The Effect of Globalization on the Performance of Small and Medium Enterprises in the US: Does Owners' Race/Ethnicity Matter?

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ABSTRACT

The impact of globalization on small and medium enterprises (SMEs) has received a lot of attention in international circles in the past few years. This paper contributes to the policy debate by using firm-level data from the 2003 Survey of Small Business Finance to examine the effect of globalization on the performance of minority-owned and white-owned SMEs in the United States. Our measures of globalization capture two important aspects of globalization: international trade and foreign direct investment. We find that minority-owned businesses that operate in more globalized regions earn lower profits. In contrast, globalization has no significant effect on the profits of white-owned businesses.

JEL classification: L5, F23, O2
Key words: Firm, Foreign Direct Investment, Globalization, Minority, Profit

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"Trade Liberalization … makes it significantly difficult for small and medium enterprises to survive or maintain their business position in the local and, if applicable, in the global market." United Nations Conference on Trade and Development (UNCTAD), 2004, page 5.

1. Introduction

The effect of globalization on small and medium enterprises (SMEs) has received a lot of attention in international circles in the past few years. One of the reasons for the international focus on SMEs is that these firms make significant contributions to the economy of both developing and developed countries. SMEs contribute over 55 percent of GDP and over 65 percent of total employment in high-income countries (UNCTAD, 2004). In East Asia, SMEs are major players in the exporting industry, accounting for about 56 percent and 40 percent of exports in Taiwan and South Korea, respectively. Furthermore, in many developing countries, SMEs have been identified as making significant contributions to poverty reduction. This paper contributes to the international policy debate by examining the effect of globalization on the performance of SMEs in the United States.

There are two reasons for focusing on the U.S. First, when it comes to investments by multinational corporations (MNCs) — i.e., foreign direct investment (FDI) — the U.S. is the most "globalized" country in the world. It is the world's largest recipient of inward direct investment and the world's largest foreign direct investor. Furthermore, MNCs contribute significantly to the U.S. economy. In 2003, MNC imports accounted for over 50 percent of total U.S. imports and MNC exports accounted for over 67 percent of total U.S. exports. In addition, MNCs employed about 25 million people in the U.S. and their gross product was about 20 percent of the gross domestic product of private industries in the U.S. (Kozlow, 2006; BEA, 2006). The second reason for focusing on the U.S. is that SMEs are an important part of the US

economy. SMEs represent 99.9 percent of the 25.8 million businesses, employ about 50 percent of all private sector employees, have generated 60-80 percent of net new jobs annually over the last decade, account for over 50 percent of non-farm private gross domestic product, represent about 97 percent of all exporting firms, and account for about 29 percent of total exports.[1] Given the size and the scope of the activities of MNCs in the U.S., it is natural that their activities will have an effect on the performance of private firms, in particular, SMEs. Furthermore, the importance of SMEs in the U.S. economy suggests that in order to have a better understanding of the effect of globalization the U.S. economy, one has to comprehend how globalization affects SMEs.

This paper answers a simple but important question: Do firms that operate in more globalized regions earn less profit? We carry out a separate analysis for white-owned firms and minority-owned (i.e., non-white-owned) firms, because minority-owned firms face different constraints than their white counterparts and therefore the determinants of profits are likely to be different for the two types of firms: estimates from an analysis that rely on pooled data of minority-owned and white-owned firms will be biased.[2] We employ three measures of globalization that capture two of the three main aspects of globalization—international trade and FDI.[3] Specifically, we use total exports, exports by SMEs, and assets of multinational corporations (MNCs) as measures of globalization. The three measures reflect the extensiveness of globalization-induced competition by small firms as well as large firms. In addition, the assets

[1] See http://usinfo.state.gov/products/pubs/oecon/chap4.htm for more information about SMEs.
[2] For example, in the 2003 Survey of Small Business and Finance, firms were asked to identify the most important problem facing their business. About 12 percent of minority-owned businesses selected financing and interest rates as the major constraint compared to about 6 percent for white-owned firms. Also, Cavulluzzo and Cavullozo (1998) and Blanchflower et al. (2003) find that black-owned enterprises are more likely to be denied credit even after controlling for differences in credit-worthiness and other factors.
[3] The three aspects of globalization are international trade, FDI and migration.

of MNCs can serve as a proxy for FDI.[4] Furthermore, MNCs account for over 67 percent of total exports, hence total exports may also proxy for foreign firm penetration in a region. One advantage of using different measures of globalization is that it serves as a robustness check and enhances the credibility of our results.

Our work is related to the growing literature that examines the effect of globalization on firm performance (e.g., Hsu and Chen, 2000; Baggs, 2005; Nocke and Stephen Yeaple, 2006). Many of these studies have found that the effect of globalization depends on firm size, suggesting that estimates from an analysis that rely on pooled data of small and large firms will be biased.[5] However, as pointed out by Baggs (2005), a lack of data has resulted in small firms being understudied. We extend the existing literature in three ways: (i) we add to the thin literature that analyzes the effect of globalization on small firms; (ii) we examine the effect of trade as well as FDI on firm performance—previous studies have used only trade related variables as measures of globalization;[6] and (iii) we examine the *within-region* effect of globalization—i.e., analyze the extent to which globalization of the *region* in which a firm operates affect the firms' performance. In contrast, the existing literature focuses on the *within-industry* effect of globalization—i.e., analyze the extent to which globalization in the *industry* in which a firm operates affect the firms' performance. Note that focusing on the *within-industry* effects of globalization may not capture the full impact of globalization if there are significant spill-over effects to other industries.

Another contribution of the paper is that we employ a unique firm-level data for our analysis. Most of the previous studies on minority-owned businesses have utilized data from the

[4] We use assets as a proxy for FDI because data on FDI are not available by state.
[5] See Nocke and Yeaple (2006) for a theoretical model and Hsu and Chen (2000) for empirical evidence showing that the effect of trade on firm performance depends on firm size.
[6] A few exceptions include Mei and Chen (2000) who use both FDI and exports as measures of globalization to analyze the effect of globalization on labor productivity of SMEs in Taiwan.

Survey of Minority Owned Business Enterprises (SMBOE). A major caveat of the SMBOE is that the data are aggregated (at the industry, state, or metropolitan area levels) and therefore precludes one from analyzing how firm-specific attributes (e.g. firm size) affect firm performance. Another disadvantage of the SMBOE is that the aggregated nature of the data raises the potential problem of an aggregation bias.[7] The dataset that we employ for our analysis is from the 2003 Survey of Small Businesses (SSBF), and it addresses the limitations discussed above. The SSBF data contains detailed information about individual firms (e.g., sales and profits). Furthermore, it allows us to examine the effect of globalization on a direct measure of firm performance, i.e., profits. This is an improvement over previous studies that have had to impute profits from data based on aggregate financial information (e.g., Price, 2005). Finally, by using data from 2003 for analysis, we address the concern raised by Owen and Pazornik (2003) who note that "an updated survey of minority businesses will be critical to crafting useful policies and helping minority businesses move into the global economy."[8]

Our analysis employs data for 4,053 firms of which 376 are minority-owned and 3,677 are white-owned. The control variables include firm characteristics (measures of size and productivity); individual-specific attributes of firm owners (education level and years of managerial experience); industry dummy variables and levels of income in each region. We first analyze the effect of globalization on profits for the full sample. We find that the estimated coefficient of all the three globalization measures is insignificant, suggesting that globalization has no significant effect on profits for SMEs. Next we run separate regressions for minority-owned and white-owned SMEs. We find that the effect of globalization (as well as some of the control variables) is different for the two samples. Globalization has a negative and significant

[7] See Garrett (2003) for a discussion on aggregation bias.
[8] The most recent extensive review of the role of minority-owned businesses in the global economy was carried out by Owen and Pazornik, (2003). We thank James People for bringing this paper to our attention.

effect on the profits of minority-owned SMEs but has no significant effect for white-owned SMEs, and the results hold for all the three measures of globalization. For both minority-owned and white-owned firms, profitability increases with firm size, firms' intangible assets and managerial experience of the owners of the firm. However, the effect of the level of education of firm owners' differs for the two samples: education has no significant effect on profits for minority-owned SMEs but has a positive and significant effect for white-owned SMEs. Indeed, these results lend credence to our assertion that minority-owned firms are in some sense "different" from white-owned firms.

The rest of the paper is organized follows. Section 2 discusses channels through which globalization can affect the performance of domestic firms, Section 3 describes the data, Section 4 describes the variables, Section 5 presents the empirical results and Section 6 concludes.

2. Globalization and the Performance of domestic Firms: A Brief Discussion

MNCs generally utilize superior technology, have better market access, are better managed and are more productive than domestically owned firms (Lipsey, 2002; Greene et al., 2006).[9] In addition, MNCs pay higher wages and offer more training to workers than domestic-owned firms. FDI also creates backwards and forward linkages with domestic firms.

There are at least three channels through which FDI can affect the performance of domestic firms: competition, labor market, and linkages. Increased MNC presence may imply more intense competition. However, the overall effect of competition on the performance of domestic firms is unclear. On the one hand, increased product market competition may cause local firms to reduce their price markups, leading to a reduction in their profits. On the other

[9] For example, Greene at al. (2006) conclude that "multinationals may be intrinsically better managed firms than are purely domestic firms." See Lipsey (2002) for a comprehensive discussion about the effects of FDI.

hand, the "learning by competition" analogy applies: the pressure to survive may speed up the adoption of new technologies and thereby enhance the productivity of domestic firms. With regards to the labor market, we note that higher wages paid by multinationals may have spillover effects to other industries, resulting in an increase in the cost of production for local firms (Lipsey, 1994).[10] Furthermore, by providing better remunerations to workers, MNCs are able to attract more productive workers, thereby lowering the quality of the employee pool available to domestic firms and possibly reducing average productivity levels.

MNC presence, however, can have a positive effect on the performance of domestic firms. The linkages between MNCs and domestic firms create businesses opportunities and enhance the technological know-how and productivity of domestic firms (Javorcik, 2004).[11] For example, MNCs often outsource parts of their production to domestic firms or utilize local firms as suppliers of services and raw materials, thus creating business opportunities for domestic firms. Also, MNCs tend to provide training, equipment and technology to their local suppliers.[12]

With regards to the effect of exporting on firm performance, several studies have found that exporting firms share similar characteristics as MNCs. For example, using data on U.S. manufacturing industry, Bernard and Jensen (1995,1999) report that exporters are 29 percent more productive and pay wages 12 percent higher than non-exporters. Thus, the discussions regarding the competition and wage effect resulting from the presence of MNCs also applies to exporters. Thus, the overall theoretical effect of globalization on the performance of domestic

[10] Several studies have documented the spill-over effects of wages paid by multinationals. For example, based on data for the United States, Lipsey (1994) finds that wages tend to be higher in industries and in states that have a greater MNC presence.

[11] See Gorg and Greenway (2004) and Saggi (2004) for excellent reviews of the spill-over effects of exporting and FDI.

[12] Blalock and Gertler (forthcoming) argue that the motivation for diffusing technology to local suppliers is not altruistic but rather a strategic move to enable the MNC to build efficient supply chains. Specifically, transferring technology to local suppliers may enhance the quality and/or prices of their products and make the multinational more competitive abroad.

firms is unclear and therefore has to be determined empirically. Indeed, that is the objective of this paper.

Globalization and SMEs

The discussion so far pertains to domestic firms in general. We now put our arguments in the context of the paper by making three observations. First, the impact of FDI does not pertain only to domestic firms that operate in the industry in which FDI occurs, but rather spills over to firms in all industries. The reason is that inter-firm linkages can and do occur between firms in different industries. Also, the effect of globalization on wages and employment spills over to other industries (Lipsey, 1994). This point is relevant for our analysis because SMEs are largely concentrated in the services and retail industries and MNCs are generally concentrated in manufacturing and wholesale trade. For example, the distribution of MNCs in the U.S. by industry in 2003 was 36 % in manufacturing, 19 % in wholesale trade, 2 % in retail trade and less than 10 % in service industries. In contrast, the distribution for SMEs was 12 % in manufacturing, 2 % in wholesale, 20 % in retail trade and 40 % in service industries. The point is that, although SMEs generally operate in less "globalized" industries, they may still experience the spill-over effects of globalization. The second observation is that the wage and employment effect of globalization may be more profound for SMEs than larger domestic firms due to their relatively smaller size. Finally, since SMEs are dominant in the services industry, the non-tradable services needed for production by MNCs are likely to be provided by SMEs—suggesting that there are linkages between SMEs and MNCs.

3. The Data

3.1 Firm Data

Our primary source of data is the nationally representative Survey of Small Businesses (SSBF) conducted by the Federal Reserve Board in 2003.[13] The survey covered 4,240 for-profit, non-financial, non-farm firms with less than 500 employees that were operating in the U.S at the end of 2003. The survey collected detailed information on firm characteristics, owners' characteristics and firms' use of financial services. The characteristics of the firm owners such as level of education, years of experience, race and ethnicity were created from a weighted average of the individual owners' characteristics (up to three largest owners), where the weights are ownership shares. For our analysis, we define a business as white-owned if the weighted percentage of ownership that is non-white is equal to zero; otherwise we define the business as minority-owned. Thus minority-owned implies the weighted percentage of ownership of Blacks, Asian, Hawaiian and Pacific Islander, Native American and Alaskan Native, and non-white Hispanic is greater than zero. However, since ownership characteristics were collected for the three largest owners, the minimum ownership share for the minority-owned sample is 19 percent and the average ownership share was over 80 percent. Our full sample consists of 4053 firms, of which 376 are minority-owned and 3,677 are white-owned.

One limitation of the SSBF data is that for confidentiality purposes, information about the location of firms is available only at a regional level. The nine regional groupings are based on the census division classifications (see Table 1).

[13] The data and detailed description are available at http://132.200.33.130/pubs/oss/oss3/nssbftoc.htm.

3.2. Data on Measures of Globalization

Our measures of globalization are total exports, exports by SMEs and the assets of MNCs. The data on exports are obtained from the International Trade Administration, U.S. Department of Commerce.[14] The FDI measures are from the Bureau of Economic Analysis (BEA), Department of Commerce.[15] The FDI data pertains to business enterprises in the U.S. in which there is foreign direct investment— i.e., more than 10 percent foreign ownership. The measures of globalization are available at the state level. However, since the information regarding the location of firms is at the regional level, we aggregated the globalization variables at the regional level.[16] As pointed out earlier, this is may be less of a concern because of the spill-over effects of foreign firm penetration. We scaled the globalization variables by the GDP in a region to account for the size of the regions.

Table 2 shows the data for the measures of globalization for the nine regions. For all the three measures, West South Central (Arkansas, Louisiana, Oklahoma and Texas) is the most globalized region. Going by total exports and MNC assets, the least globalized regions are Middle Atlantic (New Jersey, New York and Pennsylvania) and West North Central (Iowa, Kansas, Minnesota, Missouri, Nebraska, North Dakota and South Dakota), respectively. We now discuss the variables used in our regressions.

[14] See http://ita.doc.gov/td/industry/otea/edb/Reports/2004/table15_bystate.html.
[15] See http://bea.gov/bea/
[16] The ideal case is to use data disaggregated by industry and location. However, the data on FDI assets are not available by industry and the data on state exports are available only for manufacturing.

4. The Variables

The dependent variable, *Profit*, is the full year equivalent of a firm's total profits (in $100,000) in 2003. To increase accuracy and consistency, information on firm's profits was verified using a firm's U.S. federal tax records and accounting identities.

4.1. Firm Variables

Characteristics of the Firm: According to the literature, the factors that affect firm performance include size, productivity and location. Larger firms have a greater ability to absorb risks and can take advantage of economies of scale. Bernard and Wagner (1998) argue that larger firms generally have lower average or marginal costs, suggesting that profitability increases with firm size. Firms with large intangible assets are more productive.[17] Asiedu and Esfahani (2001) use the ratio of sales to tangible assets as an indicator of the size of a firm's intangible assets. They argue that since tangible assets are often included in a firm's balance sheet while the intangible assets are not, the ratio of sales to tangible assets can act as an indicator of the richness of a firm's intangible assets. Firm profits may also be influenced by geographical location (Henderson and Ono, 2005). For example, firms that operate in urban areas have better access to important services (e.g., financial services) and a larger pool of potential clients, and may benefit from localized scale externalities. However, the operating cost in an urban setting is generally higher than in a rural area. As a consequence, the overall effect of location on profits is unclear. For our analysis, we include the log (number of the number of employees), log (sales/assets) and a binary variable which takes on value 1 if a firm operates in metropolitan area as control variables. Following Bernard and Wagner (1998) and Asiedu and Esfahani (2001), we hypothesize that the

[17] Indeed, one of the reasons given for the existence of MNCs is that these firms are "special" because they possess intangible assets. For more on this issue, see Caves (1982) and Markusen (1995).

estimated coefficient of firm size and sales to assets ratio will be positive. The effect of location on profitability is not determined a *priori*.

*The Characteristics of Firm Owners***:** Several studies have found that the attributes of the owners of small firms, such as the level of education has an effect on the firm's performance (e.g., Lautanen, 2000). [18] We consider two owner-specific characteristics, education level and management experience. To measure the owners' education, we define a binary variable that takes on value 1 if the weighted average education level of owners' is equivalent to or greater than a college degree and zero otherwise. We use the weighted average years of the business experience of the owners to measure management experience.[19] All else equal, we expect education and experience to have a positive effect on profits.

4.2. Industry and Regional Variables

We include income per capita to capture income levels in a region. Income per capita may serve as a proxy for the purchasing power in the region, suggesting a positive association between income and firm profits. However, higher incomes may also reflect the fact that wages and therefore employer cost is higher.[20] Thus, the overall effect of income per capita on firm profits is unclear. Finally, we include two-digit industry dummy variables to account for unobserved industry effects. Tables 3, 4 and 5 show the summary statistics for the full sample, white-owned sample and minority-owned sample, respectively.

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[18] Based on data for SMEs in Finland, Lautanen (2000) finds that the likelihood of adopting an export strategy is higher for firms whose managers have knowledge of foreign languages.

[19] Recall that the weighted averages are based on the attributes of the three top owners and therefore the measures do not reflect the characteristics of all the owners or all the decision makers.

[20] A better measure of labor cost is the employer cost index reported by the Bureau of Labor Statistics. However, the data for the various census divisions are not available prior to 2005. We experimented with an alternative (and crude) measure of labor cost, unionization rate, defined as the share of workers that belong to a union, as a proxy for labor cost. The idea is that regions that have a higher unionization rate are likely to have a higher labor cost which translates into lower profits for firms. However, the estimated coefficient of the unionization measure was not significant. We thank Barry Hirsch for assistance with the data on unionization rates.

5. Empirical Results

We use a survey-based OLS estimation technique that accounts for complex survey design, stratification, and population weight. This technique uses additional information about the survey design, population weights, and sampling stratification in constructing estimates and it produces unbiased population estimates and standard errors. We estimate the equation (1) for each of the measures of globalization:

$$\text{Profit}_{ij} = \alpha + \theta\ \text{Firm}_{ij} + \zeta\ \text{Industry}_{i} + \beta\ \text{Globalization}_{j} + \gamma\ \ln(\text{GDP per Capita})_{j} + \varepsilon_{ij} \qquad (1)$$

where Profit_{ij} is the profit of firm *i* operating in region *j*; Firm is the firm and ownership-specific characteristics of firm *i* in region *j*; Industry_{ii} is the industry classification of firm *i* and Globalization_{j} is a measure of globalization for region *j*. Our parameter of interest is the estimated value of β. It is important to note that β may capture both the effects of globalization and unobserved region fixed effects that may affect firm profitability. Unfortunately, without a panel data, we cannot fully identify the effects of unobserved region effects from those of globalization.

5.1. The Effect of Globalization on Profits — Full Sample

We start by examining the effect of globalization on profits for the full sample. The estimation results are reported in Table 6. There are two noticeable points. The R^2 is very low: only about 2.9 percent of the variation in profits can be explained by the model. The second noticeable point is that the estimated coefficients of all the measures of globalization are insignificant. Thus, based on the estimation results one may conclude, albeit *erroneously*, that globalization does not have a significant effect on the profits of SMEs. However, it is also

important to note that the estimations do not take into account the heterogeneity of firms. Specifically, the analysis assumes that the effect of globalization (and the other explanatory variables) is the same for minority-owned and white-owned SMEs. Thus, if the effect of globalization is different for the two groups, then the coefficients reported in Table 6 will be biased. We address this issue in the next section by dividing the full sample into minority-owned and white-owned SMEs and re-estimating equation (1).

5.2. The Effect of Globalization on Profits of Minority-Owned and White-Owned SMEs.

Table 7 reports the results for the two sub-samples. One noticeable point in Table 7 is that the effect of globalization on profits is different for the two groups. All else equal, globalization does not have a significant effect on the profits of white-owned firms. In contrast, the estimated coefficient of all three globalization measures is negative and significant at the 5 percent levels for minority-owned SMEs, suggesting that on the average minority-owned firms that operate in more globalized regions earn lower profits. For, example a one standard deviation increase in (total exports/GDP) reduces profits by about $117,000. A similar change in (SME exports/GDP) and (MNE assets/GDP) reduces profits by about $106,000 and $83,400, respectively. Note that the effect of globalization on profit is economically large since the median profit for minority-owned firms is about $37,000.

We now turn our attention to the control variables. Note that the estimated coefficient for firm characteristics is qualitatively similar for the two groups. Specifically, the results show that profitability increases with firm size and firms' intangible assets (defined as sales to assets ratio). In contrast, firms' location (metropolitan or versus non-metropolitan) has no significant effect on profits. With regards to owner-specific attributes, we find a positive association between

managerial experience and profits. Furthermore, the relationship holds for the two groups. The education level of owners has no significant effect on profits for minority-owned firms. In contrast, it has a positive effect for white-owned firms.

Table 7 also shows that the industry-specific effect on profits varies for the two groups. For example, the estimated coefficient for the services sector dummy variable is negative and significant at the 1 percent level for white-owned firms and the coefficient for the construction dummy variable is not significant. This contrasts with the minority-owned sample, where the coefficient for construction is negative and significant and the coefficient for service industry is not significant.

6. Conclusion

This paper examines the effect of globalization on the profits of minority-owned and white-owned SMEs in the United States. We find that minority-owned businesses that operate in more globalized regions earn lower profits. In contrast, globalization has no significant effect on the profits of white-owned businesses. An important policy implication of our study is that the benefits of globalization vary by the ethnic and racial ownership of SMEs. Thus, policies designed to increase FDI and exports should not only be tailored to increasing the positive effects of FDI and exports expansion on SMEs but also to ensuring that both minority-owned and white-owned firms have equal access to the benefits of globalization.

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Table 1

Regional Classifications based on Census Divisions

Region	State
New England	Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont
Middle Atlantic	New Jersey, New York, Pennsylvania
East North Central	Indiana, Michigan, Ohio, Wisconsin
West North Central	Iowa, Kansas, Minnesota, Missouri, Nebraska, North Dakota, South Dakota
Pacific	Alaska, California, Hawaii, Oregon, Washington
East South Central	Alabama, Kentucky, Mississippi, Tennessee
West South Central	Arkansas, Louisiana, Oklahoma, Texas
Mountain	Arizona, Colorado, Idaho, Montana, Nevada, New Mexico, Utah, Wyoming
South Atlantic	Delaware, District of Columbia, Florida, Georgia, Maryland, North Carolina, South Carolina, Virginia, West Virginia

Table 2

Globalization Measures by Region

Region	**GDP per Capita**	**Total Exports/GDP (Percent)**	**SME Exports/GDP (Percent)**	**MNC Assets/GDP (Percent)**
East North Central	30,071	7.55	1.56	11.19
East South Central	25,156	7.86	1.56	13.82
Middle Atlantic	35,223	4.54	1.95	9.48
Mountain	27,705	4.98	1.04	7.64
New England	34,010	5.85	1.72	9.74
Pacific	31,217	8.48	2.93	10.71
South Atlantic	31,474	5.15	1.62	8.64
West North Central	28,765	5.20	1.23	6.47
West South Central	25,816	12.29	3.13	14.32

Table 3

Summary Statistics: Full Sample (4052 Firms)

Variable	Mean	Std. Dev.	Min	Max
Profit ($100,000)	4.97	35.41	-117.85	1590.00
Ln (Sales/Assets)	1.02	1.38	-6.10	9.21
Ln (No. of Employees)	2.17	1.61	0.00	6.19
Metropolitan Area	0.18	0.38	0.00	1.00
College Graduate	0.49	0.50	0.00	1.00
Managers' Experience (years)	21.41	11.47	0.00	65.00
Manufacturing	0.12	0.32	0.00	1.00
Construction	0.10	0.30	0.00	1.00
Transportation	0.04	0.20	0.00	1.00
Finance, Insurance and Real Estate	0.06	0.24	0.00	1.00
Retail	0.20	0.40	0.00	1.00
Service	0.41	0.49	0.00	1.00
Wholesale	0.02	0.15	0.00	1.00
100*(SME Exports/GDP)	1.95	0.68	1.04	3.13
100*(Total Exports/GDP)	6.88	2.27	4.54	12.29
100*(MNC Assets/GDP)	10.12	2.18	6.47	14.32
Ln (GDP per Capita)	10.45	0.08	10.24	10.60

Table 4

Summary Statistics: White-Owned SMES (3677 Firms)

Variable	Mean	Std. Dev.	Min	Max
Profit ($100,000)	4.98	35.55	-117.85	1590.00
Ln (Sales/Assets)	1.03	1.37	-6.10	9.21
Ln (No of Employees)	2.19	1.62	0.00	6.19
Metropolitan Area	0.18	0.39	0.00	1.00
College Graduate	0.48	0.50	0.00	1.00
Managers' Experience (years)	21.78	11.52	0.00	65.00
Manufacturing	0.12	0.33	0.00	1.00
Construction	0.11	0.31	0.00	1.00
Transportation	0.04	0.20	0.00	1.00
Finance, Insurance and Real Estate	0.06	0.24	0.00	1.00
Retail	0.20	0.40	0.00	1.00
Service	0.40	0.49	0.00	1.00
Wholesale	0.02	0.15	0.00	1.00
100*(SME Exports/GDP)	1.93	0.68	1.04	3.13
100*(Total Exports/GDP)	6.85	2.25	4.54	12.29
100*(MNC Assets/GDP)	10.08	2.18	6.47	14.32
Ln (GDP per Capita)	10.45	0.08	10.24	10.60

Table 5

Summary Statistics: Minority-Owned SMES (376 Firms)

Variable	Mean	Std. Dev.	Min	Max
Profit ($100,000)	4.83	33.97	-11.07	628.00
Ln (Sales/Assets)	0.98	1.51	-4.26	5.82
Ln (No of Employees)	2.01	1.53	0.00	6.12
Metropolitan Area	0.13	0.33	0.00	1.00
College Graduate	0.58	0.49	0.00	1.00
Managers' Experience (years)	17.83	10.37	1.00	50.00
Manufacturing	0.08	0.27	0.00	1.00
Construction	0.05	0.21	0.00	1.00
Transportation	0.03	0.18	0.00	1.00
Finance, Insurance, and Real Estate	0.04	0.20	0.00	1.00
Retail	0.23	0.42	0.00	1.00
Service	0.52	0.50	0.00	1.00
Wholesale	0.03	0.16	0.00	1.00
100*(SME Exports/GDP)	2.13	0.71	1.04	3.13
100*(Total Exports/GDP)	7.26	2.40	4.54	12.29
100*(MNC Assets/GDP)	10.48	2.15	6.47	14.32
Ln (GDP per Capita)	10.45	0.09	10.24	10.60

Table 6

Effect of Globalization on Firm Profit (Total Sample, 4,053 Firms)

(Dependent Variable: Firm Profit ($100,000). Robust P-values in parenthesis)

	Total Exports	**SME Exports**	**Assets of MNCs**
Globalization	0.038	0.268	0.064
	(0.691)	(0.373)	(0.456)
Firm Characteristics			
Ln (Sales/Assets)	0.465***	0.464***	0.464***
	(0.005)	(0.005)	(0.005)
Ln (No of Employees)	1.706***	1.709***	1.711***
	(0.000)	(0.000)	(0.000)
Metropolitan Area	0.047	0.083	0.059
	(0.917)	(0.855)	(0.895)
Firm Owner Characteristics			
College Graduate	0.750**	0.746**	0.748**
	(0.047)	(0.049)	(0.050)
Managers Experience (years)	0.029**	0.029**	0.029**
	(0.027)	(0.026)	(0.026)
Industry and Regional Variables			
Manufacturing	-1.204*	-1.179*	-1.193*
	(0.079)	(0.086)	(0.081)
Construction	-0.943	-0.912	-0.934
	(0.175)	(0.193)	(0.178)
Transportation	-0.888	-0.869	-0.876
	(0.271)	(0.284)	(0.277)
Finance, Insurance, and Real Estate	2.673	2.699*	2.687
	(0.102)	(0.100)	(0.101)
Retail	-1.040	-1.021	-1.034
	(0.124)	(0.134)	(0.125)
Service	-1.702***	-1.684***	-1.694***
	(0.005)	(0.006)	(0.005)
Wholesale	4.914	4.917	4.911
	(0.275)	(0.272)	(0.273)
Ln (GDP per Capita)	0.691	-0.082	0.858
	(0.710)	(0.967)	(0.650)
Constant	-8.506	-0.712	-10.647
	(0.666)	(0.972)	(0.596)
R-squared	0.029	0.029	0.029

Table 7

Effect of Globalization on Firm Profits (Minority-Owned and White-Owned SMEs)

(Dependent Variable: Firm Profit ($100,000). Robust P-values in parenthesis)

	Total Exports		**SME Exports**		**Assets of MNCs**	
	Minority-owned	**White-owned**	**Minority-owned**	**White-owned**	**Minority-owned**	**White-owned**
	(1)	(2)	(3)	(4)	(5)	(6)
Globalization	-0.491**	0.096	-1.500**	0.431	-0.388**	0.094
	(0.018)	(0.362)	(0.013)	(0.201)	(0.029)	(0.318)
Firm Characteristics						
Ln (Sales/Assets)	1.138***	0.358**	1.160***	0.358**	1.157***	0.358**
	(0.009)	(0.027)	(0.009)	(0.027)	(0.009)	(0.027)
Ln (No of Employees)	1.818***	1.723***	1.772***	1.726***	1.739***	1.728***
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
Metropolitan Area	-0.357	0.143	-0.454	0.186	-0.478	0.139
	(0.722)	(0.764)	(0.654)	(0.703)	(0.635)	(0.769)
Firm Owner Characteristics						
College Graduate	-1.010	1.014***	-1.084	1.010***	-1.158	1.011***
	(0.418)	(0.003)	(0.396)	(0.003)	(0.373)	(0.003)
Managers' Experience (years)	0.173**	0.020*	0.172**	0.020*	0.172**	0.020*
	(0.034)	(0.078)	(0.037)	(0.075)	(0.038)	(0.077)
Industry and Regional Variables						
Manufacturing	1.098	-1.306*	1.181	-1.284*	1.251	-1.307*
	(0.416)	(0.084)	(0.387)	(0.090)	(0.363)	(0.083)
Construction	-2.507**	-0.955	-2.389**	-0.931	-2.343**	-0.961
	(0.042)	(0.206)	(0.043)	(0.220)	(0.038)	(0.202)
Transportation	8.008*	-1.435*	7.856*	-1.420*	7.880*	-1.430*
	(0.085)	(0.070)	(0.097)	(0.074)	(0.095)	(0.070)
Finance, Ins. and Real Estate	15.442*	1.330	15.201*	1.348	15.759*	1.342
	(0.057)	(0.297)	(0.063)	(0.292)	(0.060)	(0.292)
Retail	2.054	-1.246*	2.134	-1.233	2.223	-1.255*
	(0.119)	(0.098)	(0.111)	(0.103)	(0.107)	(0.094)
Service	0.642	-1.836***	0.691	-1.828***	0.917	-1.838***
	(0.584)	(0.006)	(0.564)	(0.007)	(0.455)	(0.006)
Wholesale	1.314	5.408	1.376	5.393	1.484	5.384
	(0.511)	(0.286)	(0.485)	(0.286)	(0.422)	(0.286)
Ln (GDP per Capita)	9.378	-0.152	16.494*	-1.657	9.226	-0.260
	(0.150)	(0.930)	(0.053)	(0.329)	(0.197)	(0.869)
Constant	-99.844	0.154	-174.446*	15.682	-97.715	0.991
	(0.147)	(0.993)	(0.052)	(0.363)	(0.199)	(0.953)
Number of Firms	376	3677	376	3677	376	3677
R-squared	0.198	0.026	0.196	0.027	0.193	0.026