is likely to change, however, as the Oklahoma Legislature responds to recent recommendations by two study groups to improve the availability, quality, and affordability of child care in Oklahoma.<sup>1, 2</sup>

Although there is growing agreement that government should do something about child care, there is no consensus about what that something should be. The purpose of this article is to review and evaluate some of the basic issues and options likely to face legislators in the area of child care. Two primary issues are examined: (1) the appropriate role of the government in providing day care, and (2) the effect of more and/or better child care on state economic development. Some modest policy suggestions are also made.

### WHAT ROLE FOR GOVERNMENT?

Day care in the United States is provided in a variety of ways. According to a recent government report 47.9 percent of children under five years were cared for by relatives.<sup>3</sup> Another 22.3 percent were cared for by nonrelatives in other homes, 23.1 percent were cared for in organized facilities, less than 1 percent attended school, and the remainder (about 6 percent)

were cared for either by a nonrelative in the child's home, or they simply cared for themselves.

Presumably, this pattern largely reflects the free exercise of individual preferences, conditioned by the family incomes available for this and other purposes. Government actions influence the choices made, however. The federal government, for example, has 22 separate programs that provide some form of child care assistance, primarily through provisions of the tax code and special features of public assistance programs.<sup>4</sup> State governments subsidize child care through their tax codes and public assistance and education programs, and also exert influence on buyers and providers of child care services through their regulatory activities.

Given that the issue of child care has struck a responsive chord with the public, there will be increasing pressure on governments to expand their role in allocating resources to child care. Are there any precepts that should guide their future (or, for that matter, present) involvement?

The normal presumption by economists is that government should be involved only when the market fails to allocate resources efficiently or equitably—and then only if such involvement would actually improve matters. Child care appears to be a case where such a test has not yet been imposed, but one in which government involvement is warranted.

There are four ways in which government involvement could improve matters: (1) by aiding at-risk preschool children, (2) by assisting low-income families, (3) by reducing labor market discrimination, and (4) by providing quality assurance. Governments also need to design the tax code to allow properly for day care expenses.

### Aid to At-Risk Pre-School Children

Most of the nonparent child care received by children 5 to 14 years of age is provided by elementary schools. This country has a long-standing, and nearly universally accepted, policy of using public funds to pay for this schooling. Proponents of publicly-supported elementary education argue that public

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support is essential if society is to realize all of the potential benefits from schooling, and that private funding alone would result in too little education being provided from society's perspective.

Some proponents of greater government support for child care have argued that early childhood education (education to three and four-year-olds in an organized setting) has the same types of outcomes as traditional elementary schooling. They have yet to show, however, that early childhood education provides benefits to society that are not also realized through traditional schooling starting at age five or six—with one notable exception. The exception is disadvantaged or "at risk" three and four-year-olds enrolled in early education programs.

Research has demonstrated short- and long-term academic and social benefits to these youngsters from early education.<sup>5, 6</sup> Benefits include a reduced need for remedial education, lower dropout, delinquency and adolescent pregnancy rates, and less need for public assistance in adulthood.

Currently, fewer than 20 percent of the four-year-olds (and virtually none of the three-year-olds) at risk of subsequent academic difficulty (because of low family income or language difficulty) receive early childhood education. Thus, there is both logic in and need for greater provision of public funds for this purpose. The same argument also justifies increases in public funds for early childhood education as a means of providing child care for disadvantaged children. It does not, of course, justify public funding of early childhood education as a means of providing child care to all three and four-year-olds.

### **Assistance to Low-Income Families**

There is widespread agreement that government has an appropriate and important role to play in alleviating poverty. The market system seems unable to solve this problem by itself, and substantial resources have been directed toward this end through a large number of government expenditure programs and provisions in the tax code.

Although much of this assistance is given through programs in which work by the recipients is not a condition of assistance, many Americans prefer that the poor work whenever possible. Surveys have determined that the poor are generally not any less willing to work than nonpoor. Many of the poor, however, face significant obstacles to working, one of which is their inability to afford quality child care.

Parents of poor families with young children often face the prospect of employment at low wages, or they need to acquire additional education or training to im-

prove their wage prospects. Quality child care for these parents is often a critical need. According to the Census Bureau's 1982 *Current Population Survey*, for example, 36 percent of nonworking mothers in families with annual incomes less than \$15,000 would have sought work if reasonably-priced child care had been available. Many mothers receiving support from Aid to Families with Dependent Children (AFDC) are almost certain to remain unemployed, given their skills and AFDC's inadequate provisions for child care. In fact, most poor mothers cannot complete their education, obtain job training, or get established in the work force without long-term child care assistance.

Although government should support the poor (women and men) in acquiring child care as a means of fighting poverty, government dollars invested in child care assistance could be a sound investment—one that yields benefits greater than the costs of assistance. In Massachusetts, for example, the state's Employment and Training Choices program provides day care assistance to welfare mothers while they are in job training and for one year after job placement. This segment of the program cost \$25 million in 1986. In return, the state realized savings on welfare payments of \$91 million, on food stamps of \$22 million, on Medicaid of \$39 million, and also received increased tax revenues of \$19 million.<sup>7</sup>

### **Reduce Labor Market Discrimination**

Labor market sex discrimination exists when two equally qualified people are treated differently solely on the basis of their sex. In the absence of discrimination, profit-maximizing employers in competitive labor markets will pay workers in accordance with their productivity, and an individual's sex would be irrelevant consideration. If labor market discrimination exists, men and women who in its absence would receive the same pay do not receive the same pay.

Women's earnings are, on average, only about 60 percent of men's earnings. Some of this differential can be explained by sex differences in qualifications. A large number of researchers, however, have concluded that a substantial portion (as much as 50 percent) of this differential cannot be explained by sex differences in qualifications.<sup>8</sup> The unexplained differential is commonly attributed to labor market discrimination.

Government policies to combat labor market discrimination can be justified on two grounds. Government intervention may be rationalized as a simple matter of justice. Government intervention may also be rationalized as a means of increasing output by more efficiently allocating resources. To see this, consider the typical case of sex discrimination



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where women are hired at lower wages than equally productive men. In this case, labor costs do not serve as accurate indicators of social costs. Society produces too little of the output that uses overpriced male labor and too much of the output that uses underpriced female labor. The value of the social product would be greater if the price of female labor increased relative to the price of male labor and output adjusted accordingly.

Child care is not normally viewed as a tool for combatting labor market discrimination, but it can play such a role. If employers believe that women, as a group, are less productive than men because of their child care responsibilities, then making child care more dependable should reduce discrimination based on this perception. To be effective in this sense, government assistance may have to be provided directly to, or through, the employer. Thus, government subsidies to employers may be justified as a means of combatting labor market discrimination.

### **Provide Quality Assurance**

Child care hardly fits the classic textbook case in which buyers have perfect information about all attributes of the product. The typical child care buyer is usually aware of only a small number of child care providers, and has only partial information on the quality of the care provided by each. While it is true that the demand for better information will lead to the development of private information and referral services, there is a role for public assistance of such services. For one thing, information has a public good quality in the sense that it is difficult to preclude those who don't pay from sharing in the information, and it is for this reason likely that information on child care will be undersupplied by the private sector. In addition, the expense of privately-provided information and referral services will limit the services to those who can afford them.

There is more to quality assurance, however, than accessible information. Working parents typically experience considerable anxiety over the quality of the child care that is available.

Quality child care means a safe environment that, ideally, includes child supervision by a well-trained caregiver or staff of caregivers. Only eight states have any training requirements for home-based care. Many centers in many states operate without licenses or insurance, and the staff-to-child ratio often exceeds the standard of at least one adult to five children recommended by the National Association for the Education of Young Children.

The point is that quality assurance may require the establishment of some standards for licensing. At this

juncture in the development of the U.S. child care industry such standards may have to be prescribed by government. Parents, employers, and taxpayers need some assurance that they are getting their money's worth.

### **Tax Code Provisions for Child Care Expenses**

Child care expenses may be viewed as a cost of earnings income or as a factor influencing a family's ability to pay income taxes. If these views are sound some provisions are required in the tax code for child care expenses.

Income subject to taxation should exclude the necessary expenses incurred in earning income. Thus, it may be appropriate to provide a deduction or credit for necessary child care expenses. Some tax experts do argue that expenses incurred for child care by working parents, especially by families in which both parents work, ought to be treated for tax purposes as a necessary expense of earning income. They would acknowledge,<sup>9</sup> however, that it is difficult to determine exactly what share of expenses is "necessary" and what share represents extra services provided to children.

Some reputable economists have taken the position that children are similar to other goods and services that parents choose to buy and that child care expenses are simply expenditures for household consumption.<sup>10</sup> Proponents of this view see no need to provide income tax deductions or credits for child care expenses.

Another approach maintains that the ability to pay of families with different numbers of working parents is different—that families in which both parents work and pay for child care have lesser ability to pay taxes than families with a parent at home who can provide child care. Proponents of this view argue that a deduction or credit should be granted to two-earner families for the value of at-home child care services foregone.<sup>11</sup> Although there is a logic to this view, it would be difficult to determine the value to be placed on at-home child care services.

### **EFFECTS ON THE ECONOMY**

Although there is a case, based on equity and efficiency consideration, for government assistance in the provision and acquisition of child care, there is great interest at the state level in whether such assistance would have a positive effect on state prospects for economic development. A review of the benefits and costs of such assistance strongly suggests that it would.

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## Benefits

Young children are a significant deterrent to labor force participation by their mothers, perhaps even more so in Oklahoma, which has a labor force participation rate for women with children under five that is significantly below the U.S. average.<sup>12</sup> At the same time, the labor force participation rate of these women has been increasing more rapidly than for any other group. Availability of affordable, quality child care is important because it would encourage more young women to enter and remain attached to the labor market, and it would provide better care for children of mothers who are already working.

Public policy that subsidizes purchased child care lowers its cost to buyers. We would expect the lower price to increase the labor force participation of women with children. The results of an empirical study by Robins and Spiegelman indicate that this is likely to be the case.<sup>13</sup>

Is this important to the economy? Bloom and Steen argue that it is. They point out that we are heading into a decade in which labor shortages are likely to develop as the baby-bust generation comes of age, and that the potential increase in the female labor supply may have to be realized. How large is this potential? They estimate that the labor force would grow 13 percent faster if only one-half of the women who claim they would go to work if child care were available actually did so.

Child care subsidies are also likely to have long-run effects on the women influenced by them. They would experience fewer and shorter work force interruptions, and establish a record of longer and more continuous work experience. This should have a positive effect on both their occupational attainment and their earnings. Thus, child care subsidies could contribute to a reduction in labor market inequality between men and women. As we noted above, it may be wise policy to provide some of these subsidies to employers.

What would a reduction in labor market sex discrimination mean to the economy? We argued above that it would increase the social product by inducing a reallocation of labor from the production of products that use too much underpriced female labor to those that use too little overpriced male labor. There are other, possibly more important effects, however.

If women are deterred by discrimination from investing in their human capital (through schooling and job training, for example) society loses a valuable resource. Thus, reduced discrimination benefits society as well as individuals by bringing their talents and abilities to bear in new areas. To the extent that women get an opportunity previously denied, the

economy taps an important and previously wasted resource. Only when there is true equal employment opportunity can we take full advantage of each individual's special talents and skills.

Another long-run advantage resulting from subsidized child care is that it increases the likelihood that poor mothers will become taxpayers, rather than wards of the state. Such women will provide better role models for their children, reducing the likelihood of intergenerational transmission of poverty. We have already noted above the savings in public assistance and increased taxes that were realized in Massachusetts in 1986 from the impact of child care subsidies. More recently, Robins has found that simply making child care more convenient, by locating facilities within low-income public housing projects, unambiguously reduces the probability of being dependent on welfare and the amount of welfare payments.<sup>14</sup>

A reduction in welfare payments frees funds for other purposes. There is nothing to preclude their use for development-enhancing activities. Lower welfare costs also tend to enhance a state's attractiveness as a potential location for new or expanding businesses.

A third long-run advantage flows from government subsidies of Head Start like complementary child care and early childhood educational programs. As noted above, there is considerable evidence that the disadvantaged or at-risk children who attend such programs are more likely to complete more years of schooling and to exhibit less socially unproductive behavior, and less likely to become dependent on welfare payments. Thus, there are both individual and social benefits as a result of this investment in the human capital of children at risk of academic failure. In its absence, society wastes resources devoted to years of schooling from which many of these individuals would obtain little benefit.

In addition to children, parents, and taxpayers, employers have a growing stake in the availability and quality of child care. In the long run, they benefit from any programs that help today's children to become more productive workers. In the short-run, subsidized child care makes more workers available, improves female labor force attachment, and reduces absenteeism and the unproductive use of company time for child care matters.

## Costs

There are costs, as well as benefits, associated with government subsidies for child care. There is the cost of the subsidy, per se, which appears either as a program outlay or as reduction in tax revenues. In a broader sense, however, costs include any adverse

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effects of the subsidy. Of special concern are the possibilities of adverse effects on the children receiving the care, and of induced increases in the number of children. The latter need not be a cost, even if it should occur, but it is treated as such here because opponents of subsidized child care frequently express concern about this aspect of the issue.

The most emotionally charged issue is the effect of maternal employment on children. According to Bronfenbrenner's and Crouter's exhaustive review of the evidence, it is not obvious that the fact a mother works has any clearly predictable effects on her children.<sup>15</sup> They found no evidence of adverse effects of quality day care, and some evidence of better social adjustment. The impact on school-aged and older children from successfully working mothers appears to be quite positive, probably due to the greater satisfaction she experiences and the independence she fosters in her children. Daughters, particularly, are more likely to hold their mothers in high esteem and to adopt them as role models, and sons are more likely to favor equality for women.

The law of demand tells us that reducing the price of any good, including children, will result in an increase in quantity demanded. Thus, from this perspective, child care subsidies could increase the number of children. This is not the only effect, however. As noted above, subsidies also encourage the mother to enter the labor market and enhance her prospects for higher earnings. This tends to increase the opportunity cost of additional children. Further, greater work attachment may serve to change women's preferences toward work and the income and independence it brings, and away from children as the central focus of their lives.

It is not possible to determine, *a priori*, which effects are likely to be stronger. None of the advanced industrialized countries that have subsidized child care, however, have experienced significant changes in their birthrate.

### **Net Effect**

It is not possible to draw any definite conclusion at this date about the net effects—benefit less costs—of government subsidies for child care as a whole. In a larger sense, this can be done only when there is evidence of this type for a whole host of specific programs. To date, child care assistance for Head Start-like programs that benefit at-risk children has clearly passed a cost-benefit test. Child care assistance provided in the context of workfare programs also appears to have passed such a test, as evidenced by the favorable evaluations of the Massachusetts' Employ-

ment Training Choices program in 1986 (as reported above), and a simpler workfare program in San Diego.

### **SUGGESTIONS FOR POLICYMAKERS**

In spite of the difficulty of doing so in some cases, policymakers may want to assign a high priority to cost-benefit analyses of existing and proposed child care assistance programs. A program that passes such a test will clearly contribute to an improved economy and be less vulnerable to political pressure.

In spite of the pressure to do something about child care, policymakers will probably want to move cautiously in adopting new programs. The policy agenda sanctioned as a corrective for market failures is really quite modest. Much of the potential increase in female labor force participation will occur without additional government assistance. In fact, the pace will accelerate as business firms become more heavily involved in providing the large amount of assistance that they will find to be in their own best interest to provide.

This does not mean that government should eschew subsidies to business for the purpose of providing child care. Some subsidy may be necessary as a means of combatting labor market discrimination and fighting poverty. Government should ask for periodic evidence, however, of relative improvement in women's occupational status or earnings as a condition of continued subsidies. There seems to be no basis in economics for general business subsidies and no basis for failure to monitor progress toward fulfilling the purposes of the subsidies that are given.

In spite of a flurry of articles in the business and popular press, there are many businesses that need to be made aware of the costs and benefits to the firm of child care assistance. Although the private sector will probably provide much of this information, government-sponsored research may be helpful in speeding the rate of adoption of new management and personnel practices regarding child care.

In spite of a relatively high degree of public acceptance of the existing tax credits for child care in both the federal and state (Oklahoma included) income tax codes, a thorough review of this type of child care assistance seems in order at the state level. In Oklahoma, a child care tax credit equal to 20 percent of the federal child care tax credit is allowed in determining Oklahoma income taxes. We need to determine if this credit is needed in addition to the federal credit as a means either of offsetting the costs of earning income or of offsetting differences in ability to pay. We also need to deal with the question being raised at

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the federal level; namely, should the child care tax credit be provided to high income families who are much better able to afford child care? This question gets to the heart of how progressive we really want the state income tax to be.

Finally, there is a need for a thorough review of existing regulations pertaining to the provision of child care. There is reason to believe that some regulation of this industry is in the public interest. Care must be exercised to ensure, however, that our standards are not too high (that costs do not exceed benefits), and that instead of mandating solutions to the child care problem we foster the exercise of individual initiative in finding new and better ways to care for the state's children.

### NOTES

<sup>1</sup>Price Waterhouse, *Comprehensive Study of State and State Supported Services to Children and Families in Oklahoma* (Oklahoma City: Oklahoma Legislature, 1988).

<sup>2</sup>Post Summit Working Group on Families, Children and Youth, *A Brighter Tomorrow* (Oklahoma City: Office of the Governor, 1988).

<sup>3</sup>Bureau of the Census, *Who's Minding the Kids? Child Care Arrangements: Winter 1984-85, Series P-70, No. 9* (Washington, D.C.: Government Printing Office, 1987).

<sup>4</sup>Phillip K. Robins, "Federal Support for Child Care: Current Policies and a Proposed New System," *Focus* 11 (1988a): 1-9.

<sup>5</sup>Consortium for Longitudinal Studies, *Lasting Effects After*

*Preschool: Final Report* (Washington, D.C.: U.S. Government Printing Office, 1981).

<sup>6</sup>Lawrence J. Schweinhart, *The Preschool Challenge* (Ypsilanti, Michigan: High Scope Education Research Foundation, 1985).

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<sup>8</sup>For summaries of this literature see Francine D. Blair, "Discrimination Against Women: Theory and Evidence," in *Labor Economics: Modern Views*, William A. Darity, Jr., ed. (Boston: Kluwer Nijhoff, 1984); Cynthia B. Lloyd and Beth Niemi, *The Economics of Sex Differentials* (New York: Columbia University Press, 1979); and Donald J. Trieiman and Heidi I. Hartman, eds, *Women, Work and Wages: Equal Pay for Jobs of Equal Value* (Washington, D.C.: National Academy Press, 1981).

<sup>9</sup>See Richard Goode, *The Individual Income Tax* (Washington, D.C.: Brookings Institution, 1976).

<sup>10</sup>Henry Simons, *Personal Income Taxation* (Chicago: University of Chicago Press, 1938); and Gary Becker, *A Treatise on the Family* (Cambridge: Harvard University Press, 1981).

<sup>11</sup>Richard A. Musgrave and Peggy B. Musgrave, *Public Finance in Theory and Practice* (New York: McGraw-Hill Book Co., 1989); and Robin W. Boadway and David E. Wildasin, *Public Sector Economics*, 2nd ed. (Boston: Little Brown and Co., 1984).

<sup>12</sup>Price Waterhouse, 1988, p. A-25.

<sup>13</sup>Phillip K. Robins and Robert G. Spiegelman, "An Econometric Model of the Demand for Child Care," *Economic Inquiry* 16 (1978): 83-94.

<sup>14</sup>*Ibid.*

<sup>15</sup>Urie Bronfenbrenner and Ann C. Crouter, "Work and Family through Time and Space," *Families That Work: Children in a Changing World*, S.B. Kamerman & C.D. Hayes, eds. (Washington, D.C.: National Academy Press, 1982).

## MEASURES OF DIVERSIFICATION

One theme that is nearly universally shared by politicians, economic planners, and consultants is the need to reduce dependence on the oil and gas extraction sector and agriculture. The arguments in support of this position are well known, but deserve a brief restatement.<sup>1</sup>

Increasing reliance on the oil and gas sector as a major impulse for job growth began in earnest with the oil embargo of 1973 and related price hikes. The rapidly escalating price of oil from 1973 to 1982 not only caused an increase of the relative size of the oil and gas sector in the Oklahoma economy but also induced large employment increases in related sectors such as construction and durable goods manufacturing. Many jobs were created in new and existing businesses that supplied the oil and gas sector. These related businesses manufactured items such as pipe, pumps, and tubing specially made for the extraction and processing of natural gas and petroleum. Other Oklahoma businesses became expert at providing specialized engineering and construction services for the petroleum sector not only in Oklahoma but also in the other oil-producing states. Thus, the state's economy quickly developed a set of interindustry linkages that became more complex and strong as the price of oil continued to rise. In economic terms, the multiplier for the oil and gas industry continued to get larger and larger.

The magnitude and complexity of these interindustry linkages produced very rapid growth so long as oil prices continued to rise. However, in 1982 and later in 1986, the state discovered that the very strength of these interindustry linkages that had produced such benevolent effects on employment growth in the state's economy could also exert strong malevolent impacts when the price of oil fell. Thus, the magnitude of the oil and gas sector multiplier was a double-edged sword: rapidly declining oil prices

resulted in many lost jobs even more quickly than rapidly rising oil prices had generated new jobs. The economic volatility generated in Oklahoma by world oil prices during the 1980s produced virtual consensus that reduced dependence on oil and gas was required, and quickly.

Reducing the reliance of the state's economy on the oil and gas extraction sector was identified as one of the primary goals of state economic development strategy. According to the Five Year Strategic Economic Development Plan, this goal would be achieved by diversifying the state's economy away from the oil and gas sector.

### WHAT IS DIVERSIFICATION?

To diversify means to give variety; to vary. For example, a diversifying farmer grows various types of crops instead of just one. A diversified financial plan spreads assets over various types of financial instruments including stocks, bonds, commodities, and cash, not concentrating too heavily on only one or two kinds of investment.

Why should Oklahoma be concerned with diversification? Or to use the agricultural example, how does the farmer benefit by growing more than one type of crop? If all crops were subject to the same degree of risk in the marketplace and were equally affected by unpredictable weather patterns, then there would be no reason to diversify. The farmer could do just as well by raising only wheat as by planting wheat and other crops as well.

The reality of the situation is that not all crops are equally sensitive to changes in the weather. Some crops perform better during droughts than others. In addition, market conditions are not equally stable among crops. Wheat prices may rise, for example, at the same time that other crop prices fall. The magnitude of relative price increases and declines may also differ dramatically over time.

Similarly for the state's economy, if employment fluctuates in the same manner across all industries then the particular mix of industries in the state would

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have no effect on employment stability. Diversification would not matter. The state would be free to specialize in the industries with the highest prospective rates of growth that also provide the best match with Oklahoma's markets, labor force characteristics, location, and natural resources.

But the experience of the 1980s showed Oklahoma that industrial specialization has its risks. The potential for high rates of growth can also carry a high risk of disastrous decline. Some industries may offer the potential for rapid employment growth during periods of favorable market conditions for their products but these same industries can exhibit rapid employment decline during periods of soft demand or when costs of labor and materials are rapidly rising.

To summarize, diversification involves the examination of industry mix in light of improving economic stability. But how do we know whether Oklahoma is becoming more diversified? Various measures of diversification exist. For example, the Five-Year Economic Development Plan for Oklahoma measures diversification as a movement towards the U.S. distribution of employment by industry, or the U.S. industry mix. Is this the best way to measure diversification? Do other alternatives exist? Will a reduction in the relative size of the oil and gas sector necessarily reduce economic instability in Oklahoma? The remainder of this article will suggest some answers to these questions.

### MEASURING DIVERSIFICATION

Agreement regarding the appropriate method of measuring industrial diversification has not yet been achieved. Many measures of diversification exist in the literature, but three general types appear to seem exist: industry mix, portfolio variance, and efficient diversification.

#### Industry Mix

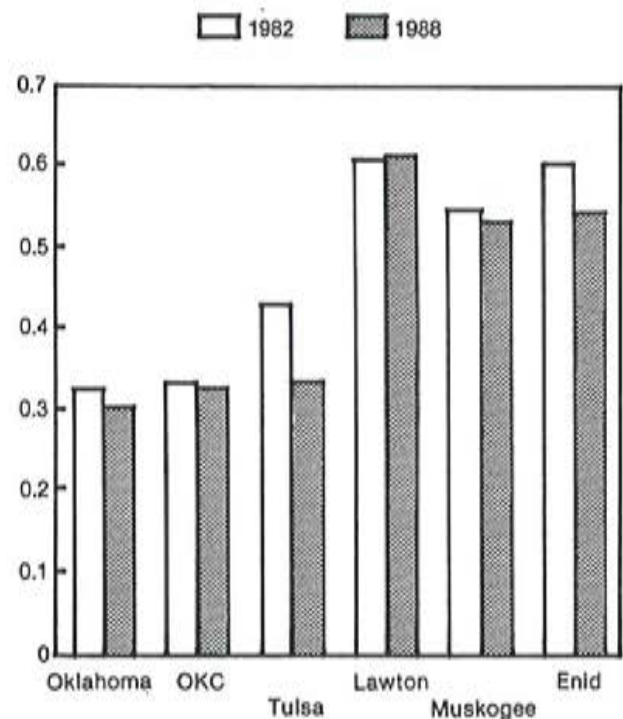
Virtually all efforts to measure diversification use industry mix as a tool to analyze the structure of a regional economy. Industry mix is the distribution of economic activity among industries in a particular region, usually measured by the distribution of employment. Once the distribution of employment by industry is determined, the percentages are compared with some arbitrary standard. For example, some early studies of diversification analyzed local industry mix using a standard of equal distribution of employment. In this method, economies in which employment is relatively evenly divided among industries were considered more diversified than those that concentrated

employment in just a few industries.<sup>2</sup>

Other studies used the national average industry mix as a standard for comparison.<sup>3</sup> In this method, the percentage of employment in each industry for a particular region is compared to the corresponding percentage for the national economy; a large deviation from the national percentage indicates that the regional economy is more concentrated in that industry than is the national economy. Since some deviations from the national average percentages will be positive and some negative, the deviations are summed ignoring the sign (negative or positive). The result is an index that measures the degree of dissimilarity of the regional economy compared with the national economy. An index value of zero indicates perfect correspondence with the national industry mix, while a higher index number suggests a degree of dissimilarity.

Indexes of dissimilarity are shown in Figure 1 for the state and areas within Oklahoma for 1982 and 1988.

**FIGURE 1**  
Index of Industrial Dissimilarity  
by Region  
1982 and 1988



Two facts arise from the graph. First, the degree of dissimilarity appears to depend on the size of the

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region. For example, the Oklahoma economy as a whole has the smallest index, suggesting the least dissimilarity with the national economy. The Oklahoma City and Tulsa metropolitan areas have larger indexes, while the smaller metropolitan areas of Lawton, Muskogee, and Enid show the greatest degree of dissimilarity with the national industry mix. This result is not surprising, since in smaller areas a small number of very large employers can dominate the industry mix. Also, in all areas except the Lawton metro area the index fell from 1982 to 1988, indicating that the industrial structures of these areas had shifted to more closely resemble the national industry mix.

Does a lower index value necessarily suggest that local economies will suffer less volatility relative to the national economy? The evidence suggests that this will not be the case. An increasing degree of similarity with the national mix of industries does not suggest that the regional economy will experience the same fluctuations in employment as does the national economy. In fact, the state's economy would probably not share the same pattern of economic fluctuations as the national economy even if Oklahoma managed to achieve an industry mix identical with that of the nation. For this to be true, Oklahoma would have to share the same pattern of interindustry linkages as the national economy.<sup>4</sup> The fact is that most linkages among industries in the Oklahoma economy are weaker than in the U.S. economy since the state imports a larger proportion of goods and services from external (out-of-state) sources.

In addition, the national average may not represent the best mix of industries for the Oklahoma economy; we may be able to do better. This is especially true for local areas within the state. For example, Cleveland and Payne Counties have a high concentration of employment in public higher education. The local industry mix in these two counties is dissimilar from the national average and as a result the index of dissimilarity will be relatively high. But does this mean a relatively high potential for economic instability exists in these two counties? The evidence suggests that employment actually is more stable in these counties than in the state as a whole even though the mix of industries is more uneven because higher education is a very stable source of employment.

### **Portfolio Variance**

The absence of a strong, predictable relationship between industry mix and employment stability has caused some researchers to doubt whether a linkage between diversification and economic stability exists at

all.<sup>5</sup> However, other analysts believe that the problem rests with the inadequacies of the simple industry mix measure of diversification. They have argued that a better measure would take into account the differences in employment variability from industry to industry. According to this view, the proper mix of industries should not be determined by comparison with some arbitrary standard such as the national average industry mix or equal industry proportions. Rather, the proper industry mix must be determined by examining the contribution to overall economic instability that is associated with each industry. The contribution to overall economic instability associated with any particular industry depends on the combination of employment variation within the industry and employment variation between the industry and other industries in the region. The industrial portfolio variance for a community is equal to a weighted sum of these two sources of variation across all industries. Communities may reduce industrial portfolio variance by encouraging growth in industries that contribute the least to overall employment variation.

### **Efficient Diversification**

While the portfolio variance approach of measuring diversification is an improvement over the simple industry mix approach, the method is not completely satisfactory. The method provides a measure of the risk of economic instability but tells us nothing about the potential employment growth rates that are associated with various levels of risk.

This shortcoming can best be illustrated by use of a simple example. Suppose that the risk of employment instability associated with the current mix of industries in our community is thought to be too large. Consequently, the community manages to secure employment increases in industries that exhibit the smallest contribution to economic instability, thereby reducing overall industrial portfolio variance. But what happens to the rate of growth of employment in the community? It is possible that the employment growth rate of our community could increase, stay the same, or decline depending on the new mix of industries. Thus, portfolio variance, used on its own, does not assure us that our community is growing as quickly as possible for a given level of risk.

Current research focuses on the concept of efficient diversification: an industry mix for a particular area is efficient if it is not possible to increase the rate of employment growth without increasing the risk of instability. Alternatively, a mix of industries is efficient if the risk of instability is minimized for a given employment growth rate.

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## DIVERSIFICATION AND STABILITY

The analysis above shows that efficient diversification can reduce the risk of economic instability associated with achieving a particular growth rate of employment. But does diversification cause an unambiguous decline in economic instability? In part, the answer to this question depends on the source of the instability. This discussion will focus on two sources of instability: cyclical and growth.<sup>6</sup>

### Cyclical Variations

An important potential source of fluctuation in the state's economy is the national business cycle. Changes in the U.S. demand for goods and services are translated into fluctuations in the Oklahoma economy through local businesses that depend heavily on U.S. markets as a source of demand. These industries not only include manufacturing but also business services, health services, professional services, and insurance. Businesses engaged in manufacturing in Oklahoma are as a group the most dependent on external markets simply because local markets are not sufficient to support the scale of plant required for profitable operations. The sensitivity of the state's manufacturing sector to fluctuations in the U.S. economy depends partially on the characteristics of the goods in question. Three of these characteristics are: (1) whether the good is a luxury good, (2) the durability of the good, and (3) whether the good is purchased largely by consumers or by other businesses.<sup>7</sup>

The demand for luxury, or high-quality nonessential items depends on the level of discretionary income. Exports of luxury goods from Oklahoma to the U.S. expand rapidly during upward swings in the national business cycle as discretionary income rises. On the other hand, the demand for these goods rapidly dissolves during recessions due to the decline or elimination of discretionary income. Consumers tend to buy items that are less ostentatious when household incomes tighten.

Purchases of long-lived goods such as automobiles, appliances, and furniture tend to fluctuate much more than less durable goods such as clothing, fuel, and food. During a recession consumers tend to cut back on purchases that are nonessential either because of jobs lost in the household or as a precautionary measure. New automobiles usually top the list of purchases that can be put off until consumer confidence in the economy is restored.

Finally, purchases of goods that are used by other businesses are in reality investment expenditures

either for equipment or material inventories needed for production. Investment spending for equipment and inventories is more volatile than spending for consumer goods. Consumer spending will generally fall by proportionally less than the decline in GNP, but investment will decline proportionally more.

By combining these characteristics the type of manufactured goods that are the most—and least—sensitive to the national business cycle may be identified. Nondurable, inexpensive consumer goods are probably the least sensitive to cyclical fluctuations.<sup>8</sup> Examples include food items such as bread, milk, and butter. At the other extreme, the manufacture of luxury automobiles are very sensitive to business cycle fluctuations.

### Growth Instability

Growth instability occurs with shifts in the economic growth trend as evidenced by a break in the long-term path of employment growth. Sensitivity to growth instability is attributed to heavy concentration of the industry mix in one or two sectors. Growth trends may shift if an economy is too concentrated in businesses that share the same stage of industrial growth. For example, an economy that is specialized in young industries will experience a stage of very rapid growth followed by moderate growth and perhaps a stage of decline as the industry matures into a less entrepreneurial form. Developing a mix of young, mature, and declining industries would help smooth the long-term path of growth.<sup>9</sup>

In addition, economies that exhibit smooth long-term growth paths will have relatively little employment in commodity-producing industries such as agriculture, mining, and petroleum and natural gas extraction. These industries are subject to sudden price changes that can cause severe shifts in the trend of output and employment growth.

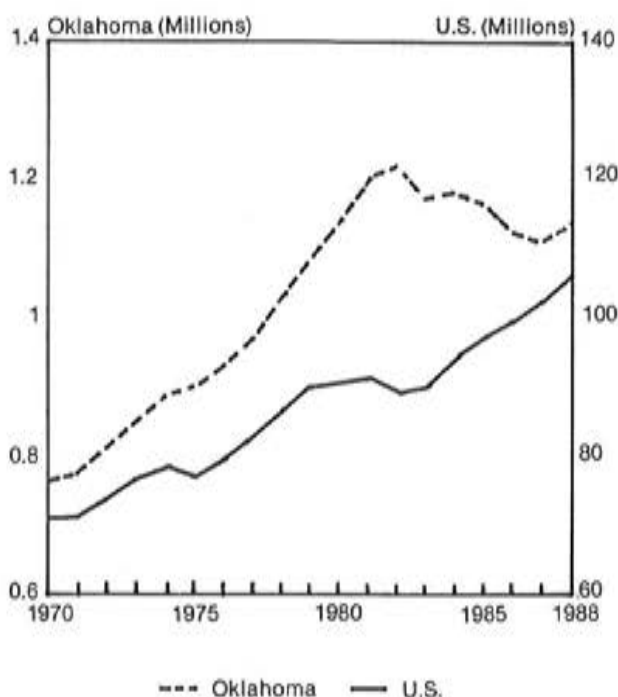
### Industry Mix and Stability in Oklahoma

During the past twenty years the national economy has experienced four recessions, with the low points of economic activity (troughs) occurring in 1970, 1975, 1980, and 1982. As shown in Figure 2 and Table 1, the state's economy showed few adverse effects from the first three of these recessions. In fact, Oklahoma prospered. State employment rose during these three recessions even though U.S. employment declined. Fueled by rising oil and natural gas prices, growing dependence on the petroleum sector helped to insulate the state's economy from the adverse affects of these recessions. As for the national recession in



1982, employment in Oklahoma did decline, but this resulted more from rapidly falling petroleum prices than from a weak national economy. Thus, the Oklahoma economy showed little sensitivity to national cyclical fluctuations during the 1970s and 1980s; the strength of the oil and gas sector acted as a buffer against downturns in the national business cycle. Cyclical instability was not a significant problem in Oklahoma.

**FIGURE 2**  
Trend of Nonagricultural Employment  
Oklahoma and the U.S.  
1970-1988



Data: Oklahoma Employment Security Commission and U.S. Department of Labor.

**TABLE 1**  
Change in Nonagricultural Employment  
Last Three National Recessions

	Recession (Year: Quarter)			
	1969:IV- 1970:IV	1973:IV- 1975:I	1980:I- 1980:III	1981:III- 1982:IV
	Percent Change of Employment			
U.S.	-0.8	-1.3	-1.1	-3.0
Oklahoma	0.1	.2	3.0	-1.6

Growth instability, on the other hand, was a major problem during this period. The long period of stable employment growth from 1974 to 1981, virtually devoid of the effects of national recessions, suggested to many that the Oklahoma economy had solved the problem of economic instability. In actuality, the Oklahoma economy had minimized cyclical instability, but for the same reasons it incurred a greater risk of growth instability.

The path of employment growth was stable and rapid during the 1970s and early 1980s until the first of two major oil price declines occurred in 1982, causing a major downward redirection in the trend of growth (Figure 2). During the mid-1980s the state's economy endured a second negative oil price shock and began a period of drastic cost-cutting and downsizing, rapidly adjusting to the lower prices of oil. With the benefit of hindsight, one can now characterize this as a period of adjustment from the path of rapid growth induced by increasing oil prices to a more stable path, reflecting lower but relatively stable prices of oil. The relatively slow and stable growth of non-agricultural employment since mid-1987 may signal the beginning of new, but much slower, growth path for employment into the future.

## CONCLUSION

Reducing the relative size of agriculture and the oil and gas sector may not result in the best mix of industries for Oklahoma. In other words, lowering the degree of dependence on agriculture and oil and gas is not necessarily the same thing as diversification.

The discussion above showed that during the 1970s and early 1980s, rising dependence on oil and gas and agriculture reduced the risk of cyclical instability but at the same time greatly increased the risk of growth instability in the state's economy. Since the mid-1980s the state has worked to reduce reliance on agriculture and oil and gas. As a consequence, the risk of sudden shifts in the growth trend of employment such as occurred during the 1980s will probably decline. But the risk of cyclical instability may well increase, depending on the characteristics of the businesses that are added to the industrial mix.

Oklahoma must reduce reliance on agriculture and oil and gas in order to reduce growth instability but at the same time should be careful to cultivate industries that are resilient to cyclical changes in the U.S. economy. For example, large increases in the relative size of the durable goods manufacturing sector may make the state's economy much more sensitive to national recessions. Thus, policymakers should carefully

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monitor changes in the state's economic structure by tracking both the risk and the potential rates of growth associated with future changes in Oklahoma's industry mix.

### NOTES

<sup>1</sup>A more detailed discussion may be found in "Background for the Oklahoma Economy 1970-1987" in *Oklahoma's Strategic Economic Development Plan, 1988-1993*, Oklahoma Department of Commerce.

<sup>2</sup>For a discussion of various measures of diversification based primarily on industrial mix, see Merlin M. Hackbart and Donald A. Anderson, "On Measuring Economic Diversification," *Land Economics*, 51, (November 1975): 374-378, and Roy W. Bahl, Robert Firestone, and Donald Phares, "Industrial Diversity in Urban

Areas: Alternative Measures and Intermetropolitan Comparisons," *Economic Geography*, 47 (July 1971): 414-425.

<sup>3</sup>For example, see Vincent Maruggi, "Post-Oil Boom Economic Diversification in Louisiana and New Orleans: Real or Illusory?" *Louisiana Business Survey*, (Fall 1988).

<sup>4</sup>Michael E. Conroy, "The Concept and Measurement of Regional Industrial Diversification," *Southern Economic Journal*, 41 (1975): 493-494.

<sup>5</sup>*Ibid.*, p. 492.

<sup>6</sup>See Wilbur R. Thompson, *A Preface to Urban Economics*, Baltimore: Johns Hopkins University Press, 1956.

<sup>7</sup>*Ibid.*, pp. 149-153.

<sup>8</sup>Seasonal fluctuations may be a more serious problem with this type of good.

<sup>9</sup>Thompson, pp. 162-164.

## AGRICULTURAL PRODUCT PROCESSING IN OKLAHOMA

Agricultural product processing has been targeted for development in Oklahoma. In the 1984 volume of *State Policy and Economic Development in Oklahoma*, Plaxico noted the relative underdevelopment of agricultural processing in Oklahoma and emphasized the need to include this sector in the State's development strategy.<sup>1</sup> Three of the Oklahoma Futures' Task Forces suggested that food processing should be an important part of Oklahoma's effort to diversify and develop its economic base.<sup>2</sup> The goals of these efforts are economic development, economic diversification, and job creation.

Economic development means increasing the value of economic activity in Oklahoma. Increasing business activity means that existing business firms will need to expand, new businesses will need to be started, and/or out-of-state firms will relocate in Oklahoma.

Diversification is desired to provide a broader spectrum of activities such that downturns in economic activity in a single industry will have less dramatic impacts on the aggregate of Oklahoma's economy. Economic development and diversification may create more jobs in hopefully a more stable aggregate economic environment.

Given that Oklahoma has collectively adopted expanded agricultural processing as a desirable industrial development objective, it is important to then examine policies that state government can use to achieve the objective. The themes of this paper are as follows:

- (1) To promote development of an industry, it is important to understand the characteristics of that industry and how it is currently being operated.
- (2) The relationship between state policies and economic development comes about through creating a more favorable environment for

business plans for expanding, beginning, or relocating businesses.

The discussions of the two themes are contained in five sections. The first section contains a description of the food marketing system and the linkages between food processing and other activities required for the system to perform effectively. The second section describes the food processing industry in Oklahoma and Oklahoma's share of U.S. food processing activities. In the third section, the business planning process for agricultural processing firms is described. In the fourth section, state government policies that may make it possible to expand Oklahoma's economic base by developing a significantly larger agricultural processing industry are discussed. In the last section, possible consequences of agricultural processing expansion are discussed.

### AGRICULTURAL PRODUCT MARKETING SYSTEM

The development of value-added agricultural processing activities should be viewed as simply part of the continuous, complex economic development process within the agricultural marketing system. The ovals in Figure 1 represent the business firms that make up the segments of the food and fiber marketing system. Transportation and exchange functions take place between the levels in the food system. At each stage of the system, the firms involved use financial, human, and physical inputs to add time, form, location, and possession utility to food products.

Agricultural resources, farmers and their input suppliers are the beginning of the system. While most agricultural products require further processing, it is possible for farmers to bypass the system and engage in direct marketing to consumers. For most products, direct marketing plays a minor role although it is very important for some producers. Production capabilities of farmers can serve as a constraint on the performance of the rest of the system. If producers do not produce the appropriate quality, weight or variety of

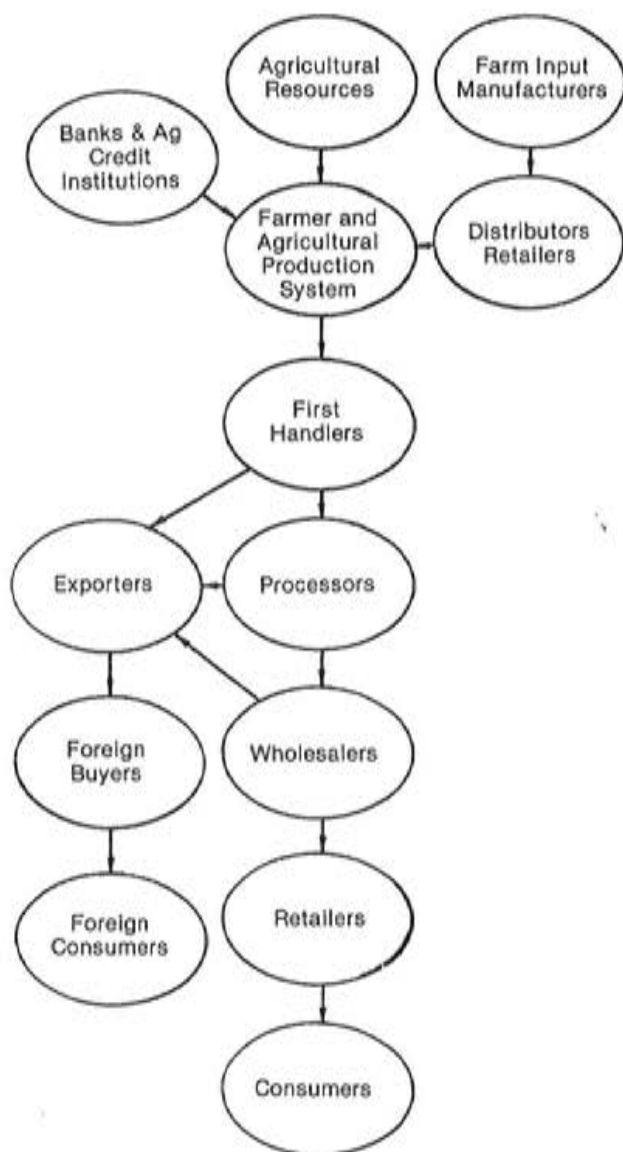
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product the usefulness of their output in the rest of the marketing channel may be very limited.

In the cattle industry, it is common for several exchanges to take place between farmers prior to shipment to a processor. In Oklahoma, cow-calf producers frequently sell to wheat producers who place cattle to winter graze wheat, and cattle coming off wheat pasture are sold to cattle feeders for finishing. All of these exchanges can be either private arrangements between producers or through organized auctions or stockyards.

**FIGURE 1**  
**Food Marketing System**



First handlers often receive products from farmers prior and then the product is shipped to the processor. First handlers are often responsible for accumulation of larger lots, grading and shipping further through the channel. In Oklahoma, local grain elevators are among the most common first handlers; generally they will then ship wheat to a processor.

For some crops, farmers perform the functions of first handlers and deal directly with processors. These producers are sufficiently large to deliver directly to processors. They may be under contract to grow crops for processing. It is also possible for both producers and processors to vertically integrate with farmers performing processing functions or processors performing farm production activities. Vertical integration can occur by contracts, joint ventures, or ownership of the firms at the other levels in the marketing channel. Processor contracting with producers has been most prevalent in vegetable operations, poultry, and processed fruit production. Recently some cattle feeders have begun to contract with processors.

Food and agricultural processors are responsible for buying, selling, processing, storing, transporting, market intelligence, risk bearing, financing and standardizing of agricultural products.<sup>3</sup> For many products, these functions are essential if the food system is to efficiently supply the quantity and quality of foods U.S. consumers demand. A wide variety of processing can occur and some processors, flour mills for example, produce inputs for use in other processed products.

The nature of the functions performed by processors has been changing. Processors have changed their activities to adjust to the requirements of increased away-from-home food consumption, and to increased demand for convenience. Some processors have adapted packaging techniques that do not require refrigeration for complete meals and others specialize in meeting the needs of fast food restaurants. Less food preparation is occurring in the home.

U.S. food manufacturers' sales are estimated at \$342 billion for 1988. U.S. food processors added an estimated \$88 billion in value to \$130 billion of purchases from American agriculture, fisheries, and imports. An estimated \$8.5 billion was spent on advertising and \$1.4 billion spent on research and development, and \$8.5 billion spent on capital expenditures.<sup>4</sup>

Wholesalers generally buy products from processors in large uniform loads and then deliver mixed loads of a variety of products in the quantities that a retailer needs. Fleming Foods, Homeland, and Scrivner are

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examples of wholesalers that serve largely retail grocery stores. Numerous smaller companies perform wholesaling functions and supply restaurants and institutions.

Retailers are responsible for dealing directly with consumers. Retailers may be grocery stores, restaurants, or institutions. Consumers are buying more services with the food they consume either by eating in restaurants and institutions or by purchasing items that can be eaten with a minimum of preparation in the home. Some retail stores are offering home delivery of grocery products so that the consumer does not need to visit the store.

Consumers are the last important linkage in the system. It is clear that consumer demand is a driving force in the system. New products and services are being developed to meet demand. The nature of the grocery store has changed as stores have become larger and supply a wider variety of products and services.

Failure of the input (financial, human, and physical) sectors at any point in the system, farm production, first handlers, wholesalers, retailers and participants in the export marketing channel can cause the system to fail (including food processors). The importance of input firms in the economic development process has long been recognized.<sup>5</sup> Development of a larger food processing industry in Oklahoma may require a different set of input services than are currently available. Should those services be provided by Oklahoma firms, additional economic activity will be generated.

The relative financial importance of the various sectors depends on where food is consumed. For expenditures on food consumed at home in the U.S., USDA estimates that one third goes to farmers, an additional one-third of the value pays for processing, and one third is added between the processor and consumer. For expenditures on food consumed away-from-home, 15 percent is received by farmers, an additional 15 percent of the expenditures pay for activities by processors and 70 percent of consumers expenditures pays for activities beyond the processor. That is, measured as a share of food expenditures at-home as well as away-from-home, food processors' share of food expenditures is as large as the farmers' share itself.

The away-from-home food market for food products has shown significant growth. For a food processor, producing products for the food service industry is particularly appealing because of the absence of need to do significant consumer advertising. Advertising requirements for a consumer product may be a significant barrier to entry. However, if a

significant portion of a processor's sales are to one particular food service establishment, the processor may be subject to substantial financial upheaval if major restaurant or institutional customers decide to change suppliers.

## OKLAHOMA FOOD PROCESSING INDUSTRY

Oklahoma has a relatively small food processing industry. Food processors in Oklahoma accounted for only .73 percent of the value of U.S. shipments and .65 percent of the total value added in food and kindred product firms in the U.S. in 1986. For all manufacturing, Oklahoma firms accounted for .99 percent of the value of shipments and .87 percent of value-added in manufacturing in the U.S. in 1986.<sup>6</sup> This means that the Oklahoma food and kindred products industry is less well developed than all manufacturing.

The number of employees in food processing in Oklahoma has declined since 1982 (U.S. Census of Manufacturers). Employment in food and kindred product manufacturing has declined from 15,300 in 1982 to 13,700 in 1989.<sup>7</sup> Oklahoma Employment Security Commission data indicate that employment in food and kindred product manufacturing has declined from 15,300 in 1982 to 13,700 in 1989. Data from the Oklahoma Employment Security Commission would reflect more of the employment in very small firms that are likely to not be as well represented in the Census of Manufacturers data. Earnings by food and kindred product employees were estimated at \$320 million in 1988 which represents 6.8 percent of manufacturing earnings in Oklahoma (U.S. Department of Commerce).

The 1988-89 *Oklahoma Directory of Manufacturers* reveals that they are predominantly small firms. Of the 363 firms in the directory, there were 64 percent with less than 20 employees, 13 percent with 21 to 50 employees, 9 percent with 51 to 100 employees, and only 14 percent with more than 101 employees.<sup>8</sup> Recent announcements indicate that significant capital investments in food processing in Oklahoma from firms currently located outside the state are likely to occur in the poultry products industry. Small meat processing companies have declined in number.

Some people have suggested that because Oklahoma has significant farming and ranching industry, that Oklahoma should promote the development of processing of products produced in Oklahoma. Location of production of raw materials is not always a primary factor influencing the location of agricultural processing facilities. Agricultural product processing

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firms may purchase raw product inputs from a variety of sources, locally as well as internationally, in order to produce a product mix that allows them to achieve the sometimes substantial cost efficiencies associated with volume.

Whether expansion of Oklahoma food processing comes from a start-up, expansion or an investment by a firm currently located outside Oklahoma, firms generally develop a business plan that is capable of attracting capital. In order to understand the decisions business firms make to start, expand or to relocate and the impacts of state policies on business creation, expansion or relocation, it is important to understand the business planning process.

### **BUSINESS PLANNING FOR FOOD PROCESSORS**

The analytical problem for a food processing firm is to evaluate what, where, how and by whom marketing functions can be efficiently performed. The efficiency of food marketing firms and their location has been the subject of considerable research.<sup>9</sup> Most of the work has been completed from the perspective of the development of an efficient industry rather than from the perspective of an individual firms.

For an individual firm, feasibility studies/business development plans are required if a business is to start, expand or relocate. The components of a business plan include:

- (1) a mission and objective statement,
- (2) a marketing plan,
- (3) a production and operations plan,
- (4) a financial plan,
- (5) a management, control and contingency plan.

The mission and objectives statement is a description of what the firm expects to accomplish with a new venture or expansion. The marketing plan outlines the situation within the market, identifies opportunities and potential problems, and presents strategies and tactics that will be used to achieve sales objectives. The production and operations plan will present the raw materials, processes, equipment, and labor that will be employed in the operation of the facility. The financial plan will include cash flow requirements, expected profit objectives for the operation, projected balance sheets, income statements, and sources and uses of funds statements. The management, control, and contingency plan describes how the operation will be managed, the data that will be collected to monitor the business progress, and may describe contingency

plans if particular events do not happen as expected.

Writing business plans is an important process because it causes people with business ideas to realistically evaluate their concepts and perceptions of the probability of success. Written plans can be studied by others so that suggestions and possible problems are more likely to be identified. Planning for agribusiness firms is particularly important because of the characteristics of the environment in which the planning takes place. Innovative firms in the food marketing system perform marketing functions and create a marketing mix (product or service, place/time, promotion, price, personnel) that is new and different because one (or more) of the components of the marketing mix creates a unique opportunity. Conditions of entry (the ability of a competing firm to provide equivalent services) will determine the extent to which firms can enjoy long-term profit. An estimated 10,600 grocery products were introduced in 1988. For new food products, it is estimated that over 90 percent of new product introductions fail.

The unique characteristics of the agribusiness sector include:

- (1) the unique cultural, institutional, and political aspects of food, domestically and internationally,
- (2) the uncertainty arising from the underlying biologic basis of crop and livestock production,
- (3) the alternative goals and forms of political intervention across subsectors and between nations in an increasingly global industry,
- (4) institutional arrangements that place significant portions of the technology development process in the public sector, and
- (5) the differing competitive structures existing within and among the subsectors of the food and agribusiness sector.<sup>10</sup>

The composite of these differences yields a somewhat more risky business environment which is often subjected to exogenous policy decisions made by governments both domestically and internationally. In order to deal with risk and develop contingency options, business planning is essential.

Factors that may be important in a plant location or expansion decision include: location of markets, location of raw product production, relative transportation costs of the raw product versus the final product, access to transportation services, perishability, availability of complementary products to process, costs of operation (land, labor and capital), quality of labor and availability of training programs, current location of the firm or entrepreneur, availability of technical

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support, and perceived quality of life in a community (education, arts, recreation, commuting times). Relative transportation costs of wheat and wheat flour have been a major factor favoring location of most wheat milling operations near consumption centers.<sup>11</sup> Similar analyses have been done for the beef feedlot and slaughter industries.<sup>12</sup>

Public policy decisions, both U.S. and foreign, have had an impact on the U.S. food industry. Many of the factors evaluated in the business planning process are influenced by international, federal, state and local policy actions.

### POLICY OPTIONS AND ISSUES

A public policy question that needs to be addressed is whether a policy and educational environment where business plans for establishment or expansion of food processing and marketing firms will succeed can be created. Success means attracting the investment capital and paying a return to that investment. State and local government policies and programs are designed to stimulate economic development and diversification by encouraging expansion or relocation of food processing firms by having an impact on business plans. The policies can impact on the mission/objectives of the firm, the marketing plan, production and operations plan, the financial plan, and/or the management plan.

Policies that can impact on the mission or objectives of the firm include:

- (1) programs that promote innovation and new product research and development, and
- (2) programs that expand the marketing focus (internationally, government contracting, marketing to wholesale distributors).

Policies that can impact the marketing plan include:

- (1) state promotion efforts in domestic and international markets,
- (2) quality assurance programs including quality standards, packaging requirements, and certification programs,
- (3) state marketing orders to collect funds for promotion efforts in both domestic and international markets,
- (4) training programs for processors wanting to bid government contracts,
- (5) state sponsored marketing research designed to identify new product needs and opportunities for processors,
- (6) state sponsored research on packaging and

distribution channels to identify new alternatives that may reduce costs or allow marketing in new markets, and

- (7) construction of transportation infrastructure to allow better access to markets.

State and local government policies that could impact production and operations planning include:

- (1) specialized technology transfer efforts designed to provide firms with current information about new ways to process products and reduce costs,
- (2) labor training programs to assure high quality and well-trained labor to work in expanded or relocated facilities,
- (3) product development research to discover new uses for agricultural products,
- (4) management training in alternative computerized information, evaluation, and control systems, and
- (5) extension and research support for farm producers that provide inputs to processors.

Financial plans can be influenced by:

- (1) state or local tax forgiveness or credits for investment, and
- (2) using state or local industrial bonds to make capital available at lower interest rates than a private firm would pay.

Management, control, and contingency plans can be impacted by:

- (1) training programs for managers,
- (2) development of management information systems, and
- (3) risk management or risk sharing programs.

Recent emphasis on economic development in Oklahoma has greatly enhanced the state's capacity to impact business plans and encourage development of new business in Oklahoma. A key piece of legislation has been House Bill 1444, Economic Development which amended sections in titles 62, 70, and 74 of the Oklahoma Economic Development Act of 1987. Key agencies and institutions that could be of assistance to agricultural processors include: Oklahoma State University; Oklahoma Department of Agriculture, Oklahoma Department of Commerce, and the State Department of Vocational and Technical Education. The Oklahoma Department of Commerce has become a referral agency that can direct industry prospects to federal, state and local services available to assist industrial development in Oklahoma.<sup>13</sup>

Oklahoma State University's contribution to the

effort to serve and expand the food processing industry is to provide research, educational programs, and service to participants in the food and fiber system. Reasons for supporting food processing research and education include: assisting small businesses, increasing the variety and quality of food products available, providing information to reduce the hurdles associated with industrial development, reducing the negative externalities that may occur because of industrial development, and reducing the probability that poor investment decisions are made.<sup>14,15</sup> Emphasis in the Division of Agriculture at Oklahoma State has been on production agriculture. The ability to contribute to food processing expansion has been limited by the absence of resources to develop the facilities and people to be of service to a broad spectrum of the industry. Significant efforts in meat and dairy products have been ongoing for many years.

In each of the last two sessions of the Oklahoma Legislature, money has been budgeted near the end of the sessions to plan a university center which includes a physical facility and personnel to enhance the capacity to provide research, service and educational programs to the food processing industry. These measures have been vetoed by the governor. The purpose of the proposed center is to facilitate food processing industry development by providing research, service, and educational activities that solve problems faced by the food processing industry in Oklahoma. The center will also enhance the educational opportunity available to students who desire careers in food processing. Education and technology transfer includes research and extension efforts to develop and refine new products or processes and to help firms complete up-to-date marketing and financial analyses that incorporate new products or processes.

### **COSTS AND BENEFITS OF EXPANDING FOOD PROCESSING**

A second important public policy issue associated with development of food processing enterprises is the aggregate costs and benefits of the development. Given that resources for industrial development in Oklahoma are limited, the public policy question is how to spend those resources to receive the highest benefits at the lowest costs considering both positive and negative externalities of industrial development.

Expanded food processing in Oklahoma could potentially have a variety of benefits and costs. Possible benefits include: better markets for agricultural products, increased employment, additional input supply firms, increased demand for transportation ser-

VICES, increased tax collections, and increased utility demand. Potential costs include: increased pollution, demands for public utilities and transportation services, increased needs for public services, and decreased production of some crops currently produced.

Demand for food products in processing plants can change the price for products. Product prices tend to be higher in areas where use of the products is greatest. Wheat prices for example are higher at export ports and near wheat milling centers than they are in rural Oklahoma.

Food processing has a very high employment multiplier effect because of the demand for packaging and other services associated with the food processing plant. Employment multiplier estimates for food processing are 4.6 which means for every job created in food processing, 3.6 additional jobs are created. Employment growth will largely be determined by the nature of technology employed and the extent to which the processes are capital or labor intensive.

Increased employment may mean fewer unemployed people, higher earnings, and reduced needs for public services demanded by unemployed people. The impacts are likely to be greatest in small to medium sized communities that would have to make substantial adjustments if industrial development occurs. If the increased public revenues exceed the increased costs incurred in providing services to new industry, the net effect of expanded food processing will likely be positive.

Potential pollution problems from additional food processing can be minimized by effective by-product utilization and careful planning of new facilities. For example, disposal of by-products from beef processing would be very expensive if the industry had not been capable of making a variety of products from the non-meat products. Similar problems for any food processing plant may be important to solve.

### **NOTES**

<sup>1</sup>James S. Plaxico, "Agriculture and Oklahoma Economic Growth," *State Policy and Economic Growth in Oklahoma: 1984* (Oklahoma City: Oklahoma 2000, Inc., 1984), p. 42.

<sup>2</sup>Oklahoma Futures, "Goals, Strategies and Implementing Actions for the Oklahoma Five Year Economic Development Plan," unpublished mimeo adopted by Oklahoma Futures, March 24, 1988.

<sup>3</sup>Richard L. Khols and Joseph N. Uhl, *Marketing of Agricultural Products*, 5th ed. (MacMillan Publishing Co., Inc. New York, 1980), pp. 23-27.

<sup>4</sup>United States Department of Agriculture, *Food Marketing Review*, 1988, Economic Research Service, Agricultural Economic Report Number 614 (August 1989). U.S. Department of Com-



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merce, *Survey of Current Business* (August 1989).

<sup>5</sup>Lawrence, Witt, "Factor Markets," Chapter 3 in *Institution in Agricultural Development*, Melvin B. Blase, ed. (The Iowa State University Press, 1971).

<sup>6</sup>U.S. Census Bureau, *Survey of Manufacturers*, various issues, 1982-1986.

<sup>7</sup>*Ibid.*

<sup>8</sup>Oklahoma Department of Commerce, *Oklahoma Directory of Manufacturers, 1988-89* (Oklahoma City, 1989a).

<sup>9</sup>Ben C. French, "Part II. The Analysis of Productive Efficiency in Agricultural Marketing: Models, Methods, and Progress" in *A Survey of Agricultural Economics Literature Volume 1: Traditional Fields of Agricultural Economics, 1940s to 1970s*, Lee R. Martin ed. (University of Minnesota Press, 1977).

<sup>10</sup>Steven T. Sonka, "Future Priorities in Agribusiness Education: A U.S. Perspective," *Agribusiness, An International Journal* 5 (May

1989): 269-279.

<sup>11</sup>Michael W. Babcock, Gail L. Cramer, and William A. Nelson, "The Impact of Transportation Rates on the Location of the Wheat Flour Milling Industry," *Agribusiness* 1 (1985): 61-71.

<sup>12</sup>Gregory M. Clarey, Raymond A. Dietrich, and Donald E. Farris, "Effects of Increased Transportation Costs on Spatial Price Differences and Optimum Locations of Cattle Feeding and Slaughter," *Agribusiness* 2 (1986): 235-246.

<sup>13</sup>Oklahoma Department of Commerce, "Program Guide 1989-90," Oklahoma City, August 16, 1989b.

<sup>14</sup>J. Ferris, "State Value-Added Activities as Related to Economic Efficiency." Paper presented at the American Agricultural Economic Association annual meeting, Michigan State University, August 1987.

<sup>15</sup>Daniel S. Tilley, "Value Added Activities as a Rural Development Strategy: Discussion," *Southern Journal of Agricultural Economics* 21 (July 1989): 37-40.

# PUBLIC POLICIES AFFECTING THE OKLAHOMA COAL MINING INDUSTRY

## INTRODUCTION

Researchers with the Oklahoma Geological Survey have documented that Oklahoma has over 7.9 billion tons of remaining bituminous coal resources.<sup>1</sup> This stock of coal makes it the largest, most secure and potentially the most valuable energy resource we have in Oklahoma. Geologists at the University of Oklahoma and with the Oklahoma Geological Survey have for many years documented both the physical stock and technological potential for mining Oklahoma coal. The Oklahoma Department of Mines is striving to implement policies that will help improve our coal mining industry. The recently organized Oklahoma Mining Commission provides needed policy guidance. Regrettably, very few in-depth economic analyses have been performed on the potential impacts increased coal mining could have on the Oklahoma economy.

Depressed economic conditions in Oklahoma, coupled with "knee-jerk" pricing of other energy sources such as crude oil and natural gas, have left the Oklahoma coal industry in a lurch. Perhaps, a more appropriate thought is that the coal mining sector can make a strong positive contribution to the state's economic recovery. Oklahoma has the technology, human expertise, and ability to mine and burn Oklahoma coal profitably, and without adversely impacting the environment. The strip mined land can be reclaimed and put back in productive agricultural and/or recreational uses. Coal can be burned by in-state industries in a blend mixture with lower sulfur coal from Wyoming. It can also be burned alone in specific industries, and the resulting emissions will still meet EPA compliance standards for sulfur dioxide (SO<sub>2</sub>) and nitrous oxides (NO<sub>x</sub>).

Oklahoma's bituminous coal does not have to be considered as a competitor for other Oklahoma

energy resources such as oil and natural gas. Neither should it be considered as a competitor to the massive reserves of low sulfur, subbituminous coal in Wyoming. Oklahoma coal is a *complementary* resource to our other energy fuels, that can help provide balanced economic growth in Oklahoma in terms of increased employment, personal income and output of goods and services.

The purpose of this article is to analyze the Oklahoma coal industry, including changes in the demand and markets for Oklahoma coal, and transportation policies affecting coal mining in Oklahoma. Recommendations will be made for changes in public policies that may help revitalize the coal mining industry and its complementary industries, such as truck transportation, in Oklahoma.

## COAL PRODUCTION TRENDS IN OKLAHOMA

As mentioned above, the Oklahoma coal mining industry is in complete disarray. The industry has been affected by rapid and abrupt changes in oil and gas prices in the last 20 years, coupled with much tougher coal mining reclamation regulations as a result of the Federal Surface Mining Reclamation Act of 1977. From a vibrant industry of about 30 active coal mining companies in the late 1970s and nearly 2,000 primary mining employees, the industry now has less than 10 active companies and fewer than 600 employees.

Efforts by the state government in 1987 with legislation requiring the blending of some Oklahoma coal with out-of-state mined coal in Oklahoma coal fired plants may help revive the industry. Also, recent changes in the trucking industry regulations may make transportation of Oklahoma coal more cost effective in competing with coal imports from Wyoming.

Coal production figures in Oklahoma for the past 40 years resemble a roller coaster ride. Annual production in 1972 was 2.5 million tons, the highest yearly total since 1950, when 2.8 million tons were mined. Production figures are shown in Table 1 of the Appendix. Production took a drop in 1973; then increased in 1974-76 after the first Arab oil embargo in 1973, due

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to the Israeli-Egyptian war, and resulting quadrupling of petroleum prices (from \$2.50 per barrel of 42 gallons to over \$10.00 per barrel). Annual coal production in Oklahoma surged in 1977 to 5.3 million tons with the next oil embargo and sharply higher oil and natural gas prices. Oil prices increased rapidly in the late 1970s and early 1980s to \$35.00 per barrel with spot prices reaching as high as \$40.00 per barrel.

Oklahoma coal production peaked at 5.7 million tons in 1981, and then began declining, reaching 2.1 million tons in 1988. 1989 production will be less than 2.0 million tons. Cumulative coal production in Oklahoma (1873-1989) is about 262 million short tons.

Some 20 named and a few unnamed bituminous coal beds are present in eastern Oklahoma, most of which have been mined, at least for coal use. Most past production has been from the Hartshorne, Lower Hartshorne, McAlester, and Croweburg coal beds, which were mined by underground methods. Ninety three percent of the production in 1985 was from surface mines in the Iron Post, Croweburg, Mineral, and Lower Hartshorne coals; seven percent was from an underground mining of the Lower Harshorne coal. Only one underground mine was in operation in 1989.

The higher costs of mining coal due to the reclamation costs associated with the Federal Surface Mining Reclamation Act (PL 95-87), increasing truck and rail costs, higher barge costs due to imposition of the federal mandated diesel fuel use tax associated with navigation systems, as well as much lower oil and natural gas prices all led to this decline. Oil prices declined to a ten year low of slightly under \$10 per barrel in the summer of 1986; natural gas prices declined from a peak of \$5.00 per million Btu's (MBtu) or thousand cubic feet (MCF) to as low as \$1.40 MBtu for short-term contracts in November 1989. More recently, oil prices have increased back up to \$19.00 per barrel, and are projected to continue increasing slowly over the next five years.

Other reasons for the reduction are the high costs of mining Oklahoma coal, the loss of out-of-state markets for coal fired power plants along the Gulf of Mexico (primarily Tampa), and the renewed competition from natural gas as a drying fuel (agent) by the concrete kilns near Midlothian, Texas and a few such plants in Oklahoma. The latter change occurred when natural gas prices declined from \$5.00 per million Btu's in the early 1980s to around \$1.40 per million Btu's in late 1989.

Increased surveillance and stricter enforcement of coal reclamation regulations by the Office of Surface

Mining and the Oklahoma Department of Mines also has led to the exit of many marginal coal companies in Oklahoma. The number of active and semi-active coal mining companies in Oklahoma has declined from about 55 in the late 1970s to only 12 in late 1989. Of those 12, only about 5 are continuously active in mining coal.

The United States industry and consumers adopted an energy conservation ethic in the late 1970s and early 1980s when gasoline prices reached \$1.30 or more per gallon, natural gas retail prices (for home heating and other uses) went over \$5.00 per MCF, and electricity costs doubled. Smaller, more energy efficient cars, more energy efficient appliances, better insulated homes, offices, and factories all caused U.S. petroleum imports to decline; at the same time, due to higher prices, U.S. energy production increased. Oil and gas drilling boomed in the energy states of Oklahoma, Texas, Louisiana, and New Mexico in the 1977-1983 period.

As oil and gas prices dropped since mid 1983, so did the near-term interest in energy conservation. Demand for foreign oil has increased, and the United States is once again importing over 50 percent of its daily oil needs from other countries; an increasing share of these imports is from volatile Middle-Eastern OPEC nations.

Recent federal government legislation, including the 1987 repeal of the 1978 Fuel Use Act, and efforts by environmental lobbying groups against acid rain from coal fired power plants, and radioactive wastes from nuclear power plants, all have tended to promote greater use of oil and natural gas at the expense of the coal industry and the nuclear power industry in the United States. The U.S. is likely to regret the increasing dependence on foreign oil in the 1990s and the 21st century and should not be so complacent about the continued reliability of foreign energy sources. There should be more diligent developing of technological innovations that would allow mining of coal resources more efficiently, and burning these resources using more environmentally sound burning systems that do not cause air and/or water pollution.

## **OKLAHOMA DEPARTMENT OF MINES**

The Oklahoma Department of Mines is the state agency charged with administering various laws and regulations relating to coal mining and reclamation. That agency also oversees permitting and mining of other minerals such as limestone, sand and gravel,

gypsum, and granite. The Office of Chief Mine Inspector was created before statehood. A State Mining Board was established in 1907, and worked with the Chief Mine Inspector.

The provisions of Title 45 of the Oklahoma Statutes cover both health and safety at the minesite, and also reclamation of mined land. The first state coal reclamation law became effective on January 1, 1968. A revised Oklahoma Mining Lands Reclamation Act became effective on July 1, 1971. It required better reclamation than the earlier law and included all mining (other minerals as well as coal).

In 1977, the U.S. Congress passed the Surface Mining Control and Reclamation Act (Public Law 95-87). This law has more stringent enforcement provisions on coal mining operations and on the reclamation of mined land. It also required states to adopt similar legislation. Consequently, Oklahoma passed the Coal Reclamation Act of 1978 to operate the interim program; permanent standards were adopted in 1979.

In 1985, the State Legislature abolished the State Mining Board and replaced it with the Oklahoma Mining Commission. This new nine-member Commission is the policy making body of the Oklahoma Department of Mines. In 1986, State Question 594 was approved by the voters of Oklahoma. It amended sections of the Constitution to eliminate the position of Chief Mine Inspector. The Department of Mines now is administered by a director appointed by the Oklahoma Mining Commission.

### BITUMINOUS COAL RESOURCES IN OKLAHOMA

The Oklahoma Geological Survey estimated that as of January 1, 1987, the State of Oklahoma had 7.9 billion tons of remaining bituminous coal resources in 19 counties (Table 1 and Figure 1). This is a slight upward revision from earlier estimates by the Oklahoma Geological Survey. LeFlore County has about 25 percent of the state total, followed by Haskell County with 19 percent, Pittsburg County with over 17 percent, Latimer with about 11 percent, Craig County with about 8 percent, and Okmulgee and Rogers Counties with about 5 percent each.

Identified coal resources are in approximately 8,000 square miles in eastern Oklahoma. The area is within the southern part of the western region of the interior coal province of the United States. The coal beds are of middle and late Pennsylvania age, 0.8 to 7 feet thick; 0.4 to 6.5 percent sulfur content, both coking and non-coking coal, and contain 11,500 to 15,500

**TABLE 1**  
**Remaining Bituminous Coal Resources**  
**in Oklahoma, by County**  
**January 1987**

Counties	Thousands of Short Tons	Percent
<b>Coal Region</b>		
Coal	292,875	3.71
Craig	640,092	8.10
Haskell	1,513,681	19.15
Latimer	841,968	10.65
LeFlore	1,973,362	24.96
McIntosh	46,755	0.59
Muskogee	61,199	0.77
Nowata	29,645	0.38
Okmulgee	370,695	4.69
Pittsburg	1,383,833	17.51
Rogers	362,637	4.59
Wagoner	63,541	0.80
<b>Subtotal</b>	<b>7,580,283</b>	<b>95.90</b>
<b>Other Counties</b>		
Atoka	29,619	0.37
Creek	14,046	0.18
Mayes	31,092	0.39
Okfuskee	79,351	1.00
Sequoyah	27,146	0.34
Tulsa	138,397	1.76
Washington	4,655	0.06
<b>Subtotal</b>	<b>324,306</b>	<b>4.10</b>
<b>Total</b>	<b>7,904,589</b>	<b>100.00</b>

Source: 1985 and 1986 Annual Report, Oklahoma Department of Mines, Oklahoma City, Oklahoma. Based on research done by Oklahoma Geological Survey, primarily Sam Friedman of the University of Oklahoma.

Btu's per pound.<sup>2</sup>

The bituminous coals are low volatile in northern LeFlore County; medium volatile in northern LeFlore, Sequoyah and most of Haskell Counties, high volatile A and B in Craig and Nowata Counties, parts of Haskell County and in most of the remaining coal-bearing counties; and high volatile C in Coal and Pittsburg Counties (coal groups 1.5, Class II, American Society for Testing and Materials Standard D388-66).<sup>3</sup>

The coal beds in the northeast Oklahoma shelf area are 0.8-5.0 feet thick, dip westward from ½ degrees to two degrees, and contain more than three percent sulfur by weight with the exception of the Croweburg coal. The coal beds in the Arkoma basin area are 1-7 feet thick and occur in eroded anticlines and synclines that plunge southwestward. The coals crop out mostly along the sides of these folded and faulted structures, and their dip ranges from three degrees to nearly vertical. In the Arkoma Basin, coals that exhibit steep dips

(18 degrees to 65 degrees) commonly were mined before 1960. From 1960 to 1974 no mines were developed in steeply dipping coal beds. The Arab oil embargo of 1973 resulted in an increase in the demand for coal. Thus, from 1974 to 1984, seven surface mines were developed in steeply dipping coal beds in the Arkoma Basin, and they produced coking and metallurgical coal. Coal from steeply dipping beds has not been mined since 1984. Of the remaining coal resources in the state (7.9 billion tons as of January 1, 1987) 76 percent are in the Arkoma Basin and 24 percent are in the shelf area. About 41 percent of the coal is low and medium volatile in rank, and it is in the Arkoma Basin. The weighted average sulfur and the utility and industrial coal averaged 3.0 percent sulfur. The 1985 coal production contained an average of 2.0 percent sulfur, a decrease of 0.5 percent from 1984.

Approximately 680 million tons of Oklahoma's remaining coal resources were estimated as strippable from beneath 100 feet or less of overburden, in beds 12 inches or more in thickness.<sup>4</sup> The Demonstrated Reserve Base shows 355 million tons are strippable.<sup>5</sup> Strippable coal resources were reported in Atoka, Coal, Creek, Craig, Haskell, Latimer, LeFlore, Mayes, McIntosh, Muskogee, Nowata, Okfuskee, Okmulgee, Pittsburg, Rogers, Sequoyah, Tulsa, and Wagoner Counties in 18 different coal beds.

### MARKETS FOR OKLAHOMA COAL

Coal was the major U.S. energy source from 1880 until 1950. From 1950 to the present, petroleum and natural gas have been the leading energy sources. However, rising fuel prices and supply uncertainties with regard to appropriate supplies of petroleum and natural gas have increasingly turned the nation to alternate fuel sources. Thus, coal again has become an alternative energy source.

Electricity generation is the largest market for coal in the United States. In recent years, the major competition for coal in new electric power plants has been nuclear energy. This situation originated from the Power Plant and Industrial Fuel Use Act of 1978, which prohibited oil and natural gas burning in new power plants. However, the 1978 Fuel Use Act was repealed in 1987, again making natural gas and possibly fuel oil competitive energy sources. Coal is also used in the paper, chemical, petroleum, stone, clay and glass, metals, coke manufacturing, cement manufacturing, and synthetics industries.

**FIGURE 1**  
Western Region of the Interior Coal Province  
(Oklahoma Counties)



Source: Friedman, Oklahoma Geological Survey.

### Uses and Markets for Oklahoma Coal

Coal was the major energy source in Oklahoma before World War I. Presently, most Oklahoma coal is used in adjacent states. The main uses of Oklahoma coal are electricity generation, coke manufacturing, metallurgical use, and cement manufacturing. Information obtained from the coal mine operators in a 1984 survey indicated that 43.5 and 6.8 percent of

the coal being mined in Oklahoma is used for electricity generation and coke manufacture, respectively; while the rest is being used for other industrial purposes.<sup>6</sup>

Also, the survey information indicated that about 94 percent of the coal mined in Oklahoma was being shipped to other states. The states to which coal was shipped included Arkansas, Illinois, Iowa, Florida, Kansas, Missouri, and Texas. Almost six percent of the coal mined in Oklahoma was exported to Japan in 1983 and 1984 as metallurgical ("met") coal. That market has now dried up, and no "met" coal was shipped to Japan in 1989.

### Analysis of Coal Prices

In this section, the Oklahoma coal price is valued in relation to the United States coal price. This evaluation will be done using f.o.b. prices at the mine. Also, delivered prices of coal received at the Oklahoma and United States coal-fired electric power plants are compared, both in ton and Btu terms.

The United States f.o.b. price at the mine is the average market price from all coal producing states. Prices vary significantly from one state to another depending on quality of coal and distance to consuming states. Data published by the United States Energy Information Administration for 1987 indicated that states with higher prices per ton include Alabama (\$41.42 per ton), West Virginia (\$29.15 per ton), and Ohio (\$30.80 per ton), while states with lower prices are North Dakota (\$7.91 per ton), Texas (\$12.10 per ton for lignite coal), Wyoming (\$9.80 per ton), Montana (\$12.43 per ton), and New Mexico (\$21.78 per ton).

The average f.o.b. prices for Oklahoma and United States coal at the mine are presented in Table 2. Oklahoma f.o.b. coal price at the mine steadily increased from \$17.64 per ton in 1977 to \$32.54 per ton in 1982, an increase of over 84 percent. However, in 1983 it decreased to \$31.29 per ton; it has decreased slightly to \$31.06 per ton in 1988. In the period 1977-1982, the United States coal price increased by about 37 percent. Then it decreased from \$27.14 per ton in 1982 to \$22.07 per ton in 1988. The Oklahoma coal price was lower than the United States coal price in the period of 1977-1978, while in the period of 1979-1988, it was higher than the United States coal price.

The average delivered prices of coal received at coal-fired electric power plants vary depending on the type of coal procurement, among other things. The utility company must decide how to obtain the coal.

**TABLE 2**  
**Average Prices Per Ton**  
**of Oklahoma and U.S. Coal**  
**F.O.B. at the Mine**  
**1972-1988**

Year	Oklahoma Coal	U.S. Coal
1972	\$ 7.28	\$ 7.66
1973	7.69	8.53
1974	10.51	15.75
1975	16.69	19.23
1976	17.00	19.43
1977	17.64	19.82
1978	21.42	21.78
1979	25.72	23.65
1980	27.78	24.52
1981	32.53	26.29
1982	32.54	27.14
1983	31.29	25.98
1984	32.13	25.61
1985	31.72	25.20
1986	28.23	23.79
1987	31.83	23.07
1988	31.06	22.07

Source: *Annual Coal Production, by years*, Energy Information Administration, Washington, D.C.

Coal procurement may be done by securing the coal on a long-term contract, or buying the coal on a "spot" basis. Contracts cover a supply period of one or more years. The prices set in the contract reflect market conditions at the time the contract is negotiated; however, adjustments may be authorized through price and/or escalation clauses.

The objective of a long-term contract is to bond buyer and seller together for mutual benefit. The most common long-term contract among the utility companies is the base-price-plus escalation contract. This type of contract begins with some base value per ton, then escalates the base over time to account for rising costs. It is favored by most utility companies because the risks are supposedly borne more equally by the buyer and the seller. The Oklahoma coal-fired electric power plants generally have secured their coal from coal mining companies in Wyoming on a long-term contract basis. In 1988, over 86 percent of the coal delivered to United States electric utility companies was obtained under long-term contract. However, the amount of Oklahoma coal reserves currently committed to long-term contracts is insignificant (less than one-tenth of one percent).

Coal procurement under a "spot" basis refers to the purchase of short-term coal supplies on the open market. Spot purchases generally are a single shipment of coal, or regular deliveries scheduled for less

than a one year period. These purchases generally are made by the user to fulfill a certain portion of energy requirements, to meet unanticipated energy needs, or to take advantage of low fuel prices. About 14 percent of the coal delivered to United States electric utility companies in 1988 and about eight percent of the coal delivered to Oklahoma coal-fired power plants in 1988 was obtained through spot purchases. Electric utility companies use this method to avoid expenses of unnecessary large stockpiles, to cover peak coal demands, to take advantage of lower coal prices during certain periods, and to experiment with new coal sources.

Like most commodity markets, the spot coal market is volatile in terms of prices and quantities offered. Also, it is highly competitive. Some electric utility companies buy a major portion of their coal needs from the spot market, while others purchase little coal from such a market. Oklahoma coal-fired electric power companies traditionally have bought little or no coal on a "spot" basis. In 1987, as a result of the new Oklahoma law requiring burning of some Oklahoma coal (ten percent by Btu) by Oklahoma electric utilities, a small amount of Oklahoma coal is being purchased on a spot basis.

Average delivered prices of coal received at Oklahoma and United States coal-fired electric power plants are presented in Table 3. Prices of coal received at United States electric utility companies are given on a contract basis and on a "spot" basis, while those for Oklahoma are presented on a contract basis. Delivered prices of coal received at Oklahoma electric utility companies increased from \$20.02 per ton in 1979 to \$29.80 per ton in 1984, then have declined slightly

since then to \$26.42 per ton in 1988. Information obtained from the Oklahoma coal-fired electric power plants survey indicates that coal transportation accounts for two-thirds to three-fourths of the cost of coal. This is primarily for coal delivered from Wyoming by railroad, and not for the "test burn" Oklahoma coal delivered to the coal fired power plants by truck in 1988 and 1989.

Delivered price of coal received at Oklahoma electric utility plants on a Btu basis increased from 115 cents per million Btu in 1979 to 173.3 cents per million Btu in 1983, then declined to 148.2 cents in 1988. Also, it is worthwhile to point out that delivered coal prices, in both ton and Btu terms, increased steadily in the period 1979-1983, and have declined each year since then (1984-1988).

Contract delivered price of coal received at United States electric utility companies on a ton basis was higher than that at Oklahoma electric utility companies. United States' prices increased from \$25.78 per ton in 1979 to \$35.21 per ton in 1983, an increase of about 37 percent. Prices have since decreased to \$30.86 per ton in 1988 (Table 3).

From 1979 to 1982, the contract delivered price of coal received at United States coal-fired electric power plants on a Btu basis was higher than that at Oklahoma's coal-fired plants. It increased from 122 cents per million Btu in 1979 to 165.1 cents per million Btu in 1982, an increase of about 38 percent. From 1983-1987, the U.S. contract delivered prices to power plants were less on a Btu basis than the Btu price to Oklahoma power plants. However, this changed again in 1988, e.g., 148.2 cents per million Btu for Oklahoma power plants in 1988 compared to

**TABLE 3**  
**Average Delivered Prices of Coal Received at Oklahoma and U.S. Electric Utilities**  
**for Steam Plants of 50-Megawatt Capacity or Larger**  
**1979-1988**

Area	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
<b>Oklahoma<sup>a</sup></b>										
\$ per ton	20.02	21.46	24.87	28.08	29.73	29.80	28.82	28.36	27.56	26.42
cents per 10 <sup>6</sup> Btu	115.00	123.40	145.30	164.60	173.30	173.20	167.90	163.70	155.70	148.20
<b>United States</b>										
<i>Contract Prices</i>										
\$ per ton	25.78	28.33	31.34	34.63	35.21	35.06	34.63	33.51	32.01	30.86
cent per 10 <sup>6</sup> Btu	122.00	134.80	151.30	165.10	167.80	168.80	167.60	161.70	154.80	150.30
<i>Spot Prices</i>										
\$ per ton	28.71	32.22	38.79	37.60	33.34	35.49	33.73	31.81	30.86	29.30
cents per 10 <sup>6</sup> Btu	124.40	137.30	164.40	160.80	149.80	153.70	144.40	134.60	130.60	126.30

Source: *Cost and Quality of Fuels for Electric Utility Plants*, Energy Information Administration, Washington, D.C., 1984-1988 Annual Reports.

<sup>a</sup>Average delivered prices of coal received at Oklahoma electric utility companies are all contract prices for Oklahoma utilities.

150.3 cents per million Btu for all U.S. power plants. It should be noted that in 1987 at least some, and possibly all, of the power plant operations in Oklahoma negotiated a significant transportation cost reduction with the Burlington Northern and other railroads involved in transporting Wyoming coal to Oklahoma. This is as much as a \$5.00 per ton reduction in transportation costs of approximately 19 cents per million Btu's.

The spot delivered price of coal received at United States electric utility plants on a ton basis has been greater than the Oklahoma price for the period 1979-88. It increased from \$28.71 per ton in 1979 to \$38.79 per ton in 1981 and has decreased since then, dropping to \$29.30 per ton in 1988.

From 1979 to 1981, the spot price paid by United States electric utility companies on a Btu basis was higher than that paid by Oklahoma electric utility companies. However, U.S. spot prices have been lower than the Oklahoma contract prices on a Btu basis each year from 1982 to 1988. The spot price for the United States has increased slightly from 124.4 cents per million Btu in 1979 to 126.3 cents per million Btu in 1988.

Finally, it is worthwhile to point out the decline in spot prices was probably due to the decrease in electricity sales caused by the economic recession that began in 1981. Also, it is important to indicate that the increase in delivered prices paid by Oklahoma coal-fired electric power companies was mainly due to the increase in freight rates. According to the superintendents of the Oklahoma coal-fired electric power plants, freight rates increased at a faster rate than the f.o.b. price of coal at the mines located in Campbell County, Wyoming. For instance, in 1977 Western Farmers Electric Cooperative contracted to pay \$11.94 per ton to Burlington Northern to ship the coal

from Gillette, Wyoming to Hugo, Oklahoma, while in 1983 it paid more than \$23 per ton, an increase of about 93 percent. Increasing diesel fuel costs, higher wage rates, increasing maintenance costs, and the general increases in other costs, caused these rail rate increases. However, the Burlington Northern reduced its freight rate by about \$5 per ton in 1987, which has worked to the competitive disadvantage of Oklahoma coal being used in Oklahoma coal-fired power plants.

#### Oklahoma Coal-Fired Electric Power Plants: Users of Wyoming Coal

Currently, Oklahoma has ten coal-fired electric generating units in operation. Some characteristics of the Oklahoma coal-fired electric power plants are presented in Table 4. The total capability is 4,885 MW. The coal tonnage needed to operate these ten units at full generating capacity is about 16.3 million tons per year.

The quantity of coal received, coal consumption, and stocks at Oklahoma electric utility plants for the period 1979-1988 are presented in Table 5. The quantity of coal received increased from 4,367,000 tons in 1979 to 13,897,000 tons in 1988. Coal consumption experienced a larger increase; from 2,975,000 tons in 1979 to 14,435,000 tons in 1988 (Table 5).

The Oklahoma coal-fired electric power plants used only Wyoming coal in their generation operations up to 1987. The superintendents of those plants contend that the boilers of the generating units were designed based on the characteristics of Wyoming coal. Also, Oklahoma coal has a higher sulfur content (2.0 percent) than Wyoming coal (0.4-0.7 percent), and the Oklahoma air quality regulations require sulfur dioxide emissions to be not greater than 1.2 pounds per million Btu.

**TABLE 4**  
**Some Characteristics of Oklahoma Coal-Fired Electric Power Plants 1989**

	Generation Station						Total
	GRDA	Sooner (OG&E)	Muskogee (OG&E)	Northeastern (PSO)	Hugo (WFEC)	Shady Point (AES) <sup>a</sup>	
Location	Choteau	Red Rock	Muskogee	Oologah	Ft. Towson	Shady Point	
Number of Units	2	2	3	2	1	1	11
Capability (MW)	1,010	1,030	1,545	900	400	300	5,185
Coal Use Full Capability (millions tons/year)	3.6	3.0	4.5	3.6	1.6	1.0	17.3

Source: Information obtained from electric utilities.

<sup>a</sup>The Shady Point Generation Plant is scheduled to begin producing electricity in 1990.



**TABLE 5**  
**Quantity of Coal Received**  
**Coal Consumption and Stocks at**  
**Oklahoma Electric Utility Plants**  
**1979-1988**  
**(1,000 Tons)**

Year	Quantity Received	Consumption	Stocks As of December 31
1979	4,367	2,975	2,911
1980	7,883	5,752	5,157
1981	9,266	8,368	5,893
1982	10,723	11,096	5,407
1983	10,671	12,042	4,031
1984	12,605	12,541	4,080
1985	12,895	12,747	4,194
1986	12,007	11,628	4,219
1987	13,446	12,861	3,634
1988	13,897	14,435	2,678

Source: *Quarterly Coal Reports and Coal Distribution, Reports by Energy Information Administration, Washington, D.C., for selected years and quarters.*

It is possible to meet these rigorous standards (requirements) by using a blended mixture of 90 percent of Wyoming coal and ten percent of Oklahoma coal, or even a higher ratio of Oklahoma coal by volume. The 1987 law passed by the Oklahoma Legislature requires Oklahoma coal-fired power plants to burn a minimum of ten percent Oklahoma coal on a Btu basis, if "economically feasible." An aborted attempt was made to change this requirement to ten percent by volume in the 1988 Legislature.

#### **Oklahoma Coal-Fired Electric Power Plants: Potential Users of Oklahoma Coal**

Oklahoma coal has a calorific value ranging between 12,000 Btu/lb to 13,500 Btu/lb. This value is about 4,000 to 5,000 Btu greater than the heat value of Wyoming coal. Also, Oklahoma coal has a lower moisture content than Wyoming coal (7.7 percent vs. 31 percent). These facts, together with the higher delivered prices of Wyoming coal received at Oklahoma coal-fired electric power plants in the last few years, may help encourage Oklahoma electric utility companies to use a blended coal mixture of Wyoming and Oklahoma coal in the near future. Obviously, the 1987 state law now "requires" these plants to burn ten percent Oklahoma coal by Btu. If future Wyoming coal contracts and transportation contracts by these companies result in either coal prices and/or transportation costs increasing, Oklahoma coal may become more competitive.

Currently, all 11 electric power plants surveyed are either planning, or are conducting, tests to determine

how the performance of the boilers is affected by using a blended coal mixture. The ability to achieve a reliable coal mixture will be determined by the capabilities of the coal handling facility. At a minimum, separate identifiable storage piles may be required, with associated requirements for separate receiving and handling facilities to serve the individual coal piles.

Regarding the modifications in the federal and state air quality regulations needed to stimulate use of a higher mixture of Oklahoma and Wyoming coal, all the superintendents of Oklahoma coal-fired electric power plants indicated that those regulations need to be changed to allow a higher level of sulfur dioxide emissions. However, environmental laws now require any new coal-burning facilities to have "scrubbers." Thus, it may be feasible to use such a mixture in those units that already have "scrubbers" and still be able to meet the federal and state air quality regulations. Use of the other technologies, such as washing and/or a fluidized bed process using a mix of coal and limestone, to desulfurize Oklahoma coal also could enhance the possibilities of using such a coal mixture in state electric utility plants.

The Grand River Dam Authority's Electric Generating Unit 2 has been designed to use 33 percent of Oklahoma coal by volume, or up to 50 percent by Btu in its generation operation. GRDA officials have indicated that unit 2 can burn about 500,000 tons of Oklahoma coal and one million tons of Wyoming coal at full operating capacity. The new coal-fired power plant being built by Applied Energy Services at Shady Point (near Poteau) has the technological capability of burning all Oklahoma coal, about one million tons per year when operating at full capacity. With the possibility of using ten percent of Oklahoma coal in the rest of the state's coal-fired electric power units, there could be a significant increase in the level of demand for Oklahoma coal in the near future.

Finally, even though the coal mining costs are higher in Oklahoma, and subsequently f.o.b. value is higher at the mine, the transportation costs from Oklahoma mines to Oklahoma coal-fired power plants obviously are lower than transportation costs for Wyoming coal. Thus, a change in the actual cost structure faced by the Oklahoma coal-fired electric power companies may induce them to view Oklahoma coal mining companies as a potential supplier in filling part of their coal needs.

#### **PAST, CURRENT, AND POTENTIAL ECONOMIC IMPACTS**

A research study, completed in 1987 at Oklahoma

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State University, focused on the regional impacts of coal mining in Oklahoma.<sup>7</sup> The researchers analyzed three scenarios; the first scenario represented annual coal production of 5.0 million tons, based on what had been attained for several years in the late 1970s and early 1980s. The second scenario involved finding additional markets for Oklahoma coal that would increase annual production by 25 percent from the Scenario 1 base, or up to 6.25 million tons. The third scenario projected an increase in markets that would increase production by 50 percent over the Scenario 1 base or up to 7.5 million tons annually. Certainly these goals are attainable if the various segments of the coal industry (producers, consumers, state and federal government agencies) all work together.

The estimated total *output* of goods and services generated by a coal development scenario consistent with a base demand level for Oklahoma coal of five million tons per year would amount to \$241,625,000 (in 1977 dollars). An increase of 25 and 50 percent from the base demand level for Oklahoma coal would cause an *increase* of 24.9 percent (\$60,063,500) and 52.4 percent (\$126,370,700) in the Oklahoma output of goods and services generated directly, indirectly and induced by the coal mining industry, respectively.<sup>8</sup>

The major input-output sectors affected by the Oklahoma coal mining industry under the three development scenarios would be the household, rental and real estate, construction and mining machinery, wholesale and retail trade, petroleum products production, maintenance and repair construction, finance and insurance, and transportation and warehousing. These eight sectors would account for over 73 percent of the Oklahoma output impacts.

Sectors experiencing greater output changes as a result of an increase of 25 and 50 percent from the base demand level for Oklahoma coal would be the household, construction and mining machinery, real estate and rental, and petroleum products production sectors. These four sectors would account for about 57 percent of the total change in Oklahoma output compared with the coal development scenario of five million tons per year.

The total *income* impact caused by a coal mining activity consistent with a level of demand of five million tons per year would total \$85,832,300 (in 1977 dollars). An increase of 25 and 50 percent from the base demand level for Oklahoma coal would cause income to expand to \$105,133,600 and \$127,170,400, respectively. The income increases under the last two scenarios, measured with respect to the first scenario, represent an expansion of 22.5 and 48.0 percent, respectively.

The greatest proportion of income increases would come from the wages and salaries paid to the coal mine workers by the coal mine companies. However, the total income generated directly, indirectly and induced in the rest of the sectors of the economy would represent over 53 percent of the total income increase.

The income received by the coal mine workers from the coal mine companies is the greatest impact. The income coming from the wholesale and retail trade, construction and mining machinery, health, educational and social services and non-profit organizations, maintenance and repair construction, transportation and warehousing, finance and insurance, business services, automobile repair and services, petroleum products production, and natural gas production sectors would follow in importance.

The total direct and secondary *employment* generated by a demand level for Oklahoma coal of five million tons per year would be 5,451 jobs, while an increase of 25 and 50 percent from the base demand for Oklahoma coal would cause employment to expand to 6,682 and 8,035 jobs. Most jobs would be generated in the coal mining industry, followed by the wholesale and retail trade, business services, and construction and mining machinery sectors.

The coal mining employment in the Coal Region reached a record high of 1,827 jobs in 1979. However, it has decreased to less than 600 jobs in 1989. This employment is important for the Coal Region where unemployment and underemployment are high.

An analysis of the commuting patterns of the 1984 coal mining employment in the Coal Region indicated that about 86 percent of that employment was captured by workers residing in the region. The rest of the workers were either living in adjacent Oklahoma counties (12 percent) or commuting from Kansas and Arkansas (two percent).

### **TRUCK TRANSPORTATION OF OKLAHOMA PRODUCED COAL**

Of the 2.1 million tons of coal mined in Oklahoma in 1988, about 721,400 tons were used in Oklahoma coal-fired power plants. The ten operating coal-fired units in Oklahoma had 13,897,000 tons of coal delivered in 1988; thus about 95 percent was delivered by unit trains from the Gillette, Wyoming area. The Oklahoma coal is transported to the Oklahoma power plants mostly by truck, although some is moving by rail. Peabody Coal Company is moving some coal from its Craig County mine to the PSO plant at Oologah by train.

In the late 1970s and early 1980s, a significant quantity of Oklahoma mined coal moved to its final destination by truck; e.g., coal-fired power plants at Coffeyville, Kansas and other Kansas communities, and several concrete kilns in the Midlothian, Texas area. Also, Oklahoma coal was trucked to several small Oklahoma industries using coal to produce steam.

The major movement of Oklahoma coal by truck occurred from about 1978 to 1987, in moving coal to barge loading facilities at the Port of Catoosa, Port of Muskogee, Webbers Falls, at a site near the Kerr Dam, and Keota. The movement of Oklahoma coal by barge to out-of-state destinations declined significantly in 1988 and 1989.

The peak year for barge transportation of Oklahoma coal occurred in 1981, when 1.3 million tons were moved on the McClellan-Kerr Navigation System in Oklahoma (Table 6). Although some of this coal was moved to barge loading facilities at Muskogee by rail, probably 80 percent moved to the ports by truck.

In 1987, the Oklahoma State Legislature passed Senate Bill 458, and it was signed into law by Governor Henry Bellmon. This law requires Oklahoma coal-

fired power plants to burn a mixture of coal that contains a minimum of ten percent Oklahoma coal, as calculated on a British Thermal Unit (Btu) basis. There is an exception provided in the law, that is, if the cost of the Oklahoma mixed coal is more than five percent higher than the cost of out-of-state coal, the state's electric utilities do not have to purchase Oklahoma coal.

All the electricity producers in Oklahoma are striving to meet the ten percent rule. The volume of Oklahoma coal-fired power plants has increased in 1988 and 1989, although the two coal units owned by GRDA, the state owned electric power producer, have been lagging in the purchase and use of Oklahoma coal.

If the ten existing plants are able to purchase a sufficient volume of Oklahoma mined coal, and assuming they operate at full capacity, then about 1.4 million tons of Oklahoma coal could be burned by these ten units each year. In addition, the new Shady Point cogeneration plant, with 300 MW capacity, is under construction in LeFlore County. The owners, Applied Energy Services, are committed to purchase 800,000 to one million tons of Oklahoma mined coal, if it is available. That plant uses a fluidized bed process where coal is burned in a mixture with limestone. About 175,000 tons of limestone also will be needed annually by that plant. Thus, there should be a significant demand for truck transportation to haul the coal and limestone, as well as to dispose of the fly ash and bottom ash.

As indicated, the state law specified the burning of Oklahoma coal on the basis of ten percent Btu equivalent. Since Oklahoma coal contains about 12,500 to 13,500 Btu's per pound and Wyoming coal about 8,500 Btu's per pound, it only takes about two-thirds of a pound of Oklahoma coal to replace one pound of Wyoming coal. Attempts by some state Legislators to change the law to require "burning ten percent Oklahoma coal by volume" (or up to 15-20 percent in one bill's version) have failed in subsequent sessions of the State Legislature.

It is clear that there will be an increased demand for truck transportation in Oklahoma to haul coal from Oklahoma coal mines to the 11 coal-fired power plants in the near future. Truck transportation also should play a significant role in hauling limestone to the Shady Point plant, and in hauling ash away from all 11 plants.

## SUMMARY AND CONCLUSIONS

Oklahoma has abundant bituminous coal resources. This has been documented by researchers with the

TABLE 6

**Oklahoma Production, Coal Shipments on McClellan-Kerr Arkansas River Navigation System and by Residual Truck-Rail Shipments 1971-1989**

Year	Tons		
	Oklahoma Production	Navigation	Rail-Truck
1971	2,333,493	38,110	2,295,383
1972	2,530,221	461,839	2,068,382
1973	2,194,670	181,075	2,013,595
1974	2,374,685	174,700	2,199,985
1975	2,850,427	167,898	2,682,529
1976	3,626,781	191,484	3,435,297
1977	5,346,654	438,315	4,908,339
1978	5,428,738	1,109,588	4,319,150
1979	4,791,767	792,107	3,999,660
1980	5,363,714	699,005	4,664,709
1981	5,728,461	1,282,552	4,445,909
1982	4,645,952	961,184	3,684,768
1983	3,635,890	910,518	2,725,322
1984	4,226,106	1,186,512	3,039,594
1985	3,344,113	683,094	2,661,019
1986	2,969,520	636,335	2,333,185
1987	2,866,840	529,126	2,337,714
1988	2,117,506	96,601	2,020,905
1989	1,759,373	70,400	1,688,973

Source: Tulsa District, U.S. Army Corps of Engineers and Oklahoma Department of Mines.

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Oklahoma Geological Survey at the University of Oklahoma. Oklahoma also has a trained cadre of mine workers who know how to safely and efficiently strip mine coal. There also are some strong owner-managers operating several coal companies who have the technical skills and managerial expertise to successfully mine and market Oklahoma coal.

Oklahoma has 11 coal-fired power plants which will burn over 17 million tons of coal a year, when operating at full capacity. There are no environmental restrictions or economic reasons why at least three to four million tons of this annual energy requirement can not be provided from Oklahoma coal mines. Other industrial plants in Oklahoma also can use Oklahoma mined coal, although on a smaller scale.

Oklahoma has the potential to grow economically, creating new jobs, increased incomes and increased output of goods and services using a combination of all three of our available energy sources — coal, gas, and oil. What needs to be done to provide the stimulus for the complementary use of all three of these resources?

The most critical need is for policy makers to promote all three energy sources, rather than concentrate on the one "clean" resource, natural gas. New federal regulations are likely to require scrubbers on any new coal-fired power plants. More stringent requirements on emissions of SO<sub>2</sub> and NO<sub>x</sub>, to reduce acid rain problems, may require retrofitting scrubbers on existing coal-fired plants. If that happens, higher sulfur Oklahoma coal can be burned in greater quantities while still meeting the emissions standards. Certainly, the fluidized bed technology where higher sulfur coal is burned with calcium carbonate holds promise for increased use of higher sulfur coal.

The coal industry has been treated as an "ugly step child" by many state and federal legislators. It is time we considered the strong economic impact in jobs and income that would be created in eastern Oklahoma by a vibrant coal mining industry. This is the region of the state we keep telling ourselves is ripe for economic development. The State Legislature may want to consider the advantages and disadvantages of a tax incentive to the Oklahoma coal mining companies for each new job created.

Another key objective is to organize all members of our coal producing and coal consuming economies together into an Oklahoma Coal Council. The members should be able to analyze any actual and perceived conflicts, and focus on solutions for providing a stable supply of Oklahoma coal on an orderly basis to the coal-fired power plants. Representatives of the public utilities involved (OG&E, PSO, GRDA, WFEC, and AES) need to work with the Oklahoma

coal mining companies to develop reasonable timetables for increasing the quantity of Oklahoma coal to be burned in the 11 coal-fired plants. Representatives of the transportation sector—trucks, rail and barge — also should participate as members of this Council.

The coal mining companies need to be more vigorous in seeking smaller, but stable markets for Oklahoma produced coal. State government agencies, especially the Oklahoma Department of Mines, Oklahoma Department of Commerce, and the Oklahoma Corporation Commission should help develop guidelines for meeting environmental quality standards, and also should work to create a more favorable image of the Oklahoma coal mining industry.

Researchers and extension specialists at the major universities in energy research should redouble their efforts to seek ways to more efficiently mine and market Oklahoma coal, as well as suggesting changes in reclamation laws that would reduce coal mined land reclamation costs, without sacrificing the environmental integrity of the region. The new Energy Center at OU should have a strong emphasis on coal as an energy resource. Obviously, natural gas is a valuable energy resource in Oklahoma. However, policy makers should not overlook the long run economic benefits from research on mining and marketing Oklahoma coal.

## NOTES

<sup>1</sup>S.A. Friedman, *Investigation of the Coal Reserves in the Ozarks Section of Oklahoma and Their Potential Uses*. A final report to the Ozarks Regional Commission, July 10, 1974.

<sup>2</sup>Oklahoma Mining Commission, Department of Mines, *Seventy-Seventh Report for Calendar Year 1987*. (Oklahoma City, November 15, 1988).

<sup>3</sup>*Ibid.*

<sup>4</sup>S.A. Friedman.

<sup>5</sup>Oklahoma Mining Commission.

<sup>6</sup>Angel S. Martinez-Salazar and Daniel D. Badger, *Regional Impacts of Coal Mining in Eastern Oklahoma*. AE8761, (Stillwater, Oklahoma: Department of Agricultural Economics, Oklahoma State University, July 1987).

<sup>7</sup>*Ibid.*

<sup>8</sup>*Ibid.*

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## APPENDIX

**TABLE 1**  
**Summary of Oklahoma Coal Mining**  
**by County and Year**  
**Selected Years**

County	1950	1960	1970	1980	1985	1987	1988
Atoka	—	—	—	—	—	—	—
Coal	79,890	286	—	—	12,570	—	19,817
Craig	117,625	99,596	992,596	1,804,546	1,041,254	697,097	616,042
Creek	—	37	—	—	—	—	—
Haskell	384,726	244,595	424,320	700,876	607,817	419,801	407,892
Latimer	2,726	1,377	75	252,911	316,238	244,490	245,706
LeFlore	388,600	215,042	221,432	302,618	276,826	36,002	64,501
Mayes	—	—	—	—	—	—	—
McIntosh	2,025	157,970	—	10,993	54,293	15,628	47,016
Muskogee	152,688	—	1,122	247,254	—	58,785	85,280
Nowata	—	19,457	—	23,019	25,586	—	—
Okfuskee	—	—	—	—	—	—	—
Okmulgee	724,992	14,885	1,610	589,957	4,166	5,520	4,990
Pittsburg	285,440	125,358	3,515	80,200	292,608	8,941	—
Rogers	507,729	297,576	797,794	1,098,854	482,974	1,303,309	609,009
Sequoyah	102,782	187,724	—	—	—	—	—
Tulsa	7,313	—	—	—	—	—	—
Wagoner	2,910	599	—	252,458	229,781	77,267	17,253
Washington	—	—	—	—	—	—	—
<b>TOTAL</b>	<b>2,759,646</b>	<b>1,364,502</b>	<b>2,442,464</b>	<b>5,363,714</b>	<b>3,344,113</b>	<b>2,866,840</b>	<b>2,117,506</b>

Source: Department of Mines, Chief Mine Inspector, Oklahoma, *Annual Report* issues.

# THE FIRST SESSION OF THE 42ND OKLAHOMA LEGISLATURE: HIGHLIGHTS AND ECONOMIC DEVELOPMENT INITIATIVES

## INTRODUCTION

One of the major responsibilities of legislative bodies at all levels of government is to promote the economic well-being of the citizenry. Currently, for example, across America economic development is viewed as one of the major issues, if not "the" issue, facing state, county, city, and even tribal governments.<sup>1</sup> The media report daily on economic development initiatives passed by state Legislatures or being pursued by local officials.

Economic development is important for several reasons. First, such activities are politically appealing. The bottom line, so to speak, of such policies is to create new jobs and increase economic activity and opportunities.<sup>2</sup> In fact, the careers of political officials may be tied to their success in promoting policies that enhance economic opportunities for their constituents. Second, the creation of new jobs and potential increases in population can have positive outcomes for local economies. Retail sales, land values, building construction, newspaper circulation, and service oriented businesses are likely to experience gains as local economies expand. At the same time, state and local governments benefit from economic growth through the collection of more tax revenue. Finally, creating jobs helps combat social problems, such as unemployment, poverty, and crime. Given these potential benefits, it is not surprising that economic development appears so appealing.

How well has Oklahoma fared in the struggle to develop and diversify the state's economic base following the recession in the "oil patch" and agribusiness in the early 1980s? The answer to this question depends, of course, on one's perspective and expectations. Incorporating many of the recommendations suggested in the Counsel for Community

Development's report entitled *Oklahoma: Tools for a Global Competitor*,<sup>3</sup> sweeping economic development initiatives were passed in the "Oklahoma Economic Development Act of 1987" (HB 1444). This bill created Oklahoma Futures as a policy development board to advise the Department of Commerce and state policymakers. In October 1988 this group of public and private sector leaders issued its first five year economic development plan for the state. The 1987 economic development act also established the Oklahoma Center for the Advancement of Science and Technology to develop and enlarge the state's research programs; the Oklahoma Capital Investment Board to oversee a pool of money to be loaned to Oklahoma businesses; the Executive Bond Oversight Commission and the Legislative Bond Oversight Commission to review state bond issues; and the Oklahoma Development Finance Authority to replace the Oklahoma Development Authority. The new Authority assumes the duties of the one it replaced but has greater bonding capacity.

In short, since 1982 and especially since passage of HB 1444 in 1987 the state Legislature has demonstrated a real interest in pursuing economic development initiatives that carry with them the potential for revitalizing Oklahoma's economy. The purpose of this chapter is to review and analyze significant economic development initiatives pursued by the first session of the 42nd Oklahoma Legislature. First, however, we might briefly highlight some of the major events that helped insure the historical significance of the session.

## THE FIRST SESSION OF THE 42ND LEGISLATURE: HIGHLIGHTS

During the first session of the 42nd Legislature (1989) the 101 members of the House of Representatives (70 Democrats and 31 Republicans) and 48 senators (33 Democrats and 15 Republicans) considered 1,332 measures; 550 bills were passed and 23 were vetoed by Governor Bellmon.<sup>4</sup> The Legislature appropriated about \$2.68 billion for fiscal year 1990, with approximately \$200 million in new monies. A

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majority of the new funds went to education (54 percent), to the Department of Human Services (17 percent), and to state employees, who received a \$400 a year pay raise and a doubling of their longevity pay. About \$17 million was drawn from the state's "rainy day fund" for prison construction.

The 1989 Legislature will probably be remembered more for significant events that occurred during the session than for substantive policies passed by lawmakers. Three events are particularly noteworthy: (1) passage of State Question 620 that restricts legislative sessions, (2) the ouster of Jim Barker as Speaker of the House of Representatives, and (3) Governor Bellmon's calling the Legislature into special session.

### **State Question 620**

The first session of the 42nd Legislature adjourned at 3:10 p.m. Friday, May 26, 1989. This adjournment date was the earliest one in more than a decade (since 1978). The impetus for early, and we might note orderly, adjournment was passage of State Question 620 in March of 1989. Voters overwhelmingly approved the question by a vote of 136,930 (75 percent) in favor and 44,872 (25 percent) against.<sup>5</sup> State Question 620 restricts the annual legislative session from the first Monday of February through 5:00 p.m. of the last Friday in May. Previously, the annual session was limited to 90 legislative days beginning in January. Sessions, however, often ran well into the summer and appropriation bills were not passed until near the beginning of the fiscal year, which starts July first.

In addition to the shorter legislative session, other procedural changes were approved by the Legislature. House committees were reduced from 28 to 21 in number; rules in the House of Representatives were changed such that the body cannot meet past midnight; conference committees must complete their work by May 3rd (except for appropriation bills) to prevent a backlog in the final days of the session; and conference committee reports cannot be considered for at least 24 hours after filing so that members can study proposed legislation.<sup>6</sup> All of these reforms were put in place by legislators concerned about putting their houses in better order and in response to criticisms from constituents about legislative procedures from previous sessions.

### **Ouster of the Speaker<sup>7</sup>**

The ouster of veteran, four-term speaker Jim Barker (D.-Muskogee) on May 16, 1989, took state capitol observers by surprise. It represents the first time

in recent state history that a sitting speaker was "dethroned" owing to the lack of confidence of his peers and carries real implications for the future policy directions in the House of Representatives. Barker was elected speaker in 1983 after another veteran speaker, Dan Draper, had been convicted for vote tampering (later overturned by a federal judge). The new speaker won high marks after assuming control of a deeply-divided body by restoring leadership over the often unruly house and then taking the lead in passing tax increases in 1984, 1985, and 1987.

By the 1988 legislative campaigns, however, Barker's leadership was being seriously questioned. Barker and his allies were widely attacked from within the Legislature and in the media for employing heavy-handed tactics and indulging in pork-barrel politics. Nonetheless, Barker was reelected easily to a fourth term as speaker. The switch from secret ballot to a pledge-card system in 1986 made Barker's task easier. The incumbent speaker was difficult to deny when he approached each member for his or her support.

Events in 1989 proved to be Barker's Waterloo, however. Twenty-one of the 70 house Democrats, for example, opposed majority leader Guy Davis when he allegedly threatened to hold higher education appropriations hostage until State Regent James Barnes of Tulsa apologized for sponsoring a full-page newspaper advertisement attacking the speaker and his lieutenants for their pork-barrel politics in the previous session. The 21 house members signed a letter critical of the treatment of the state regent. The speaker, who placed a high premium on loyalty, backed Davis by withholding appointments of several of his critics to the General Conference Committee on Appropriations and allegedly threatening other committee assignments.

A group of dissidents, later known as the "T-Bar Twelve" (named after a popular Oklahoma City Restaurant where they met several times), assembled to plot their strategy. Cal Hobson, a Democrat representing Cleveland County and one of the most progressive members of the Legislature, also became one of the ringleaders of the Barker opposition. The dissidents systematically and secretly classified their Democratic colleagues as to how they would vote on an ouster motion. Freshmen legislators were given special attention. By mid-May the conspirators had 45 of 70 Democrats committed to the ouster in a floor fight. Attorneys among them were assigned to research the parliamentary script.

At 10:40 on May 16, Dwayne Steidley, a Claremore Democrat and chairperson of the House Judiciary Committee, made the motion to remove the

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speaker. Previous planning paid off for the rebels; every move by Barker's allies to block the revolt was parried. Republicans joined with 45 Democrats for a 72-25 vote for the ouster motion. Only 51 votes were required.

In the Democratic caucus that followed, Shawnee Representative Steve Lewis, the T-Bar Twelve's candidate, won the nomination over two other candidates. He was elected subsequently on a strictly party vote. For his part, Barker conducted himself with great tact during and after the revolt. Lewis, in turn, brought the session to an orderly close and promised more procedural reforms for the next session. The new speaker's strongest support, in contrast to the more rural leadership of the Barker years, comes from urban Democrats. Political observers could project that the new leadership would be more supportive of raising taxes, as illustrated below.

### **The Special Session<sup>8</sup>**

In July 1989, as in the previous two years, Governor Henry Bellmon called the Legislature into special session. His agenda consisted of three proposals: (1) a common education financing scheme that would require a statewide vote on imposing a 1.9 percent gross receipts tax on goods and services purchased in Oklahoma, imposing an income tax surcharge, and reducing the reliance of the public school system on the property tax; (2) dipping into the state's constitutional rainy day fund for \$50 million to buy books, supplies, and instructional equipment for schools and for creating programs to address the school dropout problem; and (3) raising the diesel tax by 3 cents per gallon to 16 cents (the same rate paid on gasoline purchases) so as to provide the Department of Transportation extra funds to match all available federal highway dollars.

The special session convened on August 14 to consider Bellmon's agenda. The Legislature acted quite negatively to the first and major item—the governor's school funding proposal. Indeed, it was apparent that the Governor's tax proposals were dead on arrival. The Office of State Finance has estimated that Bellmon's plan to tie school funding to a growing revenue source instead of property taxes would raise approximately \$292 million for schools. Bellmon, for his part, insisted that it was time for legislators to put up or shut up on the question of education. Currently, Oklahoma ranks 46th among the states in total public school expenditures per pupil, although state government's *share* of total state-local school funding ranks in the top ten.

On August 18, the House voted 96 to 1 against the

proposal. Representative Bill Veitch (R.-Tulsa) was given the "purple heart" by the governor for sponsoring the bill and casting the only favorable vote. Instead of the governor's financing scheme, Speaker Lewis supported a plan for a \$304 million increase in the state's personal income tax to finance the pressing needs of common education. According to Lewis, the school improvement plan could be financed at a cost of about 30 cents per day for the average family in Oklahoma. Funds derived from a 1 to 1.5 percent increase in the effective rate of state income taxes would be dedicated to schools. The tax increase would raise about \$300 million in the first year and grow to about \$600 million by the fifth year.

The additional 3 cents in the diesel fuel tax would have generated approximately \$11 million for the Department of Transportation. State Transportation Secretary Neal McCaleb argued that the money was required for the next fiscal year to fully match federal road funds. In comparison to other neighboring states, Oklahoma spends \$17,130 per mile while Kansas spends \$43,500 per mile, Texas \$38,500 per mile, and Colorado \$25,000 per mile.

On August 23 the state Legislature recessed the special session until November 6 without approving any of Governor Bellmon's proposals. Instead, the formulation of a plan to bail out Oklahoma's ailing educational system was given to a 31 member task force (27 of whom can vote on proposals) called "Task Force 2000: Creating Twenty-First Century Schools." The task force was given until November 6 to offer to the Legislature an education reform and revenue proposal.

### **Summary**

The passage of State Question 620 and the ouster of Speaker Barker will change the nature and functioning of the state Legislature. The effect of the former is straightforward, shorter sessions. The full impact of the latter event perhaps will take more time to determine. Reducing the number of house committees, proposing new deadlines for the drafting of legislation, and requiring a quorum of committee members to be present during the interim in order to transact business are products of the new house leadership under Speaker Lewis. It would seem, at least to us, that business as usual (e.g., pork-barrel politics, the "good ole boy" network, marathon days in the final days of the legislative session) is over in the Oklahoma Legislature.

With respect to the special session, perhaps one should not expect too much from such a forum, even with the availability of the Task Force 2000 report.



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Nevertheless, the urgent needs of education, both common and higher, are well known. Another task force to consider the issue is probably not needed for identification of the problems; instead legislative action and public support for reform are required. Tough choices are required, which will eventually mean either a major overhaul of the ad valorem system in the state or increases in other taxes. In an election year, imposing new taxes is certainly not popular. On the other hand, the citizens of the state can no longer afford a second-rate educational system for their children. Money is not a cure-all. Yet Oklahoma is so far behind most other states in financing education, it is a good place to start. A well-educated workforce is a must for economic development, the topic we turn to next.

### THE 1989 LEGISLATIVE SESSION AND ECONOMIC DEVELOPMENT INITIATIVES: REVIEW AND ANALYSIS

Given the major events outlined above, that a blueprint for economic development is in place (HB 1444), and that analysts claim that the major policy thrust of the first session of the 42nd Legislature was on children's issues,<sup>9</sup> it should come as little surprise that economic development initiatives coming out of the 1989 session were not monumental in scope. A number of specific and noteworthy economic development policies were passed, nonetheless. Although the list is not exhaustive, in this section we first review these policies and provide a general analysis of economic development in the state.

#### Review of Economic Development Bills<sup>10</sup>

For the most part, economic development legislation passed in 1989 was aimed at implementing and/or building on The Economic Development Act of 1987 (HB 1444). Perhaps one of the key pieces of legislation was HB 1497. In August of 1988 voters of the state approved State Question 618, which gives the Legislature the power to define the meaning of a "manufacturing facility." Since voter approval in 1985, such qualifying facilities have been eligible for a five-year ad valorem exemption program if they expand or locate in the state. Frequently, however, new business development was unable to take advantage of the tax relief because of the narrow range of industries that fit the definition of "manufacturing facility." Under HB 1497 the Legislature expanded the definition of manufacturing facilities to include: "(1) facilities engaged in chemical or mechanical transfor-

mation of materials into new materials, (2) aircraft repair or construction, and (3) computer services and data processing in which the majority of the manual gross revenues are from out-of-state business."

HB 1444 transfers to the Department of Commerce the export insurance program formerly managed by the Oklahoma World Trade Export Authority, creates a revolving fund for the program, and frees the 1988 appropriation for the program that had been vetoed.

Several bills were aimed at enhancing local governmental economic development efforts. SB 113 allows substate planning districts to employ engineers who can in turn assist local governments; HB 1183 permits counties with populations of 400,000 or less to hire an executive director for economic development programs and allows counties to cooperate through the establishment of intergovernmental public trusts; and HB 1179 expands eligibility criteria and the amount of funds available to at-risk farming and ranching enterprises.

The 1989 session produced three salient economic development bond policies. SB 111: "(1) implements the state's credit enhancement program which will enable the state to insure economic development programs approved by the Oklahoma Development Finance Authority (up to \$100 million total) with the full faith and credit of the state, (2) creates the Council of Bond Oversight as the successor to the Executive or Legislative Bond Oversight Commissions in the event the Commissions are found unconstitutional, and (3) permits the State Bond Advisor to assist local governmental units in their issuance of bonds." SB 154 allows agricultural, livestock, or mining processing businesses to qualify for the Industrial Development Loan Program of the Oklahoma Development Finance Agency. Finally, HB 1525 revises the state "private bond allocation ceiling to reserve in the future 20 percent of the total bond pool for a Qualified Small Issue Bond Pool."

Banking initiatives passed in 1989 included HB 1609, which allows interim state banks and sets policies governing their operation. HB 1642 "limits public trusts, which have the state, municipalities, or counties as beneficiaries, to investment of these governmental entities' funds in collateralized or insured certificates of deposit or other evidences of deposit in financial institutions."

To aid the depressed housing construction industry, HB 1364 expanded the Energy Conservation program in the Department of Commerce. Program guidelines were modified so that persons meeting income criteria can receive up to \$3,000 grants for weatherization and other home improvement projects.

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## Analysis of Economic Development Initiatives in Oklahoma

Without a doubt, Oklahoma is in dire need of further economic development. This, of course, does not distinguish Oklahoma from many other states. Several widely quoted systems of ranking states in terms of the attractiveness of their economic development-related environment are byproducts of the interstate competition for growth. The methodology, reliability, and accuracy of these ranking systems has often been challenged. Critics argue that the ranking systems are highly subjective and sometimes highly biased.<sup>11</sup> Nevertheless, policymakers do pay attention to the rankings in spite of their controversial nature.<sup>12</sup>

One of the more widely-quoted economic development rating systems is that of the Corporation for Enterprise Development (CFED), a Washington, D.C. research group. Using 1987 data, CFED prepared a ranking of the fifty states based on 78 factors deemed to be determinants of current and future state economic growth.<sup>13</sup>

States were assigned grades along the following four dimensions:

- economic performance—employment growth, income per capita, equity, job quality, and quality of life;
- business vitality—competitiveness of existing businesses and ability to spawn new ones;
- economic capacity—human and capital resources, infrastructure capacity, amenities to attract and retain talent; and
- policy strength—effectiveness of governance and regulation, tax policy, commitment to enabling capital mobilization, improved education and research, and help for distressed communities.<sup>14</sup>

The letter grades A, B, C, D, and F were assigned to each state for each of the four major dimensions. Given Oklahoma's current economic woes and low job growth, not surprisingly: Oklahoma was one of the five states to receive a grade of "F" for economic performance. Not much better news was offered with respect to business vitality—a grade of "D." Venture capital is necessary to help foster the development of new enterprises, and such funds have been scarce in Oklahoma lately. The grade of "D" for economic capacity seems on target. Despite a record year in 1989 for percent increases to education (six percent increase in appropriations to common schools; 9.1 percent for higher education, and 9.8 percent for vocational-technical education),<sup>15</sup> the educational system in Oklahoma, compared to other states, re-

mains near the bottom in per pupil expenditures. Moreover, millions of dollars are required for infrastructure development and repair.<sup>16</sup> In fact, early in 1989 Governor Bellmon requested an approximately \$300 million capital improvement bond issue to address infrastructure needs.<sup>17</sup> No action by the Legislature was forthcoming. Finally, the grade of "B" for economic development policy reflects the changes in development-related policies made by state policy makers in recent years.

Closer to home, the Oklahoma State Chamber of Commerce in June of 1989 released its "report card" on the performance of the state Legislature.<sup>18</sup> In education the Legislature received the grade of "B-," for job/business climate the grade of "C," for legislative process reform the grade of "A," and for workers compensation reform the grade of "D-." Proposals backed by the Chamber, which it claims would enhance economic development in the state, but not passed by the state Legislature include: (1) giving local districts options in school finance, (2) pilot open transfer programs for schools, (3) letting voters choose if they prefer 100 percent valuation of property, (4) tort reform, (5) workers compensation reform, and (6) approval of a proposed constitutional amendment (HJR 1006) that will allow the interest rate for industrial revenue bonds to be set by law instead of the six percent specified in the state constitution.<sup>19</sup>

Finally, the accomplishments and failures of the Economic Development Act of 1987 (HB 1444) were subjected to media scrutiny. For example, one reporter lamented the lack of progress in implementing the legislation, after two years and \$34 million in added appropriations, a large portion of HB 1444 remained only a theory.<sup>20</sup> Additionally, the media observed the delay in putting on line two of the three new state entities whose purpose was to attract and create new capital for investment—the Oklahoma Capital Investment Board and the Oklahoma Development Finance Authority<sup>21</sup> and noted that attendance by key Oklahoma policy makers at Oklahoma Futures meetings was "small to nonexistent."<sup>22</sup> Oklahoma Futures is the group of public and private officials who are to function as a board of directors to oversee economic development initiatives under HB 1444. There also has been criticism of the degree to which the Oklahoma Department of Commerce (ODOC) expanded programmatically, in personnel and in appropriations. ODOC was created in 1986 with the merger of the Department of Economic and Community Affairs and the Department of Economic Development. At the time of the merger, the two agencies employed 151 full-time employees and

enjoyed appropriations in the amount of \$8.3 million. Three years later, ODOC's budget had increased about \$19 million, and it employed some 210 full-time employees. Thirty-eight programs and activities have been added in the ODOC since 1987.<sup>23</sup> It should be noted, however, that of the approximate \$19 million in new monies, legislative leaders diverted about \$7.6 million for pork-barrel projects. About \$1.5 million also went to finance the attempt to secure the super collider project to Oklahoma.

### CLOSING COMMENTS

As sociologist Craig St. John reminds us, economic growth should not be confused with economic development.<sup>24</sup> He contends that during the 1970s and early 1980s Oklahoma experienced economic growth as a result of soaring prices for petroleum and stable prices for farm commodities. The economy expanded and the number of dollars in circulation increased, but the economic base of the state did not change fundamentally. Economic growth occurred largely without development. According to St. John, economic development requires economic diversification and long-range planning. The purpose of HB 1444 and Oklahoma Futures is to provide the venture capital and policies needed for diversification.

Clearly the economic revitalization and diversification effort in Oklahoma as well as full implementation of provisions of HB 1444 are only partially completed. But, as James Tolbert, chairman of Oklahoma Futures, notes: "The state didn't get in a hole in a week and won't get out of one in that time either..."<sup>25</sup> To expect a quick solution to diversification is asking too much. For Sooners who are accustomed to a "boom or bust" mentality, however, the wait will seem unbearable.

Perhaps the keys to future economic development are found in a recent report issued by the Southern Governors' Association.<sup>26</sup> Traditionally the approach to luring industry to the South has been through various tax incentive packages, availability of a cheap labor force (i.e., non-union), and savings in energy due to climate. The report argues for a new southern strategy. "The ability to field an educated and highly skilled work force, provide [a] quality physical infrastructure, and develop and transfer technology are key ingredients upon which firms depend for their competitive survival." The new approach "is not to keep taxes and business costs low at the expense of services, but rather, to provide these essential services in the most effective and efficient way possible." In brief, the state has yet to realize much of the initial

promise of the Economic Development Act of 1987. In some ways, though, Oklahoma has done the easy part—most of the institutional machinery to promote and facilitate development is now in place. More capital is needed, of course. But the next big step in economic development will be the tough one, fraught with uncertainty, controversy, and dissent. The 1989 special session of the Legislature provided a preview of what is to come. The real issue now involves more fundamental change. What do we do about reforming worker's compensation or modernizing state government through constitutional revision? But above all, what will Oklahomans choose to do about financing a truly competitive system of education and funding essential infrastructure improvements to attract investment and improve the quality of life for the state's residents? Such efforts will be costly, no doubt. Yet, this is more than just a matter of increasing public spending; such expenditures can really be seen as an investment in the future of the state. Can Oklahoma pull it off? The answer is a resounding "maybe."

### NOTES

<sup>1</sup>For a discussion of tribal governments and economic development see Larkin Warner, "State Policy Toward Indian Tribes and Economic Development in Oklahoma," *State Policy and Economic Development in Oklahoma: 1989* (Oklahoma City: Oklahoma 2000, Inc., January 1989), pp. 25-35.

<sup>2</sup>Enid F. Beaumont and Harold A. Hovey, "State, Local, and Federal Economic Development Policies: New Federal Patterns, Chaos, Or What?" *Public Administration Review* 45 (March/April 1985): 327.

<sup>3</sup>Counsel for Community Development, Inc., *Oklahoma: Tools for a Global Competitor* (Cambridge, Mass.: Counsel for Community Development, Inc., January 1987).

<sup>4</sup>Data in this paragraph are from David Ligon, Anne Stefan-Kopko Barrett, and Dedric Anderson, *Highlights of Non-Appropriation Legislation Enacted During the First Session of the 42nd Oklahoma Legislature* (Oklahoma City: Research Division, Oklahoma House of Representatives, June 1989): pp. iv, 4.

<sup>5</sup>Interview with George G. Humphreys, Director, Research Division, Oklahoma House of Representatives, October 18, 1989.

<sup>6</sup>Ligon et al., in *Highlights*, pp. 3-4 and *Ibid.*

<sup>7</sup>Information on the ouster movement was taken from Elizabeth Hudson, "Sacking the Speaker: A Quick, Clean Political Revolt," *The Washington Post*, June 8, 1989; "State Newspapers Comment Editorially On Barker Ouster," *Stillwater NewsPress*, May 21, 1989; Carter Bradley, "Rep. Gish One of Ringleaders In Move To Oust Jim Barker," *Stillwater NewsPress*, May 21, 1989; Jim Myers, "Legislators Still In Shock After Barker Ouster," *Tulsa World*, May 21, 1989.

<sup>8</sup>Information on the special session was taken from "Heaton Says Bellmon Backs Tax Hike," *Stillwater NewsPress*, August 23, 1989; "Bellmon Urges Teachers To Challenge Lawmakers," *Stillwater NewsPress*, August 14, 1989; "Bellmon Stands Up For Tax Program As Demos Work On Own," *Stillwater NewsPress*,

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August 15, 1989; "Bellmon Wants Education Funding From Special Session," *Stillwater NewsPress*, August 13, 1989; "Task Force 2000 Faces Tough Job In Less Than 10 Weeks," *Stillwater NewsPress*, August 27, 1989; "House Speaker Lewis Hitches Wagon To Unpopular Tax," *Stillwater NewsPress*, August 20, 1989; "Governor Bellmon Declares It Is Now Up To Legislators To Get School Funds," *Stillwater NewsPress*, August 18, 1989; "Legislative Leaders Calling For Recess of Special Session," *Stillwater NewsPress*, August 23, 1989; "House Doesn't Take Action On Bellmon's Tax Program," *Stillwater NewsPress*, August 16, 1989; and "House Speaker Lewis Outlines School Plan," *Stillwater NewsPress*, August 16, 1989.

<sup>9</sup>Ligon et al., *Highlights*, p. 1.

<sup>10</sup>Information on economic bills passed during the session comes from *ibid.*, pp. 22-26.

<sup>11</sup>"Changes in Business Climate Rankings," *Strategic Indicators* 6 (June 1985).

<sup>12</sup>"Playing the State Ranking Game — A New National Pastime Catches On," *National Journal* (June 30, 1984): 1268.

<sup>13</sup>The Corporation for Enterprise Development, *The 1989 Development Report Card for the States* (Washington, D.C., 1989).

<sup>14</sup>Deborah Kasouf, "State Economic Index Adds Fuel to Debate," *Public Administration Times*, April 15, 1987, p. 12.

<sup>15</sup>*Oklahoma Legislative Weekly Reporter* (Oklahoma City: Oklahoma Business News Company, May 30, 1989), p. 3.

<sup>16</sup>See David A. Penn with the assistance of Ramona Henry and Sheila Murray, *Oklahoma Infrastructure Study: Conditions, Needs, and Recommendations—Executive Summary* (Oklahoma City: Governor's Infrastructure Advisory Task Force and Oklahoma Department of Economic and Community Affairs, April 1986).

<sup>17</sup>*Oklahoma Legislative Weekly Reporter*, p. 9.

<sup>18</sup>Tim Chavez, "Chamber Gives Legislature B- For 'Late Heroics'," *The Sunday Oklahoman*, June 4, 1989.

<sup>19</sup>See *ibid.* and "Capitol Comment," (Oklahoma City: Oklahoma State Chamber of Commerce & Industry, May 25, 1989).

<sup>20</sup>Tim Chavez, "Bill Leaves Room for Development," *The Sunday Oklahoman*, July 23, 1989.

<sup>21</sup>*ibid.* and Tim Chavez, "State Cautiously Ventures Into Capital Funding," *The Sunday Oklahoman*, July 30, 1989.

<sup>22</sup>Tim Chavez, "Oklahoma Futures Caught Between Theory and Fact," *The Sunday Oklahoman*, July 23, 1989.

<sup>23</sup>Tim Chavez, "Development Push Expands State Agency," *The Sunday Oklahoman*, August 6, 1989.

<sup>24</sup>Craig St. John, "Growth and Development in Oklahoma," *Free Inquiry* 15 (November 1987): 231.

<sup>25</sup>As quoted in Tim Chavez, "State Awaiting Payoff From Consultant's Work," *The Sunday Oklahoman*, August 6, 1989.

<sup>26</sup>"Report Says Southern States Must Alter Economy Manner," *Stillwater NewsPress*, September 17, 1989.