



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 Paper Series

MACROECONOMIC TRENDS AND THEIR IMPLICATIONS FOR LOCAL ECONOMIC DEVELOPMENT

by

John J. Waelti

and

Arley D. Waldo



DEPARTMENT OF AGRICULTURAL AND APPLIED ECONOMICS

UNIVERSITY OF MINNESOTA

COLLEGE OF AGRICULTURE

ST. PAUL, MINNESOTA 55108

**MACROECONOMIC TRENDS AND THEIR
IMPLICATIONS FOR LOCAL ECONOMIC DEVELOPMENT**

by

John J. Waelti

and

Arley D. Waldo

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, color, creed, religion, national origin, sex, age, marital status, disability, public assistance, veteran status, or sexual orientation.

Information on other titles in this series may be obtained from: Waite Library, University of Minnesota, Department of Agricultural and Applied Economics, 1994 Buford Avenue, 232 COB, St. Paul MN 55108, U.S.A.

Prologue

The idea for this paper originated from a workshop on community development in which I participated in northwestern Minnesota in July 1989. The workshop was organized by Claudia Parliament. Carole Yoho and Arley Waldo were the other participants.

At that time, I was considering the possibility of applying for the Headship of the Agricultural Economics Department at New Mexico State University, the availability of that position having just been announced. I discussed this possibility with Arley, the first person to who I even mentioned this fantasy. His reaction would be crucial to whether I would even think further about it. He encouraged me to apply for the position.

In autumn of 1989, I interviewed at New Mexico State University. Also that autumn, Arley and I began the draft of this paper, and pursued the activities typical of academic agendas. As this paper was only one item on our respective agendas, it languished. In 1990, I was offered the position at New Mexico State. I left my latest revision in Arley's hands and left for Las Cruces in September.

In spring of 1991, Arley sent me his suggestions for revisions. After some delay, I returned that draft with only minor revisions, suggesting that, in my view, it was ready for publication. It was shortly after that I learned that Arley was, as it turned out to be, fatally ill. I was able to see him one last time in summer 1991 on a visit to Minnesota, before his death in autumn. Obviously, this paper was not on our minds.

In view of Arley's longstanding professional dedication to rural development, and in view of our discussions during July 1989 which led to this paper, and which were instrumental in my eventual move to New Mexico, I believe it fitting to at long last complete this paper.

For me, it marks the end of a professional relationship with a valued colleague. More significantly, it acknowledges the memory of a trusted friend.

John J. Waelti

Introduction

Cities, towns, and villages across the country are struggling with the inevitable problems resulting from economic, demographic, and social change. In some cases, problems stem from community growth and burgeoning demands on both public and private services and facilities. In other cases, towns and villages may be stagnant, or changing in character from self-contained communities to bedroom appendages of nearby larger cities. And in still other cases, towns have ceased to be in demand for any economic or social function and are losing population. These communities are in a state of decline, and the problem is one of easing the pain for those remaining residents and keeping social losses to a minimum.

The economic vitality of towns and cities depends on many factors beyond the control of individuals, concerned citizens groups, and local public officials. The stage of the business cycle, trends in major sectors of the economy, energy prices, the balance of trade, and many other national and international circumstances all have profound local economic implications, as do natural phenomena such as drought or floods. Regional economic health -- such as how the Upper Midwest is doing relative to Northeast, the South, or the West, for example -- also will affect the vitality of towns in those regions. Much of this is largely beyond the control of local citizens.

Finally, national trends in the macroeconomy, demographics, and related phenomena affect the viability of towns and cities, including the attractiveness and usefulness of their social and economic amenities and their ability to provide them. While national macroeconomic trends are beyond the control of individuals and communities, it is nevertheless important that these trends are understood so that adjustment can be made to them. This paper reviews several major national economic trends, and suggests implications for local community development.

GNP and the Government Sector

To understand general macroeconomic trends, it is useful to proceed in terms of gross national product and its components. Gross national product, or **GNP**, is the market value of all final goods and services produced by the economy during a given time period. Figures on GNP are usually

cited on an annual basis. The basic components of GNP are **consumption**, **investment**, **government purchases** of goods and services, and **net exports**. While the exact composition of these components can get quite detailed, a brief discussion of the basic elements provides some useful insights.

Consumption refers to private expenditures on goods and services. *Consumption* includes spending on **durable goods**, such as automobiles, furniture, and appliances; **non-durable goods** such as food, clothing, and gasoline; and **services**, such as medical care, electricity, and professional assistance.

Investment refers to expenditures made by private businesses on buildings, machinery, and equipment; and by private individuals on owner-occupied housing. The **investment** component of GNP is subject to considerable variability, and is a source of fluctuating economic activity.

Government purchases refer to purchases of goods and services by all levels of government -- federal, state, and local. It is important to note that the government component of GNP does not include all government spending. A large fraction of total government outlays are for purposes such as interest payments on public debt and income transfer programs.

Net Exports refers to the net value of exports over imports. If imports exceed exports -- as has been the case since 1983 -- the difference is subtracted from GNP because imports represent products produced with foreign rather than domestic resources.

Of special significance is the size and importance of the government sector. In 1990, the nation's GNP was almost \$5.5 trillion. Government purchases of goods and services totaled nearly \$1.1 trillion. The major components of GNP are shown in Table 1.

In recent years, government purchases of goods and services have accounted for approximately 20 percent of GNP. Perhaps surprisingly, this figure of 20 percent has remained relatively stable for the past 30 years. In view of the larger role that government seems to be playing in the economy, how can this relatively stable number be explained?

There are two significant reasons for this apparent paradox. First, the division of government between the federal government, as contrasted with state and local governments, has been changing.

State and local government purchases have been growing relative to federal government purchases. Second, particularly at the federal level, government purchases of goods and services, as represented in the national income accounts, is an incomplete measure of the impact of government tax and spending programs on economic activity. We need to examine each of these in greater detail.

Table 1. Gross National Product, 1990.

Component	Billion Dollars
Consumption	3,658.6
Investment	741.9
Net Exports	-34.6
Government Purchases	1,097.8
Total GNP	5,463.6
Note: Details may not add to totals because of rounding.	
Source: Economic Indicators, February 1991, p.1.	

Government and the Economy

Government affects the economy through both its fiscal activities and the regulations it imposes on individuals and businesses. The economic impact of government is most frequently thought of in terms of taxes, borrowing, and government spending. But the importance of regulatory activities should not be overlooked.

It is difficult to grasp the magnitude and scope of government's importance in the economy. Total government spending in the United States -- by federal, state, and local governments -- amounted to a little over \$1.9 trillion in 1990. This is a figure that is hard to comprehend.

Some points of reference: In 1990 ...

> Total spending by all levels of government amounted to \$7,668 per U.S. resident.

- > Federal, state, and local governments bought one-fifth of the total output of the U.S. economy.
- > One of every six wage and salary workers was employed by some unit of government.
- > Government transfer payments, such as social security benefits, accounted for \$1 out of every \$7 of personal income in the nation.

Budgetary Objectives

To get a better notion of how government finance affects local residents and the communities in which they live, it is useful to consider the economic objectives of government. The three major budgetary objectives of government are (1) to provide public services, (2) to influence the distribution of income in the nation, and (3) to promote economic stability.

Both the federal government and the states and their local units are importantly involved in the provision of public services. These activities are important because they represent decisions that affect the way in which our nation's resources are used. Put simply, the larger the share of our resources devoted to providing public services, the smaller the share available to the private sector of the economy. Use of our nation's resources to provide public services can be measured by government purchases of goods and services. As we shall see, there is a significant difference between the role of the federal government and that of the states in the provision of public services.

Government also influences the distribution of income in the nation. Taxes reduce the disposable income of individual taxpayers, while government transfer payments -- such as federal outlays for Social Security benefits -- increase the income of beneficiaries. Transfer payments, unlike government purchases of goods and services, do not involve the use of real resources. And, since they are not a measure of production, they are not a part of GNP. Rather, transfer payments have the effect of increasing the income of recipients at the expense of those whose after-tax income is reduced by the revenues required to finance those payments. For example, Social Security checks increase the disposable income of recipients, while Social Security taxes reduce the disposable income of those now

in the work force. The federal Social Security program is the largest government income transfer program, but a great many government tax and expenditure programs affect the distribution of income among individuals and groups of citizens.

Finally, we attempt through government fiscal policy to achieve economic stability -- stable prices and full employment. Federal fiscal policy, in conjunction with the monetary policies of the Federal Reserve System and our international trade policies, is a major weapon in the fight against inflation and unemployment.

Two observations are in order. First, government spending to provide public services is important at both the federal and state level. But government programs that are aimed at redistribution of income or achieving and maintaining economic stability are functions that must be carried out chiefly by the federal government. Second, these budgetary functions of government are interrelated. For example, expenditures intended principally to provide a particular public service may also affect the distribution of income or the level of prices and employment.

Federal Outlays

Expenditures of the federal government totaled nearly \$1.3 trillion in 1990 (Table 2). (Note again, that federal outlays are larger than the government component of GNP because the former includes transfer payments and the latter does not.) Federal outlays are dominated by three broad spending categories: (1) **national defense**; (2) **transfer payments** such as Social Security, Medicare, military and civilian pensions, and other transfer programs; and (3) **interest** on the federal debt. These expenditures represent 79 percent of total federal spending. All other federal spending -- for everything else the federal government does, including federal aid to state and local governments -- is only 21 percent of the total.

Table 2. Federal Government Expenditure, 1990.

	Amount (Bil. Dol.)	Percent of Total
Purchases of Goods and Services:		
National Defense	312.9	24.5
Nondefense	110.6	8.7
Total	423,5	33.2
Transfer Payments:		
Social Security	244.1	19.1
Medicare	106.6	8.4
Other	160.6	12.6
Total	511.3	40.1
Grants to State and Local Governments	131.7	10.3
Net Interest Paid	186.5	14.6
Other	22.9	1.8
Total Federal Expenditure	1,275.9	100.0
Source: Survey of Current Business, February 1991, p. 29.		

The Increased Role of Entitlements

The size of government purchases included in the nation's GNP figures understates the impact of government taxes and spending on economic activity. The reason lies in the distinction between **purchases of goods and services** and **transfer payments**. For purposes of national income accounting, it is logical to consider the proportion of a nation's resources which are used in public sector activity, such as schools, roads, highways, and national defense. The best measure we have is an estimate of the financial outlays made for these purposes. When a unit of government hires a secretary, buys a

tank, or pays a soldier to drive the tank, this is payment in return for labor and capital, or for real resources consumed by government activity.

Again, this is not synonymous with total government expenditures. Much of government spending is not for consumption of real resources by government activity, but involves a **transfer of income**, known as **transfer payments**. Revenues received by the government (whether from taxes or borrowing) and expended as transfer payments make up a large and growing part of government (particularly federal) budgets.

Most transfer payments at the federal level are embodied in the law as **entitlements**, and have significant implications for the budget. Entitlements are programs mandated by law, and over which there is little discretion on a year-to-year basis except through explicit changes in the law. For example, the payments during forthcoming years for Social Security have been determined by laws already enacted. These payments can only be changed by explicitly changing existing law. In contrast, discretionary programs are acted upon annually, their funding depending on explicit legislative action for that specific year.

Entitlements and other federal outlays for individuals constitute that portion of the federal budget which has been growing the most rapidly in recent decades. In fiscal year 1960, federal payments for individuals were \$24.2 billion, or 4.8 percent of GNP and about 26.2 percent of the federal budget.¹ In fiscal year 1990, they were \$578 billion, 10.5 percent of GNP, and 48 percent of the federal budget.

Entitlements and other mandatory federal spending for fiscal year 1990 are shown in Table 3. Social Security is by far the largest entitlement program. An estimated \$246 billion in Social Security benefits were paid to beneficiaries in fiscal year 1990. Social Security, Medicare, and Medicaid together account for two-thirds of all mandatory federal spending. Much smaller amounts are spent for programs aimed specifically at low-income families and individuals. For example, only about 7

¹ Figures are from *Budget of the United States Government: Fiscal Year 1991*, Table 11.1, p. A-317.

Table 3. Federal Mandatory Program Spending, FY 1990.

Program	Amount (Bil.Dol.)	Percent of Total
Social Security	246.0	43.7
Medicare and Medicaid	134.4	23.9
Federal Employee Retirement	52.5	9.3
Unemployment Compensation	16.4	2.9
Veterans Benefits and Services	15.8	2.8
Food Stamps	15.3	2.7
AFDC	12.1	2.2
Supplemental Security Income	11.4	2.0
Other	58.6	10.4
Total	562.5	100.0

Note: Figures are estimates in the proposed budget.

Source: Budget of the United States Government : Fiscal Year 1991, p. 208.

percent of all mandatory spending is for the Food Stamp, AFDC, and Supplemental Security Income programs.

The importance of transfer payments to the local economy must not be overlooked. For the U.S. as a whole, transfer payments constitute 15 percent of personal income. For the state of Minnesota, transfer payments are about 14 percent of personal income, but income from transfer payments varies widely over the state. For about one-third of Minnesota's 87 counties, transfer payments represented 20 percent or more of total personal income in 1987; and, in a few counties, around 30 percent of personal income is derived from transfer payments.²

While programs such as Social Security and Medicare were never intended as programs for community development, it is clear that the injection of such funds into the local economy would be sorely missed. When 20 to 30 percent of personal income results from transfer payments, these

² Based on figures for 1987 from the U.S Dept. of Commerce, Bureau of Economic Analysis.

sources of income must be taken into account in developing strategies for community development.

The growing size of entitlements is best seen when examined in the context of the Federal budget as a whole.

The Federal Budget in Perspective

The federal budget plays several important roles in the American economy. Because of the sheer magnitude of the federal budget, the timing of expenditures and tax collections can act as a stabilizing or destabilizing force on the macroeconomy. In fact, a major subject of economic study is devoted to **fiscal policy**, which is the use of government taxes and expenditures for purposes of economic stabilization.

In addition to the effect of government taxes and expenditures in the aggregate on the level of economic activity, the composition of expenditures has far-reaching effects on the way in which resources are used and, for our purposes here, on community development. For example, defense contracts which funnel federal funds toward communities which manufacture military equipment obviously will stimulate local economic activity. When such a program is cut back or discontinued, communities may experience economic hardship. A reduction in the size of defense installations or the outright closing of military bases will also adversely affect local economies.

Similarly, federal expenditures for sewage treatment plants, highways, public office buildings, and grants-in-aid for specific purposes such as education have obvious direct impacts on local communities. Perhaps less obvious are programs, such as Social Security, which though not intended directly as mechanisms for community development, are nevertheless extremely important to the economic base of many communities.

A surprisingly small proportion of the federal budget is devoted explicitly to community development purposes. Federal grants-in-aid and direct federal spending specifically directed toward local economic development come out of the relatively small discretionary nondefense part of the budget. And if one attempts to look into the future, there seems little chance that federal expenditures for discretionary community development programs have much chance of increasing.

Entitlements are a large and growing portion of the federal budget, and there is little chance that politicians will cut back these popularly mandated programs or increase taxes in order to fund expanded local development programs.

Similarly, even with the virtual termination of military tensions with the Soviet Union and the swift end to the Gulf War, defense expenditures are likely to remain relatively high. And interest on the federal debt will continue as a major budget outlay. Thus, with federal spending on entitlements, national defense, and interest on the debt continuing to account for a very large fraction of the total budget and the reluctance to increase federal revenues, the practical implication is that local communities cannot look to the federal government for expanded community development assistance. Increased grants-in-aid to local communities for economic development would be of tremendous help and would only add insignificantly to the federal budget. However, because of the overwhelming proportion of the budget taken by entitlements, defense, and interest on debt, programs such as federal grants-in-aid to state and local governments for economic development, which are discretionary and visible, are often among the first to be cut when the federal budget comes under pressure.

State and Local Government Finance

Most domestic (nondefense) public services in this country are provided by state and local governments. In 1989 total spending for goods and services for nondefense purposes by all levels of government amounted to \$734.5 billion.³ Of this amount, state and local government outlays accounted for about 7 out of every 8 dollars (\$633.4 billion in 1989). Schools, roads and streets, police and fire protection, water and sewer systems, parks and playgrounds, etc. are largely state and local responsibilities.

Of course, the federal government does provide some domestic services directly and helps finance certain state and local services. The principal means of federal help to state and local

³ Unless otherwise indicated, figures are from the U.S. Dept. of Commerce, Bureau of Economic Analysis and Bureau of the Census.

governments is through federal grants-in-aid, loans, and tax subsidies. But federal financial assistance for state and local governments has fallen dramatically in the past decade.

The Rise and Fall of Federal Aid

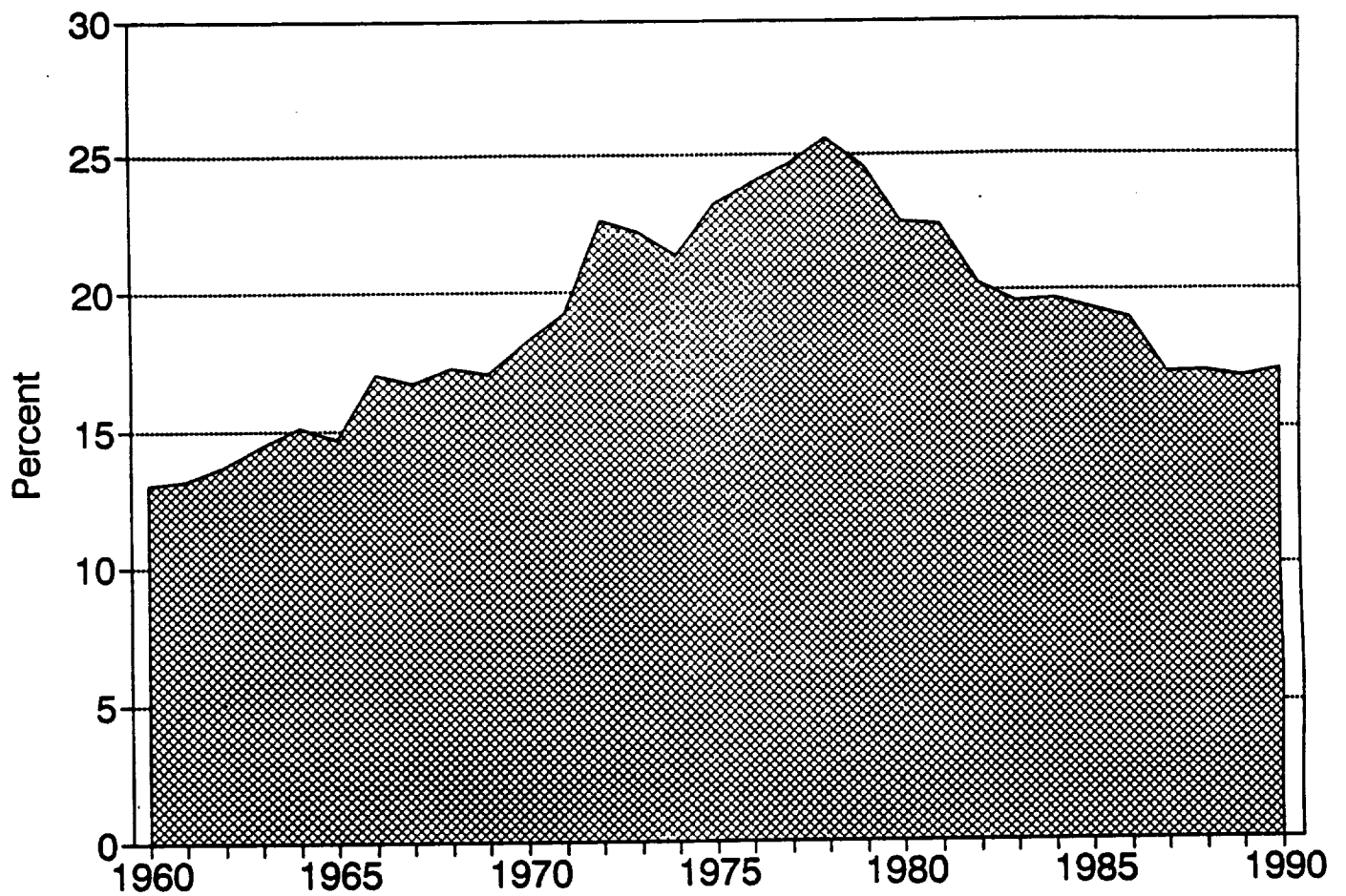
From the end of the Korean War to the late 1970s, federal aid to state and local governments and direct federal provision of nondefense services grew rapidly (Figure 1). In the mid-1950s, federal aid accounted for a little less than 10 percent of state and local government outlays. By 1978, federal aid had grown to almost 26 percent of state and local spending. That period of fiscal history ended during the Carter administration, and the downturn in federal aid accelerated under President Reagan.

Federal cutbacks have forced state and local governments to assume a larger role in providing and financing domestic services. Today about 5 out of every 6 dollars spent by state and local governments comes from state and local revenue sources. Of the federal aid that is available (\$118.9 billion in 1989), nearly half goes to public welfare and health programs such as Aid to Families with Dependent Children (AFDC) and Medicaid which are jointly financed by the federal government and the states. Excluding expenditures for social services and income maintenance, nearly 90 percent of all general expenditures of state and local government are financed from state and local tax and nontax revenue.

Other Macroeconomic Trends

Communities exist because they provide economic and social services which people require. Communities are places to live, work, and raise families. In regions such as the rural Upper Midwest, towns and local communities historically were determined by the needs of a predominantly farm population. Sizes of counties and location of county seats were determined by the distance which could be traveled to and from by horse and wagon. Smaller towns away from the county seat provided goods and services such as groceries, clothing, hardware, and farm supplies at a more convenient

Fig. 1. Federal Grants as a Percent of State and Local Government Expenditure



location to outlying farm families. It is many of these smaller towns which are fighting for survival today. Several general trends have contributed to this process.

The first is the longstanding trend toward fewer, larger, and more specialized farms. Several decades ago, a typical farm in the Upper Midwest might have consisted of a dairy operation with supplementary hog and chicken enterprises. Many farm were about 160 acres in size. Each farm was an operating enterprise requiring inputs of seed, fertilizer, fuel, machinery, and purchased feed supplements for the dairy, hog, and chicken enterprises. The farm family required groceries, clothing and shoes, and household supplies, preferably at convenient, easy-to-reach locations. These goods and services were provided by the small, independently-owned business of main street rural America -- the small shops and stores that lined the main streets of hundreds of rural towns. Modest entertainment was provided by the local independently owned movie theater.

The reduction in number of farms -- and with it -- the reduction in number of farm families, has reduced the amount of groceries, shoes, clothing, and general household goods required. There is insufficient demand for these goods and services to support the previous number of independently-owned small business on the main street of many of these small rural towns.

Small chicken and hog operations have practically passed from the scene. The larger, specialized dairy, hog and other livestock operations obviously require purchased inputs, as do large-scale crop enterprises. However, these inputs may be supplied in large quantities by specialized dealers who are capable of serving a broad market area. The same is true of farm implement dealers. The trend toward "fewer and larger" is not confined to farms.

Accompanying these trends is the simultaneous improvements of highways and transportation. The Saturday night trip to town, which was a weekly social event as well as the time to do the week's shopping, became a thing of the past. Instead of driving five miles to town, it is now just as easy to drive 20 miles, or even 50 miles, down an improved highway in a fast car to a larger town with larger stores offering a wider array of goods -- sometimes at lower prices. The stores of main street no longer provide the economic function which they did in the past. There are now fewer farm families

to serve. And even in growing rural towns, the economic character of communities has changed as new businesses are located in shopping malls on the edge of town, often at the expense of established merchants on main street. "Convenience stores" take care of daily needs. Costlier purchases are made at shopping malls -- often in larger towns many miles away.

These trends have left many small towns in a state of decline, and have greatly changed the character of others. A recent study of Minnesota found that the populations of a majority of small towns are either stable or growing slightly.⁴ Only in towns of 350 or less, are there as many towns losing as gaining population. However, this should not obscure the fact that the nature of many towns from 500 to 2,500 people has changed drastically. Many of these towns are mainly residential communities from which people commute elsewhere to work. And while many of these towns may have remained stable or gained slightly in population, they have experienced a demise of their main streets and have lost their traditional retail and service functions to larger places. Clearly, the nature and character of small towns has changed, even if they are maintaining their population.

Small-town America represents a way of life and a repository of values held dear by Americans. The decline of small towns, and the changing nature of these which remain represent a loss of a romantic part of Americana. It is natural that many people lament these social and economic changes and would somehow like to reverse them. However, the economic health of small towns depends on economic support -- not the nostalgia and glamour associated with the way a diminishing number of us remember "how it used to be."

Towns which are struggling to survive, and surviving towns which are dealing with their versions of suburban sprawl, can't change these general macroeconomic trends, but they can help themselves by being aware of these trends and taking advantage of them where possible. Local residents need to be aware of the demographic changes which are affecting rural communities.

⁴ John Frazer Hart and Tanya Bendiksen, "Small Towns Can't Stop Growing," *CURA Reporter*, Vol. 19, No. 3, October 1989.

Major Demographic Trends

The characteristics of the population have major implications for economic development at both the national level and the community level. First, let's review some national trends concerning the age distribution of the population.

It is helpful to think of several population groups, conveniently called: (1) the birth dearth of the 1930s; (2) the baby boomers (boom during the period 1946-64); (3) the birth dearth of the late 1960s and early 1970s; and (4) the echo, which refers to the resurgence of births beginning in the late 1970s as a result of the baby boomers having children. These groups influence the size of the labor force and other economic factors such as demand for various types of goods and services.

Much of the current trend of population rests on the relatively small number of babies born during the depression of the 1930s, and the years of World War II. This was followed by the extremely large number of people born during the period 1946-64. These people are known as the baby boomers. About 32 percent, or nearly one-third of Americans living today, were born during that period.

The return of veterans from the Second World War and the post war economic expansion resulted in rapid family formation and the beginning of the baby boom. This in turn brought on the expansion of the suburbs surrounding our major cities, the need for new schools, and demand for consumer items needed by young, growing families. This generation of children became the youth culture -- the rock generation of the 1960s. By sheer force of numbers, it exerted a dramatic economic and cultural effect on American society.

Beginning in 1965, the number of births dropped, primarily because the relatively small number of people born in the birth dearth of the 1930s were now in their child bearing years. During that same period -- the late 1960s -- the first of the baby boomers were getting through college and entering the labor market.

During the 1970s, the children of the birth dearth were entering middle age, the early baby boomers were in the stage of household formation, and the last of the baby boomers entering the

work force or finishing their education. The more affluent of the baby boomers, again setting trends, became the high spending, high consuming "yuppies."

In the late 1970s and early 1980s, the baby boomers were having children of their own, producing an "echo" effect. The 32 percent of the population, now in the ages of about 25 to 43, were in or entering their high earning - high consuming years. This created additional market demands.

A look ahead tells us that by the mid 1990s, the relatively small birth dearth generation will be entering retirement. A decade later, the huge baby boom generation will begin retiring, creating an overwhelming demand for goods and services relating to health care, retirement homes, and the like. Retirees will constitute an increasingly large segment of the nation's consumers.

Much has been written in the popular press concerning the possible strain an aging population will place on the Social Security system. Will we need to extend the retirement age so that the ratio of people outside the work force relative to the number of people in the work force does not become excessive? The larger number of people in the older age brackets will affect both society and culture, and the nature of the economy.

Table 4 shows the percentage of the total population in various age groups for selected years from 1960 to 2010. Not surprisingly, we see a marked decline in the proportion of the population under 18 and an increase in the proportion 65 and older.

The baby boom has a significant effect on the age structure of our work force. In 1972, persons aged 55 and older constituted 16.7 percent of the work force. With the entry of the baby boomers into the work force, workers 55 and older constituted only 14.3 percent in 1979. In 1986, after the baby boom generation had completed their entry, workers aged 55 and older constituted only 12.6 percent of the labor force. As this generation ages, we can expect the average age of the work force to increase gradually; and the percentage of the nation's population in the work force will continue to decline.

Table 4. Actual and Projected U.S. Population: Percentage Distribution by Age.

Year	Age		
	Under 18	18-64	Over 64
Percent of Total			
1960	35.7	55.1	9.2
1970	34.0	56.2	9.8
1980	28.0	60.7	11.3
1990	25.6	61.8	12.6
2000	24.5	62.5	13.0
2010	22.2	63.9	13.9

Source: U.S. Bureau of the Census, Statistical Abstract of the United States: 1990.
Table 13, p. 3, and Table 18, p. 16.

We concluded earlier that transfer payments will continue to increase. The aging of the American population and the entitlements accompanying this process practically guarantee that this will be the case.

Sources of New Jobs

The extent to which the number of jobs available expands or contracts over time depends on the balance between those changes increasing the job availability -- business births, expansions, and immigration -- and those decreasing the job pool -- business deaths, contractions, and outmigration. All of these events are occurring simultaneously in every labor market. For employment to increase over time, the factors which increase jobs must exceed those which decrease jobs.

The nation's economy is projected to generate over 16 million new jobs between now and 2000. Several recent studies on the job creation process in the private sector yield rather surprising results.

Small business is the major source of job growth. Labor market studies conclude that nearly two-thirds of all net new jobs are created by firms with 20 or fewer employees, and about four-fifths

are created by firms with 100 or fewer employees.⁵ Research has shown that over the last decade small businesses created 3 million jobs, while the nation's 1,000 largest firms showed no net increase in employment. While large firms (over 500 employees) account for about 27 percent of all jobs, such firms account for only about 13 percent of all new jobs. Between 1972 and 1976, firms with 50 or fewer employees generated all net new jobs in the Northeast, almost 80 percent in the North Central region, and about two-thirds of new jobs in the South and West.

New firms are the major source of job growth. Studies show that a very high percentage of new jobs, 80 percent in one study,⁶ are created by firms which have been operating less than four years. This is true for all regions of the country.

Service producing industries generate most new jobs. Service industries generate the vast majority of new jobs and accounted for virtually all new employment growth from 1972-76. Manufacturing firms generated no net new jobs, but there were shifts within the manufacturing sector to high technology industries.

Let's take a closer look at the specific sectors which hold promise for job growth.⁷ Consider the three broad occupational groups with the most highly trained workers in terms of educational attainment: (1) executive, administrative, and managerial workers, (2) professional workers, and (3) technical and related support workers. Collectively, these three groups accounted for 25 percent of total employment in 1980, but they are expected to account for almost 40 percent of total job growth between 1986 and 2000.

In the professional worker category, which is expected to grow by 27 percent from 1986-2000 (in contrast to 19 percent for employment as a whole) employment in engineering, computer

⁵ Richard Greene, "Tracking Job Growth in Private Industry," *Monthly Labor Review*, September 1982.

⁶ Based on a model from MIT, discussed in *ibid.*

⁷ The remainder of this section is based largely on information from George T. Silestri and John M. Lukasiewicz, "Projections 2000: A Look at Occupational Employment Trends to the Year 2000," *Monthly Labor Review*, September 1987.

specialties, and the health professional occupations is expected to account for more than one-half of the 3.7 million new professional jobs by the year 2000.

In the technicians and support workers category, jobs for health technologists and technicians are expected to account for 47 percent of the 1.4 million new technician jobs that will be added over the 1986-2000 period.

If we view the trends by industry, job growth in services is expected to increase by over 33 percent between 1986 and 2000, as compared to about 19 percent for employment overall. Employment in wholesale and retail trade is expected to increase by about 27 percent. Together, these two categories will account for over 80 percent of the rise in employment among wage and salary workers.

If we look at employment in terms of trends for occupational clusters, we find that employment for health professionals is expected to grow by 42 percent, adding over one million jobs by 2000. The specific occupations projected to grow fastest are physical therapists, optometrists, speech pathologists and audiologists, and nurses. Projections show a total of two million registered nurses in 2000, or an increase of over 600,000.

In the technicians category -- including health services, computer applications, research and development, and legal services -- the increase in employment for health technicians and technologists is expected to account for nearly half of the total increase of 1.4 million new jobs.

In the service worker category, the medical assistant occupation has a projected growth rate of 90 percent from 1986 to 2000. The number of home health aids is projected to grow by 80 percent due to the growing elderly population and a continuation of the trend toward providing more medical care outside of the traditional hospital and nursing home setting.

In general, the occupations with the three largest projected job growths to the year 2000 are: (1) retail sales persons (1.2 million), (2) waiters and waitresses (750 thousand), and (3) registered nurses (600,000).

Virtually all of these 21 million additional jobs will be in the service producing sector. Although output of goods will rise about 2.3 percent per year, the job outlook in the goods producing sector is essentially flat. These trends will influence the options available to local communities in their developmental effort.

Concept of an Economic Base

If a community is to exist and grow, it must have an economic means for support. Local residents must have a way to purchase necessary goods and services from outside the community. The more goods and services which a community provides itself, the more a given amount of dollars circulates within the community. When goods and services are purchased outside the community, as when a resident drives 50 miles down the road to purchase a new refrigerator, dollars leave the community.

Some dollars will inevitably leave the community. The essential point is that there must be a source of new dollars *entering* the community. This is known as the **economic base** -- new dollars which come into the community. The greater the proportion of those dollars which continue to circulate within the community before leaving, the greater level of local economic activity.

Traditionally, a community's economic base has been thought to be based on the sale of goods and services. Agricultural products provided the traditional economic base of many rural communities. Farmers' receipts from grain and livestock products brought in money from "the outside." These dollars then provided the base for supporting local businesses and the taxes to support local schools and other public services.

A manufacturing plant in a local community performs much the same function. As its products are sold outside the community, it brings in dollars. It should be clear that any economic activity which brings in outside dollars provides income and adds to a community's economic base. A branch of the State University System brings in dollars from the state and the federal government. A local branch office of a state or federal government agency does the same, as civil service personnel

are paid with state or federal funds. These employees may then use these dollars to purchase homes, automobiles, and other goods and services locally.

In many communities, tourist activities are a source of outside dollars. Defense contracts provide that function in other communities. The essential point is that apart from the special case of a self-trimming community, a source of outside dollars is essential for the community to exist. Communities concerned with economic development must understand their economic base. They find ways to bring in new dollars and to keep those dollars circulating within the community.

It should be clear from the foregoing discussion that any source of outside dollars contributes to a community's economic base. Many local officials may be surprised to discover that Social Security receipts are a rather large proportion of the economic base for many communities. These dollars are received, and circulated, at least in part, locally. Retirees bringing in dollars from any outside source add to the local economic base. And the more these dollars are circulated locally before leaving the community, the greater the level of local economic activity.

These points, along with some of our previous points have significance for local community development options. Social Security payments and other transfer payments already make up a large portion of the economic base of many communities. As the American population ages, individual decisions about where to retire will affect where these transfer payments go. If residents of small towns choose to remain, so will the transfer payments received by those retirees. The more attractive the local community in terms of the amenities required by retirees -- health services, food services, adequate housing -- the more likely retirees are to remain.

This suggests a possible strategy available to all local communities. Retired people who add to the economic base are more likely to remain if the community is attractive for retirement. This can add to the level of local economic activity.

This source of outside dollars -- the incomes of retired persons -- may offer a far more realistic strategy for community economic development than "chasing smokestacks," especially when we recall

that the job opportunities are projected to grow much more in health services and other service activities than in the goods producing sectors.

Implications for Community Development

National macroeconomic and demographic trends have reshaped small towns across rural America, and are continuing to do so. Yet, while some towns have ceased to be vital centers of growth, or seem to be in a stage of decline, others will remain as regional trade centers, and continue to provide social and economic amenities required for people to want to live there. What is essential is that people concerned with the future of their communities be aware of these trends and the possibilities for taking advantage of them.

Let's review some of our conclusions to see how they might apply to local community development decisions. Among the salient conclusions are:

1. Communities can depend on little in the way of expanded assistance from the federal government for such purposes as education, water supply, sewage treatment, and health. While these programs will continue to exist, they will be no substitute for local development efforts.
2. New jobs will tend to be service oriented instead of manufacturing oriented, and they will result from new and existing small businesses rather than from the expansion of existing, large businesses.
3. The aging population suggests that entitlements such as Social Security will tend to increase. The increasing longevity of people suggests that the demand amenities for an aging population, many of whom will remain in good health well into the 1970s and beyond, as well as for facilities for care of the aged will increase.
4. Entitlements such as Social Security and Medicare bring in dollars from the outside, and thus act as an addition to the economic base of a community. For many communities, this will be a significant portion of their economic base.

If we consider these conclusions, one possibility -- even necessity -- which is evident is that of

providing facilities for an aging population, many of whom probably would prefer to remain in their local community during their retirement years. An aging population requires more intensive health care and specialized facilities. While some of these services demand highly skilled workers, others can be provided by people with less specialized training.

Entitlements received by citizens represent additions to a community's economic base. If more services are provided locally, more local community economic activity is generated by these additions to the economic base. If Social Security recipients leave the community, so does that portion of the community's economic base and the additional local economic activity which could have been generated. The economic importance of entitlements, particularly those associated with Social Security and Medicare, should give communities reason to consider how to keep this potential source of local income within the community.

Communities often tend to place a great deal of effort on attracting new manufacturing plant which may offer the prospect of a large number of new jobs. The trends we have observed would tend to mitigate against this strategy. There is a rather loose correlation between job creation and manufacturing output. The economy is becoming increasingly service oriented. The old strategy of "chasing smokestacks" is seldom fruitful. Communities instead need to assess their unique attributes, and take into account factors such as size, proximity to other communities, and what they can supply in the way of services and amenities which make them desirable places to live. They can then consider what is possible and act accordingly.

This strategy provides no magic formula for local economic development, but the lesson here is that the most effective action is that which conforms to national trends rather than goes counter to them. While these national economic and demographic trends cannot be influenced by individual communities, all communities do have the power to take these trends into account in planning for their economic future.

References

Budget of the United States Government: Fiscal Year 1991.

Greene, Richard. 1982. "Tracking Job Growth in Private Industry," Monthly Labor Review, September.

Hart, John F. and Tanya Bendiksen, 1989. "Small Towns Can't Stop Growing," CURA Reporter, Vol. 1, 19, No. 3, October.

Silestri, George T. and John M. Lukasiewicz, 1987. "Projections 2000: A Look at Occupational Employment Trends to the Year 2000," Monthly Labor Review, September.