

Stagflation Shines on the Sunbelt: An Industry Analysis of Deindustrialization and the Growth of the Service Sector

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Abstract: *The current economic crisis (2008-09) is threatening to cripple US automobile production, jeopardizing the last major manufacturing industry in North America. Current economic decisions made by the US government with respect to industry bailouts are more completely understood by analysing the period of stagflation experienced in the USA between 1973 and 1982. Using industrial sector employment data from the US Department of Labour, I conduct a shift-share analysis on two case study cities, Youngstown, Ohio and Dallas, Texas, to emphasize how geographical location and economic specialization led to the growth of the service industry in the South at the expense of the manufacturing belt region in the north-eastern USA since the 1970s. Interpreting the effects of this economic shift provides a glance into past US economic change, through which the economic values of the current US government can be better understood.*

The United States experienced a period of stagflation between 1973 and 1982. Stagflation is defined as a period of increased unemployment and slow growth or economic stagnation, accompanied by rising prices or inflation (Investopedia). This economic crisis resulted in a massive change in the dominant economic sector of the US as manufacturing employment decreased, while service sector employment grew significantly (Knox & McCarthy). According to Paul Knox and Linda McCarthy (2005), the economic shift from manufacturing to services was a result of increased productivity and specialization in manufacturing, which increased demand for distribution and producer services, while decreasing employment opportunities in the

traditional manufacturing sector. Tickell and Peck (1992) present a less positive image, stating that manufacturing collapsed in the stagflation crisis because of external factors such as rising oil prices. However they also cite important internal factors, particularly worker 'militancy', technological stagnation, and a saturation of goods in consumer markets. Changes in employment were accompanied by changes in the geographic concentration of economic growth. While industrial development had been concentrated in the Manufacturing Belt of the Northeast, the service sector developed in the Sunbelt region of the South (Knox & McCarthy and Marshall & Wood; see [Figure 1] and [Figure 2]). This paper discusses the impacts of deindustrialization of the Man-

ufacturing Belt region and explains how the decentralization of the manufacturing industry in the US spurred the explosive growth of the service sector in the Sunbelt region. A shift-share analysis, which examines the combined effects of regional economic attractiveness and the region's industry make-up, will be executed upon industry employment data from Youngstown, Ohio and Dallas, Texas to help illustrate the changing economic patterns experienced in the USA during the 1970s stagflation crisis. Such an analysis will aid in our understanding of the benefits and consequences of this movement from industrial to advanced capitalism. This knowledge can then be used to help understand the values of the US government, in light of the current economic crisis (2008-09), and explain why the future of the North American automobile, the last major manufacturing sector of the USA, is so uncertain.

1.0 Deindustrialization in the USA

From the eighteenth-century beginnings of the Industrial Revolution to the early 1970s,

the US economy was dominated by an economic system of export manufacturing (Knox & McCarthy). Industrialization centred on goods such as textiles and automobiles occurred throughout the Northeast region of the US in port cities such as Detroit, Chicago, New York and Youngstown. These cities were tied together by major waterways including the Great Lakes and the Ohio, Mississippi, and Missouri Rivers. The inter-relationships of these cities were cemented through the vertical and horizontal integration of machine production and the high wages and incomes offered to labourers. This resulted in the creation of a "robust, diversified producer and consumer durables sector" in the region widely known as the manufacturing belt (Markusen & Carlson, p. 31; see [Figure 1]). However, this concentration of labour and resources resulted in a lack of economic diversity, contributing to the severe unemployment in these regions, especially cities that specialized as manufacturing centres when the economy shifted in favour of the service sector, in the 1970s (Knox & McCarthy).

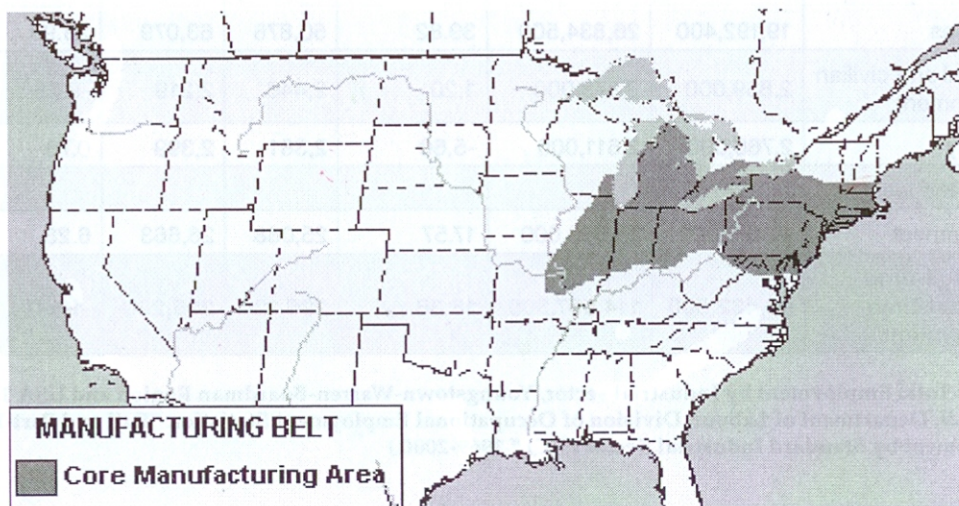


Figure 1: Manufacturing Belt at its Height (www.harpercollege.edu) 2.0

The Youngstown Case Study

Youngstown, Ohio [Figure 3] has become symbolic of deindustrialization, experiencing a loss of 10,000 jobs overnight when the Campbell Steel Works closed in 1977 (Knox & McCarthy). Through an exploration of the changes in Youngstown and the surround-

ing region's employment from 1973-1982, an image emerges of the impact deindustrialization had on the Manufacturing Belt's economic prosperity. While total employment in the US grew 16.38% during this period, the Youngstown regional employment declined by 10.41% over the same time (see Table 1).

	USA			Youngstown-Warren-Boardman		
	1973	1982	% change	1973	1982	% change
Farming	3,896,000	3,657,000	-6.13	3,747	4,327	15.48
Agricultural services, forestry, fishing & other	612,500	953,900	55.74	771	887	15.05
Mining	761,800	1,509,000	98.08	515	1,834	256.12
Construction	5,074,300	5,354,300	5.52	12,017	9,743	-18.92
Manufacturing	20,413,200	19,269,900	-5.60	111,491	66,462	-40.39
Transportation and public utilities	5,072,700	5,649,800	11.38	15,573	11,986	-23.03
Wholesale trade	4,529,200	5,722,500	26.35	9,093	10,776	18.51
Retail trade	15,012,100	18,169,100	21.03	48,388	50,360	4.08
Finance, insurance, and real estate	7,138,300	8,873,300	24.31	13,738	14,555	5.95
Services	19,192,400	26,834,500	39.82	50,876	63,079	23.99
Federal and civilian government	2,839,000	2,873,000	1.20	2,446	2,219	-9.28
Military	2,766,000	2,611,000	-5.60	2,381	2,399	0.76
State and local						
Government	11,125,000	13,080,000	17.57	25,088	26,663	6.28
Total full-time and part-time employment	98,432,500	114,557,300	16.38	296,124	265,290	-10.41

Table 1: Total Employment by Industrial sector, Youngstown-Warren-Boardman Region and USA 1973-1982 (U.S. Department of Labour, Division of Occupational Employment Statistics. "Full and Part-Time Employment by Standard Industrial Sector (SIC)." 1969-2000.)

Manufacturing employment in Youngstown plummeted by 40.39%, while the national decline was only 5.6%. Had Youngstown's total employment grown at the national rate, this would have increased to 344,634 jobs. Instead, the total employment declined, resulting in a deficit of 79,344 jobs. Applying a shift-share analysis to Youngstown (see Table 2), the gap between national and regional employment effects is confirmed. Additionally, the mix

industrial make-up, only 11,141 jobs - 14% of all those lost – were determined by Youngstown's industrial specialization.

The local growth effect clearly highlights a regional economic disparity within the Manufacturing Belt in relation to national performance. The local growth effect for Youngstown during this decade resulted in a loss of 68,203 jobs. This means that 86% of the total job loss in the Youngstown region was based on regional

	Mix Effect	Local Growth Effect	Combined Effects
Farming	-844	810	-34
Agricultural services, forestry, fishing & other	303	-314	-10
Mining	421	814	1,235
Construction	-1,305	-2,937	-4,243
Manufacturing	-24,508	-38,785	-63,293
Transportation and public utilities	-779	-5,359	-6,138
Wholesale trade	906	-713	193
Retail trade	2,249	-8,204	-5,955
Finance, insurance, and real estate	1,089	-2,522	-1,434
Services	11,924	-8,055	3,869
Federal and civilian government	-371	-256	-628
Military	-523	151	-372
State and local government	299	-2,834	-2,535
Totals	-11,141	-68,203	-79,344

Table 2: Shift-Share Analysis for Youngstown Region (U.S. Department of Labour, Division of Occupational Employment Statistics. "Full and Part-Time Employment by Standard Industrial Sector (SIC)." 1969-2000.)

effect measures how well the share or mix of employment in the region has performed in comparison with national industry averages. While job losses occurred due to Youngstown's

factors which caused jobs to shift away from the centre. These factors, such as high energy costs, foreign competition, employee dissatisfaction, and aging inefficient infrastructure,

were compounded by inflation and a weakened economy.

4.0 The Sunbelt Region and the Growth of the Service Sector

In contrast, the Sunbelt region of the USA [Figure 2] promised cheaper land, lower taxes, lower energy costs, and cheaper, non-unionized labourers (Knox & McCarthy). As a result, the initial response of many industries to the manufacturing crisis and the increasingly obvious geographic economic disparity was to relocate or close plants, or lay-off workers in favour of

works between regions and sub-regions in the southern USA. Office-based services were the initial area of major service growth in the South. They are central to metropolitan development, having direct and indirect multiplier effects on the growth of the service industry. The direct effect of increased office development was increased employment in the Sunbelt region. There were also substantial indirect effects due to the extra purchasing power of upper and middle class employees stimulating the growth of consumer, leisure, and recreational services, as well as having larger national and

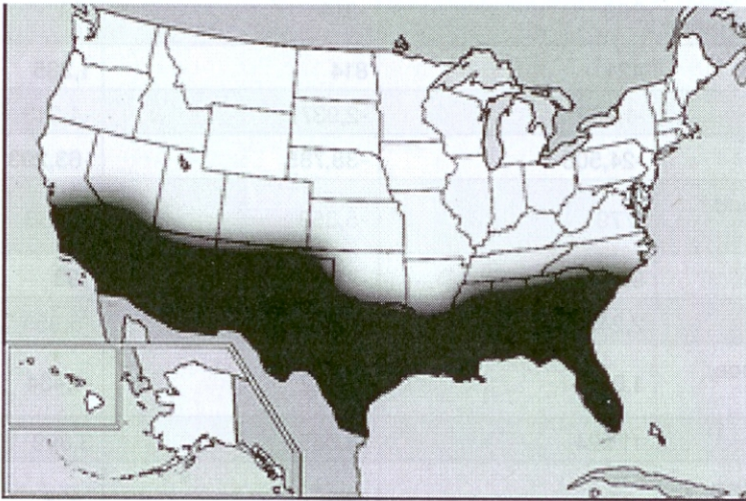


Figure 2: Sunbelt Region (www.city-data.com)

‘greener pastures’ (Knox & McCarthy).

The net movement of manufacturing to the Sunbelt region helped spur the explosion of the US service sector in the South, in the 1970s and 1980s. This is because increases in manufacturing led to an increased need for distribution and producer services (Knox & McCarthy). Many centres in the region such as Houston, the Santa Clara Valley (Silicon Valley), Atlanta, and Dallas were primed for economic growth due to the recent construction of the interstate highway system and the growth of airport net-

international effects on the tourism industry (Marshall & Wood).

5.0 The Dallas, Texas Case Study

The economy of Dallas, Texas (see [Figure 3]) helps to illustrate the growth of the service sector in the Sunbelt. Dallas has been an important financial centre since the turn of the twentieth century, establishing itself as a market centre for the state’s cotton production early on, then quickly moving to oil as the industry grew in East Texas. The wealth

gained from the oil industry began to attract smaller corporate technological manufacturers in metropolitan areas (Hanson). The first corporate headquarters relocated to Dallas from the Northeast in 1948. There were more than 626 national company headquarters in Dallas including Texas Instruments in 1974, the same

year the Dallas-Fort Worth International Airport opened (Dallas Historical Society). With a growing base of office service jobs and the international airport, Dallas was a prime target for manufacturing relocation and exemplified the value gained through the indirect multiplier effects of the service industry.

	USA			Dallas-Fort Worth-Arlington		
	1973	1982	% change	1973	1982	% change
Farming	3,896,000	3,657,000	-6.13	17,194	19,994	16.28
Agricultural services, forestry, fishing & other	612,500	953,900	55.74	5,725	9,460	65.24
Mining	761,800	1,509,000	98.08	15,337	55,366	261.00
Construction	5,074,300	5,354,300	5.52	77,813	114,594	47.27
Manufacturing	20,413,200	19,269,900	-5.60	255,013	327,762	28.53
Transportation and public utilities	5,072,700	5,649,800	11.38	79,603	108,335	36.09
Wholesale trade	4,529,200	5,722,500	26.35	98,944	144,849	46.39
Retail trade	15,012,100	18,169,100	21.03	218,413	321,538	47.22
Finance, insurance, and real estate	7,138,300	8,873,300	24.31	129,741	187,820	44.77
Services	19,192,400	26,834,500	39.82	268,106	428,380	59.78
Federal and civilian government	2,839,000	2,873,000	1.20	28,589	32,939	15.22
Military	2,766,000	2,611,000	-5.60	16,209	16,789	3.58
State and local government	11,125,000	13,080,000	17.57	116,042	153,581	32.35
Total full-time and part-time employment	98,432,500	114,557,300	16.38	1,326,729	1,921,407	44.82

Table 3: Total Employment by Industrial Sector, Dallas-Fort Worth-Arlington Region and the USA, 1973-1982. (U.S. Department of Labour, Division of Occupational Employment Statistics. "Full and Part-Time Employment by Standard Industrial Sector (SIC)." 1969-2000.)

Table 3 indicates a drastic difference in regional growth patterns in Dallas in comparison with Youngstown. Regional growth for Dallas and its surrounding region over this period was 44.82%, nearly three times the growth of the country as a whole. Manufacturing employment growth at 28.53% affirms the movement of manufacturing into the Sunbelt region, while service sector employment increased nearly 60% (Table 3). Had Dallas' employment grown at the national rate, total employment would have increased from 1,326,729 to 1,544,068. Instead, employment boomed to 1,921,407, which resulted in a growth

surplus of 377,339 jobs. The shift-share analysis for the Dallas Metropolitan Area (Table 4) shows that the region did gain employment in the form of 29,023 jobs from the industry mix, which it specialized in relative to the national equivalent. However, the vast majority of the job surplus Dallas experienced during this period was due to the local attractiveness of Dallas, along with the entire Sunbelt region. While Dallas is much larger than Youngstown, the proportional difference in employment changes between the two regions during the 1970s was staggering.

	Mix effect	Local Growth Effect	Combined Effects
Farming	-3,871	3,855	-17
Agricultural services, forestry, fishing & other	2,253	544	2,797
Mining	12,531	24,986	37,517
Construction	-8,453	32,487	24,034
Manufacturing	-56,058	87,032	30,974
Transportation and public utilities	-3,984	19,676	15,692
Wholesale trade	9,860	19,836	29,696
Retail trade	10,152	57,193	67,345
Finance, insurance, and real estate	10,281	26,545	36,825
Services	62,835	53,519	116,354
Federal and civilian government	-4,341	4,008	-333
Military	-3,564	1,488	-2,075
State and local government	1,383	17,147	18,529
Totals	29,023	348,316	377,339

Table 4: Shift-Share Analysis for the Dallas Region: Employment Changes, 1973-1982 (U.S. Department of Labour, Division of Occupational Employment Statistics. "Full and Part-Time Employment by Standard Industrial Sector (SIC)." 1969-2000.)

6.0 Implications and Repercussions of Deindustrialization and Decentralization

While the direct economic impacts of deindustrialization and job shift are readily apparent, there are also indirect costs associated with decline. Job losses in the manufacturing sector affect supplementary industrial sectors, which can in turn lead to a decline in retail and personal services jobs (Knox & McCarthy). While Dallas experienced a boom in home and commercial development, extending employment into the trades sector during the 1970s and the first half of the 1980s, Youngstown showed a large decrease in construction employment during the period, an ancillary industrial sector (Hanson). Similarly, Dallas' employment in the finance, insurance, and real-estate sector increased nearly 45%, and retail trade increased 47% from 1973-82, reflecting an increase in consumer wealth. The same sectors in Youngstown grew only 6% and 4% respectively over the same period.

Manufacturing relocation decisions also hold indirect costs for local labourers and have important local implications on public funding. The location of a plant affects government budgets for initiatives such as highway construction and changes in federal tax revenues. When a plant relocates less funding is available to address social issues in industrially abandoned areas, while areas of relocation enjoy increases in local and federal government funding (Persky & Wiewel). These trends are reflected in both case study cities as Youngstown's federal and civilian employment decreased 9.28%, while Dallas' increased 15.22%. Any desires by planners and policymakers to reallocate funding to those areas in need are deterred by the threat of lost funding (Rast). This has perpetuated the patterns of income disparity and increased poverty in deindustrialized

regions. The US Department of Housing and Urban Development measured levels of urban distress across the US in 1982 at the end of the stagflation period, in order to determine regional federal aid eligibility (Knox & McCarthy; [Figure 3]). This measure was based upon a set of minimum standards relating to population growth, levels of household income, and employment in the manufacturing and retail industry. It also included maximum standards with respect to poverty levels, age of residential infrastructure, and unemployment. An index score of six was assigned to all cities of over 100,000 residents to address levels of distress: the higher the number, the more distressed the area. The Dallas area ranked between (-1) to 1 showing low distress, while many of the cities along Lake Erie within the Manufacturing Belt, including Youngstown, were ranked between 5 to 6, the highest levels of distress (Knox & McCarthy).

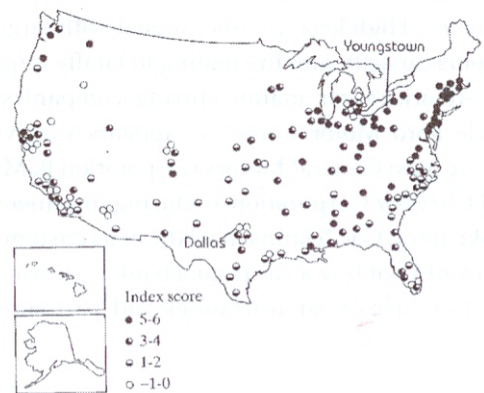


Figure 3: US Housing and Urban Development Measure of Urban Distress, 1982 (Knox and McCarthy, p. 86)

7.0 Conclusion

The decade of stagflation from 1973-1982, created more than a temporary economic crisis in

the US. It changed the entire economic make-up of the country, both industrially and geographically. It is important to acknowledge the continued presence of manufacturing as a source of employment and revenues within the US. Simultaneously, it is equally important to realize it is an industry that has been in decline since the 1970s, as cheap labour and rents continue to be the driving force behind manufacturing production in an increasingly global world*. Markusen and Schrock (2008) recently attempted to redefine the economy of America within urban systems theory by incorporating consumption activities and the role of the service industry. They argue that it is not only manufacturing export activities that define regional growth; goods and services production and consumption can also be a source of regional job growth and stability.

The current economic crisis is threatening a major part of what is left of the manufacturing sector in the US "Rust Belt" – the automobile industry. High legacy costs coupled with large surplus capacity are threatening to fatally cripple America's car manufacturing companies. While Ford Motor Company appears surviving for now, General Motors Corporation (GM) and Chrysler Corporation are facing imminent bankruptcy. GM "claims that 80% of its customers would not buy a car from a bankrupt firm" due to issues of car warranties and part sup-

plies and therefore bankruptcy is not an option (Economist, 2008). The company is searching for an infusion of cash from the US government, but the future does not look promising.

The hesitation on the part of the US government to bail out key players in the North American auto industry conveys an unmistakable statement regarding the priorities of the US government in attempting to recover the current economy. This political sentiment is a clear reflection of the economic and geographic shift to the service industry that began during the 1970s and its continued presence and dominance in the global economy today. It seems clear that future economic decisions have been and will continue to be based around managing a service, rather than a manufacturing, economy.

**For more information on the socio-economic and socio-political effects of deindustrialization and the rise of neoliberalism on race, class, and gender see: David Harvey (2005). A Brief History of Neoliberalism. Oxford; New York: Oxford University Press and Naomi Kline (2007). The Shock Doctrine: The Rise of Disaster Capitalism. Toronto: A.A. Knopf Canada. For more information of the suburbanization of the manufacturing industry see Persky and Wiewel (2000),*

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