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A STUDY AND AN ANALYSIS OF THE RETAIL MARKET  
GROWTH OF GREAT FALLS AND BILLINGS, MONTANA,  
FROM 1960 TO 1970

By

Donald J. Grosso


B.S., Montana State University, 1966

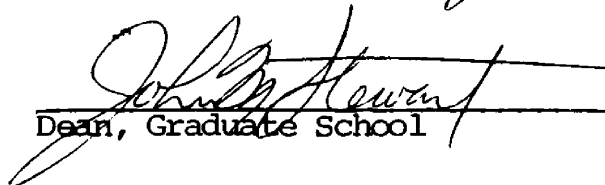
Presented in partial fulfillment of the requirements  
for the degree of Master of Business Administration

UNIVERSITY OF MONTANA

1972

Approved by:

  
Chairman, Board of Examiners

  
Dean, Graduate School

Date May 22, 1972

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## CHAPTER I

### INTRODUCTION

This paper is a study and an analysis of the retail market growth experienced by both the retail trade centers of Great Falls and Billings, Montana, and their respective retail trade areas from 1960 to 1970. A primary purpose will be to determine which of the two retail trade areas has experienced the healthiest retail market growth. A secondary purpose shall be to determine how the retail market growth experienced by these retail trade areas compares with other retail trade areas throughout the United States.

In order to accomplish the secondary purpose, an appropriate national standard must be found that effectively indicates the retail market growth experienced by other retail trade areas throughout the United States. National figures, essentially averages, were chosen as this standard. The use of national figures will indicate how the retail market growth of the trade areas of Billings and Great Falls compares with "the average retail trade area in the United States."

In order to achieve both purposes, the relevant factors of retail market growth must be identified and compared. Professor William J. Stanton defines a market as: ". . . people with needs to satisfy, the money to spend and the willingness to spend it."<sup>1</sup> From this definition

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<sup>1</sup>William J. Stanton, Fundamentals of Marketing, (New York: McGraw-Hill Book Company, 1964), p. 76.

it follows that population, income, and retail sales growth are relevant factors that must be compared. Employment is a base, of course, for all of these and, therefore, employment growth must also be compared.

To compare these factors in an appropriate fashion, the respective retail market areas for Great Falls and Billings must be identified. The retail trade areas for Great Falls and Billings are shown in Figure 1. The areas shown include all of the counties of Montana that were identified as part of the retail trade areas of Great Falls and Billings by John R. Borchert and Russell B. Adams.<sup>1</sup>

There are retail outlets scattered throughout the trade areas, but none offer the variety or quantity of goods that is available in the trade centers of Great Falls or Billings. It is this characteristic of these trade centers that causes people from throughout the trade areas to do some portion of their shopping in the trade centers.<sup>2</sup>

The city of Great Falls is located in Cascade County and the Great Falls Standard Metropolitan Statistical Area (SMSA) is defined as Cascade County. The city of Billings is located in Yellowstone County and this county is defined as the Billings SMSA. In the tables, then, Cascade County refers to the Great Falls SMSA and Yellowstone County refers to the Billings SMSA.<sup>3</sup>

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<sup>1</sup>John R. Borchert and Russell B. Adams, Trade Centers and Trade Areas of the Upper Midwest, Upper Midwest Economic Study, Urban Report Number 3, (Minneapolis, Minnesota: University of Minnesota, 1963), p. 7.

<sup>2</sup>Ibid., p. 4.

<sup>3</sup>U.S. Department of Commerce, Bureau of the Census, Census of Population: 1960, Characteristics of the Population, (Washington, D.C.: U.S. Government Printing Office, 1963), p. 28-3.







The term "Remaining Counties" refers to all counties in the trade area except for the SMSA county. For example, when this term is used in conjunction with the Billings Trade Area, it includes all of the counties in the trade area except Yellowstone County.

The first factor to be considered in the analysis is population growth.

## CHAPTER II

### POPULATION GROWTH

Table 1, in conjunction with Figure 1, provides a general description of the trade areas. The remaining counties are largely rural areas, while the SMSA's are largely urban areas.

Population and population growth trends in the trade areas and in the United States are given in Table 1. The population in both Cascade and Yellowstone counties increased at a rate comparable with that of the United States. However, both trade areas have population growth rates that are low compared to the population growth rate of the United States (1.0 percent for the Great Falls Trade Area, 3.6 percent for the Billings Trade Area compared to 13.3 percent for the United States). This situation is due to the large population losses experienced by the remaining counties of the trade areas.

Table 1 portrays the importance of the SMSA's population to the entire trade area's population. This type of information is needed to evaluate the retail market penetration of the trade areas by the trade centers. For example, these population figures indicate that Billings achieves better retail market penetration of its trade area than does Great Falls of its trade area. This is so because, in 1970, a higher percentage of the population of the Billings Trade Area was concentrated in Yellowstone County (74.4 percent compared with 65.6 percent of the Great Falls Trade Area for Cascade County), and, thus, was closer to the

TABLE 1  
POPULATION  
Comparative Statistics  
1960 and 1970

	TOTAL		PERCENT CHANGE 1960-1970	PERCENTAGE DISTRIBUTION WITHIN TRADE AREA	
	1960 <sup>a</sup>	1970 <sup>a</sup>		1960	1970
Cascade County	73,418	81,804	+ 11.4	59.4	65.6
Remaining Counties	50,090	42,970	- 14.2	40.6	34.4
Great Falls Trade Area	123,508	124,774	+ 1.0	100.0	100.0
Yellowstone County	79,016	87,367	+ 10.6	69.7	74.4
Remaining Counties	34,312	30,032	- 12.5	30.3	25.6
Billings Trade Area	113,328	117,399	+ 3.6	100.0	100.0
	In Thousands				
United States	179,323 <sup>b</sup>	203,235 <sup>c</sup>	+ 13.3	--	--

<sup>a</sup>Calculated or taken directly from: U.S. Department of Commerce, Bureau of the Census, Census of Population: 1970, Number of Inhabitants, (Washington, D.C.: U. S. Government Printing Office, November, 1970), Final Report, PC(1)-A28, Montana, Table 9, p. 28-12.

<sup>b</sup>Taken directly from: U.S. Department of Commerce, Bureau of the Census, Census of Population: 1970, Final Population Counts, (Washington, D.C.: U. S. Government Printing Office, February, 1971), Advance Report, PC(V1)-1, United States, Table 1, p. 3.

<sup>c</sup>Taken directly from: U.S. Department of Commerce, Bureau of the Census, Census of Population: 1970, Number of Inhabitants, (Washington, D.C.: U. S. Government Printing Office, December, 1971), Final Report, PC(1)-A1, United States Summary, Correction Note, p. 1-37.

shopping places of Billings.

While Table 1 clearly portrays the important population trends in the trade areas, it offers no explanation as to the why of these trends. Employment growth provides some of the answers.

## CHAPTER III

## EMPLOYMENT GROWTH

There were some changes made by the Bureau of the Census in the definition of an employed person from 1960 to 1970. Most of the changes were minor and would probably not affect the comparability of 1960 and 1970 data. The change which would seem to have the largest effect was that in 1970, 14 and 15 year olds were no longer counted as members of the labor force. The 1970 data were adjusted to compensate for this change.<sup>1</sup>

Employment data for the trade areas and the United States is given in Table 2. The table points out that the increase in civilian employment in both trade areas does not compare well with national figures (2.2 percent for the Great Falls Trade Area, 7.0 percent for the Billings Trade Area, compared with 19.5 percent for the United States).

Population and employment tend to change together.<sup>2</sup> This phenomenon is illustrated by Tables 1 and 2. Total employment (civilian and military) in Cascade and Yellowstone counties increased between 1960 and

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<sup>1</sup>U.S. Department of Commerce, Bureau of the Census, Census of Population: 1970, General Social and Economic Characteristics, (Washington, D.C.: U.S. Government Printing Office, October, 1971), Final Report PC(1)-C28 Montana, Appendix B, pp. App. 15 and 16.

<sup>2</sup>Montana Economic Study, Part 1: The Montana Economy, Volume 2, Chapter 2-4, Montana's Population, Employment and Income, 1950-68 with projections to 1980, Bureau of Business and Economic Research, School of Business Administration, (Missoula, Montana: University of Montana, June, 1970), p. 2.35.

TABLE 2  
EMPLOYMENT: CIVILIAN AND MILITARY  
Comparative Statistics  
1960 and 1970

	CIVILIAN				MILITARY				
	Number Employed		Percent Change 1960-1970	Percentage Distribution Within Trade Area		Number Employed		Percentage of Total Employment <sup>e</sup>	
	1960 <sup>a</sup>	1970 <sup>b,d</sup>		1960	1970	1960 <sup>a</sup>	1970 <sup>b</sup>	1960	1970
Cascade County	24,184	26,579	+ 9.9	59.1	63.6	4,187	4,636	14.8	14.8
Remaining Counties	16,727	15,215	- 9.0	40.9	36.4	145	5	.9	*
Great Falls Trade Area	40,911	41,794	+ 2.2	100.0	100.0	4,332	4,641	9.6	10.0
Yellowstone County	29,470	33,408	+ 13.4	72.0	76.3	25	174	*	.6
Remaining Counties	11,479	10,397	- 9.4	28.0	23.7	4	0	*	*
Billings Trade Area	40,949	43,805	+ 7.0	100.0	100.0	29	174	*	.4
United States	Thousands		+ 19.5	--	--	--	--	--	--
	65,778 <sup>c,f</sup>	78,627 <sup>c,f</sup>							

\*Less than 1/10 of 1%.

<sup>a</sup>Calculated or taken directly from: U.S. Department of Commerce, Bureau of the Census, Census of Population: 1960, Volume I, Characteristics of the Population, (Washington, D.C.: U. S. Government Printing Office, 1963), Part 28, Montana, Table 83, pp. 28-136 - 28-140 and Table 85, pp. 28-146 - 28-150.

<sup>b</sup>Calculated or taken directly from: U.S. Department of Commerce, Bureau of the Census, Census of Population: 1970, General Social and Economic Characteristics, (Washington, D.C.: U.S. Government Printing Office, October, 1971), Final Report, PC(1)-C28, Montana, Table 121, pp. 28-206 - 28-210 and Table 123, pp. 28-216 - 28-220.

<sup>c</sup>Taken directly from: U.S. Bureau of Labor Statistics, Employment and Earnings, (Washington, D.C.: U. S. Government Printing Office, March, 1972), Volume 18, No. 9, Table A1, p. 21.

<sup>d</sup>Note: These data have been adjusted to include 14 and 15 year olds to make them compatible with 1960 data.

<sup>e</sup>Note: Total employment is the sum of military and civilian employment.

<sup>f</sup>Note: Does not include 14 and 15 year olds.



1970, and population also increased. In the remaining counties, however, total employment decreased and population declined.

As shown by Table 2, there is an important difference between Great Falls and Billings employment. Malmstrom Air Force Base is located in Cascade County. Military employment (members of the armed forces on active duty<sup>1</sup>) accounts for a significant portion of both Cascade County's (14.8 percent) and the Great Falls Trade Area's (about 10 percent) total employment. In contrast, military employment in Yellowstone County and the Billings Trade Area is of very little importance (less than one percent of total employment).

The significance of Malmstrom Air Force Base to Cascade County and the Great Falls Trade Area is understated by Table 2 because some civilians are employed at the Base but are not included in military employment.

To more clearly explain the employment trends in the trade areas, total employment was classified into the categories of primary and derivative. Primary employment consists of employment in those industries that mainly serve markets outside of the trade areas. Derivative employment includes employment in activities that rely heavily on sales within the trade areas.<sup>2</sup>

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<sup>1</sup>U.S. Department of Commerce, Bureau of the Census, Census of Population: 1970, General Social and Economic Characteristics, (Washington, D.C.: U.S. Government Printing Office, October, 1971), Final Report PC(1)-C28 Montana, Appendix B, pp. App. 15 and 16.

<sup>2</sup>Montana Economic Study, Part 1: The Montana Economy; Volume 2, Chapter 2-4, Montana's Population, Employment and Income, 1958-68 with Projections to 1980, Bureau of Business and Economic Research, School of Business Administration, (Missoula, Montana: University of Montana, June, 1970), p. 2.15.

Primary employment serves as a base for derivative employment. The existence of primary employment in the area creates the need for derivative employment. In other words, the local market is created by the fact that there are primary industries and their employees in the area with needs to satisfy.<sup>1</sup>

The classification of employment into primary and derivative in Tables 3 and 4 is somewhat deficient. Federal government employment is usually classified as primary employment and state and local government employment as derivative employment. However, because the civilian employment category of "Public Administration" is not broken down into federal, state, and local employment, all public administrative civilian employment was classified as derivative in Tables 3 and 4. Fortunately, civilian public administrative employment is a small portion of civilian government employment. For example, in the state of Montana for 1970, it accounted for only 28.0 percent of civilian federal, state, and local government employment.<sup>2</sup>

Tables 3 and 4 show that primary employment, concerned mainly with the production of goods, has decreased. This is a reflection of the fact that the productivity in primary industries has increased at a rate faster than demand for products in these industries. A declining

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<sup>1</sup>Ibid., p. 2.16.

<sup>2</sup>U.S. Department of Commerce, Bureau of the Census, Census of Population: 1970, General Social and Economic Characteristics, (Washington, D.C.: U.S. Government Printing Office, October, 1971), Final Report, PC(1)-C28, Montana, Table 47, p. 28-114 and Table 56, p. 28-131.

TABLE 3  
TOTAL EMPLOYMENT<sup>f</sup>: PRIMARY AND DERIVATIVE  
Comparative Statistics  
1960 and 1970

	PRIMARY <sup>c,e</sup>						DERIVATIVE <sup>d,e</sup>							
	Number Employed		Percent Change 1960-1970	Percentage of Total Employment		Percentage Distribution Within Trade Area		Number Employed		Percent Change 1960-1970	Percentage of Total Employment		Percentage Distribution Within Trade Area	
	1960 <sup>a</sup>	1970 <sup>b</sup>		1960 <sup>a</sup>	1970 <sup>b</sup>	1960	1970	1960 <sup>a</sup>	1970 <sup>b</sup>		1960 <sup>a</sup>	1970 <sup>b</sup>	1960	1970
Cascade County	9,993	9,839	- 1.5	35.2	31.5	44.3	45.6	18,378	21,376	+ 16.3	64.8	68.5	66.1	70.3
Remaining Counties	7,433	6,208	- 16.5	44.1	40.8	55.7	54.4	9,439	9,012	- 4.5	56.0	59.2	33.9	29.7
Great Falls Trade Area	17,426	16,047	- 7.9	38.5	34.6	100.0	100.0	27,817	30,388	+ 9.3	61.5	65.4	100.0	100.0
Yellowstone County	6,823	5,634	- 17.4	23.1	16.8	56.3	57.0	22,672	27,948	+ 23.3	76.9	83.2	78.5	81.7
Remaining Counties	5,277	4,120	- 21.9	46.0	39.6	43.7	43.0	6,206	6,277	+ 1.1	54.0	60.0	21.5	18.3
Billings Trade Area	12,100	9,754	- 19.4	29.5	22.2	100.0	100.0	28,878	34,225	+ 18.5	70.5	77.8	100.0	100.0

<sup>a</sup>Calculated or taken directly from: U.S. Department of Commerce, Bureau of the Census, Census of Population: 1960, Volume I, Characteristics of the Population, (Washington, D.C.: U.S. Government Printing Office, 1963,) Part 28, Montana, Table 83, pp. 28-136 - 28-140 and Table 85, pp. 28-146 - 28-150.

<sup>b</sup>Calculated or taken directly from: U.S. Department of Commerce, Bureau of the Census, Census of Population: 1970, General Social and Economic Characteristics, (Washington, D.C.: U.S. Government Printing Office, October, 1971), Final Report, PC(1) - C28, Montana, Table 121, pp. 28-206 - 28-210 and Table 123, pp. 28-216 - 28-220.

<sup>c</sup>Primary employment includes: Agriculture, forestry and fisheries, mining, manufacturing, railroads and railway express service, and military.

<sup>d</sup>Derivative Employment includes: construction, trucking service and warehousing, other transportation, communications, utilities and sanitary services, wholesale trade, food, bakery and dairy stores, eating and drinking places, general merchandise retailing, motor vehicle retailing and service stations, other retail trade, banking and credit agencies, insurance, real estate, and other finance, business and repair services, private households, other personal services, entertainment and recreation services, hospitals, health services, except hospitals, elementary, secondary schools and colleges--government and private, other education and kindred services, welfare, religious and non-profit membership organizations, legal, engineering and miscellaneous professional services, public administration, and for 1960--industry not reported.

<sup>e</sup>Note: In 1960, 14 and 15 year olds were included in the labor force and were accounted for in the industry in which they were employed. However, in 1970, 14 and 15 year old employees were categorized as agricultural or non-agricultural employees. The 14 and 15 year old agricultural employees were included in primary employment; the non-agricultural 14 and 15 year olds were included in derivative employment.

<sup>f</sup>Note: Total employment is the sum of military employment and civilian employment.

TABLE 4  
TOTAL EMPLOYMENT\* BY INDUSTRY  
Comparative Statistics  
1960 and 1970

	CASCADE COUNTY			YELLOWSTONE COUNTY			REMAINING COUNTIES OF GREAT FALLS TRADE AREA			REMAINING COUNTIES OF BILLINGS TRADE AREA			GREAT FALLS TRADE AREA			BILLINGS TRADE AREA		
	Number Employed 1960 <sup>a</sup>	Number Employed 1970 <sup>b</sup>	Percent Change 1960-1970	Number Employed 1960 <sup>a</sup>	Number Employed 1970 <sup>b</sup>	Percent Change 1960-1970	Number Employed 1960 <sup>a</sup>	Number Employed 1970 <sup>b</sup>	Percent Change 1960-1970	Number Employed 1960 <sup>a</sup>	Number Employed 1970 <sup>b</sup>	Percent Change 1960-1970	Number Employed 1960 <sup>a</sup>	Number Employed 1970 <sup>b</sup>	Percent Change 1960-1970	Number Employed 1960 <sup>a</sup>	Number Employed 1970 <sup>b</sup>	Percent Change 1960-1970
<b>Primary Employment</b>	1,508	1,247	-17.3	1,928	1,446	-25.0	5,868	4,995	-14.9	3,896	3,016	-22.6	7,376	6,242	-15.4	5,824	4,462	-23.4
Agriculture, Forestry, Fish. <sup>c</sup>	121	85	-29.8	404	249	-38.4	829	466	-43.8	547	169	-69.1	550	531	-3.5	951	418	-56.0
Mining	3,260	3,221	-1.2	3,360	2,880	-14.3	640	591	-7.7	429	613	+42.9	3,908	3,802	-2.5	3,789	3,493	-7.8
Manufacturing	497	670	+34.6	1,106	885	-20.0	351	161	-54.1	401	322	-19.7	4,132	4,631	+12.3	1,720	1,574	-8.5
Railroads and Highway Express	4,983	4,938	-0.9	6,753	5,131	-24.0	7,433	6,268	-15.7	3,277	4,120	+25.9	17,446	15,941	-8.6	12,160	9,724	-19.9
<b>Total Primary Employment</b>	10,377	9,939	-4.2	13,584	10,591	-21.3	16,995	13,726	-18.9	11,397	11,276	-1.0	37,468	35,388	-5.9	28,818	24,225	-15.9
<b>Derivative Employment</b>	1,379	1,452	+5.3	2,159	2,552	+18.2	625	512	-18.1	461	365	-20.8	2,004	1,964	-2.0	2,620	2,917	+11.3
Non-retail Trade	5,731	6,825	+19.1	7,766	9,747	+25.5	3,175	2,825	-11.0	1,857	1,913	+3.0	8,906	9,650	+8.4	9,623	11,640	+21.2
Wholesale and Retail Trade	6,332	7,712	+21.8	7,736	10,155	+31.3	3,490	3,628	+4.0	2,452	2,278	-7.0	9,482	11,380	+19.5	10,180	12,729	+24.9
Services	1,601	1,989	+24.2	1,766	1,968	+11.4	627	1,375	+220.0	218	238	+9.2	1,726	2,019	+16.9	1,848	1,900	+2.8
Public Administration	1,254	1,248	-0.5	1,682	2,230	+32.6	843	661	-21.1	628	571	-9.1	2,921	2,417	-17.3	2,613	2,801	+7.2
Insurance, Real Estate, Finance	1,254	1,248	-0.5	1,682	2,230	+32.6	843	661	-21.1	628	571	-9.1	2,921	2,417	-17.3	2,613	2,801	+7.2
Communications	1,254	1,248	-0.5	1,682	2,230	+32.6	843	661	-21.1	628	571	-9.1	2,921	2,417	-17.3	2,613	2,801	+7.2
<b>Total Derivative Employment</b>	10,377	11,392	+9.8	13,584	15,619	+14.3	16,995	14,120	-16.9	11,397	11,276	-1.0	37,468	36,388	-2.9	28,818	31,225	+8.3

\*Calculated from: U.S. Department of Commerce, Bureau of the Census, Census of Population, 1960, Volume I, Characteristics of the Population, (Washington, D.C.: U.S. Government Printing Office, 1963), Part 28, Montana, Table 85, pp. 28-116 - 28-150.

<sup>b</sup>Calculated from: U.S. Department of Commerce, Bureau of the Census, Census of Population, 1970, General Social and Economic Characteristics, (Washington, D.C.: U.S. Government Printing Office, October, 1971), Final Report, PC71-1, Montana, Table 123, pp. 28-216 - 28-220.

<sup>c</sup>Note: For 1960 includes "Industry Not Reported".

<sup>d</sup>Note: In 1960, 14 and 15 year olds were included in the labor force and were accounted for in the industry in which they were employed. However, in 1970, 14 and 15 year olds were categorized as agricultural employees or non-agricultural employees. The 14 and 15 year old agricultural employees were included in the category of "Agriculture, Forestry and Fisheries". The non-agricultural 14 and 15 year olds were included in the category of "Services".

<sup>e</sup>Note: Total employment is the sum of military employment and civilian employment.

demand for labor in primary industries has resulted.<sup>1</sup>

Tables 3 and 4 indicate that derivative employment, concerned mainly with the production of services, has increased. This is attributable to the fact that productivity in the service industries has lagged, while the demand for services has increased substantially. Therefore, there has been an increasing need for labor in these industries.<sup>2</sup>

Table 3 helps to explain why total employment and population has increased in the SMSA's, while the remaining counties have experienced a decrease. The loss of primary employment was slightly more pronounced in the remaining counties than in the SMSA's. However, the remaining counties did not experience an increase in derivative employment similar to that of the SMSA's. The reason for this is that derivative industries like wholesale and retail trade, services, insurance, finance and real estate have a much better chance of success in urban areas than in rural areas and, thus, are attracted to the urban centers of Great Falls and Billings.

The Billings Trade Area has experienced a much larger drop in primary employment (19.4 percent compared with 7.9 percent) and a much larger increase in derivative employment (18.5 percent compared with 9.3 percent) than that experienced by the Great Falls Trade Area, as shown by Table 3. Table 4 indicates which industries are responsible for this

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<sup>1</sup>Montana Economic Study, Part 1: The Montana Economy; Volume 2, Chapter 2-4, Montana's Population, Employment and Income, 1958-68 with Projections to 1980, Bureau of Business and Economic Research, School of Business Administration, (Missoula, Montana: University of Montana, June, 1970), p. 2.20.

<sup>2</sup>Ibid., p. 2.20.

trend. The primary industries of agriculture, forestry, fisheries, mining, and manufacturing have declined at a faster rate in the Billings Trade Area than in the Great Falls Trade Area. Also, the increase in military employment, the only primary industry in which employment increased in the trade areas, had a much larger impact on the Great Falls Trade Area than the Billings Trade Area. The derivative industries of non-rail transportation, wholesale and retail trade, utilities, communications, and services have increased faster in the Billings Trade Area than in the Great Falls Trade Area.

As a result of the changes in employment from primary to derivative industries in the trade areas, there has been a corresponding change in the importance of primary and derivative industries in the trade areas. This is indicated by Table 3. Primary employment, as a percent of total employment, in the Billings Trade Area dropped by 6.3 percentage points (compared with a 3.7 percentage point drop in the Great Falls Trade Area). Derivative employment, as a percent of total employment in the Billings Trade Area, increased by 7.3 percentage points (compared with a 3.9 percentage point increase in the Great Falls Trade Area).

A description of trends in population and employment has been given; the next factor to be examined is income growth.



## CHAPTER IV

## INCOME GROWTH

A question that must be answered is: How much has income grown in the market area? Personal income growth provides some insight into the answer to this question.

Personal Income

Personal income is:<sup>1</sup>

. . . the current income received by persons from all sources net of contributions for social insurance. Not only individuals (including owners of unincorporated enterprises), but non-profit institutions, private trust funds, and private health and welfare funds are classed as "persons". Personal income includes transfers (payments not resulting from current production) from government and business such as social security benefits, military pensions, etc., but excludes transfers among persons.

Real personal income and growth of real personal income in both trade areas and the United States for 1959 and 1969 is given in Table 5.<sup>2</sup> One important point illustrated by Table 5 is that real personal income growth in both trade areas has lagged behind real personal income growth

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<sup>1</sup>U.S. Department of Commerce, Bureau of the Census, Statistical Abstract of the United States: 1969, 90th Edition, (Washington, D.C.: U.S. Government Printing Office, 1969), p. 308.

<sup>2</sup>In order to allow for the effects of inflation on income growth, all income is expressed in constant dollars (1958 dollars in this case). The result is that income figures are converted to real income figures--income expressed in dollars of constant purchasing power.

TABLE 5  
 PERSONAL INCOME  
 Comparative Statistics  
 1959 and 1969  
 (1958 Dollars)<sup>c</sup>

	THOUSANDS OF DOLLARS		PERCENT CHANGE 1959-1969	PERCENTAGE DISTRIBUTION WITHIN TRADE AREA	
	1959 <sup>a</sup>	1969 <sup>a</sup>		1959	1969
Cascade County	163,148	227,117	+ 39.2	61.6	64.5
Remaining Counties	101,600	124,836	+ 22.9	38.4	35.5
Great Falls Trade Area <sup>d</sup>	264,748	351,953	+ 32.9	100.0	100.0
Yellowstone County	179,933	228,280	+ 26.9	75.2	77.4
Remaining Counties	59,356	66,724	+ 12.4	24.8	22.6
Billings Trade Area <sup>d</sup>	239,289	295,004	+ 23.3	100.0	100.0
	Millions				
United States	376,075 <sup>b</sup>	603,943 <sup>b</sup>	+ 62.3	--	--

<sup>a</sup>Calculated from: U.S. Department of Commerce, Office of Business Economics, Regional Economics Information System, "Personal Income by Major Sources and Earnings by Broad Industrial Sector," Montana and Counties, unpublished data, (Washington, D.C.: February, 1972), Table 5.00.

<sup>b</sup>Calculated From: U.S. Department of Commerce, Office of Business Economics, Survey of Current Business, (Washington, D.C.: U. S. Government Printing Office, August, 1971), Volume 51, Number 8, Table 1, pp. 30 and 31.

<sup>c</sup>Note: Current dollars converted to 1958 dollars by the use of the implicit price deflator for personal consumption expenditures.

<sup>d</sup>Note: Totals may not add due to rounding.

in the United States. For the Billings Trade Area, real personal income has grown by 23.3 percent (a little more than one-third as much as the United States). Real personal income in the Great Falls Trade Area has grown by 32.9 percent (more than half as much as the United States).

In spite of the fact that total employment increased almost three times as fast in the Billings Trade Area as the Great Falls Trade Area (7.3 percent compared with 2.6 percent),<sup>1</sup> real personal income in the Great Falls Trade Area has grown faster than real personal income in the Billings Trade Area (32.9 percent compared with 23.3 percent).

In order to explain this phenomenon, personal income must be broken down into its components. The components are:<sup>2</sup>

(1) Wage and Salary Disbursements, which consist of ". . . the monetary remuneration of employees commonly regarded as wages and salaries, inclusive of executives' compensation, commissions, tips, and bonuses, and the value of payments in kind which represent income to the recipient."

(2) Other Labor Income, consisting of ". . . employer contributions under private pension, health and welfare, and group insurance plans; compensation for injuries; pay of military reservists; directors' fees; and several other minor items."

(3) Proprietors' Income, which measures ". . . the net business earnings of owners of unincorporated enterprises, consisting almost entirely of sole proprietorships and partnerships but

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<sup>1</sup>U.S. Department of Commerce, Bureau of the Census, Census of Population: 1960, Volume I, Characteristics of the Population, (Washington, D.C.: U.S. Government Printing Office, 1963), Part 28, Montana, Table 83, pp. 28-136 - 28-140 and Table 85, pp. 28-146 - 28-150; U.S. Department of Commerce, Bureau of the Census, Census of Population: 1970, General Social and Economic Characteristics, (Washington, D.C.: U.S. Government Printing Office, October, 1971), Final Report, PC(1)-C28, Montana, Table 121, pp. 28-206 - 28-210 and Table 123, pp. 28-216 - 28-220.

<sup>2</sup>U.S. Department of Commerce, Office of Business Economics, Personal Income by States Since 1929, A supplement to the Survey of Current Business, (Washington, D.C.: U.S. Government Printing Office, 1956).

including also producers' cooperatives and other numerically minor forms of non-corporate business."

(4) Property Income, which consists of ". . . rental income of persons, dividends and personal interest income."

(5) Transfer Payments, which ". . . comprises in general, receipts of persons from government and business (other than government interest) for which no services are rendered currently."

(6) Personal Contributions for Social Insurance--"Contributions made by individuals under the various social insurance programs are excluded from personal income by handling them as an explicit deduction item. Payment by both employees and self-employed are included in the series."

Earnings are defined as the total of three of the components of personal income--Wage and Salary Income, Other Labor Income and Proprietors' Income. Earnings represent "active income"--in general, income received from participating in the labor force as an employee or owner--as opposed to the more "passive" income of property income and transfer payments. Earnings make up about 80 percent of personal income in both the Great Falls Trade Area and the Billings Trade Area.<sup>1</sup>

Real primary and derivative earnings and real primary and derivative earnings trends are given in Table 6. The table indicates that there has been a change in the importance of real primary and derivative earnings in the trade areas. Real primary earnings, as a percent of personal income, in the Billings Trade Area, dropped by 4.6 percentage points (compared with no drop in the Great Falls Trade Area). Real derivative earnings, as a percent of personal income, in the Billings Trade

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<sup>1</sup>U.S. Department of Commerce, Office of Business Economics, Regional Economics Information System, "Personal Income by Major Sources and Earnings by Broad Industrial Sector," Montana and Counties, unpublished data, (Washington, D.C.: February, 1972), Table 5.00.

TABLE 6  
EARNINGS: PRIMARY AND DERIVATIVE

Comparative Statistics  
1959 and 1969

(1958 Dollars)<sup>c</sup>

PRIMARY<sup>a</sup>

DERIVATIVE<sup>b</sup>

	Thousands Of Dollars		Percent Change	Percentage of Personal Income		Percentage Distribution Within Trade Area		Thousands of Dollars		Percent Change	Percentage of Personal Income		Percentage Distribution Within Trade Area	
	1959	1969		1959-1969	1959	1969	1959	1969	1959		1969	1959-1969	1959	1969
Cascade County	45,693	65,973	+ 44.4	28.0	29.0	51.4	55.9	85,133	111,965	+ 31.5	52.2	49.3	68.4	72.1
Remaining Counties	43,265	52,112	+ 20.4	42.6	41.7	48.6	44.1	39,283	43,364	+ 10.4	38.7	34.7	31.6	27.9
Great Falls Trade Area <sup>d</sup>	88,958	118,085	+ 32.7	33.6	33.6	100.0	100.0	124,417	155,329	+ 24.8	47.0	44.1	100.0	100.0
Yellowstone County	39,298	42,409	+ 7.9	21.8	18.6	59.5	62.6	105,484	136,217	+ 29.1	58.6	59.7	83.4	85.0
Remaining Counties	26,749	25,346	- 5.2	45.1	38.0	40.5	37.4	21,026	24,104	+ 14.6	35.4	36.1	16.6	15.0
Billings Trade Area <sup>d</sup>	66,047	67,755	+ 2.6	27.6	23.0	100.0	100.0	126,509	160,321	+ 26.7	52.9	54.3	100.0	100.0

Calculated from: U. S. Department of Commerce, Office of Business Economics, Regional Economics Information System, "Personal Income by Major Sources and Earnings by Broad Industrial Sector," Montana and Counties, unpublished data, (Washington, D. C.: February, 1972), Table 5.00.

<sup>a</sup>Primary Earnings include: Farming, Federal, Manufacturing, Mining.

<sup>b</sup>Derivative Earnings include: State and local government, Contract Construction, Transportation, Communications and Public Utilities, Wholesale and Retail Trade, Finance, Insurance and Real Estate, Services; Other consists of agricultural and similar service establishments, forestry, fisheries, and miscellaneous industries.

<sup>c</sup>Note: Current dollars converted to 1958 dollars by the use of the implicit price deflator for personal consumption expenditures.

<sup>d</sup>Note: Totals may not add due to rounding.

Area, increased by 1.4 percentage points (compared with a drop of 2.9 percentage points in the Great Falls Trade Area).

The significance of the changes discussed in the above paragraph is vividly illustrated by comparing the changes in employment and real primary and derivative earnings in the trade areas. Table 3 indicated that primary employment in the Billings Trade Area decreased about twice as fast as primary employment in the Great Falls Trade Area. However, Tables 6 and 7 show that real primary earnings increased over twelve times as much in the Great Falls Trade Area as in the Billings Trade Area (32.7 percent as compared to 2.6 percent)! Table 7 shows that the increase in Federal military real earnings in the Great Falls Trade Area has had a large effect on this increase in real primary income in the Great Falls Trade Area.

Table 3 also indicated that derivative employment in the Billings Trade Area increased twice as fast as derivative employment in the Great Falls Trade Area. In spite of this large difference, Tables 6 and 7 show that real derivative earnings in the Great Falls Trade Area and the Billings Trade Area increased by about the same amount (24.8 percent compared with 26.7 percent).

In summary, total employment increased faster in the Billings Trade Area than in the Great Falls Trade Area. However, personal income has grown faster in the Great Falls Trade Area than in the Billings Trade Area because employment in the higher paying primary industries has declined faster in the Billings Trade Area than in the Great Falls Trade Area while at the same time employment in the lower paying derivative industries has increased faster in the Billings Trade Area than in the





## Great Falls Trade Area.

As shown by Table 5, real personal income in Billings offers a higher market penetration than Great Falls. In 1969, Yellowstone County residents received 77.4 percent (228.3 million dollars) of the real personal income that was received by all of the residents of the Billings Trade Area. In 1969, Cascade County accounted for only 64.5 percent (295.0 million dollars) of the real personal income received in the Great Falls Trade Area.

Another income variable which helps to answer the question of "How much has income grown in the market area?" is per capita income.

### Per Capita Income

Per capita income of an area is defined as the personal income of the area divided by the population of the area. Table 8 gives real per capita income and real per capita income growth for the trade areas and the United States.

As shown by Table 8, the increase in real per capita income in both trade areas does not compare well with national figures (31.6 percent for the Great Falls Trade Area, 19.0 percent for the Billings Trade Area, compared with 41.7 percent for the United States). This is well illustrated by observing the results of these changes. In 1959, both trade areas had higher per capita incomes than the United States. However, by 1969, the United States had a higher per capita income than either of the trade areas.

The remaining counties in the trade areas had larger increases in per capita income than their respective SMSA counties, as shown by Table 8.

TABLE 8  
PER CAPITA INCOME  
Comparative Statistics  
1959 and 1969

(1958 Dollars)<sup>c</sup>

	DOLLARS PER YEAR		PERCENT CHANGE
	1959 <sup>a</sup>	1969 <sup>a</sup>	1959-1969
Cascade County	2,222	2,776	+ 24.9
Remaining Counties	2,028	2,905	+ 43.2
Great Falls Trade Area	2,144	2,821	+ 31.6
Yellowstone County	2,277	2,613	+ 14.7
Remaining Counties	1,730	2,222	+ 28.4
Billings Trade Area	2,111	2,513	+ 19.0
United States	2,097 <sup>b</sup>	2,972 <sup>b</sup>	+ 41.7

<sup>a</sup>Calculated from: U.S. Department of Commerce, Office of Business Economics, Regional Economics Information System, "Personal Income by Major Sources and Earnings by Broad Industrial Sector," Montana and Counties, unpublished data, (Washington, D.C.: February, 1972), Table 5.00; U.S. Department of Commerce, Bureau of the Census, Census of Population: 1970, Number of Inhabitants, (Washington, D.C.: U.S. Government Printing Office, November, 1970), Final Report, PC(1)-A28, Montana, Table 9, p. 28-12.

<sup>b</sup>Calculated from: U.S. Department of Commerce, Office of Business Economics, Survey of Current Business, (Washington, D.C.: U.S. Government Printing Office, August, 1971), Volume 51, Number 8, Table 1, pp. 30 and 31; U.S. Department of Commerce, Bureau of the Census, Census of Population: 1970, Final Population Counts, (Washington, D.C.: U.S. Government Printing Office, February, 1971), Advance Reports, PC(V1)-1, United States, Table 1, p. 3; U. S. Department of Commerce, Bureau of the Census, Census of Population: 1970, Number of Inhabitants, (Washington, D.C.: U.S. Government Printing Office, December, 1971), Final Report, PC(1)-A1, United States Summary, Correction Note, p. 1-37.

<sup>c</sup>Note: Current dollars converted to 1958 dollars by the use of the implicit price deflator for personal consumption expenditures.

Cascade County had a 24.9 percent increase compared with a 43.2 percent increase for the remaining counties of the Great Falls Trade Area. Yellowstone County experienced only a 14.7 percent increase while the remaining counties of the Billings Trade Area experienced a 28.4 percent increase. Also, the Great Falls Trade Area had a much larger increase in real per capita income than the Billings Trade Area (31.6 percent compared with 19.0 percent). These two trends can be explained by examining the changes in the percent of population employed and earnings per worker in the trade areas.

Table 9 gives the percent of the population employed in the trade areas for 1960 and 1970. Real earnings per worker and changes in real earnings per worker are given in Table 10. Earnings per worker were calculated by dividing earnings figures from the Office of Business Economics by employment figures from the Bureau of the Census. Because of the different methods of data collection used by the two departments, the earnings per worker figures are only rough estimates.

Between 1960 and 1970, the percent of the population employed increased more rapidly in the remaining counties of the Great Falls Trade Area than in Cascade County as shown by Table 9. The table also shows that the percent of the population employed in the remaining counties of the Billings Trade Area increased at the same rate as the percent of the population employed in Yellowstone County.

Table 10 shows that real earnings per worker in the remaining counties of the trade areas increased faster than real earnings per worker in their respective SMSA's. This occurred because employment in the higher paying primary industries decreased at about the same rate in both,

TABLE 9  
PERCENT OF POPULATION EMPLOYED  
Comparative Statistics  
1960 and 1970

	PERCENT OF POPULATION EMPLOYED <sup>a</sup>	
	1960	1970
Cascade County	38.6	38.2
Remaining Counties	33.7	35.4
Great Falls Trade Area	36.6	37.2
Yellowstone County	37.3	38.4
Remaining Counties	33.5	34.6
Billings Trade Area	36.2	37.5

Calculated from: U. S. Department of Commerce, Bureau of the Census, Census of Population: 1970, Number of Inhabitants, (Washington, D. C.: U. S. Government Printing Office, November, 1970), Final Report, PC(1)-A28, Montana, Table 9, p. 28-12; U. S. Department of Commerce, Bureau of the Census, Census of Population: 1960, Volume I, Characteristics of the Population, (Washington, D. C.: U. S. Government Printing Office, 1963), Part 28, Montana, Table 83, pp. 28-136 - 28-140 and Table 85, pp. 28-146 - 28-150; U. S. Department of Commerce, Bureau of the Census, Census of Population: 1970; General Social and Economic Characteristics, (Washington, D. C.: U. S. Government Printing Office October, 1971), Final Report, PC(1)-C28, Montana, Table 121, pp. 28-206 - 28-210, and Table 123, pp. 28-216 - 28-220.

<sup>a</sup>Note: Total employment - the sum of military and civilian employment - was used to calculate percent of population employed.

TABLE 10  
EARNINGS PER WORKER  
Comparative Statistics  
1959 and 1969

(1958 Dollars)<sup>b</sup>

	DOLLARS PER YEAR <sup>a</sup>		PERCENT CHANGE
	1959	1969	1959-1969
Cascade County	4,611	5,700	+ 23.6
Remaining Counties	4,893	6,273	+ 28.2
Great Falls Trade Area	4,716	5,888	+ 24.8
Yellowstone County	4,909	5,319	+ 8.4
Remaining Counties	4,160	4,772	+ 14.7
Billings Trade Area	4,699	5,190	+ 10.4

Calculated from: U. S. Department of Commerce, Bureau of the Census, Census of Population: 1960, Volume I, Characteristics of the Population, (Washington, D. C.: U. S. Government Printing Office, 1963), Part 28, Montana, Table 83, pp. 28-136 - 28-140 and Table 85, pp. 28-146 - 28-150; U. S. Department of Commerce, Bureau of the Census, Census of Population: 1970, General Social and Economic Characteristics, (Washington, D. C.: U. S. Government Printing Office, October, 1971), Final Report, PC(1)-C28, Montana, Table 121, pp. 28-206 - 28-210 and Table 123, pp. 28-216 - 28-220; U. S. Department of Commerce, Office of Business Economics, Regional Economic Information System, "Personal Income by Major Sources and Earnings by Broad Industrial Sector," Montana and Counties, unpublished data, (Washington, D. C.: February, 1972), Table 5.00.

<sup>a</sup>Note: Total employment - the sum of military and civilian employment - was used to calculate percent of population employed.

<sup>b</sup>Note: Current dollars converted to 1958 dollars by the use of the implicit price deflator for personal consumption expenditures.



but the remaining counties did not experience an increase in the lower paying derivative industries as did the SMSA's. Consequently, primary employment, as a percent of total employment, did not decline as rapidly in the remaining counties as in their respective SMSA's (see Table 3).

As a result of the changes in percent of the population employed and real earnings per worker, real per capita income in the remaining counties of the trade areas grew faster than real per capita income in the remaining counties' respective SMSA's.

The Great Falls Trade Area experienced a smaller change in percent of population employed than the Billings Trade Area (.6 percentage points compared with 1.3 percentage points). However, the Great Falls Trade Area had a much larger increase in real earnings per worker than the Billings Trade Area (24.8 percent compared to 10.4 percent). The larger increase in real earnings per worker in the Great Falls Trade Area resulted from the fact, discussed earlier, that the Great Falls Trade Area had a smaller shift in employment from the higher paying primary industries to the lower paying derivative industries than did the Billings Trade Area.

The Billings Trade Area had a larger increase in percent of population employed than the Great Falls Trade Area, but the Great Falls Trade Area had a much larger increase in real earnings per worker than the Billings Trade Area. Consequently, the Great Falls Trade Area experienced a larger increase in real per capita income.

The final income variable to be considered in evaluating income growth is family income.

### Family Income

The growth in families with middle and upper incomes is the specific variable that is used to indicate family income growth. Families with incomes of over \$8,000 in 1969 were considered to be middle and upper income families. Eight thousand 1969 dollars deflated to 1959 dollars is \$6,562, using the implicit price deflator for personal consumption expenditures.<sup>1</sup> Families with incomes of over \$6,000 in 1959 were considered to be middle and upper income families.

The term "family" as used here is defined as:<sup>2</sup>

. . . a family consists of a household head and one or more other persons living in the same household who are related to the head by blood, marriage, or adoption. All persons in a household are regarded as members of his (her) family.

Income as it relates to families is not the same as personal income. Income in this case is defined as the sum of wage or salary income, non-farm net self-employment income, farm net self-employment income, security or railroad retirement income, and all other income. All other income includes such things as interest, dividends, unemployment insurance benefits, and others. Family income is the total income, as defined above, of all members of the family 14 years old and over.<sup>3</sup>

The growth in the number of families with middle and upper incomes

<sup>1</sup>Executive Office of the President, Economic Report of the President, transmitted to the Congress, together with the Annual Report of the Council of Economic Advisors, (Washington, D.C.: U.S. Government Printing Office, 1971), Appendix C, p. 200.

<sup>2</sup>U.S. Department of Commerce, Bureau of the Census, Census of Population: 1970, General Social and Economic Characteristics, Government Printing Office, (October, 1971), Appendix B, p. App. 13.

<sup>3</sup>Ibid., Appendix B, pp. App. 25 & App. 26.

between 1959 and 1969 in the trade areas has lagged behind that of the United States, as indicated by Table 11. The growth rates in Billings and Great Falls (about 20 percent) were only about one-third of the growth rate for the United States. This lag by the trade areas is dramatically pointed out by the changes in the percentage of total families with middle and upper incomes. In 1959, both trade areas had a higher percentage of families with middle and upper incomes than the United States. But, by 1969, the United States had a higher percentage of families with middle and upper incomes than both of the trade areas. This occurred in spite of the fact that population increased more in the United States than in either of the two trade areas.

Table 11 shows that Billings offered better market penetration in terms of families in the middle and upper income groups than Great Falls. This is true because there were more middle and upper income families in Yellowstone County (12,710) than in Cascade County (11,644) in 1969. However, the number of families in the middle and upper income groups is increasing slightly faster in Cascade County than in Yellowstone County (26.6 percent increase in Cascade County compared with a 23.4 percent increase in Yellowstone County).

The relative percentage changes in the number of families with middle and upper incomes that occurred in the SMSA counties can be partially explained by the employment trends in these counties. Yellowstone County had a larger shift in employment from the higher paying primary industries to the lower paying derivative industries than did Cascade County. Consequently, there was a larger increase in families with middle and upper

TABLE 11

## FAMILY INCOME: MIDDLE AND UPPER

Comparative Statistics  
1959 and 1969

	NUMBER OF FAMILIES		PERCENT CHANGE	PERCENTAGE OF TOTAL FAMILIES		PERCENTAGE DISTRIBUTION WITHIN TRADE AREA	
	OVER \$6,000	OVER \$8,000 <sup>e</sup>		OVER \$6,000	OVER \$8,000 <sup>e</sup>		
	1959 <sup>a</sup>	1969 <sup>b</sup>	1959-1969	1959	1969	1959	1969
Cascade County	9,194	11,644	+ 26.6	50.4	57.6	65.0	68.4
Remaining Counties	4,953	5,368	+ 8.4	41.8	50.4	35.0	31.6
Great Falls Trade Area	14,147	17,012	+ 20.3	47.0	55.1	100.0	100.0
Yellowstone County	10,303	12,710	+ 23.4	51.9	58.5	79.6	79.9
Remaining Counties	2,633	3,188	+ 21.1	31.3	41.5	20.4	20.1
Billings Trade Area	12,936	15,898	+ 22.9	45.7	54.1	100.0	100.0
	Thousands						
United States	19,016 <sup>c</sup>	30,895 <sup>d</sup>	+ 62.4	42.2 <sup>c</sup>	60.3 <sup>d</sup>	--	--

<sup>a</sup>Calculated from: U.S. Department of Commerce, Bureau of the Census, Census of Population: 1960, Volume I, Characteristics of the Population, (Washington, D.C.: U.S. Government Printing Office, 1963), Part 28, Montana, Table 86, pp. 28-151 - 28-155.

<sup>b</sup>Calculated or taken directly from: U.S. Department of Commerce, Bureau of the Census, Census of Population: 1970, (Washington, D.C.: U.S. Government Printing Office, October, 1971), General Social and Economic Characteristics, Final Report, PC(1) - C28 Montana, Table 124, pp. 28-221 - 28-225.

<sup>c</sup>Calculated or taken directly from: U.S. Department of Commerce, Bureau of the Census, Current Population Reports, (Washington, D.C.: U.S. Government Printing Office, January, 1961), "Income of Families and Persons in the United States, 1959," Series P-60, No. 35, Table 2, p. 23.

<sup>d</sup>Calculated or taken directly from: U.S. Department of Commerce, Bureau of the Census, Current Population Reports, (Washington, D.C.: U.S. Government Printing Office, 1970), "Income in 1969 of Families and Persons in the United States," Series P-60, No. 75, Table 16, pp. 32-33.

<sup>e</sup>Note: 8,000 1969 dollars is approximately 6,000 1959 dollars; implicit price deflator for personal consumption expenditures.

incomes in Cascade County than in Yellowstone County.<sup>1</sup>

The market factors of population, employment and income growth have been discussed; the final variable to be considered is retail sales growth.

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<sup>1</sup>Montana Economic Study, Part 1: The Montana Economy, Volume 2, Chapter 2-4, Montana's Population, Employment and Income 1950-68, with Projection to 1980, Bureau of Business and Economic Research, School of Business Administration, (Missoula, Montana: University of Montana, June, 1970), Figure 3.9, p. 3.39.

## CHAPTER V

## RETAIL SALES GROWTH

The main determinants of retail sales growth are population, employment, and income growth and, therefore, some of the trends in these variables will manifest themselves in retail sales trends.

Retail sales are defined as:<sup>1</sup>

. . . merchandise sold and receipts from repairs and from other services to customers whether or not payment was received in 1967. Sales are net of deductions for refunds and allowances for merchandise returned by customers. Trade-in allowances are not deducted from total sales.

Sales do not include retail sales made by manufacturers, wholesalers, service establishments, and other businesses whose primary activity is other than retail trade. They do, however, include receipts other than from the sale of merchandise at retail (e.g., service receipts, sales to industrial users, and sales to other retailers) by establishments primarily engaged in retail trade.

The slower growth experienced by the trade areas as compared to the United States in population, employment and income is reflected in retail sales. Table 12 shows that real retail sales growth from 1963 to 1967 in the Great Falls Trade Area was 7.7 percent, in the Billings Trade Area, 11.5 percent, and in the United States, 17.8 percent. At first glance, these figures do not seem to reflect the larger differences shown in population, employment and income. However, if these retail sales

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<sup>1</sup>U.S. Department of Commerce, Bureau of the Census, Census of Business: 1967, Volume I, Retail Trade-Subject Reports, (Washington, D.C.: U.S. Government Printing Office, 1971), Appendix A, p. A-3.

TABLE 12  
 RETAIL SALES  
 Comparative Statistics  
 1963 and 1967  
 (1958 Dollars)<sup>e</sup>

	THOUSANDS OF DOLLARS		PERCENT CHANGE 1963-1967	PERCENTAGE DISTRIBUTION WITHIN TRADE AREA	
	1963 <sup>a</sup>	1967 <sup>b</sup>		1963	1967
Cascade County	119,603	130,554	+ 9.2	68.2	69.2
Remaining Counties	55,641	58,216	+ 4.6	31.8	30.8
Great Falls Trade Area <sup>d</sup>	175,244	188,770	+ 7.7	100.0	100.0
Yellowstone County	125,932	147,614	+ 17.2	77.8	81.8
Remaining Counties <sup>d</sup>	35,897	32,900	- 8.3	22.2	18.2
Billings Trade Area <sup>d</sup>	161,829	180,514	+ 11.5	100.0	100.0
	Millions				
United States	230,162 <sup>c</sup>	271,166 <sup>c</sup>	+ 17.8	--	--

<sup>a</sup>Calculated or taken directly from: U.S. Department of Commerce, Bureau of the Census, Census of Business: 1963, Volume II, Retail Trade - Area Statistics, (Washington, D.C.: U.S. Government Printing Office, 1966), Part 2, Indiana - New York, Table 3, pp. 28-8 - 28-11.

<sup>b</sup>Calculated or taken directly from: U.S. Department of Commerce, Bureau of the Census, Census of Business: 1967, Volume II, Retail Trade - Area Statistics, (Washington, D.C.: U.S. Government Printing Office, 1970), Part 2, Iowa - North Carolina, Table 3, pp. 28-8 - 28-11.

<sup>c</sup>U.S. Department of Commerce, Bureau of the Census, Census of Business: 1967, Volume II, Retail Trade - Area Statistics, (Washington, D.C.: U.S. Government Printing Office, 1970), Part 1, U.S. Summary and Alabama to Indiana, Table 1, p 1-4 - 1-5.

<sup>d</sup>Note: Totals may not add due to rounding.

<sup>e</sup>Current dollars converted to 1958 dollars by the use of the implicit price deflator for personal consumption expenditures.

growth figures were shown for a corresponding ten-year period, a larger difference would be apparent.

Table 12 shows that the Billings Trade Area's real retail sales growth rate was higher than that of the Great Falls Trade Area. Table 12 also indicates that Yellowstone County has experienced a much higher real retail sales growth rate than Cascade County (9.2 percent in Cascade as compared with 17.2 percent in Yellowstone). One primary reason that this happened was that Billings absorbed the growth of the remaining counties of the Billings Trade Area. Yellowstone County experienced a large increase in real retail sales (17.6 percent) while the remaining counties of the Billings Trade Area experienced a large decline (-8.3 percent).

All of the relevant factors of population, employment, income, and retail sales growth have been examined and compared. The conclusion arrived at, in terms of the purposes of this study, is given next.



## CHAPTER VI

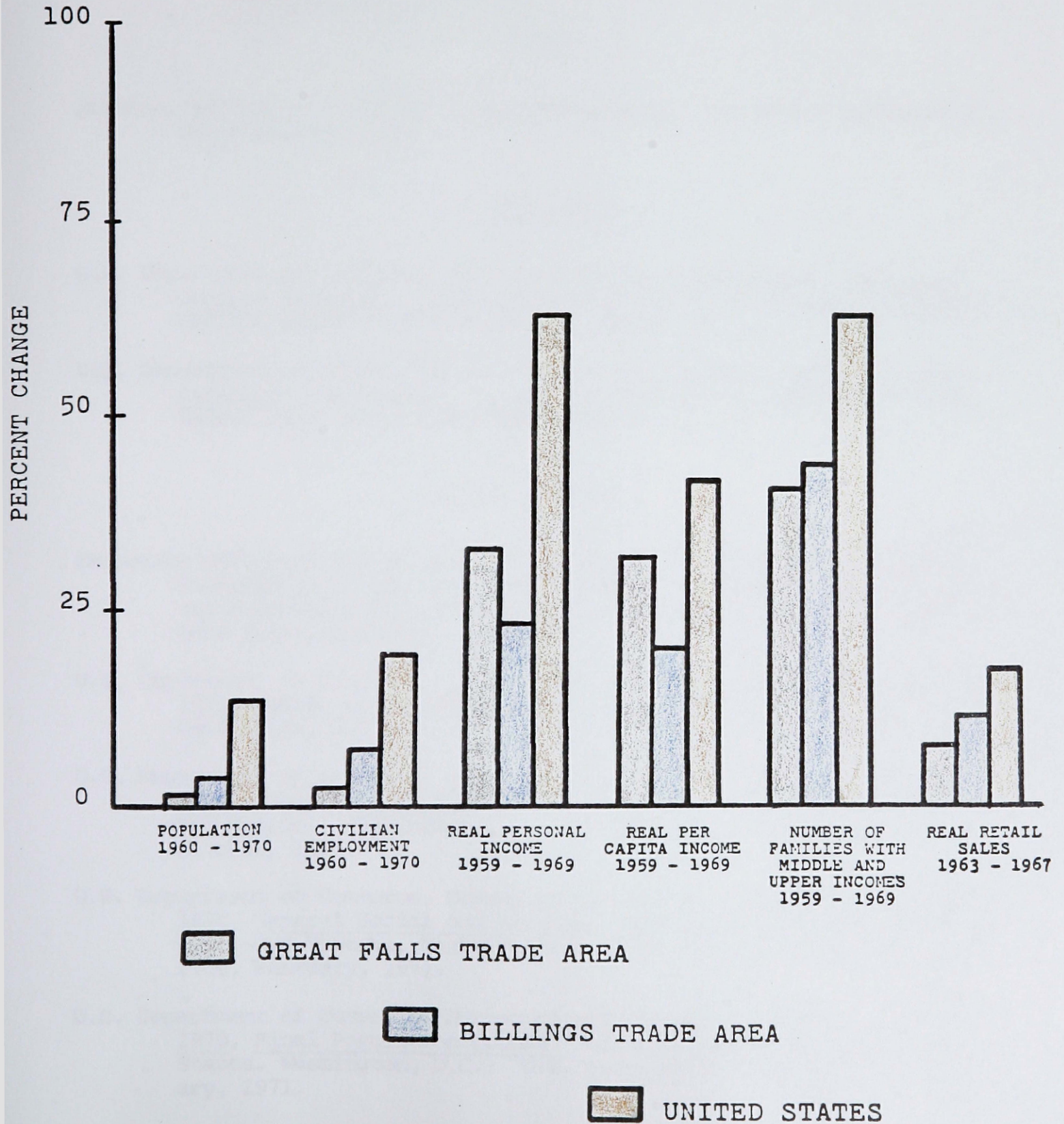
## CONCLUSION

Figure 2 provides a summary of how retail market growth in the Billings Trade Area and the Great Falls Trade Area compare with each other and with corresponding growth in the United States. In terms of both population and employment, the Billings Trade Area has experienced healthier growth. However, the Great Falls Trade Area has experienced healthier growth in real personal income and real per capita income. Real income has grown faster in the Great Falls Trade Area than the Billings Trade Area because the Billings Trade Area had a larger shift in employment from the higher paying primary industries to the lower paying derivative industries than did the Great Falls Trade Area. In spite of the larger real income growth in the Great Falls Trade Area, real retail sales have grown faster in the Billings Trade Area than the Great Falls Trade Area.

Figure 2 clearly shows that in all of the relevant factors considered the retail market growth experienced by both the Great Falls Trade Area and the Billings Trade Area is much smaller than the retail market growth experienced by the "average retail trade area in the United States."

FIGURE 2

SUMMARY OF RETAIL MARKET GROWTH  
COMPARATIVE STATISTICS



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