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United States
Department of
Agriculture

Economic
Research
Service

Agriculture
Information
Bulletin
Number 552

November 1988

Employment and Earnings in Nonmetro Industry, 1979-86

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PRODUCTION
CURRENT

DEC

Employment and earnings in nonmetropolitan (nonmetro) industries declined more during bad times and expanded less in good times than in metropolitan (metro) industries in 1979-86. Employment fell 0.5 percentage point a year in nonmetro areas during the 1979-82 recession, but rose each year in metro areas by 0.5 percentage point. Overall, real earnings declined during the recession, but dropped much faster in nonmetro industries: 3.5 percent a year in nonmetro industries compared with 0.9 percent a year in metro industries. The Midwest was hit hardest. Nonmetro industries improved only half as fast as metro industries during the 1982-86 recovery.

Recent nonmetro jobs and earnings growth in both goods-producing and service-producing industries lagged those elsewhere. We compare earnings and employment by industry for nonmetro and metro areas in 1979-86--a period spanning recession and recovery--to see how nonmetro business is faring, what kinds of jobs are being created, and how earnings are changing. We also look at regional differences.

Though employment and real earnings did improve in 1982-86, the growth was slower in nonmetro than in metro areas. Most of the nonmetro growth in employment occurred in service-producing industries:

Recovery, 1982-86

	<u>Employment growth</u>	<u>Earnings growth</u>
	<u>Percent per year</u>	
Nonmetro:		
Goods	0.3	1.6
Services	2.7	3.2
Metro:		
Goods	1.3	2.4
Services	3.8	5.3

Nonmetro growth lagged metro growth. And services, with relatively low-paying jobs, accounted for most of nonmetro growth.

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Definitions

Goods-producing industries. Farming, mining, construction, manufacturing, and the combined category of agricultural services, forestry, fishing, and other industries.

Service-producing industries. Transportation and public utilities; wholesale and retail trade; finance, insurance, and real estate; services; and Federal, State, and local government and government enterprises.

Earnings. The sum of wages and salaries, other labor income, and proprietor's income.

Real earnings. The value of past earnings adjusted to the current year. Earnings in 1979 and 1982 were adjusted using the implicit price deflator for personal consumption expenditures to reflect their value as of 1986. With the deflator valued at 100 for 1986, the deflators for 1979 and 1982 were 68.4 and 87.5, respectively.

Metro. Metropolitan Statistical Areas (MSA) defined as of June 1986 by the U.S. Office of Management and Budget. Includes core counties containing a city of 50,000 or more people, or containing several smaller cities totaling 50,000 or more people and a total area population of at least 100,000. Additional contiguous counties are included in the MSA if they are economically and socially integrated with the core county.

Nonmetro. Areas that are not metro.

Regions. Regions were aggregated from the eight regions defined by the U.S. Department of Commerce's Bureau of Economic Analysis. These regions differ slightly from the more familiar census regions. Alaska and Hawaii are not included.

Northeast--Connecticut, Delaware, District of Columbia, Maine, Maryland, Massachusetts, New Hampshire, New Jersey, New York, Pennsylvania, Rhode Island, and Vermont.

Midwest--Illinois, Indiana, Iowa, Kansas, Michigan, Minnesota, Missouri, Nebraska, North Dakota, Ohio, South Dakota, and Wisconsin.

South--Alabama, Arizona, Arkansas, Florida, Georgia, Kentucky, Louisiana, Mississippi, New Mexico, North Carolina, Oklahoma, South Carolina, Tennessee, Texas, Virginia, and West Virginia.

West--California, Colorado, Idaho, Montana, Nevada, Oregon, Utah, Washington, and Wyoming.

THE RECESSION BY INDUSTRY AND REGION

Earnings fell faster than employment during the recession. That trend may have been caused by workers working fewer hours, proportionately more higher wage workers losing jobs than lower wage workers, or wages increasing slower than prices.

Employment and real earnings in the goods-producing industries of farming, construction, and manufacturing declined in both nonmetro and metro areas of all regions, except for slight growth in real earnings from manufacturing in the metro West (tables 1 and 2). Particularly hard hit was the Midwest, where construction and manufacturing employment fell by more than 6.5 percent per year and real farm earnings dropped 20.6 percent per year.

The exception to the general downturn in the goods-producing sector was mining, in which employment and real earnings surged as high world energy prices spurred energy exploration and production. Employment and real earnings in mining rose particularly rapidly in metro areas of the South and West.

Service-producing industries saw nonmetro employment growth in all regions but a decline in real earnings (table 2). Real earnings from service-producing industries declined in the nonmetro Midwest by an average 2.4 percent per year, double the rate of loss for any other nonmetro area. Real earnings from service-producing industries also fell in the metro Midwest, the only metro area to have declining real earnings in these industries.

THE RECOVERY BY INDUSTRY AND REGION

During the recovery, the goods-producing industries generally reversed the employment and earnings trends of the recession. Construction employment and real earning grew slower in nonmetro than in metro areas (tables 1 and 2). Conversely, manufacturing employment and real earnings grew faster in nonmetro than in metro areas. These nonmetro-metro relationships did not hold in all regions, however, and growth was not equally distributed across regions.

The nonmetro Midwest rebounded during the recovery, but its construction employment growth rate averaged only 0.7 percent a year, less than half the rate of increase in the nonmetro West, the next slowest growing nonmetro area. The nonmetro Northeast had the highest rate of construction employment growth of all areas, increasing at 8.8 percent per year. In contrast, the nonmetro Northeast was the only nonmetro area in which manufacturing employment continued to decline, although only by 0.3 percent per year.

Farming employment continued to decline across the board. Real earnings from farming, however, grew in all areas except the nonmetro South. The largest

Data Sources

Estimates of changes in employment and real earnings, broken out by industry, are based on data recently released by the U.S. Department of Commerce, Bureau of Economic Analysis (BEA). BEA revised 1969-84 employment and income estimates and released new data for 1985 and 1986.

Estimates of employment change by industry from 1987 to 1988 are based on preliminary monthly data for January 1987 and January 1988 from the U.S. Department of Labor, Bureau of Labor Statistics.

Table 1--Average annual change in metro and nonmetro employment by industry and region

Region and industry	Total			Metro		Nonmetro	
	1979-82	1982-86	1987-88	1979-82	1982-86	1979-82	1982-86
<u>Percent</u>							
United States	0.3	2.9	3.0	0.5	3.2	-0.5	1.8
Goods-producing	-2.8	1.0	NA	-2.7	1.3	-2.8	.3
Farming	-2.0	-1.7	NA	-1.7	-1.6	-2.2	-1.8
Mining	7.6	-5.1	.7	10.9	-4.0	4.1	-6.5
Construction	-3.2	5.7	3.5	-3.2	6.4	-3.6	3.0
Manufacturing	-3.6	.3	1.8	-3.4	0	-4.2	1.4
Service-producing	1.5	3.6	3.3	1.6	3.8	.9	2.7
Northeast	.2	2.8	2.8	.3	2.8	-.1	2.8
Goods-producing	-2.6	.4	NA	-2.6	.4	-2.6	1.0
Farming	-.7	-1.3	NA	-.8	-1.3	-.5	-1.3
Mining	-.1	-1.9	-2.3	-1.4	-.1	1.9	-4.5
Construction	-.8	7.7	7.5	-.6	7.6	-2.2	8.8
Manufacturing	-3.3	-1.4	-.2	-3.3	-1.6	-3.7	-.3
Service-producing	1.2	3.5	3.2	1.2	3.5	1.2	3.7
Midwest	-1.7	2.4	2.6	-1.8	2.7	-1.5	1.5
Goods-producing	-5.7	.9	NA	-6.5	1.2	-4.1	.3
Farming	-2.3	-1.4	NA	-2.0	-1.1	-2.4	-1.4
Mining	2.8	-1.7	2.5	.1	1.2	4.6	-3.5
Construction	-7.2	4.6	4.7	-7.9	6.1	-5.4	.7
Manufacturing	-6.6	.6	1.5	-6.8	.3	-6.1	1.8
Service-producing	.1	3.0	2.8	.1	3.3	.1	2.2
South	1.5	3.0	3.2	2.2	3.5	-.1	1.7
Goods-producing	-.9	.9	NA	0	1.4	-2.1	0
Farming	-2.1	-2.5	NA	-1.3	-2.3	-2.4	-2.6
Mining	9.8	-6.1	-.1	14.1	-5.1	4.9	-7.3
Construction	-1.6	4.8	-.1	-1.1	5.2	-3.0	3.2
Manufacturing	-1.7	.8	2.9	-1.0	.5	-3.0	1.4
Service-producing	2.5	3.8	3.6	3.0	4.2	1.2	2.7
West	1.0	3.5	3.6	1.1	3.7	0	1.9
Goods-producing	-1.7	2.2	NA	-1.4	2.4	-2.9	.5
Farming	-1.9	-.9	NA	-2.3	-1.3	-1.3	-.5
Mining	7.8	-6.3	4.0	11.8	-4.5	2.6	-9.2
Construction	-5.1	6.5	4.8	-5.3	7.3	-4.0	1.6
Manufacturing	-1.5	1.5	3.2	-1.0	1.4	-6.3	2.6
Service-producing	1.9	3.9	3.7	2.0	4.1	1.2	2.5

NA = Not available.

Source: The 1979-86 change was computed from data provided by the U.S. Department of Commerce, Bureau of Economic Analysis. The 1987-88 change was computed from monthly employment data provided by the U.S. Department of Labor, Bureau of Labor Statistics.

Table 2--Average annual change in metro and nonmetro real earnings by region and industry

Region and industry	Total		Metro		Nonmetro	
	1979-82	1982-86	1979-82	1982-86	1979-82	1982-86
<u>Percent</u>						
United States	-1.3	4.1	-0.9	4.4	-3.5	2.5
Goods-producing	-4.0	2.2	-3.4	2.4	-6.4	1.6
Farming	-12.8	4.4	-8.3	3.6	-15.2	5.0
Mining	8.1	-6.5	11.7	-5.0	3.7	-8.7
Construction	-5.8	5.7	-5.5	6.4	-7.4	2.4
Manufacturing	-3.6	1.7	-3.3	1.6	-4.9	2.4
Service-producing	.2	5.0	.4	5.3	-1.1	3.2
Northeast	-.8	4.8	-.6	4.9	-2.5	4.2
Goods-producing	-2.9	2.2	-2.7e	2.1e	-4.4e	2.7e
Farming	-6.1	2.9	-6.2	3.9	-6.1	1.2
Mining	3.3	-1.3	3.5e	.3e	1.1e	-5.7e
Construction	-2.5	10.0	-2.1	9.4e	-6.6	12.0e
Manufacturing	-3.0	.4	-2.9	.4	-4.0	1.2
Service-producing	.3	6.0	.3e	6.0e	-1.1e	5.1e
Midwest	-4.6	3.4	-4.2	3.6	-6.0	2.7
Goods-producing	-8.6	2.7	-8.1e	2.5e	-10.9e*	3.9e*
Farming	-20.6	9.8	-19.7	6.9	-20.8	10.5
Mining	.4	-4.2	-.5e	-.4e	NA	NA
Construction	-11.0	4.6	-11.7e	6.1e	-10.5e	.4e
Manufacturing	-7.2	2.0	-7.4	1.9	-6.6	2.5
Service-producing	-1.7	3.9	-1.5e	4.3e	-2.4e	2.3e
South	.5	3.7	1.4	4.2	-2.1	2.2
Goods-producing	-1.2	1.3	.2e	1.6e	-4.0e	.5e
Farming	-8.4	.1	-2.2	1.3	-10.9	-.4
Mining	10.3	-8.0	15.4e	-7.1e	5.0e	-9.8e
Construction	-4.0	4.1	-3.2e	4.4e	-7.2e	2.9e
Manufacturing	-1.2	2.0	-.3e	1.7e	-3.4e	2.7e
Service-producing	1.5	4.9	2.0e	5.3e	-.7e**	3.8e**
West	-.6	4.7	-.2	5.0	-3.5	1.7
Goods-producing	-2.2	3.1	-1.4	3.4e	-7.1	.3e
Farming	-8.1	3.6	-6.6	3.7	-10.4	3.3
Mining	9.0	-6.6	12.9	-5.2e	3.6	-9.7e
Construction	-6.5	5.4	-6.4	6.1e	-7.5	-.8e
Manufacturing	-.6	2.9	.2	2.9	-8.4	2.5
Service-producing	.2	5.4	.3	5.7	-1.0	2.5

NA = Not available. e = Change was estimated using amounts purposely lowered by the U.S. Department of Commerce, Bureau of Economic Analysis, to prevent disclosure of data on specific employers. * = Mining was not disclosed in 1979 and 1986. Therefore, mining was excluded from computations of changes in income from goods-producing industries in the nonmetro Midwest. ** = Transportation and public utilities were not disclosed in 1986 and, therefore, were excluded from computations of changes in income from service-producing industries for the nonmetro South. Source: Computed from data provided by the U.S. Department of Commerce, Bureau of Economic Analysis.

turnaround was in the Midwest, where real earnings from farming had declined an average of 21 percent per year during the recession but grew an average of 10 percent per year during the recovery.

Mining, in contrast to generally improving conditions in other goods-producing industries, declined during the recovery as slumping world energy prices made U.S. mining less competitive. Mining employment fell in both nonmetro and metro areas of all regions except the metro Midwest, where it rose slightly. Although mining employment had not increased as fast in nonmetro as in metro areas during 1979-82, it declined faster in nonmetro areas in 1982-86.

Both employment and real earnings grew in service-producing industries during the recovery, but less in nonmetro areas. For example, employment growth accelerated in the service sector in nonmetro and metro areas nationwide, but by 2.7 percent in nonmetro areas compared with 3.8 percent in metro areas. Real earnings in the service sector, which had declined in nonmetro areas and in the metro Midwest during the recession, grew 3.2 percent in nonmetro areas and 5.3 percent in metro areas during the recovery.

The share of employment in service-producing industries grew in 1979-86 (table 3). Service-producing industries accounted for 60 percent of nonmetro and 73 percent of metro employment in 1979. By 1986, they accounted for 65 percent of nonmetro and 77 percent of metro employment. Goods-producing industries, in contrast, lost jobs in nonmetro and metro areas. Farming's share of employment dropped by 2 percentage points and manufacturing's share fell by 2.4 percentage points in nonmetro areas between 1979 and 1986. Only manufacturing accounted for significantly less employment in metro areas in 1986 than in 1979, a drop of 4.1 percentage points.

Preliminary data for January 1987 to January 1988 indicate that the recovery in U.S. employment is continuing (table 1). Service-producing industries are still growing in all regions, construction is growing outside the South, and manufacturing is growing in all regions but the Northeast. Mining is still declining in the Northeast, is stagnant in the South, and is growing in the Midwest and West.

NONMETRO REAL EARNINGS PER WORKER LOWER

Average real earnings per nonmetro worker declined faster during the recession and increased slower during the recovery than metro earnings (table 4). Nonmetro real earnings per worker averaged \$17,077 in 1979, declined to \$15,575 in 1982, and increased to only \$16,011 by 1986. Average real earnings of metro workers, \$21,322 in 1979, fell to \$20,465 by 1982, and rose to \$21,471 by 1986. Nonmetro average real earnings per worker during the recession and recovery fell from 80 percent of the metro average in 1979, to 76 percent in 1982, to 75 percent in 1986. This pattern of lower nonmetro real earnings and a widening gap between nonmetro and metro earnings holds for all regions.

Workers in all nonmetro industries had declining average real earnings during the recession (table 5). Particularly hard hit was farming, where average real earnings fell from \$14,422 in 1979 to \$9,400 in 1982.

Real earnings per worker rebounded during the recovery in all nonmetro industries except mining and construction. Nonmetro farming had the highest annual rate of increase, but remained the industry with the lowest average earnings per worker.

Table 3--Metro and nonmetro employment by industry

Area and industry	1979		1982		1986	
	Workforce size	Distribution by industry	Workforce size	Distribution by industry	Workforce size	Distribution by industry
	<u>Number</u>	<u>Percent</u>	<u>Number</u>	<u>Percent</u>	<u>Number</u>	<u>Percent</u>
United States	111,631,900	100.0	112,565,400	100.0	126,169,400	100.0
Goods-producing*	33,167,800	29.7	30,505,700	27.1	31,780,900	25.2
Farming	3,848,000	3.4	3,621,000	3.2	3,377,000	2.7
Mining	1,089,900	1.0	1,355,900	1.2	1,098,800	.9
Construction	5,897,000	5.3	5,341,400	4.7	6,657,700	5.3
Manufacturing	21,490,000	19.3	19,253,800	17.1	19,479,400	15.4
Service-producing	78,464,100	70.3	82,059,700	72.9	94,388,500	74.8
Metro	88,174,678	100.0	89,477,337	100.0	101,373,967	100.0
Goods-producing*	23,854,560	27.1	21,961,818	24.5	23,135,706	22.8
Farming	1,272,269	1.4	1,209,081	1.4	1,134,355	1.1
Mining	534,873	.6	730,032	.8	621,024	.6
Construction	4,596,668	5.2	4,175,015	4.7	5,347,564	5.3
Manufacturing	16,878,172	19.1	15,200,663	17.0	15,195,770	15.0
Service-producing	64,320,118	72.9	67,515,519	75.5	78,238,261	77.2
Nonmetro	23,457,222	100.0	23,088,063	100.0	24,795,433	100.0
Goods-producing*	9,313,240	39.7	8,543,882	37.0	8,645,194	34.9
Farming	2,575,731	11.0	2,411,919	10.4	2,242,645	9.0
Mining	555,027	2.4	625,868	2.7	477,776	1.9
Construction	1,300,332	5.5	1,166,385	5.1	1,310,136	5.3
Manufacturing	4,611,828	19.7	4,053,137	17.6	4,283,630	17.3
Service-producing	14,143,982	60.3	14,544,181	63.0	16,150,239	65.1

*Goods-producing also includes the combined category of agricultural services forestry, fishing, and other industries. Therefore, farming, mining, construction, and manufacturing do not add to goods-producing.

Source: Computed from data provided by the U.S. Department of Commerce, Bureau of Economic Analysis.

Table 4--Real earnings per worker in metro and nonmetro areas by region

Region and area	1979	1982	1986	Average annual change		
				1979-82	1982-86	1979-86
	-----	1986 dollars	-----	-----	Percent	-----
United States	20,430	19,462	20,398	-1.6	1.2	0
Northeast	21,239	20,622	22,298	-1.0	2.0	.7
Midwest	21,164	19,391	20,191	-2.9	1.0	-.7
South	18,539	18,003	18,504	-1.0	.7	0
West	21,513	20,543	21,502	-1.5	1.1	0
Metro	21,322	20,465	21,471	-1.4	1.2	.1
Northeast	21,676	21,113	22,872	-.9	2.0	.8
Midwest	22,523	20,949	21,702	-2.4	.9	-.5
South	19,492	19,058	19,554	-.7	.6	0
West	21,938	21,083	22,157	-1.3	1.2	.1
Nonmetro	17,077	15,575	16,011	-3.0	.7	-.9
Northeast	17,066	15,881	16,752	-2.4	1.3	-.3
Midwest	17,424	15,143	15,871	-4.6	1.2	-1.3
South	16,256	15,296	15,609	-2.0	.5	-.6
West	18,671	16,807	16,650	-3.4	-.2	-1.6

Source: Computed from data provided by the U.S. Department of Commerce, Bureau of Economic Analysis.

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Table 5--Real earnings per worker in metro and nonmetro areas by industry

Area and industry	1979	1982	1986	Average annual change		
				1979-82	1982-86	1979-86
	-----	1986 dollars	-----	-----	Percent	-----
United States	20,430	19,462	20,398	-1.6	1.2	0
Goods-producing	25,129	24,148	25,296	-1.3	1.2	.1
Farming	14,411	10,154	12,955	-11.0	6.3	-1.5
Mining	34,503	35,009	33,032	.5	-1.4	-.6
Construction	26,962	24,866	24,862	-2.7	0	-1.2
Manufacturing	26,454	26,448	27,984	0	1.4	.8
Service-producing	18,443	17,720	18,749	-1.3	1.4	.2
Metro	21,322	20,465	21,471	-1.4	1.2	.1
Goods-producing	27,096	26,559	27,686	-.7	1.0	.3
Farming	14,389	11,658	14,308	-6.8	5.3	-.1
Mining	36,917	37,708	36,161	.7	-1.0	-.3
Construction	27,969	26,023	25,991	-2.4	0	-1.0
Manufacturing	27,904	27,988	29,815	.1	1.6	1.0
Service-producing	19,180	18,483	19,634	-1.2	1.5	.3
Nonmetro	17,077	15,575	16,011	-3.0	.7	-.9
Goods-producing	20,091	17,952	18,901	-3.7	1.3	-.9
Farming	14,422	9,400	12,271	-13.3	6.9	-2.3
Mining	32,178	31,861	28,966	-.3	-2.4	-1.5
Construction	23,402	20,727	20,258	-4.0	-.6	-2.0
Manufacturing	21,147	20,672	21,490	-.8	1.0	.2
Service-producing	15,092	14,178	14,463	-2.1	.5	-.6

Source: Computed from data provided by the U.S. Department of Commerce, Bureau of Economic Analysis.

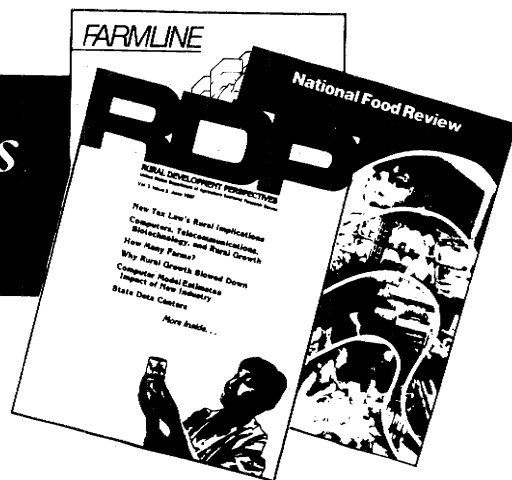
 Analysis presented in this report is part of a project being conducted by the U.S. Department of Agriculture's Economic Research Service to better monitor conditions and change in nonmetro business and industry.

FOR ADDITIONAL INFORMATION...

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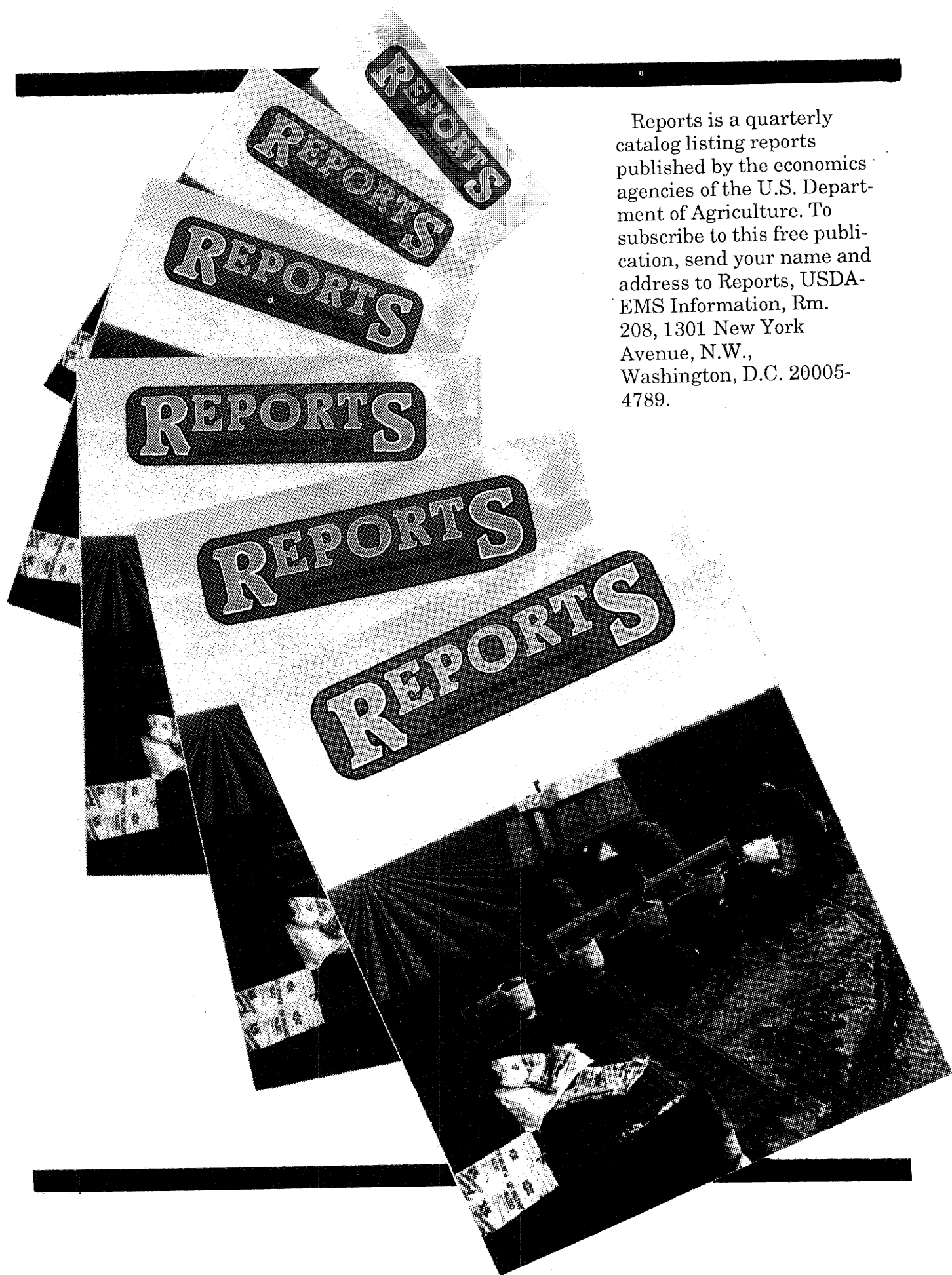
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