

Approved January 25, 1989  
Date

MINUTES OF THE HOUSE COMMITTEE ON ECONOMIC DEVELOPMENT

The meeting was called to order by Elizabeth Baker at  
Chairperson

3:36 ~~am~~/p.m. on Thursday, January 19, 1989 in room 423-S of the Capitol.

All members were present except: Representative Foster. Excused.

Committee staff present:

Jim Wilson, Revisor  
Lynne Holt, Research  
Elaine Johnson, Secretary

Conferees appearing before the committee:

Dr. Anthony Redwood, Institute of Public Policy and Research, University of Kansas  
Professor Norman Clifford, Economics Department, University of Kansas

The meeting was called to order at 3:36 p.m. by Chairman Baker. Dr. Anthony Redwood, of the Institute of Public Policy and Research, University of Kansas was recognized.

Dr. Redwood followed the outline (Attachment 1) in his presentation to the committee. Dr. Redwood discussed the mission and activities of the Institute for Public Policy and Research (IPPBR). (Attachment 2).

Dr. Redwood recognized Professor Norman Clifford of the Economics Department. Professor Clifford went over the "U.S. and Kansas Economic Forecasts for 1989" (Attachment 3) for the committee.

Professor Clifford responded to questions asked by the committee.

Dr. Redwood continued by discussing "The Nature and Significance of The Overland Park/Johnson County Economy", research report for the committee. (Attachment 4).

Dr. Redwood responded to questions asked by the committee.

Dr. Redwood referred back to the outline, number IV and briefly touched on all points. (Attachment 1).

The committee thanked Dr. Redwood for coming and asked that he return in the near future.

The meeting adjourned at 5:10 p.m.

*Elizabeth  
Baker*

Date: 1-19-89

GUEST REGISTER

HOUSE

Committee on Economic Development

NAME

ORGANIZATION

ADDRESS

Thomas G. Clifford

IPPBR - U of Kansas

Lawrence, KS

Patricia C. Ostlund

IPPBR - U of Kansas

Lawrence, KS

Judy Frost

City of Topeka

Topeka

Brenda Manke

SETRC - UNES Center - KS

Jon Drap

Kansas for Life and its Best

Topeka

DICK HAYTER

KSU

MANHATTAN

Alice Rubin

Eagle Beacon

Topeka

Ann Patterson

KDOC

Topeka

Debbie McCaskill

KDOC

Topeka

Von Rife

KCOVE

Topeka

Toy Redwood

KU

Kim C. Newey

Sedgwick Co.

Wichita

D. WAYNE ZIMMERMAN TOPEKA

KDOC

Kevin Robertson

TIAT

Topeka

Jon Josseland

KU

Lawrence

House Committee on Economic Development

January 19, 1989

Presentation by Dr. Tony Redwood  
Professor of Business and Executive Director  
IPPBR, University of Kansas

- I. Mission and activities of IPPBR
  - A. Organization structure and mission
  - B. Programs and activities
  - C. Current projects
  - D. Publications
  
- II. Forecasts of the state economy
  
- III. Study: The Nature and Significance of the Overland Park/Johnson County Economy.
  
- IV. Some observations on economic development
  - 1) Support the following legislation
    - export finance
    - small business loan guarantee
    - enterprise zones and basic industry
  - 2) Important areas to focus upon
    - rural and community development
    - banking
    - travel and tourism strategy
    - property tax abatement
    - database development
    - and when studies are complete**
    - business training
    - technology transfer and management assistance

*House Eco Devo Comm.  
Attachment 1  
1/19/89*

3) EDIF funding for economic development

-State economic development strategy is

- bold in concept
- productive in implementation
- increasingly comprehensive

but it is also

-of very modest magnitude

-EDIF is all there is to support programmatic efforts and to leverage complementary activity

-Key principles

a) HCR 5033 (1988)

-use only for economic development initiatives and enhancement

-use only for programs relating to the foundations or pillars of economic development, namely financial capital, human capital, infrastructure, capacity and commitment, and entrepreneurial environment

b) put the funds where they will be cost-effective, that is, where we will get the best "bang for the buck"

-We concur with most of the budget recommendations for EDIF, and in particular applaud the additional funding to the Kansas Industrial Training Program.

-We disagree with the use of EDIF funds for water projects, and recommend that these monies be moved to KTEC to support technological innovation in our existing industry and new business formation.

**THE INSTITUTE FOR PUBLIC POLICY AND BUSINESS RESEARCH**  
University of Kansas

**I. MISSION AND ACTIVITIES OF IPPBR**

**A. Organization Structure and Mission**

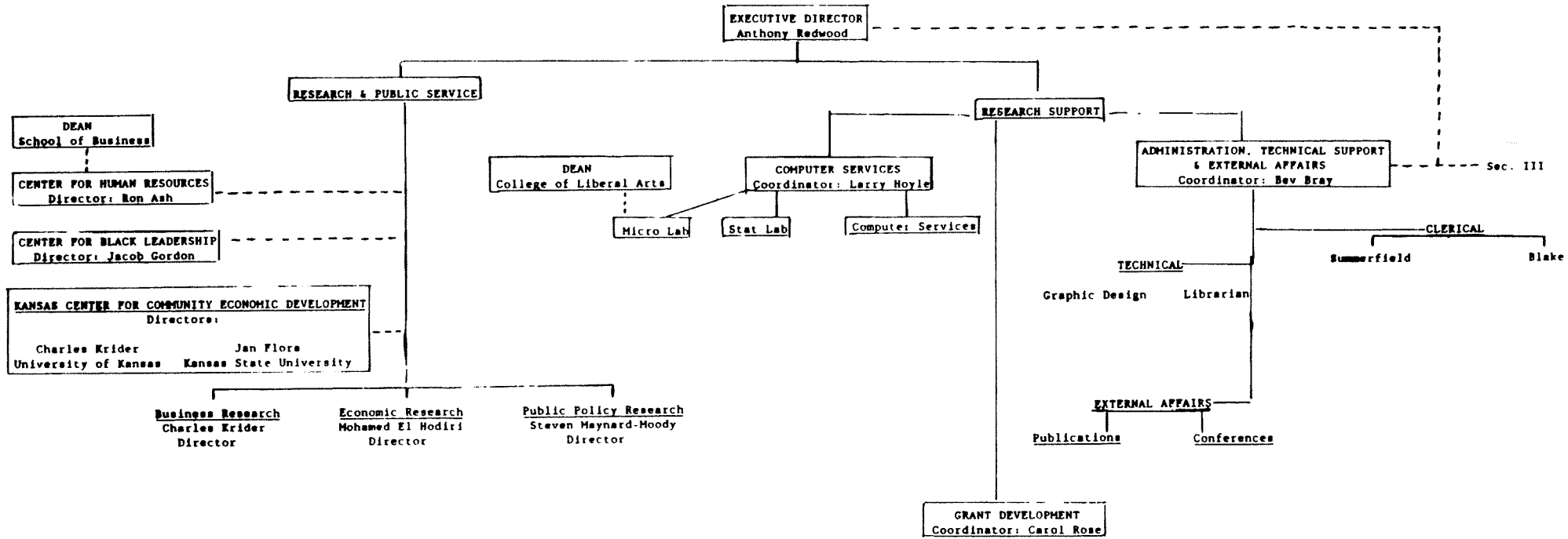
The Institute for Public Policy and Business Research is organized into three research programs: Business, Economics, and Public Policy. These research branches are augmented by three technical and support sections: Information Processing Services, Grant Development, and Administrative/ External Affairs and Technical Services. As well, the Institute provides management oversight of ancillary operations such as the Center for Human Resources, the Auxiliary State Data Center, the Sample Survey Research Laboratory, Stats Lab, Micro Lab, the Center for Black Leadership Development, and the new Kansas Center for Community Economic Development (in collaboration with Kansas State University). (See organizational chart on following page.)

IPPBR's purpose is threefold:

- (1) to perform applied research on Kansas-oriented issues that are relevant to state and local governments, the state business community, and other private concerns in the areas of business, public policy, and economics;
- (2) as an outgrowth of this research to provide outreach services and information to Kansans and Kansas' private and public sectors; and
- (3) to develop opportunities for University scholars to engage in basic and applied research at both the state and national levels.

IPPBR's research role is undertaken through two routes. First, interdisciplinary in-house research is conducted in the three basic research programs. This includes contract activities in the areas of state economic problems, economic modeling, economic impact and development, social policy, labor market information, issues in public administration and survey research. Second, IPPBR's research role has expanded upon a foundation of externally-funded efforts within the unit. Working in tandem with faculty from the School of Business, the Departments of Economics, Public Administration, Political Science and other departments in the social sciences, IPPBR actively pursues, develops, and administers grant and contract research. Externally-funded research projects by individual faculty which are developmentally and administratively supported by IPPBR span the full spectrum of diverse subjects from business training to tourism, from tax appraisal policies to education-industry linkages, and from game theory to fuzzy sets. IPPBR's active research programs also provide firsthand research opportunities for many University graduate students.

INSTITUTE FOR PUBLIC POLICY AND BUSINESS RESEARCH



Sec. III

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Outreach services and information are effectively provided to the public as evidenced by the regular publication of the Kansas Business Review, Kansas Statistical Abstract, the dissemination of technical reports and research monographs, annual conferences and institutes, and numerous presentations. As an Auxiliary State Center for Census Data, IPPBR receives and/or accesses most major census publications for Kansas and neighboring states, and collects and maintains other various state and national data sources. Thus, IPPBR possesses an in-house capability for monitoring and analyzing national and local economic and public policy conditions. This capability permits IPPBR to regularly respond to requests for information from the media, government, business, and general public, as well as the University itself.

## B. PROGRAMS AND ACTIVITIES

### BUSINESS RESEARCH PROGRAM

Director: Charles Krider

The main focus of the Business Research Program is on economic development in Kansas. In past years, the Institute has done considerable research on the state's business environment including employment growth, business formation, why firms locate in Kansas, and personal income trends. We have identified the state's strengths and weaknesses and we are engaged on an ongoing basis advising the Legislature on economic development initiatives. Over the next few years we will emphasize research on how Kansas can improve its economic growth by encouraging firms to locate or expand in the state or by facilitating the start of new businesses. Current Institute research includes:

- a) A national study of higher education-industry linkages;
- b) Strategic planning and monitoring of economic development activities in the state;
- c) An evaluation of business training/retraining systems in Kansas as well as other states;
- d) Surveys of tourism in Lawrence, Overland Park, and Southeast Kansas; and
- e) Research underpinning for the Lawrence Chamber of Commerce's Economic Development Program.

A second major area of research is on the economic development activities of rural communities in Kansas. This is the first year of an ongoing project funded by the Economic Development Administration to develop technical assistance programs which will bring university expertise in economic development to nonmetropolitan communities to foster and enhance planning strategies. This is a collaborative effort between the University of Kansas and Kansas State University.

### ECONOMIC RESEARCH PROGRAM

Director, Mohamed El-Hodiri

The economic research group of the Institute is concerned with accessing and monitoring the Kansas economy. Research on the Kansas economy involves forecasting future economic activity in Kansas as well as analyzing the long-term effects of particular phenomena of the State of Kansas. To facilitate this task the economic research group is devoted to the economic modeling of the state's economy.

The research program of the econometric modeling group proceeds along two parallel but closely related paths. The first is the development of the ability to produce short-run forecasts of the national and state economies.



Progress along this path is achieved almost completely through development work on the Kansas Econometric model. The second path is more general research on modeling the Kansas economy. Currently this research is being conducted in cooperation with the input-output modeling group and includes (1) an attempt to econometrically estimate input-output multipliers and compare them to the multipliers calculated from the input-output model, (2) an attempt to econometrically estimate Kansas export series based on proxies for Kansas exports, and (3) an attempt to estimate, using Kansas county data, the impact of infrastructure, such as highways and universities, on economic development.

The short-term econometric model establishes linkages to national economic variables, provides total state labor force forecasts, provides total state income forecasts, identifies key export-oriented industries, serves as a basis for forecasting state revenue, and serves as a basis for constructing satellite models.

The dynamic long-term input-output econometric model provides interindustry flows, establishes primary goods requirements by industry, develops an accounting mechanism for natural resource use, incorporates state policy variables, describes investment activities in relation to sectoral capacity, and, through the use of sensitivity analysis, provides a tool for study of policy under different scenarios.

#### **PUBLIC POLICY RESEARCH PROGRAM**

**Director: Steven Maynard-Moody**

The program's activities are divided into basic and applied research, and research based consulting. Many of the present activities involve collaboration with other IPPBR research programs such as Business. Other present and future projects are the responsibility of faculty primarily in the Departments of Public Administration and Political Science. There are three major programmatic thrusts of IPPBR Public Policy Analysis: (a) Policy Studies, (b) Survey Research, and (c) Public Management.

Most of the sponsored projects within the public policy program involve surveys using the Institute's Computer Assisted Telephone Interviewing (CATI) system. This system allows for simultaneous interviewing and data entry and the almost immediate interpretation of survey data.

For the past four years, the Institute has conducted surveys of public opinion in Kansas. These polls are taken at the beginning of each legislative session and questions in the survey are from legislative and state agency officials, special legislative issues or concerns, and questions from other national polls.

## MANAGED RESEARCH PROGRAMS FOR OTHER SCHOOLS AND DEPARTMENTS

The grant development and administrative services sections of the Institute actively pursue, develop, and administer grant and contract research for faculty members in other departments and schools within the University community. School of Business faculty members have been relatively successful in securing sponsored project funding from the National Science Foundation, the U.S. Bureau of the Census, the Peat, Marwick Foundation, and United Telecommunications, Inc., (in conjunction with the Kansas Advanced Technology Commission). The grant development staff members provide the liaison between faculty and these clientele by assisting with proposal development. Once the proposals are awarded, the Administrative staff members assist each investigator with staff recruiting, payroll, purchasing, travel arrangements, and other financial administration.

## SUPPORT GROUPS AND ANCILLARY PROGRAMS

As well as the Institute's three branches of research described above, there are three professional support groups to help facilitate the Institute's research programs, research conducted by individual faculty associated with the Institute, and public service.

### INFORMATION PROCESSING SECTION

Coordinator: Dr. Larry Hoyle

The primary mission of the Information Processing staff of the Institute is to provide either direct or indirect computing support to all Institute projects. In the process of providing this support to internal projects, the Information Processing Section often provides support and services to units outside the Institute. The support provided can be grouped into four major categories: statistical analysis; data retrieval; word processing support; and other computing support. During FY88-89 the information processing section performed the following functions in addition to it's support of all day to day computing activities of the Institute.

The Fraser Hall Microcomputer Lab: In cooperation with Academic Affairs and the College, the Institute operates a lab with 8 Zenith Z158 microcomputers. This lab provides a classroom facility for courses in a variety of disciplines: open access to micros for faculty, staff, and students; and workshops for students, faculty, and staff. The Microlab allows for training in the use of microcomputer software, micro-mainframe links, and wide area networks such as Bitnet and Internet.

During late FY87-88 we offered County Profiles from the Kansas Statistical Abstract data for the first time. All county-level data were reorganized into profiles of every Kansas county. These profiles have been improved for the 87-88 edition (published in FY88-89) to include comparisons with the state and rankings among counties. The profiles are also offered in both printed and microcomputer-readable format.

Census and Other Data Retrieval: The computing section provides access to U.S. Census data in conjunction with the Institute's library. We also receive data from the Bureau of Economic Analysis, Citibank Citibase and various state agencies. The most frequent users are persons from planning organizations, state government, private consulting firms, and academic institutions. We provide data for use on microcomputer and mainframe.

Computer Assisted Telephone Interviewing: During FY87-88 the Institute developed a computer assisted telephone facility. The information processing section assisted with writing, selecting, and installing software. Generation of random numbers, and entry and analysis of data were done primarily with the SPSSPC package, with some use of SAS and C.

#### GRANT DEVELOPMENT

Coordinator: Carol Rose

Grant Development assists faculty in (1) identifying external funding sources; (2) submitting grant proposals; and (3) administering research grants once they are awarded. While actual disbursement of research funds is overseen by IPPBR's Administration and Technical Support staff, the Grant Development staff facilitates budget information to researchers, reminds them of report deadlines and account status, and assists with other grant-related procedures. These activities help to encourage grant-seeking and enable researchers to devote more time and effort to the research itself.

#### ADMINISTRATION, TECHNICAL SUPPORT, AND EXTERNAL AFFAIRS

Coordinator: Bev Bray

The Administration, Technical Support and External Affairs group has three sections. The technical section includes cartography and graphic design, and library services. The administrative section provides secretarial and clerical assistance, word processing, laser printing, photocopying and grant administration for the Institute, the Economics Department, and the School of Business. A third component is the External Affairs section which includes publications and conferences, managed by Carolyn Coleman and Loretta Carraher, respectively. These activities involve well established clientele and are recognized for presenting issues of interest and significance to business, the legislature, the academic community and the general public.

Where it is advantageous to do so, the Institute also umbrellas Centers and Projects. This involves providing secretarial and technical support to these largely self-sustaining units so that they are assured of maximum viability on which to develop. At present, the Institute supports such units as the Center for Human Resources directed by Dr. Ron Ash, Professor of Business; the Auxiliary Data Center; the Survey Research Laboratory; the Center for Black Leadership, Professor Jacob Gordon; and the new Kansas Center for Community Economic Development (in collaboration with Kansas State University).

## CONFERENCES

Coordinator: Loretta Carraher

The success of the seminars and conferences administered by the conference section of the Institute is due in a large degree to the utilization of faculty expertise. Faculty involvement is solicited throughout the University's academic schools and department so that the targeted audiences can receive relevant information to assist them in their endeavors. In return, the conferences provide an excellent conduit for the dissemination of faculty research information.

Conferences in 1988 were:

38th Annual City Clerks and Municipal Finance Officers School. The two and one-half day School offers presentations and discussion focused on current issues and new laws affecting city management.

8th Annual IIMC Academy for Advanced Education. The Academy is an intensive one and one-half day seminar sanctioned by the International Institute for Municipal Clerks (IIMC) and is designed to offer advance training to city clerks who have obtained the professional title of Certified Municipal Clerk.

41st Annual City Manager Conference. Designed to provide legal government managers the opportunity to interact with nationally recognized experts in the field of municipal and county governments and public administration, the conference draws city and county managers/administrators from the surrounding five-state area.

Annual Economic Outlook Conference. Employing the theme "Economic Policy Challenges for the 1990s," the 1988 conference concentrated on the following economic issues for the coming decade: regional, national, and international characters of economic activity; the growing importance of technology in the U.S. economy, interstate banking, and policies and actions that help communities grow and prosper.

14th Annual Certification Institute for City Clerks and Municipal Finance Officers. The Certification Institute, over a three-year period, offers 110.5 contact hours of instruction in public administration, inter-personal and organizational dynamics, and current problems and strategies in local government.

An additional conference planned for 1989 is: The First Annual Community Economic Development Conference (in collaboration with Kansas State University), September 20-21, 1989.

### C. CURRENT PROJECTS

#### Kansas Center for Community Economic Development (Economic Development Administration)

The Kansas Center for Community Economic Development is a collaborative effort between the University of Kansas and Kansas State University and is an on-going project funded by the Economic Development Administration. The project is intended to develop technical assistance programs which bring university expertise in economic development to rural-based communities in Kansas.

#### Higher Education-Industry Linkages for Economic Development (KTEC)

The Institute has undertaken a national study of industrial liaison activities and systems designed to enhance university/private sector linkages for economic development in Kansas. The objectives of industrial liaison is to enhance innovation and competitiveness in primarily small to medium-sized businesses. This enhancement occurs when the resources found within the higher education system are used to assist companies in implementing new technology.

#### Kansas Strategic Planning Data Base (Kansas Inc.)

The Institute is in the process of developing a data base of economic and demographic information to underpin strategic planning and monitoring of economic development for the State of Kansas.

#### Meeting the Human Capital Challenge in Kansas (Kansas Inc.)

The Institute is undertaking an extensive study of the current business training/retraining system in Kansas, viewed from an economic development perspective.

#### Lawrence Chamber of Commerce Economic Development Marketing Program

The purpose of this project is to support the Lawrence Chamber of Commerce's Economic Development Program. This is the fourth year the Institute has provided the research underpinning for this program. This research focuses on activities developed to enhance the community's business climate and to strengthen the Chamber's marketing efforts.

#### Johnson County Advanced Technology Incubator Study (Business and Industry Institute of Johnson County Community College)

This is a feasibility study to confirm the need and likelihood for success of an advanced technology incubator in Johnson County. The project also identified the market for potential entrepreneurs in the metropolitan area, and assessed the economic climate in Kansas City, particularly with regard to high-tech business.

Changing Ethnic Relations in Garden City, Kansas (Ford Foundation)

The project's primary goal is to understand the nature of relations between new immigrants and established residents of Garden City, Kansas. Garden City is the fastest growing community in Kansas, having experienced a 33 percent increase since 1980, due primarily to an in-migration of minorities. Even so, the city seems to have been unusually successful in its adjustment and negative consequences have been kept to a minimum. This project is looking at this positive accommodation as an important case study in changing ethnic relations.

Study of Tourism in Overland Park, Kansas (Overland Park Convention and Visitors Bureau)

The Institute developed a 12-month tracking survey of tourists visiting the Overland Park area. The information will be analyzed to determine significant factors which affect tourism in Overland Park and marketing problems and opportunities.

Marketing Survey of the Southeast Kansas Tourism Region (Kansas Department of Commerce)

The results of this survey were analyzed and a report which includes recommendations for promoting tourism in Southeast Kansas will be submitted to the Kansas Department of Commerce.

Study of Tourism in Lawrence, Kansas (Lawrence Convention and Visitors Bureau)

The Institute conducted a survey of Lawrence motel and hotel guests to determine factors affecting tourism in the City of Lawrence. Planned for the future is a second and third phase to analyze motivational factors and to diagnose marketing problems and to identify marketing opportunities.

PROJECTS RECENTLY COMPLETED

The Nature and Significance of the Overland Park/Johnson County Economy (Overland Park Economic Development Council)

This was a project to study the role of headquarters facilities and regional service firms in the Johnson County and Kansas economies. The research was intended to establish not only the economic importance of facilities, but also to provide a framework that would guide decision makers on issues affecting the community.

Population Projections for Kansas (Legislative Research Department)

The Institute developed a demographic population projection model which will estimate county level population by particular age groups.

Kansas Business Retention and Expansion Study (Kansas Department of Commerce)

The Institute analyzed business retention and expansion in ten mid-sized Kansas communities and extended its conclusions and recommendations to the state level. The cities involved were: McPherson, Garden City, Hutchinson, Lawrence, Salina, Great Bend, Emporia, Coffeyville, Goodland, and Hays.

Impact of Financial Incentives on the Locational Decisions of Firms: Hays, Kansas (City of Hays)

This was a study that surveyed the impact of tax credits for a successful plant location site in Puerto Rico and assessed the degree to which these credits eroded the competitive position of Hays and other similarly situated cities. The study made an evaluation of whether federal tax credits similar to those granted to Puerto Rico would be an effective means of encouraging rural development in Kansas.

Kansas Business Tax Study (Kansas Inc.)

The purpose of this study was to assess Kansas business tax costs relative to business tax costs in five neighboring states. The research was a part of a larger Kansas Inc. study identifying policy options which might insure that the state's business tax structure was conducive to growth of the existing industry base and was attractive for recruitment purposes.

Export Incentive Survey of Kansas Manufacturers (Kansas Inc.)

A survey of 424 business firms was conducted to examine the difference between exporting and non-exporting in Kansas. The purpose was to identify export incentives that are or would be useful to Kansas business firms.

D. PUBLICATIONS

RESEARCH REPORTS

The Institute began in 1985 to systematically publish research reports which are primarily the result of sponsored projects.

- No. 100 The Kansas Retail Liquor Industry Darwin W. Daicoff (December, 1985; 57 pages)
- No. 101 Kansas Commission for the Humanities: Needs Assessment Steven Maynard-Moody (July, 1985; 25 pages)
- No. 102 An Estimate of the Cost of Alzheimer's Disease in Kansas Catherine Shenoy (December, 1985; 28 pages)
- No. 103 Kansas Economic Development Study-Interim Report Anthony Redwood and Charles Krider (January, 1986; 30 pages)
- No. 104 The Economic Impact of State Support for the Arts in Kansas Shirley Sicilian and Robert Glass (March, 1986; 29 pages)
- No. 105 Second Annual Public Opinion Survey of Kansas Steven Maynard-Moody and Jerry Mitchell (February, 1986; 35 pages)
- No. 106 Information Utilization in Kansas Government Steven Maynard-Moody and Jerry Mitchell (January, 1986; 56 pages)
- No. 107 Economic Impact of Santa Fe Industrial Park Catherine Shenoy (December, 1985; 7 pages)
- No. 108 Kansas Economic Development Final Report (only Executive Summary available) Anthony Redwood and Charles Krider (June, 1986; 64 pages)
- No. 109 Rights Without Resources: The Rise and Fall of the Kansas Kickapoo Donald Stull, Jerry Schultz and Ken Cadue (March, 1986; 25 pages)
- No. 110 An Introduction to the Study of Indochinese Refugee Policy Concerns John Massad and Donald Stull (June, 1986; 42 pages)
- No. 111 Estimate of Need and Utilization of Home Health Service in Kansas Catherine Shenoy (July, 1986; 35 pages)
- No. 112 Kansas Housing Survey Steven Maynard-Moody and Jerry Mitchell (November, 1986; 52 pages)
- No. 113 High Technology Businesses in Lawrence, Kansas Catherine Shenoy (November, 1986; 13 pages)
- No. 114 Proceedings, First Black Leadership Symposium Jacob Gordon (October, 1986; 85 pages)



- No. 115 Kansas Local Government: A Report to the Governor Steven Maynard Moody (October, 1986; 51 pages)
- No. 116 The Regulatory Review Process and Business Impact Analysis Kathleen Bryant (February, 1987; 75 pages)
- No. 117 Costs and Benefits of Business Tax Incentives in Kansas Shirley Sicilian (February, 1987; 29 pages)
- No. 118 Some Economic Variables and the Expansion of Retail Facilities Catherine Shenoy (February, 1987; 47 pages)
- No. 119 Third Annual Public Opinion Survey of Kansas Steven Maynard-Moody and Jerry Mitchell (February, 1987; 32 pages)
- No. 120 Higher Education-Private Sector Linkages for Economic Development --Executive Summary Anthony Redwood, Kathleen Harnish and Carolyn Coleman (November, 1986; 19 pages)
- No. 121 Final Report for the Wichita Comprehensive Program to Reduce Driving While Intoxicated Steven Maynard-Moody (May, 1986; 160 pages)
- No. 122 Kansas Higher Education Enrollment Package Conversion From GCOS to VM/CMS Larry Hoyle (March, 1987; 17 pages)
- No. 123 The Economic Impact of Cheyenne Bottoms on Kansas and on Barton County Shirley Sicilian and Carolyn Coleman (December, 1986; 33 pages)
- No. 124 Final Report: Research Improvement Award for Economic Development Anthony Redwood, Mohamed El-Hodiri, and David Burress (June, 1987; 100 pages)
- No. 125 Southeast Kansas Highways Norm Clifford, Kathleen Harnish and Anthony Redwood (June, 1987; 16 pages)
- No. 126 Using Federal Tax Policy to Influence Firm Locations: Two Examples of the Impact on Kansas Communities Pat Oslund and Charles Krider (July, 1987; 50 pages)
- No. 127 Proceedings, Second Black Leadership Symposium Jacob Gordon (October, 1987; 114 pages)
- No. 128 Vocational/Technical Education and Kansas Economic Development Charles Krider, Kathleen Bryant, Don Eskew and Tim Ternes (October, 1987; 59 pages)
- No. 129 Job Creation in Non Metropolitan Communities: Issues for State Policy Anthony Redwood, Kathleen Harnish and Susan Dewell (September, 1987; 20 pages)

- No. 130 Tax Structures of Kansas and Nearby States: Part I, Description and Data. Shirley Sicilian, Patricia Oslund and Darwin Daicoff (October, 1987; 78 pages)
- No. 131 Tax Structures of Kansas and Nearby States: Part II, Hypothetical Firm Study. Patricia Oslund and Darwin Daicoff (October, 1987; 74 pages)
- Revised Version of Reports 130 and 131, Patricia Oslund (January, 1988; 197 pages)
- No. 132 Criteria in Factfinding on Economic Issues. Anthony Redwood (June, 1987; 9 pages)
- No. 133 The Regulatory Oversight and Business Impact Analysis: Designing an Expanded Program for Kansas. Kathleen Bryant (August, 1987; 75 pages)
- No. 134 Testimony before the Joint Committee on Economic Development, 1987, Anthony Redwood, Charles Krider (January, 1988; 139 pages)
- No. 135 Downtown Redevelopment and Public Opinion: A Survey of Citizen Attitudes for the Downtown Improvement Committee, Paul Schumaker, Steven Maynard-Moody (January, 1988; 37 pages).
- No. 136 Superconducting Super-Collider Project: Final Report, Items 2.7.1 through 2.7.10, Mohamed El Hodiri, Mike Eglinski, and Joe Constantino (January, 1988; 123 pages)
- No. 137 Business Retention and Expansion in Kansas Mid-Size Communities, Charles Krider, Steven Maynard-Moody, Don Eskew, and Bill Cheek (February, 1988; 153 pages)
- No. 138 Policy Issues Affecting Community Economic Development, Anthony Redwood, (February, 1988; 18 pages)(revision of Report No. 129, with emphasis on local rather than state policy).
- No. 139 Economic Profile of Lawrence/Douglas County: Part I--Sectorial Mix of Industry Compared to the State, Nation and Similarly Sized College Towns, Helga Upmeier (February, 1988; 40 pages)
- No. 140 Economic Profile of Lawrence/Douglas County: Part II--Economic Base and Base Multipliers, Helga Upmeier (In Progress)
- No. 141 U.S. and Kansas Economic Forecasts for 1988, Norman Clifford, Robert Glass, February, 1988; 36 pages)
- No. 142 1988 Kansas Legislative Issues Poll, Steven Maynard-Moody, William Cheek, (February, 1988; 27 pages)

\*\*\*\*\* The following series of reports are based on the Business Retention and Expansion Study (Report No. 137) of Ten Mid-Size Kansas Communities; Charles Krider, Steven Maynard-Moody, Helga Upmeier, Don Eskew, Andrew Hiss, Byeong-Hee Choi and Kellie Farran.

- No. 143 McPherson (March, 1988; 145 pages)
- No. 144 Garden City (April, 1988; 148 pages)
- No. 145 Hutchinson (April, 1988; 155 pages)
- No. 146 Lawrence (May, 1988; 155 pages)
- No. 147 Salina (April, 1988; 149 pages)
- No. 148 Great Bend (April, 1988; 156 pages)
- No. 149 Emporia (May, 1988; 147 pages)
- No. 150 Coffeyville (May, 1988; 149 pages)
- No. 151 Goodland (May, 1988; 141 pages)
- No. 152 Hays (May, 1988; 146 pages)
- No. 153 Kansas Industry in the Global Economy: Issues of Competitiveness and Public Policy, Anthony Redwood, Kathleen Harnish (April, 1988; 29 pages)
- No. 154 International Exporting and Non-Exporting Businesses in Kansas, Steven Maynard-Moody, William Cheek (May, 1988; 35 pages)
- No. 155 Kansas Small Business Development Centers: Performance and Impact, Steven Maynard-Moody and William Cheek (June, 1988; 22 pages).
- No. 156 U.S. and Kansas Economic Forecasts, Midyear Update, 1988. Norman Clifford, Mohamed El Hodiri, Bob Glass (July, 1988; 35 pages).
- No. 157 The Nature and Significance of the Overland Park/Johnson County Economy. Mohamed El Hodiri, Gina Sanborn, David Burress, Pat Oslund (July, 1988; 128 pages)
- No. 158 Kansas Population Projections, 1985 - 2000, Helga Upmeier (December, 1988; 35 pages)

DISCUSSION PAPERS

No. 1987.1

Linearity and Separability of Regional General Equilibrium Input/Output Models under Static Cobb-Douglas Assumptions, David Burress.

No. 1987.2

Hedger Response to Multiple Grades of Delivery on Futures Markets, Da-Hsiang Donald Lien.

No. 1987.3

Mission Measurements in Limited Dependent Variable Models, Donald Lien and David Rearden.

No. 1988.1

A Survey of Static and Dynamic State-level Input-Output Models, David Burress, Pat Oslund, and Michael Eglinski.

No. 1988.2

A Comparison of Dynamic I-O Multipliers for Kansas with Parallel Econometric Multipliers, David Burress and Norman Clifford.

## KANSAS BUSINESS REVIEW

Published quarterly by the Institute for Public Policy and Business Research, Kansas Business Review (KBR) is mailed free of charge to more than 6,000 Kansans and Kansas libraries. Leaders in the public and private sectors, academicians and high school libraries, print and broadcast journalists, all receive the Kansas Business Review.

The KBR's purpose is to provide its readers with research, economic analyses, and statistical indicators relevant to their business concerns. A typical issue includes three major articles reporting the results of research by Institute staff and other scholars on business and economic matters of importance to the state. Current analysis of the national and Kansas economies and tables detailing nine of the state's leading economic indicators complete each issue. Since the spring of 1984, the Institute, through a cooperative association with the School of Business' Small Business Development Center, has regularly featured research notes and studies aimed at the specific needs and interests of the Kansas small business community.

Increased exposure given to the KBR in Kansas print and electronic media and an increased number of requests for the KBR indicate that it successfully expresses the University's service commitment to the Kansas business sector.

### Lead Articles in the KBR

#### Fall 1988

- "The Importance of the Service Sector: The Case of Johnson County," Gina Sanborn, with David Burress, Pat Oslund, and Anthony Redwood.
- "Kansas Industry in the Global Economy," Anthony Redwood and Kathleen Harnish.
- "Characteristics of Kansas Exporters," Steven Maynard-Moody and William Cheek.
- "Leading Sectors of the Kansas Economy," Donald Lien and David Rearden.

#### Summer 1988

- "Business Taxes in Kansas and Nearby States," Pat Oslund.
- "Business Retention and Expansion in Kansas Mid-Sized Communities," Charles Krider, Don Eskew, and Steven Maynard-Moody.
- "Kansas Employment Forecast by Sector: A Time-Series Approach," Donald Lien and David Rearden.

#### Spring 1988

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Institute for Public Policy and Business Research  
The University of Kansas

U.S. AND KANSAS  
ECONOMIC FORECASTS FOR 1989

by  
Norman Clifford  
Director of the Kansas Econometric Model  
Assistant Professor of Economics

Mohamed El Hodiri  
Professor of Economics  
Director of Economic Research

Anthony L. Redwood  
Professor of Business  
Executive Director

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Report No. 159

*House Eco Dev Comm.  
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## Preface

The Institute for Public Policy and Business Research is pleased to present this forecast, which was generated with the Kansas Econometric Model and the Indiana University Econometric Model of the United States. This report includes an executive summary, an explanation of the assumptions used in making the forecasts, forecasts for the U.S. and Kansas economies for 1989, and an appendix with detailed quarter by quarter forecasts for each sector.

The forecast and this report were prepared by Professor Norman Clifford, director of the Kansas Econometric Model. The Kansas Econometric Model is a long-term project of the Institute; Professor Clifford, Professor Mohamed El Hodiri, Dr. Gary Albrecht and Robert Glass, among others, have been instrumental in its development. Professor Donald Lien has been responsible for the development of a supporting ARIMA model.

## Executive Summary

### National Forecast

The U.S. Economy will continue to expand during 1989, although at a slower rate than in 1988. Real GNP growth will average 2.3 percent for the year, compared to 3.8 percent for 1988. The major components of GNP, consumption spending, investment spending, government purchases, and net exports, will grow in 1989, but all except government spending will grow more slowly than in 1988.

The major forces for growth will be investment spending and exports. Investment spending will be spurred by continued high capacity utilization rates, although its growth rate will be lower than in 1988 because of higher interest rates. Export growth will be stimulated by a slight decline in the dollar and the healthy economic growth of many of our trading partners. Strong export growth and a reduction in the rate of growth of imports will cause a modest reduction in the real trade deficit of about \$6.8 billion.

As a consequence of the expectation that the Federal Reserve's concern over inflation will lead a restrictive monetary policy during the year, interest rates will rise throughout 1989, with the rate on three-month treasury bills averaging 9.1 percent during the fourth quarter.

Nonagricultural establishment employment will grow 2.9 percent compared to 3.5 percent in 1988. The national unemployment rate will decline to just under 5 percent for the year. Some tightness in the labor market will cause wage rates to increase by 5.8 percent, about one percentage point higher than the increase in 1988.

The rate of inflation as measured by the consumer price index will increase 5.2 percent in 1989, compared to 4.1 percent in 1988 due to increased inflationary pressure on the cost side.

Real U.S. personal income, will increase 2.8 percent in 1989, compared to 3 percent in 1988. Because of increases in tax payments, real disposable personal income will increase only 2.3 percent in 1989 after increasing 3.5 percent in 1988.

**Table I U.S. Forecast--Summary**

	1985	1986	1987	1988	1989
Real GNP	3619	3722	3847	3994	4087
Growth Rate	3.4	2.9	3.4	3.8	2.3
Rate of Inflation	3.5	1.9	3.7	4.1	5.2
Civilian Employment	107.3	109.7	112.6	115.1	117.8
Growth Rate	2.0	2.3	2.6	2.2	2.4
Unemployment Rate	7.1	6.9	6.1	5.4	4.9
3-month Rate T-bills	7.5	6.0	5.8	6.6	8.5
Personal Income	3325	3531	3780	4057	4387
Growth rate	7.0	6.2	7.1	7.3	8.1
Real Disposable Income	2543	2641	2686	2780	2845
Growth Rate	3.0	3.9	1.7	3.5	2.3

The U.S. forecast, summarized in Table I, above, is based on the Indiana University Econometric Model of the United States. To arrive at the preceding forecast, the following major assumptions were imposed on that model:

1. The Federal Reserve will pursue a restrictive monetary policy, with M2 growing at 4 percent in 1989.
2. Real Federal government purchases of goods and services will decline slightly in 1989. There will be no major changes in taxes in 1989.

3. The dollar will continue to depreciate slightly, about 3 percent in 1989.
4. The real growth rate of the other OECD<sup>1</sup> countries will average 3 percent in 1989.
5. Imported oil prices will remain essentially unchanged in the coming year.

### Kansas Forecast

The Kansas forecast, summarized in Table II below, is based on the Institute's Kansas Econometric Model and on the national forecast given above.

Table II Kansas Forecast--Summary

	1985	1986	1987	1988	1989
Total					
Employment	1176.0	1169.0	1205.0	1222.3	1233.7
Growth rate	3.8	-0.6	3.1	1.4	0.9
Wage & Salary					
Employment	967.9	984.7	999.6	1017.4	1029.1
Growth rate	0.7	1.7	1.5	1.8	1.1
Unemployment					
Rate	5.0	5.4	4.9	4.6	4.7
Nominal					
Personal					
Income	33855	35667	37450	39439	41698
Growth Rate	6.5	5.4	5.0	5.3	5.7
Real Personal					
Income	30326	31191	31344	31674	31829
Growth Rate	3.1	2.9	0.5	1.1	0.5

Following a trend of recent years, growth of the Kansas economy will lag growth of the U.S. economy. Kansas personal income will grow 5.7 percent in 1989, compared to 8.1 percent for the U.S. Real Kansas personal income will increase 0.5 percent compared to 2.8 percent for the U.S.

Kansas nonfarm wage and salary employment will grow 1.1 percent in 1989, compared to 2.9 percent for the U.S. Total civilian employment in Kansas will grow 0.9 percent, compared to 2.4 percent in the U.S. The Kansas unemployment rate will average 4.7 percent, compared to 4.9 percent for the nation.

Employment in manufacturing will grow faster than employment in the state as a whole, averaging 2 percent growth for 1989. Employment in nondurable goods manufacturing will grow 2.1 percent; printing and publishing will lead the way with a 5.2 percent employment growth rate. Employment in durable goods manufacturing will grow 2 percent. The fastest growing durable goods sectors will be primary metals (9.9 percent) and stone glass and clay (4.6 percent).

Among the nonmanufacturing sectors, employment in services will exhibit an above average 2.2 percent growth. Employment in construction will grow a modest 1.4 percent. Employment in government will increase 0.9 percent. Employment in finance, insurance, and real estate will grow 0.8 percent, employment in wholesale trade will grow 0.5 percent, and employment in retail trade will grow 0.4 percent.

Employment in transportation and public utilities will remain level in 1989. Employment in mining will fall 4.1 percent.

## Introduction

The National economy will continue to grow in 1989, although at a slower rate than it did during a surprisingly strong 1988. Although the main engines of 1988 growth, nonresidential investment spending and export growth, will continue to drive the economy in 1989, they will exert a more moderate influence than they did in the earlier year. A tight money supply, brought about by the Federal Reserve Board's continuing concern over inflation, will cause interest rates to rise throughout the year. Continued moderate economic growth will cause the already low unemployment rate to fall even further, dipping slightly below 5 percent during the latter part of the year. Tightening of the labor market and recent signs of increasing prices will cause inflation to accelerate modestly to 5.2 percent.

The Kansas economy will mirror the national economy, growing in 1989 but more slowly in most areas than in 1988. In addition, the Kansas economy will grow more slowly than the U.S. economy, a trend that has been evident throughout the decade. For example, the average annual growth rate of employment in the U.S. from 1982 to 1988 was 2.4 percent, while the average annual growth rate of employment in Kansas during the same period was 1.6 percent. Similarly, the average annual rate of growth of personal income in the U.S. from 1982 to 1988 was 7.2 percent, while for Kansas the average annual rate of growth was 5.6 percent.

The manufacturing sector of the Kansas economy will outperform the rest of the state's economy. Kansas personal income in current dollars will grow 5.7 percent slightly above 1988's 5.3 percent, but after adjustment for inflation it will grow only 0.5 percent, somewhat less than its 1.1 percent growth rate

of 1988. These are the main themes of the forecast produced this quarter at the Institute for Public Policy and Business Research at the University of Kansas.<sup>2</sup>

The National forecast is based on the following major assumptions:

1. The Federal Reserve will pursue a restrictive monetary policy, with M2 growing at 4 percent in 1989.
2. Real Federal government purchases of goods and services will decline slightly in 1989. There will be no major changes in taxes in 1989.
3. The dollar will continue to depreciate slightly, about 3 percent in 1989.
4. The real growth rate of the other OECD<sup>3</sup> countries will average 3 percent in 1989.
5. Imported oil prices will remain essentially unchanged in the coming year.

## National Forecast

The national economy exhibited surprisingly strong growth in 1988 with the effects of the October 1987 stock market crash both milder and shorter lived than many economists expected. Based on actual data for the first three quarters and a forecast for the fourth quarter, we expect the 1988 growth rate of real GNP to be 3.8 percent. The national economy should cool down somewhat in 1989, however, with our forecast calling for a 2.3 percent rate of growth of real GNP in 1989.

The slow down in growth of the national economy will be brought about by a reduction in the rate of growth of several of the major components of aggregate demand. Consumption spending will grow 1.8 percent in 1989 compared to 2.7 percent in 1988. A major reason for the slowdown in the growth of consumption spending is a reduction in the level of spending on consumer durables. The demand for consumer durables will fall by 0.6 percent in 1989 after growing 4.3 percent during 1988. This weakening in spending on consumer durables can be traced to two areas. First, spending on new automobiles, dampened by a slowdown in the rate of growth of disposable personal income as well as higher interest rates, will fall 4.7 percent in 1989, as compared to a 5.1 percent increase in 1988. Second, spending on furnishings and household equipment will level off after growing at a robust 6.1 percent in 1988. Spending on durable goods in other categories will actually grow 1.6 percent in 1989, about one-third faster than the previous year.

Consumer spending on services will grow 2.8 percent in 1989, down slightly from its 1988 growth of 3.4 percent. An exception to the general trend of spending on services is spending on electricity and gas, which will grow 5.7 percent in 1989, up from its 4.1 percent growth in 1988.



Consumer spending on nondurable goods will grow 1.4 percent in 1989, as compared to 1.0 percent in 1988. The fastest growing components of nondurable goods will be spending on clothing and shoes, which will grow 2.9 percent in 1989 as compared to only 0.3 percent in 1988, and spending on gasoline and oil, which will increase 4.6 percent in 1989 after growing 1.4 percent in 1988. Spending on food will increase only 0.3 percent in 1989 after increasing 0.6 percent in 1988, while spending on fuel oil and coal will decrease 3.8 percent in 1989 after increasing 4.5 percent in 1988. Spending on other categories of nondurable goods will increase 1.9 percent in 1989 after growing 2.1 percent in the previous year.

A second major component of aggregate demand, investment spending, will also grow more modestly in 1989 than it did in 1988, but it will retain its position as one of the main forces for economic growth. Nonresidential fixed investment will grow 7.5 percent in 1989 as compared to 10.3 percent in 1988. Although the growth in nonresidential investment spending will be dampened somewhat due to higher interest rates in 1989, it will still remain strong due, in part at least, to continuing high capacity utilization rates. Investment in equipment will increase by 10.0 percent in 1989, compared to 14.4 percent in 1988, whereas investment in non-residential structures will increase 0.3 percent in 1989 after declining 0.3 percent in 1988. Investment in residential structures is expected to increase 0.8 percent in 1989 after falling 2.2 percent in 1988.

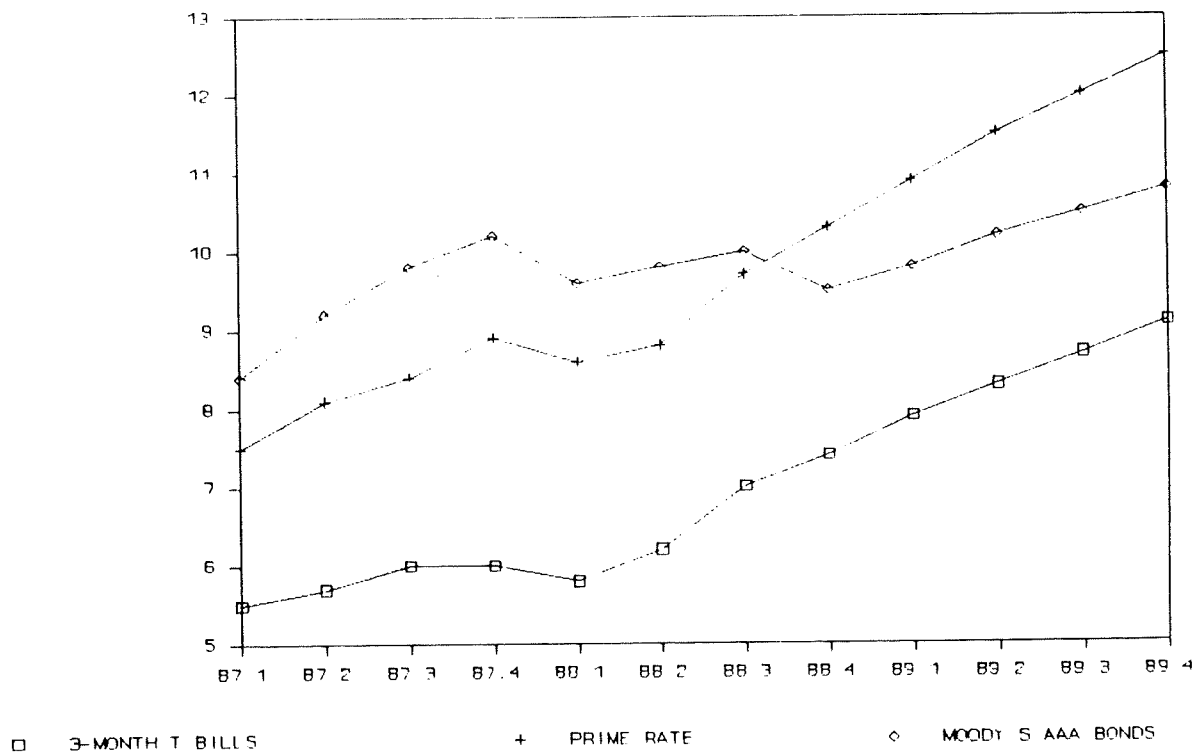
A third major component of aggregate demand, net exports, will also contribute to economic growth in 1988. Real export demand, which grew 17.6 percent in 1988, will continue to exhibit strong growth in 1989, although at a slower 7.0 percent rate, driven by healthy economic growth in the other OECD

countries as well as the slight decline in the value of the dollar. Spending on real imports will grow 4.8 percent in 1989, compared to 7.9 percent in 1988. This reduction in the rate of growth of spending on imports will come about mainly from reduced auto imports. Spending on auto imports will fall 14.6 percent in 1989 after falling 6.6 percent in 1988. Imports of oil and petroleum products will grow 4.2 percent in 1989 as compared to 9.4 percent in 1988. Spending on all other categories of imports will increase 6.3 percent in 1989 after growing 8.8 percent in 1988. The ability of the rate of growth of exports to continue to exceed the rate of growth of imports means that the deficit in net exports will shrink by a further \$6.8 billion in 1989, following a 1988 decline of \$31.3 billion.

The final major category of aggregate demand, government purchases of goods and services, will grow 1.7 percent in 1989 after remaining flat in 1988. Federal government purchases will decline 0.1 percent in 1989 after falling 3.3 percent in 1988. Federal defense purchases will decline 1.6 percent for the second straight year, while nondefense purchases will grow 4.8 percent after falling 8.7 percent in 1988. State and local government purchases will increase 3.0 percent in 1989 compared to 2.7 percent in 1988.

Interest rates will be higher in 1989 than they were in 1988, due to the Federal Reserve Board's adherence to a tight money policy. Not only will the average for typical interest rates be higher than it was in 1988, but rates will continue to increase throughout out the year, as a slight easing by the Fed as the year progresses will not be sufficient to completely eliminate the upward pressure on interest rates. The period of tightest money growth by the Fed will have been the fourth quarter of 1988, with M2 growth at only a 2.7 percent annual rate. During 1989, the growth rate of M2 will gradually increase, beginning with

a 3.9 percent annual growth rate in the first quarter and ending with a 4.5 percent growth rate in the last quarter. Since the GNP deflator will be growing at from 4.7 to 5.3 percent annual rates during those quarters, the real money stock will be falling throughout 1989. The declining real money stock and growing real GNP will cause interest rates to rise throughout the year. The forecasted path of selected interest rates is shown in Figure 1.



**Figure 1 Forecasted Interest Rates**

There will be a gradual decline in the unemployment rate in 1989 in spite of the slowdown in the rate of growth of the economy, as employment grows slightly faster than the labor force. Nonagricultural establishment employment

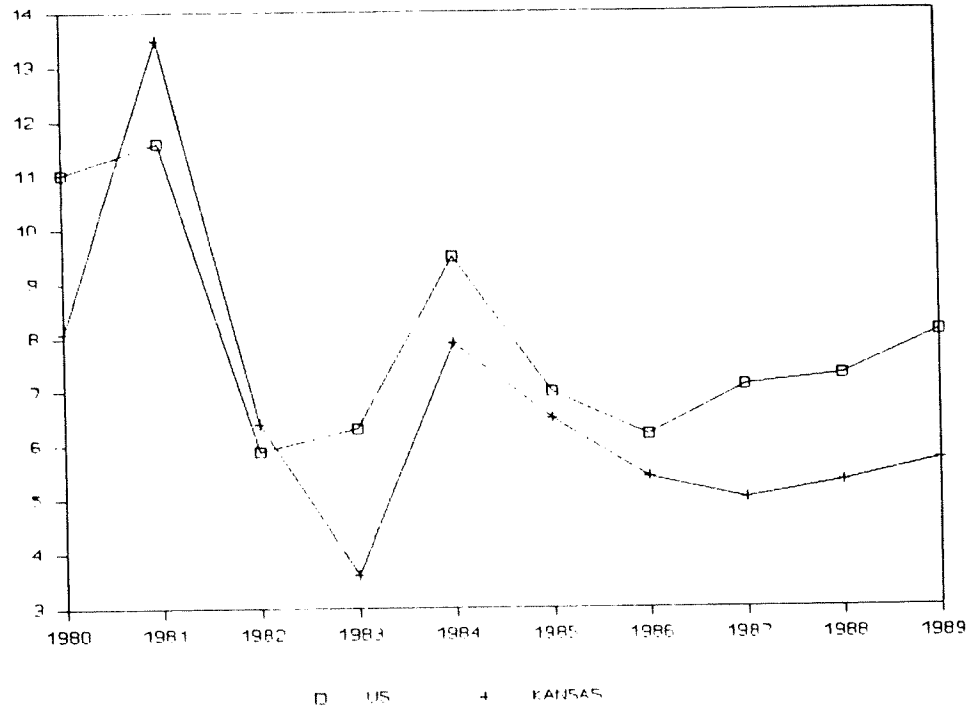
will grow 2.9 percent in 1989 after growing 3.5 percent in 1988. The national unemployment rate will decline from 5.4 percent in 1988 to 4.9 percent in 1989. Tightness in the labor market coupled with some signs of growing inflation will cause wages to grow faster in 1989 than in the two previous years. The average hourly wage in private nonfarm employment will increase 5.8 percent in 1989 as compared to 4.9 percent in 1988 and 4.6 percent in 1987.

Increased inflationary pressures from the cost side will cause a modest increase in inflation in 1989. The inflation rate, as measured by the rate of change in the consumer price index, will be 5.2 percent in 1989 compared to 4.1 percent in 1988. With real GNP growing at a slightly lower rate than potential output is growing, there appears to be little demand side inflationary pressure. However, with wages going up faster in 1989 than in 1988, and productivity posting a 0.3 percent decrease in 1989 as compared to a 1.1 percent increase in 1988, there is increased cost side inflationary pressure for 1989. This is reflected in the forecast for increased inflation in 1989.

The largest consumer price increases in 1989 will be in food, medical care, and other goods and services. Food prices, in part because of the lingering effects of the drought, will increase 7.5 percent in 1989 following a more modest 4.4 percent increase in 1988. Medical care prices will increase 7.7 percent in 1989 after rising 6.7 percent in 1988. The 1989 increase is composed of a 9 percent increase in the prices of medical commodities and a 7.4 percent increase in the prices of medical services. Prices of other goods and services, which consists of personal care, personal and educational expenses, and tobacco and smoking products, will increase 7.5 percent in 1989 following a 6.9 percent increase in 1988.

Housing, apparel, transportation, and entertainment will show moderate price increases in 1989. Housing costs will increase 4.6 percent in 1989 following a 3.7 percent increase in 1988. The main increase in housing costs will come from a 5.4 percent increase in the cost of shelter, while costs of fuel and utilities and household furnishings and operations will increase 2.9 percent and 3.8 percent respectively. Transportation costs will increase 4.2 percent in 1989, following a 3.1 percent increase in 1988. Prices of entertainment will increase 4 percent in 1989 following a 4.3 percent increase in 1988. Apparel and upkeep prices will show a very modest 1.5 percent increase in 1989, after increasing 3.7 percent in 1988.

Personal income in current dollars will grow 8.1 percent in 1989, following a 7.3 percent increase in 1988. These figures may be misleading, however, since much of the increase is due to price increases. In real terms personal income will increase 2.8 percent in 1989 as compared to 3 percent in 1988. Real disposable personal income will grow substantially more slowly in 1989 (2.3 percent rate of growth) than it did in 1988 (3.5 percent rate of growth) due to a 5.4 percent increase in real personal tax and non-tax payments. This increase in tax and non-tax payments comes about through a 3.0 percent increase in real taxable income and a 0.5 percentage point increase in the average federal personal tax rate. The 2.3 percent growth in real disposable income coupled with the 1.8 percent increase in real consumption expenditure leads to a slight increase in the personal saving rate, from 4.0 percent in 1988 to 4.5 percent in 1989. Figure 2 shows the pattern of the growth of personal income since 1980.

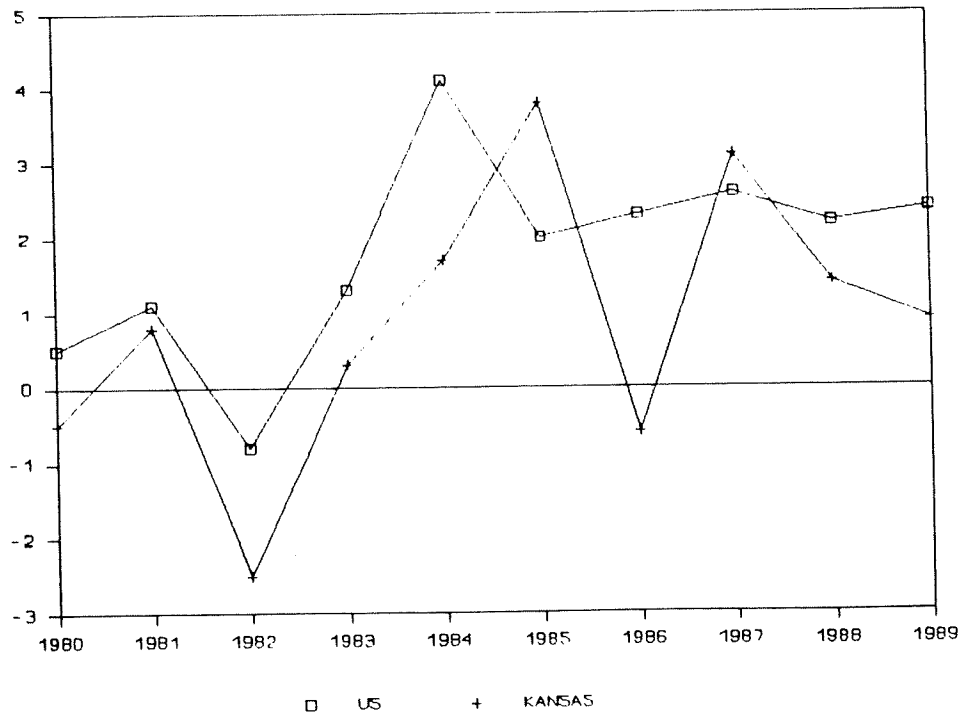


**Figure 2 U.S. and Kansas  
Personal Income Growth  
(Current Dollars)**

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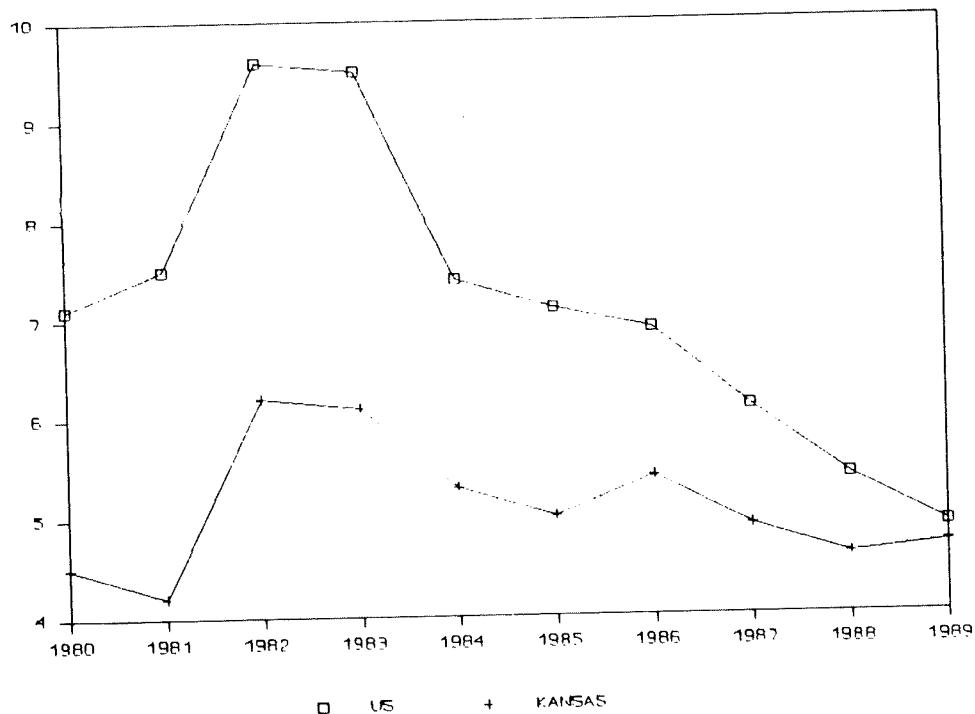
### Kansas Forecast

The Kansas economy, like the national economy, will continue to grow in 1989, although at a slower rate than in 1988. Furthermore, as Figures 2 and 3 illustrate, Kansas will grow more slowly than the U.S., as it has in recent years. Nonfarm wage and salary employment will grow 1.1 percent in 1989, down somewhat from its 1988 1.8 percent growth rate. Total Kansas civilian employment will grow 0.9 percent in 1989, also down from its 1988 1.4 percent rate of growth. A slowdown in the rate of growth of the labor force, from 1.2 percent



**Figure 3 U.S. and Kansas  
Forecasted Employment Growth**

in 1988 to 1.0 percent in 1989, will keep the employment rate from increasing appreciably. The unemployment rate for 1989 will be 4.7 percent, little changed from 1988's 4.6 percent. Figure 4 contrasts the forecasts for the Kansas and U.S. unemployment rates.



**Figure 4 U.S. and Kansas Forecasted Unemployment Rates**

Table III, below, summarizes Kansas employment growth forecasts by sector. Employment growth in the manufacturing sector will outperform employment growth in the rest of the Kansas economy, growing 2.0 percent in 1989, down somewhat from its healthy 2.8 percent growth rate of 1988. Reflecting the national consumption trends, Kansas employment in nondurable goods production will be



Table III Kansas Employment Forecasts by Sector

	1985	1986	1987	1988	1989
Mining	16.7	12.2	11.5	11.5	11.0
Growth Rate	-6.7	-26.8	-6.3	0.1	-4.1
Construction	42.3	43.9	44.4	42.1	42.6
Growth Rate	-2.9	3.7	1.3	-5.4	1.4
Durable Goods	102.1	102.6	102.4	106.7	108.8
Growth rate	-3.0	0.5	-0.2	4.2	2.0
Nondurable Goods	72.3	73.1	73.5	74.1	75.7
Growth Rate	1.6	1.1	0.6	0.8	2.1
Transportation & Public Utilities	63.9	62.7	61.4	61.0	60.9
Growth Rate	-0.3	-1.9	-1.9	-0.8	0.0
Wholesale Trade	67.2	67.1	68.0	69.9	70.2
Growth Rate	0.0	-0.1	1.3	2.7	0.5
Retail Trade	176.0	180.6	183.4	186.9	187.7
Growth Rate	2.2	2.6	1.5	1.9	0.4
F.I.R.E.	52.8	54.7	56.4	57.0	57.5
Growth Rate	2.9	3.5	3.1	1.2	0.8
Services	185.8	193.7	200.8	207.9	212.3
Growth Rate	1.7	4.3	3.6	3.5	2.2
Federal Gov't.	27.1	27.7	27.3	26.5	26.7
Growth Rate	3.2	2.2	-1.6	-2.9	0.9
State & Local Government	161.6	166.4	170.5	173.9	175.5
Growth Rate	1.7	3.0	2.5	2.0	0.9

stronger in 1989, growing 2.1 percent compared to a rather weak 0.8 percent in 1988, while Kansas employment in durable goods will grow 2.0 percent in 1989, down significantly from its 4.2 percent 1988 growth rate.

Among the nondurable goods producing sectors, printing and publishing will exhibit the strongest performance, with employment in that sector growing 5.2 percent in 1989, rebounding from no growth in 1988. Employment in food and

kindred products will grow only 0.8 percent, while employment in chemicals and allied products will decline 0.1 percent. Employment in apparel and petroleum and coal products will decline significantly, falling 2.4 percent and 4.7 percent respectively. Employment in all other nondurable goods manufacturing, about one sixth of the total, will grow a healthy 4.8 percent.

Among the durable goods producing sectors, primary metals and stone glass and clay will stand out. Employment in stone glass and clay will make a strong comeback, growing 4.6 percent after declining by 3.6 percent in 1988. Primary metals employment is forecasted to perform even better, growing 9.9 percent. Also exhibiting strong 1989 growth will be fabricated metals and machinery, including electrical. Fabricated metals employment will grow 2.8 percent and employment in machinery, including electrical, will grow 2.9 percent. Employment growth in transportation equipment, which makes up over two-fifths of the durable goods manufacturing total, will grow only 0.8 percent in 1989, well down from its 3.6 percent growth in 1988.

Among the nonmanufacturing sectors, only employment in services is expected to exhibit above average growth at 2.2 percent, and even so this growth rate is down significantly from the 3.5 percent employment growth posted by this sector in 1988. Employment in finance, insurance, and real estate will grow only 0.8 percent, slightly less than in 1988, with employment in banking and insurance actually declining. Employment in wholesale trade will grow 0.5 percent, down from 1988's 2.7 percent. Employment in retail trade will grow 0.4 percent, down from 1.9 percent in 1988, with employment in general merchandise stores, auto dealers and gas stations, and apparel and accessory stores declining slightly, and employment in food stores and other retail trade sectors increasing 1.5 percent.

Employment in transportation and public utilities will level off in 1989 after falling 0.8 percent in 1988, with employment in railroads continuing to fall, and employment in trucking and warehousing exhibiting modest growth. Employment in mining, which is mostly oil and gas extraction in Kansas, will fall 4.1 percent after remaining flat in 1988. Construction employment will partly rebound, growing 1.4 percent following a 5.4 percent decrease in 1988. Both federal and state and local government employment in Kansas will increase 0.9 percent in 1989, compared to a 2.9 percent drop in federal government employment and a 2.0 percent increase in state and local government employment in 1988.

Kansas personal income in current dollars will grow 5.7 percent in 1989, compared to 5.3 percent in 1988. After adjusting for inflation<sup>4</sup>, however, Kansas personal income will grow only 0.5 percent, compared to 1.1 percent in 1988. Kansas wages and salaries in current dollars will grow 5.3 percent, about the same as in 1988. Dividends, interest and rents will grow 8.9 percent in 1989 compared to 7.3 percent in 1988, in part reflecting 1989's higher interest rates. Nonfarm proprietor's income will grow 7.0 percent, transfer payments will grow 6.4 percent and other labor income will grow 6.0 percent. However farm proprietor's income, due mainly to the lingering effects of the drought, is expected to fall 4.1 percent.

## FOOTNOTES

<sup>1</sup>Organization for Economic Cooperation and Development. Member nations are Australia, Austria, Belgium, Canada, Denmark, Finland, France, West Germany, Greece, Holland, Iceland, Ireland, Italy, Japan, Luxembourg, New Zealand, Norway, Portugal, Spain, Sweden, Switzerland, Turkey, United Kingdom, and the United States.

<sup>2</sup>The forecasts of the national economy are produced by the Econometric Model of the United States using assumptions generated at the Institute. This model was developed at the Center for Econometric Model Research at the University of Indiana, R. Jeffery Green and Morton J. Marcus, Directors. The Kansas forecasts are produced by the Kansas Econometric Model, which is a product of the Institute.

<sup>3</sup>Organization for Economic Cooperation and Development. Member nations are Australia, Austria, Belgium, Canada, Denmark, Finland, France, West Germany, Greece, Holland, Iceland, Ireland, Italy, Japan, Luxembourg, New Zealand, Norway, Portugal, Spain, Sweden, Switzerland, Turkey, United Kingdom, and the United States.

<sup>4</sup>Since there is not price deflator for Kansas, we use the Personal Consumption Deflator for the U.S. to deflate Kansas income.

APPENDIX

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Institute for Public Policy and Business Research, University of Kansas									1988-1989	US Forecast	16JAN89	1
GNP AS EXPENDITURE - 1982 DOLLARS												
	1988Q1	1988Q2	1988Q3	1988Q4	1989Q1	1989Q2	1989Q3	1989Q4	1988	1989		
US: Gross National Product	3956.1	3985.2	4010.9	4022.4	4055.5	4078.9	4098.7	4113.5	3993.7	4086.6		
Percent Change From Last Qtr (AR)	3.4	3.0	2.6	1.2	3.3	2.3	2.0	1.5	3.8	2.3		
US: Personal Consumption Expend.	2559.8	2579.0	2604.5	2610.2	2623.3	2631.9	2640.0	2645.1	2588.4	2635.1		
Percent Change From Last Qtr (AR)	4.5	3.0	4.0	0.9	2.0	1.3	1.2	0.8	2.7	1.8		
US: Per. Con. Exp.-Durables	401.1	410.6	409.5	409.8	409.3	407.1	404.4	401.1	407.8	405.5		
Percent Change From Last Qtr (AR)	14.7	9.7	-1.0	0.3	-0.5	-2.1	-2.6	-3.3	4.3	-0.6		
US: PCE-Nondurables	892.7	893.6	905.5	905.6	908.7	910.9	913.2	914.8	899.3	911.9		
Percent Change From Last Qtr (AR)	1.0	0.4	5.4	0.0	1.4	0.9	1.0	0.7	1.0	1.4		
US: PCE-Services	1265.9	1274.8	1289.5	1294.8	1305.3	1313.9	1322.4	1329.2	1281.3	1317.7		
Percent Change From Last Qtr (AR)	4.0	2.8	4.7	1.7	3.3	2.6	2.6	2.1	3.4	2.8		
US: Fixed Nonresidential Invest.	473.4	490.2	496.0	504.5	516.2	524.2	532.1	538.9	491.0	527.8		
Percent Change From Last Qtr (AR)	7.6	15.0	4.8	7.0	9.7	6.3	6.2	5.2	10.3	7.5		
US: Producers Durable Equipment	349.4	365.1	370.0	378.7	390.6	398.5	406.4	413.3	365.8	402.2		
Percent Change From Last Qtr (AR)	21.6	19.3	5.5	9.7	13.2	8.3	8.2	6.9	14.4	10.0		
US: Investment in Structures	124.0	125.0	126.0	125.8	125.6	125.6	125.6	125.6	125.2	125.6		
Percent Change From Last Qtr (AR)	-22.4	3.5	3.1	-0.7	-0.6	0.1	-0.1	-0.2	-0.3	0.3		
US: Residential Investment	189.5	189.6	191.1	193.1	194.0	193.3	191.7	190.1	190.8	192.3		
Percent Change From Last Qtr (AR)	-6.5	0.2	3.2	4.3	2.0	-1.6	-3.3	-3.2	-2.2	0.8		

US forecasts were generated using assumptions determined by the Institute for Public Policy and Business Research and operationalized through the Indiana Econometric Model of the United States.

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Institute for Public Policy and Business Research, University of Kansas	1988-1989				US Forecast				16JAN89	2
	1988Q1	1988Q2	1988Q3	1988Q4	1989Q1	1989Q2	1989Q3	1989Q4	1988	1989
US: Change in Bus. Inventories	65.9	35.3	36.7	22.3	24.0	27.6	30.5	30.7	40.1	28.2
US: Change in Farm Inventories	14.1	5.3	-0.3	-5.0	0.0	0.0	0.0	0.0	3.5	0.0
US: Change in Nonfarm Inv.	51.9	30.1	36.7	27.3	24.0	27.6	30.5	30.7	36.5	28.2
US: Net Exports	-109.0	-92.6	-95.2	-93.4	-91.6	-90.5	-91.0	-90.0	-97.6	-90.8
US: Total Exports	486.2	496.9	510.7	518.5	527.1	534.9	542.2	549.4	503.1	538.4
Percent Change From Last Qtr (AR)	25.7	9.1	11.6	6.3	6.8	6.1	5.6	5.4	17.6	7.0
US: Total Imports	595.1	589.5	605.9	611.9	618.7	625.4	633.2	639.4	600.6	629.2
Percent Change From Last Qtr (AR)	6.9	-3.7	11.6	4.0	4.5	4.4	5.1	4.0	7.9	4.8
US: Total Government Purchases	776.4	783.8	777.8	785.7	789.5	792.5	795.6	798.7	780.9	794.1
Percent Change From Last Qtr (AR)	-7.9	3.9	-3.0	4.1	1.9	1.5	1.6	1.6	0.1	1.7
US: Fed. Govt. Purchases	327.8	331.6	323.7	328.0	328.2	327.6	327.1	326.7	327.8	327.4
Percent Change From Last Qtr (AR)	-21.0	4.7	-9.2	5.4	0.2	-0.7	-0.6	-0.5	-3.3	-0.1
US: Fed. Defense Purchases	264.6	263.6	256.7	258.0	258.0	257.0	256.0	255.0	260.7	256.5
Percent Change From Last Qtr (AR)	-5.3	-1.5	-10.1	2.0	0.0	-1.5	-1.5	-1.6	-1.6	-1.6
US: Fed. Nondefense Purchases	63.2	67.9	69.4	70.0	70.2	70.6	71.1	71.7	67.6	70.9
Percent Change From Last Qtr (AR)	-60.1	33.2	9.1	3.5	1.1	2.3	2.9	3.4	-8.7	4.8
US: State and Local Govt. Purch.	448.7	452.2	454.1	457.7	461.3	464.9	468.5	472.0	453.2	466.7
Percent Change From Last Qtr (AR)	3.5	3.2	1.7	3.2	3.2	3.1	3.1	3.1	2.7	3.0

US forecasts were generated using assumptions determined by the Institute for Public Policy and Business Research and operationalized through the Indiana Econometric Model of the United States.

Institute for Public Policy and Business Research, University of Kansas									1988-1989	US Forecast	16JAN89	3
GNP AS EXPENDITURE - CURRENT DOLLARS												
	1988Q1	1988Q2	1988Q3	1988Q4	1989Q1	1989Q2	1989Q3	1989Q4	1988	1989		
US: Gross National Product	4724.5	4823.8	4909.2	4969.9	5068.0	5159.7	5250.4	5338.2	4856.8	5204.1		
Percent Change From Last Qtr (AR)	5.4	8.7	7.3	5.0	8.1	7.4	7.2	6.9	7.3	7.1		
US: Personal Consumption Expend.	3128.1	3194.6	3261.5	3309.7	3369.6	3424.4	3479.9	3533.6	3223.4	3451.8		
Percent Change From Last Qtr (AR)	6.9	8.8	8.6	6.0	7.4	6.7	6.6	6.3	7.0	7.1		
US: Per. Con. Exp.-Durables	437.8	449.8	451.8	456.5	459.8	461.3	462.2	462.7	449.0	461.5		
Percent Change From Last Qtr (AR)	15.9	11.4	1.8	4.3	2.9	1.2	0.8	0.5	6.4	2.8		
US: PCE-Nondurables	1016.2	1036.6	1061.9	1075.1	1092.1	1107.6	1123.5	1138.7	1047.4	1115.5		
Percent Change From Last Qtr (AR)	1.5	8.3	10.1	5.1	6.5	5.8	5.9	5.5	5.0	6.5		
US: PCE-Services	1674.1	1708.2	1747.7	1778.0	1817.7	1855.5	1894.2	1932.2	1727.0	1874.9		
Percent Change From Last Qtr (AR)	8.1	8.4	9.6	7.1	9.2	8.6	8.6	8.3	8.5	8.6		
US: Fixed Nonresidential Invest.	471.5	487.8	494.7	503.2	515.9	525.9	537.0	548.3	489.3	531.8		
Percent Change From Last Qtr (AR)	6.5	14.6	5.8	7.1	10.5	7.9	8.7	8.7	9.5	8.7		
US: Producers Durable Equipment	331.3	345.5	350.7	359.5	372.1	381.4	391.3	401.2	346.8	386.5		
Percent Change From Last Qtr (AR)	20.4	18.2	6.1	10.4	14.8	10.3	10.9	10.4	12.8	11.5		
US: Investment in Structures	140.1	142.3	143.9	143.7	143.8	144.5	145.6	147.1	142.5	145.3		
Percent Change From Last Qtr (AR)	-19.0	6.4	4.5	-0.6	0.3	2.0	3.2	4.1	2.2	1.9		
US: Residential Investment	226.6	226.5	228.3	233.8	238.2	240.5	242.0	243.8	228.8	241.1		
Percent Change From Last Qtr (AR)	-3.8	-0.2	3.2	10.0	7.7	3.9	2.5	3.1	0.8	5.4		

US forecasts were generated using assumptions determined by the Institute for Public Policy and Business Research and operationalized through the Indiana Econometric Model of the United States.

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Institute for Public Policy and Business Research, University of Kansas										1988-1989	US Forecast	16JAN89	4
	1988Q1	1988Q2	1988Q3	1988Q4	1989Q1	1989Q2	1989Q3	1989Q4	1988	1989			
US: Change in Bus. Inventories	65.3	43.7	48.4	24.2	28.7	35.3	40.5	42.7	45.4	36.8			
US: Change in Farm Inventories	15.9	10.6	7.3	-7.0	0.0	0.0	0.0	0.0	6.7	0.0			
US: Change in Nonfarm Inv.	49.4	33.1	39.5	31.2	28.7	35.3	40.5	42.7	38.3	36.8			
US: Net Exports	-112.1	-90.4	-82.4	-81.0	-78.1	-74.3	-71.2	-68.2	-91.5	-72.9			
US: Total Exports	487.8	507.1	531.5	550.5	570.5	589.0	606.6	624.2	519.2	597.6			
Percent Change From Last Qtr (AR)	26.8	16.8	20.7	15.1	15.3	13.7	12.5	12.1	21.3	15.1			
US: Total Imports	599.9	597.5	613.9	631.4	648.5	663.3	677.8	692.4	610.7	670.5			
Percent Change From Last Qtr (AR)	10.3	-1.6	11.4	11.9	11.3	9.4	9.1	8.9	10.8	9.8			
US: Total Government Purchases	945.2	961.6	958.7	980.0	993.7	1008.0	1022.3	1037.9	961.4	1015.4			
Percent Change From Last Qtr (AR)	-0.9	7.1	-1.2	9.2	5.7	5.9	5.8	6.3	4.0	5.6			
US: Fed. Govt. Purchases	377.7	382.2	370.9	382.3	385.8	390.2	394.7	400.2	378.3	392.7			
Percent Change From Last Qtr (AR)	-13.3	4.9	-11.3	12.9	3.7	4.7	4.7	5.7	-1.0	3.8			
US: Fed. Defense Purchases	298.4	298.8	293.1	298.5	301.9	304.3	307.1	310.4	297.2	305.9			
Percent Change From Last Qtr (AR)	-1.1	0.5	-7.4	7.6	4.5	3.2	3.8	4.4	0.7	2.9			
US: Fed. Nondefense Purchases	79.3	83.4	77.9	83.8	83.9	86.0	87.6	89.8	81.1	86.8			
Percent Change From Last Qtr (AR)	-45.3	22.3	-23.9	33.6	0.7	10.3	7.9	10.4	-6.4	7.1			
US: State and Local Govt. Purch.	567.5	579.4	587.8	597.7	607.9	617.7	627.5	637.7	583.1	622.7			
Percent Change From Last Qtr (AR)	8.6	8.7	5.9	6.9	7.0	6.6	6.5	6.6	7.4	6.8			

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Institute for Public Policy and Business Research, University of Kansas										1988-1989	US Forecast	16JAN89	5
RELATION OF GNP, MNP, NAT. INCOME & PERS. INCOME	1988Q1	1988Q2	1988Q3	1988Q4	1989Q1	1989Q2	1989Q3	1989Q4	1988	1989			
US: Gross National Product Percent Change From Last Qtr (AR)	4724.5 5.4	4823.8 8.7	4909.2 7.3	4969.9 5.0	5068.0 8.1	5159.7 7.4	5250.4 7.2	5338.2 6.9	4856.8 7.3	5204.1 7.1			
US: Cap. Cons. Allow. with Adj. Percent Change From Last Qtr (AR)	498.3 7.4	503.2 4.0	508.1 4.0	512.4 3.5	519.5 5.6	528.8 7.4	540.0 8.7	551.9 9.1	505.5 5.3	535.0 5.8			
US: Cap. Cons. Allow w/o Adj. Percent Change From Last Qtr (AR)	475.8 11.9	482.3 5.6	490.2 6.7	494.4 3.5	501.5 5.8	510.8 7.7	522.0 9.1	533.9 9.4	485.7 7.4	517.0 6.5			
US: Cap. Cons. Adjustment, Total Percent Change From Last Qtr (AR)	22.5 -51.1	20.9 -25.6	18.0 -45.0	18.0 0.0	18.0 0.0	18.0 0.0	18.0 0.0	18.0 0.0	19.8 -28.1	18.0 -9.3			
US: Net National Product Percent Change From Last Qtr (AR)	4226.2 5.2	4320.5 9.2	4401.1 7.7	4457.5 5.2	4548.5 8.4	4630.9 7.4	4710.3 7.0	4786.3 6.6	4351.3 7.5	4669.0 7.3			
US: Indirect Business Taxes Percent Change From Last Qtr (AR)	379.4 5.7	385.8 6.9	391.7 6.3	401.3 10.1	412.1 11.3	422.7 10.7	433.8 10.9	444.3 10.1	389.5 6.3	428.2 9.9			
US: Business Transfer Payments Percent Change From Last Qtr (AR)	29.6 8.5	30.3 9.8	31.1 11.0	31.7 8.4	32.4 8.6	33.1 8.4	33.7 8.0	34.3 7.7	30.7 9.0	33.4 8.8			
US: Statistical Discrepancy	-15.0	-5.1	0.0	0.0	0.0	0.0	0.0	0.0	-5.0	0.0			
US: Sub. less Cur. Sur.-Gov. E.	18.6	19.2	9.0	15.0	14.9	14.7	14.6	14.4	15.4	14.6			
US: National Income Percent Change From Last Qtr (AR)	3850.8 5.2	3928.8 8.4	3996.2 7.0	4039.5 4.4	4118.9 8.1	4189.8 7.1	4257.4 6.6	4322.1 6.2	3953.8 7.5	4222.1 6.8			

US forecasts were generated using assumptions determined by the Institute for Public Policy and Business Research and operationalized through the Indiana Econometric Model of the United States.

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Institute for Public Policy and Business Research, University of Kansas								1988-1989	US Forecast	16JAN89	6
	1988Q1	1988Q2	1988Q3	1988Q4	1989Q1	1989Q2	1989Q3	1989Q4	1988	1989	
US: Corp. Prof. w. IVA + CCADJ Percent Change From Last Qtr (AR)	316.2 0.1	326.5 13.7	323.7 -3.4	300.4 -25.9	288.7 -14.7	279.4 -12.3	268.5 -14.7	256.5 -16.6	316.7 2.0	273.3 -13.7	
US: Net Interest Percent Change From Last Qtr (AR)	373.9 4.8	380.6 7.4	397.7 19.2	411.3 14.4	424.7 13.6	437.5 12.7	450.4 12.3	463.2 11.8	390.9 10.6	443.9 13.6	
US: Cont. to Soc. Ins.-Total Percent Change From Last Qtr (AR)	433.3 26.5	440.9 7.2	448.3 6.9	454.9 6.0	464.5 8.7	471.5 6.2	478.3 5.9	485.0 5.7	444.4 11.3	474.8 6.9	
US: Wage Accruals less Disburs.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
US: Govt. Trans. to Pers.-Total Percent Change From Last Qtr (AR)	546.7 15.1	552.5 4.3	556.2 2.7	564.7 6.3	573.2 6.1	582.7 6.8	596.2 9.6	610.9 10.2	555.0 6.6	590.8 6.4	
US: Personal Interest Income Percent Change From Last Qtr (AR)	554.2 3.1	563.7 7.0	581.3 13.1	595.5 10.2	610.3 10.3	624.9 9.9	640.0 10.0	655.3 9.9	573.7 8.9	632.6 10.3	
US: Personal Dividend Income Percent Change From Last Qtr (AR)	93.5 7.1	95.0 6.6	97.3 10.0	98.4 4.4	99.3 3.9	100.1 3.3	100.4 1.3	100.6 0.5	96.0 8.4	100.1 4.2	
US: Personal Income Percent Change From Last Qtr (AR)	3951.4 4.6	4022.4 7.4	4092.3 7.1	4163.3 7.1	4256.3 9.2	4342.3 8.3	4430.7 8.4	4518.5 8.2	4057.3 7.3	4387.0 8.1	

US forecasts were generated using assumptions determined by the Institute for Public Policy and Business Research and operationalized through the Indiana Econometric Model of the United States.

Institute for Public Policy and Business Research, University of Kansas									1988-1989	US Forecast	16JAN89	7
DISPOSITION OF PERSONAL INCOME - CURRENT DOLLARS												
	1988Q1	1988Q2	1988Q3	1988Q4	1989Q1	1989Q2	1989Q3	1989Q4	1988	1989		
US: Personal Income	3951.4	4022.4	4092.3	4163.3	4256.3	4342.3	4430.7	4518.5	4057.3	4387.0		
Percent Change From Last Qtr (AR)	4.6	7.4	7.1	7.1	9.2	8.3	8.4	8.2	7.3	8.1		
US: Wage and Salary Disburse.	2358.7	2410.0	2461.4	2507.8	2559.5	2611.7	2663.2	2713.7	2434.5	2637.0		
Percent Change From Last Qtr (AR)	5.9	9.0	8.8	7.8	8.5	8.4	8.1	7.8	8.3	8.3		
US: Other Labor Income	214.6	216.5	219.5	222.4	225.7	229.2	232.6	235.9	218.2	230.8		
Percent Change From Last Qtr (AR)	4.2	3.6	5.7	5.4	6.2	6.2	6.0	5.8	5.0	5.8		
US: Total Proprietors Inc.	323.9	328.8	322.1	322.2	339.5	347.3	354.2	360.6	324.2	350.4		
Percent Change From Last Qtr (AR)	-2.6	6.2	-7.9	0.1	23.3	9.6	8.2	7.4	3.6	8.1		
US: Farm Proprietors Inc.	44.7	43.4	30.4	26.0	37.7	40.1	42.2	44.1	36.1	41.0		
Percent Change From Last Qtr (AR)	-18.2	-11.1	-75.9	-46.5	343.0	27.8	22.6	19.0	-15.9	13.6		
US: Nonfarm Proprietors Inc.	279.2	285.3	291.7	296.2	301.8	307.2	312.0	316.5	288.1	309.4		
Percent Change From Last Qtr (AR)	0.3	9.0	9.3	6.3	7.7	7.4	6.4	5.9	6.7	7.4		
US: Rental Income of Persons	20.5	19.1	20.1	20.7	21.1	21.5	21.9	22.2	20.1	21.7		
Percent Change From Last Qtr (AR)	0.0	-24.6	22.6	11.5	9.7	7.8	6.5	5.5	8.9	7.9		
US: Personal Interest Income	554.2	563.7	581.3	595.5	610.3	624.9	640.0	655.3	573.7	632.6		
Percent Change From Last Qtr (AR)	3.1	7.0	13.1	10.2	10.3	9.9	10.0	9.9	8.9	10.3		
US: Personal Dividend Income	93.5	95.0	97.3	98.4	99.3	100.1	100.4	100.6	96.0	100.1		
Percent Change From Last Qtr (AR)	7.1	6.6	10.0	4.4	3.9	3.3	1.3	0.5	8.4	4.2		
US: Total Transfer Payments	576.3	582.8	587.3	596.5	605.6	615.8	630.0	645.3	585.7	624.2		
Percent Change From Last Qtr (AR)	14.8	4.6	3.1	6.4	6.3	6.9	9.5	10.1	6.7	6.6		

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Institute for Public Policy and Business Research, University of Kansas										1988-1989	US Forecast	16JAN89	8
	1988Q1	1988Q2	1988Q3	1988Q4	1989Q1	1989Q2	1989Q3	1989Q4	1988	1989			
US: Tot. Pers. Tax + Nontax Pay	575.8	601.0	586.4	618.8	634.8	653.2	667.8	686.0	595.5	660.5			
Percent Change From Last Qtr (AR)	-9.9	18.7	-9.4	24.0	10.8	12.1	9.2	11.3	4.4	10.9			
US: Disposable Personal Income	3375.6	3421.5	3506.0	3544.4	3621.5	3689.1	3762.9	3832.6	3461.9	3726.5			
Percent Change From Last Qtr (AR)	7.4	5.6	10.3	4.5	9.0	7.7	8.2	7.6	7.9	7.6			
US: Personal Consumption Expend.	3128.1	3194.6	3261.5	3309.7	3369.6	3424.4	3479.9	3533.6	3223.4	3451.8			
Percent Change From Last Qtr (AR)	6.9	8.8	8.6	6.0	7.4	6.7	6.6	6.3	7.0	7.1			
US: Int. Paid by Cons. to Bus.	96.4	98.2	99.9	101.2	102.6	104.0	105.5	107.1	98.9	104.8			
Percent Change From Last Qtr (AR)	8.7	7.7	7.1	5.1	5.8	5.5	5.8	6.5	7.4	5.9			
US: Pers. Trans. Pay. to For.	1.2	0.8	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0			
US: Personal Saving	149.9	127.8	143.6	132.6	148.3	159.7	176.6	190.9	138.5	168.9			
Percent Change From Last Qtr (AR)	17.4	-47.2	59.4	-27.4	56.7	34.4	49.5	36.5	32.9	22.0			
US: Disposable Personal Income	2762.3	2762.2	2799.8	2795.3	2819.4	2835.3	2854.7	2868.9	2779.9	2844.6			
Percent Change From Last Qtr (AR)	5.0	-0.0	5.6	-0.6	3.5	2.3	2.8	2.0	3.5	2.3			
US: Personal Savings Rate	4.4	3.7	4.1	3.7	4.1	4.3	4.7	5.0	4.0	4.5			

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Institute for Public Policy and Business Research, University of Kansas										
	1988-1989				US Forecast				16JAN89	9
NATIONAL INCOME - CURRENT DOLLARS	1988Q1	1988Q2	1988Q3	1988Q4	1989Q1	1989Q2	1989Q3	1989Q4	1988	1989
US: National Income Percent Change From Last Qtr (AR)	3850.8 5.2	3928.8 8.4	3996.2 7.0	4039.5 4.4	4118.9 8.1	4189.8 7.1	4257.4 6.6	4322.1 6.2	3953.8 7.5	4222.1 6.8
US: Wages and Salaries Percent Change From Last Qtr (AR)	2358.7 6.0	2410.0 9.0	2460.0 8.6	2507.8 8.0	2559.5 8.5	2611.7 8.4	2663.2 8.1	2713.7 7.8	2434.1 8.3	2637.0 8.3
US: W. and S.-Govt. + Govt. Ent. Percent Change From Last Qtr (AR)	437.1 7.6	442.9 5.4	449.1 5.7	457.7 7.9	465.2 6.7	472.7 6.6	480.3 6.6	488.1 6.6	446.7 6.3	476.6 6.7
US: W. and S.-Other Percent Change From Last Qtr (AR)	1921.6 5.6	1967.1 9.8	2010.9 9.2	2050.1 8.0	2094.3 8.9	2139.0 8.8	2182.9 8.4	2225.6 8.1	1987.4 8.7	2160.5 8.7
US: Supplements to w. and s. Percent Change From Last Qtr (AR)	457.7 11.8	464.0 5.6	471.1 6.3	477.2 5.3	485.5 7.1	492.4 5.8	499.3 5.7	506.0 5.5	467.5 7.5	495.8 6.0
US: Emp. Cont. to Soc. Ins. Percent Change From Last Qtr (AR)	243.1 19.1	247.5 7.4	251.6 6.8	254.8 5.2	259.7 8.0	263.2 5.5	266.7 5.4	270.1 5.2	249.2 9.7	264.9 6.3
US: Other Labor Income Percent Change From Last Qtr (AR)	214.6 4.2	216.5 3.6	219.5 5.7	222.4 5.4	225.7 6.2	229.2 6.2	232.6 6.0	235.9 5.8	218.2 5.0	230.8 5.8
US: Total Proprietors Inc. Percent Change From Last Qtr (AR)	323.9 -2.6	328.8 6.2	322.1 -7.9	322.2 0.1	339.5 23.3	347.3 9.6	354.2 8.2	360.6 7.4	324.2 3.6	350.4 8.1
US: Farm Proprietors Inc. Percent Change From Last Qtr (AR)	44.7 -18.2	43.4 -11.1	30.4 -75.9	26.0 -46.5	37.7 343.0	40.1 27.8	42.2 22.6	44.1 19.0	36.1 -15.9	41.0 13.6
US: Nonfarm Proprietors Inc. Percent Change From Last Qtr (AR)	279.2 0.3	285.3 9.0	291.7 9.3	296.2 6.3	301.8 7.7	307.2 7.4	312.0 6.4	316.5 5.9	288.1 6.7	309.4 7.4

US forecasts were generated using assumptions determined by the Institute for Public Policy and Business Research and operationalized through the Indiana Econometric Model of the United States.

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Institute for Public Policy and Business Research, University of Kansas										1988-1989	US Forecast	16JAN89	10
	1988Q1	1988Q2	1988Q3	1988Q4	1989Q1	1989Q2	1989Q3	1989Q4	1988	1989			
US: Rental Income of Persons Percent Change From Last Qtr (AR)	20.5 0.0	19.1 -24.6	20.1 22.6	20.7 11.5	21.1 9.7	21.5 7.8	21.9 6.5	22.2 5.5	20.1 8.9	21.7 7.9			
US: Corp. Prof. w. IVA + CCADJ Percent Change From Last Qtr (AR)	316.2 0.1	326.5 13.7	323.7 -3.4	300.4 -25.9	288.7 -14.7	279.4 -12.3	268.5 -14.7	256.5 -16.6	316.7 2.0	273.3 -13.7			
US: Net Interest Percent Change From Last Qtr (AR)	373.9 4.8	380.6 7.4	397.7 19.2	411.3 14.4	424.7 13.6	437.5 12.7	450.4 12.3	463.2 11.8	390.9 10.6	443.9 13.6			
US: Corp. Prof. before Tax Percent Change From Last Qtr (AR)	286.2 6.2	305.9 30.5	307.7 2.4	284.4 -27.0	273.1 -15.0	265.5 -10.7	256.3 -13.1	246.4 -14.7	296.1 7.0	260.3 -12.1			
US: Profits Tax Liability Percent Change From Last Qtr (AR)	136.9 2.1	143.2 19.7	144.6 4.0	136.9 -19.6	132.9 -11.2	130.1 -8.2	127.0 -9.1	123.8 -9.9	140.4 5.0	128.5 -8.5			
US: Corp. Prof. after Taxes Percent Change From Last Qtr (AR)	149.4 10.6	162.7 40.7	163.1 1.0	147.5 -33.2	140.1 -18.4	135.3 -13.0	129.3 -16.7	122.6 -19.2	155.7 8.9	131.8 -15.3			
US: Dividends-Total Percent Change From Last Qtr (AR)	101.3 8.3	103.1 7.3	105.7 10.5	107.1 5.3	108.3 4.9	109.5 4.3	110.4 3.2	110.9 2.1	104.3 9.2	109.8 5.3			
US: Undistributed Corp. Prof. Percent Change From Last Qtr (AR)	48.1 15.5	59.6 135.7	57.5 -13.4	40.4 -75.6	31.8 -61.6	25.9 -56.3	18.9 -71.2	11.6 -85.7	51.4 8.4	22.1 -57.1			
US: Inventory Valuation Adj. Percent Change From Last Qtr (AR)	-19.4 29.1	-27.4 297.9	-29.0 25.5	-28.7 -3.5	-28.8 0.9	-30.4 23.7	-32.1 25.1	-34.1 26.7	-26.1 45.0	-31.3 19.9			
US: Corp. Cap. Cons. Adj. Percent Change From Last Qtr (AR)	49.4 -21.0	48.0 -10.9	45.1 -22.1	44.7 -3.6	44.4 -2.4	44.3 -1.2	44.3 -0.1	44.3 -0.1	46.8 -9.5	44.3 -5.3			
US: Net Interest Percent Change From Last Qtr (AR)	373.9 4.8	380.6 7.4	397.7 19.2	411.3 14.4	424.7 13.6	437.5 12.7	450.4 12.3	463.2 11.8	390.9 10.6	443.9 13.6			

US forecasts were generated using assumptions determined by the Institute for Public Policy and Business Research and operationalized through the Indiana Econometric Model of the United States.

Institute for Public Policy and Business Research, University of Kansas									1988-1989	US Forecast	16JAN89	11
PRICE DEFLATORS	1988Q1	1988Q2	1988Q3	1988Q4	1989Q1	1989Q2	1989Q3	1989Q4	1988	1989		
US: CPI-All items Percent Change From Last Qtr (AR)	1.2 3.4	1.2 4.8	1.2 4.7	1.2 4.9	1.2 5.3	1.2 5.4	1.3 5.5	1.3 5.5	1.2 4.1	1.2 5.2		
US: Implicit Deflator - GNP Percent Change From Last Qtr (AR)	1.2 1.9	1.2 5.5	1.2 4.6	1.2 3.8	1.2 4.7	1.3 5.0	1.3 5.2	1.3 5.3	1.2 3.4	1.3 4.7		
US: Implicit Deflator - C Percent Change From Last Qtr (AR)	1.2 2.3	1.2 5.6	1.3 4.5	1.3 5.1	1.3 5.3	1.3 5.3	1.3 5.4	1.3 5.5	1.2 4.2	1.3 5.2		
US: Implicit Deflator - IOIL Percent Change From Last Qtr (AR)	0.5 -42.2	0.5 -2.6	0.5 -21.6	0.5 2.1	0.5 0.0	0.5 0.0	0.5 0.0	0.4 -7.7	0.5 -14.6	0.5 -3.3		

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Institute for Public Policy and Business Research, University of Kansas										1988-1989	US Forecast	16JAN89	12
EMPLOYMENT	1988Q1	1988Q2	1988Q3	1988Q4	1989Q1	1989Q2	1989Q3	1989Q4	1988	1989			
US: Civilian Labor Force	121.1	121.3	121.9	122.3	123.0	123.6	124.1	124.6	121.7	123.8			
Percent Change From Last Qtr (AR)	1.9	0.4	2.1	1.6	2.0	2.0	1.9	1.6	1.5	1.8			
US: Civilian Employment	114.4	114.8	115.3	115.9	116.7	117.5	118.2	118.7	115.1	117.8			
Percent Change From Last Qtr (AR)	2.8	1.4	1.9	1.9	3.0	2.9	2.2	1.8	2.2	2.4			
US: Unemployment	6.8	6.5	6.6	6.5	6.3	6.0	6.0	5.9	6.6	6.0			
Percent Change From Last Qtr (AR)	-11.4	-15.3	4.6	-5.1	-14.1	-14.6	-3.5	-2.1	-9.6	-8.4			
US: Unemployment Rate-Total	5.6	5.4	5.4	5.3	5.1	4.9	4.8	4.8	5.4	4.9			
US: Tot. Nonfarm Empl.	104.7	105.6	106.5	107.2	108.1	108.9	109.5	110.0	106.0	109.1			
Percent Change From Last Qtr (AR)	3.9	3.6	3.3	2.8	3.4	2.8	2.2	1.9	3.6	2.9			
US: Agricultural Employment	3.2	3.1	3.1	3.1	3.3	3.3	3.2	3.2	3.2	3.2			
Percent Change From Last Qtr (AR)	3.8	-14.6	0.8	2.8	15.2	1.8	-7.5	-4.7	-1.7	2.2			
US: Total Govt. Empl.	17.3	17.3	17.4	17.5	17.7	17.8	17.9	18.0	17.4	17.8			
Percent Change From Last Qtr (AR)	2.3	1.9	1.7	3.1	2.5	2.5	2.5	2.5	2.2	2.5			
US: Fed. Govt. Empl.	3.0	3.0	2.9	2.9	3.0	3.0	3.0	3.0	3.0	3.0			
Percent Change From Last Qtr (AR)	-0.2	-2.1	-0.8	0.0	1.4	1.4	1.4	1.3	0.5	0.6			
US: S & L Govt. Empl.	14.3	14.4	14.5	14.6	14.7	14.8	14.9	15.0	14.4	14.8			
Percent Change From Last Qtr (AR)	2.9	3.0	2.8	2.8	2.8	2.7	2.7	2.7	2.7	2.8			
US: Tot. Priv. Nonfarm Empl.	101.4	102.5	103.3	104.1	104.9	105.6	106.2	106.8	102.8	105.9			
Percent Change From Last Qtr (AR)	3.9	4.3	3.4	2.8	3.0	2.8	2.5	2.1	3.8	3.0			
US: Wage Rate Per Hour-Pr. Nonag.	10.4	10.5	10.7	10.8	11.0	11.1	11.3	11.5	10.6	11.2			
Percent Change From Last Qtr (AR)	2.4	4.8	6.1	5.4	5.8	6.1	6.2	6.4	4.9	5.8			
US: Output Per Manhour-Pr. Nonag.	19.0	19.0	19.0	19.0	19.0	19.0	19.0	18.9	19.0	19.0			
Percent Change From Last Qtr (AR)	1.5	-0.2	-0.1	0.6	-1.2	-0.3	-0.3	-0.2	1.1	-0.3			

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Institute for Public Policy and Business Research, University of Kansas										1988-1989	US Forecast	16JAN89	13
FINANCIAL AND GOVERNMENT BUDGET DEFECIT													
	1988Q1	1988Q2	1988Q3	1988Q4	1989Q1	1989Q2	1989Q3	1989Q4	1988	1989			
US: M1 Money Supply	760.4	772.3	782.4	789.6	801.2	812.3	822.3	832.0	776.2	817.0			
Percent Change From Last Qtr (AR)	3.9	6.4	5.4	3.8	6.0	5.6	5.0	4.8	4.3	5.3			
US: M2 Money Supply	2946.3	3003.2	3030.8	3051.0	3080.1	3111.1	3143.6	3178.2	3007.8	3128.3			
Percent Change From Last Qtr (AR)	6.9	8.0	3.7	2.7	3.9	4.1	4.3	4.5	5.1	4.0			
US: 3-Month T-Bill Rate	5.8	6.2	7.0	7.4	7.9	8.3	8.7	9.1	6.6	8.5			
US: Prime Rate Charged By Banks	8.6	8.8	9.7	10.3	10.9	11.5	12.0	12.5	9.3	11.7			
US: Moodys AAA Corp. Bond Rate	9.6	9.8	10.0	9.5	9.8	10.1	10.5	10.8	9.7	10.3			
US: Federal Govt. Surplus	-155.1	-133.3	-124.8	-120.9	-115.2	-110.8	-115.1	-118.2	-133.5	-114.8			

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Institute for Public Policy and Business Research, University of Kansas										
	1988-1989				Kansas Forecast				16JAN89	14
EMPLOYMENT	1988Q1	1988Q2	1988Q3	1988Q4	1989Q1	1989Q2	1989Q3	1989Q4	1988	1989
KS EMP: Civilian Labor Force	1268.2	1299.8	1281.1	1277.6	1266.8	1308.1	1305.7	1297.9	1281.7	1294.6
Percent Change From One Year Ago	2.4	1.7	0.5	0.1	-0.1	0.6	1.9	1.6	1.2	1.0
KS EMP: Employed	1200.2	1245.3	1225.9	1217.9	1198.5	1246.6	1248.7	1241.1	1222.3	1233.7
Percent Change From One Year Ago	3.1	2.3	0.6	-0.1	-0.1	0.1	1.9	1.9	1.4	0.9
KS EMP: Unemployed	67.9	54.5	55.2	59.8	68.2	61.4	57.0	56.8	59.3	60.8
Percent Change From One Year Ago	-8.3	-11.0	-1.3	5.1	0.4	12.7	3.2	-5.0	-4.3	2.5
KS EMP: Unemployment Rate	5.4	4.2	4.3	4.7	5.4	4.7	4.4	4.4	4.6	4.7
KS EMP: Adj. for Res. & Self Emp.	146.5	157.2	139.4	141.0	139.8	152.9	158.7	151.6	146.0	150.8
Percent Change From One Year Ago	9.7	7.1	-6.9	-2.8	-4.6	-2.8	13.9	7.5	1.6	3.2
KS EMP: Farm	49.8	66.2	70.8	48.8	44.6	59.2	64.0	47.9	58.9	53.9
Percent Change From One Year Ago	-2.2	-2.3	-2.3	-11.4	-10.4	-10.6	-9.7	-1.8	-4.3	-8.5
KS EMP: Total Non-farm Wage & Salary	1003.9	1021.9	1015.7	1028.0	1014.1	1034.5	1026.1	1041.5	1017.4	1029.1
Percent Change From One Year Ago	2.5	1.9	1.9	0.8	1.0	1.2	1.0	1.3	1.8	1.1
KS EMP: Mining	11.6	11.6	11.5	11.2	10.7	11.0	11.3	11.1	11.5	11.0
Percent Change From One Year Ago	7.4	3.3	-2.0	-7.3	-7.6	-5.4	-1.9	-1.1	0.1	-4.1

Kansas forecasts were generated using assumptions determined by the Institute for Public Policy and Business Research and operationalized through the Kansas Econometric Model.

	1988-1989				Kansas Forecast				16JAN89	15
	1988Q1	1988Q2	1988Q3	1988Q4	1989Q1	1989Q2	1989Q3	1989Q4	1988	1989
KS EMP: Oil & Gas Extraction Percent Change From One Year Ago	10.3 9.6	10.1 4.5	10.0 -1.6	9.8 -8.1	9.5 -8.0	9.5 -6.0	9.8 -2.0	9.7 -1.1	10.1 0.8	9.6 -4.3
KS EMP: Mining Residual Percent Change From One Year Ago	1.3 -7.0	1.5 -4.3	1.5 -4.3	1.4 -1.0	1.3 -4.9	1.4 -1.1	1.5 -1.3	1.4 -1.3	1.4 -4.1	1.4 -2.1
KS EMP: Construction Percent Change From One Year Ago	36.8 -8.0	42.9 -4.5	45.5 -4.5	42.9 -4.8	37.3 1.4	44.0 2.4	46.1 1.2	43.1 0.5	42.1 -5.4	42.6 1.4
KS EMP: Non-durable Goods Percent Change From One Year Ago	73.8 2.5	74.3 0.8	74.1 0.1	74.1 -0.0	74.4 0.8	75.9 2.2	76.3 2.9	76.0 2.6	74.1 0.8	75.7 2.1
KS EMP: Food & Kindred Percent Change From One Year Ago	28.2 3.2	28.4 2.3	28.5 1.4	28.4 -0.4	27.9 -1.1	28.5 0.4	29.1 2.0	29.0 2.0	28.4 1.6	28.6 0.8
KS EMP: Apparel Percent Change From One Year Ago	3.7 24.7	3.6 5.9	3.6 -2.7	3.5 -5.8	3.5 -6.6	3.5 -1.3	3.5 -0.6	3.5 -0.9	3.6 4.5	3.5 -2.4
KS EMP: Printing & Publishing Percent Change From One Year Ago	18.7 -0.4	19.0 0.2	18.6 -1.1	18.8 1.4	19.6 5.0	20.0 5.2	19.6 5.4	19.7 5.1	18.8 0.0	19.7 5.2
KS EMP: Chemicals & Allied Prod. Percent Change From One Year Ago	7.7 -4.9	7.7 -6.1	7.7 0.4	7.6 -1.9	7.6 -0.9	7.7 0.1	7.8 0.4	7.6 0.2	7.7 -3.2	7.7 -0.1
KS EMP: Petroleum & Coal Percent Change From One Year Ago	3.0 0.0	3.1 1.1	3.2 5.5	3.1 2.2	3.0 -1.6	3.0 -2.6	3.0 -7.2	2.8 -7.3	3.1 2.2	2.9 -4.7
KS EMP: Non-durables Residual Percent Change From One Year Ago	12.5 5.9	12.5 1.3	12.5 -1.6	12.7 1.2	12.9 2.8	13.2 5.1	13.4 6.6	13.3 4.8	12.6 1.7	13.2 4.8

Kansas forecasts were generated using assumptions determined by the Institute for Public Policy and Business Research and operationalized through the Kansas Econometric Model.

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	1988-1989				Kansas Forecast				16JAN89	16
	1988Q1	1988Q2	1988Q3	1988Q4	1989Q1	1989Q2	1989Q3	1989Q4	1988	1989
KS EMP: Durable Goods Percent Change From One Year Ago	104.7 4.2	106.0 3.7	107.2 4.0	108.9 4.8	108.3 3.5	109.0 2.8	108.6 1.3	109.4 0.5	106.7 4.2	108.8 2.0
KS EMP: Stone Glass Clay Percent Change From One Year Ago	5.7 -10.1	6.2 -3.1	6.3 -3.6	6.3 2.5	6.0 6.5	6.4 3.9	6.6 4.4	6.5 3.7	6.1 -3.6	6.4 4.6
KS EMP: Primary Metals Percent Change From One Year Ago	2.9 1.2	3.1 8.1	3.3 15.1	3.4 16.0	3.4 17.7	3.5 12.2	3.5 6.0	3.5 4.9	3.2 10.1	3.5 9.9
KS EMP: Fabricated Metals Percent Change From One Year Ago	11.4 7.5	11.8 7.9	11.9 5.9	12.0 6.1	11.8 3.8	12.1 2.2	12.3 2.8	12.2 2.5	11.8 6.8	12.1 2.8
KS EMP: Machinery, Incl. Electrical Percent Change From One Year Ago	28.4 5.8	28.8 5.1	29.1 5.2	29.4 5.4	29.7 4.7	29.8 3.4	29.7 2.2	29.8 1.5	28.9 5.4	29.7 2.9
KS EMP: Transportation Equipment Percent Change From One Year Ago	46.3 4.7	46.0 2.3	46.3 2.9	47.9 4.6	47.5 2.7	47.0 2.1	46.3 -0.0	47.3 -1.3	46.6 3.6	47.0 0.8
KS EMP: Durables Residual Percent Change From One Year Ago	10.0 3.8	10.1 4.1	10.3 5.1	10.0 0.7	9.7 -2.5	10.2 1.2	10.3 -0.2	10.0 0.1	10.1 3.4	10.1 -0.3
KS EMP: Transportation & Utilities Percent Change From One Year Ago	60.5 -0.5	61.2 -0.6	61.1 -0.8	61.0 -1.2	59.9 -1.0	61.1 -0.3	61.4 0.5	61.4 0.6	61.0 -0.8	60.9 -0.0
KS EMP: Railroads Percent Change From One Year Ago	9.0 -4.3	9.0 -3.2	8.9 -4.0	8.7 -2.2	8.4 -6.9	8.3 -7.6	8.3 -5.9	8.2 -5.9	8.9 -3.4	8.3 -6.6
KS EMP: Trucking & Warehousing Percent Change From One Year Ago	21.4 1.9	22.1 0.6	22.4 1.1	22.2 0.3	21.5 0.2	22.5 1.4	22.9 2.2	22.7 2.2	22.1 1.0	22.4 1.5

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	Institute for Public Policy and Business Research, University of Kansas 1988-1989 Kansas Forecast								16JAN89	17
	1988Q1	1988Q2	1988Q3	1988Q4	1989Q1	1989Q2	1989Q3	1989Q4	1988	1989
KS EMP: Electric Gas & Sanitary Serv Percent Change From One Year Ago	11.6 0.6	11.6 0.0	11.7 0.0	11.4 -1.3	11.4 -1.5	11.6 -0.5	11.7 0.5	11.5 0.5	11.6 -0.2	11.6 -0.3
KS EMP: Trans. & Utilities Residual Percent Change From One Year Ago	18.5 -1.9	18.4 -1.3	18.1 -2.0	18.6 -2.3	18.7 0.9	18.7 1.5	18.4 1.7	18.9 1.6	18.4 -1.9	18.7 1.4
KS EMP: Wholesale Trade Percent Change From One Year Ago	68.6 3.2	70.5 3.8	70.8 2.8	69.6 1.1	69.5 1.3	70.6 0.2	71.0 0.3	69.8 0.3	69.9 2.7	70.2 0.5
KS EMP: Retail Trade Percent Change From One Year Ago	185.1 3.9	186.5 2.3	186.5 1.3	189.4 0.2	183.3 -1.0	187.2 0.4	188.6 1.1	191.7 1.2	186.9 1.9	187.7 0.4
KS EMP: Gen. Merchandise Stores Percent Change From One Year Ago	27.9 15.3	27.2 10.7	27.5 9.4	29.3 3.8	27.0 -3.2	26.7 -2.0	26.9 -2.2	28.8 -1.6	28.0 9.6	27.3 -2.2
KS EMP: Food Stores Percent Change From One Year Ago	27.5 3.6	27.6 3.2	28.0 3.1	28.4 3.0	28.0 1.8	28.1 2.1	28.3 1.1	28.7 1.1	27.9 3.2	28.3 1.5
KS EMP: Auto. Dealers & Gas Stations Percent Change From One Year Ago	23.3 3.1	23.4 1.6	23.4 0.1	23.1 -0.8	22.7 -2.5	23.1 -1.4	23.1 -1.1	22.8 -1.3	23.3 1.0	22.9 -1.6
KS EMP: Apparel & Accessory Stores Percent Change From One Year Ago	9.1 0.4	9.1 -0.7	8.8 -2.6	9.5 -1.5	8.9 -2.3	8.8 -2.9	8.9 1.0	9.5 0.1	9.1 -1.1	9.0 -1.0
KS EMP: Retail Trade Residual Percent Change From One Year Ago	97.3 1.6	99.1 0.5	98.8 -0.6	99.1 -1.3	96.7 -0.6	100.4 1.3	101.3 2.6	101.8 2.7	98.6 0.0	100.1 1.5
KS EMP: Finance, Insurance, R.E. Percent Change From One Year Ago	56.6 2.2	57.4 1.3	57.5 0.8	56.7 0.6	56.5 -0.2	57.7 0.6	58.4 1.4	57.5 1.4	57.0 1.2	57.5 0.8

Kansas forecasts were generated using assumptions determined by the Institute for Public Policy and Business Research and operationalized through the Kansas Econometric Model.

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Institute for Public Policy and Business Research, University of Kansas								1988-1989	Kansas Forecast		16JAN89	18
	1988Q1	1988Q2	1988Q3	1988Q4	1989Q1	1989Q2	1989Q3	1989Q4	1988	1989		
KS EMP: Banking Percent Change From One Year Ago	16.1 -1.6	16.2 -1.0	16.3 -0.4	16.0 -1.3	15.9 -1.1	15.9 -1.7	15.9 -2.2	15.6 -2.3	16.2 -1.1	15.9 -1.8		
KS EMP: Insurance Percent Change From One Year Ago	10.8 -0.3	10.8 -1.2	10.8 -1.2	10.7 -0.7	10.5 -3.2	10.5 -3.2	10.4 -3.5	10.3 -3.6	10.8 -0.9	10.4 -3.4		
KS EMP: F.I.R.E. Residual Percent Change From One Year Ago	29.6 5.5	30.3 3.5	30.4 2.1	30.0 2.1	30.0 1.4	31.3 3.2	32.0 5.2	31.6 5.1	30.1 3.3	31.2 3.7		
KS EMP: Services Percent Change From One Year Ago	204.0 3.9	208.4 3.6	209.7 3.9	209.3 2.7	208.9 2.4	213.6 2.5	213.6 1.9	213.4 1.9	207.9 3.5	212.3 2.2		
KS EMP: Hotels & Lodging Percent Change From One Year Ago	9.2 2.6	9.5 1.8	9.7 1.0	9.5 3.7	9.2 0.4	10.0 4.8	10.4 7.3	10.1 6.2	9.5 2.3	9.9 4.7		
KS EMP: Personal Services Percent Change From One Year Ago	11.6 1.5	11.4 -1.4	11.0 0.0	11.2 -2.7	12.0 3.5	11.8 3.2	11.5 4.8	11.7 4.2	11.3 -0.7	11.8 3.9		
KS EMP: Services Residual Percent Change From One Year Ago	183.3 4.1	187.5 4.1	189.0 4.3	188.6 3.0	187.6 2.4	191.9 2.3	191.7 1.4	191.6 1.6	187.1 3.9	190.7 1.9		
KS EMP: Federal Gov. Percent Change From One Year Ago	26.7 -3.0	26.7 -2.7	26.4 -3.1	26.3 -2.7	26.2 -1.7	26.9 1.0	27.0 2.5	26.8 1.8	26.5 -2.9	26.7 0.9		
KS EMP: State & Local Gov. Percent Change From One Year Ago	175.5 2.2	176.4 1.8	165.4 3.5	178.5 0.7	179.1 2.1	177.5 0.6	163.9 -0.9	181.4 1.6	173.9 2.0	175.5 0.9		

Kansas forecasts were generated using assumptions determined by the Institute for Public Policy and Business Research and operationalized through the Kansas Econometric Model.

Institute for Public Policy and Business Research, University of Kansas										1988-1989	Kansas Forecast	16JAN89	19
HOURS AND WAGES	1988Q1	1988Q2	1988Q3	1988Q4	1989Q1	1989Q2	1989Q3	1989Q4	1988	1989			
KS HRS/WK: Food & Kindred Products	39.8	40.2	40.8	40.6	40.8	41.3	42.1	41.3	40.4	41.4			
Percent Change From One Year Ago	-8.3	-8.3	-4.9	-1.0	2.5	2.7	3.2	1.7	-5.7	2.5			
KS HRS/WK: Apparel&Other Fin. Prod.	39.7	38.6	38.8	38.0	37.1	37.2	37.5	37.3	38.8	37.3			
Percent Change From One Year Ago	11.5	1.1	-0.1	-1.0	-6.5	-3.7	-3.5	-1.9	2.7	-3.9			
KS HRS/WK: Pet. Refining & Rel. Ind.	44.1	44.1	42.7	42.5	42.0	42.6	42.6	42.5	43.3	42.4			
Percent Change From One Year Ago	8.5	5.1	2.2	-4.6	-4.7	-3.2	-0.1	-0.1	2.6	-2.1			
KS HRS/WK: Fabricated Metal Products	39.1	37.9	38.1	37.9	37.0	37.5	37.6	37.5	38.3	37.4			
Percent Change From One Year Ago	9.9	5.0	2.0	-3.3	-5.4	-0.9	-1.4	-1.1	3.2	-2.2			
KS HRS/WK: Machinery, Incl. Elec.	42.8	42.7	42.0	42.2	41.3	40.8	39.9	40.8	42.4	40.7			
Percent Change From One Year Ago	1.8	3.0	2.3	-0.0	-3.6	-4.5	-5.0	-3.2	1.8	-4.1			
KS HRS/WK: Transportation Equipment	40.8	40.6	40.1	41.1	40.0	40.0	40.0	41.1	40.7	40.3			
Percent Change From One Year Ago	1.2	-0.5	-1.6	0.0	-2.0	-1.5	-0.4	-0.1	-0.2	-1.0			
KS WAGE/HR: Food & Kindred Products	8.8	9.0	9.0	9.1	9.2	9.3	9.4	9.5	9.0	9.3			
Percent Change From One Year Ago	0.3	1.6	1.5	2.9	4.1	3.2	4.9	4.8	1.6	4.3			
KS WAGE/HR: Apparel&Other Fin. Prod.	5.3	5.2	5.2	5.3	5.4	5.4	5.5	5.6	5.2	5.5			
Percent Change From One Year Ago	-2.1	-0.3	-1.6	0.9	2.1	2.9	5.4	5.4	-0.8	3.9			
KS WAGE/HR: Pet. Refining & Rel. Ind	13.6	13.9	13.8	14.0	14.3	14.4	14.5	14.8	13.8	14.5			
Percent Change From One Year Ago	1.4	3.7	4.0	3.3	4.8	4.0	5.1	5.1	3.1	4.8			
KS WAGE/HR: Fabricated Metal Product	8.1	8.1	8.3	8.4	8.5	8.5	8.6	8.7	8.2	8.6			
Percent Change From One Year Ago	-0.9	0.3	2.2	3.8	4.8	5.7	4.5	4.4	1.4	4.9			
KS WAGE/HR: Machinery, Incl. Elec.	9.6	9.7	9.7	9.9	9.9	10.0	10.2	10.3	9.7	10.1			
Percent Change From One Year Ago	1.2	3.6	3.5	3.6	3.2	3.0	4.6	4.7	3.0	3.9			
KS WAGE/HR: Transportation Equipment	11.8	12.0	12.3	12.6	12.7	12.8	12.9	13.2	12.2	12.9			
Percent Change From One Year Ago	-2.9	0.5	3.5	6.7	7.7	6.4	5.0	4.8	1.9	5.9			

Kansas forecasts were generated using assumptions determined by the Institute for Public Policy and Business Research and operationalized through the Kansas Econometric Model.

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Institute for Public Policy and Business Research, University of Kansas										
	1988-1989				Kansas Forecast				16JAN89	20
WAGE BILLS	1988Q1	1988Q2	1988Q3	1988Q4	1989Q1	1989Q2	1989Q3	1989Q4	1988	1989
KS WG BILL: Total Wages & Salaries	20372.0	20836.0	20938.7	21268.4	21410.2	21832.7	22125.1	22426.3	20853.8	21948.6
Percent Change From One Year Ago	5.7	5.8	5.1	4.2	5.1	4.8	5.7	5.4	5.2	5.3
KS WG BILL: Farm Wages & Salaries	162.0	164.0	166.2	167.9	170.5	172.8	175.1	176.8	165.0	173.8
Percent Change From One Year Ago	5.2	5.8	5.2	4.3	5.2	5.4	5.4	5.3	5.1	5.3
KS WG BILL: Agricultural Services	74.0	75.0	75.0	75.2	75.4	75.6	76.0	76.5	74.8	75.9
Percent Change From One Year Ago	4.2	8.7	2.8	-1.1	1.8	0.9	1.3	1.7	3.5	1.4
KS WG BILL: Mining	246.0	253.0	244.1	245.0	244.9	249.2	253.5	256.5	247.0	251.0
Percent Change From One Year Ago	4.7	-0.4	-6.8	-4.7	-0.4	-1.5	3.9	4.7	-2.0	1.6
KS WG BILL: Construction	927.0	956.0	989.9	975.9	946.0	1016.6	1039.0	1018.2	962.2	1004.9
Percent Change From One Year Ago	-7.2	-2.7	1.1	-1.3	2.0	6.3	5.0	4.3	-2.6	4.4
KS WG BILL: Durable Goods	2671.0	2728.0	2816.1	2979.1	2912.8	2968.5	2982.7	3098.9	2798.6	2990.7
Percent Change From One Year Ago	5.6	1.4	5.8	4.4	9.1	8.8	5.9	4.0	4.3	6.9
KS WG BILL: Nondurable Goods	1665.0	1679.0	1688.7	1731.4	1773.8	1820.2	1857.3	1880.6	1691.0	1833.0
Percent Change From One Year Ago	4.8	3.8	3.4	3.5	6.5	8.4	10.0	8.6	3.9	8.4

Kansas forecasts were generated using assumptions determined by the Institute for Public Policy and Business Research and operationalized through the Kansas Econometric Model.

Institute for Public Policy and Business Research, University of Kansas		1988-1989				Kansas Forecast				16JAN89	21
		1988Q1	1988Q2	1988Q3	1988Q4	1989Q1	1989Q2	1989Q3	1989Q4	1988	1989
KS WG BILL: Trans. & Public Utilities	1787.0	1829.0	1843.3	1872.6	1889.0	1913.6	1938.0	1969.7	1833.0	1927.6	
Percent Change From One Year Ago	6.1	6.0	4.3	5.3	5.7	4.6	5.1	5.2	5.4	5.2	
KS WG BILL: Wholesale Trade	1622.0	1683.0	1701.6	1713.2	1735.1	1767.3	1790.2	1803.1	1679.9	1773.9	
Percent Change From One Year Ago	4.8	6.6	7.2	5.2	7.0	5.0	5.2	5.2	6.0	5.6	
KS WG BILL: Retail Trade	2102.0	2111.0	2112.3	2124.0	2143.1	2164.8	2185.0	2202.1	2112.3	2173.7	
Percent Change From One Year Ago	9.5	8.6	7.5	6.0	2.0	2.5	3.4	3.7	7.9	2.9	
KS WG BILL: Finance, Insurance, & R.E	1281.0	1303.0	1322.2	1332.7	1352.8	1391.6	1423.7	1433.6	1309.7	1400.4	
Percent Change From One Year Ago	4.6	4.3	3.9	3.2	5.6	6.8	7.7	7.6	4.0	6.9	
KS WG BILL: Services	3566.0	3709.0	3616.1	3652.5	3734.4	3827.1	3903.2	3953.5	3635.9	3854.6	
Percent Change From One Year Ago	10.7	12.9	6.8	4.2	4.7	3.2	7.9	8.2	8.6	6.0	
KS WG BILL: Govt. & Govt. Enterprises	4269.0	4347.0	4363.2	4399.0	4432.5	4465.4	4501.5	4556.7	4344.5	4489.0	
Percent Change From One Year Ago	4.0	5.0	4.5	4.8	3.8	2.7	3.2	3.6	4.6	3.3	

Kansas forecasts were generated using assumptions determined by the Institute for Public Policy and Business Research and operationalized through the Kansas Econometric Model.

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Institute for Public Policy and Business Research, University of Kansas										1988-1989	Kansas Forecast	16JAN89	22
PERSONAL INCOME	1988Q1	1988Q2	1988Q3	1988Q4	1989Q1	1989Q2	1989Q3	1989Q4	1988	1989			
KS PERS INC: Total Personal Income	38803.0	39977.0	39269.1	39706.8	40430.8	41503.4	42056.0	42802.8	39439.0	41698.3			
Percent Change From One Year Ago	5.6	7.3	5.9	2.6	4.2	3.8	7.1	7.8	5.3	5.7			
KS PERS INC: Real Personal Income	31753.7	32273.4	31357.6	31314.5	31475.9	31898.7	31904.1	32040.4	31674.8	31829.8			
Percent Change From One Year Ago	1.4	3.0	1.6	-1.7	-0.9	-1.2	1.7	2.3	1.1	0.5			
KS PERS INC: Farm Proprietors Income	1939.0	2496.0	1363.9	1170.8	1446.6	1777.4	1686.5	1773.9	1742.4	1671.1			
Percent Change From One Year Ago	11.9	49.7	38.5	-35.4	-25.4	-28.8	23.7	51.5	12.5	-4.1			
KS PERS INC: Non-farm Proprietors Inc	3006.0	3061.0	3125.1	3171.6	3228.1	3283.5	3332.9	3379.3	3090.9	3305.9			
Percent Change From One Year Ago	1.5	3.9	4.7	4.1	7.4	7.3	6.6	6.5	3.6	7.0			
KS PERS INC: Dividends Interest & Ren	7119.0	7201.0	7410.8	7571.8	7737.3	7898.3	8059.4	8219.5	7325.6	7978.6			
Percent Change From One Year Ago	7.4	7.0	7.7	7.1	8.7	9.7	8.8	8.6	7.3	8.9			
KS PERS INC: Adj. For Residence	863.0	849.0	860.0	870.8	881.3	888.4	896.2	904.5	860.7	892.6			
Percent Change From One Year Ago	0.5	2.8	1.6	1.8	2.1	4.6	4.2	3.9	1.7	3.7			
KS PERS INC: Pers. Cont. For Soc. Ins	1757.0	1780.0	1808.5	1835.5	1877.1	1906.9	1936.2	1964.8	1795.2	1921.2			
Percent Change From One Year Ago	11.1	10.8	11.8	11.9	6.8	7.1	7.1	7.0	11.4	7.0			
KS PERS INC: Transfer Payments	5345.0	5384.0	5420.3	5503.5	5587.4	5680.9	5811.3	5952.5	5413.2	5758.0			
Percent Change From One Year Ago	6.0	5.1	4.7	5.9	4.5	5.5	7.2	8.2	5.4	6.4			
KS PERS INC: Other Labor Income	1916.0	1930.0	1958.8	1985.5	2016.9	2049.1	2080.7	2111.6	1947.6	2064.6			
Percent Change From One Year Ago	4.2	2.1	3.0	2.7	5.3	6.2	6.2	6.4	3.0	6.0			

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Kansas forecasts were generated using assumptions determined by the Institute for Public Policy and Business Research and operationalized through the Kansas Econometric Model.

Institute for Public Policy and Business Research  
University of Kansas

**THE NATURE AND SIGNIFICANCE OF  
THE OVERLAND PARK/JOHNSON COUNTY ECONOMY**

Report to the Overland Park Chamber of Commerce

Gina Sanborn, Project Director  
Research Associate

with

Dr. David Burress, Principal Investigator  
Assistant Professor of Economics

and

Patricia Oslund  
Research Associate

and

Dr. Anthony Redwood  
Professor of Business

Dr. Mohamed El-Hodiri, Director of Economic Research  
Dr. Anthony L. Redwood, Executive Director

July 5, 1988

Report No. 157

*House Eco Devo Comm.  
Attachment 4 1/14/89*

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## I. EXECUTIVE SUMMARY

The Overland Park Chamber of Commerce commissioned the Institute for Public Policy and Business Research to do this study because the Chamber is interested in developing some quantitative estimates of the economic significance of service and administrative firms in the Overland Park area. Service industries and administrative firms make up a very significant portion of the Overland Park and Johnson County economies, but the community is unable to provide hard facts about the specific impacts of these industries on the city, county and state. The Chamber believes, as this study confirms, that the impact of these firms on the local and state economies is very significant. Thus, the purpose of this study is to obtain economic impact data that can guide decision makers on issues affecting the community.

This study analyzes the economic impact and significance of export-oriented regional service firms and national and regional headquarters located in Johnson County. It includes analyses of published data on the Johnson County economy, data from a survey of service and headquarters firms located in Overland Park, tax simulations performed for three hypothetical firms, and the estimated tax revenue and total economic impacts of such firms located in Johnson County. The major findings of this study are as follows.

### Key Characteristics of the Overland Park and Johnson County Economy

As a first step in this study, published data was analyzed to determine the key characteristics of the local economy. In this analysis it was found



that Overland Park and Johnson County have had very high rates of employment and establishment growth compared with the state and nation in recent years. (See Tables 1 and 3) This is particularly true for the services sector, and specifically the business services subsector. Between 1977 and 1982, which are the latest data years for cities, employment in the services sector grew 196% in Overland Park and 136% in Johnson County, compared with 93% in Kansas and 75% in the United States. Employment in business services, which includes such industries as advertising, computer and data processing services, and management consulting and public relations, grew 443% in Overland Park and 137% in Johnson County, compared with 42% in Kansas and 27% in the United States over the same period. Between 1980 and 1985 (1985 is the latest year for which comparable data by industry is available at the county, state and national levels), employment in the services sector grew 64% in Johnson County, compared with 17% in Kansas and 25% in the United States. Business services grew 114% in Johnson County, 57% in Kansas and 43% in the United States during the 1980-85 period. Thus, local growth in services greatly exceeded that in the state or nation during this period.

Further analysis of the data was carried out to determine whether this growth was due to national or state trends, industry trends or local trends. Based on a comparison of employment growth rates in Johnson County and the United States, the majority of the rapid employment growth in the county was found to be related to the dynamic county economy itself. Through this analysis it was determined that the rapid Johnson County employment growth significantly exceeded the national or state growth and, therefore, Johnson County's growth could not simply be attributed to overall national or state employment growth rates. Nor could Johnson County's employment growth be

brokers, real estate offices, and holding and other investment offices in the finance, insurance and real estate sector. They also include business services, miscellaneous services, transportation services, communications, printing and publishing, chemicals and allied products, electric and electronic equipment, and the administrative and auxiliary sectors (headquarters and division offices) in wholesale trade, services and transportation and other public utilities. Other manufacturing sectors are, (See Table 5) by their nature, also generally considered a part of the economic base.

According to this method of analysis, the subsectors identified above are the export-oriented or economic base subsectors of Johnson County. It is interesting to note that this list includes many retail trade subsectors. In most communities, retail trade subsectors are secondary industries which support primary industries in other sectors; however Johnson County is unusual in Kansas and the United States in that elements of retail trade are among the export-oriented subsectors of its economy. Its location on the state border and its ability to draw retail customers in from outside the community make some portions of its retail trade sector part of the economic base.

Published data was also used to try to answer another question regarding the significance of service sectors: what is the worth of service jobs as compared with manufacturing jobs or jobs in other industries traditionally considered to be primary industries. The fear exists that service jobs are low-wage jobs and that an economy which is predominated by service industries is a low-income economy dependent on exports from outside. An evaluation of payroll data by industry appears to partially refute this notion. In Johnson County, payroll per employee in many

business services has exceeded payroll per employee in manufacturing. (See Table 6)  
Payroll per employee in manufacturing was \$21,091 in 1985, while it was \$27,106 in advertising, \$27,021 in computer and data processing, \$25,515 in management consulting and public relations, and \$32,278 in accounting, auditing and bookkeeping services, all of which are in the services sector. Thus, the fear that a service economy means an economy dependent on low-wage jobs is not well-founded if such business services and other high paying services are an important part of that economy.

#### Employment and Spending Patterns of Export-Oriented Service Firms Located in Johnson County

Many questions regarding the significance of service industries in Overland Park and Johnson County could not be answered by published data. A survey of local export-oriented service and headquarters firms was used to get more in-depth information regarding their significance. Twenty firms responded to the survey questionnaire, representing a 28 percent return rate. The survey covered information on 4,373 employees and included firms in retailing, wholesaling, advertising, finance, insurance, telecommunications, transportation, accounting, engineering and manufacturing. Results were analyzed for the total sample of firms, as well as broken down into two categories: smaller, regional service firms with an average of 66 employees and larger, headquarters or division offices with an average of 418 employees.

Results of this survey of export-oriented service and headquarters firms located in Johnson County, as undertaken in this study, reveal that, on average, for each 100 employees, larger headquarters or division

establishments have higher overall expenditures, payroll and capital, and utilize more office space than do smaller regional service firms. For every 100 workers, larger headquarters or divisions annually spend over \$1,300,000 on the purchase of goods and services in Johnson County and over \$1,500,000 in Kansas, including Johnson County, and smaller regional service firms spend over \$500,000 in Johnson County and over \$600,000 in Kansas, including Johnson County. (See Tables 9 and 10)

For each 100 workers employed, the smaller firms surveyed also annually pay an average of approximately \$1.6 million in payroll to employees who reside in Johnson County and an additional \$100,000 to employees who reside elsewhere in Kansas; the larger firms pay an average of approximately \$2.6 million in payroll to employees residing in Johnson County and approximately \$400,000 more in payroll to other workers residing in Kansas outside of Johnson County. (See Tables 9 and 10)

These results indicate that smaller, regional service firms and larger headquarters and division establishments behave somewhat differently and have different impacts on the county and state economies. The larger firms have a greater economic impact per 100 workers than the smaller firms, but both are very significant to the local and state economies. Smaller, regional service firms are more prevalent in the local economy, as well as in the state and national economies, than the larger, headquarters firms and thus are very significant because of their number as well as because of their individual economic contributions.

When the spending patterns for both the large headquarters and smaller regional service firms are combined based on their proportions in the local economy, the total annual expenditures by such a firm per 100 workers are

over \$600,000 to other Johnson County firms and over \$700,000 to other Kansas firms. These are averages based on survey data. Annual payroll per 100 employees for the total set of firms is approximately \$1.8 million to employees who reside in Johnson County and an additional \$100,000 to employees who live elsewhere in the state.

According to the Kansas Department of Human Resources, total employment in Johnson County was 190,299 in April 1988. Of these, based on proportions in past years found in Bureau of the Census data, approximately 75 percent, or 142,725, are service workers in transportation, communications, utilities, wholesale trade, retail trade, finance, insurance, real estate, and other services. Of the 142,725 service workers, we estimate that (See Table 7) approximately 92,000, or almost two-thirds of service workers, are employed by headquarters establishments or services which export outside the local or state market. These 92,000 workers represent 48 percent of all employment in the county as of April 1988. With the addition of 33,200 additional jobs in the county which are indirectly related to the initial 92,000 jobs, 125,200 jobs in Johnson County are indirectly or directly caused by the location of the export-oriented service or headquarters firm in Johnson County. This represents 66 percent of county employment. These figures include both retail trade workers and other service workers employed in export-oriented service firms and include both local exports across the state line and distant exports to other cities. Service sales across the state line are major exports for Johnson County; this local export activity makes the economy of this area somewhat unusual in the state.

Of the 92,000 jobs in export-oriented service or headquarters firms in Johnson County, approximately 65,000, or 34 percent of total county

employment, can be directly attributed to the export of services outside the local market and approximately 35,000 of these, or 18 percent of total county employment, are directly related to the export of services outside the state market.√ With the addition of county jobs which are indirectly related to the export of county services outside the local or state markets, (See Table 8) 46 percent of total county employment, or 88,400 jobs in the county, are related to the export of Johnson County services outside the local market and 25 percent of total county employment, or 47,600 jobs in the county, are related to the export of Johnson County services outside the state market.

Based on averages from those firms surveyed for this study, of those workers employed directly by Johnson County export-oriented service firms, 28 percent live in Overland Park, 75 percent in Johnson County and 85 percent in the state of Kansas. About 15 percent live on the Missouri side of the line.

#### Estimates of Total Economic Impact

The input/output model of the Institute for Public Policy and Business Research was used to estimate the total economic impact of the export-oriented service and headquarters sector located in Johnson County. Based on survey data and this model, total sales in the county due to 100 export-oriented service workers are estimated to be \$3 million. The total earnings in the county are \$2.1 million and the total number employed is 136.√ Total sales in the state due to 100 export-oriented service workers are estimated at \$3.9 million. The total earnings in the state are estimated to be \$2.3 million and the total number of jobs is 145. (See Table 12)

About 33,200 additional jobs in the county and 41,500 jobs in the state, including those in Johnson County, depend on the initial 92,000 export-oriented service jobs in Johnson County. Thus, total employment in the state, created by the existence of the export-oriented headquarters and regional services located in Johnson County, is conservatively estimated at 133,500 jobs or approximately 11 percent of total Kansas employment in 1988.

Based on the estimate of 133,500 jobs in the state which can be attributed to export-oriented services located in Johnson County, total sales in the state are approximately \$3.5 billion and in the county they are over \$2.8 billion. Total earnings for the 133,500 workers, are estimated at \$2.2 billion in the state and are \$2 billion in the county. (See Table 13)

The estimated total sales impact due to only the 65,000 jobs which are estimated to be directly related to Johnson County service exports outside the local market would be \$2.5 billion for the entire state and \$2.0 billion for the county. The total earnings impact would be \$1.5 billion in the state with \$1.4 billion of that in the county. Total employment due to the 65,000 jobs would be 94,300, with 23,400 additional jobs in the county and 5,900 additional jobs elsewhere in the state.

The estimated total sales impact due to the 35,000 jobs which are estimated to be directly related to Johnson County service exports outside the state market would be \$1.3 billion for the entire state and \$1.1 billion for the county. The total earnings impact would be \$800 million in the state with \$740 million of that in the county. Total employment due to the 35,000 jobs would be 50,800, with 12,600 additional jobs in the county and 3,200 additional jobs elsewhere in the state.

Effects of Tax Laws on Export-Oriented Service Firms and Estimate of Tax Revenue from These Firms

Other questions considered in this study were the estimated tax revenue derived from Johnson County export-oriented service and headquarters establishments, and the impact of tax laws on such firms. Our general estimate of the total personal and corporate income tax and sales tax revenues attributed to export-oriented service and headquarters firms is \$182 million dollars for the state, which is over 11 percent of the total expected revenue in Kansas from these taxes for the July 1, 1987 through June 30, 1988 period. This is based on the estimated 95,000 export-oriented service workers in Johnson County and 41,500 other jobs in the county or state indirectly attributable to the existence of the Johnson County export-oriented service sector. It includes estimates of over \$106 million in income taxes and \$76 million in sales tax collected.

In order to consider the impact of area and state taxes on the firms studied, tax simulations were conducted. ✓ Three industries were chosen to represent service and headquarters firms and hypothetical firm profiles were developed for a firm in each of these three industries. Tax laws were then applied to each of these hypothetical firms based on its location in either Johnson County, Kansas or Jackson County, Missouri. Taxes were estimated in Kansas for both before and after reassessment. Missouri taxes were calculated based on the current tax situation in Missouri. The Missouri taxes did include the Kansas City, Missouri earnings tax and the property tax effect of the decision in the school district desegregation case. A capitalization adjustment was made due to higher property taxes in Kansas.



Since economists believe that property values will adjust to differences in property taxes, we reflect this with this adjustment.

Of the three hypothetical firms analyzed, only the results for the data processing firm were significant for the effect on the total firm. For this firm, Kansas taxes were 110.8% higher before reassessment and 89.0% higher after reassessment than the Missouri taxes. However, the difference is reduced, though still significant when total taxes to the state and federal government are considered. Total taxes in Kansas before reassessment were 13.1% higher than those in Missouri and taxes in Kansas after reassessment were 11.1% higher than those in Missouri. Net profit, after capitalization of property taxes, was 6.0% lower in Kansas before reassessment and 6.8% lower in Kansas after reassessment than in Missouri.

For the telecommunications regional headquarters, the tax difference was again significant for the Kansas and Missouri taxes. If the firm were located in Kansas it would pay 85.1% more in Kansas before reassessment and 39.4% in Kansas after reassessment than in Missouri if it were located in Missouri. Once again the difference is greatly reduced when taxes to other states and the federal government are taken into account. All taxes to all levels of government were 1.6% higher before reassessment and 0.9% higher after reassessment for the Kansas location than for the Missouri location. Net profit, after a capitalization adjustment for property tax, was 0.4% lower in Kansas before reassessment and 0.9% lower in Kansas after reassessment than in Missouri.

For the nonelectrical machinery manufacturing headquarters, taxes paid to Kansas before reassessment were 45.6% higher and after reassessment were 24.9% higher than taxes paid to Missouri. The difference in all taxes,

including taxes paid to Kansas or Missouri, other states and the federal government, was negligible - total taxes for the firm located in Kansas were 0.7% higher before reassessment and 0.4% higher after reassessment than for the firm located in Missouri. Net profit, after a capitalization adjustment for property tax, was 0.5% lower in Kansas before reassessment and 0.8% lower in Kansas after reassessment than in Missouri.

Of the taxes, state income tax, property tax, unemployment insurance and workman's compensation were all higher in Kansas than in Missouri for each of the three firms both before and after reassessment. The estimated effects of reassessment raised property tax on commercial real estate about 250 percent and lowered the effective property tax on business personal property by about 73 percent. The net effect on the three hypothetical firms was lower total Kansas property taxes after reassessment because of the relative amounts of the two types of property which each hypothetical firm owned. Although the total Kansas property tax bills were more in line with Missouri property taxes after Kansas reassessment, they were still somewhat higher than in Missouri. The sales tax on equipment purchases for all three firms were significantly higher in Missouri than in Kansas, as were tax payments to other states and the federal government for the two national firms - nonelectrical machinery and telecommunications.

Thus, the tax simulations show that there is a significant difference in the total taxes paid to either Kansas or Missouri, depending on which location each of the three firms might choose, but the significance is greatly reduced when total taxes to all states and the federal government are compared. The net difference to the entire firm of locating in either Johnson County, Kansas or Jackson County, Missouri is relatively negligible

for the two firms which have locations in other states - the nonelectrical machinery and telecommunications firms. The difference is still somewhat significant for the data processing firm, which only has one location in either Johnson County or Jackson County.

### Summary

One can conclude, based on the results of this study that the regional service and headquarters firms located in Johnson County have a very significant economic impact on the county and state economies. There is a substantial portion of the services sector of the Johnson County economy which can be considered in the same regard as "primary" industries, such as manufacturing. Just as a manufacturing firm can draw wealth into a state by exporting its product, create new employment in the state, and support growth in other sectors of the economy, so too can certain types of service firms. Not all services exist merely to support other local industries or the consumption of the local workforce. Export-oriented services such as business services and headquarters establishments do export their "product" outside the community and state, draw in wealth and create additional jobs. They also provide high-paying jobs for highly skilled and educated workers. A service economy is not necessarily a low-wage economy, dependent on imports.

Essentially, there are two types of services which exist - export-oriented services, which are primary industries and part of a community's economic base, and services, such as personal services, which are not primary, are not part of the base, and are dependent on the existence of the primary industries in the economy. Within Johnson County, approximately

three-fourths of the work force is made up of service employees. Of these, about two-thirds, or 92,000 workers, are in export-oriented service firms, and one third are in supporting service firms. As of April 1988, at least 48 percent of total Johnson County employment is in export-oriented services and 11 percent of the jobs in the state can be attributed, directly or indirectly, to the export-oriented service firms located in Johnson County. The 65,000 Johnson County jobs related to service exports outside the local market represent 34 percent of total Johnson County employment and the 35,000 Johnson County jobs related to service exports outside the state market represent 18 percent of total Johnson County employment. With the addition of indirect workers, Johnson County service exports outside the local market account for about 88,400 jobs or 46 percent of total county employment, and Johnson County service exports outside the state market account for about 47,600 or 25 percent of total county employment.

Therefore, it can be concluded that the export-oriented service sector of Johnson County is of great significance to the county and state economies. The economic well-being of the county, and to a lesser extent, of the state are affected by the economic well-being of this sector. The significance of this sector should be recognized and public policy should take knowledge of this significance into account.

TABLE 1  
 REGIONAL AND NATIONAL EMPLOYMENT GROWTH  
 1972-1982

INDUSTRY	PERCENTAGE EMPLOYMENT GROWTH (PAID EMPLOYEES)				
	PERIOD	OVERLAND PARK	JOHNSON COUNTY	KANSAS	UNITED STATES
Manufacturing SIC 20-39	1972-77	18.8%	42.7%	22.2%	3.0%
	1977-82	21.1%	29.3%	1.5%	-2.5%
Wholesale Trade SIC 50-51	1972-77	97.9%	75.5%	20.6%	9.2%
	1977-82	38.2%	35.4%	7.0%	13.4%
Retail Trade SIC 52-59	1972-77	67.6%	51.8%	23.0%	16.3%
	1977-82	9.9%	22.3%	5.6%	10.9%
Other Services (including Business Services) SIC 70-89	1972-77	58.8%	48.9%	20.9%	19.5%
	1977-82	196.0%	135.8%	92.5%	75.3%
Business Services SIC 73	1972-77	32.2%	98.3%	51.6%	30.6%
	1977-82	442.6%	136.5%	41.8%	27.1%

Sources: U.S. Department of Commerce, Bureau of the Census,  
 "Census of Retail Trade,"  
 "Census of Wholesale Trade,"  
 "Census of Manufactures,"  
 "Census of Service Industries," 1972, 1977, 1982.

TABLE 2  
EMPLOYMENT GROWTH IN JOHNSON COUNTY, KANSAS AND THE UNITED STATES, 1980-85

SIC	INDUSTRY	EMPLOYMENT JOHNSON CO 1980	EMPLOYMENT JOHNSON CO 1985	JOHNSON CO GROWTH RATE 1980-85	KANSAS GROWTH RATE 1980-85	U.S. GROWTH RATE 1980-85
--	TOTAL	101,769	130,013	28%	3%	8%
--	Agricultural Services, Forestry, Fisheries	468	831	78%	42%	31%
--	Mining	53	435	721%	11%	-5%
--	Contract Construction	7,918	7,647	-3%	-15%	0%
15	General Contractors & Operative Builders	G	1,957		-19%	-8%
16	Heavy Construction Contractors	1,926	G		-29%	-19%
17	Special Trade Contractors	4,547	4,418	-3%		11%
--	Manufacturing	21,845	22,956	5%	-10%	-8%
20	Food and Kindred Products	1,536	1,154	-25%	14%	-6%
23	Apparel & Other Textile Products	G	G		5%	-12%
24	Lumber and Wood Products	198	308	56%	-15%	-7%
25	Furniture and Fixtures	C	B		-36%	1%
26	Paper and Allied Products	282	639	127%	9%	-6%
27	Printing and Publishing	2,843	4,395	55%	10%	12%
28	Chemicals and Allied Products	1,779	2,205	24%	-3%	-7%
29	Petroleum and Coal Products	C	C		-39%	-15%
30	Rubber and Miscellaneous Plastics Products	1,229	1,106	-10%	1%	0%
32	Stone, Clay and Glass Products	272	539	98%	-16%	-14%
33	Primary Metal Industries	C	C		-36%	-34%
34	Fabricated Metal Products	726	696	-4%	-23%	-11%
35	Machinery, Except Electrical	999	1,605	61%	-32%	-16%
36	Electric and Electronic Equipment	5,328	4,414	-17%	-8%	3%
37	Transportation Equipment	104	B		-9%	-5%
38	Instruments and Related Products	F	712		-12%	-4%
39	Miscellaneous Manufacturing Products	324	367	13%	-33%	-14%
--	Administrative and Auxiliary	H	G		-9%	-2%
--	Transportation and Other Public Utilities	5,695	6,794	19%	1%	4%
41	Local and Interurban Passenger Transit	E	E		-28%	-1%
42	Trucking and Warehousing	1,610	2,095	30%	-9%	0%
45	Transportation by Air	226	419	85%	75%	11%
47	Transportation Services	250	532	113%	24%	30%
48	Communication	2,101	2,811	34%	-4%	-3%
--	Administrative and Auxiliary	904	592	-35%	21%	43%
--	Wholesale Trade	10,065	13,118	30%	0%	8%
50	Wholesale Trade-Durable Goods	6,528	8,632	32%	0%	7%
51	Wholesale Trade-Nondurable Goods	2,717	3,622	33%	2%	9%

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TABLE 2 (continued)  
 EMPLOYMENT GROWTH IN JOHNSON COUNTY, KANSAS AND THE UNITED STATES, 1980-85

SIC	INDUSTRY	EMPLOYMENT JOHNSON CO 1980	EMPLOYMENT JOHNSON CO 1985	JOHNSON CO GROWTH RATE 1980-85	KANSAS GROWTH RATE 1980-85	U.S. GROWTH RATE 1980-85
--	Retail Trade	24,446	29,690	21%	7%	12%
52	Building Materials & Garden Supplies	757	F		1%	9%
53	General Merchandise Stores	4,044	4,151	3%	-1%	-1%
54	Food Stores	2,138	3,116	46%	13%	17%
55	Automotive Dealers & Service Stations	2,481	2,846	15%	-4%	6%
56	Apparel and Accessory Stores	2,080	2,329	12%	1%	10%
57	Furniture and Home Furnishings Stores	1,104	1,604	45%	8%	9%
58	Eating and Drinking Places	5,897	7,995	36%	12%	18%
59	Miscellaneous Retail	4,606	5,124	11%	8%	11%
--	Administrative and Auxiliary	1,339	G		14%	19%
--	Finance, Insurance and Real Estate	11,317	15,468	37%	10%	13%
60	Banking	1,521	1,657	9%	5%	5%
61	Credit Agencies Other than Banks	1,292	1,647	27%	14%	26%
62	Security, Commodity Brokers & Services	C	452		85%	57%
63	Insurance Carriers	5,185	5,710	10%	-2%	1%
64	Insurance Agents, Brokers & Service	1,185	1,974	67%	25%	20%
65	Real Estate	1,380	3,161	129%	12%	16%
67	Holding & Other Investment Offices	449	664	48%	59%	39%
--	Administrative and Auxiliary	C	192		3%	33%
--	Services	19,346	31,767	64%	17%	25%
70	Hotels and Other Lodging Places	820	2,071	153%	9%	16%
72	Personal Services	1,510	2,264	50%	11%	12%
73	Business Services	4,047	8,651	114%	57%	43%
75	Auto Repair, Services & Garages	531	1,019	92%	28%	21%
76	Miscellaneous Repair Services	269	408	52%	-4%	2%
78	Motion Pictures	F	C		-35%	10%
79	Amusement & Recreation Services	1,394	1,181	-15%	-2%	9%
80	Health Services	5,454	7,506	38%	5%	21%
81	Legal Services	494	717	45%	24%	36%
82	Educational Services	911	1,384	52%	28%	22%
83	Social Services	608	1,188	95%	34%	26%
86	Membership Organizations	1,211	2,301	90%	24%	28%
89	Miscellaneous Services	1,338	2,438	82%	23%	38%
--	Administrative and Auxiliary	C	451		88%	44%
--	Nonclassifiable Establishments	616	1,307	112%	46%	86%

Suppressed data:

A:0-19; B:20-99; C:100-249; E:250-499; F:500-999; G:1,000-2,499; H:2,500-4,999;  
 I:5,000-9,999; J:10,000-24,999; K:25,000-49,999; L:50,000-99,999; M:100,000 or more.

Source: U.S. Department of Commerce, Bureau of the Census, "County Business Patterns."

TABLE 3  
NUMBER OF ESTABLISHMENTS IN BUSINESS SERVICES  
JOHNSON COUNTY  
1970-85

YEAR	73 Business Services	731 Adver- tising	732 Credit reporting and collection	733 Mailing, reproduc- tion, sten- ographic	736 Personnel supply services	737 Computer & data processing services	7392 Management consulting & public relations	891 Engineering Architectural & Surveying Services	893 Accounting Auditing & Bookkeeping Services
1970	80	-	-	-	-	-	18	38	34
1971	96	10	4	-	-	-	19	38	30
1972	107	-	-	-	-	-	29	40	31
1973	121	-	-	-	-	-	30	41	37
1974	178	9	7	14	6	9	38	42	41
1975	193	13	10	18	9	11	37	40	50
1976	226	17	11	18	12	16	41	43	56
1977	271	27	14	17	15	24	54	57	81
1978	281	28	15	25	16	29	55	60	78
1979	314	22	17	35	17	26	60	64	81
1980	350	22	19	40	22	31	69	63	88
1981	408	25	18	43	30	38	79	58	99
1982	457	37	18	43	38	35	99	81	109
1983	564	42	20	60	39	52	119	85	133
1984	630	43	21	56	45	60	130	103	129
1985	665	43	18	60	49	68	119	116	144
Johnson County % Growth 1975-85	244.6%	230.8%	80.0%	233.3%	444.4%	518.2%	561.1%	205.3%	323.3%
U.S. % Growth 1975-85	110.0%	70.4%	4.1%	84.2%	82.6%	300.9%	145.6%	90.0%	94.3%

Source:  
U.S. Department of Commerce, Bureau of the Census, "County Business Patterns."

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TABLE 4  
SHIFT-SHARE ANALYSIS OF JOHNSON COUNTY & UNITED STATES, 1980-85

SHIFT-SHARE SIC	INDUSTRY	ABSOLUTE CHG IN EMPLOY 1980-85	NATIONAL GROWTH EFFECT	INDUSTRY MIX EFFECT	LOCAL SHARE EFFECT
--	TOTAL	28,244	8,533	758	18,953
--	Agricultural Services, Forestry, Fisheries	363	39	108	216
--	Mining	382	4	(7)	385
--	Contract Construction	(271)	664	(652)	(283)
--	Manufacturing	1,111	1,832	(3,618)	2,898
20	Food and Kindred Products	(382)	129	(225)	(286)
24	Lumber and Wood Products	110	17	(31)	125
26	Paper and Allied Products	357	24	(40)	373
27	Printing and Publishing	1,552	238	113	1,200
28	Chemicals and Allied Products	426	149	(277)	554
30	Rubber and Miscellaneous Plastics Products	(123)	103	(108)	(118)
32	Stone, Clay and Glass Products	267	23	(60)	304
34	Fabricated Metal Products	(30)	61	(137)	46
35	Machinery, Except Electrical	606	84	(243)	765
36	Electric and Electronic Equipment	(914)	447	(299)	(1,062)
39	Miscellaneous Manufacturing Products	43	27	(72)	88
--	Transportation and Other Public Utilities	1,099	477	(241)	862
42	Trucking and Warehousing	485	135	(133)	483
45	Transportation by Air	193	19	6	168
47	Transportation Services	282	21	54	207
48	Communication	710	176	(229)	763
--	Administrative and Auxiliary	(312)	76	309	(697)
--	Wholesale Trade	3,053	844	(45)	2,254
50	Wholesale Trade-Durable Goods	2,104	547	(99)	1,655
51	Wholesale Trade-Nondurable Goods	905	228	23	654
--	Retail Trade	5,244	2,050	882	2,312
53	General Merchandise Stores	107	339	(387)	155
54	Food Stores	978	179	176	623
55	Automotive Dealers & Service Stations	365	208	(51)	208
56	Apparel and Accessory Stores	249	174	23	51
57	Furniture and Home Furnishings Stores	500	93	10	398
58	Eating and Drinking Places	2,098	494	569	1,035
59	Miscellaneous Retail	518	386	142	(10)

TABLE 4 (continued)  
SHIFT-SHARE ANALYSIS OF JOHNSON COUNTY & UNITED STATES, 1980-85

SHIFT-SHARE SIC	INDUSTRY	ABSOLUTE CHG IN EMPLOY 1980-85	NATIONAL GROWTH EFFECT	INDUSTRY MIX EFFECT	LOCAL SHARE EFFECT
--	Finance, Insurance and Real Estate	4,151	949	568	2,635
60	Banking	136	128	(47)	55
61	Credit Agencies Other than Banks	355	108	233	13
63	Insurance Carriers	525	435	(370)	461
64	Insurance Agents, Brokers & Service	789	99	133	557
65	Real Estate	1,781	116	101	1,564
67	Holding & Other Investment Offices	215	38	137	41
--	Services	12,421	1,622	3,283	7,516
70	Hotels and Other Lodging Places	1,251	69	66	1,116
72	Personal Services	754	127	57	570
73	Business Services	4,604	339	1,394	2,870
75	Auto Repair, Services & Garages	488	45	65	378
76	Miscellaneous Repair Services	139	23	(16)	133
79	Amusement & Recreation Services	(213)	117	6	(335)
80	Health Services	2,052	457	661	933
81	Legal Services	223	41	137	44
82	Educational Services	473	76	126	271
83	Social Services	580	51	108	421
86	Membership Organizations	1,090	102	235	754
89	Miscellaneous Services	1,100	112	399	589
--	Nonclassifiable Establishments	691	52	481	159

Source: U.S. Department of Commerce, Bureau of the Census, "County Business Patterns."

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TABLE 5  
LOCATION QUOTIENT ANALYSIS  
JOHNSON COUNTY AND THE UNITED STATES, 1985

SIC	INDUSTRY	EMPLOYMENT (% OF TOTAL)		
		JOHNSON COUNTY	UNITED STATES	LOCATION QUOTIENT
--	TOTAL	100.00%	100.00%	
-- *	Agricultural Services, Forestry, Fisheries	0.64%	0.47%	1.36
--	Mining	0.33%	1.16%	0.29
13	Oil and Gas Extraction	C	0.59%	
14 *	Nonmetallic Minerals, Except Fuels	0.15%	0.12%	1.20
--	Administrative and Auxiliary	C	0.17%	
--	Contract Construction	5.88%	5.52%	1.07
15	General Contractors & Operative Builders	1.51%	1.43%	1.05
16	Heavy Construction Contractors	G	0.85%	
17	Special Trade Contractors	3.40%	3.21%	1.06
--	Manufacturing	17.66%	23.96%	0.74
20	Food and Kindred Products	0.89%	1.75%	0.51
23	Apparel & Other Textile Products	G	1.39%	
24	Lumber and Wood Products	0.24%	0.81%	0.29
25	Furniture and Fixtures	B	0.61%	
26	Paper and Allied Products	0.49%	0.76%	0.65
27 *	Printing and Publishing	3.38%	1.75%	1.94
28 *	Chemicals and Allied Products	1.70%	1.06%	1.60
29	Petroleum and Coal Products	C	0.16%	
30	Rubber and Miscellaneous Plastics Products	0.85%	0.94%	0.90
31	Leather and Leather Products	B	0.19%	
32	Stone, Clay and Glass Products	0.41%	0.67%	0.62
33	Primary Metal Industries	C	0.96%	
34	Fabricated Metal Products	0.54%	1.85%	0.29
35	Machinery, Except Electrical	1.23%	2.59%	0.48
36 *	Electric and Electronic Equipment	3.40%	2.57%	1.32
37	Transportation Equipment	B	2.18%	
38	Instruments and Related Products	0.55%	0.76%	0.72
39	Miscellaneous Manufacturing Products	0.28%	0.47%	0.61
--	Administrative and Auxiliary	G	1.59%	
--	Transportation and Other Public Utilities	5.23%	5.94%	0.88
41	Local and Interurban Passenger Transit	E	0.33%	
42	Trucking and Warehousing	1.61%	1.59%	1.02
45	Transportation by Air	0.32%	0.60%	0.54
46	Pipe Lines, Except Natural Gas	0.00%	0.02%	0.00
47 *	Transportation Services	0.41%	0.34%	1.20
48 *	Communication	2.16%	1.58%	1.37
-- *	Administrative and Auxiliary	0.46%	0.24%	1.91

LE 5 (continued)  
 LOCATION QUOTIENT ANALYSIS  
 JOHNSON COUNTY AND THE UNITED STATES, 1985

SIC	INDUSTRY	EMPLOYMENT (% OF TOTAL)		
		JOHNSON COUNTY	UNITED STATES	LOCATION QUOTIENT
-- *	Wholesale Trade	10.09%	6.93%	1.46
50 *	Wholesale Trade-Durable Goods	6.64%	3.90%	1.70
51	Wholesale Trade-Nondurable Goods	2.79%	2.68%	1.04
-- *	Administrative and Auxiliary	0.66%	0.36%	1.83
-- *	Retail Trade	22.84%	20.77%	1.10
52	Building Materials & Garden Supplies	F	0.72%	
53 *	General Merchandise Stores	3.19%	2.39%	1.33
54	Food Stores	2.40%	3.20%	0.75
55	Automotive Dealers & Service Stations	2.19%	2.29%	0.96
56 *	Apparel and Accessory Stores	1.79%	1.27%	1.41
57 *	Furniture and Home Furnishings Stores	1.23%	0.78%	1.59
58	Eating and Drinking Places	6.15%	6.54%	0.94
59 *	Miscellaneous Retail	3.94%	2.63%	1.50
--	Administrative and Auxiliary	G	0.96%	
-- *	Finance, Insurance and Real Estate	11.90%	7.40%	1.61
60	Banking	1.27%	1.96%	0.65
61 *	Credit Agencies Other than Banks	1.27%	0.92%	1.38
62	Security, Commodity Brokers & Services	0.35%	0.42%	0.84
63 *	Insurance Carriers	4.39%	1.54%	2.84
64 *	Insurance Agents, Brokers & Service	1.52%	0.68%	2.23
65 *	Real Estate	2.43%	1.41%	1.72
67 *	Holding & Other Investment Offices	0.51%	0.24%	2.14
--	Administrative and Auxiliary	0.15%	0.21%	0.72
--	Services	24.43%	26.56%	0.92
70 *	Hotels and Other Lodging Places	1.59%	1.56%	1.02
72	Personal Services	1.74%	1.32%	1.32
73 *	Business Services	6.65%	5.27%	1.26
75	Auto Repair, Services & Garages	0.78%	0.83%	0.94
76	Miscellaneous Repair Services	0.31%	0.40%	0.78
78	Motion Pictures	C	0.28%	
79	Amusement & Recreation Services	0.91%	0.95%	0.96
80	Health Services	5.77%	7.81%	0.74
81	Legal Services	0.55%	0.84%	0.65
82	Educational Services	1.06%	1.87%	0.57
83	Social Services	0.91%	1.59%	0.57
86	Membership Organizations	1.77%	1.91%	0.93
89 *	Miscellaneous Services	1.88%	1.58%	1.19
-- *	Administrative and Auxiliary	0.35%	0.30%	1.16
--	Nonclassifiable Establishments	1.01%	1.28%	0.78

\*\* Indicates that percentage employment is higher for Johnson County than for the United States

Suppressed Data:

A:0-19; B:20-99; C:100-249; E:250-499; F:500-999; G:1,000-2,499;  
 H:2,500-4,999; I:5,000-9,999; J:10,000-24,999; K:25,000-49,999;  
 L:50,000-99,999; M:100,000 or more.

Source:

U.S. Department of Commerce, Bureau of the Census, "County Business Patterns."

TABLE 6  
ANNUAL PAYROLL PER EMPLOYEE IN BUSINESS SERVICES (DOLLARS)  
JOHNSON COUNTY  
1970-85

YEAR	73 Business Services	731 Adver- tising	732 Credit reporting and collection	733 Mailing, reproduc- tion, sten- ographic	736 Personnel supply services	737 Computer & data processing services	7392 Management consulting & public relations	891 Engineering Architectural & Surveying Services	893 Accounting Auditing & Bookkeeping Services
1974	8,308	7,430	D	5,787	2,488	12,723	14,105	7,464	12,987
1975	8,938	9,674	7,974	7,522	D	11,808	13,938	7,737	13,711
1976	8,850	10,658	8,276	7,388	5,312	11,469	11,112	7,913	14,693
1977	9,716	14,700	9,430	D	4,675	13,263	16,177	9,038	14,903
1978	9,732	15,853	8,047	D	5,453	13,253	14,483	9,099	17,964
1979	10,636	19,981	9,765	D	5,347	15,992	10,988	10,585	21,121
1980	12,977	18,957	11,154	D	7,681	19,627	15,126	12,438	22,840
1981	12,614	20,598	D	13,863	9,243	18,990	15,573	13,203	24,659
1982	12,724	22,685	D	13,542	5,970	20,935	13,878	13,776	28,169
1983	15,081	23,684	D	13,692	7,116	22,669	24,118	15,673	31,738
1984	18,895	25,903	D	20,113	10,382	30,311	23,932	18,565	32,383
1985	18,098	27,106	D	18,172	9,273	27,021	25,515	20,220	32,278
Johnson County % Growth 1975-85	102.5%	180.2%	-	141.6%	-	128.8%	83.1%	161.3%	135.4%
U.S. % Growth 1975-85	102.9%	110.9%	115.2%	92.3%	77.7%	117.6%	84.4%	106.9%	83.8%

D: Suppressed data

Source:  
U.S. Department of Commerce, Bureau of the Census, "County Business Patterns."

TABLE 7  
 TOTAL EMPLOYMENT AND EMPLOYMENT IN EXPORT-ORIENTED SERVICES IN  
 JOHNSON COUNTY

Type of Employment	Number of Employees	Percentage of Total Employment
Total Employment in Johnson County	190,299	100%
Employment in Johnson County Service Firms	142,000	75%
Employment in Export-Oriented Service Firms in Johnson County	92,000	48%
Employment Attributed to Exports of Johnson County Services Outside the Local Market	65,000	34%
Employment Attributed to Exports of Johnson County Services Outside the State Market	35,000	18%

Source: Institute for Public Policy and Business Research, University of Kansas. "The Nature and Significance of the Overland Park/Johnson County Economy," 1988.

TABLE 8  
 ESTIMATES OF THE TOTAL EMPLOYMENT IMPACT ON JOHNSON COUNTY AND THE STATE OF  
 KANSAS OF EXPORT-ORIENTED SERVICE FIRMS LOCATED IN JOHNSON COUNTY

	Direct Employment	Indirect Employment	Total Employment
<b>EMPLOYMENT IN THE STATE OF KANSAS*</b>			
Number of Jobs Due to Export-Oriented Service Firms in Johnson County	92,000	41,500	133,500
Number of Jobs Attributed to Exports of Johnson County Services Outside the Local Market	65,000	29,300	94,300
Number of Jobs Attributed to Exports of Johnson County Services Outside the State Market	35,000	15,800	50,800
<b>EMPLOYMENT IN JOHNSON COUNTY</b>			
Number of Jobs Due to Export-Oriented Service Firms in Johnson County	92,000	33,000	125,000
Number of Jobs Attributed to Exports of Johnson County Services Outside the Local Market	65,000	23,400	88,400
Number of Jobs Attributed to Exports of Johnson County Services Outside the State Market	35,000	12,600	47,600

\*Including Employment in Johnson County.

Source: Institute for Public Policy and Business Research, University of Kansas. Surveys for "The Nature and Significance of the Overland Park/Johnson County Economy" and "Business Retention and Expansion in Kansas Mid-Size Communities," 1988.

TABLE 9  
 ASSETS AND EXPENDITURES IN JOHNSON COUNTY PER 100 EMPLOYEES IN AN EXPORT-  
 ORIENTED JOHNSON COUNTY SERVICE FIRM

	REGIONAL SERVICE FIRMS	LARGE HEADQUARTERS FIRMS	TOTAL (weighted by size)*
<b>CAPITAL ITEM</b>			
Land	\$81,226	\$288,688	\$109,441
Building	122,989	1,358,178	290,975
Office machinery & computers	298,973	448,359	319,289
Office furniture	234,932	486,856	269,194
Commercial and industrial machinery and equipment	1,027	16,463	3,126
Automobiles	2,174	14,764	3,886
<b>OFFICE SPACE</b>			
Office space rented (sq.ft)	17,730	10,494	16,746
Office space owned (sq.ft)	7,568	20,000	9,259
Total	25,298	30,494	26,005
<b>ANNUAL EXPENDITURES</b>			
Office machinery & equipment	\$17,555	\$126,155	\$32,325
Office furniture	9,333	86,400	19,814
Commercial and industrial machinery and equipment	0	0	0
Automobiles	0	1,372	187
Other personal property	0	67,750	9,214
New construction	4,348	543,733	77,704
Rent payments	216,368	175,222	210,772
Interest payments	14,257	0	12,318
Business services	72,674	64,698	71,589
U.S. Mail	37,161	48,788	38,742
Other mail & phone	41,274	24,611	39,008
Air travel	8,348	53,070	14,430
Restaurant	7,939	9,723	8,182
Insurance	18,891	95,878	29,361
Utilities (all except phone)	13,336	10,758	12,985
Office supplies	36,188	20,416	34,043
Motor fuel	5,737	332	5,002
<b>Total expenditures except payroll</b>	<b>\$503,409</b>	<b>\$1,328,906</b>	<b>\$615,677</b>
<b>Payroll per 100 workers</b>	<b>\$1,938,600</b>	<b>\$3,829,000</b>	<b>\$2,193,804</b>
<b>Payroll remaining in Johnson County</b>	<b>\$1,686,582</b>	<b>\$2,630,523</b>	<b>\$1,814,014</b>

\*weighting explained in text

Source: Survey for the Overland Park Study of Service and Administrative Firms. Institute for Public Policy and Business Research, 1988.



TABLE 10  
EXPENDITURES IN KANSAS PER 100 EMPLOYEES IN A JOHNSON COUNTY EXPORT-ORIENTED  
SERVICE FIRM

	SMALL FIRMS	LARGE FIRMS	TOTAL (weighted by size)*
ANNUAL EXPENDITURES			
Office machinery & equipment	\$17,555	\$132,373	\$33,170
Office furniture	9,333	86,400	19,814
Commercial and industrial machinery and equipment	0	0	0
Automobiles	0	21,996	2,991
Other personal property	0	101,624	13,821
New construction	4,348	565,799	80,705
Rent payments	218,554	175,222	212,661
Interest payments	14,257	0	12,318
Business services	135,592	107,848	131,819
U.S. Mail	37,561	48,788	39,088
Other mail & phone	51,879	85,636	56,470
Air travel	8,348	53,070	14,430
Restaurant	7,939	9,723	8,182
Insurance	21,374	96,886	31,644
Utilities (all except phone)	15,151	14,355	15,043
Office supplies	64,828	24,430	59,334
Motor fuel	7,783	9,648	8,037
Total expenditures except payroll	\$614,502	\$1,533,798	\$739,526
Payroll per 100 workers	\$1,938,600	\$3,829,000	\$2,193,804
Payroll remaining in Kansas	\$1,704,029	\$3,032,568	\$1,883,382

\*weighting explained in text

Source: Survey for the Overland Park Study of Service and Administrative Firms. Institute for Public Policy and Business Research, 1988.

BLE 11  
 TOTAL ECONOMIC IMPACTS PER 100 EMPLOYEES IN AN EXPORT-ORIENTED JOHNSON COUNTY SERVICE FIRM  
 ON EXPENDITURES, EARNINGS AND EMPLOYMENT IN JOHNSON COUNTY

Sector Description	INITIAL ANNUAL EXPENDITURES PER 100 EMPLOYEES	TOTAL SALES PER 100 EMPLOYEES	ADDITIONAL EARNINGS PER 100 EMPLOYEES	ADDITIONAL EMPLOYMENT PER 100 EMPLOYEES
livestock	\$463	\$773	\$87	0.00
crops	\$1,234	\$2,271	\$336	0.01
forestry	\$0	\$0	\$0	0.00
agricultural services	\$330	\$691	\$160	0.01
metal and nonmetallic mineral mining	\$0	\$0	\$0	0.00
coal mining	\$0	\$0	\$0	0.00
oil and gas production	\$0	\$0	\$0	0.00
stone, gravel, and clay	\$0	\$0	\$0	0.00
construction	\$77,704	\$153,653	\$33,975	1.64
food processing	\$54,139	\$97,452	\$13,398	0.74
tobacco processing	\$0	\$0	\$0	0.00
fabrics and apparel	\$29,277	\$65,105	\$13,584	0.85
lumber and wood	\$165	\$293	\$62	0.00
furniture and fixtures	\$20,546	\$41,513	\$10,028	0.56
paper products	\$36,332	\$67,153	\$12,067	0.71
printing	\$10,450	\$24,518	\$5,897	0.33
chemicals	\$1,350	\$2,733	\$297	0.01
plastic materials and synthetics	\$0	\$0	\$0	0.00
drugs and preparations	\$18,523	\$40,719	\$6,777	0.33
paints	\$0	\$0	\$0	0.00
petroleum refining	\$28,598	\$43,490	\$2,222	0.10
rubber, rubber and misc. plastic prod	\$5,577	\$10,250	\$2,184	0.13
leather products	\$1,488	\$2,887	\$642	0.04
glass, stone, and clay products	\$982	\$2,010	\$453	0.02
iron, steel, and other metals	\$6	\$11	\$2	0.00
metal products, ordinance, structural	\$1,230	\$2,158	\$493	0.02
engines and machinery	\$853	\$1,597	\$391	0.02
computers, computing equipment	\$32,717	\$71,102	\$16,720	0.80
electrical equipment and appliances	\$15,964	\$32,573	\$7,653	0.40
electronic equipment and parts	\$405	\$893	\$234	0.01
motor vehicles, aircraft, trans. equi	\$1,180	\$2,043	\$445	0.02
scientific and photographic equipment	\$2,833	\$5,781	\$1,500	0.07
misc. manufacturing	\$16,607	\$31,769	\$6,783	0.37
transportation and warehousing	\$45,638	\$90,041	\$19,674	0.98
communications except radio and T.V.	\$100,286	\$179,430	\$48,899	1.95
radio, T.V., business services	\$89,294	\$153,684	\$32,834	1.83
electric services, utilities	\$15,986	\$23,821	\$2,551	0.11
wholesale and retail trade	\$228,102	\$433,765	\$114,658	6.56
finance, insurance	\$86,663	\$194,820	\$55,979	2.71
real estate and rental	\$405,586	\$554,789	\$39,359	2.29
hotels, personal services	\$35,289	\$66,726	\$17,407	1.48
eating and drinking places	\$79,524	\$148,591	\$28,079	2.90
automobile repair and services	\$23,883	\$40,024	\$6,284	0.34
amusements	\$11,058	\$21,970	\$4,733	0.41
health, education, social services	\$180,781	\$396,610	\$131,051	7.53
<b>TOTALS</b>	<b>\$1,661,044</b>	<b>\$3,007,711</b>	<b>\$637,895</b>	<b>36.32</b>

Source: Survey for the Overland Park Study of Administrative and Service firms.  
 Institute for Public Policy and Business Research, University of Kansas, 1988

TABLE 12

## TOTAL ECONOMIC IMPACTS PER 100 EMPLOYEES IN AN EXPORT-ORIENTED JOHNSON COUNTY SERVICE FIRM ON EXPENDITURES, EARNINGS AND EMPLOYMENT IN THE STATE OF KANSAS

Sector Description	INITIAL ANNUAL EXPENDITURE PER 100 EMPLOYEES	TOTAL SALES PER 100 EMPLOYEES	ADDITIONAL EARNINGS PER 100 EMPLOYEES	ADDITIONAL EMPLOYMENT PER 100 EMPLOYEES
livestock	\$2,044	\$5,735	\$638	0.02
crops	\$8,259	\$16,942	\$2,277	0.07
forestry	\$114	\$210	\$25	0.00
agricultural services	\$174	\$409	\$85	0.01
metal and nonmetallic mineral mining	\$0	\$0	\$0	0.00
coal mining	\$45	\$88	\$18	0.00
oil and gas production	\$0	\$0	\$0	0.00
stone, gravel, and clay	\$0	\$0	\$0	0.00
construction	\$80,705	\$173,287	\$35,470	1.94
food processing	\$120,078	\$352,296	\$44,707	2.26
tobacco processing	\$0	\$0	\$0	0.00
fabrics and apparel	\$13,288	\$25,656	\$4,960	0.34
lumber and wood	\$309	\$658	\$127	0.01
furniture and fixtures	\$22,500	\$48,344	\$10,875	0.66
paper products	\$63,383	\$142,168	\$23,157	1.29
printing	\$11,843	\$30,881	\$6,823	0.40
chemicals	\$1,530	\$3,722	\$375	0.02
plastic materials and synthetics	\$0	\$0	\$0	0.00
drugs and preparations	\$20,993	\$48,301	\$7,417	0.38
paints	\$106	\$280	\$39	0.00
petroleum refining	\$61,608	\$141,848	\$7,325	0.37
rubber, rubber and misc. plastic prod	\$7,227	\$14,723	\$2,864	0.15
leather products	\$361	\$725	\$149	0.01
glass, stone, and clay products	\$2,212	\$5,625	\$1,128	0.06
iron, steel, and other metals	\$14	\$28	\$5	0.00
metal products, ordinance, structural	\$1,743	\$3,444	\$729	0.04
engines and machinery	\$1,662	\$3,518	\$804	0.04
computers, computing equipment	\$33,403	\$68,153	\$14,954	0.76
electrical equipment and appliances	\$6,665	\$13,369	\$2,933	0.16
electronic equipment and parts	\$168	\$382	\$92	0.01
motor vehicles, aircraft, trans. equi	\$49,502	\$115,561	\$23,675	1.08
scientific and photographic equipment	\$1,470	\$3,104	\$749	0.04
misc. manufacturing	\$17,796	\$35,470	\$7,063	0.43
transportation and warehousing	\$49,177	\$112,220	\$21,557	1.15
communications except radio and T.V.	\$119,177	\$215,514	\$55,714	2.45
radio, T.V., business services	\$143,708	\$247,928	\$50,116	3.17
electric services, utilities	\$74,720	\$176,444	\$16,839	0.81
wholesale and retail trade	\$238,746	\$471,783	\$116,304	7.91
finance, insurance	\$80,784	\$175,260	\$47,905	2.63
real estate and rental	\$349,598	\$460,599	\$29,011	1.83
hotels, personal services	\$28,272	\$55,637	\$13,428	1.23
eating and drinking places	\$81,046	\$200,197	\$33,303	3.65
automobile repair and services	\$26,083	\$52,670	\$8,083	0.49
amusements	\$9,356	\$19,192	\$3,824	0.37
health, education, social services	\$177,435	\$409,512	\$125,948	8.75
TOTALS	\$1,907,304	\$3,851,885	\$721,496	45.00

Source: Survey for the Overland Park Study of Administrative and Service firms.  
Institute for Public Policy and Business Research, University of Kansas, 1988

TABLE 13  
 ESTIMATES OF THE TOTAL ECONOMIC IMPACTS OF EXPORT-ORIENTED JOHNSON COUNTY  
 SERVICE FIRMS ON JOHNSON COUNTY AND THE STATE OF KANSAS

	Impact on Kansas	Impact on Johnson County
<b>SALES OF GOODS AND SERVICES</b>		
Due to All Export-Oriented Service Firms in Johnson County	\$3.5 billion	\$2.8 billion
Attributable to Exports of Johnson County Services Outside the Local Market	\$2.5 billion	\$2 billion
Attributable to Exports of Johnson County Services Outside the State Market	\$1.3 billion	\$1.1 billion
<b>EARNINGS PAID TO EMPLOYEES</b>		
Due to All Export-Oriented Service Firms in Johnson County	\$2.2 billion	\$2 billion
Attributable to Exports of Johnson County Services Outside the Local Market	\$1.5 billion	\$1.4 billion
Attributable to Exports of Johnson County Services Outside the State Market	\$800 million	\$740 million

Source: Institute for Public Policy and Business Research, University of Kansas.  
 Survey for "The Nature and Significance of the Overland Park/Johnson County  
 Economy," 1988.

**TABLE 14**  
**TAX SIMULATION RESULTS FOR THREE HYPOTHETICAL FIRMS LOCATED IN EITHER**  
**JOHNSON COUNTY, KANSAS OR JACKSON COUNTY, MISSOURI**

	Johnson Co. (After Reassessment)			Jackson County, Missouri			Percentage Difference Jackson & Johnson Co. Net Profits
	Kansas Taxes	Total Taxes	Net Profit	Missouri Taxes	Total Taxes	Net Profit	
Data Processing Firm Headquarters (sole location)	\$80,620	\$326,490	\$430,651	\$42,646	\$293,902	\$462,159	6.8%
Telecommunications Regional Headquarters (multi-location)	\$1,700,304	\$46,511,310	\$42,660,243	\$1,219,357	\$46,104,691	\$43,041,890	0.9%
Nonelectrical Machinery Manufacturing Headquarters (multi-location)	\$194,237	\$7,140,487	\$4,685,762	\$155,508	\$7,110,701	\$4,722,764	0.8%

Source: Institute for Public Policy and Business Research, University of Kansas. Tax simulations for "The Nature and Significance of the Overland Park/Johnson County Economy," 1988.