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

Elissa Berrill
82719063

Geography 350
Dr. Elvin Wyly

University of British Columbia
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“Capitalist economies, by their very nature, must continually change.”

The United States experienced a period of stagflation\(^2\) between 1973 and 1982. 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.\(^3\) According to Knox and McCarthy, 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.\(^4\) Tickell and Peck present a less positive image stating that manufacturing collapsed with the stagflation crisis not only due to external factors such as rising oil prices, but to internal factors, particularly worker ‘militancy’, technological stagnation, and a saturation of goods in consumer markets.\(^5\) 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.\(^6\) Inevitably, changes in the geographic and economic make-up of a country will result in a need to redefine and classify the new economic sector with respect to urban systems theory. This essay will discuss the impacts of deindustrialization of the Manufacturing Belt region and explain how the decentralization

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\(^2\) Stagflation: a period of increased unemployment and slow growth (stagnation) accompanied by rising prices (inflation). Definition from: "Investopedia" <www.investopedia.com>


\(^4\) Distribution services include: transportation, communications, utilities, and wholesaling; producer services include: marketing, advertising, administration, finance and insurance. Knox and McCarthy, 79.

\(^5\) Tickell and Peck, 190.

\(^6\) See Figure 1 and Figure 2. Information from: Knox and McCarthy, 80 and Marshall and Wood, 23.
of the manufacturing industry in the US spurred the explosive growth of the service sector in the Sunbelt region and lead to the redefinition of the American urban system to incorporate the service industry. It will then conclude with an example which illustrates the continued decline of manufacturing in relation to American economic policies and priorities, in light of the current economic crisis. A shift-share analysis executed upon industry employment data from Youngstown, Ohio and Dallas, Texas will help illustrate the changing economic patterns experienced in the USA during the 1970s stagflation crisis and help understand the benefits and consequences of this movement from industrial to advanced capitalism.

**Deindustrialization**

From the beginning of the Industrial Revolution to the early 1970s, the US economy was dominated by an economic system of export manufacturing.\(^7\) Industrialization occurred throughout the Northeast region of the US during the mid-19\(^{th}\) century in cities which were tied together by major waterways including the Great Lakes and the Ohio, Mississippi, and Missouri Rivers. The interrelationships 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

\(^7\) Knox and McCarthy, 68.
producer and consumer durables sector” in the region widely known as the manufacturing belt (Figure 1\(^8\)).\(^9\)

Industrialization is traditionally defined by export base theory which exclusively favours staples theory in describing the origins of economic growth.\(^10\) This argument has been critiqued as overly simplistic as it does not properly address all industries (focusing solely on natural resources), nor does it consider the “logical flaw” that the world as a whole does not export itself.\(^11\) Perhaps the best theoretical explanation of the US manufacturing industry’s role within the American urban system is one proposed by Knox and McCarthy which synthesizes staples theory, innovation diffusion theory and economic base theory. They define urban-industrial growth as a self-propelling process generating a variety of localized consequences including backward and forward linkages, the development of skilled specialized labour, and the creation of a balance between competition and cooperation of local companies, which increases local innovation and regional strength.\(^12\) These four factors created multiplier effects within the Manufacturing Belt region of the US up to the 1970s resulting in its economic prosperity. However, a concentration of labour and resources results in a lack of economic diversity. This contributed to the severe unemployment experienced by these regions, especially cities that specialized as manufacturing centres, when the economy shifted in the 1970s.\(^13\)

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\(^8\) Figure 1: Manufacturing Belt image from: www.harpercollege.edu
\(^11\) Wyly, 10; Markusen and Schrock, 6.
\(^12\) Wyly, 12.
\(^13\) Knox and McCarthy, 84.
Youngstown, Ohio has become symbolic of decentralization, experiencing a loss of 10,000 jobs overnight when Campbell Steel Works closed in 1977.\textsuperscript{14} Exploring the changes in Youngstown’s (and its surround region’s) employment from 1973-1982, the impact deindustrialization had on the Manufacturing Belt’s economic prosperity can be visualized. While total employment in the US grew 16.38%, the Youngstown regional employment declined by 10.41%. Manufacturing employment in Youngstown plummeted by 40.39%, while the national decline was only 5.6%. Had Youngstown grown at the national rate, its total employment would have increased to 344,634 jobs. Instead, its decline resulted in a deficit of 79,344 jobs. Applying a shift-share analysis to Youngstown, the gap between national and regional employment effects is confirmed.

\textsuperscript{14} Knox and McCarthy, 84.
\textsuperscript{15} Data compiled by Elvin Wyly for Geog350, fall 2008. Source: \textit{Regional Economic Information System, 1961-2001}. Washington, DC: U.S. Department of Commerce. Note: In this and future tables, disregard growth of both the mining and agricultural service sectors… for this analysis. While growth in these areas for both are high, the proportion of total employment that makes up both sectors nationally and locally is very small and therefore the % change for both are misleading.
Additionally, the mix effect measures how well the share or mix of employment in the region has performed in comparison with national industry averages. While job losses did occur based on Youngstown’s industrial make-up, only 11,141 jobs, or 14% of all jobs lost, were determined by the regions 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 was a loss of 68,203 jobs. This means that 86% of the jobs lost in the Youngstown region were based on regional 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. The Sunbelt region of the US (Figure 2\(^{17}\)) promised cheaper land, lower taxes, lower

<table>
<thead>
<tr>
<th>Mix Effect</th>
<th>Local Growth Effect</th>
<th>Combined Effects</th>
</tr>
</thead>
<tbody>
<tr>
<td>Farming</td>
<td>-844</td>
<td>810</td>
</tr>
<tr>
<td>Agriculture services, forestry, fishing &amp; other</td>
<td>303</td>
<td>-314</td>
</tr>
<tr>
<td>Mining</td>
<td>421</td>
<td>814</td>
</tr>
<tr>
<td>Construction</td>
<td>-1,305</td>
<td>-2,937</td>
</tr>
<tr>
<td>Manufacturing</td>
<td>-24,508</td>
<td>-38,785</td>
</tr>
<tr>
<td>Transportation and public utilities</td>
<td>-779</td>
<td>-5,359</td>
</tr>
<tr>
<td>Wholesale trade</td>
<td>906</td>
<td>-713</td>
</tr>
<tr>
<td>Retail trade</td>
<td>2,249</td>
<td>-8,204</td>
</tr>
<tr>
<td>Finance, insurance, and real estate</td>
<td>1,089</td>
<td>-2,522</td>
</tr>
<tr>
<td>Services</td>
<td>11,924</td>
<td>-8,055</td>
</tr>
<tr>
<td>Federal and civilian government</td>
<td>-371</td>
<td>-256</td>
</tr>
<tr>
<td>Military</td>
<td>-523</td>
<td>151</td>
</tr>
<tr>
<td>State and local government</td>
<td>299</td>
<td>-2,834</td>
</tr>
</tbody>
</table>

**Totals**  
-11,141  
-68,203  
-79,344

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17 Sunbelt region USA, Image from www.city-data.com
energy costs and cheaper, non-unionized labourers.\textsuperscript{18} 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 ‘greener pastures.’\textsuperscript{19}

**The Growth of the Service Sector**

The movement of manufacturing to the Sunbelt region helped spur the explosion of the service sector. Many centres in the region such as Houston, the Santa Clara Valley (Silicon Valley), Atlanta, and Dallas, were primed for its arrival due to the construction of the interstate highway system and the growth of airport networks between regions and sub-regions in the South. Increases in manufacturing led to an increased need for distribution and producer services.\textsuperscript{20} Office based services are central to metropolitan development, having direct and indirect multiplier effects on the growth of the service industry. While direct effects equalled increased employment in the region, indirect effects were a result of the purchasing power of upper and middle class employees stimulating the growth of consumer, leisure, and recreational services, as well as having larger national and international effects on the tourism industry.\textsuperscript{21} The burgeoning growth of the service sector can be explained by the assumption that services

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\begin{footnotesize}
\textsuperscript{18} Knox and McCarthy, 80.

\textsuperscript{19} Tickell and Peck, 196.

\textsuperscript{20} Knox and McCarthy, 79-80.

\textsuperscript{21} Marshall and Wood, 24.
\end{footnotesize}
\end{flushright}
are more labour intensive than manufacturing. As the manufacturing sector increases its productivity, it is able to decrease employment through machine investment which creates a levelling-off and eventual and decline of employment. In contrast, the only way for the service sector to expand is through increased employment, which creates the current phenomenon of exponential service employment, which started during the 1970s period of stagflation.\footnote{Marshall and Wood, 15.}

The economy of Dallas, Texas helps to illustrate the growth of the service sector in the South. Dallas has been an important financial centre since the turn of the 20\textsuperscript{th} century. It established itself as a market centre for the state’s cotton production early on and quickly moved to oil as the industry grew in East Texas. The metropolitan wealth gained from the oil industry began to attract smaller corporate technological

\begin{table}[h]
\begin{center}
\begin{tabular}{llllll}
\hline
& & USA & & & Dallas-Fort Worth-Arlington & \\
\hline
Farming & 3,896,000 & 3,657,000 & -6.13 & 17,194 & 19,994 & 16.28 \\
Agricultural services, forestry, fishing & 612,500 & 953,900 & 55.74 & 5,725 & 9,460 & 65.24 \\
& other & & & & & \\
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 \\
\hline
Total full-time and part-time employment & 98,432,500 & 114,557,300 & 16.38 & 1,326,729 & 1,921,407 & 44.82 \\
\hline
\end{tabular}
\end{center}
\end{table}
manufacturers. The first corporate headquarters relocated to Dallas in 1948. By 1974, there were more than 626 company headquarters in Dallas including Texas Instruments; in the same year the Dallas-Fort Worth International Airport opened. With this 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. Exploring the changes in Dallas’ total industry employment from 1973-1982 (as we did with Youngstown), we see a drastic difference in regional growth patterns. 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.

Table 4: Shift-Share Analysis for the Dallas Region

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

Manufacturing employment growth at 28.53% affirms the movement of manufacturing into the Sunbelt region, while service sector employment increased nearly 60%. 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 shows that the region did gain some employment (29,023 jobs) from the industry mix which it specialized in relative to the national mix of industry. 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 is staggering.

**Implications and Repercussions**

While the direct economic impacts of deindustrialization and job shift are apparent, there are 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. 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. Similarly, Dallas’ employment in the finance, insurance and real-estate sector increased nearly 45% and retail trade increased.

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27 Knox and McCarthy, 85.
28 Hanson, 42.
47%, a reflection of the increase in consumer wealth, while the same sectors in Youngstown grew only 6% and 4% respectively.

Manufacturing relocation decisions also hold indirect costs for local labourers and have important local implications on public funding. The location of a plant affects local government budgets for initiatives such as highway construction and changes in federal tax revenues. Therefore, 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. 29 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, resulting in a loss of resources whether they are redistributed or not. 30 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.

Figure 3: US Housing and Urban Development Measure of Urban Distress, 1982.

at the end of the stagflation period, in order to determine regional federal aid eligibility (Figure 331). 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; as well as maximum standards with respect to poverty levels, age of residential infrastructure (number of houses built pre-1940s) and unemployment. Then, 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, have been ranked between 5 to 6, the highest levels of distress.32

Conclusion

While the exponential growth of the service sector in the South may draw attention away from the Northeast region now called the “Rust Belt,” it is important to realize that manufacturing is still part of the US economy today and that there are plants still in operation in the Manufacturing Belt region, but many have moved away from the city centres to cheaper suburbs creating inner-city ghettos and increasing suburbanization.33 Similarly, service production and growth is also occurring in the Northeast region. In fact, during stagflation, Youngstown’s highest area of growth was services with just under a 24% increase in jobs, even though it was small part of total

31 Knox and McCarthy, 86.
32 Knox and McCarthy, 85-6.
employment. Markusen and Schrock attempt 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 beyond import substitution production.³⁴

The decade of stagflation from 1973-1982, clearly did more than create a temporary economic crisis in the US. It changed the entire economic make-up of the country industrially and geographically. It is important not to neglect the continued presence of manufacturing as a source of employment and revenues within the US, but it is equally important to realize it is an industry in decline, as cheap labour and rents continue to be the driving force behind manufacturing production in an increasingly global world. 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 is surviving for now, General Motors (GM) and Chrysler are facing imminent bankruptcy. The Economist states that talks of “pre-packaging” bankruptcies, where creditors, investors and related businesses can negotiate before bankruptcy is declared, may be occurring over the next month. GM “claims that 80% of its customers would not buy a car from a bankrupt firm” due to issues of car warranties and part supplies and therefore bankruptcy is not an option.³⁵ It is searching for an infusion of cash from the US government, but the future does not look promising.

³⁴ Markusen and Schrock, 2.
The hesitation on the part of the US government to bail out key players in the North American auto industry makes 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 1970’s 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.