

# Credit as an Impediment to International Trade in North Dakota

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North Dakota's economy continues to depend upon production agriculture, federal activities, and energy (Leistriz and Coon, 1991). North Dakota lacks a diversified economic base which is necessary to minimize or reduce the economic impact of fluctuations in these industries on the state's economy.

Economic diversity is achieved through increased business activity in other economic sectors, such as manufacturing, that accounted for only 8 percent of North Dakota's economic base on average from 1985 through 1989 (Leistriz and Coon, 1991). Part of the reason manufacturing accounted for such a small percentage of the state's economic base was because of the recent emergence of a manufacturing sector and the small size of manufacturing firms (Leistriz and Wanzek 1992).

International trade<sup>1</sup> could expand North Dakota's manufacturing sector. Changes in the economies around the world have created unprecedented business opportunities and challenges. Firms that take advantage of such opportunities can expand their business activities. Only one in four North Dakota manufacturing businesses currently sells products outside the United States, and half plan to serve international markets in the next five years (Leistriz and Wanzek 1992a).

<sup>1</sup>International trade refers to both exportation and importation of raw and/or finished products.

## International Trade Barriers

Domestic businesses face four barriers that limit their access and ability to expand into international markets: political, structural, logistical, and financial.

**Political barriers** include tariffs and quotas. Tariffs place a tax on imported or exported goods, and quotas limit the quantity of a particular good entering or leaving a country. These barriers are designed to protect the economic viability of specific domestic industries.

**Structural barriers** relate to the principle of comparative advantage. Firms in various countries have an economic advantage in the production of some goods. Such an economic advantage prevents firms in other countries from competing in domestic or international markets without government assistance.

**Logistical barriers** are factors within the firm that inhibit the business' ability to enter international markets. Some businesses do not have the plant capacity to meet the demands of both domestic and international markets. Other firms lack the managerial expertise to develop international markets. Management may not have the practical knowledge to develop and comply with an international sales contract.

**Financial barriers** occur when individual firms try to gain access to international markets. Manufacturers may require financing to cover labor, material, and other production and shipping expenses that lead to international sales. Foreign buyers may require financing to purchase imported goods.

Businesses often are unable to obtain loans to finance international trade because their financial institution lacks experience in international finance. Local lenders do not have correspondent relationships with financial institutions that have international finance experience. Lenders may not have the expertise to evaluate creditworthiness and/or price of an international loan.

Lenders are likely to ration capital to firms involved with international trade activities. Instability in world markets and politics makes it difficult for lenders to accurately evaluate the creditworthiness of an international loan proposal. Consequently, lenders provide less credit than international businesses desire. Businesses, in turn, are financially constrained, inhibiting the firm's output and reducing the economic activity the firm could have generated within the state.

An individual business can do little to overcome political and structural trade barriers. However, logistical and financial trade barriers can be reduced through education and increased market activity.

### **Financing International Trade**

Export financing is a key determinant of the competitiveness of U.S. exporters in world markets (U.S. Government Printing Office, 1988). Financing is often needed to cover production expenses or to provide flexible payment terms to foreign buyers. Flexible payment terms are an increasingly important aspect of international trade, especially as competition grows among exporters in developing countries. Financial terms for foreign buyers often determine the success of an export transaction as products and services become more similar.

Many U.S. companies have difficulty obtaining financial support for exports. A national survey of exporters found that two-thirds thought competitive export financing either was sometimes or rarely available, and over half stated they had lost export transactions because of financial reasons (U.S. Government Printing Office, 1988). Half of the exporters indicated they would export more if export financing was available.

In a survey of North Dakota manufacturers, firms selling in international markets had more difficulty obtaining financing than did those selling only in domestic markets (Leistriz and Wanzek, 1992). Manufacturers who tried to expand into international markets had more difficulty obtaining financing compared to manufacturers that did not service international markets. Over 60 percent of North Dakota manufacturers would like to see more export financing for working capital and billing/payment (Kluzak, 1991).

North Dakota financial institutions are highly solvent and maintain relatively low loan-to-deposit ratios. The average loan-to-deposit ratio of North Dakota banks was 50 percent in 1990 (Springer, 1990). Financial institutions in the state have the ability to support international business expansion and/or creation.

Banks in North Dakota are underdiversified and highly dependent on economic conditions in local communities (Gustafson and Beauclair, 1990). Community development depends on bank lending policies, and fund availability at banks depends on local economic activity levels, creating a "chicken and egg" relationship. International business opportunities could provide diversification for North Dakota commercial banks and businesses.

### **International Trade Financing**

A survey of North Dakota manufacturers was conducted to estimate the extent that financing is a barrier to international trade in North Dakota. The survey was designed to (1) determine the extent of international trade financing in North Dakota, (2) identify international trade barriers, and (3) identify international trade needs (Baltezare et al, 1992).

A mail survey sample was developed from an existing data base of North Dakota manufacturers (Leistriz and Wanzek, 1992) and included those manufacturers who had difficulty obtaining financing, had sold their products in international markets, had expanded into international markets within the past

five years, or had planned to serve international markets in the next five years. The population was 152 manufacturers either currently engaged in international trade or actively seeking access to international markets. Over 90 questionnaires were returned after three mailings for an overall survey response rate of 60 percent.

### **Extent of Trade Financing**

About one in five (19 percent) of the manufacturers responding had received financing or financial services from private and/or public institutions to support international trade activities in 1991. These manufacturers had an average of \$773,750 of outstanding international loans in 1991. The original dollar amount of these outstanding loans was over \$6 million on average<sup>2</sup> and varied from \$45,000 to over \$34 million.

On average, 12 percent of the total sales of responding manufacturers was from international trade in 1991. The percentage of total sales associated with international trade ranged from zero to over 80 percent. Manufacturers with international trade financing had an average of nearly 25 percent international trade sales compared to nearly 10 percent for manufacturers without international trade financing.

North Dakota manufacturers received financing and/or financial services for international trade activities from both private and public institutions in 1991. Manufacturers received assistance from at least 10 different private North Dakota financial institutions and from institutions located in four other states. Public institutions financing or providing financial services included the Bank of North Dakota, Bismarck, and the Export-Import Bank, Washington, D.C.

Over 40 percent of the North Dakota manufacturers responding indicated their financial institutions did not have anyone knowledgeable about international finance or international letters of credit (Table 1). Over 60 percent of North

<sup>2</sup>This was based on the top three loans according to loan size or value of credit guarantee.

**Table 1. Responses to "Does your current financial institution have anyone knowledgeable in international finance or international letters of credit and if not, can they refer you to a financial institution that does?" Manufacturers with and without international trade financing, North Dakota manufacturers.**

Question/Manufacturer	Response		
	Yes	No	Don't Know
	----- percent -----		
Institution knowledgeable in international trade financing			
All <sup>a</sup>	22.5	43.7	33.8
With international trade financing	15.4	61.5	23.1
Without international trade financing	24.1	39.7	36.2
If not, can they refer you			
All	42.9	25.7	31.4
With international trade financing	37.5	37.5	25.0
Without international trade financing	44.4	22.2	33.3

<sup>a</sup>No significant difference was found between manufacturers with and without international trade financing, based on a Kruskal-Wallis test with a 90 percent significance level.

Dakota manufacturers with international trade financing indicated their financial institution did not have anyone knowledgeable about international trade activities compared to 40 percent for manufacturers without international trade financing. Four out of 10 manufacturers indicated their financial institution could refer them to a financial institution with international trade financing experience.

### Trade Barriers

Nearly 75 percent of all North Dakota manufacturers responding agreed that a lack of international business connections was a restraint to initiating or expanding their international trade activities (Table 2). Other barriers to international trade activities were international customers, trade barriers, and laws. Over 70 percent of North Dakota manufacturers with international trade financing agreed international financing was another restraint to expanding international trade activities.

Nearly 70 percent of all North Dakota manufacturers responding never used domestic loans to finance international trade activities (Table 3). However, 20 percent frequently or always used domestic loans to finance international trade. Almost 85 percent of North Dakota manufacturers with international trade financing frequently or always used

domestic loans to support international trade compared to less than five percent for manufacturers without international trade financing. Manufacturers with international trade financing were more likely to use domestic loans to finance international activities than were manufacturers without international trade financing.

The primary reason manufacturers used domestic loans to finance international activities was that their lenders had no experience in international finance (Table 4). Eighty percent of the manufacturers with international trade financing indicated their lenders did not know anything about international finance. Nearly 80 percent of the manufacturers without international trade financing used domestic loans because international trade was a small part of their total business.

Only 8 percent of manufacturers had unofficially been denied international trade financing or services from a private/public financial institution.<sup>3</sup> Twenty-five percent of manufacturers with international trade financing had unofficially been denied international financing, while only 5 percent of manufacturers without international trade financing had been unofficially denied financing. More manufacturers with international trade financing had been unofficially denied

financing than had manufacturers without international trade financing.

Nearly 6 percent of all manufacturers had officially been denied financing or services from a private/public financial institution.<sup>4</sup> Over 18 percent of manufacturers with international trade financing had been officially denied financing. Less than five percent of manufacturers without international trade financing had been officially denied. More manufacturers with international trade financing had been officially denied financing than had manufacturers without international trade financing.

Primary reasons firms were denied financing were that the proposal was considered too risky and that financial institutions lacked the international knowledge to support the proposal. Manufacturers had an average of two investment proposals with an average value of \$433,000 denied in 1991.

The average manufacturer would borrow nearly \$400,000 more if the firm could borrow at an interest rate that was two percentage points less than their current rate. Manufacturers with international trade financing would borrow an average of over \$850,000 more if they could borrow at an interest rate two percentage points less than their current rate compared to an average of \$265,000 for manufacturers without international trade financing.

On the average, manufacturers would borrow an additional \$80,000 if the firm could borrow at an interest rate two percentage points more than their current rate. Manufacturers with international trade financing would borrow an average of over \$315,000 more if they could borrow at an interest rate two percentage points more than their current interest rate. Manufacturers without international trade financing would borrow an average of \$23,000 more.

<sup>3</sup>An unofficial denial implies being told that pursuing a loan application to finance international trade activities would be a waste of time because it would likely be rejected.

<sup>4</sup>An official denial implies having a formal loan application rejected.

## International Trade Financial Needs

Over 40 percent of the manufacturers with international trade financing indicated that private/public financial institutions were unable to service all their international trade financial (credit and service) needs. The primary service they were unable to provide was letters of credit. Additional needs were financing for shipping products to their final destination and for production. Respondents indicated a need for financing marketing and research development. Respondents thought that new markets required more capital investments to support research and marketing.

Only 25 percent of North Dakota manufacturers had unmet international trade financial needs. However, nearly 50 percent of the manufacturers with international trade financing had unmet international trade financial needs. More manufacturers with international trade financing had unmet international trade financial needs than did manufacturers without international trade financing. Primary needs of manufacturers were more capital and market information.

Nearly 75 percent of North Dakota manufacturers responding rated the small amount of credit available an obstacle to international trade (Table 5). Other obstacles to international trade were unavailability of short-term capital and high documentation requirements. Positive agreement index scores imply that all of the factors listed were, to some extent, obstacles in international trade.

Nearly 90 percent of the manufacturers with international trade financing agreed excessive collateral requirements were an obstacle to international trade (Table 5). Low amounts of credit and the short-term credit agreements were additional factors manufacturers listed as obstacles to international trade. More manufacturers with international trade financing agreed the length of credit agreements was too short than did manufacturers without international trade financing.

**Table 2. Ratings of restraints to initiating or expanding international trade activities, manufacturers with and without international trade financing, North Dakota manufacturers, 1991.**

Group/Restraint	n	percent					
		Strongly Disagree	Disagree	Agree	Strongly Agree	Don't Know	Agreement Index <sup>a</sup>
<b>All Manufacturers<sup>b</sup></b>							
International financing	50	8.0	18.0	18.0	16.0	40.0	16.0
International customers	52	7.7	15.4	21.2	38.5	17.3	67.4
International business connections	52	3.8	7.7	25.0	48.1	15.4	105.9
International trade barriers	52	3.8	13.5	30.8	23.1	28.8	55.9
International laws	52	1.9	15.4	15.4	23.1	44.2	42.4
International product prices	52	1.9	23.1	25.0	13.5	36.5	25.1
Within firm limitations	50	2.0	22.0	34.0	8.0	34.0	24.0
Insurance	52	3.8	36.5	13.5	9.6	36.5	11.4
Exchange rates	53	5.7	24.5	20.8	15.1	34.0	15.1
Market risks	51	3.9	21.6	31.4	13.7	29.4	29.4
<b>With International Trade Financing</b>							
International financing	7	14.3	0.0	14.3	57.1	14.3	99.9
International customers	9	0.0	22.2	22.2	55.6	0.0	111.2
International business connections	8	0.0	12.5	0.0	87.5	0.0	162.5
International trade barriers	8	0.0	12.5	12.5	50.0	25.0	100.0
International laws	8	0.0	25.0	12.5	37.5	25.0	62.5
International product prices	9	0.0	22.2	33.3	33.3	11.1	77.7
Within firm limitations	7	0.0	14.3	42.9	28.6	14.3	85.8
Insurance	8	0.0	37.5	12.5	25.0	25.0	25.0
Exchange rates	9	0.0	22.2	44.4	22.2	11.1	66.6
Market risks	8	0.0	37.5	25.0	25.0	12.5	37.5
<b>Without International Trade Financing</b>							
International financing	43	7.0	20.9	18.6	9.3	44.2	2.3
International customers	43	9.3	14.0	20.9	34.9	20.9	58.1
International business connections	44	4.5	6.8	29.5	40.9	18.2	95.5
International trade barriers	44	4.5	13.6	34.1	18.2	29.5	47.9
International laws	44	2.3	13.6	15.9	20.5	47.7	38.7
International product prices	43	2.3	23.3	23.3	9.3	41.9	14.0
Within firm limitations	43	2.3	23.3	32.6	4.7	37.2	14.1
Insurance	44	4.5	36.4	13.6	6.8	38.6	(18.2)
Exchange rates	44	6.8	25.0	15.9	13.6	38.6	4.5
Market risks	43	4.7	18.6	32.6	11.6	32.6	27.8

<sup>a</sup>Agreement index equals  $[(\% \text{ responding strongly agree} * 2) + (\% \text{ responding agree} * 1)] - [(\% \text{ responding disagree} * 1) + (\% \text{ responding strongly disagree} * 2)]$ .

<sup>b</sup>No significant differences were found between manufacturers with and without international trade financing based on a Kruskal-Wallis test with a 90 percent significance level.

**Table 3. Extent manufacturers use domestic loans to finance international activities, North Dakota manufacturers, 1991.**

Group	n	percent				
		Never	Seldom	Sometimes	Frequently	Always
All manufacturers <sup>a</sup>	66	69.7	4.5	6.1	4.5	15.2
Manufacturers with international trade financing	13	15.4	0.0	0.0	23.1	61.5
Manufacturers without international trade financing	53	83.0	5.7	7.5	0.0	3.8

<sup>a</sup>A significant difference was found between manufacturers with and without international trade financing, based on a Kruskal-Wallis test with a 90 percent significance level.

Nearly 70 percent of responding manufacturers without international trade financing rated unavailability of short-term capital a major obstacle in international trade (Table 5). Additional factors manufacturers without international trade financing considered to be obstacles to international trade included too little available credit and excessive documentation requirements.

### Overview

Few North Dakota manufacturers currently receive financing or financial services from private/public financial institutions to support international trade activities. Part of the reason for the lack of international trade financing is that manufacturers do not have the necessary international business connections and/or international customers to expand their international business activity. International trade financing is not needed unless international demand for North Dakota manufactured products exists.

Even if North Dakota manufacturers had extensive international business connections and customers, most North Dakota financial institutions lack the necessary financial expertise to conduct international trade financing. North Dakota manufacturers would be unable to obtain international financing because their lender is not trained to evaluate the creditworthiness of the loan proposal. The proposal is denied because it is considered too risky.

Capital rationing is a financial barrier to international trade for North Dakota manufacturers. Evidence of capital rationing include:

- manufacturers using domestic loans to finance international trade activities,
- manufacturers having been denied international trade financing,
- manufacturers wanting to borrow additional money even at higher interest rates,
- financial institutions lacking financial experience with international loans, and
- financial institutions providing insufficient short- and long-term

**Table 4. Reasons manufacturers might have used domestic loans to finance international activities, North Dakota manufacturers, 1991.**

Group/Reason	n	percent					
		Strongly Disagree	Disagree	Agree	Strongly Agree	Don't Know	Agreement Index <sup>b</sup>
<b>All manufacturers</b>							
Don't know how to obtain international financing	20	15.0	15.0	40.0	20.0	10.0	35.0
Lender doesn't know anything about international finance	19	5.3	10.5	26.3	26.3	31.6	68.4
International trade is a small part of our total business	18	16.7	11.1	33.3	27.8	11.1	44.4
Too time-consuming to comply with international financing requirements	18	0.0	11.1	16.7	22.2	50.0	50.0
Our firm is too small to compete for international credit	17	11.8	11.8	23.5	23.5	29.4	35.1
<b>Manufacturers with international trade financing</b>							
Don't know how to obtain international financing	9	11.1	11.1	55.6	22.2	0.0	66.7
Lender doesn't know anything about international finance	10	10.0	0.0	20.0	40.0	30.0	80.0
International trade is a small part of our total business	9	33.3	11.1	22.2	33.3	0.0	11.1
Too time-consuming to comply with international financing requirements	9	0.0	11.1	0.0	33.3	55.6	55.5
Our firm is too small to compete for international credit	8	25.0	0.0	25.0	25.0	25.0	25.0
<b>Manufacturers without international trade financing</b>							
Don't know how to obtain international financing	11	18.2	18.2	27.3	18.2	18.2	9.1
Lender doesn't know anything about international finance	9	0.0	22.2	33.3	11.1	33.3	33.3
International trade is a small part of our total business	9	0.0	11.1	44.4	22.2	22.2	77.7
Too time-consuming to comply with international financing requirements	9	0.0	11.1	33.3	11.1	44.4	44.4
Our firm is too small to compete for international credit	9	0.0	22.2	22.2	22.2	33.3	44.4

<sup>a</sup>Represents those manufacturers who used domestic loans to finance international trade activities sometimes, frequently, or always.

<sup>b</sup>Agreement index equals [(% responding strongly agree \* 2) + (% responding agree \* 1)] - [(% responding disagree \* 1) + (% responding strongly disagree \* 2)].

financing to support international trade. Consequently, manufacturers have difficulty raising the necessary capital to enter into or expand existing international markets.

International financing is one of several obstacles North Dakota manufacturers face trying to expand into international markets. Manufacturers

need additional financing and financial services to compete successfully in international activities. North Dakota manufacturers will have limited success gaining access to and expanding into international markets until financial institutions develop the means to evaluate international loans and can provide services to support international trade activities.



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**Table 5. Ratings and agreement indexes of factors that might be obstacles to international trade, North Dakota manufacturers, 1991.**

Group/Factor	n	Strongly Disagree	Disagree	Agree	Strongly Agree	Neither	Agreement Index <sup>a</sup>
percent							
<b>All manufacturers</b>							
Short-term capital is not available	50	8.0	20.0	24.0	40.0	8.0	68.0
Intermediate-term capital is not available	49	6.1	22.4	32.7	30.6	8.2	59.3
Long-term capital is not available	52	5.8	17.3	30.8	28.8	17.3	59.5
Documentation requirements are too high	51	3.9	21.6	33.3	31.4	9.8	66.7
Collateral requirements are excessive	50	4.0	22.0	42.0	24.0	8.0	60.0
Amount of credit available is too low	49	4.1	18.4	42.9	30.6	4.1	77.5
Length of credit agreements are too short <sup>b</sup>	51	5.9	15.7	47.1	19.6	11.8	58.8
Distances between the firm and the financial institutions are too great	51	5.9	27.5	51.0	7.8	7.8	27.3
<b>Manufacturers with international trade financing</b>							
Short-term capital is not available	9	0.0	44.4	11.1	33.3	11.1	33.3
Intermediate-term capital is not available	9	0.0	33.3	33.3	22.2	11.1	44.4
Long-term capital is not available	10	0.0	20.0	20.0	40.0	20.0	80.0
Documentation requirements are too high	10	0.0	20.0	40.0	30.0	10.0	80.0
Collateral requirements are excessive	9	0.0	11.1	33.3	55.6	0.0	133.4
Amount of credit available is too low	9	0.0	22.2	11.1	66.7	0.0	122.3
Length of credit agreements are too short	10	0.0	10.0	30.0	40.0	20.0	100.0
Distances between the firm and the financial institutions are too great	10	0.0	50.0	30.0	10.0	10.0	0.0
<b>Manufacturers without international trade financing</b>							
Short-term capital is not available	41	9.8	14.6	26.8	41.5	7.3	75.6
Intermediate-term capital is not available	40	7.5	20.0	32.5	32.5	7.5	62.5
Long-term capital is not available	42	7.1	16.7	33.3	26.2	16.7	54.8
Documentation requirements are too high	41	4.9	22.0	31.7	31.7	9.8	63.3
Collateral requirements are excessive	41	4.9	24.4	43.9	17.1	9.8	43.9
Amount of credit available is too low	40	5.0	17.5	50.0	22.5	5.0	67.5
Length of credit agreements are too short	41	7.3	17.1	51.2	14.6	9.8	58.7
Distances between the firm and the financial institutions are too great	41	7.3	22.0	56.1	7.3	7.3	34.1

<sup>a</sup>Agreement index equals  $[(\% \text{ responding strongly agree} * 2) + (\% \text{ responding agree} * 1)] - [(\% \text{ responding disagree} * 1) + (\% \text{ responding strongly disagree} * 2)]$ .

<sup>b</sup>A significant difference was found between manufacturers with and without international trade financing based on a Kruskal-Wallis test with a 90 percent significance level.