

ESTABLISHING A SMALL BUSINESS: PURSUING AN AMERICAN DREAM OR JUST TAKING EXCESSIVE RISK?

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ABSTRACT

As policymakers search for ways to keep jobs in the United States and stem the outsourcing outflow, researchers once again return to the question of which type of business has been responsible for the majority of the jobs created in recent years. In other words, how can we leverage policy initiatives in ways that will make a substantive difference in peoples' employment opportunities? This study will, because of significant regional differences, focus on the recent job creation experience of the Midwest. We will examine the effect of a number of key macroeconomic variables such as the education level, tax rates and income per capita on the number of jobs created by both small businesses (less than 500 employees) and large businesses (500 or more employees). We will compare and contrast the state-to-state differences found upon examination of the data from 1996 to 2001. Data from a number of sources including the US Census Bureau will be used. The results of this analysis will give policymakers more information about the effective use of funds for initiatives such as education and tax reform. It should be noted that this study will address the number and not the quality of jobs created, which is an important area of future research.

INTRODUCTION

Last July, the House of Representatives devoted weeks of legislative work to the issue of America's global competitiveness. The House addressed eight topics considered key to the success of American business. These topics were: health care, bureaucracy, education, energy, innovation, trade, taxes and lawsuit abuse. These initiatives were designed to help both large and small businesses alike (Business CustomWire, July, 2004).

The primary concern of policymakers the previous year had been America's jobless recovery. This

jobless recovery unfolded on the heels of a business climate where cost-cutting and down-sizing had been the name of the game. Cost cutting measures pursued by various companies chiefly translated into eliminating jobs and reducing labor costs. Moreover, the manufacturing sector which makes about 15% of U.S. business sector employment suffered job losses that are unprecedented relative to any historical standards. According to the Bureau of Labor Statistics, by the end of third quarter of 2003, hours of all persons in manufacturing had fallen for the thirteen consecutive quarters. In other words, September 2003 was the 52nd month over which the manufacturing sector experienced job losses. Moreover, in the second and third quarters of 2003, hours of all persons in the manufacturing sector declined by 5.9 and 5 percent (seasonally adjusted annual rate), respectively (BLS Quarterly Productivity and Cost Reports, 2003).

Manufacturing jobs, however, are those which, on average, are better compensated both in terms of wages and benefits. Jobs in the manufacturing sector (quality jobs) provide employees with a standard of living which is the envy of those working in the service sector. Policy makers and economists alike must be concerned with the loss of these jobs because the income effect of this loss could be quite significant. Manufacturing positions are usually, but not always, generated by larger businesses by the nature of the production process. By contrast, firms in service producing sectors have accounted for 20% increase in the number of individuals employed nationally from 1980 to 1993 (manufacturing positions dropped 2.5%) (Economic Report of the President, February 1994, Tables B34, B44).

So, a pivotal question for researchers is which businesses are currently responsible for job creation and should, therefore, be the targets of efforts to improve competitiveness? Since small businesses

are expected by a number of researchers to create more jobs in the future based on the comparative advantage of the service sectors, should we not assist them in any way possible to overcome hurdles to successful development?

A 2002 Small Business Administration study found that, while conventional wisdom presumes that nine out of ten new businesses fail within the first five years, survival rates for small businesses are not as dismal as they seem (Headd, 2003). The reality is, however, that approximately 34% of new firms with employees will not weather the first two years (U.S. News and World Report, August 2, 2004). Even though the small business failure rate is frightening, business conditions at this time are uniquely favorable to the would-be entrepreneur. Interest rates are currently at an historic low and credit is comparatively readily available. The labor market is still soft in spite of the current economic recovery, making it easier to attract quality employees who are willing to invest their time and talents in a potentially risky venture. Other macroeconomic factors include strong consumer and government spending. In fact, Mark Zandi, chief economist for Economy.com indicates that strengthening sales figures point to conclusions that established firms, in some cases, have all the business they can handle, further adding to the favorable climate for small businesses that may be able to fill previously non-existent market niches (U.S. News and World Report, August 2, 2004).

While the time is ripe for small business growth, there is substantial evidence that small businesses are a significant and perhaps dominant force in job creation. David Audretsch found that small businesses are important sources of employment growth and innovation (2002). Asquith and Weston examine the implications of future employment trends for small business growth and find, as Audretsch did, that small businesses are important vehicles for job creation (1994). Small businesses have the comparative advantage in sectors such as technology where the economy is expected to experience growth. Small businesses are considered such as important factor in national job creation that a study by Dunkelberg, Scott and Dennis Jr. uses a survey of small business owners to predict the national unemployment rate (2004). These researchers found that 80% of the variation in the

unemployment rate could be explained by the survey responses.

While most believe that small businesses are the fountainhead of job creation, there are those who caution that it is the quality and not the quantity of jobs that should be the objective of economic policy (Zipp, 1991 and Perkins, 1994). While this is clearly an important point, we leave this topic for future research.

The purpose of this paper is to examine the data on job creation by both small and large businesses in the Midwestern states, namely, Illinois, Indiana, Iowa, Michigan, Minnesota, Missouri, Ohio, and Wisconsin. In seeking the answers to questions raised above, one approach may be to examine the data for the entire United States; the other is to closely look at regional data, a path chosen in the current study. One justification for this approach is that the states in each region (e.g., Midwest, Southwest, Northeast, etc.), may share commonalities in terms of economic structure and similarities in terms of cultural values and attitudes which may prove to be significant factors affecting business environment. Regional study may help reveal factors that are pertinent to the economic vitality of one region, but not the others. Furthermore, as an additional advantage, regional studies provide for the possibilities of compare and contrast of the findings which may lead to deeper insights about the issues being investigated. The next section offers a brief review of the literature and the data used in the study.

LITERATURE REVIEW

The role of small and large businesses in the economic life of the country is a constant topic of debate. While it seems that the big business usually gets its dues as evidenced by the celebration of Fortune 500 and the publicity around such businesses, small businesses enjoy a special place in the American culture.

The results of a recent poll conducted by the National Federation of Independent Business, published in the October 5, 2004 issue of the *Wall Street Journal*, revealed a coveted spot for the institution of small business in the American's psyche.

It is hardly a revelation to unveil the results that indicate small businesses are viewed positively. However, it may come as a surprise, at least to some, to discover that small businesses were perceived to have a positive influence on the country with a larger percentage than that for the colleges & universities and the religious organizations; 78%, 76%, and 66%, respectively. Given the results, Breeden (2004) concluded that “Most Americans believe small businesses have a positive impact on the country as a whole.”

The conclusions of academic research on the economic impact of small businesses and their contribution to the overall growth of jobs in the country, however, are not at a consensus. In a study conducted by Davis, Haltiwanger, and Schuh (1994) the authors arrived at the conclusion that small businesses are no better than big businesses when it comes of the question of job creation. They suggested that, “The claim that small businesses are the fountainhead of job creation relies on unsuitable data and on misleading interpretations of that data.” These authors especially questioned the quality of jobs created by the small business which they considered to be of essence when examining the issue of job creation. In contrast, Asquith and Weston (1994) conclude, given that most of the growth in the U.S. economy is in the service sector and that the manufacturing accounts for a small fraction of total employment, industry growth patterns continue to favor small business as a significant source of job creation. These authors emphasize small businesses that often require investment in high-tech equipment in providing data processing services as well as medical services. Thus, the issue of relative contribution of small vs. large businesses is far from settled. The current study pursues the issue for the economies of the Midwestern states. Next section discusses the data and the analysis.

DATA AND ANALYSIS

The panel data collected for this study includes five years of data, from 1996 through 2,000 for each of the eight states that make up the region of the “Midwest” in the United States. The data for employment due to birth, employment due to expansion of a business (both large and small

businesses) as well as employment generated by small businesses of various sizes came from the *Census Bureau, 1989 – 2001 Business Information Tracking Series*. In addition, the data for change in employment (the difference between jobs created and jobs lost), came from the same source. The data for unemployment rate (UR) were collected from *The U.S. Bureau of Labor Statistics, geographic Profile of Employment and Unemployment, annual issues 1996 – 2000*. The data for the education variable (EDUC) reflects the educational attainment of population of 25 years or older who have earned high school degree or more, in percent. The source of the 1996 education data was *The U.S. Census Bureau – Educational Attainment: Historical Reports, Detailed Tables*. The education data for the 1997 through 2,000 were obtained from *Statistical Abstract of the United States 1998 through 2001*. The source of data for income per capita (Inc/Cap) and corporate tax rates (Corp-Trate) were from the Bureau of Economic Analysis and Tax Foundation Web sites, respectively.

Table1 indicates the net contribution of small and large businesses to the employment of each state in the Midwest from 1996 through 2,000. The data presented in Table1 suggests that in each state, small business contributes to the net employment more than that contributed by the large business. The magnitude of this difference, however, differs from one state to another. Over this period, the ratio of job creation ranged between the low of nearly two to one, for Iowa, to the high of over 9 to 1 for Ohio. Given that the period examined was marked by the acceleration of downsizing and job outsourcings, there is a possibility that large businesses were simply a larger source of job destruction.

Table 2 presents the data regarding creation of employment by both small and large businesses. It shows employment that was created through birth as well as those created through expansion of a business. The evidence in Table 2 suggests that in every state, the job creation is larger for small business. Moreover, the creation of employment is higher in both categories of birth and expansion. Therefore, one can conclude that for the Midwest over the study period small business has been a more forceful engine for employment creation. Small business, however, is defined as any business with fewer than 500 employees which does not

clearly show which business size, if any, is more likely to contribute to the employment picture.

Table 3 shows changes in employment by the size of enterprise for every state. The data in Table 3 seem to confirm the notion that “small” businesses are the most effective vehicle for job creation. The Table shows that the largest percentage of jobs created in the small business category is due to the smallest of the all, those with four or less employees. This is true, with few exceptions, for the next smallest 5-9 employee enterprises and then 20 to 99 employee businesses. Again, the data supports the conclusion that “small” businesses have been, during the 1996-2000 period a reliable source of employment creation.

To examine the determinants of employment creation by small and large businesses, a linear relation between total employment by each type of business and several macroeconomic variables was assumed. The explanatory variables were unemployment rate (UR), percent of population with high school or higher degrees (EDUC). It was hypothesized that the higher levels of education in a given state will help the formation of businesses and thus, employment creation. The variable income per capita (Inc/Cap) is expected to have a positive relation with employment creation as higher levels of this variable shows healthier economic atmosphere. The variable corporate tax rate, on the other hand, has an inverse relation with business profits and thus, will be negatively related to employment generated by businesses due to starting new businesses or expanding the old ones.

Table 4 shows that both regression models are highly significant as evidenced by the overall measures of goodness-of-fit. All coefficients in both models are of the right sign. In the model estimating employment creation by small business, all estimated parameters are significant at better than 1% significance level except for the coefficient of EDUC which is significant at the 10% level. Interestingly enough, the variable education is not significant in the equation for large business. Even though it is hard to accept the fact that education level of the most likely employees would not be a significant factor affecting a company’s decision to choose a location as its home. However, one may conjecture that a company which employs over 500 people is perhaps a “global” company that is able to

draw on resources, including human resources, across state lines. Therefore, formation or even expansion of such companies may not depend significantly on the “educated” people in a given state. The opposite is true about small businesses that are more likely to tap into the human capital available in their home base.

CONCLUSIONS

Examination of data regarding employment creation of small and large businesses suggested that for every state in the Midwest, small businesses, defined as those enterprises with fewer than 500 employees, have been the dominant force in the area of job creation. The findings also show that among small businesses, the smallest of them all or those with one to four employees created the majority of the jobs. Therefore, for policy makers in the Midwest support of small businesses, their formation and their expansion must be a priority in any plan that aims to promote employment. These results, however, analyze only the quantity of jobs created. To promote prosperity and to achieve improvement in the standard of living of the working people, quality of jobs need to be taken into consideration as well. In addition, the results obtained in this study are based upon the analysis of data over the 1996 through 2,000. This was a period of growth and prosperity in the United States where the economy was enjoying one of its longer expansionary runs. Before final conclusion can be drawn about the relative role of small business in the economic life of the Midwest, one may need to examine data when the economy was experiencing slow downs as well as when going through an upsurge. The recent past, 2001 through 2004 is an ideal period to be studied. However, the detailed data about business employment creation will become available with several years of lag. In addition, future research focusing on other regions in the United States could shed additional light on the topic.

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**Table 1. Change in Employment Due to Small and Large Businesses
1996 - 2000
Midwestern States**

State	Illinois	Indiana	Iowa	Michigan	Minnesota	Missouri	Ohio	Wisconsin
Small Business	397,226	138,303	58,258	326,399	195,779	139,160	269,334	153,867
Large Business	78,673	33,096	32,787	60,053	88,201	53,065	28,551	23,915
Ratio Small/Large	5.0	4.2	1.78	5.4	2.2	2.6	9.4	6.4
Average UR	4.6	3.4	3.0	4.1	3.2	4.0	4.4	3.4

Note: Small Business is defined as those with fewer than 500 employees. Large Business are those with 500 and more employees.

Source: Census Bureau, 1989 - 2001 Business Information Tracking Series.

**Table 2. Creation of Employment by Small and Large Businesses by Source
1996 - 2000
Midwestern States**

Business Type	Small Business			Large Business		
	Due to Birth	Due to Expansion	Total	Due to Birth	Due to Expansion	Total
Illinois	747,218	1,536,054	2,283,272	660,992	1,177,024	1,838,016
Indiana	358,310	723,702	1,082,012	254,305	524,181	778,486
Iowa	166,193	339,231	505,424	119,416	216,489	335,905
Michigan	600,512	1,175,557	1,776,069	498,215	842,343	1,340,558
Minnesota	331,622	683,636	1,015,258	281,824	473,231	755,055
Missouri	352,802	664,650	1,017,452	285,357	492,346	777,703
Ohio	650,363	1,337,550	1,987,913	587,157	1,044,895	1,632,052
Wisconsin	267,244	564,235	831,479	177,399	327,361	504,760
Midwest	3,474,264	7,024,615	10,498,879	2,864,665	5,097,870	7,962,535

Note: Small Business is defined as those with fewer than 500 employees. Large Business are those with 500 and more employees.

Source: Census Bureau, 1989 - 2001 Business Information Tracking Series.

**Table 3. Change in Employment by Size of the Enterprise
1996 - 2000
Small Businesses in Midwestern States**

Number of Employees	1 - 4	5 - 9	10 -19	20 - 99	100 - 499	Total
	% of Total	% of Total	% of Total	% of Total	% of Total	
Illinois	179,958	49,023	29,889	80,562	57,794	397,226
	45	12	8	20	15	100
Indiana	80,170	20,414	9,279	8,818	19,622	138,303
	58	15	7	6	14	100
Iowa	37,054	5,625	-488	7,281	8,786	58,258
	64	10	-0.8	12	15	100
Michigan	146,312	38,251	7,737	28,451	1,460	222,211
	66	17	3	13	0.7	100
Minnesota	91,221	27,967	21,841	36,174	18,576	195,779
	47	14	11	18	9	100
Missouri	79,778	16,481	10,533	26,338	6,030	139,160
	57	12	8	19	4	100
Ohio	147,298	41,557	23,674	35,024	21,781	269,334
	55	15	9	13	8	100
Wisconsin	81,691	19,416	11,121	20,332	21,307	153,867
	53	13	7	13	14	100

Source: Census Bureau, 1989 - 2001 Business Information Tracking Series.

**Table 4. Regression Analysis of Determinants of Employment Creation by Small and Large
Businesses
1996 - 2,000
Midwestern States**

	Small Business				Large Business		
Variable	Coefficient	t-stat	P-Value	Variable	Coefficient	t-stat	P-Value
Intercept	-1547725	-2.81	0.008	Intercept	-1038140	-2.04	0.0487
UR	136068.4	8.3	8.77E-10	UR	106240.4	7.03	0.353-08
EDUC	12362.8	1.81	0.078	EDUC	5697.5	0.91	0.3709
Inc/Cap	13.15	3.03	0.004	Inc/Cap	16.1	4.02	0.0003
Corp-T-rate	-17792.46	-3.16	0.003	Corp-T-rate	-12082.6	-2.33	0.0567
R-Square	0.78			R-Square	0.75		
Adj R-Square	0.76			Adj R-Square	0.72		
F-statistic	31.59			F-statistic	26.13		
P-Value	3.56E-11			P-Value	4.37E-10		