



AgEcon SEARCH
RESEARCH IN AGRICULTURAL & APPLIED ECONOMICS

The World's Largest Open Access Agricultural & Applied Economics Digital Library

This document is discoverable and free to researchers across the globe due to the work of AgEcon Search.

Help ensure our sustainability.

Give to AgEcon Search

AgEcon Search

<http://ageconsearch.umn.edu>

aesearch@umn.edu

*Papers downloaded from **AgEcon Search** may be used for non-commercial purposes and personal study only. No other use, including posting to another Internet site, is permitted without permission from the copyright owner (not AgEcon Search), or as allowed under the provisions of Fair Use, U.S. Copyright Act, Title 17 U.S.C.*

Staff Papers Series

P85-22

June 1985

THE FUTURE OF MINNESOTA'S ECONOMY IN THE CONTEXT OF U.S.
AND WORLD ECONOMIC TRENDS....A STATE PERSPECTIVE

by

Wilbur R. Maki



Department of Agricultural and Applied Economics

University of Minnesota
Institute of Agriculture, Forestry and Home Economics
St. Paul, Minnesota 55108

THE FUTURE OF MINNESOTA'S ECONOMY IN THE CONTEXT OF U.S.
AND WORLD ECONOMIC TRENDS....A STATE PERSPECTIVE

by

Wilbur R. Maki

Staff Papers are published without formal review within
the Department of Agricultural and Applied Economics

The University of Minnesota is committed to the policy that all
persons shall have equal access to its programs, facilities,
and employment without regard to race, religion, color, sex,
national origin, handicap, age, or veteran status.

CONTENTS

	Page
Introduction	1
Information-producing processes	1
Emerging issue areas	2
Reducing Economic Disparities	4
Creating Jobs	5
Improving Worker Productivity	6
References	8

Prepared for Spring Hill Center Inaugral Conference on "The People of Minnesota: An Opportunity Perspective", May 21-23, 1985.

THE FUTURE OF MINNESOTA'S ECONOMY IN THE CONTEXT OF U.S.
AND WORLD ECONOMIC TRENDS....A STATE PERSPECTIVE

Wilbur Maki

Gary Stern has presented some key U.S. and world economic trends affecting the long-run future of the Minnesota economy: low inflation; increasing world-scale competition, accentuated by industry deregulation; and the approaching reality of sustainable real growth.

My response to this very able presentation is to search our intellectual and institutional resources here in Minnesota for the insights that can make sense of these trends as they impact, for better or for worse, on the state's economy.

Information-producing processes

I want to comment, first, on simply being informed--alert to the opportunities for broadly sharing in the benefits of the growing internationalization of state and regional economies and prepared for the risks associated with involvement in rapidly changing markets and technologies.

The information-producing processes I find of special significance to the topic today start with the monitoring of change in the Minnesota economy that can be attributed to the external, U. S. and world forces we Minnesotans can influence in only the smallest way, if at all, and the internal, Minnesota-bred conditions we can manage, in varying degree, to serve our best interests. I would like further to relate these aggregate economic changes to simple measures of individual and community well-being so that we can understand and use the information in our own decision-making and also show the implications of these changes for the jobs we hold or seek and the income we earn and spend. These simple measures start with jobs and income and their distribution by region, industry and occupation.

Emerging issue areas

To carry this idea of an information-producing process a bit further I turn to the two states of Minnesota: metro Minnesota extending from St. Cloud to Rochester, and rest of state. Look at the numbers. Jobs in metro Minnesota have increased at an above-average rate since 1982. Wage and salary employment is well above its peak 1979-80 level. In rest of state, however, total wage and salary employment is well below its peak 1979-80 level. Employment has increased in total, but not at an above-average rate to make up for the sharp decline experienced during the 1980-82 recessions. Remember that Minnesota employment tracks U. S. employment, but with triple vengeance. The percentage drop in Minnesota employment from peak to trough of the last recession was three times the percentage drop for the U. S.

Unemployment in metro Minnesota is down to almost half of the U.S. rate, while in rest of state unemployment is at the U.S. rate. Yes, Northeast Minnesota is included, but so are the rural areas with historically low unemployment rates but much underemployment.

Why the difference in economic indicators between metro Minnesota and rest of state? Certainly the near-busts in farming and mining are part of the problem. So is the sharp decline in manufacturing, which, directly and indirectly, accounts for much of the total employment loss in rest of state during the 1980-82 recessions. Rest of state, like rest of nation, has been severely affected by dollar inflation and the accompanying erosion of export markets and pervasive import penetration. Added to the manufacturers' woes are the special problems of agriculture and mining: high production costs (in no way attributable to high taxes, which, for one of the industries are very low relative to other industries and even other states), too high to meet world-scale competition, even if dollar inflation were sharply reversed.

What truly differentiates metro Minnesota from rest of state is the diversity of its basic industries in manufacturing, trade, finance and services. Look at the variety of U. S. and world markets for metro Minnesota businesses: consumer goods, capital goods, and government purchases; and differentiated many times over by product and industry.

Except for the Rochester area, which is more than half dependent on its health care industry and for the rest on its machinery manufacturing and some farming, metro Minnesota is marked by industrial diversity unmatched in any other but the very largest metropolitan areas.

Rest of state is another story. In more than a dozen western tier counties, agriculture accounts for 70 percent or more of each county's economic base (as shown in Figure 1). In 30 counties it accounts for more than half of the economic base. When food products manufacturing is included in the farm-dependent economy, both the number of counties and single-industry dependency increases dangerously in rest of Minnesota.

In the northern tier counties, simply change mining and timber-related manufacturing for farming and the story is unchanged, unless it is even more filled with pain and gloom. Intermixed with the mining and manufacturing, however, is part-time farming--another of northern Minnesota's contributions to Minnesota's economic future.

Part-time farming is increasingly evident, especially around our metropolitan areas, where an above-average proportion of all farms are below 100 acres in size (as shown in Figure 2). Farms under 100 acres in size are increasing rapidly, and so are farms over 500 acres. Medium-size farms are declining, but for different reasons: Around metro Minnesota-- farm subdivision; in western and southern Minnesota-- farm consolidation. Neither trend is likely to reverse itself and both have important consequences for the rest-of-state economy.

One bright promise of past years still hangs over the Minnesota horizon: the productivity of its workforce. Routine manufacturing processes that require limited worker skills move to low-cost sites, but the processes requiring greater skills stay as long as a highly productive work force adds an important competitive edge for the state's manufacturers, particularly in nonelectrical and electrical machinery, scientific and controlling instruments, printing and publishing, and related industries.

Replacing the traditional, natural resource-based, commodity-producing, materials-handling businesses are those engaged in information-producing, information-handling, and information-using activities. These businesses have large services-producing staffs, even in manufacturing. The replacement activities not only fill the void left by the shift in Minnesota's basic industries, but they also offer a technological dividend for the people of this state at a critical time in its economic history.

The technology-intensive industries of Minnesota have capitalized on the fortunate coincidence of high-order business, financial and professional services, an enterprising and innovative population, and an enduring commitment to education from kindergarten to post-graduate. They participate now in the building of a modern urban-industrial complex that is one of only a handful of such entities in the United States. The essence of this participation is investment in the individual as an increasingly productive agent of the shift from a materials-based to an information-based economy. The technology-intensive industries, whether producing mainframe computers, peripherals, services, or competing products, are marked by high levels of productivity and, also, a proclivity to overspill the productivity growth onto other industries.

The overspill of productivity growth from the technology-intensive industries to health care and education is the technological dividend that now can be shared by the three extra-ordinary partners of the new, still-emerging information-based economy. The related challenge of this decade and the next is to nurture the capacity to do more with less in health care and education and to achieve the high levels of productivity improvements in the strictly services-producing, human capital-intensive sectors that have been achieved already in the technology-intensive industries. This is the focus I wish now to sharpen while viewing the future of Minnesota's economy from a state perspective.

Reducing Economic Disparities

Reducing economic disparities is the first of a triad of governmental approaches for dealing with the local consequences of long-term economic

trends. The two other approaches are job creation and productivity improvement. Reducing economic disparities between metro Minnesota and rest of state is the end-in-view of the various place and people subsidies offered by federal and state agencies to individual businesses and households as change inducements.

U. S. and world economic trends in the iron mining and steel making industries have had devastating repercussions on the Northeast Minnesota economy. Two common approaches for coping with the consequences of structural economic change in reduced employment and subsequent population out-migration are expanded programs of infrastructure development and services delivery. Roads and schools, particularly post-secondary, are viewed as intermediaries in local economic development efforts. Most infrastructure building efforts are guided, however, by the perceptions and priorities of the past rather than a future that has not yet fully revealed itself in commonly consulted indicators. They add to local employment totals as long as the subsidy lasts and not much longer and with little, if any, local multiplier effects. Local unemployment levels may actually rise rather fall because of initial commuting and later reductions in the temporary work force.

Alternative people-centered approaches include income maintenance programs and migration subsidies for unemployed and/or relocated households. They help ease the pain of job displacement and relocation. Unless accompanied by job counseling and retraining efforts, however, the people-centered approaches provide only temporary relief at best. In most cases, they simply delay the fundamental adjustments that must take place in the community and its economic base.

By themselves place and people subsidies fail to accomplish their intended purposes. They cannot divert powerful U. S. and world economic trends nor can they achieve predictably uniform results in redirecting population and demographic growth. Despite above-average levels of local expenditures for municipal facilities and schools, for example, growth in Northeast Minnesota employment continues to lag U. S. and Minnesota rates.

Job creation in lagging regions and neighborhoods is easier said than done. Assisting businesses, including farm, in achieving sustainable real growth is commonly viewed as the essence of the new economic development efforts in the U. S. and abroad. Yet, criteria for targeting the individual business development efforts to potentially viable enterprises in one or more basic industries that can achieve sustainable growth only if a particular form of development assistance becomes available are seldom devised and, even less frequently, applied.

Recent development project evaluations completed in England, as well as the U. S., have documented very few actual net new jobs created by employment subsidies. Public expenditure per job has been extremely high and even then this expenditure may understate its full social cost because of the likely diversion of private funds from productivity-increasing investments to tax payments.

A common difficulty faced in job creation is the disassociation between development administration and economic analysis. Once an economic development program is funded, few questions are ever asked about its efficacy. Nor are the public costs of each development project squared fully with its public benefits. The highly-publicized Saturn project in Minnesota, for example, was evaluated in gross terms with respect to jobs created and additional state and local revenues generated. Added private costs of tighter labor and housing markets and added public costs of servicing a larger population were understandably not calculated because of the difficulty in acquiring these data. Job creation had become an over-riding concern.

Improving Worker Productivity

Productivity improvement rather than job creation remains the "bottom line" of fundamentally successful state and regional economic development efforts. Economic development is neither economic efficiency alone nor economic growth, although its occurrence is validated by waste reduction and output expansion. Increasing already-efficient levels of production a notch or two or doing more with less are ends-in-view of economic development efforts.

Central to economic development is education and the learning processes. Health care and the healing processes are important, too. Virtually every county in the state, when compared with the U. S., can be characterized by above-average spending (manifested in above-average employment) levels in these two services-producing areas (see Figure 3).

When above-average spending (and employment) levels are coupled with the extra-ordinary dependence of the new, emerging Minnesota economy on health care and education, a virtually uncontestable case is established for addressing the productivity issue in each of the two fields. Much progress in improving the productivity of health care providers has been achieved already. Indeed, Minnesota leads in the growth of health maintenance organizations that contend with the productivity issue in their daily operation.

A first step in addressing the productivity issue is to understand clearly what drives the costs incurred in providing health care and education-- personnel, buildings, equipment. Each cost component requires careful delineation. Sooner or later, internal support--administrative, staff, faculty--must be sought in the concerted efforts to reduce costs and, eventually, to reformulate priorities in final service delivery. Whether or not such steps are taken depends, of course, on the urgency of the endeavor.

In the health care fields, new forms of competition assert a cost-reducing discipline that attracts its own support among surviving organizations. Education, however, has lacked an over-riding need to assert a similar discipline. Such a need is likely to re-appear with newly-gained supporters as budgetary pressures, particularly at the state level, enforce a new pattern of accountability among educational institutions in addressing their most urgent productivity issues.

Thanks to Minnesota's technological dividend, the shared learning experiences for achieving significant productivity improvements in a technology-intensive industry can be drawn upon for achieving similar improvements in white-collar, services-producing industries. A productivity-enhancing infrastructure that nurtures an expanding entrepreneurship in information-related activities, for

example, can also support various entrepreneurial partnerships in education. These new, far-reaching cooperative industry-education and community-education efforts must transcend anomosities born of protective isolation by their strong but measured commitment to well thought out projects that add to each others worth.

Besides the health care and healing services, Minnesota state government itself, through its STEP (Strive Toward Excellence in Performance) program, offers a potential model for other services-producing industries, including education. For a state with a widely acknowledged edge in the productivity of its work force and leadership in health care, education, and government, coupled with an abundance of industry productivity programs to emulate, the issue of continuing productivity improvements in its important services-producing industries is one that is unlikely to be left unattended even in the remainder of this decade.

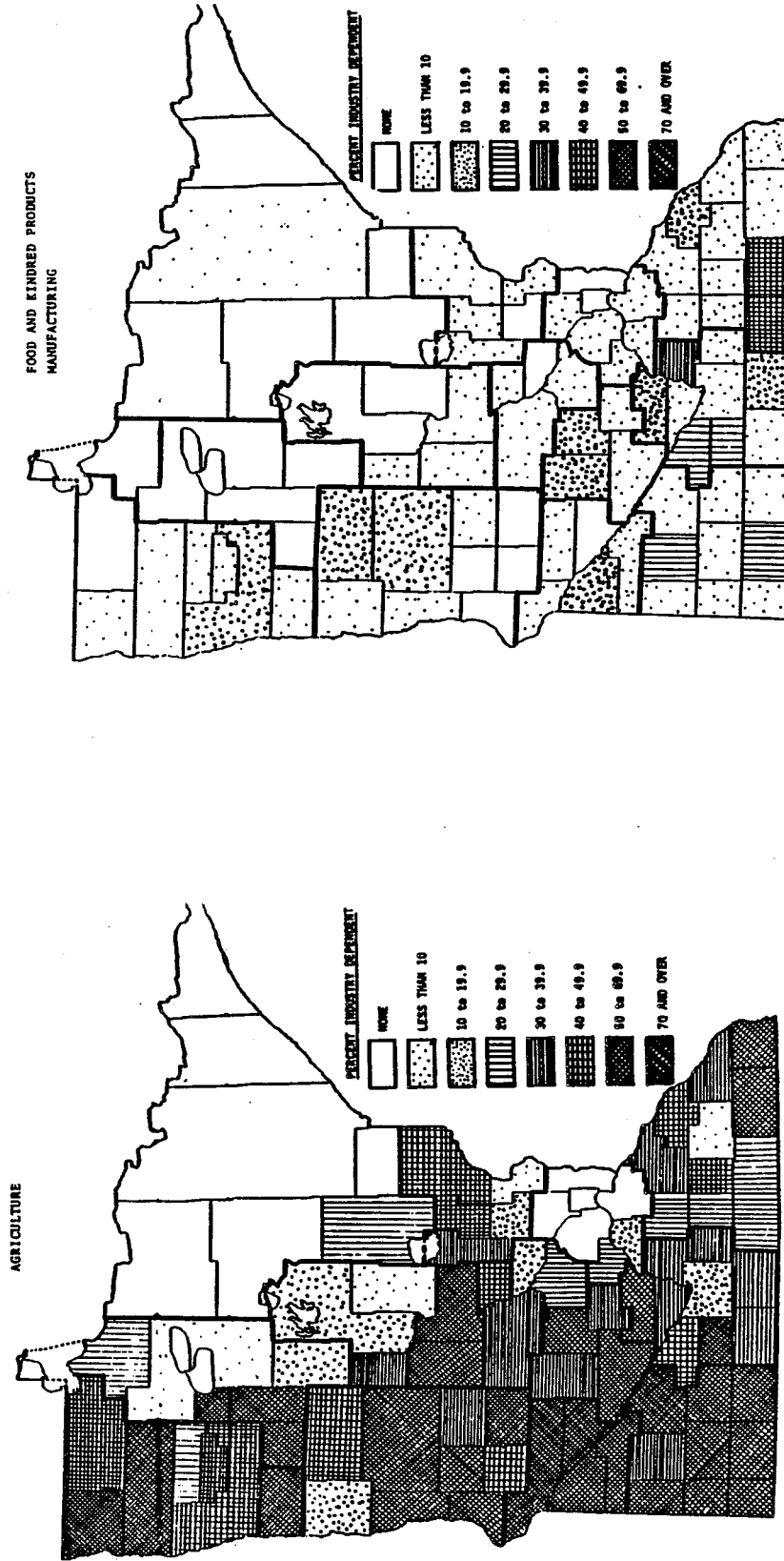
In summary, the major economic trends affecting Minnesota's future--low inflation, increasing world-scale competition, and sustainable real growth--profoundly influence the direction of its economic development efforts. Reducing economic disparities between substate regions or ostensibly creating new jobs in lagging regions and neighborhoods is not enough to justify state government intervention in private investment decisions. Its central focus must remain in those areas that enhance the productivity of its people in all their endeavors, but especially in the two very important areas of health care and education. Underlying these efforts is a growing need for a timely and reliable capability to monitor significant changes in the state's economy and, also, in the external forces which we may not influence but which, nonetheless, deeply influence our own actions, present and future.

References

- Clark, D. M. 1984. Partnerships in education - the latest fad or a long term solution to education reform. Workplace Education November/December.
- Dahl, T. 1979. New cost-effective strategy for health, in: Proceedings:

- First International Conference on Lifestyle and Health, Leon, S. S. and Amundson, G., Eds. Minneapolis, MN: University of Minnesota Press, University of Minnesota.
- Dahl, T. and Gilsrud, R. D. 1984. White collar productivity: theory and practice, in Proceedings: The 4th World Productivity Congress, Oslo, May 13-16.
- Kale, S. P. 1984. U. S. industrial development incentives and manufacturing growth in the 1970's. *Journal of Growth and Change* 15(1):26-32.
- Levin, H. and Rumberger, R. 1983. *The Educational Implications of High Technology*. Palo Alto, CA: Stanford University Institute for Research on Finance and Governance.
- Lewis, D. R. and Dahl, T. 1976. Time management in higher education administration: a case study. *Higher Education* 5:49-46.
- Noyelle, T. J. 1984. Rethinking public policy for the service era--with special focus on people and places, in: Spring Hill Center Seminar on: "Service Industries: What are the Implications for the Minnesota Economy". Spring Hill Center, Waysata, MN.
- Pickvance, C. G. 1984. Regional policy as local policy: a new direction in British regional policy. Paper presented at the 16th Annual Conference, British Section, Regional Science Association, Kent University, Canterbury, September 4-7, 1984.
- Schofield, J. A. 1979. Macro evaluation of the impact of regional policy in Britain: a review of recent research. *Urban Studies* 16:25-271.
- U. S. Congress, Joint Economic Committee. 1982. *Location of High Technology Firms and Regional Economic Development*. Washington, D. C.: U. S. Government Printing Office.

Figure 1. Employed labor force dependency on agriculture and food products manufacturing, by county, Minnesota, 1980.



Source: U.S. Bureau of the Census, 1980 Census of Population.

Figure 2. Percent of total farms of specified size class in excess of state farm size distribution, by county, Minnesota, 1982.

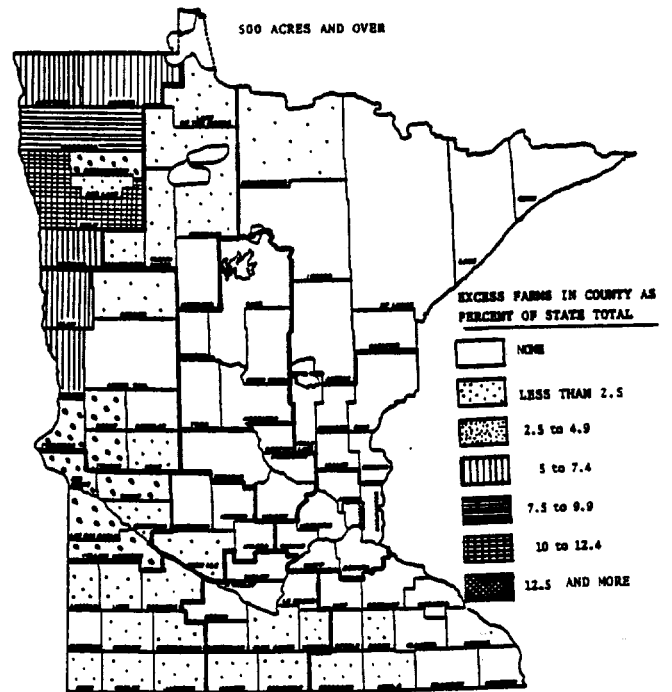
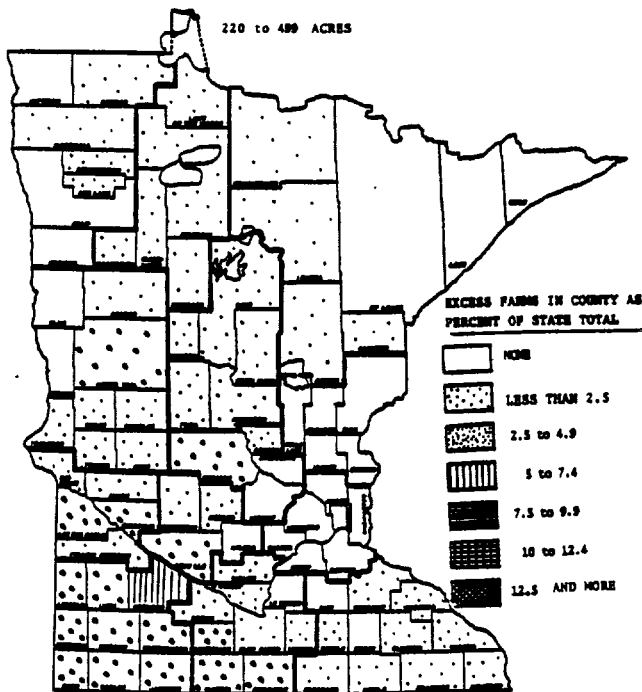
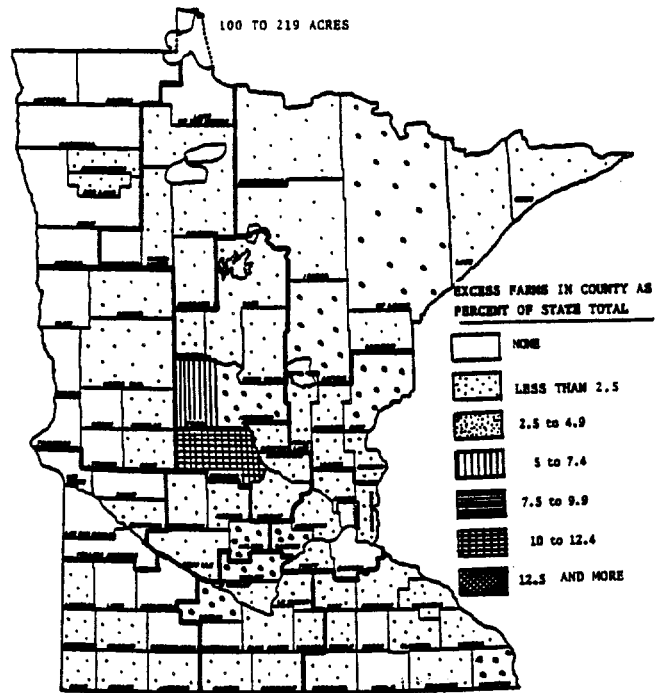
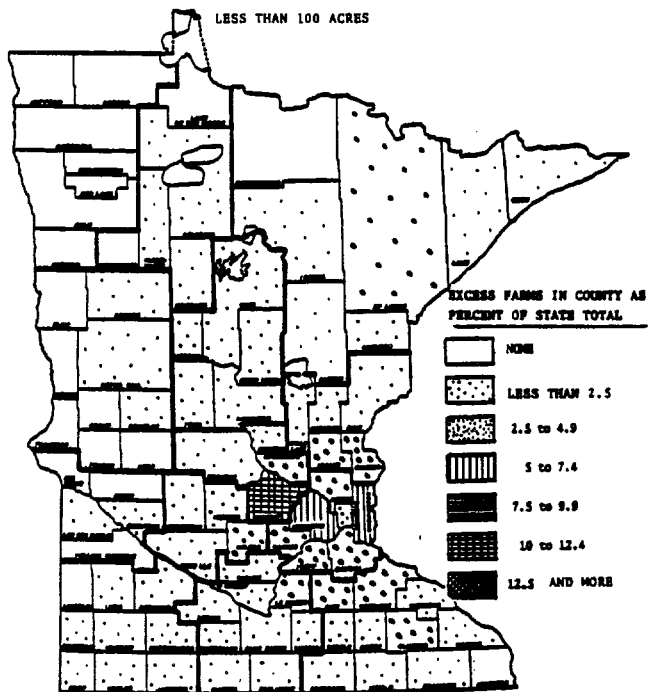
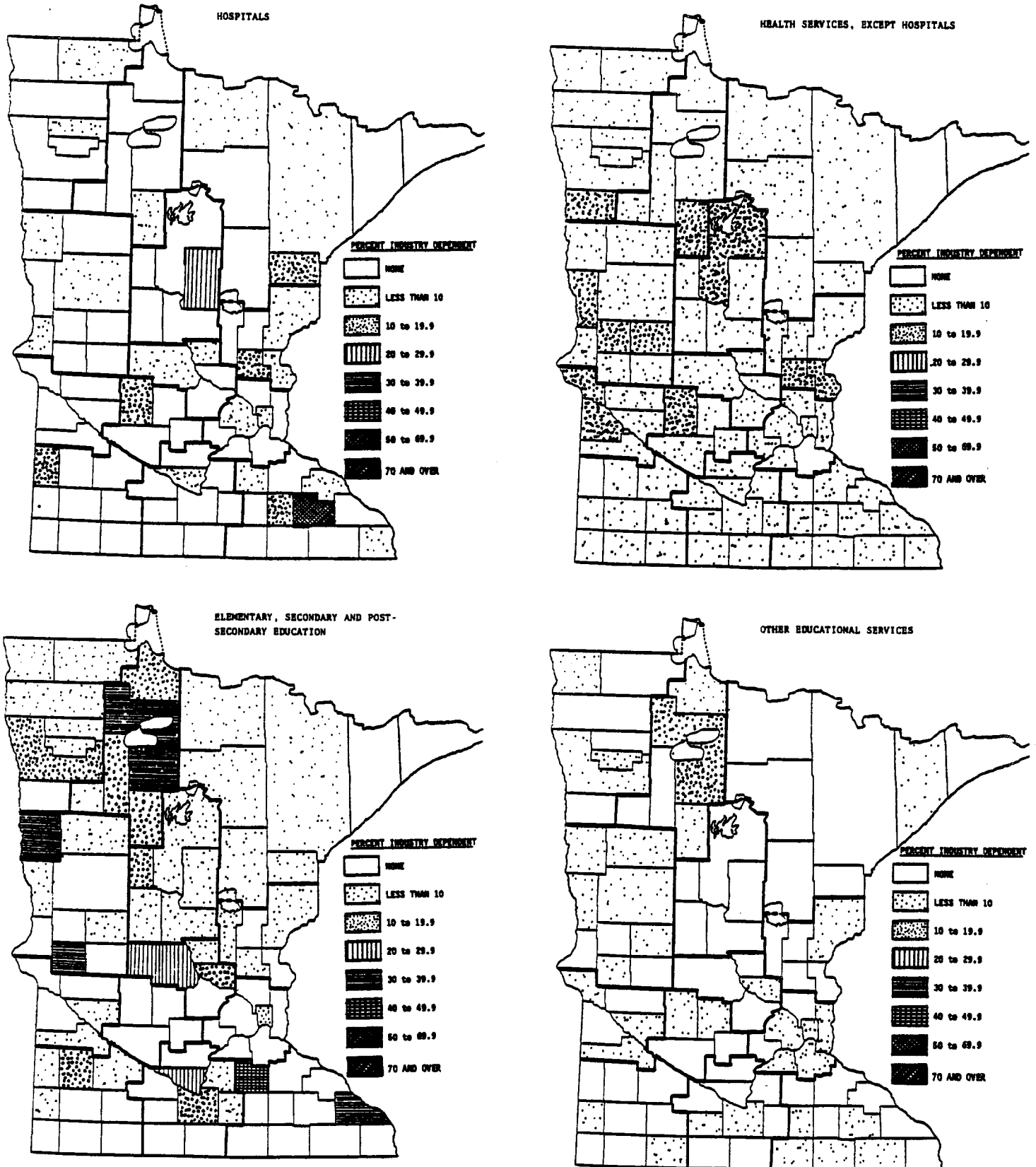


Figure 3. Employed labor force dependency on specified health care, educational services, by county, Minnesota, 1980.



Source: U.S. Bureau of the Census, 1980 Census of Population.