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ISSUE BRIEF

Gearing Up and Going Global: Experiences of Minnesota Businesses

Analysis and Evaluation

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Introduction¹

Minnesota businesses are experiencing a period of unprecedented change in the marketplace. Global business practices such as exporting, importing and outsourcing are widely practiced, becoming standard activities, and causing business to become increasingly integrated worldwide. Trade agreements have fueled much of this integration.

Globalization impacts range from greater market opportunities, lower consumer prices and lower input prices, to increased competition and potentially reduced profits. Although global business practices may dislocate workers and hurt some companies, other workers, businesses, consumers and economies can benefit from global outsourcing and an operating environment that includes free trade, open markets and robust competition.

The Minnesota Department of Employment and Economic Development and Minnesota Technology, Inc. have collaborated on an extensive study to help better understand the Minnesota global business experience and its impact on the state's economy.

The issue brief *Globalization: Pressure Points in a Competitive World*, published in March 2004, addresses the first two parts of the study and covers background secondary research and findings from roundtable discussions with Minnesota businesses, policymakers and other interested parties. This issue brief covers the final part of the study, which consists of a survey of Minnesota businesses about their experiences with key globalization trends.

The study's findings will help the state legislature, economic developers and education systems to improve efforts that facilitate business, worker and community adjustments and ensure continued business growth in our state.

The results offer a preliminary view of Minnesota business experiences. Further analysis and research are needed to fully understand the implications of globalization.

¹ We are grateful to the many people who provided feedback on the survey instrument and early drafts of the report.

Key Findings

Globalization is a complex integration of economies throughout the world and its implications affect a myriad of important issues. In this work, companies were surveyed about their global business practices, such as exporting, importing and outsourcing abroad; their motivations for engaging in these activities; and the impact of these activities on business operations and employment in various occupations. Highlights of the findings follow.

- Companies of all sizes engage in global activities, although medium and large companies are more likely to be active than smaller ones.
- Businesses strongly embraced global business practices between 1998 and 2003, increasing exports, imports and outsourcing of goods production outside the United States. While offshoring of services from Minnesota will remain relatively less common, businesses expect activity to increase from current levels.
- Businesses of all sizes and throughout the state reported effects of globalization on operations. In the employment area, most businesses reported stable or increased wages for their Minnesota-based employees.
- Globalization results in job losses and gains. Except for production work, most respondents reported few changes in their Minnesota jobs in most occupations due to global business trends.
- Through 2008, businesses have mixed forecasts about production jobs in Minnesota. While one-third of manufacturing respondents is optimistic about new jobs, one-third continues to anticipate decreased opportunities in these jobs.
- Health benefits and employment taxes are the most commonly cited compensation costs as having a high impact on outsourcing decisions.
- Importers and outsourcers of production or services are generally motivated by cost: reducing or controlling operating costs, increasing overall competitiveness and increasing revenue potential.

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Methodology and Response

The globalization experiences of Minnesota businesses were collected through a survey instrument sent to a random sample of manufacturing and service businesses. Survey development was guided by background research and direct conversations with key stakeholders (such as private businesses, legislators, academia, and other interested parties). The discussions provided important insights on global experiences of some Minnesota businesses.

Statistical trends also guided the survey. Minnesota exports of manufactured goods grew from \$8.3 billion to \$10.5 billion between 1998 and 2003, representing a growth rate of 25.9 percent. At the national level, exports of manufactured goods increased by 5.3 percent during the same period to \$645 billion in 2003. U.S. exports of business, professional and technical services grew from \$46 billion in 1998 to \$70 billion in 2003, representing a growth rate of 53 percent, and accounted for 24 percent of exports of private services in 2003.²

Motivated by these trends, the survey focused on the experiences of manufacturers (Standard Industrial Classification codes 20-39) and businesses in select services (SIC 73 Business services, SIC 81 Legal services and SIC 87 Engineering, Accounting, Research, Management and related services). The survey sample was stratified and consisted of a random sample of small firms (10-99 employees), all medium firms (100-249 employees) and all large firms (more than 249 employees).³

With the goal of understanding changes over time, the survey asked the businesses about their current situation in 2003, past experience of five years ago in 1998, and projection in five years in 2008.

² The Foreign Trade Division of the Census Bureau, U.S. Department of Commerce and the World Institute for Strategic Economic Research (WISER) provide data on exported manufactured goods. State-level services export data are not available. Just more than half of exports of private services are accounted by travel, passenger fares, transportation, and royalties and licenses. Of all other private services exports – that also include financial services and education – business, professional and technical services contribute half. “U.S. International Services: Trade in Private Services”, Bureau of Economic Analysis, U.S. Department of Commerce, December 2004. (<http://www.bea.doc.gov/bea/di/1001serv/1004serv/tab1b.xls>).

³ See Appendix I for more information.

The survey was mailed out twice in April 2004. In all, 252 business establishments responded, for a response rate of 16 percent (17 percent for manufacturers and 13 percent for service providers). The sample produces a sampling error of plus or minus 6.2 percent at a 95 percent confidence interval. This sampling error should be kept in mind as results are reviewed. Moreover, extrapolation of results to sub-samples (such as by location, industry or business size) should be done with caution.

A further limitation is that the results are based on the stratified sample of businesses surveyed, half of which consisted of medium and large businesses. By contrast, in the general economy, the vast majority of establishments consists of small businesses employing fewer than 100 employees. As a result, rather than being representative of business activity by business demographics, the survey findings may be more representative of overall business activity in which medium and large business contribute a greater share of volume and value.

Survey Results

I. Profile of Respondents

Responding businesses were well distributed by size, location and industry. Among respondents were 122 small businesses (48 percent), 92 medium businesses (37 percent) and 38 large businesses (15 percent).⁴ This distribution is not statistically different than the surveyed universe and is a direct result of the stratified survey sample, which had a greater proportion of medium and large businesses than in the general business population. Respondents in the metro and Greater Minnesota areas also showed a similar distribution by size.⁵ Overall, 156 respondents (62 percent) were in the metro area.

Two-thirds of all respondents (66 percent) are involved in manufacturing (see Figure 1). Characterizing only manufacturing respondents, 45 percent are contract manufacturers and 37 percent

⁴ Small businesses are defined as those with between 10 and 99 employees, medium businesses are those with between 100 and 249 employees, and large businesses are those with 250 or more employees.

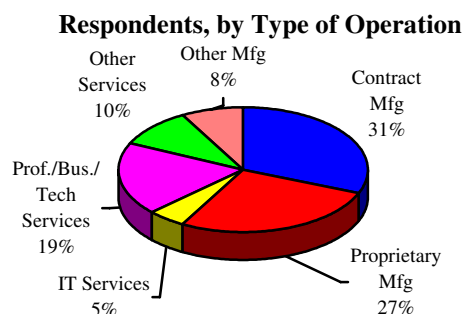
⁵ The Twin Cities metro area encompasses Anoka, Carver, Dakota, Hennepin, Ramsey, Scott and Washington counties. Greater Minnesota consists of the remaining 80 counties in Minnesota.

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are proprietary products manufacturers. Respondents in Greater Minnesota include more proprietary products manufacturers (46 percent of Greater Minnesota respondents or 42 firms) than in the metro area (15 percent of metro respondents or 23 firms). However, there are many more contract manufacturers in the metro area (47 firms) than in Greater Minnesota (28 firms).

Service providers represented 34 percent of all respondents. Of these, 54 percent provide professional, technical or business services and 15 percent provide IT services. A slightly greater proportion of respondents in Greater Minnesota is service providers (17 percent) than in the Twin Cities (10 percent). The distribution of businesses for business services (SIC 73) and engineering and other professional services (SIC 87) was similar by location, where about one-fifth of the respondents were located in Greater Minnesota.

Figure 1



II. Current Global Activities and Trends

More than half of businesses are participants in the global marketplace. About 55 percent of responding businesses are involved in the global business activities of exporting, importing or outsourcing abroad. Outsourcing production and services to non-U.S. locations is also known as offshoring of production and services.⁶

⁶ In this report, “exporting” and “importing” refer to the sale of physical goods abroad and the purchase of physical goods from abroad, respectively. The survey addressed the importing of services but not the exporting of services. The outsourcing services and production work to non-U.S. locations is essentially importing services and production work from abroad. The survey the terms “outsourcing to non-U.S. locations” and “offshoring” will be used interchangeably and mean the same thing.

The involvement is more likely to be in exporting (38 percent) and importing (36 percent) (see Table 1). Note that these shares are higher than in the general business population because the sample is stratified by size.⁷ Manufacturers are more likely to be exporters (89 percent of exporters) and importers (91 percent of importers).

Table 1

**Global Activities in 2003,
For All Respondents And By Business Location**

Activity	All	Greater MN	Metro
Exporting of goods	38% (97)	42% (40)	37% (57)
Importing of goods	36% (91)	45% (43)	31% (48)
Offshoring activities			
Back-office/call center services	6% (14)	3% (3)	7% (11)
Goods production	28% (71)	32% (31)	26% (40)
IT services	6% (15)	5% (5)	6% (10)
Professional, technical or business services (non-IT)	9% (22)	8% (8)	9% (14)
Total number of this type	252	96	156

Respondents are more involved in outsourcing of production work to non-U.S. locations (28 percent) than other types of offshoring.

Manufacturers have a greater tendency to be goods exporters and importers (50 percent of manufacturers) and outsourcers of production to non-U.S. locations (35 percent of manufacturers) compared to service providers. Very few manufacturers offshore services. While service providers are less likely than manufacturers to be involved in any of these activities, they are similarly active among exporting goods (13 percent of service providers), importing goods (9 percent of service providers) and offshoring of goods production work (15 percent of service providers) and offshoring of various services (13 percent of service providers).

Globally active businesses are found throughout the state. Notably, our survey’s respondents in Greater

⁷ Between 15 percent and 20 percent of manufacturing establishments export and/or import, according to other DEED research and private vendor databases. These percentages do not include those businesses providing inputs to domestic companies that export the final product.

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Minnesota have a slightly greater tendency to be importers, exporters and outsourcers of production to non-U.S. locations than metro area respondents.

Medium and large companies are more likely to be involved in global activities. Medium and large companies are more likely to be exporters and importers (with about half involved in 2003) and outsourcers of production to non-U.S. locations (with about 40 percent involved), than are small companies (about one-quarter and one-sixth involved, respectively) (see Table 2). Large companies (18 percent) are the most involved with outsourcing of call center and back-office operations to non-U.S. locations.

Table 2

Global Activities in 2003, By Business Size

Activity	Small	Medium	Large
Exporting	25% (30)	50% (46)	55% (21)
Importing	22% (27)	50% (46)	47% (18)
Offshoring activities			
Back-office/call center services	2% (3)	4% (4)	18% (7)
Goods production	16% (20)	38% (35)	42% (16)
IT services	7% (8)	3% (3)	11% (4)
Professional, technical or business services (non-IT)	5% (6)	11% (10)	16% (6)
Total number of this size	122	92	38

Businesses embraced global business practices between 1998 and 2003. Respondents increased their participation in some type of global activities significantly between 1998 and 2003, from 43 percent to 55 percent. Growth in activity was focused in importing (36 percent of respondents, up 15 percentage points) and outsourcing of goods production to non-U.S. locations (28 percent of respondents, up 14 percentage points) (see Table 3).

Firms of all sizes and throughout the state reported increased global involvement.⁸ In particular, the most significant changes among respondents between 1998 and 2003 were importing for small firms (11 percent to 22 percent) and medium firms (27 percent to 50 percent), and outsourcing of goods

production to non-U.S. locations by medium firms (15 percent to 38 percent) and large firms (24 percent to 42 percent) (see Appendix II).

Table 3

Trends in Global Activities, 1998-2003

Activity	1998	2003
Exporting	32%	38%
Importing	21%	36%
Offshoring activities		
Back-office/call center services	3%	6%
Goods production	14%	28%
IT services	2%	6%
Professional, technical or business services (non-IT)	3%	9%

Respondents in Greater Minnesota experienced more growth in the share of importers and outsourcers of production abroad than firms in the metro area. While one-quarter of firms in Greater Minnesota imported in 1998, almost one half exported in 2003. By contrast, metro firms increased their involvement from 18 percent in 1998 to 31 percent in 2003. Similarly, in 2003, 32 percent of firms in Greater Minnesota outsourced production abroad (up from 14 percent in 1998), compared to 26 percent of metro area firms (up from 13 percent in 1998).

Businesses reported mixed job trends due to their globalization activities. Between 1998 and 2003, 74 percent or more of respondents reported, as a result of global business practices, no impact on employment trends in services such as information technology (IT) services; non-IT professional, technical or business services; call center services, and back-office or business processing services (see Table 4).

However, the businesses had mixed responses about production jobs. While 47 percent of all respondents reported no change in production jobs, 37 percent indicated a decline in their production jobs in Minnesota. Manufacturing businesses, which provide most of these jobs, reported no change for 35 percent of businesses and a decline for 44 percent of businesses.

⁸ See Appendix II for more information.

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Table 4
Employment Trends Due to Globalization,
By Job Area, 1998-2003

Job Area	Trend, 1998 to 2003		
	Up	Same	Down
Production	16%	47%	37%
IT services	17%	74%	8%
Professional, technical or business services	14%	74%	12%
Call Center	5%	83%	12%
Back-office services	7%	81%	12%
Other	7%	90%	2%

Some respondents reported increases in employment in Minnesota as a result of global activities between 1998 and 2003: IT jobs (17 percent), production (16 percent) and professional, technical and business services (14 percent).

III. Projected Global Activities and Trends

Between 2003 and 2008, service offshoring will grow the fastest among global activities.

Establishments are increasingly expecting to outsource services abroad by 2008, particularly back-office/call centers and IT service providers (see Table 5). While six percent are currently involved, 11 percent and 12 percent of respondents, respectively, expect to do so in 2008. Considering only services respondents, the share expecting to offshore any type of services in 2008 increases from 13 percent to about 20 percent. Among manufacturers, 43 percent expect to offshore goods production by 2008 – up eight percentage points from 2003.

Table 5

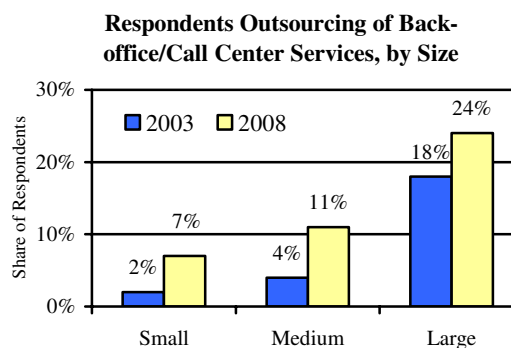
Projected Global Activities, 2003-2008

Activity	2003	2008 (projected)
Exporting	38%	37%
Importing	36%	38%
Offshoring activities		
Back-office/call center services	6%	11%
Goods production	28%	35%
IT services	6%	12%
Professional, technical or business services (non-IT)	9%	14%

By size and share of respondents, large firms expect to continue to be the most involved with outsourcing services (18 percent to 24 percent). However, by number of respondents expecting to be outsourcers of services in 2008, small and medium firms outnumber large firms.

Between 2003 and 2008, the strongest growth in new outsourcers of production is anticipated among medium businesses (48 percent, up 10 percentage points), matching the rate of outsourcing abroad of production by large businesses. Small businesses also expect to increasingly become outsourcers of production during this time period (22 percent, up 6 percentage points - see Appendix II).

Figure 2



Most businesses believe globalization will not affect future job levels at their firms. Respondents' expectations for employment trends through 2008 are consistent with their experiences over the past five years. About 70 percent or more of respondents expect no change in service-related jobs (in the listed areas) and 44 percent expect no change in production jobs. However, businesses are somewhat more optimistic about job opportunities in production, with 24 percent expecting increases in production employment (up from 16 percent who experienced growth between 1998 and 2003).

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Table 6
Projected Employment Trends,
for All Respondents, 2003-2008

Job Area	Projections, 2003 to 2008		
	Up	Same	Down
Production	24%	44%	32%
IT services	16%	73%	11%
Professional, technical or business services	14%	71%	16%
Call Center	8%	80%	12%
Back-office services	8%	81%	11%
Other	5%	89%	5%

Among manufacturers, 31 percent anticipate increases in production employment during the next five years (compared to 21 percent who experienced actual growth in such jobs between 1998 and 2003) (see Appendix V). However, about one-third expects decreases in Minnesota production and employment (although this is an improvement from the 44 percent that experienced actual decline between 1998 and 2003).

Between 16 percent and 20 percent of services respondents forecast decreases in services-related jobs – whether in IT services; professional, technical or business services; call centers; or back-office services – due to globalization during the next five years (see Table 7).

Table 7
Projected Employment Trends,
for Services Respondents, 2003-2008

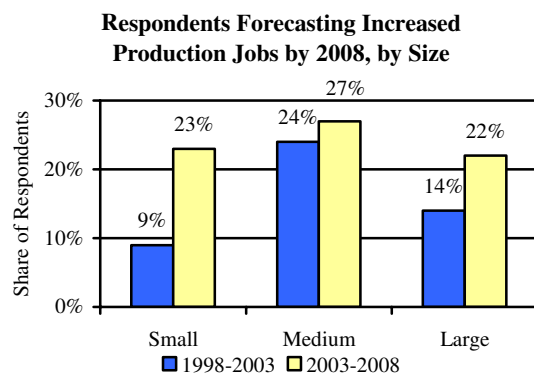
Job Area	Projections, 2003 to 2008		
	Up	Same	Down
Production	9%	67%	25%
IT services	11%	72%	16%
Professional, technical or business services	6%	74%	19%
Call Center	7%	73%	20%
Back-office services	5%	78%	17%
Other	0%	95%	5%

Employment trends experienced by small, large and medium businesses in the two time periods, 1998 to 2003, and that are forecasted for 2003 to 2008, are mostly similar, with the dominant trend being unchanged employment in the different types of jobs (see Appendix V).

A few notable differences, by respondents' business size or location, appear in forecasted production jobs. The shares of small and large firms who are optimistic about new production jobs showed strong growth between the two time periods. For 2003 to 2008, about 50 percent more large firms (up to 22 percent) and more than twice as many small firms (up to 23 percent) anticipate growth in these jobs.

Greater Minnesota respondents (28 percent, up 11 percentage points) are somewhat more optimistic than metro respondents (22 percent, up 6 percentage points) about future increases in production jobs.

Figure 3



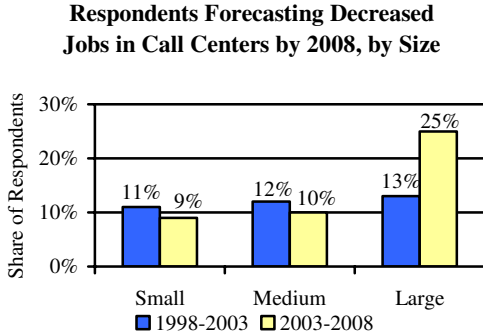
Business size also affected employment forecasts in call centers and back-office processing.⁹ Large businesses – the ones most likely to be involved in call centers and back-office related services – are relatively less optimistic about job prospects in call centers and back-office related services during the next five years.

Compared to the actual experience between 1998 and 2003, a larger share of large firms anticipate decreased call center and back-office related employment between 2003 and 2008: the shares increased by 12 percentage points to 25 percent and 21 percent, respectively (see Figure 4). While the actual number of firms involved is less than ten, the number of employees is potentially significant.

⁹ See Appendix V for more information.

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Figure 4



IV. Motivation for Global Activities

Outsourcers and importers are most frequently motivated by three reasons: cost control, increased competitiveness and maximizing revenues.

Respondents were asked to indicate their three most important motivations for offshoring or importing from a list of 10 specified reasons. They were not asked to give rankings among these three reasons.

Importers most frequently cite reducing or controlling operating costs (82 percent), increasing overall competitiveness (71 percent) and increasing revenue potential (64 percent) as reasons to buy components and raw materials outside the United States. Compensating for resources not available internally (18 percent) is the fourth most frequently mentioned reason by importers.¹⁰

Production outsourcers' responses were similar to those of importers, with reducing or controlling operating costs (77 percent), increasing overall competitiveness (79 percent) and increasing revenue potential (56 percent) given as reasons for outsourcing production work abroad. Outsourcers of production mention being geographically close to customers (fourth most indicated reason) as an important reason more frequently than importers and other outsourcers.

Outsourcers of services more frequently mention reducing or controlling operating costs (71 percent) than increasing competitiveness (53 percent) or revenue potential (46 percent) for outsourcing.

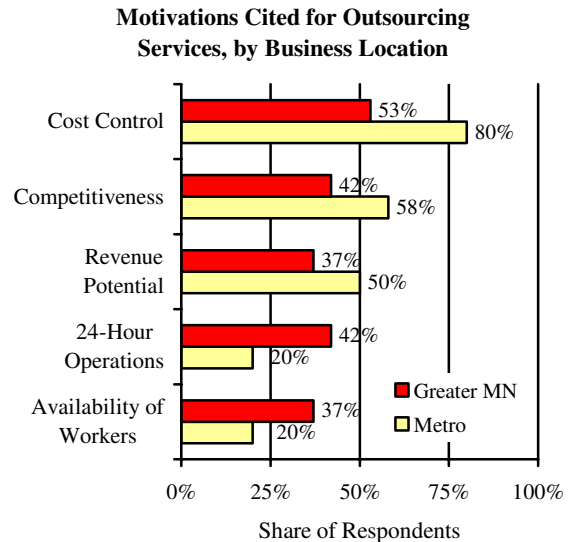
¹⁰ See Appendix III for more information.

Providing services for around-the-clock production (fourth most indicated reason) is also a key reason.

Motivations for importing and outsourcing may vary by business location. Some differences appear when comparing respondents in the metro area and in Greater Minnesota, where some motivations are cited much more frequently by businesses in one location than the other.

The differences in the reasons for outsourcing services are striking. Compared to their Twin Cities counterparts, Greater Minnesota businesses are about twice as likely to cite operations around the clock and the availability of workers abroad as reasons to outsource services. Although cost control is important to Greater Minnesota businesses, it is much more frequently cited as a reason by Twin Cities businesses.

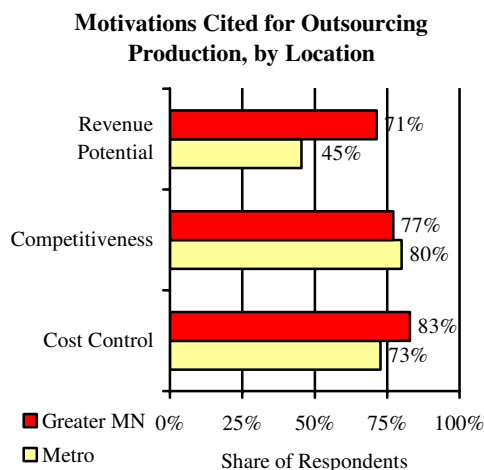
Figure 5



For outsourcers of production, the striking difference is revenue potential, which was a much more commonly cited reason by businesses in Greater Minnesota than in the Twin Cities (see Figure 6).

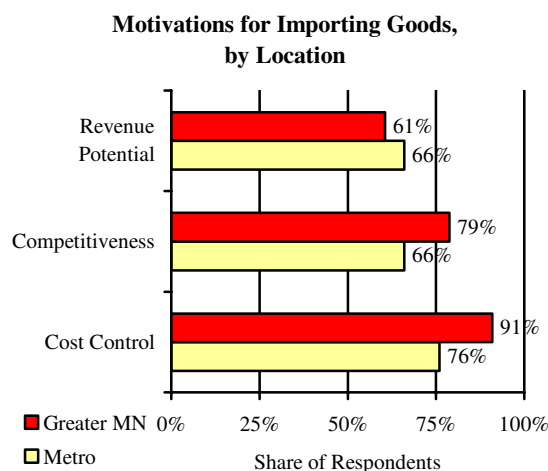
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Figure 6



While competitiveness and cost control are important to importers of goods in the Twin Cities, they are much more frequently cited as reasons by those in Greater Minnesota (see Figure 7).

Figure 7



V. Impact of Global Activities

Businesses were affected by globalization in a variety of ways between 1998 and 2003. The largest share of respondents said that their businesses had experienced decreased Minnesota employment (45 percent) and production (41 percent), revenues (41 percent) and profits (49 percent) but increased investment in technology (53 percent), and raw materials or component costs (62 percent) as a result

of global trends during this time period (see Table 8 and Appendix IV).¹¹

The shares of manufacturers reporting decreased levels of employment, production, revenues and profits exceeded those of service providers by more than 10 percent. This was particularly true for employment, for which the difference was more than 20 percent. Service providers were more likely to report unchanged conditions for these variables. Service providers and manufacturers reported increased levels of these variables in similar proportions.

Respondents had varied experiences with wages and benefits. While 18 percent said their employees' wages and benefits decreased, more (43 percent) reported increased employee compensation as a result of global business activities.

Table 8

Trends in Business Operations, for All Respondents, 1998-2003

Business Operations	Up	Same	Down
Production in Minnesota	22%	37%	41%
Employment in Minnesota	19%	36%	45%
Wage/benefits to Minnesota labor	43%	38%	18%
Cost of raw materials, components	62%	22%	16%
Investment in Technology	53%	32%	15%
Revenues/Sales	34%	25%	41%
Profits	28%	22%	49%

For the most part, global trends did not vary significantly by business size or location. Although most businesses experienced the same operational trends, regardless of size or location, there were some notable exceptions.¹² A greater share of large firms (29 percent) increased Minnesota production and employment than did small (14 percent) and medium (21 percent) firms. Small and medium businesses, as well as businesses in Greater Minnesota, appeared to be slightly more likely to have decreased production and employment.

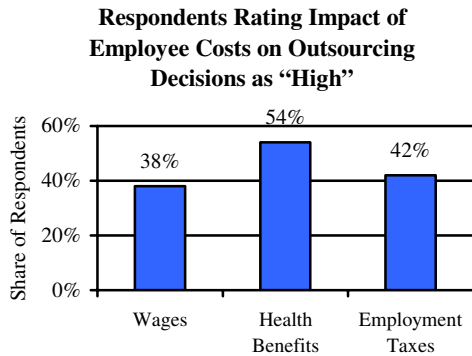
¹¹ Respondents were asked to describe the directional trend in various business aspects; they were not asked to provide numerical data.

¹² See Appendix IV for more information.

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Employee compensation levels affect the decision to outsource. About 54 percent of respondents said health benefits costs and 42 percent said worker-related taxes (such as workers’ compensation and unemployment insurance) have a high impact on outsourcing decisions to non-U.S. locations (see Figure 6).

Figure 8



More interestingly, respondents have different assessments based on their business size (see Table 9). Medium (62 percent) and large businesses (57 percent) more frequently assert that health benefits have a high impact on their outsourcing decisions, compared to small businesses (45 percent). Wages also have a high impact on outsourcing decisions for a larger share of medium and large businesses (46 percent and 43 percent, respectively) than small businesses (29 percent). Small businesses more frequently (39 percent) rated wages as having a medium impact on these decisions.

Table 9

Respondents Rating Impact of Employee Costs on Outsourcing Decisions as “High”, by Business Size

Cost Component	Small	Medium	Large
Wages	29%	46%	43%
Health Benefits	45%	62%	57%
Employment Taxes	38%	46%	41%

Respondents in the metro area and in Greater Minnesota had similar assessments of the impact of health benefits and wages on outsourcing decisions.

Final Thoughts

Competitive pressures are fueling a shift in business perspectives from the national toward the global arena. While the majority of Minnesota businesses are not yet involved, an increasing number of companies – regardless of size or location – are affected by or embracing globalization.

Although the survey examined globalization on a limited basis, these survey results confirm that many businesses and workers have mixed experiences in this new marketplace. While wider market opportunities have led to increased exporting and lower costs for business operations, the findings also confirm that, as a result of the rapid and increasing integration of global business practices into Minnesota’s economy, some businesses are facing difficult operational challenges and are sometimes making decisions that result in hardships for workers, communities and the businesses.

The economic potential of Minnesota businesses becoming globally active in one form or another is vast. While barriers such as differing languages and business cultures; lack of knowledge on how to export and import goods and services; and fear of the risks involved do exist, they can be overcome with training and learning from other businesses’ first-hand experiences.

Further examination of global economic activities not included in this study could cover economic activities directed toward Minnesota from abroad, such as foreign direct investment in Minnesota and exported services. Both areas involve billions of dollars of state economic activity.

Most reports suggest that the overall resiliency of the U.S. economy will ensure long-term success in this global marketplace. Because short-term disruptions are inevitable, these survey results are the first step in helping to fully inform economic developers, workforce development specialists and policymakers about the full impacts of globalization. Private, public and non-profit organizations, in turn, can help businesses, workers and communities manage difficult adjustments with options such as training and education alternatives, technology investment information and other business consulting help.

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Appendix I. Methodology

The survey focused on business experiences in manufacturing industries (Standard Industrial Classification codes 20-39) and selected services industries (SIC 73 Business services, SIC 81 Legal services and SIC 87 Engineering, Accounting, Research, Management and related services), those most likely to be impacted by international issues. SIC codes, rather than the newer North American Industry Classification System (NAICS) codes, were used because the private-vendor database used to pull the business records was still using SIC codes. The equivalent industries are primarily NAICS 31-33 Manufacturing and NAICS 54 Professional, scientific and technical services. Some other businesses are in NAICS 51 Information (for computer-related services) and NAICS 56 Administrative and support services (for services to buildings, employment and business support).

Further, the survey sample was stratified in order to include more experiences of medium and large firms. The survey sample consisted of a random sample of small firms (10-99 employees), all medium firms (100-249 employees) and all large firms (more than 249 employees) from manufacturing and selected services industries. The Business/InfoUSA database (1st Edition 2004) provided the business records. The list of manufacturers was adjusted so that it had an industry distribution similar to the state's population of manufacturers. Similarly, the list of service providers was adjusted so that it had a representative distribution across the three services industries.¹³ Adjustments were made at about a rate of two to one for businesses in the metro area and in Greater Minnesota.

The final distribution of surveys sent was: 46 percent small firms, 33 percent medium firms and 22 percent large firms. Businesses in manufacturing industries contributed 60 percent of the sample. Two-thirds were located in the metro area. Adjusting for incorrect addresses (mainly due to moving), the survey sample numbered 1,574 companies. Two mailings of the survey were conducted in April 2004, which resulted in 252 respondents, or a survey response rate of 16 percent. The sampling error was plus or minus 6.2 percent at a 95 percent confidence level.

Appendix II.

Share of Businesses who are Involved in Global Activities: Past (1998), Current (2003) and Projected (2008), and by Business Size

Small Businesses	1998	2003	2008 (projected)
Offshoring of goods production	9%	16%	22%
Offshoring of IT services	2%	7%	10%
Offshoring of back-office or call center services	1%	2%	7%
Offshoring of professional, technical, or business services	0%	5%	9%
Importing by my company (e.g. of components)	11%	22%	25%
Exporting by my company (e.g. of produced good/service)	17%	25%	22%
Medium Businesses	1998	2003	2008 (projected)
Offshoring of goods production	15%	38%	48%
Offshoring of IT services	1%	3%	12%
Offshoring of back-office or call center services	1%	4%	11%
Offshoring of professional, technical, or business services	4%	11%	20%
Importing by my company (e.g. of components)	27%	50%	49%
Exporting by my company (e.g. of produced good/service)	42%	50%	50%
Large Businesses	1998	2003	2008 (projected)
Offshoring of goods production	24%	42%	47%
Offshoring of IT services	0%	11%	18%
Offshoring of back-office or call center services	13%	18%	24%
Offshoring of professional, technical, or business services	11%	16%	18%
Importing by my company (e.g. of components)	37%	47%	53%
Exporting by my company (e.g. of produced good/service)	53%	55%	55%

Note: Due to methodology and sample size, only overall results are statistically valid. Readers should review sub-sample results with caution.

¹³ The difference in the industry distribution of the sample and the population from the Bureau of Labor Statistics (U.S. Department of Labor) data in 2000 for each sector is not statistically significant at the 95 percent level of confidence based on a Chi-square test.

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Appendix III.

A. Share of Businesses Citing Top Three Reasons for Importing or Outsourcing Operations to Non-U.S. Locations

Reason	Importing	Outsourcing Production	Outsourcing Services
Around the clock operations	2%	4%	27%
Availability of qualified workers abroad	12%	12%	25%
Free up internal resources in MN	5%	10%	12%
Geographically closer to customers	7%	28%	17%
High quality of production abroad	7%	6%	3%
Increase overall competitiveness	71%	79%	53%
Increase revenue potential	64%	56%	46%
Other.	1%	4%	2%
Reduce or control operating costs	82%	77%	71%
Reduce time to market	8%	11%	10%
Resources not available internally	18%	7%	17%

B. Share of Businesses Citing Top Three Reasons for Importing or Outsourcing Operations to Non-U.S. Locations, by Business Location

Reason	Importing		Outsourcing Production		Outsourcing Services	
	Greater MN	Metro	Greater MN	Metro	Greater MN	Metro
Around the clock operations	3%	2%	3%	5%	42%	20%
Availability of qualified workers abroad	3%	18%	11%	13%	37%	20%
Free up internal resources in Minnesota	3%	6%	6%	13%	5%	15%
Geographically closer to customers	0%	12%	29%	27%	16%	18%
High quality of production abroad	9%	6%	6%	5%	11%	5%
Increase overall competitiveness	79%	66%	77%	80%	42%	58%
Increase revenue potential	61%	66%	71%	45%	37%	50%
Other.	3%	2%	6%	4%	5%	3%
Reduce or control operating costs	91%	76%	83%	73%	53%	80%
Reduce time to market	3%	12%	9%	13%	21%	5%
Resources not available internally	18%	18%	9%	5%	21%	15%

Note: Due to methodology and sample size, only overall results are statistically valid. Readers should review sub-sample results with caution.

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Appendix IV.

A. Share of Businesses Experiencing Changes in Business Aspects Due to Global Trends, Between 1998 and 2003, by Business Size

Size	Business Aspect	Increase	Same	Decrease
Small	Employment in MN	14%	43%	43%
	Cost of Components, Raw Materials	66%	21%	12%
	Investment in Technology	47%	37%	15%
	Production in MN	18%	39%	42%
	Profits	18%	30%	52%
	Revenues	27%	31%	43%
	Wages	42%	40%	17%
Medium	Employment in MN	21%	31%	48%
	Cost of Components, Raw Materials	61%	21%	18%
	Investment in Technology	60%	28%	12%
	Production in MN	21%	36%	43%
	Profits	34%	16%	49%
	Revenues	38%	20%	42%
	Wages	42%	40%	18%
Large	Employment in MN	29%	29%	43%
	Cost of Components, Raw Materials	53%	23%	23%
	Investment in Technology	50%	28%	22%
	Production in MN	34%	34%	31%
	Profits	44%	15%	41%
	Revenues	46%	23%	31%
	Wages	49%	29%	23%

B. Share of Businesses Experiencing Changes in Business Aspects Due to Global Trends, Between 1998 and 2003, by Business Location

Business Aspect	Metro			Greater Minnesota		
	Increase	Same	Decrease	Increase	Same	Decrease
Employment in MN	19%	40%	41%	20%	30%	50%
Cost of Components, Raw Materials	60%	26%	14%	66%	15%	19%
Investment in Technology	53%	32%	15%	53%	32%	15%
Production in MN	22%	42%	37%	23%	30%	47%
Profits	28%	24%	48%	28%	20%	52%
Revenues	34%	28%	38%	35%	21%	44%
Wages	45%	38%	17%	40%	39%	21%

C. Share of Businesses Experiencing Changes in Business Aspects Due to Global Trends, Between 1998 and 2003, by Sector

Business Aspect	Manufacturing Respondents			Services Respondents		
	Increase	Same	Decrease	Increase	Same	Decrease
Employment in MN	19%	32%	49%	23%	50%	27%
Cost of Components, Raw Materials	65%	19%	15%	51%	30%	19%
Investment in Technology	57%	30%	13%	44%	36%	20%
Production in MN	22%	32%	46%	21%	46%	33%
Profits	29%	17%	54%	27%	35%	38%
Revenues	34%	21%	45%	33%	37%	30%
Wages	47%	35%	17%	34%	45%	20%

Note: Due to methodology and sample size, only overall results are statistically valid. Readers should review sub-sample results with caution.

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Appendix V.

A. Share of Businesses Experiencing Changes in Employment Due to Globalization, by Type of Job Area, Actual (1998-2003) and (Projected) 2003-2008, by Business Size

Size	Job Area	1998-2003			2003-2008 (projected)		
		Increase	Same	Decrease	Increase	Same	Decrease
Small	Production	9%	59%	32%	23%	52%	24%
	IT services	15%	78%	7%	18%	73%	9%
	Professional, technical or business services	9%	79%	12%	13%	75%	13%
	Call Center	4%	85%	11%	8%	82%	9%
	Back-office services	5%	80%	15%	11%	83%	7%
	Other	10%	90%	0%	5%	95%	0%
Medium	Production	24%	35%	41%	27%	30%	43%
	IT services	20%	71%	8%	16%	72%	12%
	Professional, technical or business services	16%	73%	11%	14%	68%	19%
	Call Center	5%	82%	12%	6%	85%	10%
	Back-office services	8%	81%	11%	4%	84%	12%
	Other	8%	85%	8%	8%	77%	15%
Large	Production	14%	43%	43%	22%	56%	22%
	IT services	17%	71%	11%	13%	75%	13%
	Professional, technical or business services	20%	66%	14%	16%	68%	16%
	Call Center	10%	77%	13%	11%	64%	25%
	Back-office services	9%	81%	9%	14%	66%	21%
	Other	0%	100%	0%	0%	100%	0%

B. Share of Businesses Experiencing Changes in Employment Due to Globalization, by Type of Job Area, Actual (1998-2003) and (Projected) 2003-2008, by Business Location

Location	Job Area	1998-2003			2003-2008 (projected)		
		Increase	Same	Decrease	Increase	Same	Decrease
Metro	Production	16%	52%	33%	22%	50%	27%
	IT services	20%	72%	7%	20%	72%	9%
	Professional, technical or business services	16%	73%	11%	15%	71%	14%
	Call Center	7%	78%	15%	10%	78%	11%
	Back-office services	8%	80%	12%	9%	81%	10%
	Other	0%	96%	4%	0%	96%	4%
Greater Minnesota	Production	17%	40%	43%	28%	34%	39%
	IT services	13%	77%	10%	11%	75%	15%
	Professional, technical or business services	10%	76%	14%	11%	71%	19%
	Call Center	3%	89%	8%	3%	84%	13%
	Back-office services	5%	83%	13%	7%	81%	13%
	Other	21%	79%	0%	18%	73%	9%

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C. Share of Businesses Experiencing Changes in Employment Due to Globalization, by Type of Job Area, Actual (1998-2003) and (Projected) 2003-2008, by Sector

Sector (based on primary SIC)	Job Area	1998-2003			2003-2008 (projected)		
		Increase	Same	Decrease	Increase	Same	Decrease
Manufacturing	Production	21%	35%	44%	31%	35%	35%
	IT services	20%	72%	8%	18%	73%	8%
	Professional, technical or business services	15%	74%	11%	17%	69%	14%
	Call Center	4%	86%	10%	8%	84%	8%
	Back-office services	7%	82%	11%	10%	82%	8%
	Other	10%	85%	5%	11%	83%	6%
Services	Production	3%	77%	19%	9%	67%	25%
	IT services	11%	80%	9%	11%	72%	16%
	Professional, technical or business services	11%	74%	15%	6%	74%	19%
	Call Center	8%	76%	16%	7%	73%	20%
	Back-office services	6%	78%	16%	5%	78%	17%
	Other	5%	95%	0%	0%	95%	5%

Note: Due to methodology and sample size, only overall results are statistically valid. Readers should review sub-sample results with caution.

positively Minnesota

Department of Employment
and Economic Development

The Minnesota Department of Employment and Economic Development is the state's principal economic development agency, with programs promoting business recruitment, expansion and retention, workforce development, international trade and community development.

The department employs all available state government resources to upgrade the skills of Minnesota's workforce, foster economic independence and self-sufficiency, and facilitate an economic environment that produces net new job growth in excess of the national average.

The department consists of four divisions:

Business and Community Development

The Business and Community Development Division provides a variety of financial and technical services to businesses, communities and economic development professionals. This division works with companies to expand in, or relocate to Minnesota, promotes international trade, finances business expansions and improvements in community infrastructure, and assists communities and development organizations with strengthened capacity to undertake development.

Workforce Partnerships

The Workforce Partnerships Division includes programs and functions where the state works primarily through outside service providers that in turn work directly with businesses and individuals. This division provides training and support services to unemployed and dislocated workers, financial assistance for businesses seeking to upgrade the skills of their workforce, and grants to help ease a critical shortage of workers in the health and human services industry.

WorkForce Services

The Workforce Services Division delivers workforce development programs including State Services for the Blind, Rehabilitation Services, Workforce Exchange Services, Labor Market Information and Disability Determinations Services. Many of these services are provided through the Minnesota WorkForce Centers located throughout the state.

Unemployment Insurance

This division provides temporary income to people who have lost their jobs through no fault of their own.