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PERIPHERAL vs. CORE REGIONS IN EXTENDED INTEGRATED MARKETS: A PRELIMINARY U.S. APPLICATION

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Abstract

Industry-specific data on births, deaths, expansions and contractions of all US business establishments for the 1976-1988 period--and the number of jobs affected--are examined in this report for 382 labor market areas in the US. Percentage changes in jobs and labor income are used as indicators of economic change. Additional explanatory variables included in the study are percentage changes in the indicator series on industry-specific exports, distances to primary and secondary airline nodes, and area population density. Regression models were constructed to predict changes in the indicator variables for five two-year periods: 1978-80, 1980-82, 1982-84, 1984-86 and 1986-88. Shift-share models were prepared for each LMA to summarize period-to-period change in industry-specific total labor earnings. The periodic changes in labor earnings are attributed to three change sources--national growth, industry mix and regional share. The findings document the contribution of new and small firms to economic growth. The purpose of this paper is to account for the differential growth of peripheral and core labor market areas in the US. It will serve as a basis for building scenarios of future growth and development of peripheral areas in the US under alternative market and public policy assumptions. The findings are available, also, for comparison with related studies of regional economies in the Nordic countries and the Baltic rim. This paper is an outgrowth of a proposal by Reynolds and Maki (1990a) to use cross-national comparisons for forming and testing new insights into regional development processes.

Introduction

Domestic economic policies of the United States and many of the EC12 countries emphasize stability and growth. These policies promote local industry diversification, reduced rates of local unemployment and population out-migration, and increased rates of job and income growth. Yet, the local economies of peripheral areas continue to experience persistent losses in jobs and income.

The working hypothesis for testing the findings on regional growth stems from economic base theory. We propose that a region's economic performance is conditioned by its export-producing sectors and their competitive position in US and world markets. We propose further that a change in local economic environment leads to a change in competitive position. A change in competitive position leads to a change in exports. Finally, a change in exports leads to a change in economic performance.

The data sets for fitting the two models are county-level. The industry employment and labor earnings and business establishment distributions are based on the two-digit Standard Industrial Classification (SIC) Code. The US Department of Commerce Regional Economic Information System (REIS) statistical series provide the industry data for individual years and counties. The edited and machine processed Dun's Market Identifier (DMI) data files provide the statistical series on business firms and their organization. The six files of two-year change periods start with the 1976-78 period. The files are leased to the US Small Business Administration by Dun and Bradstreet.

Labor market areas (LMAs), based on commuting-to-work data from the 1980 US Census of Population and outlined in Figure 1, are the principal units of analysis (Tolbert and Killian, 1987). Commuting areas overlap state boundaries where the largest city in the area is located near a state boundary. Thus, the 3,124 US counties are aggregated into the 382 LMAs that serve as the relevant

geographical units for area economic performance.

Two modes of statistical analysis are used: regression and shift-share (Appendix). The regression analysis relates a series of independent, explanatory variables to change in employment. In the shift-share analysis, change in industry-specific labor earnings is attributed to three change sources--national growth, industry mix and regional share over the 1970 to 1986 period.

The national growth effect in the shift-share analysis is represented by change in total labor earnings over all industries in the US. The industry mix is measured by differential change in industry-specific labor earnings in the US economy. National growth and industry mix account for the external determinants of regional change. The regional share effect is measured by the differential change in industry-specific labor earnings in a given region. It accounts for an industry's competitive position in the given region relative to the same industry in the Nation.

Regression analysis was used to estimate the statistical association between a series of economic and demographic indicators and period-to-period change in total wage and salary employment. Regression models of the form cited earlier in this report were fitted to existing county-level data aggregated for the 382 multi-county LMAs. All variables were normalized for varying levels of total employment by converting total change into percentage change (that is, dividing the total change over each two-year period with its first-year value).

Jobs, labor income,, population and labor force are the principal economic and demographic indicators used and presented in this study. The several indicator variables are described for the purposes of this study as follows:

1. Change in employment refers to the period to period change in total LMA employment, with a two-year interval given for each period.

2. Change in personal income refers to the Regional Economic Information System (REIS) total personal income series adjusted for inflation. Like the REIS employment series, the county-level numbers are aggregated for each LMA.

3. Total labor earnings refer to the wage and salary income payments by place of work, adjusted for inflation. Period-to-period change in industry-specific labor earnings is documented in the shift-share analysis.

4. Positive excess earnings refer to the industry-specific earnings for an LMA more than its amount based on the US industry distribution of total labor earnings. Two industry groupings are used. One grouping is based on the two-digit US Standard Industrial Classification Manual. The second grouping is an aggregation of two-digit industry groups into 11 economically-differentiated groups for the shift-share analysis and the regression analysis.

5. Firm volatility refers to the period-to-period change in total number of firms due to births and deaths. Small Business Administration compilation of Duns Marketing Indicator files provided both the firm and the job data series.

6. Job volatility refers to period-to-period change in total employment due to firm births and deaths and job expansions and contractions.

7. Population density refers to number of persons per square mile in each LMA.

8. Airport node variable refers to the use of two cut-off points--one at 60 miles the other at 100 miles--for differentiating LMAs by distance to an airline.

We combine the findings of two studies in this report. The one study focuses on business volatility and economic growth (Reynolds and Maki, 1990a). The second study focuses on transportation and the economy of the Upper Midwest Region of the US (Maki, Huelgas and Chao, 1991). We also make use of insights gained from a third study still in progress (Reynolds and Maki, 1990b) to document the changing patterns of job and income growth in core and peripheral labor market areas and their related change sources. The principal findings are reported under four topical headings that follow.

Job and Income Growth

Findings on job and income growth are derived from fitting the excess earnings data to the economic base model for each labor market area. The clustering of two-digit industry groups is represented by eight types of LMAs identified in Figure 2. Each LMA type is defined by its dominant basic industry cluster as calculated from the county-level employment by residence series in the 1980 US Census of Population

The role and importance of industry clustering in rural and metropolitan core areas are represented by business volatility, excess labor earnings and access to airline and telecommunications nodes. Business volatility is represented by the entry of new firms and the exit of existing firms in both rural and metropolitan core areas and the related expansions and contractions in jobs.

Related study findings show the importance of business volatility--high establishment and job birth and death rates--in accounting for a region's economic growth (Reynolds and Maki, 1990b, p.90). The authors note that, "The process of economic change requires a substantial transfer of resources (capital, facilities, employees, entrepreneurial and managerial talent) from one firm to another, from one industry sector to another."

Excess labor earnings, when used as a measure of the geographic concentration and specialization of industry, describe the area-to-area linkages through exports of excess production to areas of deficit production. Export market conditions affect business and income volatility in the exporting areas, especially for cyclically-sensitive base economies, like mining and durable goods manufacturing.

Access variables, like distance to nearest airport node or proximity to nearest metropolitan core area, provide additional measures of rural-to-metropolitan area linkages. They serve as a surrogate measure of access to information and markets for high value added products and to growth-facilitating business distribution services in the metropolitan core areas.

Change Sources for Local Labor Earnings

Each measure of regional growth analysis varies in relative values from one period to the next. For some areas, the volatility in rates of regional growth is due to the cyclical sensitivity of the local economy. For others, the period-to-period changes in jobs and earnings are related to long-term changes in industry

product cycles. Changes in industry mix reveal both short-term and long-term changes in the importance of individual industries in the US economy. Changes in regional share reveal changes in the competitive position, or economic performance and importance, of a given industry relative to the corresponding industry in the US.

A distinguishing characteristic of declining and growing areas is the rapidity and direction of change in jobs and labor earnings. Once the volatility in jobs and income is removed, the residual "regional-share effect" becomes a measure of regional growth and decline. The results are the shift-share value for 100 selected US labor market areas delineated in Figure 1 and listed in Table 1.

Included in the shift-share analysis are 77 labor market areas located in the 13 state east-west transportation corridor region extending from Michigan to Oregon and Washington. The extended Upper Midwest Region in the transportation and economy cited earlier is included within the study region. It covers 64 LMAs. It the Lower Peninsula of Michigan and all of Idaho, Oregon and Washington.

Historically, the two study regions have experienced much economic volatility due to the many natural resource-based local economies in the interior states and cyclically-sensitive durable goods manufacturing elsewhere. The remaining 23 LMAs in the current study include both rapidly growing and generally declining base economies that vary in income volatility and overall growth from the lowest to among the highest.

Sources of income volatility--that is, period-to-period shifts in labor earnings--are illustrated by the shift-share analysis. This analysis includes the two long periods of economic recovery--1970 to 1980 and 1982 to 1986--separated by two recessions occurring in the 1980-82 period. Data for the recession from 1973 to 1975 are not included in the analysis. Both the income volatility index and the income growth index are based on income change over the entire 1970 to 1986 period.

The summary results of the shift-share analyses, as presented in Table 2, show vastly different growth patterns for the four regional groupings. Over the 16-year period, total labor earnings--the principal source of personal income--increased by more than $782 billion (in 1982 dollars), from $1,426 billion in 1970 to $2,208 billion in 1986. The overall increases ranged from $40.5 billion in Mid-continent West to $50 billion in Mid-continent East, $132 in comparison LMAs, and $560 billion in the remaining LMAs in the US. The comparison LMAs increased in importance from 10.6 percent of total US labor earnings in 1970 to 12.8 percent in 1986. Mid-continent East dropped from 9.5 percent of the total to 8.4 percent.

The principal reasons for the contrasting growth patterns rest with the base economies of the two regions. Not only are the local base economies of Mid-continent East dominated by below-average growth industries, but they also are marked by a continuing decline in the competitive position of their principal exports. The base economies of the comparison region are distinguished by an overall above-average industry-mix effect and an overall above-average regional-share effect.

A distinguishing difference between the high income volatility and low income volatility LMAs in Table 3 is the direction of relative change. It is strongly negative for high volatility areas and strongly positive for low volatility areas. For most high income volatility LMAs, a positive regional-share effect for the

1970s turned negative in the 1980s, thus contributing to the strongly negative relative change in the 1980s.

The ranking of total change in labor earnings in the 1970-86 period in Table 4 confirms the unique role of the local base economy in accounting for regional job and income growth. For the 30 fastest-growing LMAs, total labor earnings increased from $182.6 billion in 1970 to $345 billion in 1986--an increase of 89 percent. During the same period, total labor earnings increased by only 22 percent for the 30 slowest-growing LMAs--from $96.1 billion in 1970 to $116.9 billion in 1986.

High local labor income growth is as frequently associated with high as low labor income volatility--nine in both cases. In comparison, the low income LMAs include 13 of the highest and five of the lowest volatility LMAs. Thus the mid-range LMAs in labor income growth include 12 high and 12 low income volatility LMAs. The findings show a lack of strong correlation between income growth and income volatility when further differentiation of local base economies is lacking.

The excess earnings variables in the regression analysis (cited earlier and presented in the next section) are used, also, in estimating the industry mix in the base economies of the 100 LMAs. Excess earnings of each two-digit industry group in the county-level labor earnings series compiled and reported by the US Department of Commerce was calculated for each county and aggregated by LMA. The industry distribution of the excess earnings for the 30 highest and 30 lowest volatility LMAs for 1974 is presented in Table 5A. The corresponding distribution for 1986 is presented in Table 5B.

The base economies of the high volatility LMAs are marked by high levels of industry specialization in farming, mining or manufacturing. In these areas, the high income volatility is associated with a high degree of vulnerability to the vicissitudes of cyclically-sensitive export markets. Moreover, the extreme specialization of industry in the base economies of the high income volatility LMAs persisted through the 1970s and many of the 1980s. Where high income volatility was accompanied by slow income growth, the local base economies also faced shrinking export markets.

High income growth areas differ from high income volatility areas and low income growth areas in the diversity of their base economy, as shown in Table 6A and Table 6B. Even specialized base economies support high income growth when the export-producing sectors remain competitive in their export markets and maintain their market shares. Generally, however, the specialized fast-growing economies had lost their earlier momentum by the mid 1980s and faced, instead, much reduced income growth.

Accounting for Local Employment Change

Regression models for each year and their area orientations are presented in this section of the report, starting with the 1978-80 period and the composite area orientation. The findings for each model are reviewed in the context of the preceding discussion of the role and importance of the base economy of in regional economic growth.

Employment Change

Period-to-period percentage change in total wage and salary employment is the measure of regional economic well-being used in all regression models. The employment change over a two-year period is related to a series of explanatory variables, also for two year intervals, lagged by one period.

The explained variance attributed to individual regression models--measured by the adjusted R square values--ranges from 34 percent to 76 percent of total variance. The individual R square values are summarized as follows:

LMA Group	7880	8082	8284	8486	8688
All LMAs (381)	.6594	.5996	.3404	.5444	.5056
Metropolitan (81)	.6535	.5630	.5431	.5159	.5788
Rural (103)	.7365	.7606	.6307	.7495	.6788
Manufacturing (139)	.6317	.5035	.3870	.5186	.4643

Generally, the explained variance is higher for the beginning and ending periods than the three intervening periods. The regression model for the rural emphasis yields the highest R square values. The diversity and complexity of regional economic change in the early 1980s apparently added to the difficulties of statistical estimation.

Excess Earnings Change

The excess earnings change variable is estimated from the two-digit county-level wage and salary earnings series. The statistical series are prepared by the US Department of Commerce for the following years: 1970, 1975, 1980, 1982, 1985 and 1986. By straight-line data interpolation, intervening year estimates were obtained to complete the two-year even-year change series.

Statistically significant (at a 5 percent confidence level) estimates of the "All LMAs" regression model parameters (standardized Beta weights) are presented for the five two-year periods, as follow:

Industry Group	7880	8082	8284	8486	8688	E
Agriculture (1-9)	.396					R
Mining (10-14)	.345	.225			.272	R
Construction (15-17)	.164		-.076	.284	.119	U
Mfg.,Nondurables (20-3,26-31)	.165			.120		M
Mfg.,Durables (24-5,32-9)	.201	-.071	.094	.178		M
TCPU (40-47)						M
Wholesale (50-51)	.112			.090		R
Retail (52-59)	.216			.101		R
Business Serv. (60-7,73,81,86)			.119			R
Consumer(70,72,75-6,78-9,84,88)	.226	.065		.063	.144	R
Other Private Serv.(80,82-3)	-.053					U

Most excess earnings variables are positively correlated with employment change. Exceptions occur in the 1980-82 period and in construction, durable goods manufacturing and other services (health care, education and social services) that relate to their role in the 1980-82 recessions. In the preceding two-year period many LMAs peaked in total employment because of high levels of durable goods manufacturing in their local base economies. Peak employment levels in the 1978-80 period were followed, however, by large employment losses in the 1980-82 period.

The largest percentage change in total employment was associated with a given percentage change in agriculture sector labor earnings. On the other hand, the mining earnings-to-employment multiplier is large because of high earnings per worker in mining.

The series of 11 regression coefficients varied among LMAs because of primary economic emphasis (E)--urban metropolitan (U), rural (R) or manufacturing (M). The geographical distribution of the three groups of LMAs included in the additional regression analyses was cited earlier in Figure 2.

Employment effects of changes in construction and other private services, like health care, education and social services, were largest in the urban metropolitan areas. Employment effects of changes in manufacturing and the transportation, communications and public utilities sector were large in LMAs with a manufacturing orientation. However, for the remaining industry groups the employment effects were largest in LMAs with a rural emphasis.

Total Excess Earnings

The current year values of excess earnings were included in the model to account for the differential effect of sector size, as well as rates of change, on total employment. Again, this measure of the base economy proved statistically significant in explaining model variance, as shown by the fitted regression coefficient values below:

Industry Group	7880	8082	8284	8486	8688	E
Agriculture(1-9)	.106				.066	R
Mining(10-14)			-.555	-.139		M
Construction (15-17)	.119		.288		-.211	R
Nondurables (20-3,26-31)					.192	M
Durables (24-5,32-9)	-.076	-.056				M
TCPU (40-47)			-.220		-.203	M
Wholesale (50-51)						R
Retail (52-59)	.211	.070		.225	.323	U
Business Serv. (60-7,73,81,86)	-.105			-.113		U
Consumer(70,72,75-6,78-9,84,88)						M
Other Private Serv.(80,82-3)	.090					R

Sector size is related positively to employment change in agriculture, construction, nondurables manufacturing, retail trade and other services. It is negatively related to employment change in mining, durable goods manufacturing, the transportation, communications and public utilities sector, and business services.

Employment effects of sector size vary with economic emphasis. They are the largest in (1) the urban metropolitan emphasis for retail trade and business services, (2) the rural emphasis for agriculture, construction, wholesale trade and other services, and (3) the manufacturing emphasis for mining, manufacturing, the transportation, communications and public utilities sector, and consumer services.

Business Volatility

Business volatility is represented by changes in the number of establishments and related jobs due to their establishment births and deaths, expansions and contractions. Firm volatility is represented by four variables--autonomous births and deaths and branch births and deaths. Job volatility is represented by eight variables--the factorial combination of autonomous and branch, births and deaths,

and expansions and contractions. The employment effects of each of the 12 explanatory variables are summarized as follows:

Business Volatility Variable	7880	8082	8284	8486	8688	E
Branch Births		.099	-.135	.093		R
Branch Deaths			.100		-.103	R
Autonomous Births	.175	.312	.296		.264	U
Autonomous Deaths			.149			R
Job Growth, Auton. Births	.083					R
Job Loss, Auton. Contractions			.098			M
Job Loss, Auton. Deaths						R
Job Growth, Auton. Expansions					.240	M
Job Growth, Branch Births			-.094			R
Job Loss, Branch Contractions						
Job Loss, Branch Deaths					.097	U
Job Growth, Branch Expansions						R

Business volatility variables are positively associated with employment change, except for branch births and branch deaths in the 1982-84 period and job growth associated with branch births in the 1986-88 period. Autonomous firm births have the largest effect on total area employment.

Labor market areas with a rural emphasis are more strongly affected by the business volatility variables than LMAs with an urban metropolitan emphasis, particularly with autonomous births and autonomous expansions. While LMAs with a rural emphasis may experience more income volatility than LMAs with an urban metropolitan orientation, they also are more susceptible to the positive influences of increased business activity. One result of having a concurrence in firm births and job expansions as well as firm deaths and job contractions is an economic dynamism that shifts local resources into more productive enterprises.

Spatial Structure

Market access differences in the spatial structure of rural and metropolitan areas are represented by three dummy variables. The values of 1 or 0 depend upon the status of the LMA relative to the specified access attribute, population density and location in or out of the Sunbelt (Texas, Oklahoma and Florida). Distances from the principal urban center of the LMA to the nearest and the next nearest airline nodes are the measures of market access represented by the dummy variables. The importance of the three dummy variables, population density, Sunbelt location (also a dummy variable) and personal income in accounting for local employment is summarized as follows:

Market Access Variable	7880	8082	8284	8486	8688	E
Node 1 if less than 60 miles			.154	.070		R
Node 2 if less than 100 miles	.107	.099				
Option if diff is less than 50		.188		.053		U
If LMA is in Sunbelt	.167	.404		-. 183	-.173	U
Population Density					-.117	M
Personal Income Change	-.201			.107	.086	M

Market access as represented by proximity to one or two of the 29 US airline nodes is a statistically significant locational attribute for differentiating among LMAs with reference to employment change. It helps articulate the role and dimensions of location in regional economic growth and change.

Each of the three economic orientations cited earlier has a different response to the market access variables. Proximity to a primary and secondary airline node is positively correlated with employment change, especially for the LMAs with a rural orientation. Proximity to two airline nodes is most important to LMAs with a metropolitan orientation.

A Sunbelt location was a positive factor in employment growth in the 1978-80 and 1980-82 periods, but a negative factor in the 1984-86 and 1986-88 periods. The LMAs with a metropolitan orientation were slightly more influenced by these factors in three of the four periods than the combined LMAs. Population density was a negative factor for LMAs with a manufacturing orientation during the 1980-82 period, but a positive factor in the 1984-86 period. It was a positive factor for LMAs with a rural orientation in the 1978-80 period. Finally, total personal income change was positively associated with employment change in the 1984-86 and 1986-88 periods and negatively in the 1978-80 period. Its largest effect was in the LMAs with a manufacturing orientation.

Assessing Competitive Position of Local Labor Markets

One interpretation of the study findings is that a particular region's location in the national and global regional settlement and trading systems imposes severe constraints on regional development options. A rural LMA located well beyond the outer limits of any metropolitan LMA has diminished prospects for long-term economic viability beyond the lifetimes of its principal product cycles. Even the incorporated municipalities of the metropolitan core area lack the economic and political power to seriously affect the decision options of its largest export-producing businesses (Jutila and Maki, 1991). The conclusions are inferred in part from comparisons of the contrasting labor earnings and employment experience of core versus peripheral labor market areas in the US.

Core vs. Peripheral Labor Market Areas

The principal findings of the two studies cited earlier are summarized, in part, by a series of statements contrasting the two types of areas--core and periphery. The study findings show that:

1. Slow-growing labor market areas (LMAs) were not consistently slow-growing and fast growing LMAs were not consistently fast growing in the three time periods--1970-80, 1980-82, and 1982-85 included in this study. However, slow-growing areas in total were consistently slow growing and the fast-growing areas in total were consistently fast growing in each of the three time periods.

2. Slow-growing areas experienced both a negative industry effect and a negative regional share effect during each of the three time periods. Fast-growing areas experienced both negative and positive industry mix effects and generally positive regional share effects.

3. Slow-growing areas were concentrated in the sparsely populated parts of the study region while fast-growing areas were concentrated in and around metropolitan core areas.

4. Exceptional shifts in the commodity-producing sectors accounted for high income volatility among LMAs while low volatility areas generally maintained their diverse base economy.

5. Rural areas with some exceptions retained high levels of industry specialization, while metropolitan areas generally sustained their diversified base economies during each of the three study periods.

6. High business (not income) volatility was associated with high growth and low business volatility was associated with low growth.

7. Access to, and choice of, airline node was associated with high growth.

8. Sunbelt location was associated with high growth in the 1970s and low growth in the 1980s.

In summary, the peripheral LMAs were most vulnerable to cyclically-induced income volatility while metropolitan core areas benefitted most from business volatility. Transitional rural areas experienced high income and business volatility and, also, high income growth.

Attributes of Local Economic Environment

Location in the context of economic competitiveness used here is thus much more than the geography of physical space. It includes, also, economic space and political space. It is the total local environment and its available human, natural and physical resources for successful business performance. It includes the local infrastructure, the base economy and the resources and capabilities for information access by the resident businesses and other economic units.

Local Infrastructure. Building local infrastructure, as a regional issue, has much currency in legislative committees because of the opportunity it offers local representatives for "bringing home the bacon." Moreover, numerous studies show a high correlation between public infrastructure expenditures and the profitability of business investment (Aschauer, 1991). Understandably, the findings are warmly received in legislative circles, even though the studies are highly aggregate in nature and the assumed causal relationship, if any, is questionable.

Nonetheless, an important attribute of an optimal location for a business enterprise is the local infrastructure--the physical facilities and economic resources shared, in varying degree, by all local businesses (Porter, 1990). For the most part, the local infrastructure is in the public sector, although it includes important quasi-private and private enterprise. The local infrastructure includes the regulated industries--transportation, communications and public utilities--and banking, finance and insurance companies, management consulting agencies, and research and development laboratories.

Each industry cluster in a local community shares the total local infrastructure, which represents the macro-economic entity that relates to the individual export-producing businesses in the local economy. By definition, the export-producing businesses are part of the local base economy and, typically, the largest employers in this category are branch plants or headquarters offices of multi-national companies trading in global markets. The branch plants, particularly, are affected by corporate decisions based on national and global rather than local considerations. However, the productivity of the local work force is strongly affected by the quality of local training and education in public schools

and post-secondary educational institutions.

Base economy. The location attribute for strengthening a region's economic base includes support industries serving the region's residentiary sector and the local transportation and telecommunications infrastructure. Both supporting industries and local infrastructure are directly affected by local governmental efforts the local macro-economic environment addressed by these efforts. The base economy, however, is likely to include direct linkages to various micro-economic decision centers. They include the regional, national and multi-national firms that function in a global macro-economic environment of which the local branch plants and offices are a part. Local efforts to directly affect the local base economy thus may pale besides the micro-economic decisions of the largest employers in the base economy (Jutila and Maki, 1991).

The study findings presented earlier show a high degree of industry specialization in most LMAs, especially among those with the highest income volatility. The incidence of specialization has not changed among individual LMAs with the highest income volatility. Overall, reduced dependence on agricultural specialization among the 100 selected LMAs has been replaced by increased dependence on manufacturing specialization. Until the 1982-84 period, mining specialization also was important.

For most LMAs with a rural or manufacturing orientation, replacement of extreme dependence on industry specialization with a more diverse base economy seems unlikely, given the factual evidence presented earlier. Especially the peripheral rural LMAs in the economic regions centered on the metropolitan LMAs are overwhelmingly dependent on the utilization of local natural resources.

Transitional LMAs are the exceptions to the overall pattern of continuing industry specialization, according to the study findings. Apparently they are close enough to the metropolitan core area to gain new industry, particularly new businesses of industries branching from the metropolitan core area to low cost sites in contiguous rural areas. Also, a new, diverse base economy is emerging in the transitional LMAs because of metropolitan core area businesses subcontracting with transitional area businesses. Thus, transitional rural areas are likely to experience high income growth and high income volatility and, also, high business volatility.

Metropolitan LMAs, with the exception of areas marked by negative industry mix and regional share values in a highly specialized base economy, generally are the fastest growing in labor earnings. At the same time, income volatility may range from the lowest to among the highest LMAs. A high degree of dependency on a specialized base economy would still sustain high income growth as shown by the strongly positive industry mix and regional share effects. Business volatility is generally high in metropolitan areas.

The promoting of regional growth is a regional issue, therefore, severely constrained in its successful implementation. The realities of business location, industry product cycles and access to new product and process technologies are constraining influences on regional growth.

If individual LMAs were assigned to one of two types of export-producing industry clusters--those producing a standardized and readily tradeable product and those producing a non-standardized less

readily tradeable product--the peripheral LMAs would dominate the first cluster and the metropolitan LMAs would dominate the second cluster. Successful strategies for maintaining and improving on existing business locations, products and technologies would thus differ for the two types of industry clusters. Government intervention would be limited primarily to the maintenance of a favorable economic environment.

Support industries produce goods and services for local intermediate and final markets. Local industries purchasing semi-finished products are the intermediate markets while households, businesses and governments purchasing finished products are the final markets.

The location attributes of support industries are simple and straightforward in their implications for new business formation: all markets are local. Any excess product demand is fulfilled by imports from outside the LMA. Therefore, economies of scale in production and production knowledge are the critical limiting factors facing entrepreneurial efforts in establishing strongly competitive new business ventures tapping into existing local markets.

Information access. Improving access to decision information by the residents of a region is of over-riding importance in building local infrastructure or supporting the base economy. However, access to information on the part of local community leaders and resident small business managers is often limited by available local resources. The decision centers of the large corporations with branch plants and offices in the local community have the access advantage.

Information production, distribution, interpretation and use are essential functions of education and research institutions. Despite the prominence of these institutions, their individual missions are more than likely to avoid the challenge of improving access to information for purposes of local business expansion and community development.

Nonetheless, key sectors for improving local access to information include state and local educational institutions and related community functions, such as city and neighborhood libraries and social centers. Moreover, various information partnerships that involve local businesses and community leaders, as well as state and local governments, can become active participants in improving access to decision information.

Summary and Conclusions

The purpose of this paper is to account for the differential growth of peripheral and core labor market areas in the US economy as a basis for (1) building scenarios of future growth and development of peripheral areas in the US under alternative market and public policy assumptions and (2) comparing the findings for selected US labor market areas with the findings of related studies of regional economies in the Nordic countries and the Baltic rim. We combine the findings of two studies and the insights gained from a third study still in progress to document the changing patterns of job and income growth in core and peripheral labor market areas and related change sources.

The working hypothesis for testing the findings on regional growth stems from economic base theory. This theory states that a region's economic performance is conditioned by its export-producing

sectors and the competitive position of its export-producing businesses in US and world markets.

Peripheral areas--the sparsely-populated labor market areas producing standardized, tradeable agricultural, mineral and timber products--would benefit from export growth. The economic and political importance of these products and their areas of production has declined in recent years.

Earnings per worker also are high in metropolitan core regions relative to rural regions. Yet, the two contrasting types of regions are linked as interdependent local economies because of their common product markets and input supply sources. Once differences in the base economies of the two types of areas are accounted for, business volatility is positively, rather than negatively, associated with economic growth.

Included in the shift-share analysis are 77 labor market areas located in the 13 state US Mid-continent east-west transportation corridor region extending from Michigan to Oregon and Washington. This transportation corridor region has experienced much economic volatility due to its many natural resource-based local economies in its interior states and cyclically-sensitive durable goods manufacturing elsewhere in the region. The remaining 23 LMAs in this study include both rapidly growing and generally declining base economies that vary in their indexes of income volatility and overall growth from the lowest to among the highest.

The largest percentage change in total employment in the regression analysis reported in this study was associated with a given percentage change in agriculture sector labor earnings. On the other hand, the mining earnings-to-employment multiplier is large because the high earnings per worker in mining.

The series of 11 regression coefficients varied among LMAs because of primary economic emphasis (E)--urban metropolitan (U), rural (R) or manufacturing (M). Employment effects of changes in construction and other private services were largest in the urban metropolitan areas. The employment effects of changes in manufacturing and the transportation, communications and public utilities sector were large in LMAs with a manufacturing orientation. However, for the remaining industry groups the employment effects were largest in LMAs with a rural emphasis.

Business volatility is represented by changes in the number of businesses and related jobs due to establishment births and deaths and job expansions and contractions. Firm volatility is represented by four variables--autonomous births and deaths and branch births and deaths. Job volatility is represented by eight variables--the factorial combination of autonomous and branch, births and deaths, and expansions and contractions.

Business volatility variables are positively associated with employment change, except for branch births and branch deaths in the 1982-84 period and job growth associated with branch births in the 1986-88 period. Autonomous firm births have consistently the largest effect on total area employment.

Labor market areas with a rural emphasis are more strongly affected by the business volatility variables than LMAs with an urban metropolitan emphasis, particularly with autonomous births and

autonomous expansions. While LMAs with a rural emphasis may experience more income volatility than LMAs with an urban metropolitan orientation, they also are more susceptible to the positive influences of increased business activity. One result of having a concurrence in firm births and job expansions as well as firm deaths and job contractions is an economic dynamism that shifts local resources into more productive enterprises.

Market access as represented by proximity to one or two of the 29 US airline nodes is a statistically significant locational attribute for differentiating among LMAs with reference to employment change. It helps articulate the role and dimensions of location in regional economic growth and change.

Each of the three economic orientations cited earlier has a different response to the market access variables. Proximity to primary and secondary airline nodes is positively correlated with employment change, especially for the LMAs with a rural orientation. Proximity to two airline nodes is most important to LMAs with a metropolitan orientation.

One interpretation of the study findings is that a particular region's location in the national and global regional settlement and trading systems imposes severe constraints on regional development options. A rural LMA located well beyond the outer limits of any metropolitan LMA has diminished prospects for long-term economic viability because of reduced access to vital business and market information. Even the incorporated municipalities of the metropolitan core area lack the economic and political power to seriously affect the decision options of the largest export-producing businesses. It is quite possible that at best many peripheral areas must aspire to a gradual decline in economic and social well-being. If fortunate, they may be assisted by some new sense of fairness in the implementation of contractionary public policies affecting natural resource-based local economies.

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APPENDIX: Measuring and Predicting Regional Growth

Place-to-place Variability

Area differences in job and income growth are "explained" for a given two-year period in a series of equations based on a model of regional growth as follows:

REGCHG = F(BUSVOL, BASECHG, ACCESS),

where,

REGCHG is a regional growth indicator variable, i.e., jobs or income changes;

F denotes a functional relationship between the target, or dependent, and explanatory, or independent, variables;

BUSVOL is a set of business volatility variables, e.g., change in jobs due to establishment births, deaths, expansions and contractions;

BASECHG is a set of area economic base variables, e.g., change in excess earnings of specified industry group;

ACCESS is a set of distance variables indicating access to airline nodes.

Period-to-period Variability

Period-to-period differences in jobs and income are "explained" for a given area are by a "shift-share" model of the form,

REGCHG = F (USGROWTH, INDMIX, AREASHARE),

where,

REGCHG is a regional growth indicator variable, i.e., jobs or income changes;

F denotes an identical relationship between the target, or dependent, and explanatory, or independent, variables;

USGROWTH is a set of aggregate US industry change variables, i.e., change in real labor earnings;

INDMIX is a set of industry-specific US change in industry-mix variables, i.e., change in industry-specific real labor earnings less aggregate US industry change;

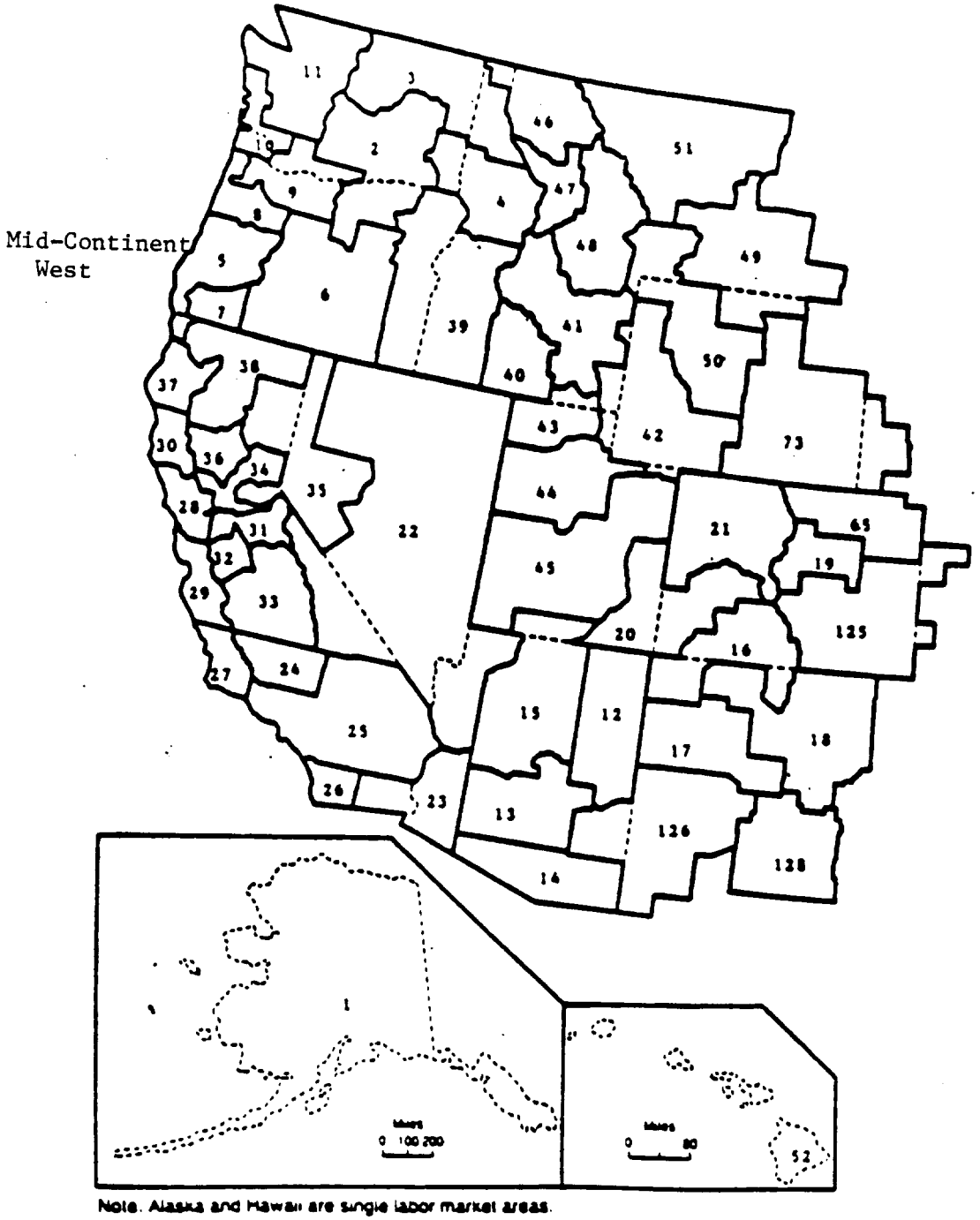
AREASHARE is a set of industry-specific area change variables, i.e., change in industry-specific area real labor earnings less corresponding change for US.

Measures of regional growth can be sorted into three broad categories--internal, external and intervening. The internal measures include the target variables--jobs and income--that are affected by local economic activity and the intervening variables and relationships. The external measures include industry-specific production of all products originating in the US and each area industry's share of the total product. Most rural areas of the United States are influenced heavily by external conditions--the general business cycle and world trade. The intervening measures, like market or employment share (that is, the proportion of the total product market or industry employment share accounted for by the local industry), link internal to external variables.

In addition, the response of each product market to changes in product prices and consumer incomes and the response of the total production of each product to improvements in productivity--measured by increases in output per hour worked--must be estimated to account for local changes in industry employment, earnings and productivity. Productivity per worker, especially in rural areas, is closely geared to investment per worker. For the dominant small business enterprise in rural areas, investment per worker is generally low, which results, in part, from limited access to export market information and access.

Figure 1A

Western Labor Market Areas with LMA Codes

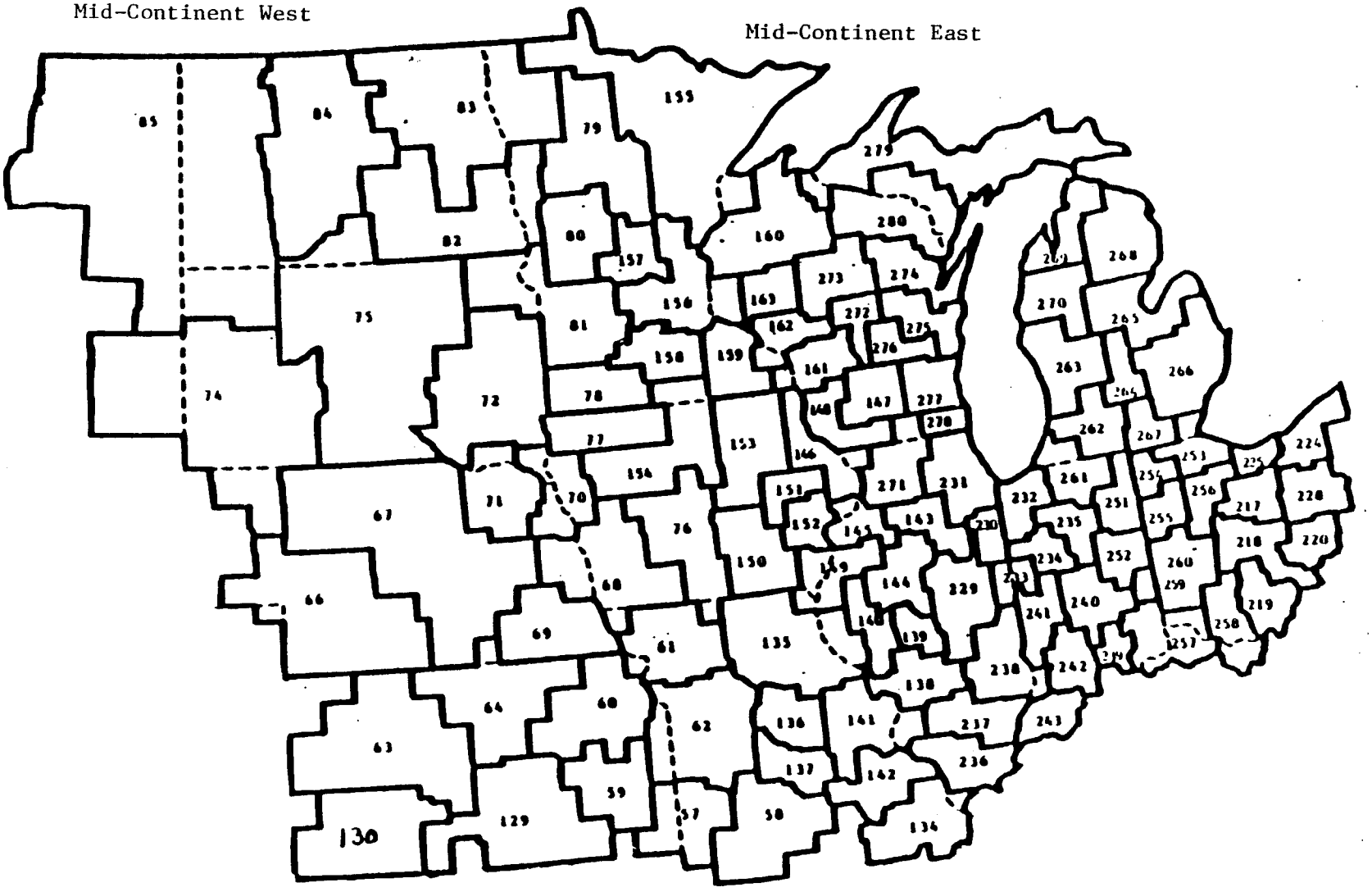


Note. Alaska and Hawaii are single labor market areas.

Source: Tolbert, Charles M. and Molly Sizer Killian. 1987. Labor Market Areas for the United States. Washington, D.C: US Department of Agriculture, Economic Research Service, Agricultural and Rural Economy Division, Staff Report AGE870721.

Figure 1B

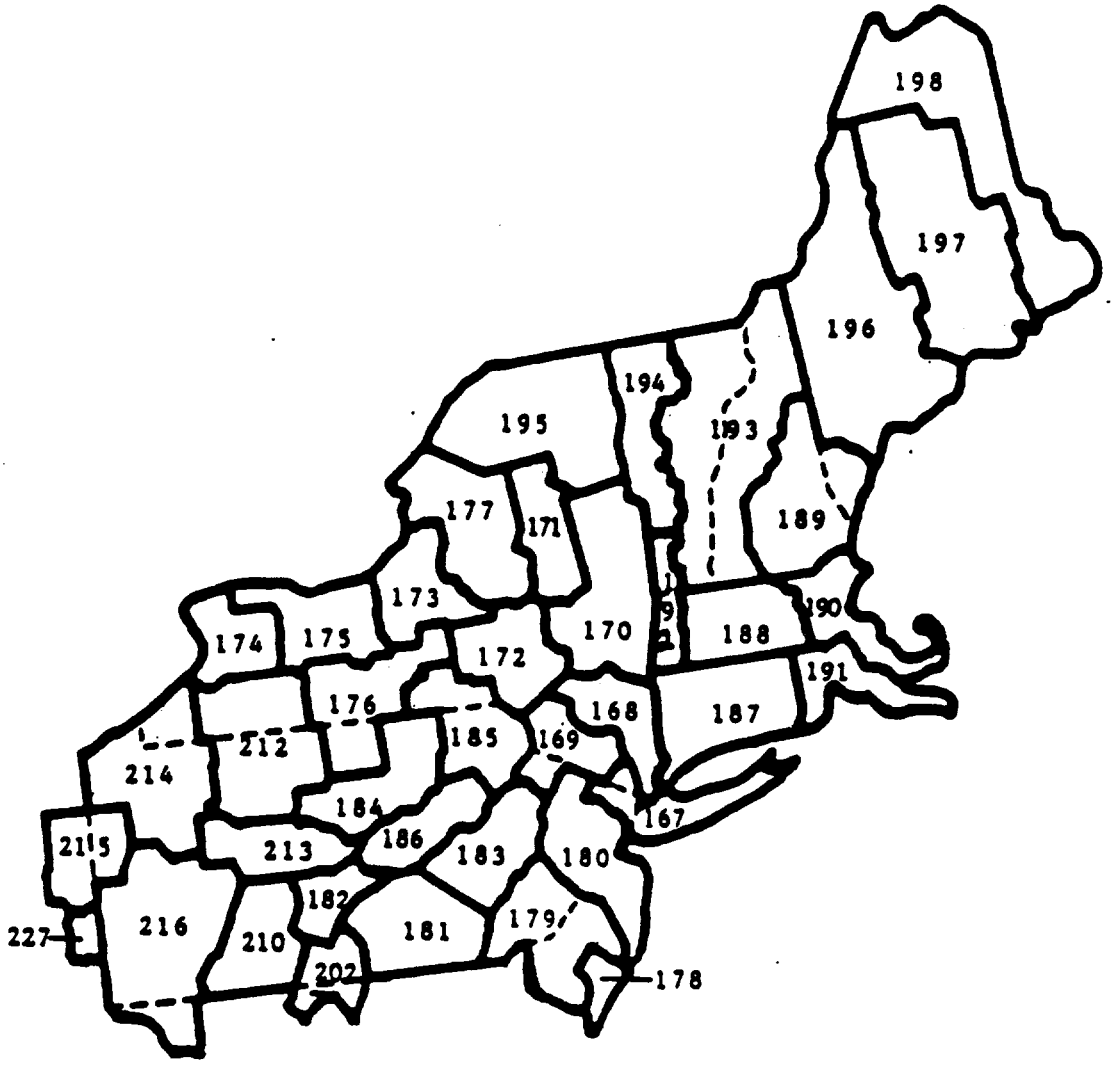
North Central Labor Market Areas with LMA Codes



Source: Tolbert, Charles M. and Molly Sizer Killian. 1987. Labor Market Areas for the United States. Washington, D.C: US Department of Agriculture, Economic Research Service, Agricultural and Rural Economy Division, Staff Report AGE870721.

Figure 1C

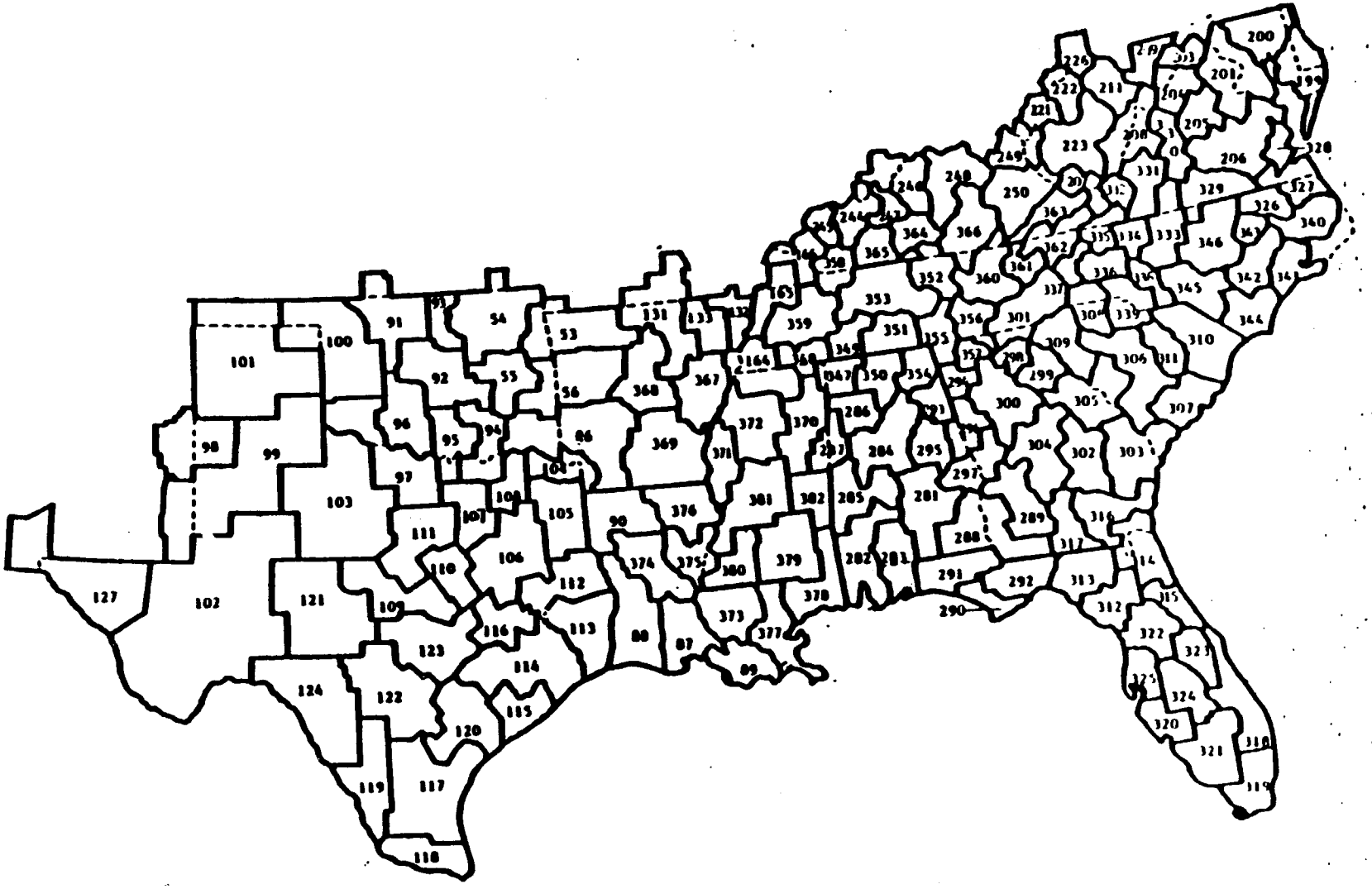
Northeastern Labor Market Areas with LMA Codes



Source: Tolbert, Charles M. and Molly Sizer Killian. 1987. Labor Market Areas for the United States. Washington, D.C: US Department of Agriculture, Economic Research Service, Agricultural and Rural Economy Division, Staff Report AGE870721.

Figure 1D

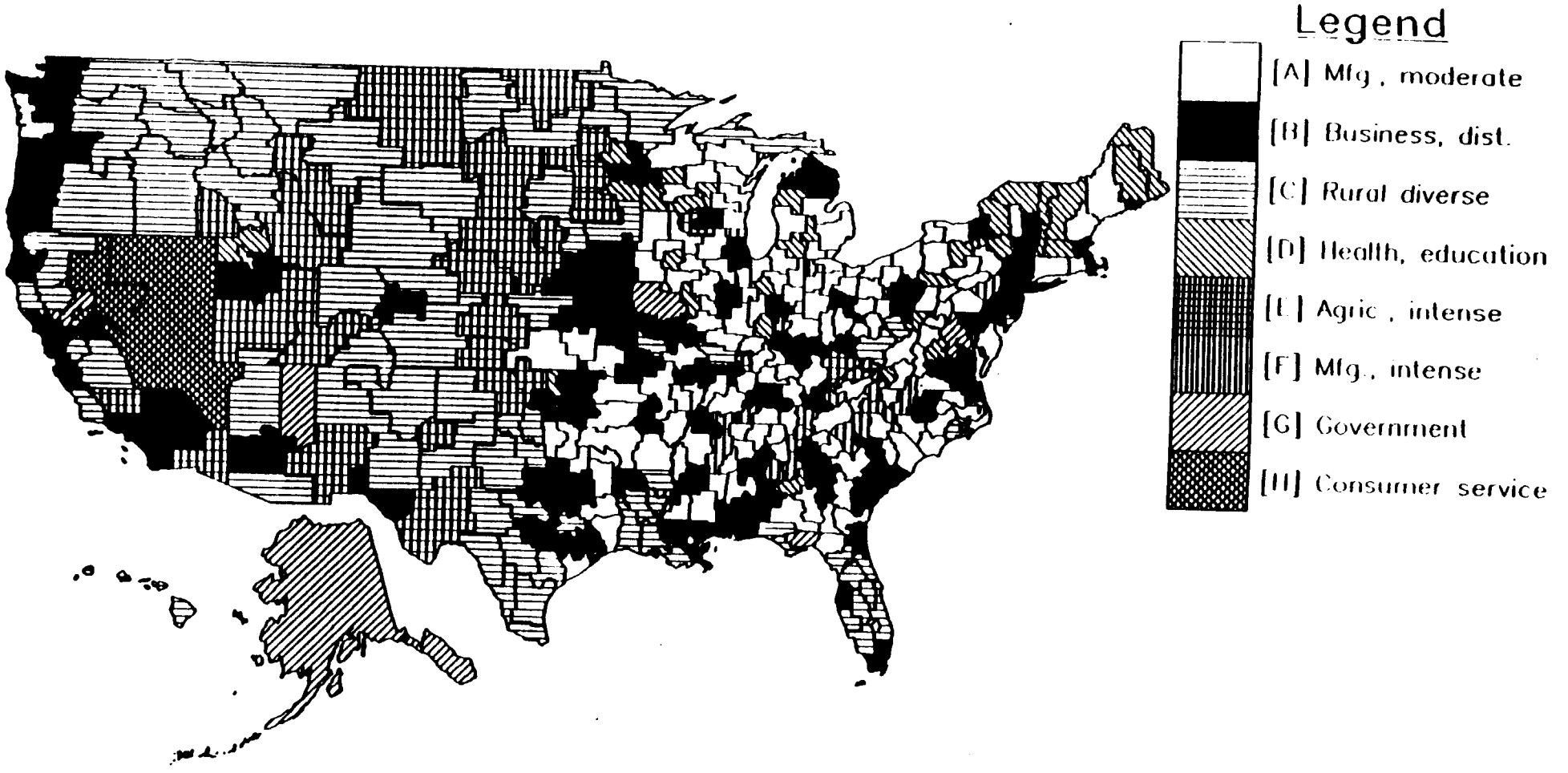
Southern Labor Market Areas with LMA Codes



Source: Tolbert, Charles M. and Molly Sizer Killian. 1987. Labor Market Areas for the United States. Washington, D.C: US Department of Agriculture, Economic Research Service, Agricultural and Rural Economy Division, Staff Report AGE870721.

Figure 2

Location of Eight Types of LMAs



Source: Tolbert, Charles M. and Molly Sizer Killian. 1987. Labor Market Areas for the United States. Washington, D.C: US Department of Agriculture, Economic Research Service, Agricultural and Rural Economy Division, Staff Report AGE870721.

Table 1. Total labor earnings (1982 $) for all industry and volatility and growth indexes of specified labor market areas; Mid-Continent West, Mid-Continent East and Comparison Labor Market Areas, US, 1970-1986

No.	Labor Market Area	LMA	Labor Earnings 1970 (mil.$)	Labor Earnings 1986 (mil.$)	Volat Index (Rank)	Growth Index (Rank)
1	WA-OR:WALLA WALLA ARE	2	2664	4379	25	37
2	WA-ID:SPOKANE AREA	3	2887	4570	73	40
3	ID-WA:LEWISTON AREA	4	833	1061	53	78
4	OR-CA:EUGENE AREA	5	2253	3203	23	62
5	OR:BEND (CENTRAL)	6	773	1186	19	51
6	OR:MEDFORD (SW)	7	669	1221	26	23
7	OR:SALEM AREA	8	1998	3243	47	33
8	OR-WA:PORTLAND AREA	9	8270	13467	54	38
9	OR-WA:LONGVIEW-COAST	10	1282	1690	24	58
10	WA:SEATTLE-TACOMA MET	11	17344	30708	81	18
11	ID:SOUTH CENTRAL	40	635	904	31	69
12	ID:POCATELLO AREA	41	1131	1784	67	42
13	WY-ID-UT:ROCK SPRINGS	42	420	1130	4	2
14	UT-ID:LOGAN AREA	43	376	774	92	11
15	MT-ID:KALISPELL AREA	46	460	661	63	52
16	MT:MISSOULA AREA	47	441	728	36	35
17	MT:BUTTE-HELENA AREA	48	702	855	70	79
18	MT-WY:BILLINGS AREA	49	980	1521	18	32
19	WY-MT:YELLOWSTONE N P	50	539	847	7	45
20	MT:GREAT FALLS AREA	51	1124	1141	35	100
21	NE-CO:NORTH PLATTE AR	66	822	1140	30	47
22	NE:GRAND ISLAND AREA	67	1720	2389	2	36
23	NE-IA-MO:OMAHA METRO	68	5668	7716	43	59
24	NE:LINCOLN METRO	69	1942	2811	21	46
25	IA-NE-SD:SOUIX CITY	70	1258	1506	66	82
26	NE-SD:NORFOLK AREA	71	557	805	6	41
27	SD:SOUIS FALLS AREA	72	1642	2351	89	56
28	WY-NE:CHEYENNE AREA	73	1592	2486	1	60
29	SD-NE-WY:RAPID CITY A	74	976	1720	11	17
30	SD-ND:ABERDEEN-WEST	75	896	1019	28	86
31	IA-MO:DES MOINES METR	76	4004	5590	94	66
32	IA:SPENCER (NW) AREA	77	903	1017	27	97
33	MN:WORTHINGTON (SE)	78	788	844	60	98
34	MN:BEMIDJI-N CENTRAL	79	507	811	56	30
35	MN:ALEXANDRIA AREA	80	622	847	58	63
36	MN-SD:MORRIS-SISSETON	81	1113	1362	34	88
37	ND-MN:FARGO-MOOREHEAD	82	1324	1934	69	48
38	ND-MN:GRAND FORKS ARE	83	1297	1754	33	64
39	ND;MINOT-BISMARK AREA	84	1033	1633	20	24
40	ND-MT-SD:DICKINSON AR	85	989	1206	9	73
	Total Mid-continent West		75431	116013		
41	IA-IL:DUBUQUE AREA	146	1529	1669	64	96
42	WI:MADISON AREA	147	3049	4447	84	53
43	WI:PLATTEVILLE AREA	148	686	801	39	92
44	IA-IL-MO:BURLINGTON	149	1442	1606	90	91
45	IA:OTTUMWA AREA	150	1263	1495	57	85
46	IA:CEDAR RAPIDS AREA	151	1654	2049	71	83
47	IA:IOWA CITY AREA	152	982	1557	42	28
48	IA:WATERLOO AREA	153	2275	2520	40	94
49	IA-MN:MASON CITY AREA	154	2229	2456	41	95
50	MN-WI:DULUTH AREA	155	2243	2474	37	93
51	MN-WI:MPLS-ST PAUL ME	156	17234	28692	50	26
52	MN:ST CLOUD AREA	157	793	1390	76	20
53	MN:MANKATO AREA	158	1023	1788	80	17
54	MN:ROCHESTER AREA	159	1476	2136	75	54
55	WI:NORTHWEST AREA	160	629	1041	77	29
56	WI-MN:LA CROSSE AREA	161	952	1466	78	44
57	WI-MN:WINONA MN AREA	162	506	698	62	65
58	IN-MI:SOUTH BEND AREA	261	4996	6595	13	81
59	MI:KALAMAZOO AREA	262	3491	4564	96	72
60	MI:GRAND RAPID AREA	263	5843	9094	49	39
61	MI:LANSING AREA	264	2915	4491	88	43
62	MI:MIDLAND AREA	265	3473	4509	55	77
63	MI:DETROIT METRO	266	42911	55904	17	74
64	MI:JACKSON AREA	267	1774	1819	79	99
65	MI:HURON FOREST AREA	268	607	801	32	81
66	MI:TRAVERSE CITY (NW)	269	709	1236	51	27
67	MI:CADILLAC AREA	270	566	752	44	75
68	IL-WI:ROCKFORD AREA	271	4413	5612	45	70
69	WI:STEVENS POINT AREA	272	735	1274	83	22
70	WI:WAUSAU AREA	273	909	1380	68	50
71	WI:GREEN BAY AREA	274	1447	2499	85	21
72	WI:OSHKOSH AREA	275	3202	4703	97	49
73	WI:FOND DU LAC AREA	276	751	992	91	68
74	WI:MILWAUKEE METRO	277	12088	15504	93	76
75	WI:KENOSHA AREA	278	2153	2676	29	80
76	MI-WI:UPPER PENNSULIA	279	1236	1424	65	90
77	WI-MI:IRON MOUNTAIN	280	725	1062	72	57
	Total Mid-continent East		135197	185176		
78	AZ:HOLBROOK (NE)	12	3190	672	38	87
79	AZ:PHOENIX METRO	13	7442	19696	98	4
80	AZ:TUSCON METRO	14	2527	5429	96	9
81	AZ-UT:FLAGSTAFF-CANYO	15	463	1068	82	7
82	NM:DURANGO-TAOS	16	555	1202	5	10
83	CO:DENVER METRO	19	9760	22467	46	8
84	CO:GRAND JUNCTION-NW	21	765	1884	3	6
85	CA:LOS ANGELES METRO	25	82481	147132	52	19
86	UT:SALT LAKE CITY MET	44	5408	10363	61	15
87	UT:CEDAR CITY-PRICE	45	512	1090	8	12
88	CO:FT COLLINS-NE AREA	65	1340	2648	59	13
89	NY:NORTHEAST AREA	195	1361	1700	16	71
90	ME:PORTLAND METRO	196	3487	5680	22	25
91	ME:BANGOR METRO	197	1048	1609	48	34
92	WV-VA:BLUEFIELD	207	844	948	14	89
93	FL:WEST PALM BEACH	318	4700	11839	95	5
94	FL:MIAMI METRO	319	14037	26961	87	14
95	FL:SARASOTA AREA	320	1274	3414	99	3
96	FL:FT MYERS AREA	321	982	2973	100	1
97	NC-VA:GREENBOROUGH AR	333	4574	7045	15	31
98	LA:BATON ROUGE METRO	373	3004	5483	10	16
99	LA:ALEXANDRIA AREA	374	933	1326	74	55
100	LA-MS:NATCHEZ MS AREA	375	456	542	12	84
	Total Comparison LMAs		151140	283169		
	Total US		1425767	2208097		

Table 2. Total and relative labor earnings (in 1982$) and period-to-period change sources: by regional groupings of US labor market areas, 1970-86

No.	Year and Change Source	Total Labor Earnings (1982$) Mid-Continent Comparis West	Mid-Continent Comparis East	Mid-Continent Comparis LMAs	Other LMAs	All LMAs	Proportion of Total Mid-Continent Comparis West	Mid-Continent Comparis East	Mid-Continent Comparis LMAs	Other LMAs	All LMAs
		(mil.$)	(mil.$)	(mil.$)	(mil.$)	(mil.$)	(pct.)	(pct.)	(pct.)	(pct.)	(pct.)
1	1970, Totals	75431	135197	151140	1063999	1425767	5.3	9.5	10.6	74.6	100.0
2	US Growth	25388	45504	50870	358114	479875	33.7	33.7	33.7	33.7	33.7
3	Industry Mix	-2452	-1462	-258	4172	0	-3.3	-1.1	-0.2	0.4	0.0
4	Regional Share	12756	-6483	30157	-36430	0	16.9	-4.8	20.0	-3.4	0.0
5	Relative Change	10304	-7945	29899	-32258	0	13.7	-5.9	19.8	-3.0	0.0
6	1980, Totals	111123	160930	227790	1405800	1905643	5.8	8.4	12.0	73.8	100.0
7	US Growth	-1364	-1975	-2796	-17257	-23393	-1.2	-1.2	-1.2	-1.2	-1.2
8	Industry Mix	-2426	-7870	4813	5482	0	-2.2	-4.9	2.1	0.4	-0.0
9	Regional Share	-3790	-9845	4969	8667	0	-3.4	-6.1	2.2	0.6	0.0
10	Relative Change	-6216	-17715	9782	14149	0	-5.6	-11.0	4.3	1.0	-0.0
11	1982, Totals	104743	157678	231738	1388091	1882250	5.6	8.4	12.3	73.7	100.0
12	US Growth	13514	20343	29898	179088	242844	12.9	12.9	12.9	12.9	12.9
13	Industry Mix	-307	-705	3361	-2350	0	-0.3	-0.4	1.5	-0.2	0.0
14	Regional Share	-6244	340	4888	1016	0	-6.0	0.2	2.1	0.1	0.0
15	Relative Change	-6550	-365	8249	-1333	0	-6.3	-0.2	3.6	-0.1	0.0
16	1985, Totals	111707	177657	269885	1565845	2125094	5.3	8.4	12.7	73.7	100.0
17	US Growth	4363	6939	10541	61160	83004	3.9	3.9	3.9	3.9	3.9
18	Industry Mix	188	-916	1107	-380	0	0.2	-0.5	0.4	-0.0	0.0
19	Regional Share	-245	1496	1636	-2887	0	-0.2	0.8	0.6	-0.2	0.0
20	Relative Change	-57	581	2743	-3266	0	-0.1	0.3	1.0	-0.2	0.0
21	1986, Totals	116013	185176	283169	1623739	2208097	5.3	8.4	12.8	73.5	100.0

Table 3. Total change in labor earnings (1982 $) from all industry due to relative change effect in 30 highest volatility and 30 lowest volatility areas: Mid-Continent West, Mid-Continent East and Comparison Labor Market Areas, US, 1970-1986

Rank	Labor Market Area	LMA No.	1970	Change, 1970-80 US Growth	Ind Mix	Reg Share	1980	Change, 1980-82 US Growth	Ind Mix	Reg Share	1982	Change, 1982-85 US Growth	Ind Mix	Reg Share	1985	Change, 1985-86 US Growth	Ind Mix	Reg Share	1986
			(mil$)	(mil$)	(mil$)	(mil$)	(mil$)	(mil$)	(mil$)	(mil$)	(mil$)	(mil$)	(mil$)	(mil$)	(mil$)	(mil$)	(mil$)	(mil$)	(mil$)
1	WY-NE:CHEYENNE AREA	73	1592	536	91	1100	3319	-41	-331	-372	2905	375	-149	-533	2598	101	-50	-163	2486
2	NE:GRAND ISLAND AREA	67	1720	579	-208	-140	1951	-24	293	269	2175	281	-31	-86	2339	31	-15	-136	2389
3	CO:GRAND JUNCTION-NW	21	765	257	78	878	1978	-24	-66	281	2169	330	-47	-437	1915	75	-2	-103	1884
4	WY-ID-UT:ROCK SPRINGS	42	420	141	8	582	1152	-14	71	57	1179	152	-88	-88	1155	46	-42	-49	1110
5	NM:DURANGO-TAOS	16	555	187	36	490	1267	-16	-0	-1	1250	161	-45	-140	1226	48	-22	-50	1202
6	NE-SD:NORFOLK AREA	71	557	187	-54	-3	687	-8	46	38	712	92	-11	-32	761	30	-8	-3	795
7	WY-MT:YELLOWSTONE N P	50	539	181	39	236	995	-12	-53	-65	902	116	-42	-97	879	34	-13	-57	847
8	UT:CEDAR CITY-PRICE	45	512	172	27	330	1042	-13	-10	108	1127	145	-107	-25	1140	45	-22	-73	1090
9	ND-MT-SD:DICKINSON AR	85	999	335	-96	142	1368	-17	69	52	1437	185	-74	-410	1139	44	-26	43	1206
10	LA:BATON ROUGE METRO	373	3004	1011	60	1598	5673	-70	196	126	5735	740	-70	-605	5800	227	-12	-532	5483
11	SD-NE-WY:RAPID CITY A	74	376	128	-36	382	1650	-20	108	88	1711	221	-106	-122	1704	67	-41	-9	1720
12	LA-MS:NATCHEZ MS AREA	375	456	154	49	-24	635	-8	-1	-8	627	81	-23	-89	595	23	-13	-64	542
13	IN-MI:SOUTH BEND AREA	261	4996	1681	-31	-912	5734	-70	-37	-107	5413	698	-40	166	6238	244	-63	146	6545
14	WV-VA:BLUEFIELD	207	844	284	253	-212	1168	-14	-48	-63	1066	138	-118	-122	963	38	-31	-22	948
15	NC-VA:GREENBOROUGH AR	333	4574	1540	-488	224	5850	-72	160	88	5744	741	-77	316	6725	263	-18	76	7045
16	NY:NORTHEAST AREA	195	1361	458	-81	-241	1497	-18	14	-5	1459	188	-62	70	1655	65	-19	-1	1700
17	MI:DETROIT METRO	266	42911	14443	-117	-5082	40329	-495	-4148	-4643	45071	5815	570	2223	53679	2097	-321	450	55904
18	MT-WY:BILLINGS AREA	49	980	330	-0	307	1617	-20	44	24	1617	209	-44	-263	1518	59	-21	-36	1521
19	OR:BEND (CENTRAL)	6	773	260	-9	202	1227	-15	-125	-140	1009	130	8	19	1166	46	6	-32	1186
20	ND:MINOT-BISMARK AREA	84	1033	348	-114	233	1499	-18	127	108	1602	207	-25	-118	1666	65	0	-99	1633
21	NE:LINCOLN METRO	69	1942	654	-63	-110	2422	-30	87	58	2455	317	-25	-4	2742	107	12	-50	2811
22	ME:PORTLAND METRO	196	3487	1174	-191	119	4589	-56	133	77	4568	589	-65	140	5232	204	-14	257	5680
23	OR-CA:EUGENE AREA	5	2253	758	119	349	3481	-43	-371	-414	2846	367	47	-146	3115	122	13	-47	3203
24	OR-WA:LONGVIEW-COAST	10	1282	431	34	247	1994	-24	-59	-83	1764	228	-1	-326	1665	65	-1	-39	1690
25	WA-OR:WALLA WALLA ARE	2	2664	897	-131	1126	4555	-56	-230	-286	4203	542	-38	-550	4158	162	28	31	4379
26	OR:MEDFORD (SW)	7	669	225	27	284	1205	-15	-123	-138	1014	131	15	11	1171	46	5	-1	1221
27	IA:SPENCER (NW) AREA	77	903	304	-144	-2	1061	-13	-141	-154	885	114	-5	-38	956	37	12	11	1017
28	SD-ND:ABERDEEN-WEST	75	896	302	-144	-143	911	-11	-26	-37	864	111	-5	-86	885	35	10	89	1019
29	WI:KENOSHA AREA	278	2153	725	2	118	2998	-37	-192	-229	2648	342	-41	-271	2678	105	-35	-72	2676
30	NE-CO:NORTH PLATTE AR	66	822	277	-101	47	1044	-13	49	36	1045	135	-29	-22	1129	44	5	-38	1140
	30 Highest-volatility LMA		86627	29156	-1187	2127	104898	-1288	-4564	-5335	107204	13831	-727	-1696	118612	4633	-642	-455	122148
71	IA:CEDAR RAPIDS AREA	151	1654	557	-81	-36	2094	-26	-140	-165	1878	242	-31	-133	1956	76	-12	28	2049
72	WI-MI:IRON MOUNTAIN	280	725	244	-5	71	1035	-13	-68	-81	928	120	-14	-7	1027	40	-7	2	1062
73	WA-ID:SPOKANE AREA	3	2887	972	-23	646	4482	-55	-237	-292	4029	520	-77	-73	4399	172	4	-5	4570
74	LA:ALEXANDRIA AREA	374	933	314	-34	83	1297	-16	9	-7	1283	166	-7	-98	1344	52	2	-73	1326
75	MN:ROCHESTER AREA	159	1476	497	-69	-8	1897	-23	-24	-48	1835	237	-44	-12	2016	79	-6	47	2136
76	MN:ST CLOUD AREA	157	783	264	-62	190	1165	-14	-4	-19	1123	145	-13	19	1274	50	3	64	1390
77	WI:NORTHWEST AREA	160	629	212	-30	120	931	-11	-38	-49	857	111	-9	5	963	38	2	38	1041
78	WI-MN:LA CROSSE AREA	161	952	320	-40	189	1421	-17	-50	-68	1322	171	-24	-69	1400	55	-6	18	1466
79	MI:JACKSON AREA	267	1774	597	29	-459	1941	-24	-142	-166	1716	221	6	-158	1784	70	-22	-13	1819
80	MN:MANKATO AREA	158	1323	445	-121	36	1683	-21	-59	-80	1567	202	-25	-59	1685	66	-2	39	1788
81	WA:SEATTLE-TACOMA MET	11	17344	5837	-56	4050	27175	-334	269	-65	26364	3401	526	-1446	28845	1127	84	652	30708
82	AZ-UT:FLAGSTAFF-CANYO	15	463	156	-2	259	875	-11	-10	-20	829	107	-13	69	992	39	0	37	1068
83	WI:STEVENS POINT AREA	272	735	247	-18	176	1140	-14	-8	-22	1098	142	-20	3	1223	48	3	0	1274
84	WI:MADISON AREA	147	3049	1026	-54	-70	3951	-49	-53	-101	3842	496	9	-161	4186	164	31	66	4447
85	WI:GREEN BAY AREA	274	1447	487	-44	283	2173	-27	-14	-41	2082	269	-27	40	2364	92	-10	53	2499
86	MI:KALAMAZOO AREA	262	3491	1175	-74	-209	4383	-54	-191	-244	4034	521	-113	-72	4369	171	-48	72	4564
87	FL:MIAMI METRO	319	14037	4724	491	2866	22118	-272	564	293	22245	2870	612	-127	25600	1000	339	21	26961
88	MI:LANSING AREA	264	2915	981	23	182	4101	-50	-117	-168	3848	496	59	-36	4367	171	-2	-44	4491
89	SD:SOUIS FALLS AREA	72	1642	552	-146	124	2172	-27	-63	-90	2056	265	-23	-3	2296	90	20	-54	2351
90	IA-IL-MO:BURLINGTON	149	1442	485	-69	-163	1696	-21	-90	-111	1534	198	-42	-116	1573	61	-10	-18	1606
91	WI:FOND DU LAC AREA	276	751	253	-33	-16	954	-12	-27	-38	886	114	-27	-26	948	37	-9	16	992
92	UT-ID:LOGAN AREA	43	376	126	-41	157	618	-8	20	12	608	78	-16	47	718	28	-10	39	774
93	WI:MILWAUKEE METRO	277	12088	4068	75	-1080	15151	-186	-522	-708	14185	1830	-132	-874	15010	586	-88	-4	15504
94	IA-MO:DES MOINES METR	76	4004	1348	-115	91	5327	-65	-236	-302	4999	645	21	-294	5371	210	43	-35	5590
95	FL:WEST PALM BEACH	318	4700	1582	131	1958	8370	-103	582	479	8646	1115	242	1035	11039	431	83	286	11839
96	AZ:TUSCON METRO	14	2527	851	-29	926	4276	-52	188	135	4316	557	-53	313	5133	200	-0	96	5429
97	WI:OSHKOSH AREA	275	3202	1078	-114	214	4380	-54	-96	-150	4082	527	-84	-41	4485	175	-39	82	4703
98	AZ:PHOENIX METRO	13	7442	2505	150	4093	14190	-174	462	288	14233	1836	204	2027	18300	715	205	476	19696
99	FL:SARASOTA AREA	320	1274	429	5	843	2550	-31	86	55	2537	327	86	219	3170	124	37	83	3414
100	FL:FT MYERS AREA	321	982	330	-27	950	2135	-26	124	98	2152	279	77	220	2727	107	44	95	2973
	30 Lowest-volatility LMAs		97046	32663	-382	16356	145682	-1788	113	-1675	141115	18206	1047	195	160563	6271	629	2063	169526

Table 4. Total change in labor earnings (1982 $) from all industry due to relative change effect in 30 fastest-growing and 30 slowest-growing areas: Mid-Continent West, Mid-Continent East and Comparison Labor Market Areas, US, 1970-1986

Rank	Labor Market Area	LMA No.	1970	Change, 1970-80 US Growth	Ind Mix	Reg Share	1980	Change, 1980-82 US Growth	Ind Mix	Reg Share	1982	Change, 1982-85 US Growth	Ind Mix	Reg Share	1985	Change, 1985-86 US Growth	Ind Mix	Reg Share	1986
			(mil$)	(mil$)	(mil$)	(mil$)	(mil$)	(mil$)	(mil$)	(mil$)	(mil$)	(mil$)	(mil$)	(mil$)	(mil$)	(mil$)	(mil$)	(mil$)	(mil$)
1	FL:FT MYERS AREA	321	982	330	-27	950	2135	-26	124	98	2332	378	77	220	2743	107	44	35	2929
2	WY-ID-UT:ROCK SPRINGS	42	420	141	8	582	1152	-14	71	57	1179	192	-38	-68	1175	46	-42	-17	1162
3	FL:SARASOTA AREA	320	1274	429	5	843	2550	-31	86	55	2537	327	86	219	3170	124	37	83	3414
4	AZ:PHOENIX METRO	13	7442	2505	150	4093	14190	-174	462	288	14233	1936	204	2227	19300	715	205	476	19696
5	FL:WEST PALM BEACH	318	4700	1582	131	1958	8370	-103	582	479	8646	1115	242	1035	11039	431	83	296	11849
6	CO:GRAND JUNCTION-NW	21	765	257	78	879	1979	-24	-66	281	2169	280	-47	-487	1915	75	-2	-103	1884
7	AZ-UT:FLAGSTAFF-CANYO	15	463	156	-2	259	875	-11	-10	-20	829	107	-13	69	992	39	0	-1	1068
8	CO:DENVER METRO	19	9760	3285	472	4788	18304	-225	149	1708	19937	2572	53	-478	22084	863	11	-490	22467
9	AZ:TUSCON METRO	14	2527	851	-29	926	4276	-52	188	135	4316	557	-53	313	5133	200	-0	96	5429
10	NM:DURANGO-TAOS	16	555	187	36	490	1267	-16	-0	-1	1250	161	-45	-140	1226	48	-22	-50	1202
11	UT-ID:LOGAN AREA	43	376	126	-41	157	618	-8	20	12	608	78	-16	47	718	28	-10	29	774
12	UT:CEDAR CITY-PRICE	45	512	172	27	330	1042	-13	-10	108	1127	145	-107	-25	1140	45	-22	-73	1090
13	CO:FT COLLINS-NE AREA	65	1340	451	-136	681	2336	-29	-12	14	2308	298	-22	1	2585	101	-1	-37	2648
14	FL:MIAMI METRO	319	14037	4724	491	2866	22118	-272	564	293	22245	2870	612	-127	25600	1000	339	21	25961
15	UT:SALT LAKE CITY MET	44	5408	1820	-20	1745	8953	-110	-98	303	9049	1167	-116	114	10214	399	-46	-203	10363
16	LA:BATON ROUGE METRO	373	3004	1011	60	1598	5673	-70	196	126	5735	740	-70	-605	5800	227	-12	-532	5483
17	SD-NE-WY:RAPID CITY A	74	976	328	-36	382	1650	-20	108	88	1711	221	-106	-122	1704	67	-41	-9	1720
18	WA:SEATTLE-TACOMA MET	11	17344	5837	-56	4050	27175	-334	269	-65	26364	3401	526	-1446	28845	1127	84	652	30708
19	CA:LOS ANGELES METRO	25	82481	27761	61	7605	116659	-1432	2404	1056	118524	15292	2987	2469	139272	5440	605	1815	147132
20	MN:ST CLOUD AREA	157	783	264	-62	180	1165	-14	-4	-19	1123	145	-13	19	1274	50	3	64	1390
21	WI:GREEN BAY AREA	274	1447	487	-44	283	2173	-27	-14	-41	2082	269	-27	40	2364	92	-10	53	2499
22	WI:STEVENS POINT AREA	272	735	247	-18	176	1140	-14	-8	-22	1098	142	-20	3	1223	48	3	0	1274
23	OR:MEDFORD (SW)	7	669	225	27	284	1205	-15	-123	-138	1014	131	15	11	1171	46	5	-1	1221
24	ND:MINOT-BISMARK AREA	84	1033	348	-114	233	1499	-18	127	108	1602	207	-25	-118	1666	65	0	-99	1633
25	ME:PORTLAND METRO	196	3487	1174	-191	119	4589	-56	133	77	4568	589	-65	140	5232	204	-14	257	5680
26	MN-WI:MPLS-ST PAUL ME	156	17234	5800	410	561	24005	-295	186	-109	23594	3044	15	837	27490	1074	1	127	28692
27	MI:TRAVERSE CITY (NW)	269	709	238	13	117	1078	-13	-68	-81	986	127	-7	46	1152	45	-5	44	1236
28	IA:IOWA CITY AREA	152	982	331	-62	152	1403	-17	50	33	1420	183	-13	-108	1483	58	5	11	1557
29	WI:NORTHWEST AREA	160	629	212	-30	120	931	-11	-38	-49	857	111	-9	5	963	38	2	38	1041
30	MN:BEMIDJI-N CENTRAL	79	507	171	-21	43	700	-9	-1	-9	677	87	-5	11	771	30	4	7	811
	30 Fastest-growing LMAs		182578	61451	1080	37348	281208	-3452	5264	4764	283941	36633	3950	3902	328426	12828	1204	2554	345012
71	NY:NORTHEAST AREA	195	1361	458	-81	-241	1497	-18	14	-5	1459	188	-62	70	1655	65	-19	-1	1700
72	MI:KALAMAZOO AREA	262	3491	1175	-74	-209	4393	-54	-191	-244	4034	521	-113	-72	4369	171	-48	72	4564
73	ND-MT-SD:DICKINSON AR	85	989	333	-96	142	1368	-17	69	52	1437	185	-74	-410	1139	44	-26	49	1206
74	MI:DETROIT METRO	266	42911	14443	-117	-5082	40329	-495	-4148	-4643	45071	5815	570	2223	53679	2097	-321	450	55904
75	MI:CADILLAC AREA	270	566	191	-12	-13	731	-9	-54	-63	649	84	-10	7	730	28	-4	-2	752
76	WI:MILWAUKEE METRO	277	12088	4068	75	-1080	15151	-186	-522	-708	14185	1830	-132	-874	15010	586	-88	-4	15504
77	MI:MIDLAND AREA	265	3473	1169	-67	28	4603	-56	-319	-375	4090	528	-45	-115	4457	174	-58	-63	4509
78	ID-WA:LEWISTON AREA	4	833	280	-53	50	1111	-14	-81	-95	972	125	-3	-64	1030	40	9	-18	1061
79	MT:BUTTE-HELENA AREA	48	702	236	8	-53	893	-11	-15	-26	851	110	-21	-101	840	33	0	-17	855
80	WI:KENOSHA AREA	278	2153	725	2	118	2998	-37	-192	-229	2648	342	-41	-271	2678	105	-35	-72	2676
81	MI:HURON FOREST AREA	268	607	204	-29	-8	774	-10	-78	-88	682	88	-14	6	762	30	-9	18	801
82	IA-NE-SD:SOUIX CITY	70	1258	423	-86	-122	1473	-18	-22	-40	1422	184	-24	-123	1459	57	10	-20	1506
83	IA:CEDAR RAPIDS AREA	151	1654	557	-81	-36	2094	-26	-140	-165	1878	242	-31	-133	1956	76	-12	28	2049
84	LA-MS:NATCHEZ MS AREA	375	456	154	49	-24	635	-8	-1	-8	627	81	-23	-89	595	23	-13	-64	542
85	IA:OTTUMWA AREA	150	1263	425	-117	-104	1467	-18	-86	-104	1325	171	-29	-46	1421	56	-6	25	1495
86	SD-ND:ABERDEEN-WEST	75	896	302	-144	-143	911	-11	-26	-37	864	111	-5	-86	885	35	10	89	1019
87	AZ:HOLBROOK (NE)	12	3190	1074	-1004	235	624	-8	-24	-31	584	75	-42	19	636	25	-10	21	672
88	MN-SD:MORRIS-SISSETON	81	1113	375	-188	78	1378	-17	-155	-172	1175	152	-20	-22	1285	50	14	13	1362
89	WV-VA:BLUEFIELD	207	844	284	253	-212	1168	-14	-48	-63	1066	138	-118	-122	963	38	-31	-22	948
90	MI-WI:UPPER PENNSULIA	279	1236	416	-18	-163	1472	-18	-117	-135	1298	167	-37	-78	1350	53	-8	29	1424
91	IA-IL-MO:BURLINGTON	149	1442	485	-69	-163	1696	-21	-90	-111	1534	198	-42	-116	1573	61	-10	-18	1606
92	WI:PLATTEVILLE AREA	148	686	231	-100	39	955	-11	-70	-80	761	98	-4	-144	712	28	4	59	901
93	MN-WI:DULUTH AREA	155	2243	755	23	-79	2941	-36	-215	-251	2522	325	-175	-232	2440	95	-26	-35	2474
94	IA:WATERLOO AREA	153	2275	766	-161	51	2932	-36	-196	-232	2617	338	-53	-432	2470	96	-13	-33	2520
95	IA-MN:MASON CITY AREA	154	2229	750	-273	-251	2455	-30	-207	-237	2172	280	-34	-101	2317	90	15	34	2456
96	IA-IL:DUBUQUE AREA	146	1529	515	-115	-75	1854	-23	-183	-206	1599	206	-30	-181	1595	62	-12	24	1669
97	IA:SPENCER (NW) AREA	77	903	304	-144	-2	1061	-13	-141	-154	885	114	-5	-38	956	37	12	11	1017
98	MN:WORTHINGTON (SE)	78	788	265	-156	-3	894	-11	-86	-97	776	100	-14	-55	806	31	9	-2	844
99	MI:JACKSON AREA	267	1774	597	29	-459	1941	-24	-142	-166	1716	221	6	-158	1784	70	-22	-13	1819
100	MT:GREAT FALLS AREA	51	1124	378	-156	-109	1236	-15	-93	-108	1127	145	-14	-259	1000	39	-4	106	1141
	30 Slowest-growing LMAs		96076	32337	-2900	-7898	102928	-1263	-7558	-8822	102025	13163	-638	-1997	112552	4396	-693	644	116899

Table 5A. Industry distribution of excess labor earnings in 30 highest-volatility and 30 lowest-volatility LMAs: Mid-continent West, Mid-continent East and Comparison LMAs, 1974

Rank	Labor Market Area	LMA No.	Agri-culture	Mining	Con-struct	Manufacturing Nondura	Durables	TCPU	Wholesal	Trade Retail	Business	Private Services Consumer	Other	Total
			(pct.)	(pct.)	(pct.)	(pct.)	(pct.)	(pct.)	(pct.)	(pct.)	(pct.)	(pct.)	(pct.)	(pct.)
1	WY-NE:CHEYENNE AREA	73	22.0	47.3	5.3	3.1	0.0	17.0	0.0	4.5	0.0	0.4	0.0	100.0
2	NE:GRAND ISLAND AREA	67	99.1	0.0	0.0	0.2	0.1	0.2	0.0	0.5	0.0	0.0	0.0	100.0
3	CO:GRAND JUNCTION-NW	21	3.0	64.0	14.5	0.0	0.0	1.1	0.0	9.8	1.1	6.5	0.0	100.0
4	WY-ID-UT:ROCK SPRINGS	42	5.9	60.3	29.5	0.3	0.0	2.0	0.0	0.4	0.0	1.7	0.0	100.0
5	NM-CO:DURANGO-TAOS	16	20.7	25.4	15.6	0.1	0.1	27.5	0.0	4.9	3.2	2.4	0.0	100.0
6	NE-SD:NORFOLK AREA	71	98.2	0.0	0.0	0.6	0.0	0.4	0.0	0.7	0.0	0.0	0.0	100.0
7	WY-MT:YELLOWSTONE N P	50	19.7	52.9	11.6	2.1	1.7	0.6	0.0	6.4	0.1	4.8	0.0	100.0
8	UT:CEDAR CITY-PRICE	45	17.6	60.2	10.2	0.0	0.2	4.8	0.0	6.0	0.1	1.0	0.0	100.0
9	ND-MT-SD:DICKINSON AR	85	98.8	0.6	0.0	0.0	0.0	0.4	0.0	0.2	0.0	0.0	0.0	100.0
10	LA:BATON ROUGE METRO	373	0.0	0.2	22.1	75.6	0.0	0.1	0.0	0.6	1.1	0.3	0.0	100.0
11	SD-NE-WY:RAPID CITY A	74	62.3	17.1	6.2	0.0	0.9	5.2	0.0	7.6	0.0	0.8	0.0	100.0
12	LA-MS:NATCHEZ MS AREA	375	8.5	27.9	5.6	35.8	17.2	0.0	0.0	3.5	0.2	1.3	0.0	100.0
13	IN-MI:SOUTH BEND AREA	261	1.5	0.0	0.0	5.3	91.9	0.0	0.0	0.0	0.2	0.0	1.0	100.0
14	WV-VA:BLUEFIELD	207	0.0	99.2	0.2	0.0	0.0	0.5	0.0	0.0	0.0	0.1	0.0	100.0
15	NC-VA:GREENBOROUGH AR	333	0.0	0.0	0.2	91.6	7.3	0.2	0.0	0.4	0.1	0.0	0.0	100.0
16	NY:NORTHEAST AREA	195	2.1	4.3	0.9	10.6	62.7	0.5	0.0	4.4	0.3	1.1	13.2	100.0
17	MI:DETROIT METRO	266	0.0	0.0	0.0	0.0	99.6	0.0	0.0	0.0	0.0	0.0	0.4	100.0
18	MT-WY:BILLINGS AREA	49	32.0	13.0	18.5	7.9	0.0	9.5	11.8	6.5	0.2	0.6	0.1	100.0
19	OR:BEND (CENTRAL)	6	10.5	0.0	0.0	0.0	87.3	1.0	0.0	1.0	0.0	0.1	0.0	100.0
20	ND:MINOT-BISMARK AREA	84	94.1	0.0	2.9	0.0	0.0	1.1	0.5	0.7	0.0	0.0	0.7	100.0
21	NE:LINCOLN METRO	69	88.7	0.0	2.4	3.5	0.0	2.6	0.0	0.8	1.8	0.1	0.0	100.0
22	ME:PORTLAND METRO	196	0.7	0.0	4.8	61.3	8.7	0.7	0.0	3.7	1.7	0.7	17.7	100.0
23	OR-CA:EUGENE AREA	5	0.1	0.0	0.0	0.0	98.3	0.6	0.0	0.9	0.0	0.1	0.0	100.0
24	OR-WA:LONGVIEW-COAST	10	0.2	0.0	2.2	17.7	79.3	0.2	0.0	0.4	0.0	0.0	0.0	100.0
25	WA-OR:WALLA WALLA ARE	2	94.9	0.0	0.6	2.7	0.3	0.1	0.0	0.1	1.4	0.0	0.0	100.0
26	OR:MEDFORD (SW)	7	0.2	0.0	1.4	0.0	89.1	1.0	0.0	4.3	0.0	0.3	3.6	100.0
27	IA:SPENCER (NW) AREA	77	98.3	0.0	0.0	1.1	0.0	0.2	0.1	0.3	0.0	0.0	0.0	100.0
28	SD-ND:ABERDEEN-WEST	75	99.8	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.0	100.0
29	WI:KENOSHA AREA	278	0.0	0.0	0.0	1.2	98.3	0.2	0.0	0.2	0.0	0.1	0.0	100.0
30	NE-CO:NORTH PLATTE AR	66	94.7	0.0	0.1	0.1	0.0	3.9	0.0	1.1	0.0	0.1	0.0	100.0
	Total Highest-volatility LMA		26.1	5.9	1.2	7.6	57.5	0.6	0.0	0.5	0.2	0.1	0.4	100.0
71	IA:CEDAR RAPIDS AREA	151	15.1	0.1	0.0	20.5	63.8	0.4	0.0	0.1	0.0	0.0	0.0	100.0
72	WI-MI:IRON MOUNTAIN	280	0.6	0.1	5.3	67.9	14.4	0.8	0.0	8.8	1.0	0.9	0.0	100.0
73	WA-ID:SPOKANE AREA	3	39.6	3.3	2.9	0.0	26.2	2.8	10.4	3.3	0.2	0.5	10.9	100.0
74	LA:ALEXANDRIA AREA	374	19.2	1.8	7.4	0.9	31.0	4.6	0.0	11.7	3.6	4.2	15.7	100.0
75	MN:ROCHESTER AREA	159	34.0	0.0	0.0	10.1	18.0	0.0	0.0	0.2	0.0	0.1	37.6	100.0
76	MN:ST CLOUD AREA	157	65.7	0.0	3.9	10.9	4.7	4.5	0.0	5.1	0.0	0.4	4.7	100.0
77	WI:NORTHWEST AREA	160	67.1	0.0	0.9	9.6	7.8	2.3	0.0	8.7	0.0	0.4	3.2	100.0
78	WI-MN:LA CROSSE AREA	161	51.5	0.0	0.0	3.5	20.0	2.8	3.1	4.9	0.1	0.2	13.9	100.0
79	MI:JACKSON AREA	267	3.1	0.0	0.0	2.6	88.0	0.6	0.0	0.2	4.8	0.0	0.6	100.0
80	MN:MANKATO AREA	158	87.1	0.0	0.4	10.1	1.6	0.1	0.0	0.3	0.0	0.0	0.2	100.0
81	WA:SEATTLE-TACOMA MET	11	0.2	0.0	0.9	0.2	86.6	1.5	5.7	2.7	0.9	0.2	0.9	100.0
82	AZ-UT:FLAGSTAFF-CANYO	15	4.1	8.0	54.5	0.0	5.1	8.0	0.0	11.4	0.2	8.5	0.2	100.0
83	WI:STEVENS POINT AREA	272	2.2	0.0	0.0	84.3	2.8	1.5	0.0	0.2	2.0	0.0	6.9	100.0
84	WI:MADISON AREA	147	30.5	0.0	6.7	38.0	0.1	1.2	1.4	4.2	6.6	0.2	11.1	100.0
85	WI:GREEN BAY AREA	274	4.3	0.0	0.3	81.1	6.7	5.7	0.3	1.4	0.0	0.1	0.0	100.0
86	MI:KALAMAZOO AREA	262	0.7	0.0	0.0	51.2	46.1	0.0	0.0	0.0	0.1	0.0	1.8	100.0
87	FL:MIAMI METRO	319	0.0	0.0	8.0	0.0	0.0	36.0	8.2	7.7	15.8	5.6	18.6	100.0
88	MI:LANSING AREA	264	0.0	0.0	0.0	0.1	97.9	0.0	0.0	0.6	1.1	0.0	0.3	100.0
89	SD:SOUIS FALLS AREA	72	89.1	0.0	0.0	4.6	0.0	1.6	4.0	0.6	0.0	0.0	0.0	100.0
90	IA-IL-MO:BURLINGTON	149	84.1	0.0	0.1	0.8	11.1	3.8	0.0	0.1	0.0	0.0	0.0	100.0
91	WI:FOND DU LAC AREA	276	28.3	0.0	0.4	4.1	63.2	3.1	0.0	0.9	0.0	0.0	0.0	100.0
92	UT-ID:LOGAN AREA	43	62.0	0.0	3.4	18.5	14.1	0.0	0.0	2.0	0.0	0.0	0.0	100.0
93	WI:MILWAUKEE METRO	277	0.0	0.0	0.0	6.3	92.8	0.3	0.0	0.0	0.5	0.0	0.1	100.0
94	IA-MO:DES MOINES METR	76	47.3	0.0	2.3	7.0	2.9	2.8	23.1	1.0	13.4	0.1	0.0	100.0
95	FL:WEST PALM BEACH	318	30.1	0.0	7.6	0.0	22.6	2.6	0.0	5.4	24.0	4.4	3.4	100.0
96	AZ:TUSCON METRO	14	0.1	53.6	13.6	0.0	3.4	2.4	0.0	7.9	2.5	1.4	15.0	100.0
97	WI:OSHKOSH AREA	275	4.2	0.0	0.2	62.7	32.9	0.0	0.0	0.0	0.0	0.0	0.0	100.0
98	AZ:PHOENIX METRO	13	0.8	20.1	18.5	0.0	26.5	3.9	0.0	9.3	11.3	1.9	7.9	100.0
99	FL:SARASOTA AREA	320	7.0	0.0	28.2	0.0	0.3	0.9	0.0	20.0	20.9	4.4	18.2	100.0
100	FL:FT MYERS AREA	321	66.9	0.0	14.1	0.0	0.0	1.8	0.0	5.3	9.3	2.7	0.0	100.0
	Total Lowest-volatility LMAs		20.8	2.0	3.1	11.2	43.8	4.3	2.8	2.6	3.8	0.9	4.8	100.0

Table 5B. Industry distribution of excess labor earnings in 30 highest-volatility and 30 lowest-volatility LMAs: Mid-continent West, Mid-continent East and Comparison LMAs, 1986

Rank	Labor Market Area	LMA No.	Agri-culture	Mining	Con-struct	Manufacturing Nondura	Durables	TCPU	Wholesal	Trade Retail	Business	Private Services Consumer	Other	Total
			(pct.)	(pct.)	(pct.)	(pct.)	(pct.)	(pct.)	(pct.)	(pct.)	(pct.)	(pct.)	(pct.)	(pct.)
1	WY-NE:CHEYENNE AREA	73	11.9	51.3	2.8	1.1	0.0	26.4	0.0	2.9	0.1	0.6	2.9	100.0
2	NE:GRAND ISLAND AREA	67	97.0	0.0	0.0	1.1	0.5	0.6	0.0	0.1	0.0	0.2	0.5	100.0
3	CO:GRAND JUNCTION-NW	21	0.1	36.7	18.2	0.0	0.0	1.0	0.0	13.4	2.8	21.2	6.6	100.0
4	WY-ID-UT:ROCK SPRINGS	42	0.6	65.3	26.7	0.0	0.2	5.1	0.0	0.0	0.0	0.9	0.2	100.0
5	NM-CO:DURANGO-TAOS	16	5.6	39.5	7.0	0.1	0.0	41.4	0.0	2.4	1.1	1.4	1.5	100.0
6	NE-SD:NORFOLK AREA	71	90.5	0.0	0.0	4.9	0.4	1.8	0.7	0.4	0.0	0.2	1.0	100.0
7	WY-MT:YELLOWSTONE N P	50	4.6	60.7	14.0	0.0	1.0	4.4	0.0	7.0	0.2	2.7	5.3	100.0
8	UT:CEDAR CITY-PRICE	45	7.1	54.5	13.1	0.0	0.2	18.3	0.0	1.8	1.7	0.7	2.5	100.0
9	ND-MT-SD:DICKINSON AR	85	58.6	37.6	0.1	0.0	0.0	2.9	0.0	0.3	0.0	0.1	0.4	100.0
10	LA:BATON ROUGE METRO	373	0.0	0.1	12.7	81.9	0.0	1.6	0.0	1.4	1.1	0.6	0.6	100.0
11	SD-NE-WY:RAPID CITY A	74	14.7	69.8	3.6	0.0	1.1	3.5	0.0	2.5	0.0	0.6	4.1	100.0
12	LA-MS:NATCHEZ MS AREA	375	1.7	71.3	0.8	14.2	6.0	0.6	0.0	2.4	0.2	0.7	2.1	100.0
13	IN-MI:SOUTH BEND AREA	261	0.1	0.0	0.0	12.3	86.9	0.5	0.0	0.0	0.0	0.1	0.0	100.0
14	WV-VA:BLUEFIELD	207	0.0	97.4	0.1	0.0	0.0	1.9	0.0	0.4	0.0	0.1	0.0	100.0
15	NC-VA:GREENBOROUGH AR	333	0.0	0.0	3.5	74.9	14.6	0.9	4.8	0.5	0.0	0.1	0.7	100.0
16	NY:NORTHEAST AREA	195	0.8	0.9	0.6	11.6	75.3	0.8	0.0	5.7	0.5	0.2	3.5	100.0
17	MI:DETROIT METRO	266	0.0	0.0	0.0	0.0	99.7	0.0	0.0	0.0	0.3	0.0	0.0	100.0
18	MT-WY:BILLINGS AREA	49	12.8	30.3	3.5	4.5	0.0	17.5	20.0	3.5	1.3	0.8	5.8	100.0
19	OR:BEND (CENTRAL)	6	6.9	0.0	0.2	0.0	89.7	0.8	0.0	1.1	0.1	0.3	0.9	100.0
20	ND:MINOT-BISMARK AREA	84	67.1	4.0	0.9	0.1	0.0	24.0	0.2	1.2	0.2	0.7	1.5	100.0
21	NE:LINCOLN METRO	69	78.1	0.0	0.1	4.2	0.1	9.5	0.0	2.1	3.7	0.6	1.5	100.0
22	ME:PORTLAND METRO	196	1.4	0.0	10.9	54.9	12.0	1.1	0.0	8.2	7.4	0.1	3.9	100.0
23	OR-CA:EUGENE AREA	5	0.7	0.0	0.0	0.1	95.2	1.2	0.0	1.5	0.0	0.2	1.2	100.0
24	OR-WA:LONGVIEW-COAST	10	2.0	0.0	0.2	41.6	53.2	1.4	0.0	1.1	0.1	0.0	0.5	100.0
25	WA-OR:WALLA WALLA ARE	2	74.3	0.0	0.5	21.0	0.4	0.2	0.0	0.4	3.1	0.1	0.1	100.0
26	OR:MEDFORD (SW)	7	0.8	0.0	0.1	0.0	85.3	3.5	0.0	5.5	0.1	0.6	4.2	100.0
27	IA:SPENCER (NW) AREA	77	97.5	0.0	0.0	1.3	0.1	0.6	0.0	0.1	0.0	0.0	0.3	100.0
28	SD-ND:ABERDEEN-WEST	75	99.0	0.0	0.0	0.0	0.0	0.3	0.0	0.2	0.1	0.1	0.3	100.0
29	WI:KENOSHA AREA	278	0.6	0.0	0.0	11.3	86.2	0.1	0.0	1.3	0.0	0.0	0.6	100.0
30	NE-CO:NORTH PLATTE AR	66	92.8	0.0	0.1	0.1	0.0	6.1	0.0	0.2	0.0	0.1	0.7	100.0
	Total Highest-volatility LMA		15.2	5.3	1.0	6.0	69.2	1.5	0.2	0.5	0.4	0.2	0.4	100.0
71	IA:CEDAR RAPIDS AREA	151	7.2	0.0	0.0	21.3	70.2	1.0	0.0	0.0	0.3	0.0	0.0	100.0
72	WI-MI:IRON MOUNTAIN	280	4.8	0.0	1.1	56.9	27.2	2.1	0.0	2.7	0.3	0.2	4.8	100.0
73	WA-ID:SPOKANE AREA	3	38.3	4.0	1.1	0.0	32.8	2.9	8.0	6.3	1.0	1.5	4.1	100.0
74	LA:ALEXANDRIA AREA	374	5.8	0.6	13.2	5.9	29.1	12.3	0.0	8.8	7.8	3.9	12.7	100.0
75	MN:ROCHESTER AREA	159	29.9	0.0	0.0	4.7	64.4	0.5	0.0	0.0	0.0	0.2	0.2	100.0
76	MN:ST CLOUD AREA	157	41.9	0.0	8.6	8.1	10.0	10.8	0.0	16.1	0.1	0.8	3.7	100.0
77	WI:NORTHWEST AREA	160	54.6	0.0	0.0	17.9	20.0	1.9	0.0	1.4	0.1	0.0	4.0	100.0
78	WI-MN:LA CROSSE AREA	161	41.7	0.0	0.0	13.4	27.9	3.8	2.6	4.2	0.2	0.6	5.7	100.0
79	MI:JACKSON AREA	267	0.9	0.0	0.0	1.7	85.2	0.2	0.0	1.2	1.5	9.0	0.3	100.0
80	MN:MANKATO AREA	158	71.9	0.0	0.0	10.4	14.1	2.4	0.0	0.1	0.1	0.3	0.6	100.0
81	WA:SEATTLE-TACOMA MET	11	0.5	0.0	1.3	0.0	91.4	1.3	2.0	0.9	0.9	0.3	1.4	100.0
82	AZ-UT:FLAGSTAFF-CANYO	15	0.5	5.4	28.4	0.0	4.7	3.3	0.0	21.1	5.1	19.9	11.6	100.0
83	WI:STEVENS POINT AREA	272	5.4	0.0	0.0	85.4	2.1	5.4	0.0	0.5	1.1	0.0	0.2	100.0
84	WI:MADISON AREA	147	15.9	0.0	1.9	21.6	0.1	2.3	2.0	6.6	43.2	0.5	5.8	100.0
85	WI:GREEN BAY AREA	274	7.5	0.0	0.0	75.6	7.8	5.8	0.0	2.1	0.0	0.2	1.0	100.0
86	MI:KALAMAZOO AREA	262	0.1	0.0	0.0	59.4	40.3	0.2	0.0	0.0	0.0	0.0	0.0	100.0
87	FL:MIAMI METRO	319	0.0	0.0	1.4	0.2	0.0	26.3	16.1	10.0	33.2	4.8	7.9	100.0
88	MI:LANSING AREA	264	0.0	0.0	0.0	0.0	98.9	0.0	0.0	0.1	0.6	0.0	0.3	100.0
89	SD:SOUIS FALLS AREA	72	69.2	0.0	0.0	12.7	0.0	8.8	3.6	0.8	2.8	0.5	1.6	100.0
90	IA-IL-MO:BURLINGTON	149	47.3	0.0	0.0	8.4	27.0	15.7	0.0	1.2	0.0	0.2	0.3	100.0
91	WI:FOND DU LAC AREA	276	24.6	0.0	0.4	7.3	64.4	2.0	0.0	0.6	0.0	0.0	0.6	100.0
92	UT-ID:LOGAN AREA	43	3.2	0.0	0.4	14.4	80.7	0.0	0.0	0.1	0.4	0.0	0.8	100.0
93	WI:MILWAUKEE METRO	277	0.0	0.0	0.0	7.8	87.5	1.1	1.0	0.0	2.7	0.0	0.0	100.0
94	IA-MO:DES MOINES METR	76	28.5	0.0	0.0	7.9	0.0	4.0	25.7	1.1	31.5	0.2	1.1	100.0
95	FL:WEST PALM BEACH	318	14.3	0.0	10.8	0.0	41.8	0.0	0.0	6.6	19.6	3.3	3.6	100.0
96	AZ:TUSCON METRO	14	0.3	7.7	27.4	0.0	41.8	1.4	0.0	7.9	2.8	2.3	8.3	100.0
97	WI:OSHKOSH AREA	275	4.3	0.0	0.0	71.0	24.7	0.0	0.0	0.0	0.0	0.0	0.0	100.0
98	AZ:PHOENIX METRO	13	0.3	1.0	38.2	0.0	28.9	0.5	0.0	6.6	18.0	2.0	4.4	100.0
99	FL:SARASOTA AREA	320	10.9	0.0	31.4	0.0	0.2	0.4	0.0	24.6	16.7	2.9	12.9	100.0
100	FL:FT MYERS AREA	321	26.7	0.1	35.0	0.0	0.1	0.1	0.0	13.9	13.5	5.7	4.8	100.0
	Total Lowest-volatility LMAs		8.8	0.3	4.6	12.5	54.4	3.5	2.7	2.9	6.8	1.2	2.2	100.0

Table 6A. Industry distribution of excess labor earnings in 30 fastest growing and 30 slowest-growing LMAs: Mid-continent West, Mid-continent East and Comparison LMAs, 1974

Rank	Labor Market Area	LMA No.	Agri-culture	Mining	Con-struct	Manufacturing Nondura	Durables	TCPU	Trade Wholesal	Retail	Private Services Business	Consumer	Other	Total
			(pct.)	(pct.)	(pct.)	(pct.)	(pct.)	(pct.)	(pct.)	(pct.)	(pct.)	(pct.)	(pct.)	(pct.)
1	FL:FT MYERS AREA	321	66.9	0.0	14.1	0.0	0.0	1.8	0.0	5.3	9.3	[illegible]	[illegible]	[illegible]
2	WY-ID-UT:ROCK SPRINGS	42	5.9	60.3	29.5	0.3	0.0	2.0	0.0	0.4	0.0	1.[illegible]	[illegible]	[illegible]
3	FL:SARASOTA AREA	320	7.0	0.0	28.2	0.0	0.3	0.9	0.0	20.0	20.9	4.4	18.[illegible]	[illegible]
4	AZ:PHOENIX METRO	13	0.8	20.1	18.5	0.0	26.5	3.9	0.0	9.3	11.3	1.9	[illegible]	[illegible]
5	FL:WEST PALM BEACH	318	30.1	0.0	7.6	0.0	22.6	2.6	0.0	5.4	24.0	4.4	3.4	[illegible]
6	CO:GRAND JUNCTION-NW	21	3.0	64.0	14.5	0.0	0.0	1.1	0.0	9.9	1.1	6.5	0.0	[illegible]
7	AZ-UT:FLAGSTAFF-CANYO	15	4.1	8.0	54.5	0.0	5.1	8.0	0.0	11.4	0.2	8.5	0.2	[illegible]
8	CO:DENVER METRO	19	0.0	8.7	8.5	5.8	0.4	9.2	43.2	4.0	18.0	0.3	2.0	[illegible]
9	AZ:TUSCON METRO	14	0.1	53.6	13.6	0.0	3.4	2.4	0.0	7.9	2.5	1.4	15.0	[illegible]
10	UT-ID:LOGAN AREA	43	62.0	0.0	3.4	18.5	14.1	0.0	0.0	2.0	0.0	0.0	0.0	[illegible]
11	NM-CO:DURANGO-TAOS	16	20.7	25.4	15.6	0.1	0.1	27.5	0.0	4.9	3.2	2.4	0.0	[illegible]
12	UT:CEDAR CITY-PRICE	45	17.6	60.2	10.2	0.0	0.2	4.8	0.0	6.0	0.1	1.0	0.0	[illegible]
13	CO:FT COLLINS-NE AREA	65	93.9	0.1	0.9	2.6	1.7	0.0	0.0	0.6	0.0	0.0	0.0	[illegible]
14	FL:MIAMI METRO	319	0.0	0.0	8.0	0.0	0.0	36.0	8.2	7.7	15.8	5.6	18.6	[illegible]
15	UT:SALT LAKE CITY MET	44	0.0	19.1	18.2	0.0	4.7	15.5	31.3	6.2	3.7	0.8	0.4	[illegible]
16	SD-NE-WY:RAPID CITY A	74	62.3	17.1	6.2	0.0	0.9	5.2	0.0	7.6	0.0	0.8	0.0	[illegible]
17	LA:BATON ROUGE METRO	373	0.0	0.2	22.1	75.6	0.0	0.1	0.0	0.6	1.1	0.3	0.0	[illegible]
18	WA:SEATTLE-TACOMA MET	11	0.2	0.0	0.9	0.2	86.6	1.5	5.7	2.7	0.9	0.2	0.9	[illegible]
19	CA:LOS ANGELES METRO	25	0.1	0.0	0.0	0.4	50.8	1.7	8.9	3.7	14.0	7.6	12.8	[illegible]
20	MN:ST CLOUD AREA	157	65.7	0.0	3.9	10.9	4.7	4.5	0.0	5.1	0.0	0.4	4.7	[illegible]
21	WI:GREEN BAY AREA	274	4.3	0.0	0.3	81.1	6.7	5.7	0.3	1.4	0.0	0.1	0.0	[illegible]
22	WI:STEVENS POINT AREA	272	2.2	0.0	0.0	84.3	2.8	1.5	0.0	0.2	2.0	0.0	6.9	[illegible]
23	ME:PORTLAND METRO	196	0.7	0.0	4.8	61.3	8.7	0.7	0.0	3.7	1.7	0.7	17.7	[illegible]
24	OR:MEDFORD (SW)	7	0.2	0.0	1.4	0.0	89.1	1.0	0.0	4.3	0.0	0.3	3.6	[illegible]
25	MN-WI:MPLS-ST PAUL ME	156	0.0	0.0	0.8	13.8	35.0	2.9	43.7	1.7	2.0	0.0	0.0	[illegible]
26	ND:MINOT-BISMARK AREA	84	94.1	0.0	2.9	0.0	0.0	1.1	0.5	0.7	0.0	0.0	0.7	[illegible]
27	MI:TRAVERSE CITY (NW)	269	0.4	2.5	17.5	4.8	6.7	4.3	0.0	14.2	0.8	4.3	44.5	[illegible]
28	IA:IOWA CITY AREA	152	86.4	0.0	1.2	9.9	0.0	0.1	0.0	0.6	1.7	0.0	0.0	[illegible]
29	NC-VA:GREENBOROUGH AR	333	0.0	0.0	0.2	91.6	7.3	0.2	0.0	0.4	0.1	0.0	0.0	[illegible]
30	WI:NORTHWEST AREA	160	67.1	0.0	0.9	9.6	7.8	2.3	0.0	8.7	0.0	0.4	3.2	[illegible]
	Total Fastest-growing LMAs		13.7	4.3	5.1	19.1	27.1	4.7	8.5	3.4	6.3	2.4	5.5	[illegible]
71	MI:KALAMAZOO AREA	262	0.7	0.0	0.0	51.2	46.1	0.0	0.0	0.0	0.1	0.0	1.8	[illegible]
72	WY-NE:CHEYENNE AREA	73	22.0	47.3	5.3	3.1	0.0	17.0	0.0	4.5	0.0	0.7	0.0	[illegible]
73	MI:DETROIT METRO	266	0.0	0.0	0.0	0.0	99.6	0.0	0.0	0.0	0.0	0.0	0.4	[illegible]
74	AZ:HOLBROOK (NE)	12	10.9	2.2	19.9	0.8	6.8	12.7	0.0	1.3	42.8	1.7	0.7	[illegible]
75	MI:CADILLAC AREA	270	21.9	0.0	1.0	19.2	38.0	6.2	0.0	9.4	0.0	0.2	4.2	[illegible]
76	WI:MILWAUKEE METRO	277	0.0	0.0	0.0	6.3	92.8	0.3	0.0	0.0	0.5	0.0	0.1	[illegible]
77	MI:MIDLAND AREA	265	3.2	0.0	0.0	19.4	76.0	0.3	0.0	0.1	0.0	0.0	0.9	[illegible]
78	ND-MT-SD:DICKINSON AR	85	98.8	0.6	0.0	0.0	0.0	0.4	0.0	0.2	0.0	0.0	0.0	[illegible]
79	ID-WA:LEWISTON AREA	4	72.5	0.0	0.7	0.3	26.0	0.1	0.0	0.3	0.0	0.0	0.0	[illegible]
80	MT:BUTTE-HELENA AREA	48	5.9	69.9	0.2	0.6	5.0	10.1	0.0	6.2	0.8	0.6	0.7	[illegible]
81	MI:HURON FOREST AREA	268	0.0	3.7	3.2	0.0	35.2	1.3	0.0	26.5	25.4	1.4	3.3	[illegible]
82	WI:KENOSHA AREA	278	0.0	0.0	0.0	1.2	98.3	0.2	0.0	0.2	0.0	0.1	0.0	[illegible]
83	IA-NE-SD:SOUIX CITY	70	72.2	0.0	0.0	23.8	0.0	2.5	0.4	0.7	0.2	0.0	0.2	[illegible]
84	IA:CEDAR RAPIDS AREA	151	15.1	0.1	0.0	20.5	63.8	0.4	0.0	0.1	0.0	0.0	0.0	[illegible]
85	IA:OTTUMWA AREA	150	86.3	0.0	0.0	0.1	12.4	0.7	0.0	0.4	0.0	0.0	0.1	[illegible]
86	LA-MS:NATCHEZ MS AREA	375	8.5	27.9	5.6	35.8	17.2	0.0	0.0	3.5	0.2	1.3	0.0	[illegible]
87	SD-ND:ABERDEEN-WEST	75	99.8	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.0	[illegible]
88	MN-SD:MORRIS-SISSETON	81	98.6	0.0	0.3	0.0	0.0	0.1	0.7	0.3	0.0	0.0	0.0	[illegible]
89	MI-WI:UPPER PENNSULIA	279	0.1	60.5	0.5	0.7	5.5	3.8	0.0	5.7	0.0	20.9	2.4	[illegible]
90	IA-IL-MO:BURLINGTON	149	84.1	0.0	0.1	0.8	11.1	3.8	0.0	0.1	0.0	0.0	0.0	[illegible]
91	WV-VA:BLUEFIELD	207	0.0	99.2	0.2	0.0	0.0	0.5	0.0	0.0	0.0	0.1	0.0	[illegible]
92	WI:PLATTEVILLE AREA	148	96.8	0.0	0.0	0.1	0.0	0.2	0.0	1.3	0.0	0.0	1.7	[illegible]
93	MN-WI:DULUTH AREA	155	0.0	79.9	4.6	4.4	0.1	9.2	0.0	0.6	0.0	0.1	1.2	[illegible]
94	IA:WATERLOO AREA	153	52.7	0.0	0.1	5.9	40.9	0.2	0.0	0.2	0.0	0.0	0.0	[illegible]
95	IA-MN:MASON CITY AREA	154	93.9	0.0	0.0	5.3	0.2	0.4	0.0	0.2	0.0	0.0	0.0	[illegible]
96	IA-IL:DUBUQUE AREA	146	48.7	0.0	1.0	29.1	20.0	0.9	0.0	0.2	0.0	0.0	0.0	[illegible]
97	IA:SPENCER (NW) AREA	77	98.3	0.0	0.0	1.1	0.0	0.2	0.1	0.3	0.0	0.0	0.0	[illegible]
98	MN:WORTHINGTON (SE)	78	99.2	0.0	0.0	0.6	0.0	0.1	0.0	0.1	0.0	0.0	0.0	[illegible]
99	MI:JACKSON AREA	267	3.1	0.0	0.0	2.6	88.0	0.6	0.0	0.2	4.8	0.0	0.6	[illegible]
100	MT:GREAT FALLS AREA	51	97.7	0.1	0.3	0.0	0.0	0.8	0.3	0.8	0.0	0.0	0.0	[illegible]
	Total Slowest-growing LMAs		31.8	6.4	0.2	2.7	57.5	0.6	0.0	0.3	0.2	0.1	0.3	[illegible]

Table 6B. Industry distribution of excess labor earnings in 30 fastest growing and 30 slowest-growing LMAs: Mid-continent West, Mid-continent East and Comparison LMAs, 1986

Rank	Labor Market Area	LMA No.	Agri-culture	Mining	Con-struct	Manufacturing Nondura	Durables	TCPU	Trade Wholesal	Trade Retail	Private Services Business	Private Services Consumer	Private Services Other	Total
			(pct.)	(pct.)	(pct.)	(pct.)	(pct.)	(pct.)	(pct.)	(pct.)	(pct.)	(pct.)	(pct.)	(pct.)
1	FL:FT MYERS AREA	321	26.7	0.1	35.0	0.0	0.1	0.1	0.0	12.6	12.5	5.4	4.3	100.0
2	WY-ID-UT:ROCK SPRINGS	42	0.6	65.3	26.7	0.0	0.2	6.1	0.0	0.0	0.0	0.9	0.2	100.0
3	FL:SARASOTA AREA	320	10.9	0.0	31.4	0.0	0.2	0.4	0.0	24.6	16.7	3.9	11.9	100.0
4	AZ:PHOENIX METRO	13	0.3	1.0	38.2	0.0	28.9	0.5	0.0	6.6	18.0	2.0	4.4	100.0
5	FL:WEST PALM BEACH	318	14.3	0.0	10.8	0.0	41.8	0.0	0.0	6.6	19.6	3.3	3.6	100.0
6	CO:GRAND JUNCTION-NW	21	0.1	36.7	18.2	0.0	0.0	1.0	0.0	13.4	2.8	21.2	6.6	100.0
7	AZ-UT:FLAGSTAFF-CANYO	15	0.5	5.4	28.4	0.0	4.7	3.3	0.0	21.1	5.1	19.9	11.6	100.0
8	CO:DENVER METRO	19	0.0	26.6	1.8	2.7	7.7	22.1	11.4	2.0	23.3	0.2	2.2	100.0
9	AZ:TUSCON METRO	14	0.3	7.7	27.4	0.0	41.8	1.4	0.0	7.9	2.8	2.3	8.3	100.0
10	UT-ID:LOGAN AREA	43	3.2	0.0	0.4	14.4	80.7	0.0	0.0	0.1	0.4	0.0	0.8	100.0
11	NM-CO:DURANGO-TAOS	16	5.6	39.5	7.0	0.1	0.0	41.4	0.0	2.4	1.1	1.4	1.5	100.0
12	UT:CEDAR CITY-PRICE	45	7.1	54.5	13.1	0.0	0.2	18.3	0.0	1.8	1.7	0.7	2.5	100.0
13	CO:FT COLLINS-NE AREA	65	38.9	1.8	16.6	3.8	30.8	2.0	0.0	3.1	0.1	0.8	2.1	100.0
14	FL:MIAMI METRO	319	0.0	0.0	1.4	0.2	0.0	26.3	16.1	10.0	33.2	4.8	7.9	100.0
15	UT:SALT LAKE CITY MET	44	0.0	2.6	13.7	0.0	13.2	14.9	29.9	6.9	12.3	1.6	5.0	100.0
16	SD-NE-WY:RAPID CITY A	74	14.7	69.8	3.6	0.0	1.1	3.5	0.0	2.5	0.0	0.6	4.1	100.0
17	LA:BATON ROUGE METRO	373	0.0	0.1	12.7	81.9	0.0	1.6	0.0	1.4	1.1	0.6	0.6	100.0
18	WA:SEATTLE-TACOMA MET	11	0.5	0.0	1.3	0.0	91.4	1.3	2.0	0.9	0.9	0.3	1.4	100.0
19	CA:LOS ANGELES METRO	25	0.0	0.0	0.0	0.2	43.6	0.3	10.7	0.1	31.5	11.6	1.9	100.0
20	MN:ST CLOUD AREA	157	41.9	0.0	8.6	8.1	10.0	10.8	0.0	16.1	0.1	0.8	3.7	100.0
21	WI:GREEN BAY AREA	274	7.5	0.0	0.0	75.6	7.8	5.8	0.0	2.1	0.0	0.2	1.0	100.0
22	WI:STEVENS POINT AREA	272	5.4	0.0	0.0	85.4	2.1	5.4	0.0	0.5	1.1	0.0	0.2	100.0
23	ME:PORTLAND METRO	196	1.4	0.0	10.9	54.9	12.0	1.1	0.0	8.2	7.4	0.1	3.9	100.0
24	OR:MEDFORD (SW)	7	0.8	0.0	0.1	0.0	85.3	3.5	0.0	5.5	0.1	0.6	4.2	100.0
25	MN-WI:MPLS-ST PAUL ME	156	0.0	0.0	0.4	14.3	55.1	3.5	20.8	1.0	3.6	0.3	1.0	100.0
26	ND:MINOT-BISMARK AREA	84	67.1	4.0	0.9	0.1	0.0	24.0	0.2	1.2	0.2	0.7	1.5	100.0
27	MI:TRAVERSE CITY (NW)	269	0.0	6.5	9.7	3.5	49.7	0.3	0.0	11.1	0.7	6.7	11.8	100.0
28	IA:IOWA CITY AREA	152	58.0	0.0	0.0	38.1	0.4	1.2	0.0	0.3	0.3	0.7	0.9	100.0
29	NC-VA:GREENBOROUGH AR	333	0.0	0.0	3.5	74.9	14.6	0.9	4.8	0.5	0.0	0.1	0.7	100.0
30	WI:NORTHWEST AREA	160	54.6	0.0	0.0	17.9	20.0	1.9	0.0	1.4	0.1	0.0	4.0	100.0
	Total Fastest-growing LMAs		4.2	4.8	5.6	12.5	37.9	4.9	6.9	2.8	13.7	4.2	2.5	100.0
71	MI:KALAMAZOO AREA	262	0.1	0.0	0.0	59.4	40.3	0.2	0.0	0.0	0.0	0.0	0.0	100.0
72	WY-NE:CHEYENNE AREA	73	11.9	51.3	2.8	1.1	0.0	26.4	0.0	2.9	0.1	0.6	2.8	100.0
73	MI:DETROIT METRO	266	0.0	0.0	0.0	0.0	99.7	0.0	0.0	0.0	0.3	0.0	0.0	100.0
74	AZ:HOLBROOK (NE)	12	4.9	9.3	15.7	1.2	3.8	25.4	0.0	0.9	37.6	0.4	0.7	100.0
75	MI:CADILLAC AREA	270	13.9	0.0	0.0	32.3	36.9	2.2	0.0	4.8	0.5	1.6	7.7	100.0
76	WI:MILWAUKEE METRO	277	0.0	0.0	0.0	7.8	87.5	1.1	1.0	0.0	2.7	0.0	0.0	100.0
77	MI:MIDLAND AREA	265	0.0	0.0	0.0	20.1	79.3	0.3	0.0	0.2	0.0	0.0	0.1	100.0
78	ND-MT-SD:DICKINSON AR	85	58.6	37.6	0.1	0.0	0.0	2.9	0.0	0.3	0.0	0.1	0.4	100.0
79	ID-WA:LEWISTON AREA	4	63.0	0.0	0.0	9.0	24.9	0.8	0.0	1.1	0.3	0.4	0.5	100.0
80	MT:BUTTE-HELENA AREA	48	17.2	8.0	3.7	0.0	2.3	26.2	0.0	17.4	4.2	2.8	18.2	100.0
81	MI:HURON FOREST AREA	268	0.1	10.4	5.8	5.1	30.2	3.2	0.0	16.7	6.8	2.6	19.1	100.0
82	WI:KENOSHA AREA	278	0.6	0.0	0.0	11.3	86.2	0.1	0.0	1.3	0.0	0.0	0.6	100.0
83	IA-NE-SD:SOUIX CITY	70	62.8	0.0	0.1	31.3	0.0	4.0	0.0	0.3	0.5	0.2	0.9	100.0
84	IA:CEDAR RAPIDS AREA	151	7.2	0.0	0.0	21.3	70.2	1.0	0.0	0.0	0.3	0.0	0.0	100.0
85	IA:OTTUMWA AREA	150	72.8	0.0	0.0	2.9	22.2	1.4	0.0	0.1	0.0	0.0	0.5	100.0
86	LA-MS:NATCHEZ MS AREA	375	1.7	71.3	0.8	14.2	6.0	0.6	0.0	2.4	0.2	0.7	2.1	100.0
87	SD-ND:ABERDEEN-WEST	75	99.0	0.0	0.0	0.0	0.0	0.3	0.0	0.2	0.1	0.1	0.3	100.0
88	MN-SD:MORRIS-SISSETON	81	96.2	0.0	0.1	2.0	0.0	0.9	0.0	0.2	0.0	0.2	0.4	100.0
89	MI-WI:UPPER PENNSULIA	279	0.3	43.2	0.9	16.8	7.9	6.4	0.0	9.9	1.1	2.9	10.6	100.0
90	IA-IL-MO:BURLINGTON	149	47.3	0.0	0.0	8.4	27.0	15.7	0.0	1.2	0.0	0.2	0.3	100.0
91	WV-VA:BLUEFIELD	207	0.0	97.4	0.1	0.0	0.0	1.9	0.0	0.4	0.0	0.1	0.0	100.0
92	WI:PLATTEVILLE AREA	148	88.5	0.0	0.0	1.7	4.8	0.5	0.0	2.0	0.0	0.2	2.4	100.0
93	MN-WI:DULUTH AREA	155	1.5	63.3	1.6	7.0	4.1	16.0	0.0	4.0	0.5	0.8	1.4	100.0
94	IA:WATERLOO AREA	153	65.6	0.0	0.0	1.5	31.8	0.5	0.0	0.0	0.0	0.2	0.3	100.0
95	IA-MN:MASON CITY AREA	154	93.3	0.0	0.0	3.9	1.7	0.7	0.0	0.1	0.0	0.0	0.3	100.0
96	IA-IL:DUBUQUE AREA	146	50.1	0.0	0.0	11.0	35.2	2.9	0.0	0.1	0.1	0.2	0.4	100.0
97	IA:SPENCER (NW) AREA	77	97.5	0.0	0.0	1.3	0.1	0.6	0.0	0.1	0.0	0.0	0.3	100.0
98	MN:WORTHINGTON (SE)	78	95.8	0.0	0.0	0.9	1.6	1.4	0.0	0.0	0.0	0.1	0.2	100.0
99	MI:JACKSON AREA	267	0.9	0.0	0.0	1.7	85.2	0.2	0.0	1.2	1.5	9.0	0.3	100.0
100	MT:GREAT FALLS AREA	51	80.5	1.4	1.4	0.0	0.0	6.9	0.4	3.6	1.1	0.8	3.9	100.0
	Total Slowest-growing LMAs		16.5	3.9	0.1	2.9	74.6	0.9	0.0	0.2	0.5	0.1	0.2	100.0