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George A. Erickcek

W.E. Upjohn Institute for Employment Research, erickcek@upjohn.org

Christine R. Fahndrich

W.E. Upjohn Institute for Employment Research

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ON KALAMAZOO COUNTY**

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George A. Erickcek
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W. E. Upjohn Institute for Employment Research
300 S. Westnedge Avenue
Kalamazoo, MI 49007

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Executive Summary

In 1993, the Upjohn Company's full economic effect on Kalamazoo County totaled \$1.09 billion, with employment and personal income impacts of 22,150 and \$726.3 million, respectively. In addition, 250 jobs and \$6.7 million in personal income were also generated in neighboring Calhoun County due to the Upjohn Company (excluding the earnings of company employees residing in the county). On average, every job at the Upjohn Company supported an additional 1.8 jobs in Kalamazoo County.

Direct Impact on Kalamazoo County

During 1993, the Upjohn Company employed, on average, 7,906 individuals in Kalamazoo County. As the county's largest employer, the Upjohn Company accounted for 5.7 percent of Kalamazoo County's total employment.¹ Moreover, the company employed 29.7 percent of the county's manufacturing workforce.

¹ Includes all wage and salary, self-employed and agricultural workers in the county.

Paying \$389.5 million in wages and salaries to its Kalamazoo County's workforce in 1993, the Upjohn Company accounted for 12.5 percent of the county's total wage and salary disbursement. County stockholders and retirees received \$10.0 million in dividends and \$11.1 million in pensions, respectively, in 1993. Combining the company's payroll, paid dividends, and retirement payments, the company provided 8.8 percent of the Kalamazoo County's estimated total personal income in 1993.²

The overall direct economic impact of the Upjohn Company on Kalamazoo County was larger than the number of its employees or the contribution it made to county total personal income. In 1993, the company paid \$23.6 million in taxes to local governments in the county (excluding the state's Single Business Tax). In addition, the company invested \$193.8 million in capital equipment and construction in the county, and purchased \$170.8 million worth of goods and services from county suppliers. Finally, in 1993, the Upjohn Company and the Upjohn Company Foundation contributed \$5.4 million to community organizations in the county.

As shown in Table 1, the company's total direct economic impact on Kalamazoo County reached nearly \$900 million in 1993.

² All dollar amounts presented in this report are in nominal (current) dollars.

TABLE 1
THE DIRECT ECONOMIC IMPACT OF THE
UPJOHN COMPANY ON KALAMAZOO COUNTY

	1993 (Millions of Dollars)	1992	%
Wages and Salaries	\$389.5	385.1	1.1
Benefits (including Health & Company Retirement)	91.1	90.1	1.1
Taxes (local)	23.6	23.1	2.2
Dividends	10.0	9.0	11.1
Retirement Payments	11.1	N.A.	***
Capital Expenditures	193.8	199.6	-2.9
Goods and Services	170.8	160.1	6.7
Contributions and Association Support	5.4	5.1	5.9
Total Direct Economic Impact	\$895.3	\$*****	***

The economies of metropolitan areas like Kalamazoo County depend greatly upon their "export" industries, which sell their goods and services to out-of-area customers. Kalamazoo County's hospitals, Western Michigan University, major retailers, and nearly all of its manufacturing firms are part of its export base, since many of their customers reside outside of the county. These industries bring new money into the community through their sales, which is then circulated throughout the county. The Upjohn Company accounts for 13.7 percent of the county's total "export" employment.

Indirect Impact on Kalamazoo County

The Upjohn Company's total economic impact on Kalamazoo County was much larger than \$900 million, however. In addition to the above direct economic impacts, the company generated indirect economic benefits that included wages of both workers employed by its suppliers located in Kalamazoo County and individuals employed in firms that depend upon the consumption expenditures of Upjohn employees, stockholders, and retirees. Moreover, the company's indirect impact included third, fourth, and higher order employment and income effects, such as the wages of individuals employed in firms that were dependent upon the consumer expenditures of those employed in producing goods or services for the Upjohn Company or its workforce. This indirect impact, which also included the earnings of these workers, can be measured both in employment and personal income.

To estimate the full impact of the Upjohn Company on Kalamazoo County, we used the Institute's econometric model of Kalamazoo County. The model, especially designed by Regional Economic Models, Incorporated (REMI) for the Upjohn Institute, is unique in that it incorporates three separate components: an input-output model, a relative-cost model and an econometric forecasting model. This model captures each of the employment and income impacts discussed above by generating an alternative forecast for Kalamazoo County without the Upjohn Company. The full impact of the company is the difference between the county's baseline forecast, which includes the Upjohn Company, and the alternative forecast.

Total Economic Impact of the Upjohn Company on Kalamazoo County

We estimate that the total employment impact of the Upjohn Company on Kalamazoo County, direct and indirect, was 22,150 in 1993. In Table 2, the company's total employment impact on the

county was broken down into both its direct effect (7,906 Upjohn Company employees) and its indirect effect (14,244 jobs created outside the company). Similarly, the total impact of the Upjohn Company on the county's total personal income was \$726.3 million, which is the sum of direct income to Upjohn employees, retirees, and county stockholders, \$410.7 million, plus the \$315.6 million of non-company income created in the county as a result of the Upjohn Company.

TABLE 2
DIRECT, INDIRECT AND TOTAL ECONOMIC IMPACTS
OF THE UPJOHN COMPANY ON KALAMAZOO COUNTY

	DIRECT	INDIRECT	TOTAL
Jobs	7,906	14,244	22,150
Income* (millions)	\$410.7	\$315.6	\$726.3
Total Value Added			\$1,086.0

*Includes wages, salaries, retirement payments, and dividends paid to local residents.

In total, an estimated 16.0 percent of the county's total employment was directly or indirectly dependent upon the Upjohn Company in 1993. Furthermore, the company generated 15.6 percent of the county's total personal income, directly or indirectly.

Employment contingent upon the Upjohn Company was distributed across all major economic sectors of the county, as shown in Table 3. Nearly 30 percent of the county's manufacturing workers depended upon the Upjohn Company. Nearly 13 percent of the county's retail workers and 15 percent of the county's services workforce relied on the company's payroll or direct orders.

TABLE 3
EMPLOYMENT IMPACT OF THE UPJOHN COMPANY
BY INDUSTRY

Industry	Number of Workers	Percentage of Industry's County Employment
Manufacturing (Including Upjohn)	8,399	29.7
Retail	3,278	12.9
Finance, Insurance & Real Estate	1,068	9.6
Services	5,896	14.9
Other	3,509	10.3
TOTAL	22,150	16.0

Often, the total impact of a company on its surrounding community is stated in ratios, with respect to their corresponding direct impacts, and referred to as employment or income multipliers. The Upjohn Company's employment multiplier was estimated to be 2.8 (22,150/7,906) in 1993, meaning that each job at the company created 1.8 other jobs locally. In 1993, the company's income multiplier was 1.77 (\$726.3 million/\$410.7 million), indicating that every dollar of income earned through the Upjohn Company added another 77 cents to local income.

In 1993, the total economic impact of the Upjohn Company on Kalamazoo County was \$1.09 billion. This number measures the total value of all goods and services produced in the county due to the Upjohn Company only, minus the cost of all raw and intermediate materials shipped into the county to produce these goods and services. In economic terms, it is the portion of the county's total value added or gross regional product which is generated by the Upjohn Company.

Economic Impact on the Kalamazoo - Battle Creek Region

The economic impact of the Upjohn Company presence in Kalamazoo County was not limited to Kalamazoo County only. Many of the company's workers resided in Battle Creek (Calhoun County) and surrounding communities and supported their county's consumer sector through their household expenditures. In addition, members of the Calhoun County business community had ties, directly (first tier supplier) or indirectly (second or third tier supplier), to the company. As shown in Table 4, we estimate that 250 individuals employed by Calhoun County businesses were economically dependent upon the Upjohn Company, and that, as a result of their labor, total personal income in Calhoun County increased \$6.7 million in 1993. It is important to note that all earnings were reported by place of work. In other words, the \$6.7 million increase in personal income in Calhoun County DOES NOT include the earnings of Upjohn Company employees residing in the county. The earnings of all Upjohn Company employees were reported in the Kalamazoo County totals.

Table 4

ECONOMIC IMPACT OF THE UPJOHN COMPANY ON KALAMAZOO AND CALHOUN COUNTIES

EMPLOYMENT	KALAMAZOO	CALHOUN	TOTAL
Upjohn Company	7,906	--	7,906
Indirect	14,244	250	14,494
TOTAL	22,150	250	22,400
PERSONAL INCOME (\$million)			
Upjohn Company	\$ 410.7	--	\$ 410.7
Indirect	\$ 315.6	\$ 6.7	\$ 322.3
TOTAL	\$ 726.3	\$ 6.7	\$ 733.0
TOTAL VALUE ADDED	\$1,086.0	\$ 13.0	\$ 1,099.0