

Does small business decline when Wal-Mart enters the market?

Has Wal-Mart Buried Mom and Pop?

BY ANDREA M. DEAN AND RUSSELL S. SOBEL
West Virginia University



Many believe the mega discount store Wal-Mart is a plague set upon small “mom-and-pop” businesses. The instant Wal-Mart moves into town, all small businesses are destroyed in its path, leaving downtowns barren and empty.

This popular misconception has garnered significant media publicity and widespread public acceptance. President Clinton’s former secretary of labor, Robert B. Reich, wrote in a 2005 *New York Times* op-ed that Wal-Mart turns “main streets into ghost towns by sucking business away from small retailers.” One of the largest anti-Wal-Mart organizations, Wal-Mart Watch, released a report in 2005 claiming that a Wal-Mart expansion in Iowa was solely responsible for the extensive closings of mom-and-pop stores, including 555 grocery stores, 298 hardware stores, 293 building suppliers, 161 variety shops, 158 women’s stores, and 116 pharmacies.

Are those claims true? In this article, we use rigorous econometric estimation techniques to examine the rate of self-employment and the number of small-employer establishments in communities where Wal-Mart has entered the market. We find that Wal-Mart has no statistically significant impact on the over-

all size of the small business sector in the United States. When all is said and done, there are just as many small businesses that are just as profitable despite the presence of Wal-Mart.

PREVIOUS ESTIMATION PROBLEMS

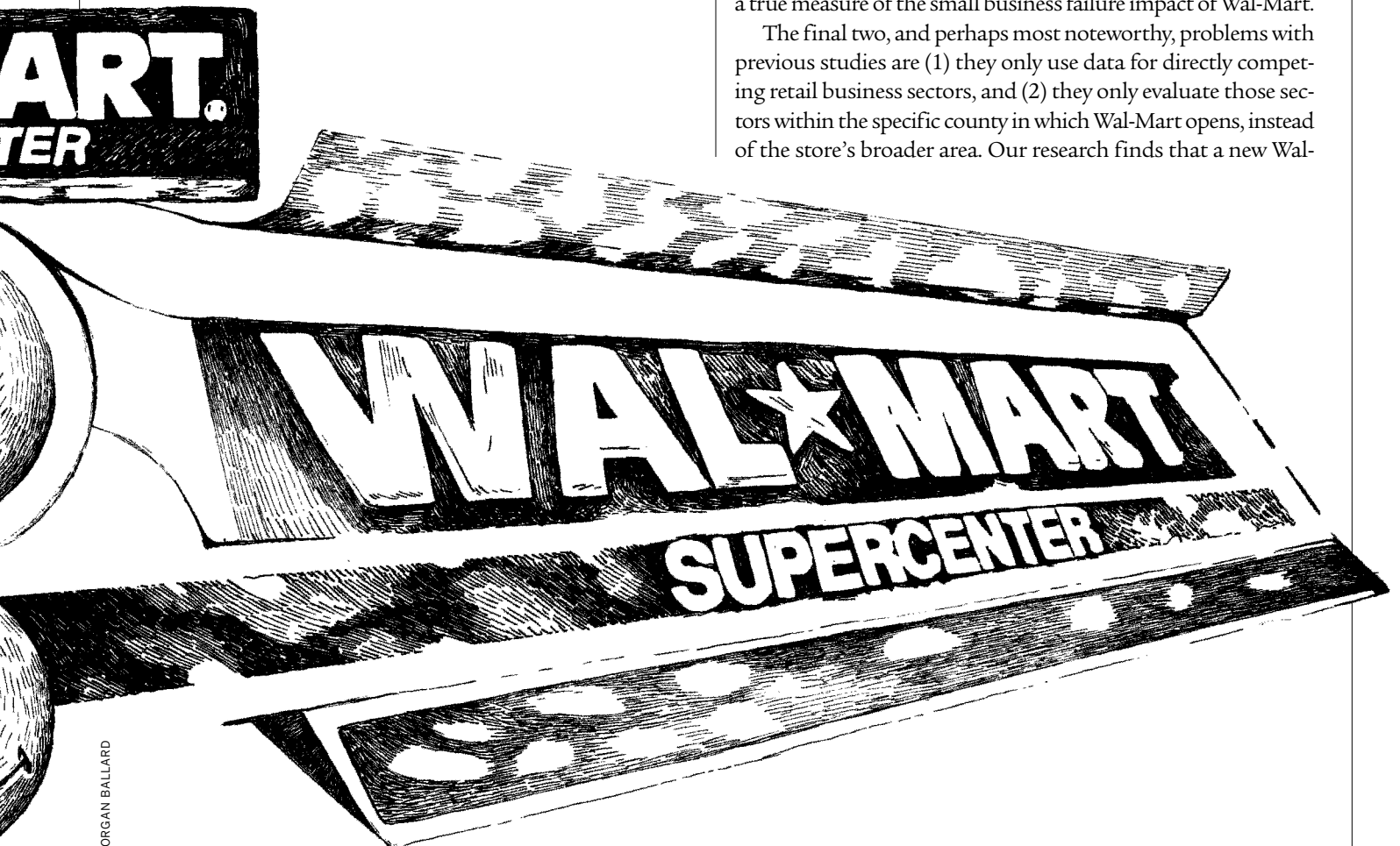
The oft-cited estimates of Wal-Mart’s alleged negative impact on small businesses, such as the Iowa example, are misleading for several reasons. First, many of those estimates, found in a series of applied policy studies, lack formal econometric estimating procedures. The studies simply compare averages for counties with Wal-Mart stores to those without Wal-Mart stores. Although the studies have attracted considerable media publicity, they are problematic and misleading because of the deficiency of econometric analysis, which makes it impossible to know whether the differences are statistically significant. Furthermore, without the use of control variables found in standard econometric analysis, the studies ignore the effects of other economic and demographic factors that differ between counties with and without Wal-Mart stores.

The second problem with previous studies is that, as part of the data for “small business,” they often lump in numbers from competing mega-retailers such as Kmart, Target, and Home Depot. Those retailers all suffer negative impacts as a result of Wal-Mart’s entrance into the market. Given that flaw, it is uncertain to what extent the previous negative estimates can be used to approximate the effect Wal-Mart has on true mom-and-pop businesses, as a Kmart’s store closing should not be counted in a true measure of the small business failure impact of Wal-Mart.

The final two, and perhaps most noteworthy, problems with previous studies are (1) they only use data for directly competing retail business sectors, and (2) they only evaluate those sectors within the specific county in which Wal-Mart opens, instead of the store’s broader area. Our research finds that a new Wal-

Andrea M. Dean is a Kendrick Fellow at West Virginia University.

Russell S. Sobel is the James Clark Coffman Distinguished Chair in Entrepreneurial Studies at West Virginia University.



MORGAN BALLARD

Mart store results in both the immediate failure of some small businesses and the emergence of other small businesses — both in other sectors and in other counties. For example, if a new Wal-Mart store opens, causing a directly competing hardware store to close and subsequently a new antique boutique opens in its place, the previous studies would only observe the failure of the hardware store. Yet Wal-Mart saves consumers a significant amount of money that they can then spend on other goods and services, and we would expect this to result in more new business opportunities. For example, if the money saved by consumers creates a greater demand for recreational activity and, as a result, a whitewater rafting company opens in a neighboring county, this new business would not be accounted for in previous studies. We now consider this process in more detail.

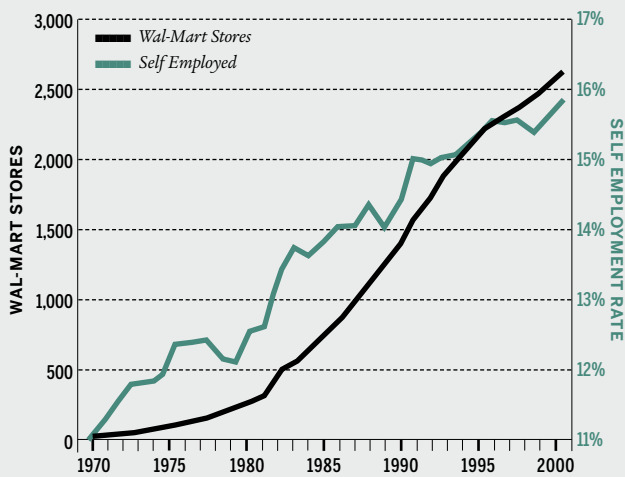
CREATIVE DESTRUCTION

The previous research on Wal-Mart’s effects did not correctly model the welfare-enhancing process of “creative destruction.” Creative destruction occurs when the introduction of a new idea or product results in the obsolescence of other products. New inventions, for instance, often result in the business failures of products supplanted by now-outdated technologies. That is unfortunate for the old businesses, but it benefits consumers and it frees money and resources that can then give rise to new businesses and further advancements.

For instance, the locale of our university, Morgantown, W.Va., is just one of many cities that have witnessed, first-hand, the process of creative destruction unleashed by Wal-Mart. Shortly after a new Wal-Mart store opened, Morgantown’s popular downtown area was wrought with empty storefronts. However, after only a brief period of time, the once-empty storefronts filled with new small businesses. A former women’s clothing shop transformed into a high-end restaurant. A former electronics store converted into an ice cream parlor. One by one, each of the vacant stores filled with new businesses, such as cof-

Figure 1

Wal-Mart Stores and Self Employment
U.S. totals, 1969–2001



SOURCES: Wal-Mart, U.S. Census Bureau

Figure 2a

Wal-Mart Stores and Small Retailers
Establishments with 1–4 employees, 1985–2002

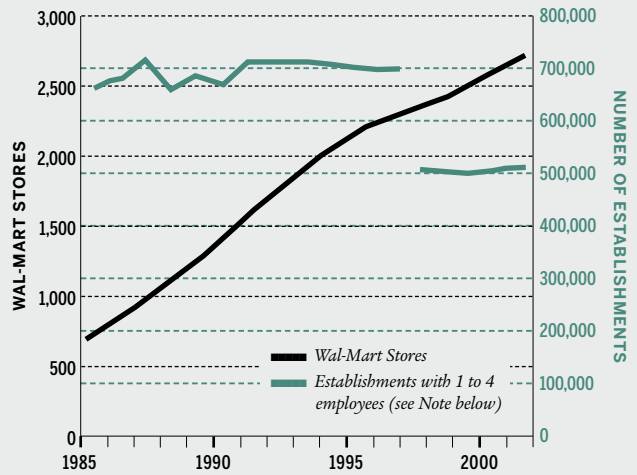
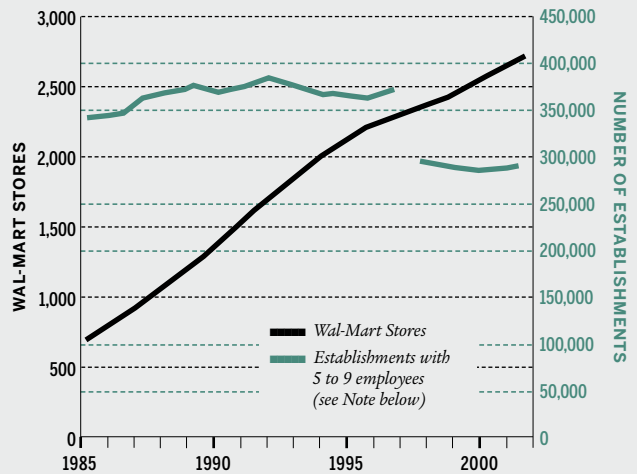


Figure 2b

Establishments with 5–9 employees, 1985–2002



SOURCES: Wal-Mart, U.S. Census Bureau
NOTE: In 1998, the U.S. Census Bureau redefined the way it measures the establish data series, causing a discontinuity in the data. The drop in the level of this series that year is due to the redefinition, so we present data as two separate lines in these figures.

fee shops, art galleries, and law firms.

This process of creative destruction is able to increase economic efficiency by the reallocation of resources. Downtown retail space, which prior to a Wal-Mart store opening would be extremely competitive and allocated mainly to general merchandise stores, becomes an economically viable location for more elaborate types of small businesses once a Wal-Mart enters the area. Entrepreneurs who once could not afford the high rents of the limited downtown retail space are now granted an affordable opportunity to open their own businesses.

It is also important to consider the money consumers save by purchasing goods at Wal-Mart’s lower prices. That money, which was previously spent on the same goods at more expensive mom-and-pop stores, can be reallocated to purchase spe-

cialty items in the boutique shops. Emek Basker of the University of Missouri–Columbia has found that the opening of a new Wal-Mart store results in city-wide price reductions of nearly two or three percent in the short run and approximately 10 percent in the long run. Consumers will spend at least some of that savings at other small businesses.

NATIONAL TRENDS

Because of its size, Wal-Mart’s impact is easily observed in U.S. aggregate-level data. As mentioned in the introduction, the Wal-Mart expansion in Iowa has been blamed for the closing of 1,581 total business firms. The data would imply a failure of 11.3 percent of all businesses in the state of Iowa. If computed as a percentage of only small businesses, Wal-Mart would be responsible for the failure of almost 30 percent of all Iowa small businesses. Have these immense declines in small business activity really occurred? If the answer to this question is yes, it will without a doubt be visible in aggregate data on U.S. small business activity.

To begin an examination of the raw data, let us first view a comparison on the expansion of Wal-Mart stores and the rate of self-employment in the United States. The measurement of Wal-Mart stores includes both the chain’s traditional “discount stores” and its “supercenters,” while the rate of self-employment is calculated by taking nonfarm proprietor employment as a percentage of total nonfarm employment. Figure 1 provides this comparison for the 48 continental U.S. states.

As can be seen in Figure 1, over the time period in which the number of Wal-Mart stores dramatically increased from just a few to over 2,500, there was also a continual increase in the rate of self-employment. This overall upward trend in self-employment is just as strong in the 1980s when Wal-Mart was rapidly expanding as it was in the 1970s. If the negative impact predicted by previous studies is correct, we should see a dramatic drop in self-employment. However, rather than a dramatic drop, the raw data suggest a nearly 50 percent increase in self-employment during the time frame.

A simple time-series regression confirms the relationship between Wal-Mart stores and self-employment seen in Figure 1. After controlling for basic factors such as per capita personal income and the unemployment rate, the regression results in a positive coefficient on Wal-Mart, contrary to the predictions of previous literature. To view those and other regression results not found in this article, please refer to our forthcoming publication in *Economic Inquiry*.

A second and third comparison of Wal-Mart stores to the number of establishments with one to four employees and the number of establishments with five to nine employees may also be enlightening. This measurement of mom-and-pop businesses is defined by the number of retail establishments with one to four employ-

ees, or five to nine employees, per 100,000 of state population from the U.S. Census Bureau. However, the data are a bit more complicated to use because the U.S. Census Bureau redefined the variable in 1998, causing a discontinuity. Unfortunately, the data also are not available for as many years as the self-employment data. Nonetheless, Figures 2a and 2b both demonstrate the same pattern. Although self-employment has been steadily increasing in the United States, the number of small establishments remains practically unchanged since 1985.

Just by looking at the raw data, no evidence can be found to validate the arguments of previous Wal-Mart literature. Wal-Mart’s alleged negative effect on the small business sector simply cannot be found in the data. However, many factors can change over a 30-year time period. For example, mom-and-pop businesses may have developed Internet-based services that would make it easier to survive in the marketplace, thereby hiding the alleged negative effect of Wal-Mart. Because of such changes, a more rigorous cross-sectional analysis at a single year in time is necessary to draw a more firm, concise conclusion on Wal-Mart’s true effect on the U.S. small business sector.

CROSS-SECTIONAL ANALYSIS

For the purpose of maximizing the number of control variables from the U.S. Census, our cross-sectional analysis uses data for the year 2000. For this analysis, both the level and growth of small business activity are examined.

RAW DATA To begin the cross-sectional analysis, it is also use-

Table 1

Wal-Mart and Small Business

States with the highest and lowest number of Wal-Mart stores per capita, 2000

	Wal-Mart stores per 100,000 population	Self employment rate (percent of total employment)	Number of establishments with 1 to 4 employees per 100,000 population	Number of establishments with 5 to 9 employees per 100,000 population
Top 5 States				
Arkansas	3.067	16.175	220.805	123.999
Nevada	2.602	15.292	140.222	89.828
Mississippi	2.109	14.217	210.922	125.041
Missouri	2.020	14.900	190.556	114.687
Alabama	1.844	14.500	207.843	122.934
Average	2.328	15.017	194.070	115.298
Bottom 5 States				
Connecticut	0.470	15.936	192.626	102.626
Washington	0.424	16.513	171.154	97.640
California	0.340	19.464	145.629	78.372
New Jersey	0.261	13.635	215.988	86.899
New York	0.084	14.107	220.299	83.319
Average	0.316	15.931	189.139	89.771

SOURCES: Wal-Mart; U.S. Census Bureau

ful to view the raw 2000 data to see if any obvious relationships can be seen, before controlling for other factors. Table 1 presents data on all small business measures for the five states with the highest and lowest number of Wal-Mart stores per capita (per 100,000 population). Arkansas, the home state of Wal-Mart and the state with the greatest population of Wal-Mart stores, has slightly more than three stores per 100,000 people. The other four states with the most Wal-Mart stores per capita are Nevada, Mississippi, Missouri, and Alabama. The states with the fewest Wal-Mart stores per capita are New York, New Jersey, California, Washington, and Connecticut. The top five states, when averaged together, have approximately 2.3 Wal-Mart stores per 100,000 people while the five states with the least Wal-Mart stores per capita have only 0.3 stores per 100,000 people. On average, the top five states have seven times the number of Wal-Mart stores per capita as the bottom five states.

With such a discernable difference, if Wal-Mart has a negative effect on the small business sector, the effect should easily be seen in the states with the most Wal-Mart store per capita. As can be seen in the data in Table 1, although the states with a larger number of Wal-Mart stores do have somewhat lower rates of self-employment, they actually have more small establishments per capita.

Do these patterns hold up across all 48 continental U.S. states? Figures 3 and 4 show data for all states on the number of Wal-Mart stores per capita and measures of small business activity. The regression line has a positive slope for both Figures 3 and 4a; however, the slope is not significantly different than zero. Both of these figures are inconsistent with the hypothesis that Wal-Mart stores reduce the number of small retail establishments. Interestingly, the slope of the regression line in Figure 4b is actually positive and significantly different from zero, which suggests that states with more

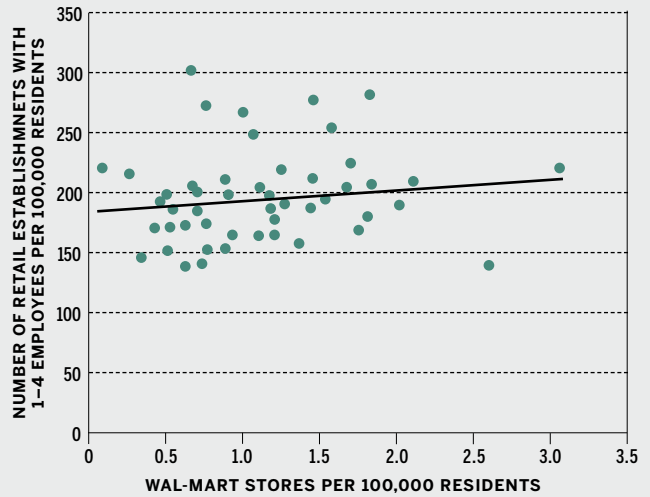
Wal-Mart stores actually have significantly higher levels of five-to-nine-employee establishments.

REGRESSION ANALYSIS Econometric regression analysis will allow us to control for other factors that may affect the size of the small business sector to better isolate the effect of Wal-Mart. Other than the number of Wal-Mart stores per 100,000 people, control variables such as median age, percent metropolitan population, percent of population in poverty, median family income (in thousands), percent of population nonwhite, percent of population with a college degree, percent

Figure 4a

Density of Wal-Mart and Small Businesses

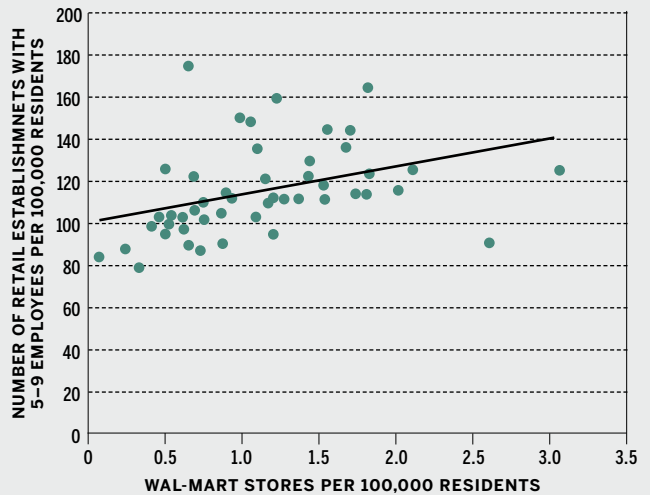
Establishments with 1-4 employees, 2000



SOURCES: Wal-Mart, U.S. Census Bureau
NOTE: Data represent the 48 continental states. Slope of the regression line shown is 8.805 and the t-statistic is 1.052 (which is not statistically significant).

Figure 4b

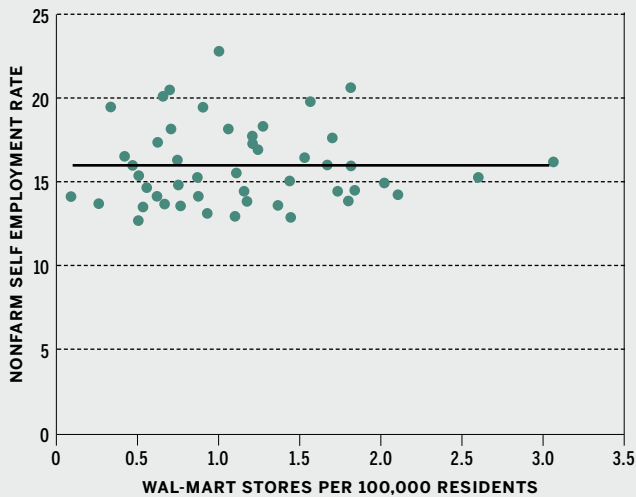
Establishments with 5-9 employees, 2000



SOURCES: Wal-Mart, U.S. Census Bureau
NOTE: Data represent the 48 continental states. Slope of the regression line shown is 13.027 and the t-statistic is 2.710 (which is statistically significant at the 1% level).

Figure 3

Wal-Mart Stores vs. Self Employment Rates 2000



SOURCES: Wal-Mart, U.S. Census Bureau
NOTE: Data represent the 48 continental states. Slope of the regression line shown is 0.035 and the t-statistic is 0.062 (which is not statistically significant).

Table 2

Does Wal-Mart Reduce Small Business?

Wal-Mart stores per capita as explanatory variable, 2000

INDEPENDENT VARIABLE	DEPENDENT VARIABLE								
	Self Employment Rate			Establishments with 1-4 Employees (per 100,000 population)			Establishments with 5-9 Employees (per 100,000 population)		
	OLS	SAR	SAC	OLS	SAR	SAC	OLS	SAR	SAC
Constant	-66.933** (2.233)	-51.274* (1.751)	-49.688* (1.756)	90.075 (0.191)	-182.669 (0.440)	-236.980 (0.547)	180.046 (0.901)	76.651 (0.373)	104.764 (0.528)
Wal-Mart stores (per 100,000 population)	-0.109 (0.229)	-0.001 (0.002)	-0.152 (0.385)	2.203 (0.297)	0.954 (0.167)	-1.955 (0.291)	3.933 (1.247)	1.712 (0.583)	3.539 (1.113)
Percent metropolitan population	-0.036* (1.750)	-0.032* (1.959)	-0.031* (1.898)	-1.273*** (3.974)	-0.899*** (3.676)	-0.983*** (4.507)	-0.849*** (6.243)	-0.683*** (5.575)	-0.658*** (5.358)
Median age (years)	0.222 (1.650)	0.221* (1.868)	0.225* (1.942)	6.925*** (3.284)	6.926*** (3.962)	6.730*** (4.143)	1.768* (1.974)	1.952** (2.231)	1.819** (2.127)
Percent in poverty	0.207 (1.094)	0.139 (0.825)	0.142 (0.887)	0.541 (.182)	-0.510 (0.207)	-0.500 (0.208)	-2.564** (2.031)	-3.047** (2.459)	-3.008** (2.470)
Median family income (thousands \$)	-0.115 (1.054)	-0.122 (1.333)	-0.111 (1.287)	-0.862 (0.504)	-1.502 (1.112)	-1.113 (0.823)	-1.419* (1.954)	-1.883*** (2.782)	-1.931*** (2.914)
Percent non-white	-0.037 (1.189)	-0.027 (0.964)	-0.021 (0.744)	0.193 (0.397)	0.419 (1.018)	0.060 (0.141)	0.171 (0.829)	0.255 (1.227)	0.216 (1.015)
Land area (1,000 sq. miles)	0.013 (1.644)	0.012* (1.784)	0.010 (1.598)	-0.036 (0.303)	-0.086 (0.893)	-0.003 (0.032)	-0.045 (0.973)	-0.091* (1.815)	-0.084* (1.659)
Percent with college education	0.408*** (4.018)	0.378*** (4.372)	0.345*** (3.600)	4.401*** (2.762)	3.126*** (2.579)	2.347 (1.496)	1.832** (2.708)	1.591*** (2.626)	1.811*** (2.635)
Percent male	1.448** (2.692)	1.095** (2.050)	1.029* (1.898)	-2.619 (0.310)	2.181 (0.302)	5.137 (0.621)	-0.378 (0.106)	1.707 (0.478)	1.095 (0.313)
Rho	—	0.188 (1.260)	0.301 (1.364)	—	0.442*** (3.435)	0.076 (0.318)	—	0.182 (1.450)	0.181 (1.106)
Lambda	—	—	-0.220 (0.660)	—	—	0.660*** (3.829)	—	—	0.043 (0.163)
LM-test	—	0.530	—	—	30.121 [†]	—	—	1.144	—
Observations	48	48	48	48	48	48	48	48	48
R-squared	0.652	0.730	0.744	0.615	0.678	0.773	0.814	0.820	0.827
Log-likelihood	-109.448	-61.444	-33.607	-239.156	-191.891	-162.983	-215.524	-157.502	-129.555

SOURCES: Wal-Mart; U.S. Census Bureau NOTES: t-statistics in parentheses; asterisks indicate significance as follows: ***=1%, **=5%, *=10%; †= no spatial dependence in the errors.

of population male, and state land area (in thousands of square miles) are also included. Those variables are traditionally used in any study of self-employment.

The model is first estimated by means of an ordinary least squares (OLS) regression. However, the OLS estimator can be biased and inconsistent when spatial dependence exists in the data. Spatial dependence can occur when there are unobservable geographic correlations within the dependent variable, which in this case is the measurement of small business activity. Because this dependent variable likely carries spatial dependence, a simple OLS regression is not sufficient; spatial econometric methods must be used to control for these geographic patterns in the data. One may think of spatial models as analogous to an autoregressive moving-average time-

series model, but with lags occurring over geographic distances rather than time. We use two specialized econometric models, spatial autoregression and spatial autocorrelation, to control for a spatially correlated error structure.

Table 2 presents the results from both the OLS and spatial estimation techniques. Highlighted at the top of the table are the Wal-Mart coefficient estimates (the amount by which one additional Wal-Mart store per 100,000 population would affect small business activity), none of which are statistically significant.

The lack of statistical significance indicates that the number of Wal-Mart stores has no significant effect on small business activity in a state, measured by either self-employment or small establishments. The estimates are consistent throughout each of the three different models.

Table 3 displays similar results to those in Table 2, except that the dependent variable, the levels of small business activity, is replaced with annual growth rates. The number of Wal-Mart stores is also replaced with the annual growth rate of Wal-Mart stores. Even with this redefinition of variables, the estimation results remain robust. Except for one case, the Wal-Mart store variable continues to be statistically insignificant. The case in which the relationship between Wal-Mart stores and establishments with one to four employees is significant is actually in the opposite direction as what previous literature would claim — it shows a positive impact. This result occurs only once, however, therefore it is not robust enough to be persuasive.

Taken as a whole, the estimates found in Tables 2 and 3 strongly reject the conjecture that Wal-Mart has a signifi-

cantly negative impact on the overall size and growth of the small business sector in the United States.

CONTROLLING FOR ENDOGENEITY Wal-Mart store locations may be endogenous. For example, Wal-Mart stores may only be expanding in areas where unobservable variables are also causing a more rapid growth in small business activity, thus skewing our results. So it is worthwhile to re-estimate the models accounting for this possibility. The issue of endogeneity is addressed in two ways: a redefinition of the Wal-Mart variable, and inclusion of a Wal-Mart store instrumental variable in the regression.

First, the Wal-Mart store variable is replaced with a five-year lagged value of the Wal-Mart variable, meaning that what was once a value for the number of Wal-Mart stores in the year 2000

Table 3

Does Wal-Mart Reduce Small Business Growth?

Wal-Mart store growth as explanatory variable

INDEPENDENT VARIABLE	DEPENDENT VARIABLE								
	Self Employment Rate			Establishments with 1-4 Employees (per 100,000 population)			Establishments with 5-9 Employees (per 100,000 population)		
	OLS	SAR	SAC	OLS	SAR	SAC	OLS	SAR	SAC
Constant	22.063 (2.031)	10.808 (1.199)	11.045 (1.155)	-31.983* (1.814)	-26.825* (1.705)	-34.979** (2.029)	-27.824 (1.543)	-42.076** (2.550)	-35.501* (1.806)
Wal-Mart stores (per 100,000 population)	-0.020 (0.846)	-0.013 (1.494)	-0.023 (1.286)	0.279 (0.741)	0.051*** (3.293)	0.030 (0.879)	-0.019 (0.486)	-0.001 (0.069)	0.007 (0.235)
Percent metropolitan population	0.005 (0.785)	0.005 (0.880)	0.004 (0.707)	0.015 (1.399)	0.018** (1.987)	0.019* (1.816)	0.013 (1.186)	0.015 (1.580)	0.013 (1.224)
Median age (years)	-0.092* (1.972)	-0.097*** (2.615)	-0.103*** (2.829)	-0.248*** (3.274)	-0.270*** (4.340)	-0.257** (3.889)	-0.091 (1.171)	-0.099 (1.481)	-0.097 (1.420)
Percent in poverty	0.013 (0.200)	0.064 (1.170)	0.045 (0.871)	-0.085 (0.779)	-0.183** (1.997)	-0.088 (0.902)	0.094 (0.838)	0.119 (1.220)	0.111 (1.226)
Median family income (thousands \$)	0.042 (1.059)	0.060* (1.889)	0.048 (1.578)	-0.003 (0.050)	-0.071 (1.294)	-0.018 (0.304)	-0.030 (0.456)	-0.032 (0.565)	-0.024 (0.423)
Percent non-white	-0.001 (0.019)	-0.011 (1.297)	-0.006 (0.760)	0.028 (1.645)	0.050*** (3.342)	0.028* (1.814)	-0.012 (0.683)	-0.009 (0.556)	-0.009 (0.613)
Land area (1,000 sq. miles)	-0.003 (1.232)	-0.002 (0.739)	-0.002 (1.077)	-0.005 (1.042)	-0.006 (1.630)	-0.005 (1.185)	-0.001 (0.123)	-0.001 (0.256)	-0.002 (0.500)
Percent with college education	-0.045 (1.408)	-0.030 (1.209)	-0.029 (1.189)	-0.026 (0.509)	-0.024 (0.590)	-0.022 (0.461)	0.019 (0.368)	0.027 (0.608)	0.019 (0.472)
Percent male	-0.381* (1.978)	-0.193 (1.210)	-0.181 (1.064)	0.835** (2.671)	0.813*** (2.865)	0.911*** (2.808)	0.603* (1.886)	0.888*** (3.014)	0.757** (2.014)
Rho	—	0.449*** (3.251)	0.571** (2.478)	—	-0.189 (1.259)	-0.134 (0.547)	—	-0.377** (1.981)	-0.046 (0.098)
Lambda	—	—	-0.269 (0.674)	—	—	0.149 (0.507)	—	—	-0.467 (0.916)
LM-test	—	128.011†	—	—	0.163	—	—	27.782†	—
Observations	48	48	48	48	48	48	48	48	48
R-squared	0.393	0.533	0.637	0.574	0.706	0.662	0.208	0.341	0.456
Log-likelihood	-45.304	-6.676	20.097	-77.065	-30.422	-7.197	-63.290	-34.333	-5.999

SOURCES: Wal-Mart; U.S. Census Bureau NOTES: t-statistics in parentheses; asterisks indicate significance as follows: ***=1%, **=5%, *=10%; †= no spatial dependence in the errors.

is now a value for the number of Wal-Mart stores in the year 1995. Not only will this variable redefinition uncover endogeneity issues, it will also address concerns that the entrance of a new Wal-Mart store has a time lag effect of small business activity.

Second, instrumental variable methodology is used to predict the number of Wal-Mart stores in each stage, and in a second stage, we use this predicted value in the regressions. The results from these regressions are practically identical to the results from the previous regressions. No model displays any significant relation between the number of Wal-Mart stores per capita and the level of business activity.

BANKRUPTCY RATES We also examine whether there is a relationship between Wal-Mart stores and bankruptcy rates in the small business sector. Data on state-level business bankruptcy rates from the U.S. Small Business Administration are collected and employed in the three regression techniques discussed above. The regressions control for demographic and socio-economic factors as well as spatial dependence. The bankruptcy variable is measured as both a rate of all businesses as well as bankruptcies per 1,000 state population.

The regression results for this alternative small business measure mirror earlier results: Wal-Mart causes no significant harmful effect. In fact, all coefficients are negative, which implies that bankruptcy rates are actually lower in states with more Wal-Marts.

QUALITY OF NEW BUSINESS Thus far, the data have consistently demonstrated that the overall size of the small business sector is unaffected by the opening of a Wal-Mart store. Without a doubt, some directly competing small businesses will fail when Wal-Mart opens. Subsequently, the failure of those businesses will free up valuable resources, making it possible for other new businesses to open. However, some worry that the new businesses are in some ways inferior to the old businesses they replace.

For example, what was once a long-standing profitable hardware store may be replaced with a marginal diner with low revenue or profitability. If this is indeed the case, the average sales or net income of small businesses should visibly decrease as Wal-Mart has expanded.

Figures 5a and 5b illustrate the relationship between the number of Wal-Mart stores and the average real net income and revenue of sole proprietors. Both figures clearly indicate a uniform positive growth for the “quality” of small businesses. In fact, small businesses today both have higher revenue, and are more profitable, than in the past (in real terms).

CONCLUSION

Our research suggests that the popular belief that Wal-Mart has a significant negative effect on the size of the mom-and-pop business sector of the United States economy is statistically unfounded. After examining a plethora of different measures of small business activity and growth, examining both time series and cross-section data, and employing different geographic levels of data and different econometric techniques, it can be firmly concluded that Wal-Mart has had no significant impact on the overall size and growth of U.S. small business activity.

Figure 5a

Wal-Mart Stores and Small Business Receipts

Average sole proprietor, real net income

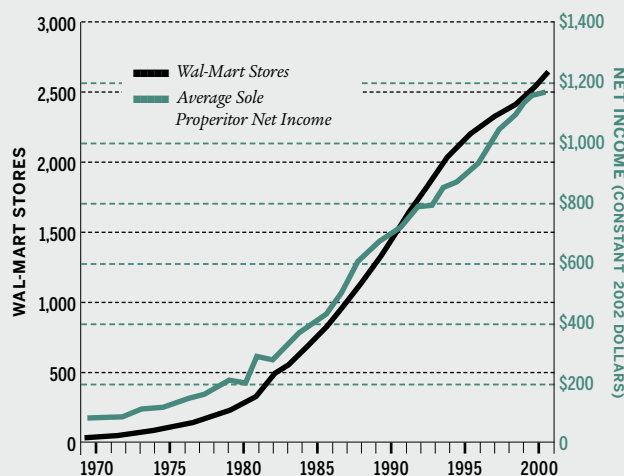
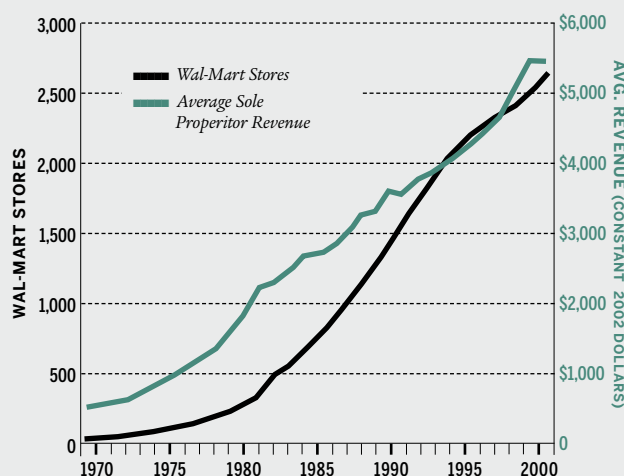


Figure 5b

Average sole proprietor, real revenue



SOURCES: Wal-Mart, U.S. Census Bureau

NOTE: Net income and receipts are converted to real dollars using the CPI.

There is no question that Wal-Mart does cause some mom-and-pop businesses to fail. However, those failures are entirely compensated for by the entry of other new small businesses elsewhere in the economy through the process of creative destruction. **R**

Readings

- “Has Wal-Mart Buried Mom and Pop? The Impact of Wal-Mart on Self Employment and Small Establishments in the United States,” by Andrea M. Dean and Russell S. Sobel. *Economic Inquiry*, forthcoming.
- “Job Creation or Destruction? Labor-Market Effects of Wal-

Mart Expansion,” by Emek Basker. *Review of Economics and Statistics*, Vol. 87 (2005).

- “Selling a Cheaper Mousetrap: Wal-Mart’s Effect on Retail Prices,” by Emek Basker. *Journal of Urban Economics*, Vol. 58 (2005).