

## ST. LOUIS IN THE SEVENTIES

by  
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When one hears tales of the "Gay Nineties" or the "Roaring Twenties", certain images immediately spring to mind. Furthermore, the Thirties are associated with depression, and the Forties denote war years. It is almost as if each of these decades has a distinct and enduring personality. Although the events which shaped the personalities of the Fifties and Sixties have already occurred, our images are still in the formative stages. Now we are faced with the continuum of events that will structure the newest decade, the Seventies.

There is an economic dimension to all the decades mentioned above. Those with pleasant personalities were generally characterized by economic growth and full employment. Those of unpleasant character give rise to memories of stagnation, unemployment, and a struggle for recovery. Relating these remarks to our interest in the local economy, we encounter the following question: What can we expect of the St. Louis economy in the Seventies?

Prognostication is not the most consistently fruitful undertaking, but there are some indicators that are available to illuminate the future.

These indicators and resulting prophecies must, however, be kept in proper perspective. For just one example, prominent economists are in substantial disagreement as to when the current expansion will cease. Professor Milton Friedman predicts not only an end to this boom period, but even a moderate to severe recession as soon as 1970. The St. Louis Federal Reserve Bank has concluded that the entire process of curbing inflation normally requires at least three years. Thus, although it is likely that there will be a slowdown both nationally and locally, in the near future, its timing and degree are subject to debate.

Part of the answer to the question which was posed above depends on how well St. Louis is equipped to resist the forces of recession and the accompanying rise in unemployment. But there are other forces which St. Louis must face, in addition to imminent recession. The social ills endemic to America's cities are widespread, a contagion to which St. Louis is not immune. This city is not without racial friction, central city decline, city-suburban fiscal disparity, and many of the other problems with which we are all familiar. Why the concern with the economy when we are faced with other issues? A healthy city can cope with these problems, but an unhealthy city will find the path to progress much more difficult. At least one necessary condition for a healthy city is a growing economy, and thus the importance of the economy becomes evident.

When we speak of a "growing" economy, however, we must speak with caution. There are two broad aspects of economic growth: expansion of volume and increase of well-being. These two are not easily separated, but the existence of one does not necessarily imply the existence of the other. Furthermore, they are subject to two different measures. Volume, for instance, is measured by size of population, quantity of employment, and total output. Tables 1 and 2 depict the growth of population and employment in St. Louis in the recent past, compared with several mid-continent cities that might be considered "competitors" of St. Louis.

Well-being is measured by such items as the unemployment rate and per capita income, which are in part functions of market efficiency. That is, the more efficient is the market, the lower is unemployment and the higher are incomes, simply because resources are properly allocated. In addition, employment can represent well-being, because we are reasonably sure that the faster employment grows, the better is the market adjusting to rising consumer demand. Past trends in per capita income for St. Louis and the other mid-continent cities are shown in Table 3. Chart 1 shows that the local unemployment rate has compared favorably with the national average.

Since employment figures can be used to indicate both growth in well-being and growth in volume, let us turn our attention more fully to employment data. We can state with certainty that employment will not grow unless there is increased demand for local production. Thus we must consider the sources of demand. In general, local industry can be divided up into three sectors: the exporters who produce goods and services for sale outside the city, those who locate in a city because the production is closely related to that of the exporters, and those who produce goods and services for consumption within the city.<sup>1/</sup> Another writer has labeled employment in these sectors, respectively, geographic-oriented employment ( $E_g$ ), complementary employment ( $E_c$ ), and urban-oriented employment ( $E_u$ ).<sup>2/</sup>

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<sup>1/</sup> This division is an extension of the familiar export base theory of the local economy. That theory divides industry into the basic and non-basic sectors, with the former supplying a national market and the latter serving local demand. Urban growth originates in increased national demand which is transmitted through the basic sector to the rest of the local economy in a multiplicative process. An extensive discussion can be found in Ralph W. Pfouts (ed.), The Techniques of Urban Economic Analysis (West Trenton, N.J.: Chandler-Davis Publishing Co., 1960).

<sup>2/</sup> Stanislaw Czamanski, "A Model of Urban Growth," Papers, Regional Science Association, Vol. 13 (1964) pp. 177-200.

The following argument might be offered:  
a small city is usually dependent for growth upon one or a few industries which have a national market. As the fortunes of these industries vary, so varies the fortune of the city. A large industrially diversified city, on the other hand, has no need to rely upon a single industry to sustain growth. Furthermore, when the city is of sufficient size, it is able to generate sufficient internal demand for its own products so that it literally feeds upon itself. Put another way, as a city increases in size over time, the geographic-oriented sector dominates the growth process initially, but is supplemented at some point by the complementary sector. <sup>3/</sup> Now let us view St. Louis growth in the light of this reasoning.

The division of St. Louis employment used in this study is found in Table 4. While the division is not perfect, due to data inadequacies, several interesting trends do appear. These trends are depicted in Chart 2, which indicates that employment expansion in the Sixties has been uneven in St. Louis. In fact, both  $E_g$  and  $E_c$  declined early in the decade. Although  $E_g$  was on the road to recovery by 1962,  $E_c$  has yet to reach its first quarter, 1960, level.

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<sup>3/</sup> Jane Jacobs has pursued this line of thought in "Strategies for Helping Cities," American Economic Review, Vol. LIX, No. 4 (September, 1969), pp. 652-656.

Employment in the urban-oriented sector, on the other hand, has enjoyed a steady, if slow, increase, subject to seasonal variations in employment. Since  $E_u$  comprises about three quarters of total employment in St. Louis, it has imparted stability to total growth. Those industries showing the most rapid employment growth include state and local government, at a 4.4 per cent annual rate.

The only factor which keeps complementary employment from declining more than it has is the increased production of certain non-durable goods. But this is not quite enough to offset employment declines in textiles manufacturing and petroleum refining. The greatest employment increases within the geographic-oriented sector were registered by the producers of transportation equipment and by the federal government.

An immediate conclusion is that St. Louis is among those cities which are able to sustain their own growth, given the maintenance of a modicum of outside demand. Furthermore, St. Louis has benefited from the fact that as incomes increase over time, so does the demand for services, both private and public. It is likely that this trend will continue in the future, subject to as yet unforeseen adjustments. This decade may then become known as the "Service Seventies", a title eminently descriptive of the observed trends.

Projections of employment have been made in two different ways, yielding two distinct trends. The first method is based on the simple assumption that things will be in the future as they were in the past. On this basis, the trends of the Sixties are extrapolated into the Seventies, yielding what may approximate a ceiling to the rate of employment growth. The second projection embodies the assumption that employment will increase, but at a declining rate. This is probably a more realistic assumption, and it results in a lower boundary or floor for the rate of employment growth. The two projections are depicted in Chart 3, and the accompanying data are in Table 4. The shaded area in Chart 3 represents the relevant area of employment growth, while actual growth from 1960 to 1968 is represented by the stars. Line AB is the locus of points midway between the ceiling and floor and probably is a good estimate of actual employment growth.

Note from Table 4 that, regardless of which method is used,  $E_c$ ,  $E_g$ , and  $E_u$  remain approximately the same percentage of total employment. This indicates that in the period under question no single sector will have a markedly increased influence on the growth of total employment.

This use of the two methods of projection has abstracted from the imminent slowdown mentioned earlier. It is possible that employment growth could slow sufficiently to drop below the floor. This, however,

should happen only if the recession occurs very soon. Otherwise, the slowed growth inherent in the floor should take any slowdown into account. Furthermore, even if growth falls beneath the lower boundary, the balance of St. Louis industry would be expected to contribute to quick recovery, enabling employment growth to return to the pertinent range.

In summary, although the employment boom of the Sixties is not expected to continue into the Seventies at the same pace, continuing shifts in the St. Louis product mix will contribute to increased incomes and greater local demand. Population growth at the periphery of the metropolitan area will also create a growth of local demand, thus causing an expansion in the output of those goods and services which are currently imported from other parts of the country. In terms of the growth classification introduced earlier, volume will expand with moderation but well-being will be constrained only by market imperfections.

Appendix

Method 1 prediction is based on the equation  $E = a + bT$ , where E is employment and T represents time. The equation was evaluated quarterly for the period 1960 to 1968, and the results applied to the period 1969 to 1980.

Method 2 prediction embodies the hypothesized relationship  $\ln E = a + b \ln T$ , which uses the natural logarithms of the same variables. The equation was evaluated in and applied to the same respective time periods as Method 1.

Table 1

## POPULATION

<u>City</u>	<u>Totals in Thousands</u>			<u>Average Annual % Change</u>	
	<u>1950</u>	<u>1960</u>	<u>1966</u>	<u>1950-60</u>	<u>1960-66</u>
St. Louis	1,755	2,105	2,272	1.8	1.3
Chicago	5,178	6,221	6,711	1.9	1.3
Indianapolis	727	944	1,030	2.6	1.5
Kansas City	848	1,093	1,201	2.6	1.6
Louisville	577	725	784	2.3	1.3
Memphis	529	675	749	2.5	1.7
Oklahoma City	392	512	587	2.7	2.3
Mid-Continent Cities Average	1,429	1,754	1,905	2.1	1.2
United States	151,326	179,323	196,842	1.7	1.6

Sources: U. S. Department of Commerce, Bureau of the Census, Census of Population: 1950 and Population Estimates and Projections, series P-25, No. 427, July 31, 1969.

Table 2

## TOTAL NONAGRICULTURAL EMPLOYMENT

<u>City</u>	<u>Totals in Thousands</u>			<u>Average Annual % Change</u>	
	<u>1950</u>	<u>1960</u>	<u>1967</u>	<u>1950-60</u>	<u>1960-67</u>
St. Louis	633	737	877	1.5	2.5
Chicago	2,032	2,471	2,906	2.0	2.3
Indianapolis	280	330	402	1.7	2.9
Kansas City	*	388	484	*	3.2
Louisville	203	242	298	1.8	3.0
Memphis	152	191	247	2.3	3.7
Oklahoma City	118	176	228	4.1	3.8
Mid-Continent Cities Average	*	648	777	*	2.6
United States	45,222	54,234	66,030	1.8	2.9

\* Comparable data unavailable

Sources: U. S. Department of Commerce, Bureau of the Census, Census of Population; 1950, and U.S. Department of Labor, Bureau of Labor Statistics, Employment and Earnings Statistics for States and Areas, 1939-67.

Table 3

## PER CAPITA PERSONAL INCOME

<u>City</u>	<u>Dollars</u>				<u>Average Annual % Change</u>		
	<u>1950</u>	<u>1959</u>	<u>1965</u>	<u>1967</u>	<u>1950-59</u>	<u>1959-65</u>	<u>1965-67</u>
St. Louis	1,787	2,483	3,087	3,485	3.7	3.7	6.3
Chicago	2,082	2,901	3,612	4,135	3.8	3.7	7.0
Indianapolis	1,831	2,452	3,210	3,614	3.3	4.6	6.1
Kansas City	1,663	2,421	3,075	3,512	4.3	4.1	6.9
Louisville	1,576	2,266	2,882	3,281	4.1	4.1	6.7
Memphis	1,355	1,788	2,354	2,737	3.1	4.7	7.8
Oklahoma City	1,508	2,092	2,654	3,028	3.7	4.0	6.8
Mid-Continent Cities Average	1,886	2,619	3,287	3,747	3.7	3.9	3.6
United States	1,489	2,161	2,760	2,963	4.2	4.2	3.6

Sources: U. S. Department of Commerce, Survey of Current Business,  
May, 1969.

Table 4

ST. LOUIS EMPLOYMENT  
PROJECTIONS

	<u>Actual</u>		<u>Annual Rate of Change</u> 1960- 1965	<u>Method One</u>					<u>Method Two</u>				
	<u>1960</u> (000)	<u>1965</u> (000)		<u>Annual Rates of Change</u>			<u>Annual Rates of Change</u>						
				<u>1970</u> (000)	<u>1980</u> (000)	<u>1965- 1970</u>	<u>1970- 1975</u>	<u>1975- 1980</u>	<u>1970</u> (000)	<u>1980</u> (000)	<u>1965- 1970</u>	<u>1970- 1975</u>	<u>1975- 1980</u>
Urban-Oriented Employment	514.4	566.1	1.9	673.5	841.1	3.5	2.4	2.1	626.1	664.1	2.0	0.7	0.5
% Total Employment	70.8	72.0		72.7	73.0				72.7	72.8			
Geographic-Oriented Employment	179.1	189.2	1.0	222.0	280.1	3.2	2.5	2.2	204.6	217.3	1.6	0.7	0.6
% Total Employment	24.7	24.0		23.9	24.3				23.8	23.8			
Complementary Employment *	32.9	31.4	-0.9	30.9	30.7	-0.3	-0.1	-0.1	30.7	30.6	-0.5	-0.1	0.0
% Total Employment	4.5	4.0		3.3	2.7				3.6	3.4			
Total Employment	727.0	786.7	1.6	926.4	1151.9	3.3	2.3	2.1	861.4	912.0	1.8	0.7	0.5

\* Does not include "Other Nonagricultural" as this series has not been consistently available in the past.

St. Louis Employment Classifications:

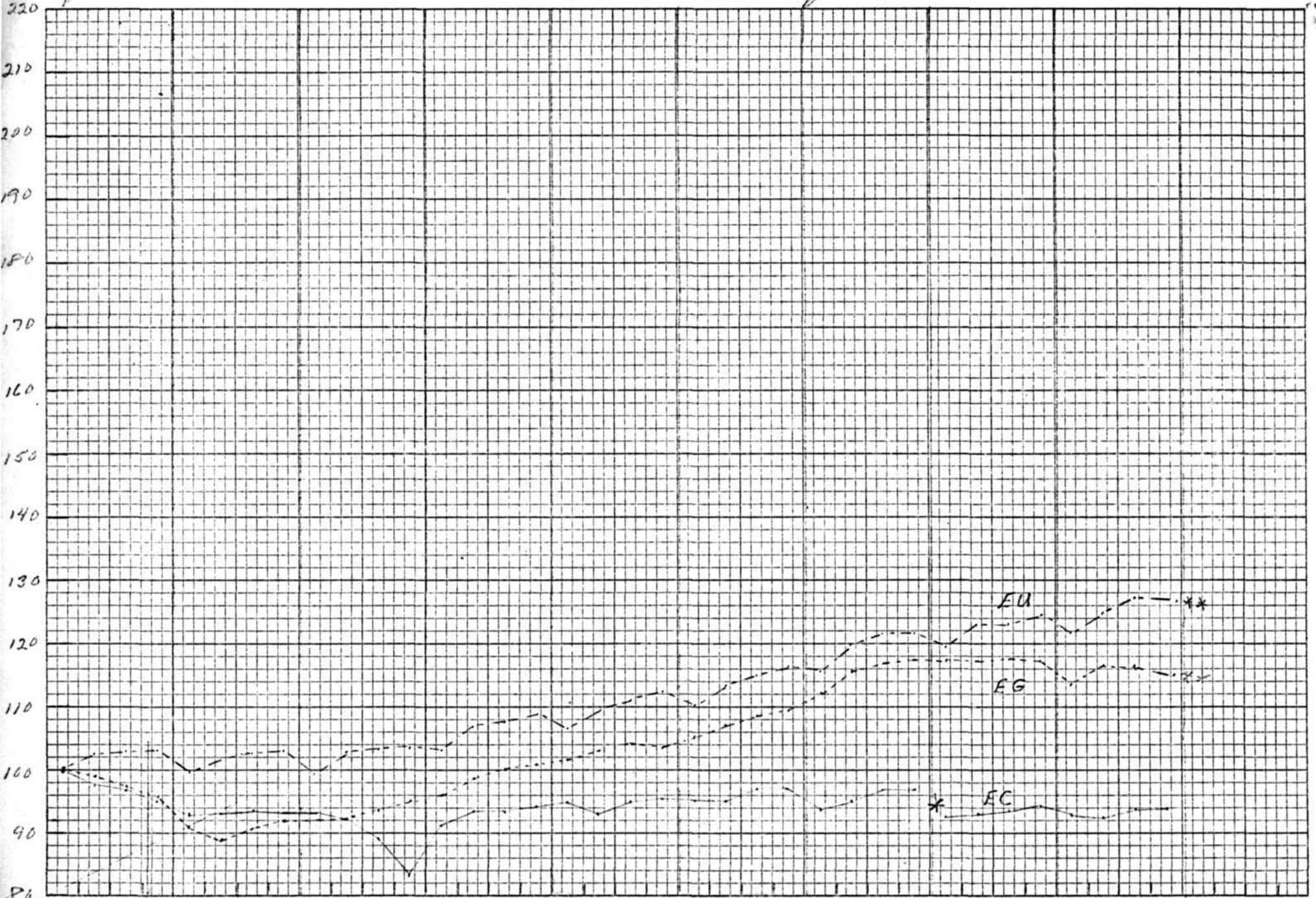
Urban-Oriented Industries E<sub>u</sub> - Lumber and Wood Products; Fabricated Metals; Other Food and Kindred Products; Paper and Allied Products; Printing and Publishing; Chemicals and Allied Products; Construction; Transportation and Public Utilities; Wholesale and Retail Trade; Finance, Insurance and Real Estate; Services; State and Local Government.

Geographic-Oriented Industries E<sub>g</sub> - Stone, Clay, and Glass; Primary Metals; Machinery; Electrical Machinery; Transportation Equipment; Meat Products; Beverages; Leather and Leather Products; Mining; Federal Government.

Complementary Industries E<sub>c</sub> - Textiles and Apparel; Petroleum Refining; Other Nondurables; Miscellaneous Durables.

ST. LOUIS Employment Trends

1st qtr. 1960 = 100



St. Louis Employment Projections

CHART 3

EMPLOYMENT  
(THOUSANDS) of Business

