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Big Box Stores:
Their Impacts on the Economy
and Tips for Competing

June 2006

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Executive Summary

This is a study in three parts: the general impact of Wal-Mart and big box stores on the economy; an empirical look at Wal-Mart's impacts on 15 Nebraska communities; and a review of research on ways that local retailers can compete against big box stores.

Part one suggests that Wal-Mart has both positive and negative impacts on the economy. Wal-Mart helps increase productivity and causes consumer prices to fall. Further, a number of studies found that employment increased in communities that received a new Wal-Mart store. However, other studies found that entry of a Wal-Mart failed to lead to net increases in local employment, and one study found a correlation between Wal-Mart locations and rising local poverty rates. More generally Wal-Mart entry increased concerns in many communities about the changes it may cause to the size and structure of the retail industry.

Part two shows that entry of a Wal-Mart does not seem to have a significant effect on retail employment, but can impact the number of retail establishments in rural Nebraska communities. Wal-Mart's effect is also visible in general merchandising, particularly with respect to the level for employment.

In part three, four strategies are suggested for competing against Wal-Mart and other big box stores. They are improving service quality, improving merchandising, improving marketing, and improving management of marketing information.

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I. Economic Impact

The goal of this section is to summarize existing research on the impact of Wal-Mart stores on local and state economies. We examine jobs, wages, prices, consumer buying power, productivity, and gross domestic product. While the literature cited focuses on Wal-Mart stores, it is worth noting that many of the same economic outcomes might be expected to result from any "big box" general merchandise retailer.

Impact on Employment and Productivity in the National Economy

The strategy behind "big box" retailers and super-combo stores (which sell groceries along with other general merchandise items) is one-stop shopping. Many shoppers prefer to do most of their regular shopping at one place, thereby saving time by avoiding traffic, travel between stores, parking problems, etc. These large stores also may benefit from efficiencies, including more capital intensive production, that allow them to offer lower prices.

Global Insight (2005) recently utilized its model of the U.S. economy to simulate the impact of Wal-Mart stores on the national economy. The model considered the contribution of Wal-Mart to efficiency and productivity in the retail sector as well as its impact on prices. Global Insight found that Wal-Mart reduced the nominal wages across the whole economy, with wages declining by 2.2% as of 2004. This decline was more than offset by a 3.1% fall in consumer prices, creating an increase in real disposable income of 0.9% by 2004. The reduction in the price level due to the presence of Wal-Mart directly translated into savings for consumers amounting to $263 billion by 2004, which amounted to $895 per person and $2,329 per household.

Wal-Mart also plays an important role in importing goods from other countries. While U.S. companies have been moving jobs offshore for decades, Wal-Mart may be helping accelerate the loss of American jobs to low-wage countries such as China. Fishman (2003**)** stated that Wal-Mart is as a vast pipeline that gives non-U.S. companies direct access to the American market. Wal-Mart has doubled its imports from China in the past five years alone, buying some $12 billion in merchandise in 2002, or nearly 10% of all Chinese exports to the United States (Basker and Van, 2005)**.**

Impact on the Local Economy

Wal-Mart entry and expansion have an uncertain impact on a county's retail employment (Hicks, 2005a). Greater productivity in delivering retail services lowers retail employment. Lower prices and greater product choice attract additional retail spending from outside of the county. The overall impact on employment in a particular community depends on the relative importance of the two effects.

Global Insight (2005) found that the opening of a typical 150-350 employee store in a county lead to an increase in local retail employment of only 97 jobs. This indicates that Wal-Mart displaces other retail establishments, but also serves to stimulate the overall development of the retail sector. Hicks and Wilburn, (2001) tested a panel of county level data in West Virginia from 1988 through 2000, analyzing the impact of Wal-Mart's presence on wages and employment. The study found that the entrance of a Wal-Mart store led to a modest increase in the number of retail establishments, a permanent retail employment increase of roughly 54 workers and no impact on retail wages. Basker (2005a) reported that following an initial increase in retail employment, the three year

impact dropped to a roughly 55 worker increase, accompanied by a small reduction in the number of small retail firms. In these studies, overall, there was a modest increase in local employment, and an uncertain effect on the number of retail establishments.

Other studies find neutral or negative impacts on retail employment and earnings when Wal-Mart enters into a county. Ozoment and Martin (1990) examined the impact of Wal-Mart on retail markets and reported no statistically positive impact on wages, employment and number of business within the county. Hicks (2005a) also found that a new store has no effect on existing employee wages in the retail sector. Neumark, Zhang and Ciccarella (2005) looked at the retail sector and overall employment, as well as retail earnings and overall wages. The authors found that employment in retail fell by 2-4% and earnings dropped by as much as 3.5% in the retail sector. Nene (2005) examined the impact of Wal-Mart on the economic growth of Nebraska's counties using data from 1979 to 2002. He found that the initial entry of Wal-Mart in a county led to a decline in economic growth. He also found that the presence of Wal-Mart in one county had no effect in bordering counties.

Impact on Poverty and Local Prices

While the impact of Wal-Mart on total employment is important, another key issue is its impact on low income residents**.** Goetz and Swaminathan (2004) examined the impact of Wal-Mart stores on county-level family poverty rates in the US. They found that holding constant the initial (1989) poverty rate, counties with more Wal-Mart stores (in 1987) had a higher poverty rate in 1999 than did counties with fewer or no Wal-Mart stores. Equally important, counties in which new Wal-Mart stores were built between

1987 and 1998 also experienced higher poverty rates. The marginal effect of another Wal-Mart store on the average poverty rate was 0.204, while that of existing stores was 0.099 percentage points.

The Goetz and Swaminathan (2004) study did not take into account changes in local prices. Basker (2005b) pointed out that prices declined after the Wal-Mart entered, by 1.5-3% immediately and eventually by 7-13%. Separately, Hausman and Leibtag (2005), in a review of literature, indicated that food prices at Wal-Mart were 8%-27% lower than at the large supermarket chains, even after discounts for loyalty cards and other specials were taken into account. The authors concluded that the less well-off households benefited greatly by shopping at super centers. Boarnet, Crane, Chatman, and Manville (2005) found that Wal-Mart grocery prices tended to be significantly lower on average than those of other stores. These authors argued that prices for grocery items at Wal-Mart super centers were between 17 and 29% lower than prices at major supermarket chains in the same urban area.

Impact on Local Fiscal Expenditure

Hicks (2005b) also examined the influence of Wal-Mart on state and local expenditures for welfare, food stamps and Medicaid. Hicks analyzed these selected fiscal impacts in Ohio from 1985 through 2003. He found that neither Wal-Marts nor Super Centers influenced welfare expenditures within the county in which they were located. The presence of a Wal-Mart or Super Center reduced county-wide expenditures on food stamps, but the impacts were again small, representing the movement of between 5 and 7 families off of food stamps. Medicaid expenditures rose in counties with a Wal-Mart or

Super Center. Hicks also pointed out that the presence of a Wal-Mart significantly increased local commercial property tax assessments and sales tax collections.

Conclusion

Research suggests that Wal-Mart has positive as well as negative impacts on the economy. The key positive finding was that Wal-Mart helped increase the productivity of the economy and caused consumer prices to come down. Further, a number of studies found that employment increased in communities that received a new Wal-Mart store. However, other studies found that Wal-Mart failed to lead to net increases in local employment, and one study found a correlation between Wal-Mart locations and rising local poverty rates. More generally Wal-Mart entry has raised concerns in many communities about the changes it may cause to the size and structure of the local retail industry.

II. Empirical Look at the Impact of Wal-Mart on Rural Nebraska Communities

In the past five years there has been a flurry of papers investigating various impacts of big box retailers, most notably, Wal-Mart on the labor market, consumer prices, employment, health care costs, and community. These insights shed light on topics and trends largely on a national scale. Recall that Basker (2005a) examined local markets in a nationwide aggregate examination. Wal-Mart's anticipated and actual entrance into a county had, on average, a sizable impact on that county's General Merchandise sector (as defined by the SIC and NAICS classification systems). However, in their study there was mixed evidence on whether Wal-Mart led to an overall increase or decline in total retail employment and the number of establishments in counties. In this section, we will specifically investigate effects in non-metropolitan Nebraska. Particularly, we will examine three issues:

1) Whether the entry of a Wal-Mart impacts total retail employment in non-metro counties
2) Whether the entry of a Wal-Mart is associated with a decline in the number of retail establishments in non-metro counties
3) Whether the entry of a Wal-Mart increases the importance of general merchandise establishments (which includes Wal-Mart) relative to more specialized retailers.

A key methodological issue is teasing out Wal-Mart's entry as an economic disturbance distinct from other market forces that may influence growth and change in the local retail sector. Basker (2005a) suggests a model of comparing "twins"– groups that share similar economic environmental variables with the treatment groups, but lack

the treatment variable (in our case, the presence of a Wal-Mart) -- to isolate Wal-Mart's impact. The "twin" control counties approach will be used in this analysis of the impact of Wal-Mart on non-metropolitan communities in Nebraska.

Data

Data sources for this study include County Business Patterns (CBP) from the Census Bureau (years 1977-2003)[1], the Wal-Mart.com store locator[2], the 1990 Census of US Population, and opening dates for each store as revealed by local managers.

The sample is a set of 15 non-metropolitan[3] counties in Nebraska that are hosts to at least one Wal-Mart store. The counties were selected due to the availability of data[4] and their non-metropolitan locations. For each county, CBP data included retail employment, retail number of establishments, general merchandise employment, and general merchandise number of establishments. General merchandise is the sub-sector of the retail sector where Wal-Mart stores would be classified.

Methodology

Store opening dates were recorded after speaking to managers at each of the 15 stores being examined. The researcher contacted each store inquiring to the opening date of the original Wal-Mart store[5]. The reported dates were validated using the CBP data through the 100 – 250 employee category, that is, additional general merchandise

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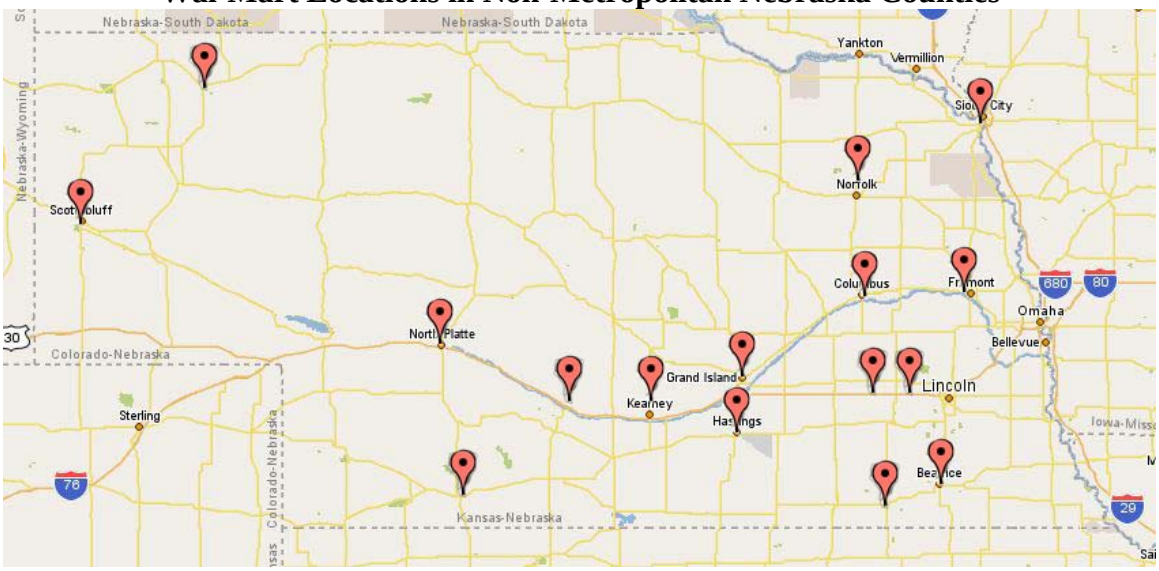
[1] Accessed from www.census.gov and from http://fisher.lib.virginia.edu/cpb
[2] Available at: http://www.walmart.com/cservice/ca_storefinder.gsp
[3] "Non-metro" refers to all counties in Nebraska excluding Cass, Douglas, Lancaster, and Sarpy counties.
[4] There is a considerable lag in the publication of CBP data, as a result any store openings after 2003 were excluded.
[5] Many Wal-Marts have been upgraded to Super Center's even though they began as normal stores. As a result, dates were collected twice to ensure the opening date corresponding to the original store's opening.

employers of this size category appeared in the data at the time the Wal-Mart store was reported to have opened. Figure 1, below, shows the location of the Wal-Marts used in the study:

Figure 1
Wal-Mart Locations in Non-Metropolitan Nebraska Counties



A group of 15 twin counties primarily from Nebraska were identified using the same approach as Rephann and Isserman (1994). Twins for each of the 15 counties were identified using county population at the time of the treatment county's store opening. Counties that were physically adjacent to a Wal-Mart county at the time of the treatment county's opening date were excluded. For example, the twin for Jefferson County is Knox County. These twins were chosen because they have similar populations and at the time of interest - 1979 to 1985 – there was no Wal-Mart in Knox County or any of the adjacent counties. Due to the range of store openings and Wal-Mart's preference for counties in the upper quartile of the population distribution, many counties served as both a treatment group and a twin for another, earlier, treatment county. In the following sections, we have also develop another set of twin counties from the State of Idaho (a

state where no Wal-Marts were built until 1992) to conduct a separate set of treatment and twin comparisons.

For each condition, seven years of data were acquired from the CBP. The seven years consist of the three years prior to the opening of a Wal-Mart, the opening year of the Wal-Mart, and the three years after a Wal-Mart opening. The same years were examined for non Wal-Mart twin counties. We calculate the growth rate in employment in the 3 years before and after the Wal-Mart in both Wal-Mart and twin counties.

Results with Nebraska Twins

Data relating to retail employment, retail establishments, general merchandise employment and general merchandise establishments are for Wal-Mart and twin counties are displayed in Table 1. The table shows means before and after Wal-Mart entry as well as the average change.

Table 1
Retail Statistics for Nebraska Wal-Mart Counties and Nebraska Twins

Retail Employment

	Wal-Mart County	Twins
Average Before	2,110	1,705
Average After	2,256	1,805
Average percent Change	8.99%	2.26%

Retail Establishments

	Wal-Mart County	Twins
Average Before	202	175
Average After	199	177
Average percent Change	-1.14%	-1.77%

General Merchandise Employment

	Wal-Mart County	Twins
Average Before	261	192
Average After	378	207
Average percent Change	108.46%	12.25%

General Merchandise Establishments

	Wal-Mart County	Twins
Average Before	6.4	6.1
Average After	7.5	5.9
Average percent Change	21.06%	0.56%

Table 1 shows that retail employment grew on average in both the treatment and twin counties between the pre-opening and post-opening periods.[6] Average retail employment growth was higher in Wal-Mart counties (8.99 percent) than in non-Wal-Mart counties (2.26 percent). The average number of retail establishments fell slightly in the Wal-Mart counties. While average retail establishments grew slightly in twin counties between the pre- and post-opening periods, the average percentage change was slightly negative.

Table 1 also shows that general merchandise employment grew on average in both the treatment and twin counties between the pre-opening and post-opening periods. However, the percentage change averaged across all counties was much higher in Wal-Mart counties (more than 100 percent) than in non-Wal-Mart counties (12.25 percent). The average number of general merchandise establishments increased in the Wal-Mart

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[6] In Table 1, let E_t^i represent retail employment in county *i* in year *t*. There are *I* counties. If T_i is the year in which the Wal-Mart opened in county *i*, then in the sample of pre-opening observations, $t \in \{T_i - 3, T_i - 2, T_i - 1\}$. Similarly, in the sample of post-opening observations, $t \in \{T_i + 1, T_i + 2, T_i + 3\}$ .The average for either pre- or post-opening retail employment is:

$$\frac{\sum_t \sum_i E_t^i}{3 * I}.$$

Similar statistics can be developed for the other three measures.

The percentage change in retail employment for county *i* can be defined as:

$$C^i = \frac{\sum_{t=T_i+1}^{T_i+3} \frac{E_t^i}{3} - \sum_{t=T_i-3}^{T_i-1} \frac{E_t^i}{3}}{\sum_{t=T_i-3}^{T_i-1} \frac{E_t^i}{3}}.$$

Then the average percent change in retail employment is:

$$\frac{\sum_{i=1}^{I} C^i}{I}$$

Again, similar statistics can be developed for the other three measures.

counties and fell in the twin counties. However, the percentage change averaged across all twin counties was slightly positive.

A comparison of means for these percentage changes was also performed to see if there is a statistically significant difference between the change in Wal-Mart versus twin counties, as in the equation below:

$$\frac{\overline{X}_W - \overline{X}_T}{\sqrt{\frac{\mathrm{var}(W)}{n(W)} + \frac{\mathrm{var}(T)}{n(T)}}},$$

where $\overline{X_W}$ is the average percentage change in the Wal-Mart counties, $\overline{X_T}$ is the average percentage change in the twin (non Wal-Mart) counties, var(·) is the variance and n(·) the size of each sample.

Results from the statistical analysis are shown in Table 2. Average percent changes, sample variances and sample sizes are respectively shown in the first three rows. Differences in the means are shown in the fourth row. The corresponding t-statistics are shown in the last row. With 28 degrees of freedom, the critical t-value for a 95 (90) percent confidence interval is 2.05 (1.70). These results suggest that Wal-Mart does not seem to have a significant effect on retail employment or the number of retail establishments. Wal-Mart's effect is more pronounced in general merchandising, but the impact is only statistically significant at the 90 percent confidence level for employment.

Table 2
Impact of Wal-Mart on Nebraska Wal-Mart Counties using Nebraska Twins

	Retail Employment		Retail Establishments		General Merchandise Employment		General Merchandise Establishments	
	Wal-Mart Sample	Twin Sample	Wal-Mart Sample	Twin Sample	Wal-Mart Sample	Twin Sample	Wal-Mart Sample	Twin Sample
$\overline{X}_W$	0.0899	0.0226	-0.0114	-0.0177	1.0846	0.1225	0.2106	0.0056
Var(·)	0.0279	0.0542	0.0045	0.0273	3.5403	0.4912	0.1682	0.1218
n(·)	15	15	15	15	15	15	15	15
$\overline{X}_W - \overline{X}_T$	0.0673		0.0063		0.9621		0.2050	
t-stat	1.24		0.23		1.96*		1.68	

* = significant at the 90% confidence level with a two-tailed test.

There is uncertainty about the causality between Wal-Mart locations in a particular county and retail growth. While a Wal-Mart eventually located in most mid-size towns in Nebraska, there may have been a tendency to locate the stores first in the fastest growing towns. Thus, our finding of faster retail employment growth in towns after receiving a new Wal-Mart (relative to towns that had not yet received one) may simply reflect Wal-Mart choosing towns with a more rapidly expanding retail sector. To address this, a per capita analysis was also conducted and the findings are summarized in Table 3 on the next page.

Table 3
Retail Statistics for Nebraska Wal-Mart Counties and Nebraska Twins Adjusted per Capita

Per Capita Retail Employment

	Wal-Mart	Twin
Average Before	0.0803	0.0702
Average After	0.0839	0.0747
Average Percent Change	7.99%	3.85%

Per Capita Retail Establishments

	Wal-Mart	Twin
Average Before	0.0080	0.0076
Average After	0.0079	0.0077
Average Percent Change	-3.13%	-0.76%

Per Capita General Merchandise Employment

	Wal-Mart	Twin
Average Before	0.0094	0.0071
Average After	0.0142	0.0072
Average Percent Change	115.15%	7.88%

Per Capita General Merchandise Establishments

	Wal-Mart	Twin
Average Before	0.00027	0.00027
Average After	0.00031	0.00028
Average Percent Change	20.24%	3.89%

A similar means comparison was also conducted for the t-statistics and is displayed below in Table 4.

Table 4
Impact of Wal-Mart on Nebraska Wal-Mart Counties using Nebraska Twins Adjusted per Capita

	Retail Employment		Retail Establishments		General Merchandise Employment		General Merchandise Establishments	
	Wal-Mart Sample	Twin Sample	Wal-Mart Sample	Twin Sample	Wal-Mart Sample	Twin Sample	Wal-Mart Sample	Twin Sample
$\overline{X}_W$	.0799	.0385	-.0313	-.0076	1.15	.0788	.2024	.0389
Var(·)	1.8408	.2624	.3979	.2466	.1672	.1178	.0757	.0689
n(·)	15	15	15	15	15	15	15	15
$\overline{X}_W - \overline{X}_T$	0.04143		-0.02368		1.0727		0.16348	
t-stat	0.73		-0.65		2.26**		1.33	

** = significant at the 95% confidence level with a two-tailed test.

Table 4 shows that using per capita data, Wal-Marts seem to have the most significant effect on increasing general merchandise employment. The entry of a Wal-Mart does not appear to make a significant impact on total retail employment. While there is a negative effect on total retail establishments, this effect is not statistically significant, but is an interesting result nonetheless.

Adjusting for local growth rates by focusing on per capita changes, as shown in Table 4 above, is only a partial solution to the causality question. Does Wal-Mart choose to locate in specific towns in Nebraska first because they see faster growth potential, higher incomes, or other attributes? To better address this issue, we compare Nebraska counties that received a Wal-Mart with twin counties in the State of Idaho.

Results with Idaho Twins

Idaho was selected due to the particular location strategy of Wal-Mart Corporation. When spreading throughout the country, Wal-Mart had a strategy of entering states sequentially –placing multiple stores in some states, selected earlier,

before placing initial stores in other states that were selected for later location. Stores were added in Idaho much later than in Nebraska.

The first store in Idaho was established in 1992 while almost all Wal-Mart stores in non-metropolitan Nebraska were built during the 1980s.[7] By choosing twins in Idaho, we are able to select much closer matches, the very towns that likely would have been receiving a Wal-Mart if the Corporation had been building in Idaho in the 1980s. The use of twins from Idaho more carefully adjusts for the causality issue – since that corporate policy determined why one county (in Nebraska) received a Wal-Mart while the other (in Idaho) did not, even though counties in both states had similar characteristics such as growth rates, size of towns, and other measurable differences. Results are re-estimated in Table 5, on the next page, using twins from Idaho.

[7] Initial locations occurred in the 1980s even if Wal-Mart has moved to new and expanded locations within the same towns since that time.

Table 5
Retail Statistics for Nebraska Wal-Mart Counties and Idaho Twins Adjusted per Capita

Retail Employment

	Wal-Mart	Idaho Twin
Average Before	1459.06	1326.07
Average After	1725.03	1559.44
Average Percent Change	8.99%	10.14%

Retail Establishments

	Wal-Mart	Idaho Twin
Average Before	139.40	132.34
Average After	165.64	160.42
Average Percent Change	-1.14%	5.76%

General Merchandise Employment

	Wal-Mart	Idaho Twin
Average Before	230.34	138.24
Average After	287.40	153.42
Average Percent Change	113.03%	10.94%

General Merchandise Establishments

	Wal-Mart	Idaho Twin
Average Before	5.25	4.35
Average After	6.55	5.67
Average Percent Change	21.06%	10.37%

Based on the results in Table 6, below, it is again evident that the entry of a Wal-Mart leads to greater general merchandise employment. However, the tests in Table 6 also indicate that there is a statistically significant decline in the number of retail establishments per capita for counties with Wal-Marts. There was no significant change in the retail employment.

Table 6
Impact of Wal-Mart on Nebraska Wal-Mart Counties using Idaho Twins

	Retail Employment		Retail Establishments		General Merchandise Employment		General Merchandise Establishments	
	Wal-Mart Sample	Twin Sample	Wal-Mart Sample	Twin Sample	Wal-Mart Sample	Twin Sample	Wal-Mart Sample	Twin Sample
$\overline{X}_W$	.0899	.1014	-.0114	.0576	1.1303	.1094	.2106	.1037
Var(·)	.0279	.0072	.0045	.0079	3.5325	.0856	.1683	.1007
n(·)	15	15	15	15	15	15	15	15
$\overline{X}_W - \overline{X}_T$	-0.01146		-0.06897		1.02085		0.10690	
t-stat	-0.24		-2.40**		2.07**		0.80	

** = significant at the 95% confidence level with a two-tailed test.

Conclusion

Community leaders are often concerned about whether the location of a big box retailer such as Wal-Mart will reduce the number of retail establishments in a community and the level of retail employment in the community. Our analysis of non-metropolitan Nebraska indicates that the building of a Wal-Mart increases employment in the general merchandise sub-segment of the retail industry, but does not increase or decrease total retail employment. At the same time, Wal-Mart's location is associated in our preferred model with a decline in the total number of retail establishments in counties. Realizing the gravity of this finding for non-metropolitan retailers, the next section reviews research on how local retailers can compete with Wal-Mart and other "big box" retailers.

III. Competing with Big Box Stores: A Literature Review for Retailers

Literature and common experience both suggest that Wal-Mart's entry into a market and the competition it creates for other retailers in a community can be difficult, stressful, and require innovative business strategies for all retailers. In this segment, we summarize research which has examined strategies that local retailers may employ in such a situation. Reactions to entry of a big box store are discussed for smaller competitors and then for larger competitors.

Small Competitor Response

Many stores in communities where a big box retailer enters the market make only minimal changes in reaction to the emergence of the competitor. Peterson and McGee (2000) reported that the most common response of existing retailers was to "do nothing." This approach was strongly associated with a loss of revenue. Peterson and McGee also showed that a lack of first year promotional activity in response to the entry of a big box retailer led to a loss of sales in the first year as well as overall for the first 3-years after entry.

Similarly, Litz and Stewart (1997) found that the majority of stores did not competitively react to the entrance of Home Depots; generally because of a prevailing belief that competitive measures would be ineffective against giant retailers. The most successful stores tried more strategies than unsuccessful stores when a new retailer opened. Even when stores reacted with swift retaliatory measures, their strategies faded within two years. Other stores responded in a variety of ways. These responses can be grouped into four categories as shown in Table 7.

Table 7
Responses to Big Box Store Entry

Concept	Authors Supporting the Concept	Specific Idea Proposed by authors
1) Service Quality	1) McGee and Love (1999) 2) McGee and Peterson (2000) 3) Maier (2005) 4) Taylor and Archer (1994) 5) Stone (1995a)	- Offer Delivery/ pick-up services - Offer expedient check out - Offer classes & workshop to customers - Learn your customer's name and use it - Know your customer's specific needs - Record all complaints, find their causes and solve them.
2) Improved Merchandising	1) Taylor and Archer (1994) 2) Stone (1995a) 3) Stone (1995b) 4) McGee and Rubach (1996-1997) 5) Welles (1993) 6) Maier (2005) 7) Rigby and Hass (2004) 8) Graham (2005)	- Reorient business by providing products not provided by Wal-Mart - Target specific customers and reward loyal customers. - Provide high quality products - Focus on a narrow range of products - Offer longer opening hours - Form a coalition of local businesses to compete against Wal-Mart
3) Marketing with Improved Pricing and Promotions	1) Stone (1995a) 2) Taylor and Archer (1994) 3) Arthur Andersen et. Al. (1994)	- Location should fulfill the following criteria if not consider relocating: actual customer traffic, nearness to competitors, construction growth patterns, real estate costs, insurance costs, zoning restrictions and tax breaks - Decrease prices on price sensitive products carried by competitors and increase prices on those not carried by them
4) Competitive strategy and Performance	1) Peterson and McGee (2000) 2) McGee and Love (1999) 3) Taylor and Archer (1994) 4) Stone (1995a)	- Understand your industry and current trends and update plans accordingly. - Improve inventory management by analyzing trends in historical data with an automated accounting system

Concept 1: Service Quality

A host of authors stressed the importance of service quality and hold that small retailers need to be customer oriented. McGee and Love (1999) in examining resources that could help small retailers and merchandisers to develop competitive advantages found that small retailers that were customer oriented with high service quality performed well. This was indicated by a high positive correlation between service quality and performance. Similarly, McGee and Peterson (2000) in determining "distinctive competencies" that were not matched by large discount chains, came to the same conclusion. They recognized the potency of service because large discount stores tended to be lacking in this area as they stress low prices. Consequently, customers seeking high quality services tended to turn to small retailers offering quality services.

Maier (2005) supported this approach, holding that employees should be particularly welcoming and be at the customer's full disposal. He used the example of Dick's Sporting Goods which hires employees who have a good mastery of the products they sell and are ready to answer a full spectrum of questions from customers.

Taylor and Archer (1994) also supported the importance of service quality and held that it can be enhanced if businesses know their customers by understanding what, why, when and the kind of places customers shop.

Stone (1995a) also highlighted the importance of service and suggested the following: employees need to have a good mastery of products offered; consider delivery or pick-up services; and offer quality and expedient services.

Concept 2: Improved Merchandising

Another recurrent strategy proposed is for small retailers to rethink their merchandising strategy. Taylor and Archer (1994) held that retailers should begin by studying the successes of others and taking ideas from competitors and peers, only adapting them to their own businesses.

Stone (1995a) recommended that small merchants focus on a narrow range of products and get accustomed to the competitor by regularly shopping there to determine the big box store's strengths and weaknesses. Stone also suggests that small merchants not sell the same products marketed by mass merchandisers since the big box stores have the ability to offer lower prices. If price competition ensues, Stone suggested that small merchants join or form a buying cooperative.

In a companion study of retailing in Iowa, Stone (1995b) corroborated this by finding that merchants who sold products not offered by Wal-Mart usually did well since they were not competing directly with Wal-Mart. These merchants even benefited from higher sales because the coming of Wal-Mart into town led to higher sales volumes overall.

McGee and Rubach (1996-1997) studying how small retailers react to the entry of large retailers (notably Wal-Mart), classified retailers as either those who perceived their environment as "benign" or those who perceived it as hostile due to the coming of a Wal-Mart into town. Among the group that perceived the environment as hostile, those who provided products similar to Wal-Mart performed the worst with respect to net income after tax, sales growth and the overall performance.

Welles (1993) examined retailer reactions to Wal-Mart entry in the small non-metropolitan community of Bath, Maine. Downtown retailers formed a coalition to compete with Wal-Mart. Realizing they would be unable to undercut Wal-Mart on traditional discount items they instead focused on niche products, longer store hours, more customer oriented service, and easier credit for customers.

Using the example of Save-a-Lot, Maier (2005) also supported this approach by recommending that retailers stay in neighborhoods and continue acting as traditional grocers, especially targeting areas with low income earners.

Rigby and Haas (2004) reported that while prices fell by as much as 10% in areas served by Wal-Mart, Wal-Mart takes at most 30% of a regional market; leaving 70% for local retailers. Local retailers should cater to targeted segments, expand signature categories, customize assortments, and raise loyalty benefits. Graham (2005) suggested competing with big retailers by expanding the services of current offerings – small value added services that focus on a firm's strengths and construct a unique shopping experience for the consumer.

Finally, Ozment and Greg (1990) held that it is challenging for small businesses to compete against Wal-Mart. However, the presence of Wal-Mart leads to a changed environment from which small business can thrive--especially those that don't compete directly with Wal-Mart. If the small businesses reorient their strategies by complementing the offerings of large discount retail chains or by focusing on niches that are not affected by large discount retail chains, they can capitalize on the situation. Ozmont and Greg also held that businesses that offer services like auto repairs and food retailers also benefit from the increased volume of sales.

Concept 3: Marketing

The third area that may require a response by small retailers is the upgrading of their marketing skills, especially pricing and promotion strategies. Stone (1995a) first recommended that small retailers master the demographics in their market areas by making use of US census information and focus group studies. Stone also recommended that retailers extend their extend their weekday hours of operation, as well as stay open on weekends. He also suggested that small retailers improve their return policies. With respect to pricing, Stone held that small retailers should use "Variable Pricing" with special attention to price sensitive products. Taylor and Archer (1994) stressed small retailers' marketing strategies should be based on the six basic marketing elements of success: product, place, promotion, people and positioning. Similar to Stone, he stressed the importance of mastering the traffic patterns of their customers. The following criteria should be considered for a good location: actual customer traffic, nearness to competitors, construction growth patterns, real estate costs, insurance costs, zoning restrictions and tax breaks.

Arthur Andersen & Co. et. al. (1994) recommended that small retailers consider the following (ranked by importance) when setting their prices: expected margin, competitor's price, retail price suggested by manufacturer, customer's perception of price, estimated demand, landed cost, company's image, whether the product in question is a basic, fashionable or seasonal product, and in-stock position.

Concept 4: Competitive Strategy and Performance

Peterson & McGee (2000) examined the relationship between various competitive strategies and future performance. Their findings suggested the need for swift and continued action on behalf of the retailer.

McGee and Love (1999) found that most small retailers lacked budgeting and forecasting skills, either because they failed to grasp their importance or simply did not have the ability to do so. Taylor and Archer (1994) pursued this point further, indicating that most successful small business have at least some simple but effective information system (manual or automated) which helps them make accurate decisions by monitoring financial, customer, industry and market trend information. This prepared smaller competitors to face changes in the market. Finally, Stone (1995a) advised retailers to automate operations and to adopt effective information systems.

Large Competitor Response

Other research has examined the success of larger retailers in competing with Wal-Mart on its own turf. Rigby and Haas (2004) suggested that once markets were segmented along the lines of quality, service, convenience, selection, and price, Wal-Mart only dominates in price, and to a limited extent, selection. Additionally, retailers who buy up and take the place of dying retailers after the arrival of a Wal-Mart benefit from the acquisition in stores and customer base.

General Merchandise Retailers

Duff (2005) investigated a large format retailer, Meijer, that has been changing its store formats to be more appealing to customers while continuing to challenge Wal-Mart. After reorganizing management and reducing staffing costs, the company has been pursuing several specific strategies in its stores. These strategies include: better applications of consumer trend knowledge; lower fixtures; clear sight lines; sophisticated merchandising including improved signage - for information and navigation; the addition of a dollar section; focusing on placing complementary products adjacent to one another, lighting for effect including spot lighting, and the implementation of hot bays – or swappable displays that are placed on the pallet so that merchandise can be switched out easily.

Costco is another large retailer challenging Wal-Mart. Maier (2004) examined Costco's strategies in an increasingly competitive industry. The company specialized in a specific niche of buyers – the community's small business owners and operators. These buyers want high-end merchandise, inexpensively.

Grocery Retailers

The grocery industry has recently been struggling with big box retailers that now have supermarkets as a part of the "Super Center" layout. The failure of the food retailing industry in establishing a compelling approach to marketing in the face of big box retailers is understated, according to Coupe (2005). Firms traditionally react to Wal-Mart emergence by trying to match Wal-Mart's marketing strategy -- low prices and complete

product selection. However, messages like “one stop shopping,” “we’ll save you money,” and “buy one get one free” do not adequately separate retailers. Instead grocery retailers should create a retail brand that can be differentiated through clever and unique marketing. Marketing messages must also target specific audiences like seniors, teens, men, women, specific health concerns, etc. These messages should strive to change the way people acquire things in a methodical, determined, and planned attack.

Conclusion

Retailers, whether locally-owned stores or chain stores, face a challenge when a large, big box stores such as Wal-Mart locates in their community. While some stores will not choose to change direction in the face of this new competition, stores that wish to have a number of strategies at their disposal. These include improving service quality, improving merchandising, improving marketing, and improving management of marketing information.

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