

Entrepreneurship and International Trade

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By

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ABSTRACT

Exporting can be viable solution for struggling entrepreneurial firms. However the different procedures and regulations that need to be addressed prior to export may be enough to discourage firms from engaging in exporting. This thesis examines the aforementioned obstacles and provides a checklist in order to facilitate the process of exporting the product into a foreign market.

This thesis then goes on to test the viability of the checklist using two separate case studies. Results from the case studies indicate that the checklist can aid entrepreneurial firms by reducing the possibility of oversights and eliminate additional costs that are associated with these oversights.

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Chapter 1.0 Introduction

1.1 Problem Statement

Export may be an intimidating word to a business person who does not fully understand what is involved in the process. Some businesses have the potential to substantially increase their profits with the addition of a foreign market. This thesis is designed to aid in the export process by creating a general checklist that can be used for a variety of different products to help facilitate the process of exportation. The focus is on the particular challenges faced by firms that wish to export a new product or a product with a new attribute. While many guides to exporting exist, the problems faced by entrepreneurs with new products are less well understood. This focus on the export challenges faced by new products is what is unique about this thesis and the contribution it provides.

Exporting can turn a business that is unable to realize a profit in the domestic market into a successful venture. Emphasis is placed on entrepreneurial firms in this thesis because there are situations where the domestic market for a new product may initially be small, too small to support a viable firm and hence, foreign markets are necessary to obtain the minimum required size. A checklist is developed that can provide a guide to what entrepreneurs need to consider when contemplating an expansion into an export market. This is not to say that the checklist can only be used on entrepreneurial firms or specific products. It could also be used as a general guideline for any business that is interested in exporting. Moreover, this checklist is intended for businesses who are already producing a product and have an intended market and demographic already chosen. It does not provide assistance on such things as; target market,

customer analysis and positioning, market strategy, marketing programs or financial planning.

For assistance regarding the previously mentioned, refer to publications such as The Marketing Plan Handbook by Marian Burk Wood or The Exporter's Guide distributed by Department of Foreign Affairs and International Trade.

1.2 Outline

This thesis is structured as follows. First, chapter two examines the role that entrepreneurship plays in the economy, drawing on literature from scholars such as Joseph Schumpeter, Friedrich A. Hayek, Israel Kirzner and Ludwig von Mises in order to gain a full understanding of the roles entrepreneurs play. Second, chapter three lays out the theoretical framework necessary to investigate the problem at hand. Chapter four develops the checklist used to ease the process of exportation. The practical application of the checklist is examined using two different case studies. One case is an established business that began to export to fill a market demand. The other case, examines a small entrepreneurial business that is looking to increase profits through the addition of a foreign market.

Chapter 2.0 Entrepreneurship's Role in the Economy

2.1 What is Entrepreneurship?

Entrepreneurship is difficult to specifically define. There have been many contributors to the attempts to define entrepreneurship, each with their own perception of what constitutes entrepreneurship and the role entrepreneurs play in the economy. More work in regards to this research has been done in disciplines such as psychology, sociology and management. In economics, scholars such as; Joseph Schumpeter, Ludwig von Mises, Friedrich A. Hayek, Frank Knight and Israel Kirzner, among others are at the forefront entrepreneurship research. Some philosophies dovetail nicely together around common perceptions, while others do not. Each perspective contributes to our understanding of entrepreneurship and it is important to consider each one in order to gain a wholeistic view of the phenomenon.

2.2 Joseph Schumpeter

One of the most important contributors to our understanding of entrepreneurship was the economist Joseph Schumpeter. Joseph Schumpeter, a mid 1900's Austrian school economist, believed that capitalism and entrepreneurship go hand in hand. Capitalism, from the view point of Karl Marx, with whom Schumpeter agreed, arises when financial resources as well as the control and production of these resources are based on private ownership, as opposed to ownership by the public or state. These sets of economic prerequisites provide the incentive structure that can lead to entrepreneurship. In keeping with Schumpeter's views, what keeps the capitalist engine in motion is the fundamental impulse that is generated from new production methods, new markets, new consumer goods as well as greater efficiencies in production methods, finding markets and devising consumer goods (Schumpeter, 1950). These

are consequently also the results of entrepreneurship. Entrepreneurship, in Schumpeter's mind, is what drives economic evolution, which in turn is what drives capitalism. Schumpeter saw the function of entrepreneurs as being:

to reform or revolutionize the pattern of production by exploiting an invention or, more generally, an untried technological possibility for producing a new commodity or producing an old one in a new way, by opening up a new source of supply of materials or a new outlet for products, by reorganizing an industry and so on.... This kind of activity is primarily responsible for the recurrent "prosperities" that revolutionize the economic organism and the recurrent "recessions" that are due to the disequilibrating impact of the new products or methods. (Schumpeter, 1950, p. 132)

Schumpeter saw entrepreneurs impacting the economy in a number of ways. These include; increased social welfare through increases in producer and consumer surpluses, the contribution of new products and methods, greater overall economic efficiencies as well as improvements to institutions such as hospitals and schools. Entrepreneurs also introduce a disequilibrium or shock to an industry and as a result of this, social welfare increases and greater efficiencies are realized.

Schumpeter hypothesized that it is through entrepreneurship that the evolutionary process that creates greater social welfare is initiated. This holds true today. Without individuals who change, invent or exploit new ideas, society in general would not move forward. It is, however, important to remember that not all entrepreneurs are inventors. An inventor is the individual who comes up with an original idea. The entrepreneur is the individual who takes that product and creates a market for it (Ruttan, 1959). The inventor can also be an entrepreneur but it is important to remember that this is not always the case. For example, the Wright brothers

invented the airplane, but there is no Wright brothers' airline. Others took their idea and created an industry around it.

Further, it is important to remember that there is a difference between entrepreneurs and managers. Many people assume these two terms are synonymous when they are not.

Entrepreneurs take the initiative to try and start a business. Conversely, managers are usually hired to run someone else's business. A manager's job is to maximize the efficient use of the resources they have at their disposal and, hence, to maximize profits to the best of their abilities (Hartmann, 1959). Some managers may encounter difficulties when they attempt to run their own business because of the difference in thinking and in their objectives when the two types of activities are combined.

It is entrepreneurs, Schumpeter believed, that are the fundamental economic actors that cause progressive changes in society. Without entrepreneurs, there would be no innovation, no change, and less efficiency in the production of products. He also recognized that in order to move forward some things must be left behind. From this stemmed Schumpeter's notion of creative destruction. The demise or destruction of some products and industries are an inevitable side effect of a progressive society. With many new products resulting from innovation, some older ones become obsolete; they are no longer competitive. For example, before there was indoor plumbing chamber pots were used. When indoor plumbing was invented, chamber pots became a thing of the past, or obsolete, as their usefulness had run its course. Another example is the typewriter. With the introduction of the personal computer,

typewriters became outdated. Typewriters could not compete with capabilities and options that computers are equipped with.

Schumpeter's work is especially relevant in today's society where innovation and entrepreneurship are valued as a major driver in the economy. There is a more general acceptance that entrepreneurs are central to improving prosperity. Many of the ideas Schumpeter discussed are being proven to be true; for example, creative destruction. The term creative destruction perfectly captures the process of industrial evolution. Technological improvements are an excellent example of the existence of creative destruction. Technology plays an important role in today's economy. In order to move forward some things must be left behind. Firms are always looking to make products more efficiently and, hence, the economy is always in disequilibrium, setting in motion evolutionary forces. Schumpeter suggests that new technologies in an established industry reduce the long run scope and importance of practices that focus on conserving established positions and attempt to maximize the profits that accrue from them (Schumpeter, 1950). This is still very true in today's economy. Firms do not look to new products in order to maintain their position in the market, but to further increase their profits in an attempt to capture a greater share of the market.

Schumpeter was able to understand and see the effects that entrepreneurship has on an economy. He suggested such behaviour be encouraged as he believed that it was the key to a growing and evolving society. Schumpeter's work has become an important cornerstone for the modern entrepreneurial literature.

2.3 Friedrich Hayek

Other scholars have their own ideas regarding what entrepreneurship is and how it works. The economist, Friedrich Hayek, believed that entrepreneurship creates a different future than what would have otherwise happened had the entrepreneur not acted. The entrepreneur does not merely discover the nature of the future (Hayek, 1978). He suggests that in order to discover the future one must believe that it is already destined to exist in a particular form. Hayek uses his concept of spontaneous learning to account for cultural evolution and market competition. He argues that these self organizing social notions can transmit more information than can be conveyed through conscious design, and hence underpins their usefulness (Boykin, 2010). Hayek argues that by enabling individuals to coordinate their actions through the impersonal mechanisms of market prices and cultural rules, spontaneous order promotes cooperation without central direction. Spontaneous order generates abstract signals that provide information that individuals can use to achieve their goals; it targets no collective goal or outcome. These signals decrease the amount of concrete information that individuals must collect. This information could include things such as; evolved rules which give rise to rational expectations regarding conduct, or prices which convey information concerning the demand for and supply of goods and services. Spontaneous learning, or order, enables individuals to act on information they do not explicitly possess. Therefore, no one can know all the facts that determine evolved rules or prices and consequently, no one is in a position to plan cultural change or economic activity using as much information as is conveyed through cultural evolution or economic activity (Boykin 2010, Hayek 1978, pp. 17-39).

2.4 Ludwig von Mises

Another view of entrepreneurship comes from Ludwig von Mises, an Austrian school economist from the early part of the 20th century. For von Mises, entrepreneurship is action. He states that such action seeks to change the future, and as a result entrepreneurship becomes a part of action. The word 'entrepreneurship' focuses on the process of imagining and forecasting the future which will result from different actions. However, without this action, forecasting and imagining remain as mere daydreams (Wood, 2005). In a sequential sense, forecasting precedes action. All actions intend to change the uncertain and unknowable future. All action involves entrepreneurship because the forecasting of the future state which will result from a certain proposed action is a subjective creation of the mind (Wood 2005, von Mises, 1966, p.252).

Von Mises goes on to suggest that successful entrepreneurship occurs when the entrepreneur can more accurately predict the future than others. As a result, the entrepreneur takes action and therefore what he offers the customers is better than what is offered by others (Wood, 2005).

2.5 Israel Kirzner

Israel Kirzner based his ideas of entrepreneurship on what he calls spontaneous learning. In situations when learning is not planned, it can be considered subconscious learning. Thus, the previously unrecognized entrepreneurial vision is synonymous with spontaneous or subconscious learning (Kirzner, 1979). According to Kirzner, in order to achieve spontaneous learning, one must have a state of mind of alertness. Like spontaneous learning, alertness

cannot be produced or improved upon. An example of this is two individuals who have identical boat-building experiences, afterwards when trying to complete a similar task one individual may learn from the previous experience, while the other does not (Kirzner, 1979).

Kirzner also believes that entrepreneurship plays an important role in the market process and, even more specifically, the competitive market. In order to explain this, one must consider the decisions of market participants. These decisions have presupposed corresponding decisions by others in the market (Kirzner, 1973). The resource owner's decisions to sell depend on the entrepreneur's decisions to buy and vice versa. Each believes that, to the best of their knowledge, the opportunity being offered to them is the best offer. Therefore, each market player can only expect to carry out their plans if in fact these plans offer others the best opportunity available to them, to the best of their knowledge (Kirzner, 1973). In other words, the market participant must not only be aware of the decisions of those he/she wishes to buy from or sell to, but also to those decisions of others who also may wish to buy or sell and therefore would become the market participant's competition. As the market unfolds, and the ignorance from one market period to another is reduced, each buyer and seller will revise their bids and attempt to offer a new best alternative to whom he wishes to buy from or sell to. It is in this sense that the market is competitive.

It is here that Kirzner inserts his notions of awareness. He believes that the market participants that are able to perceive opportunities for entrepreneurial profits are the ones who are going to be successful. They would be buyers that have not been offering high enough prices to outbid other buyers or would be sellers who have not learned that if they wish to sell they must do so

at a lower price or they will eventually be pushed out of the market. The market participants who are able to learn from their market experience and are able to perceive entrepreneurial profits; ie, buy from the parties who are still selling at a low price and have not yet realized that others are selling at a high price, and sell at a high price to those who have not yet realized that others are selling at a lower price, are the ones who will remain in the market. They have the ability to learn from their experiences while others do not.

Although, each of those that study entrepreneurship above saw it from a slightly different perspective, they all have concepts in common. They all saw entrepreneurship as a means of seeing or doing something in a manner that had not yet been discovered and, therefore, can perform or provide things using a more efficient process. Whether it is a result of creative destruction, spontaneous learning, or action, entrepreneurship paves the way for economic evolution.

2.6 Entrepreneurs and Managers

As was mentioned previously, it is important to remember that there is a difference between entrepreneurs and managers. Entrepreneurs take the initiative to start a business (create a product) or create a more effective or efficient way of doing or producing something.

Managers are usually hired to run someone else's business. A manager's job is to maximize the efficient use of the resources they have at their disposal and, hence, to maximize profits to the best of the abilities (Hartmann, 1959). In a study by Stewart et al. (1998), to determine the differences between entrepreneurs, small business owners and corporate managers, it was found that entrepreneurs are individuals who are highly driven to succeed. With this high

motivation, comes a higher propensity for risk taking (Stewart et al., 1998). They found that, although it was thought that small business owners were more similar to entrepreneurs than corporate managers, more than any other factor, the characteristic that separates small business owners and corporate managers is the level of risk taking. Besides the level of risk taking, small business owners were found to have greater similarity to corporate managers than entrepreneurs. Entrepreneurs were found to not only differ from corporate managers but also from small business owners as well. Small business owners are less risk oriented and are not as highly motivated to achieve. In addition, they also lack the same degree of preference for innovation as entrepreneurs (Stewart et al., 1998). Firms that are run by entrepreneurs tend to be larger with associated higher risk and profit potential than the conventional small business (Luchsinger and Bagby, 1987). This suggests that although entrepreneurs are driven to succeed, there may be some areas with regards to business that they are not innately equipped to deal with effectively.

In many cases the entrepreneur may be overly enthusiastic regarding their venture. Many studies have shown that entrepreneurs often overestimate the chances that their project will be successful. One particular study done by Cooper et al. (1988) found that 68 percent of entrepreneurs thought their own business would do better than others. It has further been suggested that with this exaggerated sense of optimism there is an excess of entrants into the “game” of entrepreneurship (Landier and Thesmar, 2009).

This overly optimistic view of the entrepreneur’s own venture may prove to be more of an inhibitor than helper. The entrepreneur’s desire to succeed coupled with excitement may

distract them, or inhibit them, from making objective decisions. The entrepreneur may believe that their product is the 'one' and invest more than one should or spend more than they can afford because they are sure they will recover the outlay in sales. Too often, people running their own businesses find it hard to stand back and reflect on the problems that they are facing. In certain situations, their very determination to succeed can undermine the business. Key steps may be missed, not seen or simply unable to be addressed (Pitts, 2009).

Moreover, if there is such a difference between entrepreneurs and business owners or managers, it is possible that entrepreneurs may not make as good business decisions, or are not as qualified. They may overlook important things, or have difficulty dealing with finances. It is from these entrepreneurial drawbacks that the research of this thesis comes into play. It provides entrepreneurs who may not be as well versed as other business people with a framework on which to examine more thoroughly the constraints on their future expansions into foreign markets. It offers suggestions regarding the things which may need to be considered prior to exporting into a foreign market. Additionally, many entrepreneurs also fail to realize all the potential points of failure that they could encounter during the production and promotion of their new product. Having a good idea does not mean that it will be magically integrated into the market without failure or that people will want the product. There are many points in between production and purchase where something could transpire to induce failure. It is being aware of these threats and eliminating or reducing them that aids in the success of the entrepreneur.

2.7 Roles of Entrepreneurs

Furthermore, the role of the entrepreneur may be even further extended to include that of a transaction cost reducing coordinator (Hobbs et al., 2000). There are a number of characteristics that go along with infant industries; these include things such as low production volumes or inconsistent volume of supply, inadequate infrastructure and sparse market information. These characteristics often pose problems for new industries. It is here where the coordinating entrepreneur comes into play. Once the innovation stage has taken place in an industry, what is required then is not simply management, which is “giving leadership and direction to an organized body or structure” (Grasley and Scott, 1979, p.45) but instead entrepreneurship (Hobbs et al., 2000). Kirzner (1982) sees the role of entrepreneurs as one who responds to change by using and acquiring information to exploit the opportunities created by change. It is in these roles that Kirzner stresses the importance of the coordinating entrepreneur in integrating a strategy that takes account of different parts of the market.

The following example deals with entrepreneurs who are specifically creating a new product, although services and technological advances are also somewhat relevant to the example as well. There is an abundant of information costs that are incurred when creating a product. Research needs to be done to determine whether there are like products already in the market. Research should also be done on the market itself. The size, current trends of the market as well as determining whether the product is the correct one for the market all need to be considered. Further, information that needs to be collected could include the degree and number of products that could be used as substitutes. Information costs incorporate the total

cost of acquiring the information itself. This could include the monetary value of actually purchasing the information or even the time invested in researching the information.

Asset specificity, opportunism and bounded rationality can all be used as tools to enhance the economic understanding between firms and are important tactics that entrepreneurs also need to be aware of. Bounded rationality arises when people may have intentions to make a rational decision, however, their ability to accurately evaluate all possible decision alternatives is physically limited (Hobbs and Kerr, 1999). Although bounded rationality is most common under situations of uncertainty and complexity, occasionally it may arise when there is an over abundance of information which impedes the individual's capability to make a fully rational informed decision. As a result of this bounded rationality, the threat of other individuals or firms acting opportunistically arises.

Asset specificity occurs when one partner or firm to an exchange has invested resources specific to that exchange and these resources have little or no value in an alternative use (Hobbs and Kerr, 1999). This is very common in the world of entrepreneurship. Many times individuals or firms will use something that is very asset specific. It may be through this asset specificity that the product gains its uniqueness. It is this point where, if unaware of it, entrepreneurs may run into difficulties. Firms who know the importance of this asset to the product may be tempted to act opportunistically regarding the asset. To act opportunistically means to act with self interest using guile (Williamson, 1979). Perhaps they charge a higher price than what was originally agreed upon or they may try to renege on their contract altogether.

The entrepreneur needs to be aware of all these contingencies in order for their product to be a success. There are many points where a business could fail, anything from poor infrastructure, unforeseen transaction costs or ill-fated management skills or decisions. A good coordinating entrepreneur can see the whole picture and makes sure that all the pieces of the puzzle are present and in place. This also demonstrates the different types of entrepreneurs and the need for each type of entrepreneur. There are many steps and contingencies that need to be performed or considered in order for a new product to be a success. By including each of these entrepreneurs in the process the odds of the product being a success is greatly increased.

2.8 Summary

Each of these scholars has contributed to the understanding of entrepreneurship. In addition it is important to remember that there can be many different types of entrepreneurs and that entrepreneurs differ from managers and small business owners. The next chapter looks at the theoretical framework that entrepreneurs use when making business decisions once they have developed a product. These decisions include determining the proper plant size as well as whether or not it may be a viable option to export into a foreign market in order to increase the viability of the firm.

Chapter 3.0 Theoretical Framework

3.1 Determining Plant Size

When an entrepreneur invents or identifies a new product, the demand curve for that product will be downward sloping. This is because; by definition there cannot be perfect substitutes for a new product. The steepness of the demand curve for that new product depends on the originality of the product, or in other words, the closeness of its substitutes. The less close the substitutes the steeper the demand curve. This is because consumers will find it harder to switch to less close substitutes if the price of the new product rises.

If the entrepreneur chooses to run the business themselves and take on a managerial role, the first thing the entrepreneur must decide if he/she is going to initiate commercial production of a product is what size of production facility, or plant, to build. If one were to think about this decision in the context of an economic model of a firm, this decision is taken before the average cost curve for the plant actually exists. Each plant will have a unique short run average cost curve associated with it. In the short run in economics, plant and equipment is fixed, and hence, the decision of the entrepreneur relates to what size of short run plant to build. Short run average cost curves are u-shaped and illustrate the costs associated with the production of different outputs for the particular (short run) plant and equipment it depicts.

The minimum point on the average cost curve is that plant's most efficient or least cost, quantity of output. The term which economists apply to the minimum point on the short run average cost curve is capacity. The quantity of output associated with the minimum point on the average cost curve is the plant's capacity. Note that this economist's definition of capacity

differs from the business or common English definition of capacity which often denotes the maximum output one can produce from a plant or factory. In economic theory, if a firm is producing at less than its capacity - producing a quantity to the left of the minimum point on the short run average cost curve the firm is said to have "excess capacity".

Figure 3.1 illustrates two short run average cost curves (AC curves), each one associated with a unique plant and equipment. If an entrepreneur projects the quantity of output to be Q' , they would choose to build the plant associated with short run average cost curve AC' whose capacity (lowest cost point) corresponds to Q' . The cost of producing Q' using a plant reflected in costs AC' would be C' . In contrast, choosing another size of plant, say that depicted by AC'' , the cost of producing Q' would be C'' . A rational entrepreneur will always choose to build the plant characterized by AC' if he/she forecasts that its market will be Q' . The case depicted in figures 3.1 is, however, a special case - there is constant returns to scale - the minimum point on the AC curve does not change as the size of plant and equipment increases or decreases; for example, it is C' in figure 3.1 whether AC' is built or AC'' is built. If, on the other hand, there are increasing returns to scale the firm may wish to build a plant that has capacity that is larger than Q' . This is illustrated in figure 3.2. If there are increasing returns to scale, it means that costs (at the capacity of plants) decline as capacity increases. Thus, the costs for a small plant with capacity Q' would be C' but decline to C'' if a plant of capacity Q'' is built. Although the plant associated with AC'' would be running at excess capacity, the overall costs would be lower. This means that it is likely that the firm will never build a plant with capacity, for

example Q' , short run cost curve AC' , because it is less cost efficient than a plant with capacity Q'' .

Figure 3.1: Choosing the Size of Plant to Build

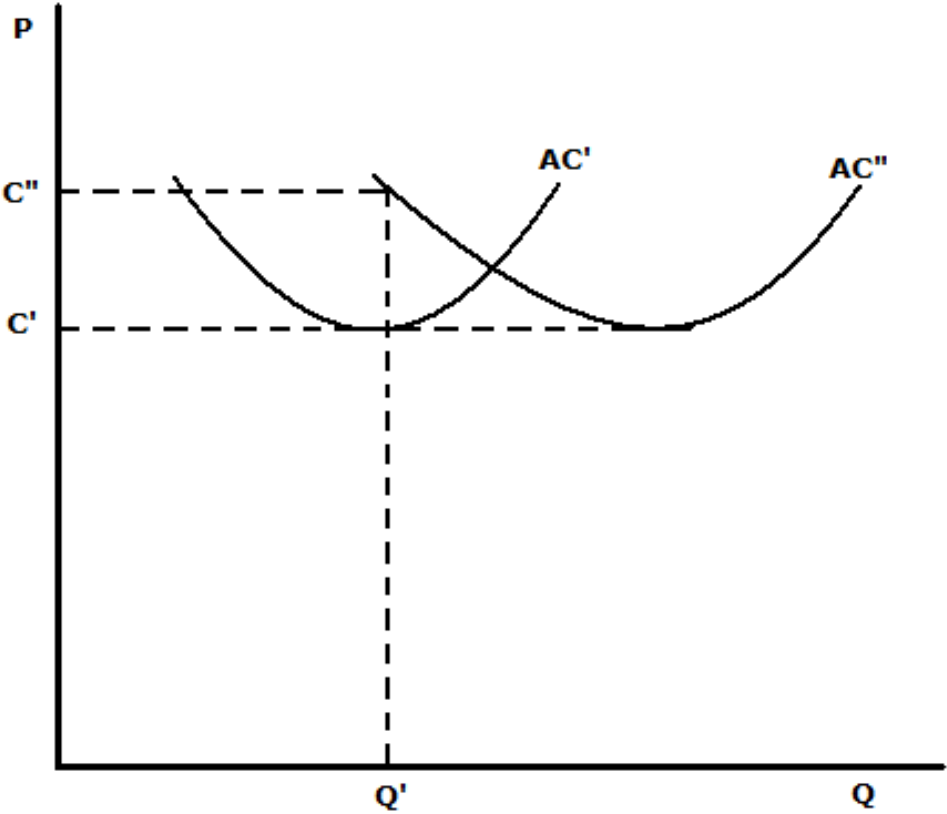
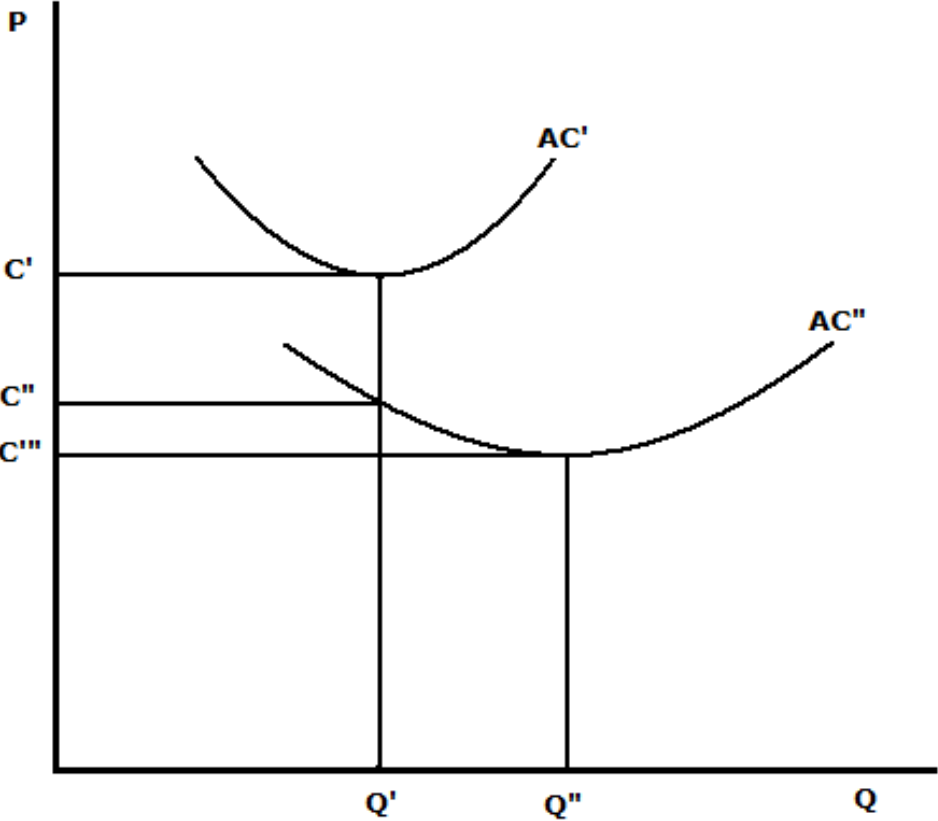


Figure 3.2: Excess Capacity

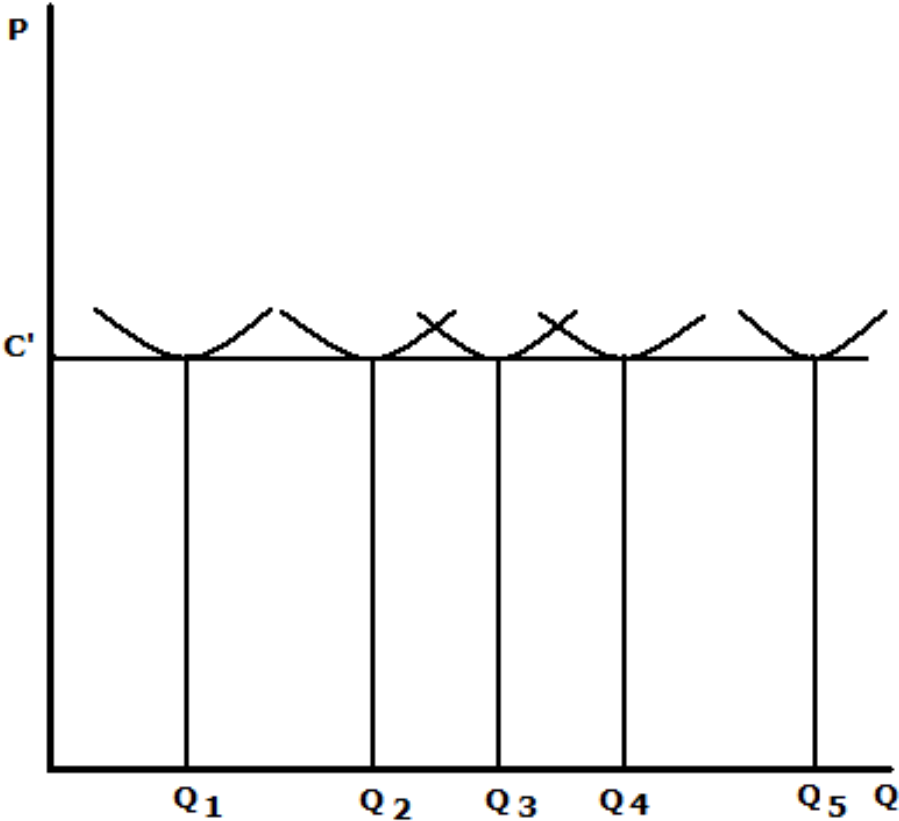


3.2 Determining Returns to Scale

After the decision to produce commercially has been made, the firm needs to determine what the returns to scale are in the industry. Returns to scale play a role in the decision of what size of plant to build; depending on whether there is increasing returns to scale, constant returns to scale or decreasing returns to scale. Returns to scale refers to the changes in output in relation to the proportional change in inputs. With increasing returns to scale, output increases by more than the proportional change in inputs and conversely with decreasing returns to scale output increases by less than the proportional change in inputs.

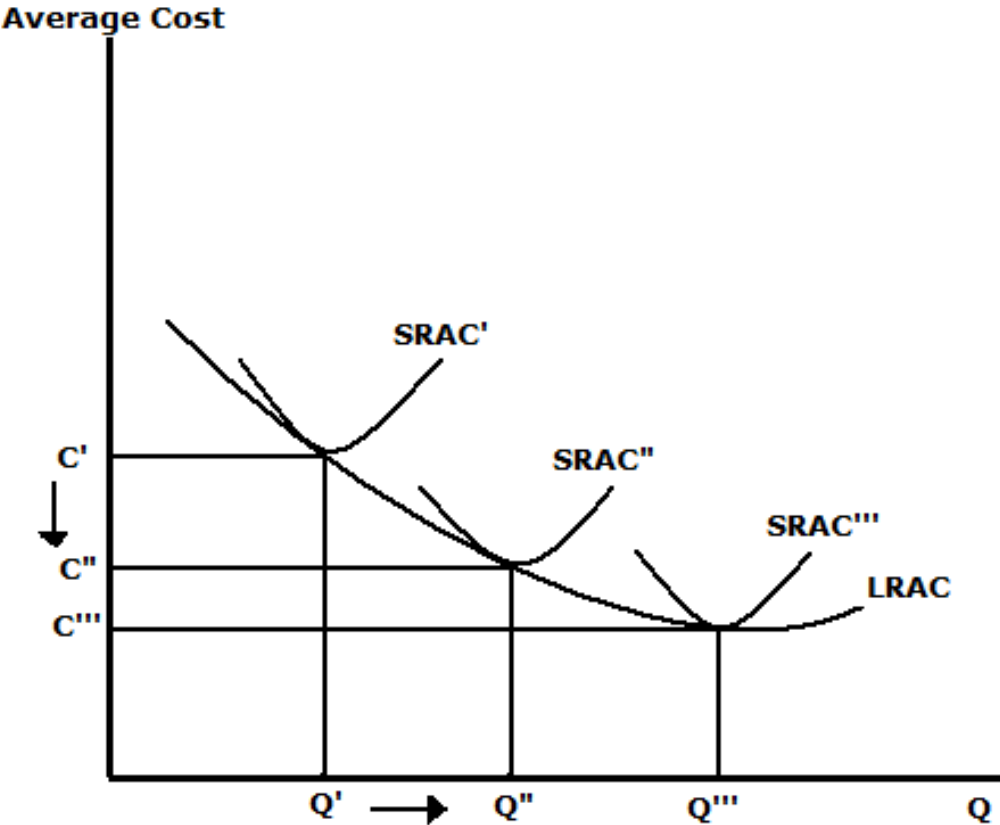
In an industry where there are constant returns to scale – constant returns to scale occurs when output increases by the exact same proportional change of inputs – market size may become irrelevant. Figure 3.3 illustrates what constant returns to scale looks like. In a situation such as this, it does not matter what Q the firm picks to build a minimum cost plant, the AC at capacity will be the same, say C' . Therefore, the firm will always choose the size of plant where the plant exactly matches the firm's projected sales.

Figure 3.3: Constant Returns to Scale



We can now contrast constant returns to scale with that of increasing returns to scale or economies of scale. Economies of scale is a long run concept and refers to the changes in the per unit cost of production as projected output rises. The long run average cost curve is made up of several short run average costs curves. If the average per unit of cost decreases as the scale is increased, then there are economies of scale. Likewise, if the average cost per unit increases, diseconomies of scale are present. Figure 3.4 represents a firm which exhibits economies of scale. The average cost is decreased from C' to C'' to C''' when the output, or Q , is increased from Q' to Q'' to Q''' . As expansion takes place the firm moves further down the long run average cost curve. The long run average cost curve or LRAC illustrates that as output or Q increases, costs will decrease. Economies of scale are often present for entrepreneurial products. With an entrepreneurial product, it is likely that sales will start out slowly. As sales volumes increase, the per unit cost may decrease as the fixed costs can then be spread over a larger volume. Furthermore, better production techniques may also lower costs and further push the firm down the long run average cost curve.


Figure 3.4: Economies of Scale



When economies of scale are present, market size becomes important and it may become very beneficial to the firm to explore ways to increase their market size. One way to achieve this increased market size is to sell into a foreign market.

3.3 The Addition of a Foreign Market

The previously discussed theoretical concepts are combined to depict an entrepreneurial firm.

A firm may build a plant that is capable of producing output greater than what is presently projected; therefore the firm has excess capacity. In this situation, foreign markets begin to look more attractive to the firm as these markets may provide the additional demand required to capitalize on the cost saving associated with eliminating excess capacity – moving down the AC curve of the plant that has been built, and hence, realizing a larger profit. Figure 3.5 demonstrates how being able to access the foreign market may be beneficial to the firm, even essential to the entrepreneurial firm being able to “make it”. For example, for the firm illustrated in Figure 3.5 the domestic demand, D_{domestic} , may not be large enough for the firm to make a profit. Figure 3.5 depicts a firm facing a downward sloping demand curve. The marginal revenue associated with this downward sloping demand curve is also downward sloping – MR_{domestic} . A profit maximizing firm will choose its quantity of output where marginal revenue equals marginal cost – at Q' . The price it can charge for output Q' is P' . The cost of producing Q' is C' . As a result, the firm will incur a loss. This is represented by the shaded box (). This market situation is not sustainable and the firm will not survive. With the addition of the foreign markets, the demand is increased to that of the domestic market plus the foreign market, $D_{\text{domestic}} + \text{foreign}$ (free trade). A firm exporting to a foreign


market is often depicted as facing a foreign demand curve with a different slope and or intercept than its domestic demand curve. This allows the firm to practice price discrimination. For ease of exposition, the analysis here ignores any differences in domestic and foreign demand. This simplification does not alter the major results. Due to this additional demand, the demand curve is then shifted outward or to the right. For profit maximizing where $MR_{\text{domestic} + \text{foreign}}$ now equals marginal cost. The price the firm can charge for the profit maximizing output has increased from P' to P'' and costs have fallen to C'' . As a consequence of the addition of the foreign market; the firm may now make a profit, which is depicted by the grey box (). Hence, the condition of the foreign market may benefit the firm both in the price it can charge and through lower costs per/unit.

Figure 3.5 however, assumes that there is free trade with the foreign market. This may not always be the case. There may be a plethora of costs that a firm may incur in order to ship internationally. There may be tariffs, quality or grading standards that increase costs, regulatory costs, or additional fixed costs. If these impediments to trade are important the market depicted in figure 3.5 can divide into three different potential cases. Each of these cases are explored in detail.

Figure 3.5: Addition of Foreign Markets

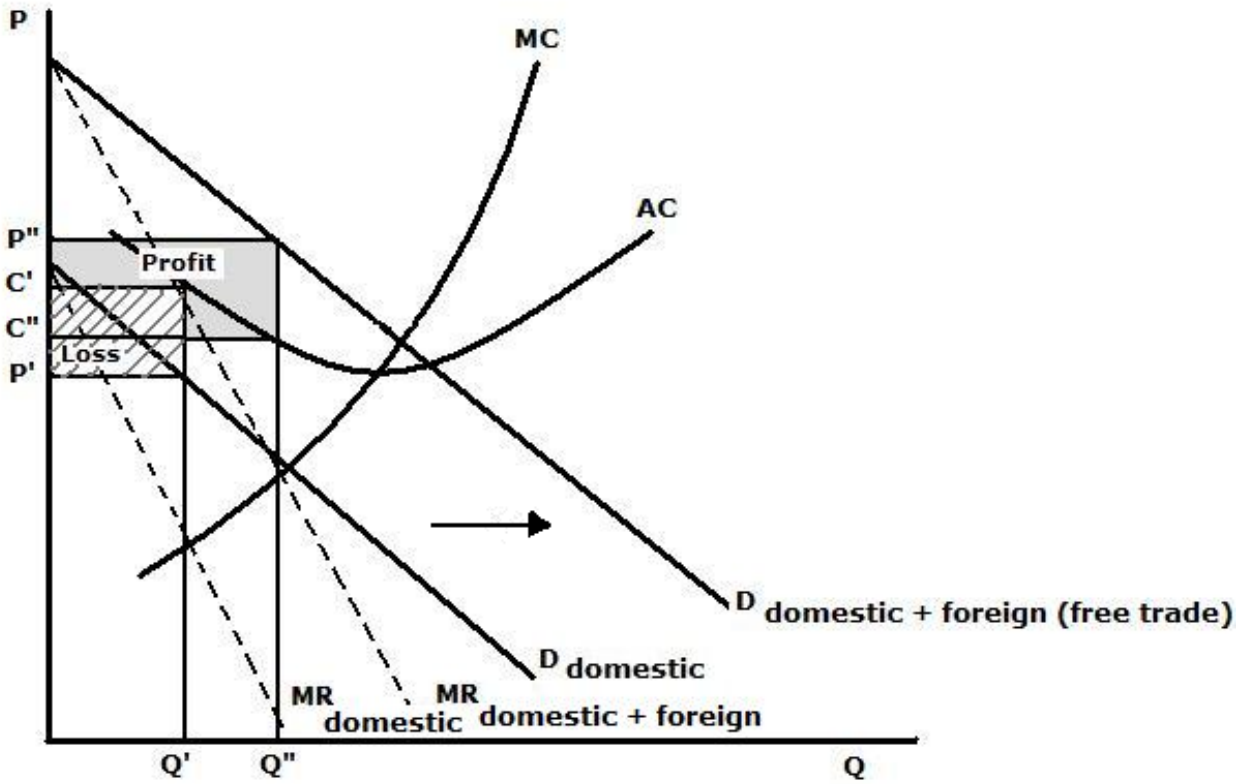





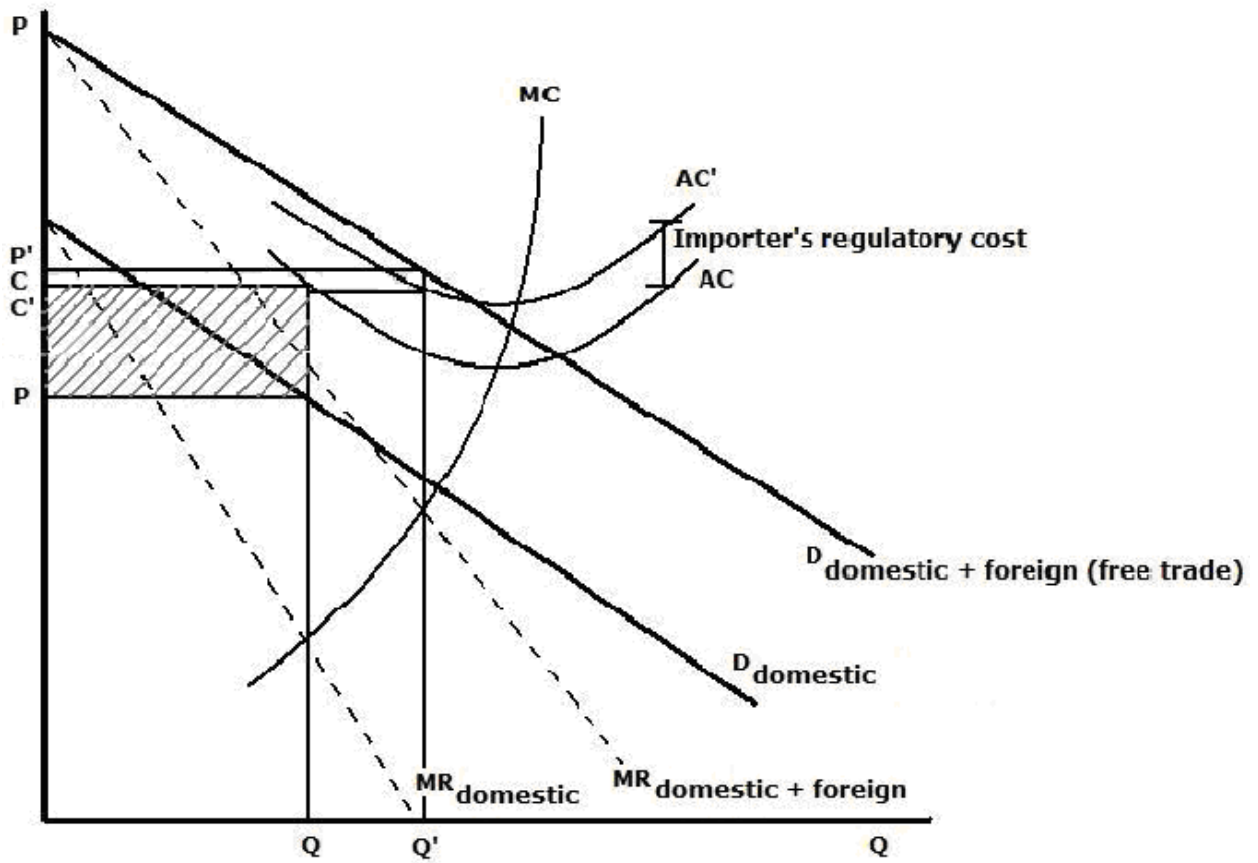
Figure 3.6 illustrates an upward shift in the average cost curve (AC) associated with accessing the foreign market. Again, when the firm is only selling their product domestically, it is operating at a loss, represented by the shaded box (); $(C - P) \times Q$. When the firm begins to expand into the foreign market it is able to expand its output to Q' , and now receives a higher price at P' . However, in order to sell in this foreign market, additional fixed costs must be incurred. This could arise from costs associated with meeting any regulatory costs importers impose on imports. The importer's regulatory cost pushes the AC curve up to AC' , reducing the profit which can be made by the exporting firm to $(P' - C') \times Q'$. Another example of an increase in fixed costs as a result of importer's regulatory costs could be the hiring of a lawyer. As there is only an increase in fixed costs, the marginal cost curve, or MC, remains the same. Although the firm is incurring a larger cost as a result of developing the foreign market, the firm is now realizing profits as an end result. The extra cost of the importer's regulatory costs is not great enough to make the foreign market an unviable option.

The second case, which is shown by Figure 3.7, is where there is an increase in production costs – variable costs – associated with being able to access a foreign market. This means that the per unit cost increases. As a result of these increased costs there is a shift in both the marginal cost curve (MC) and the average cost curve (AC). The marginal cost curve shifts inward from MC to MC' ; the average cost curve is shifted upward from AC to AC' . The firm is still better off to incur the additional per unit costs and export to foreign markets as opposed to only selling domestically, where they will not realize a profit, (the shaded box, ) $(C - P) \times Q$. Even though there are additional costs the firm is still making a profit, (the grey box, ) $(P' - AC')$

$x Q'$, due to the increased demand that is provided by the foreign market. An example of an importer's regulatory cost could be the extra cost of grading or increased quality standards that the firm must follow before they can export their product into the foreign market.

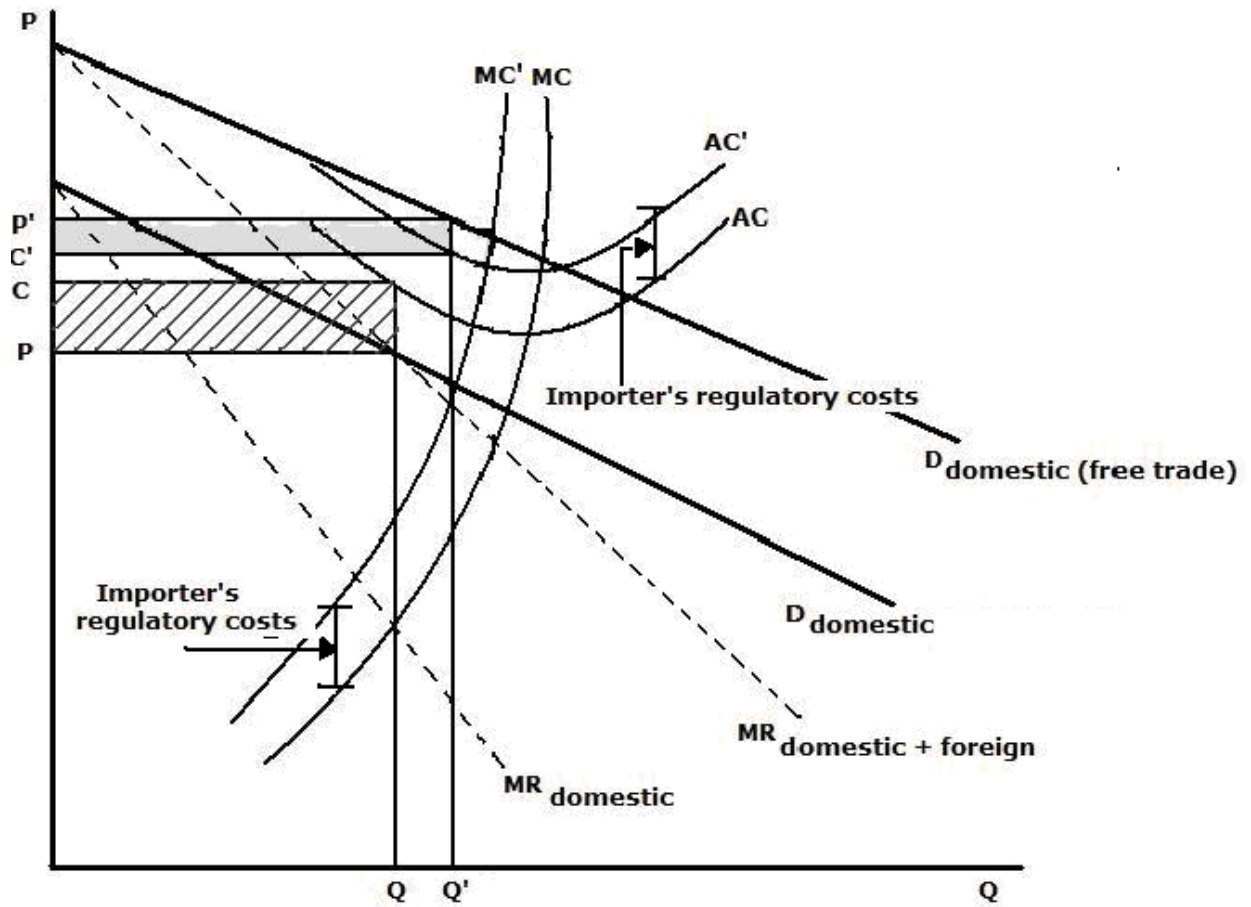
3.4 Case I: An Increase in AC Only, Due to Importer's Regulatory Costs


Figure 3.6: Case I - An Increase in AC only, due to Importer's Regulatory Costs



3.5 Case II – Increase in Production Costs due Foreign Regulatory Costs

Figure 3.7: Case II – Increase in Production Costs due to Foreign Regulatory Costs

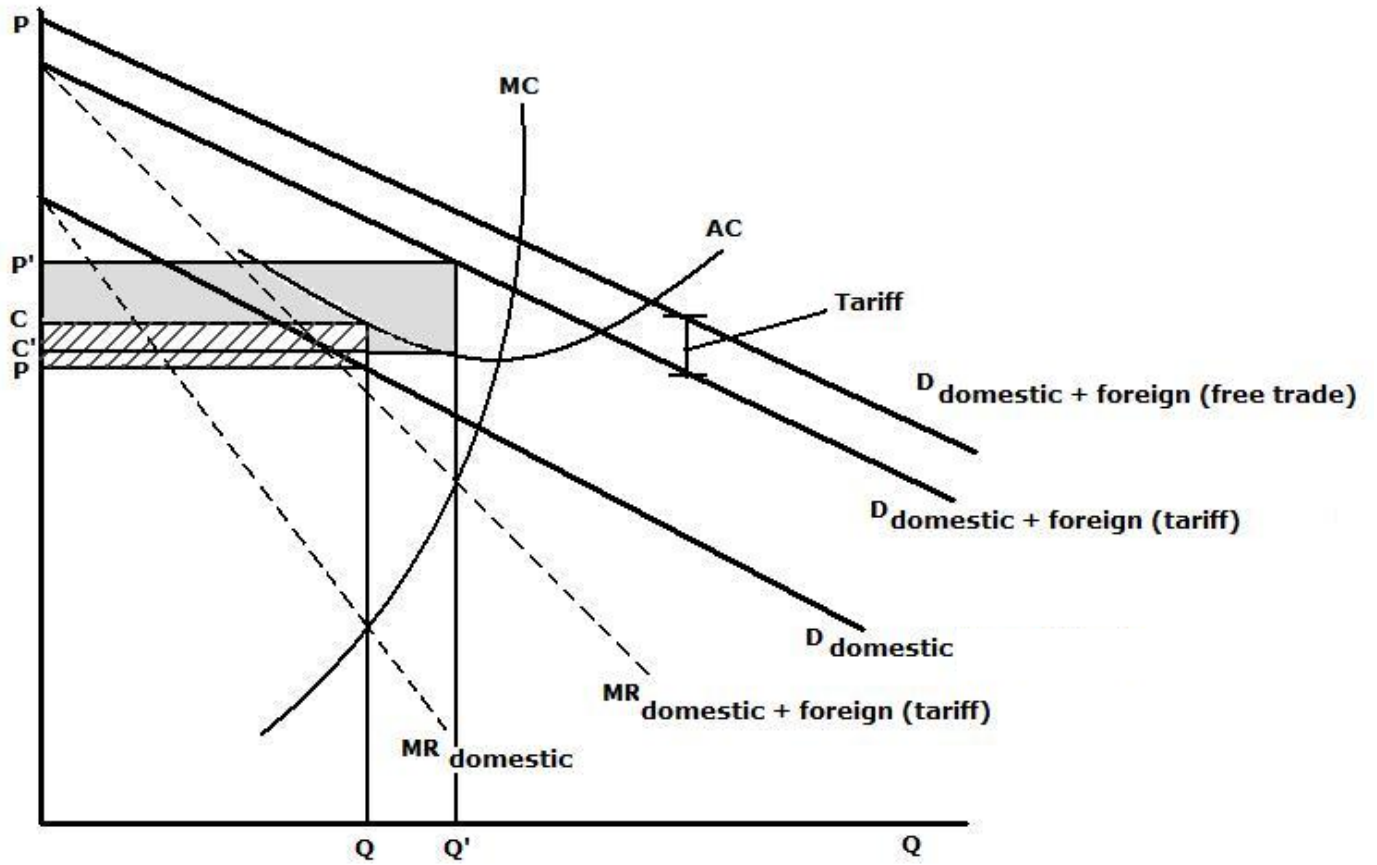


In order to ship into some foreign markets a tariff must be paid. A tariff allows unlimited access for an exporter into an importer's market at a competitive supply price plus the amount of the tariff (Gaisford et al, 2001). Figure 3.8 shows what happens when there is a tariff in the importing country. Again, facing only the domestic demand the firm incurs a loss, the shaded box, ; $(C - P) \times Q$. Then the demand curve is shifted outward to $D_{\text{domestic} + \text{foreign}}$ (free trade). However, as a result of the tariff the full potential of the additional foreign demand cannot be realized by the firm. In effect the cost of the tariff must be subtracted from the free trade demand curve and the demand curve is shifted back downward. The demand is shifted from $D_{\text{domestic} + \text{foreign}}$ (free trade) to $D_{\text{domestic} + \text{foreign}}$ (tariff). At this point the firm is now producing at Q' instead of Q , and is receiving a higher price of P' as opposed to P and faces C' as opposed to C . Thus, it is now making a profit. Therefore, not unlike the first two cases, it is still more profitable for the firm to incur the additional costs that may accompany the tariff in an effort to increase demand.

All of these cases may not be independent of one another. It may be possible for a combination of case II and case III occurring or of case I and III taking place. Therefore, from these graphs, it is evident that the addition of foreign markets can take a firm who is experiencing a loss and turn the firm around into a profitable venture. If the costs of supplying the foreign market can be reduced, say by obtaining a new tariff line with a lower tariff, profits will increase.

3.6 Case III – Demand Decreasing Import Restrictions

Figure 3.8: Case III – Demand Decreasing Import Restriction



In some cases the costs of trade barriers are too large to justify exporting into a foreign market. Figure 3.9 depicts the upward shift of the AC curve from AC to AC', this shift is a consequence of exporting into a foreign market and incurring an importer's regulatory cost. Initially the demand curve is D_{domestic} , once the firm decides to expand into the foreign market, the demand curve shifts outward from D_{domestic} to $D_{\text{domestic} + \text{foreign}}$; this shift results in an increase in the demand. However in this situation the importer's regulatory cost has pushed the AC curve high enough so that it is no longer feasible for the firm to export to the foreign country, although the Q has increased from Q to Q'. Box ABDE represents the initial loss to the firm when the demand is constrained to the domestic demand. The shaded box depicts the ending loss that the firm faces as a result of entering the foreign market but facing increased regulatory costs. Therefore, although the firm has the additional demand from the foreign market, the firm will still not make a profit, as the increased costs due to the importer's regulatory costs are greater than the extra revenues earned from the increased demand. If the regulatory costs could be reduced, there is the potential for profits.

3.7 The Addition of a Foreign Market without Additional Profits

Figure 3.9: Case I – No Profit

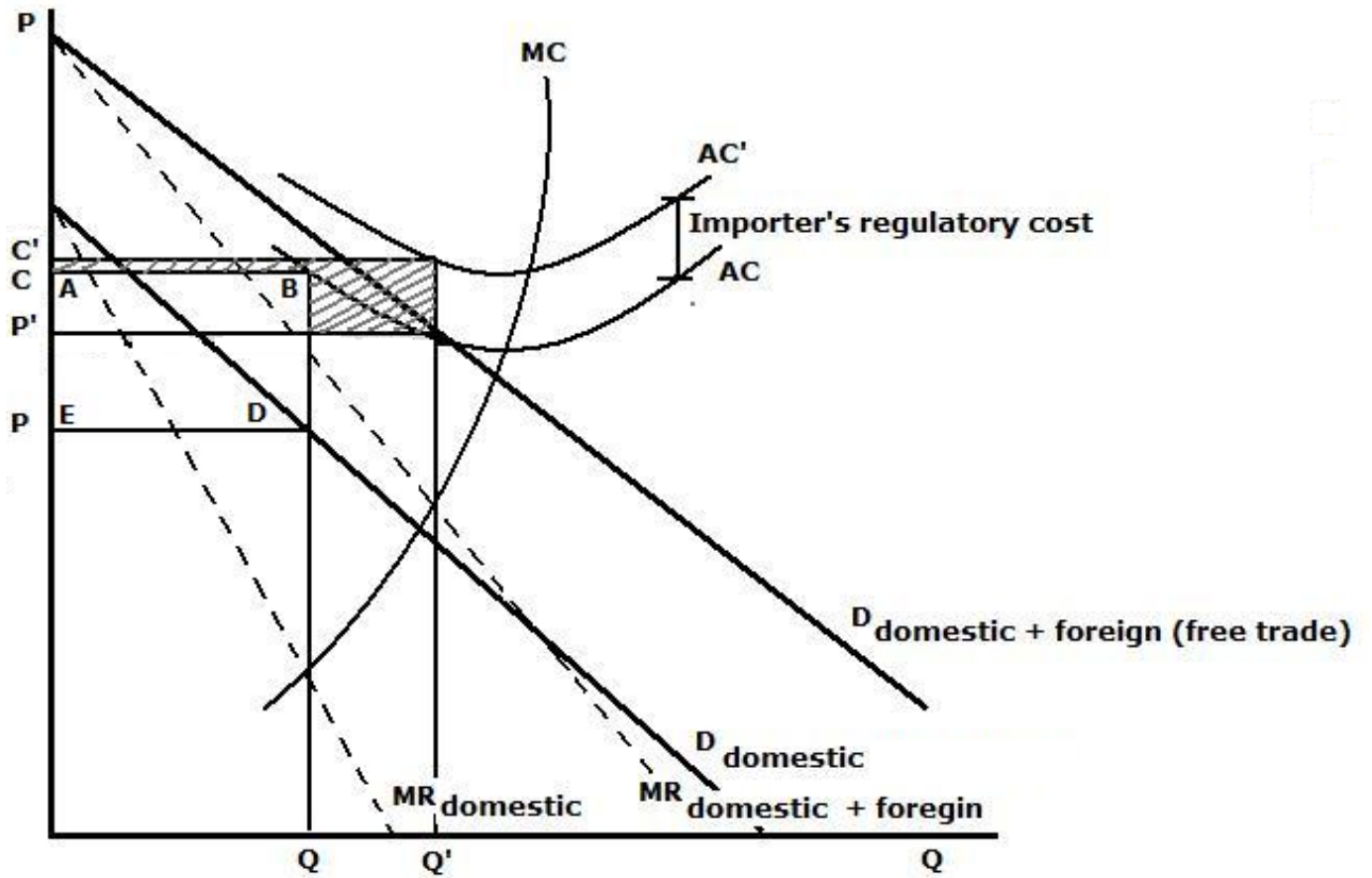




Figure 3.10 again depicts how even with the increased demand that is provided by exporting into a foreign market, a firm still may not be able to realize a profit. As in Figure 3.7, the MC curve is shifted inward which also shifts the AC curve up. This shift represents the added cost associated with the importer's regulatory costs or the costs associated with such things as grading or standards that must be done prior to exporting. Box ABDE represents the initial loss to the firm prior to exporting. The shaded box () illustrates the loss to the firm after exporting into a foreign market and after the MC and AC curves shift. With the addition of the foreign market, Q is increased from Q to Q''. Given the size of the regulatory costs and the firm is still incurring a loss. This illustrates that under these conditions it may be feasible for the firm to engage in exporting their products, as long as the regulatory costs incurred may be lowered or eliminated, as the firm would make a profit prior to the MC and AC curve shifts. These profits $(P' - C') \times Q$ are illustrated by the grey box ().

Figure 3.10: Case II – No Profit

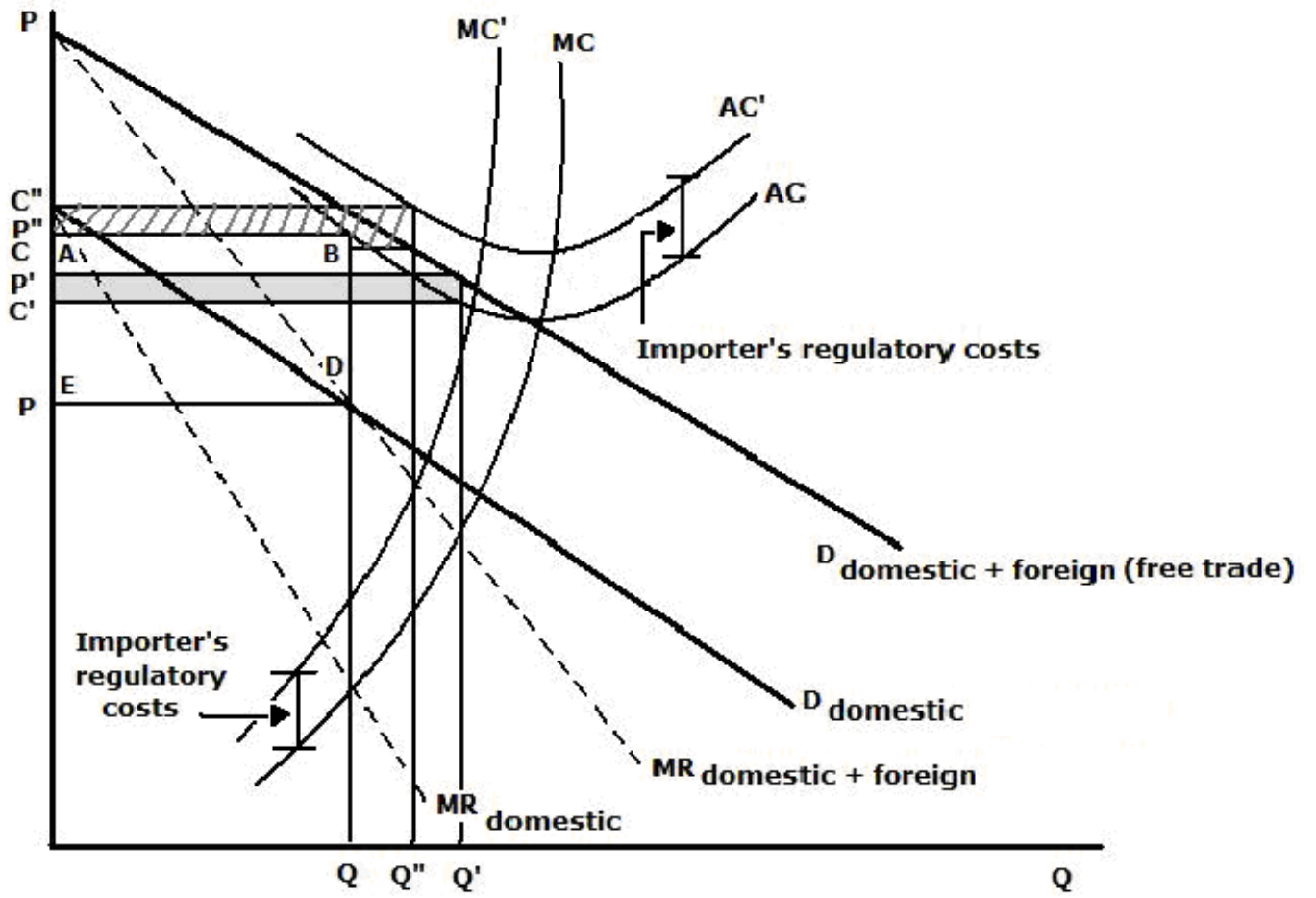




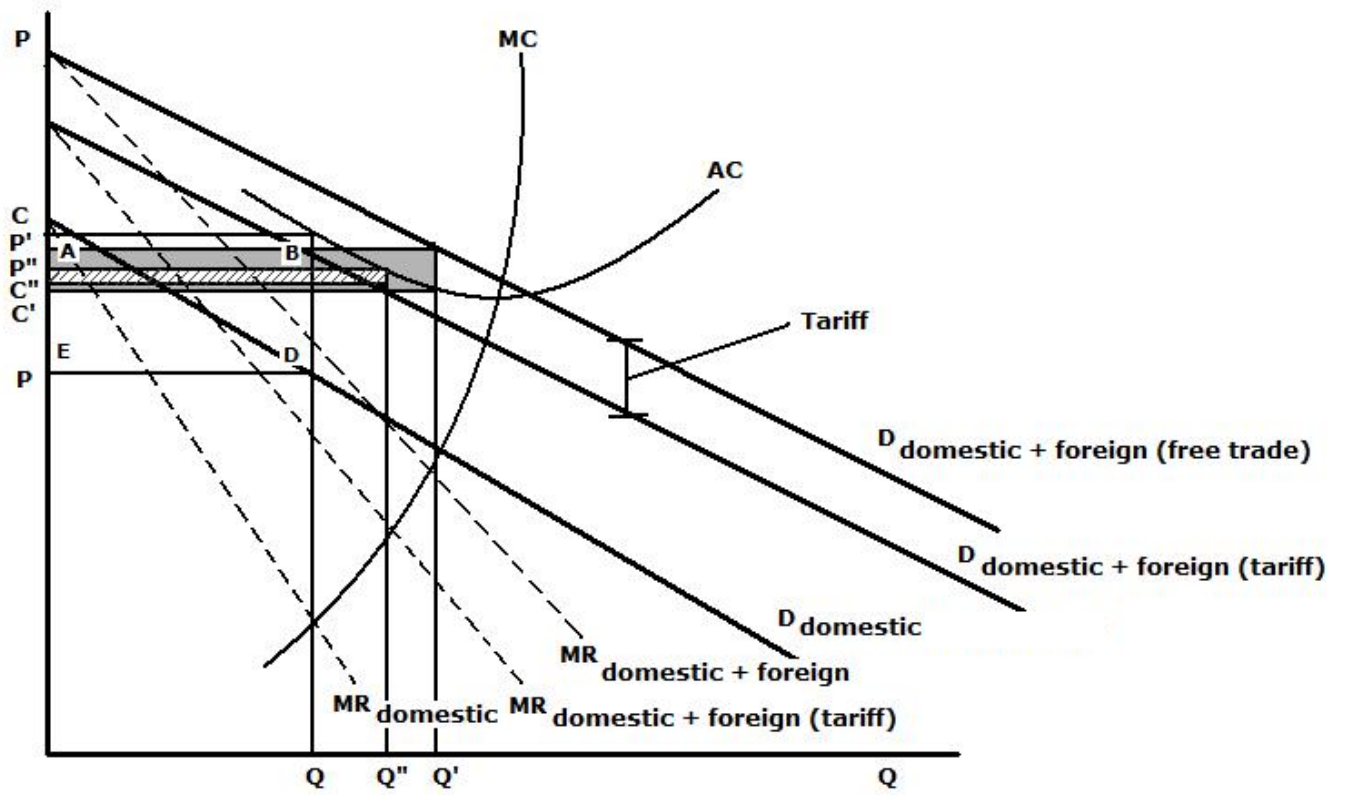
Figure 3.11 illustrates a domestic firm exporting into a market that has a tariff in place for that firm's particular product. In figure 3.11 the demand curve starts at D_{domestic} and is first shifted outward to $D_{\text{domestic}} + \text{foreign}$ (free trade) and is then readjusted to $D_{\text{domestic}} + \text{foreign}$ (tariff) as a result of the importing country's tariff. In this case, although Q is increased to Q'' and P has increased to P'' in the end the firm still does not make a profit. This result, however, may not be the case if the importing country's tariff was lowered. Before the D_{domestic} curve shifts outward to include the additional demand gained from exporting, the firm does not make a profit. This is shown by the box ABDE. Yet, if the tariff was lowered, the firm could make a profit. This is represented by the grey box (). This occurs when P is at P' and Q is at Q' . This profit however has not occurred and as a result of the tariff and the firm is operating at a loss, which is illustrated by the shaded box, (). The cost of the tariff is greater than the extra revenue generated from the increase in demand and, therefore, it is not feasible for the firm to export into this foreign market with tariffs in place.

Figure 3.11: Case III – No Profit



3.8 Summary

The theoretical framework in this chapter proves that in some situations it can be very beneficial to a firm to export into a foreign market. This may be particularly the case with entrepreneurial firms who have difficulty generating high sales numbers in the domestic market. Once the decision has been made to export there are a number of contingencies that must be considered prior to export. In chapter 4 a checklist is developed to aid entrepreneurial businesses in overcoming these challenges associated with entering the foreign market.

Chapter 4.0 Checklist for Exports of a New Product

Table 4.1, illustrates the checklist that entrepreneurs can use when thinking about exporting a new product into a foreign country. What separates this checklist from other export guides is the broad scope of the checklist. It is not specific to only type of barrier. For example, it includes such things as tariffs, labelling, domestic agents and so on. Other guides are much more specific and tend to include market and financial planning. This checklist assumes the firm has already done the research to determine whether or not there is a market for their product in the foreign country.

The horizontal rows on the left hand side pertain to the new product or new product attributes. The columns represent an array of potential conditions that firms need to be aware of prior to exporting. These include Sanitary and Phyto-Sanitary (SPS) barriers to trade, Technical Barriers to Trade (TBT) and other general barriers such as standards or the need for domestic agents. Not every column relates to each product or product attribute. The checkmarks indicate whether or not the column is relevant to that specific row; say for example, a firm has introduced an existing product with a new feature. That firm can examine the rows until they find the 'change in products characteristic' row and then follow that along through the columns. The checklist rows and columns were created by compounding information from various sources and compiling a checklist that encompasses all the different contingencies. Information was obtained from a variety of different websites, these include; Foreign affairs and International Trade Canada, World Trade Organization, United States Department of Agriculture – Food Safety and Inspection Service, United States Department of Homeland

Security, FDA Agents INC.. Consultation was done with export businesses and firms who are already exporting. In addition to that research was done on firms that had difficulty exporting to determine where they encountered problems. Then those events were compared and added to the checklist in an attempt to avoid those mistakes happening again. Once a list of barriers was determined, more brain storming was done in order to try and make certain that there were not regulations or legislation that had been overlooked.

Figure 4.1 Checklist for Exports of a New Product

	SPS Barriers to Trade							
	No appropriate tariff		Quantitive restrictions on imports	Boarder inspections for food, animal and plant safety	Inspection costs	Testing	Tolerences	Labelling requirements
Is there a Tariff? How big is it?	Determine what tariff will apply	Creation of a new tariff						
Brand new products								
Change in products characteristics								
Chane in inputs to a product								
Innovations that contain intellectual property								
Innovations that alter consumer risk								
Innovations that alter animal disease profiles								
Innovations that alter plant disease profiles								
Innovations that require after sales service								
Innovations that require consumer education/information								

	TBT Barriers to Trade						
	Hazards	legal requirements for due dilligence	Labelling for ingredients	language of labelling	Specific labelling requirements	label approval process	allowable claims
Brand new products							
Change in products characteristics							
Chane in inputs to a product							
Innovations that contain intellectual property							
Innovations that alter consumer risk							
Innovations that alter animal disease profiles							
Innovations that alter plant disease profiles							
Innovations that require after sales service							
Innovations that require consumer education/information							

	Other Barriers to Trade						
	Movement of people for after sales service	is intellectual property enforced?	Obtaining protection for intellectual property	Domestic standards	Domestic packaging regulations	Need for a domestic agent	Product caterization
Brand new products							
Change in products characteristics							
Chane in inputs to a product							
Innovations that contain intellectual property							
Innovations that alter consumer risk							
Innovations that alter animal disease profiles							
Innovations that alter plant disease profiles							
Innovations that require after sales service							
Innovations that require consumer education/information							

4.1 Horizontal Rows

The method in determining the various categories in the horizontal rows was similar to that of determining the vertical columns. Research and consultation was done with businessmen and professors in order to determine the different aspects that constitute a new product.

4.1.1 Totally New Product

These are products which are totally new in the market, (no close substitutes or not before seen in the market) and are the ones that may face the most difficult challenges. These products could come from a start-up firm or an already established firm.

4.1.2 Change in product characteristics

A change in product characteristics means that the core product may still be the same; it just may have additional features that alter or enhance the products performance. An example of this could be a GPS system on a tractor. The tractor is still a tractor and can still perform all the same tasks as before, now it has the ability to perform these tasks more efficiently due to the addition of the GPS system.

4.1.3 Change in inputs to a product

A change in the inputs of a product may create additional obstacles in trying to export the product. Perhaps the product uses some material that is not permitted in the importing country. Change in inputs may also pose some labelling issues. Firms need to be aware of labelling requirements as unlabelled or incorrectly labelled products can be refused at the border. If the labelling requirements are understood new labels will have be ordered which

may take time to design, receive official approval or to integrate into production processes; and thus international shipments may be delayed.

4.1.4 Innovations that contain intellectual property

If there is a patent on the product that the entrepreneur is trying to export, that patent may not be recognized or automatically recognized in foreign countries. Some countries do not have intellectual property rights or protection and other countries that have legislated intellectual property rights choose not to enforce them. Even if foreign intellectual property rights are well protected, the firm wishing to export to the market may have to go through a process to have their intellectual property recognized.

4.1.5 Innovations that Alter Consumer Risk

The introduction of some new products can alter the risk to the consumer. Sometimes this alteration in risk can be detrimental to the consumer's health. Take farmed salmon for example, the levels of organochlorine contaminants are significantly higher in farmed salmon than that of salmon found in the wild (Hites et al., 2004). In this situation, the innovator selling commercially farmed salmon poses more of a risk to consumers than salmon grown in the wild. Importer's risk standards must be understood by exporters and risk assessments may have to be undertaken. Importers may require risk mitigation or the provision of insurance.

4.1.6 Innovations that alter environmental risk

Some innovations alter environmental risk. An example of this would be the disposal of hazardous household cleaners. When a consumer pours the hazardous liquid down the drain, that liquid can potentially contaminate all bodies of water it comes into contact with.

Consequently, an innovation in household cleaners may potentially contribute to the contamination of the environment. Such products may be banned in some import markets. Importing countries may have tolerance limits, and proof that the hazardous materials does not exceed those limits and that the business has complied with such legislation may need to be provided. Extensive testing and documentation may have to be provided as well. For example, even where genetically modified products can be imported, extensive testing will be required.

4.1.7 Innovations that alter animal disease profiles

These innovations can include products that, for example, disinfect or prevent the spread of animal disease. Take the acid wash that is sometimes used on the carcasses of some animals. When deciding which acid wash to use, one must be conscious of the different import policies of foreign countries as some countries ban the use of some acid washes. For example, a business may want to ship meat into the United States but if the carcasses are washed with this particular acid wash, that product will not be permitted into the US.

4.1.8 Innovations that alter plant disease profiles

Although, the majority of the focus in plant breeding thus far has been on herbicides, biotechnology has enabled the breeding of plants that are resistant to fungi, bacteria or nematodes (Staub and Sozzi 1984). When these new plant varieties are created, potential new strains of diseases may be created as well. Importing countries may wish to reduce the spread of these new diseases by implementing stringent testing policies and other protocols prior to import. This may result in more costs to the entrepreneur, or in the worst case scenario, being

unable to export into that country. There may also be a considerable lag before new standards are developed in the importing country.

4.1.9 Innovations that require after sales service

In some cases, products require after sales services to be preformed. This may include such things as assembly, maintenance or a technical service. Problems may arise if the sale is made in a foreign country and the after sales service staff can not physically go to where after-sales service is required. In this situation, the business may have to hire and train staff in that location in order to fulfill post sale obligations. Such difficulties could add greatly to the true exporting cost.

4.1.10 Innovations that Requires consumer's education/information

Some countries have high standards and are more stringent than others with regards to claims being made on the packaging or labels. In countries that are less stringent, the responsibility has been passed onto the customer to decide whether or not the claims are true. In Canada, through its definitions of a food or drug, the Canadian Food and Drugs Act and Regulations restrict health claims for foods, food ingredients and natural health products or NHPs (Fitzpatrick, 2004). Health Canada, however, realized the constraints of these regulations and has started to develop regulations that are allowed for health claims for functional foods and NHPs. However, at the same time in the United States, ten generic health claims had been approved under the National Labelling and Education Act or NLEA (Fitzpatrick, 2004). Under the NLEA, once a claim is made, any food that meets the specified conditions for compensation and labelling can carry the claim without further assessment. In 2000, after scientists in Canada

reviewed the NLEA claims five of the ten NLEA claims were considered valid in a Canadian context. These claims included such things as; calcium and osteoporosis, trans fat and cholesterol and coronary artery disease and sodium and hypertension. However Canadian scientists failed to approve claims such as dietary fat and cancer and soluble fibre and risk of coronary artery disease (Fitzpatrick, 2004). It is discrepancies like these that can make the decision for the consumer harder. It then becomes up to the consumer to decipher which products they deem healthy and which are not. Firms also need to be aware of each country's labelling requirements with respect to health claims. If exporting firms' labels do not conform with the importing country's health claims, the product may be denied access at the border. Further, a health claim that has been approved in the firm's domestic market, and is a crucial element in the successful marketing of the product domestically, may simply not be allowed in the potential importing country.

4.2 Vertical Columns

The vertical columns can be broken down into three different categories, Sanitary and Phyto-Sanitary (SPS), Technical Barriers to Trade (TBT) and an Other category which contains assorted other potential constraints to market access that must be considered. Technical barriers to trade may play an even larger role than tariffs in preventing trade. The SPS Agreement is an international agreement that stipulates rules regarding the use of human, animal and plant health standards as a border management instrument. They also provide guidelines for government behaviour and incentives to adopt international standards. (Bureau et al., 1998). Countries sometimes use SPS measures as a trade barrier. The SPS can also be further broken down into three areas where it can impede trade. The first, an import ban can be implemented to prohibit trade. Secondly, by introducing regulations that discriminate across potential suppliers, trade can be diverted from one trading partner to another. Lastly, by raising barriers for all potential suppliers, overall trade flows may be reduced (Henson and Loader, 2001).

An example of an import ban prohibiting trade as a result of introducing regulations that discriminate across potential suppliers is Japan's SPS barrier with respect to U.S. apple exports in the mid 1990s. In the 1994/95 growing season, U.S. exports of Red and Golden Delicious apples to Japan were 8,508 tons (Calvin and Krissoff, 1998). Japan, however, had costly phytosanitary requirements that led to a decrease in profit from exporting apples to Japan and the amount of apple exports fell dramatically in the three following years. Japan stated that until the tests for quarantine treatment for the specific variety had been completed, Japan would ban the import of that variety, even if the tests for other varieties have been successful.

The U.S. stated that each variety should not have to be tested due to the fact that the quarantine treatment to kill an insect on one variety of apple is equivalent to another variety of apple (Calvin and Krissoff, 1998). Finally, in 1997 after the U.S. and Japan failed to reach an agreement the WTO dispute panel was asked to resolve the issue. The WTO ruled that Japan's variety testing violated its WTO obligations. While it was in place, however, exports entailed extra costs that the exporting firms had to bear.

4.2.1 SPS Barriers to Trade

Sanitary and Phytosanitary barriers to trade are when countries use human, plant and animal health standards as a measure to control border management (Hooker and Caswell, 1999).

4.2.1.1 Is there a tariff, and how big is it?

Governments use tariffs as a means of raising revenue and barriers to trade through taxes on imported goods (Kerr and Perkins, 2003). Before the entrepreneur exports his/her product it is pivotal to verify whether or not there is a tariff for the product. In some cases the tariffs for some products in certain importing countries are so large that it makes it not worthwhile to export. For example, Uganda has a 75% tariff on Pakistani rice imports, effectively eliminating rice imports from Pakistan.

4.2.1.2 No Appropriate Tariff

- Determine what tariff will apply and whether it is appropriate.
 - o When a new product is introduced it is likely that there is no tariff line for it. In this case, the new product may be placed, or lumped in with, other similar products. The Harmonized Commodity Description and Coding System, or

Harmonized System, is used to classify almost all products entering world trade. Although the Harmonized System itself is not used for tariffs, more than 200 countries use the system as a basis for their Customs tariffs. It uses a six digit code arranged in a logical structure to achieve uniform classification (WCO, 2010). As there is a connection between the classification code and the tariffs faced, classification becomes not only extremely important but controversial as well (Kerr and Loppacher 2005). For many products most exporters and importers are not concerned with where a product is classified as most classifications are reasonably similar and therefore have the same or very similar tariffs (Kerr and Loppacher 2005). However, the classification for some products becomes very important for exporters. Take bison for example, in the EU there is no tariff line for bison, so it is classified as beef. The EU's tariff for beef ranges between 40 and 50 percent, depending of the particular beef product (Hobbs et al., 2000). This effectively prohibits the export of bison into the EU, even though there is no bison industry to protect.

- creation of a new tariff
 - o In some cases, if there is no tariff line and the product does not easily fit under any other categories, a new tariff line can be created. This process may take an extended period of time, it can often take in excess of seven years to update the Harmonized System and it is a very complex process

(Kerr and Loppacher, 2005). First the national government reviews the request, then the government presents a proposal to the World Customs Organization's Review Committee. Once an agreement is met, an amendment must be drafted. This amendment process is a two and a half year process (Kerr and Loppacher, 2005). Firms should not base business decisions on the assumption that the introduction of a new tariff or classification is a relatively speedy and uncomplicated process or that it is a risk free process.

4.2.1.3 Quantitative restrictions/Non tariff barriers on imports (import quotas)

Quantitative restrictions are non-tariff barriers, but are not in the traditional form of a tariff (Hooker and Caswell, 1999). As tariff quotas do not totally limit import quantities, they are not considered quantitative restrictions (Skully, 2001). Tariff rate quotas, (TRQs), (sometimes called tariff quotas), may be less restrictive than a standard quota because they do not totally restrict quantities. With respect to tariff rate quotas, there is both an in-quota and over quota tariff. If the demand is not met at the in-quota level, then exporters may still export, but have to pay a higher tariff. Therefore, exporters benefit from having TRQs because if the demand is there, they are still able to export. There is one thing with respect to TRQ's that exporter's need to be aware of; and that is the way that the TRQ's quantities are allocated. These administrative methods include (listed from highest to lowest); state trade, historical, producer group, first come first served, license on demand, auction and applied tariffs (Skully, 2001). State trade and producer group means that the right to import in-quota is granted entirely or primarily to an

organization representing domestic producers of the product or a state trading organization. The historical method occurs when the right to import in-quota tariff is allocated in proportion to import market shares in a base period. With the first come, first serve method, the first Q units of imports to clear customs are charged the in-quota tariff and all subsequent imports are charged the over-quota tariff. Since licenses are required to import at the in-quota tariff, the licence on demand method can act like the first come, first served method if the demand for licences is less than the quota. In the situation that license demand exceeds Q, then the import volume requested is reduced proportionally among all applicants. The auction method of TRQ administration occurs when the right to import at the in-quota tariff is auctioned. The applied tariff method means that unlimited imports are allowed at or below the in-quota tariff rate, meaning that the quota is not enforced (Skully, 2001). Methods such as producer groups and state trading organizations have higher rates of quota fill than other administrative methods and as a result tend to draw more scrutiny from potential exporters and their respective governments. As a result of these many administrative methods, it means that although there is a TRQ, the exporting firm may not be able to acquire the necessary quota allocation to enable imports. The exporter must find out how to obtain a portion of the quota and then to go through the process of obtaining it.

4.2.1.4 Border Inspections for food/animal/plant safety (documentation)

Border inspections can contribute significantly to transaction costs. Border inspections can be anything from vehicle, consignment or documentation inspection. Inspection costs also travel up the vertical supply chain. This occurs in the form of acquiring trade documents (Button and

Hensher, 2001). Border inspections can take a long time to conduct and as a result, create delays in shipping which also contribute to the increase in transportation costs.

4.2.1.5 Inspection Costs

In developed countries, inspection capacities have been enhanced through rapid technological changes which allow these countries to adopt more progressive sanitary and phytosanitary standards (Otsuki et al., 2001). More progressive sanitary and phytosanitary standards can mean stricter regulations at borders, for example. It could be that the importing country requires that there be inspection of the product before it is admitted into the country. If the product does not meet the specified standards, it will not be allowed into the country and sent back at the exporter's expense. The inspections are often conducted on a cost-recovery basis. This means the exporter may pay high fees per inspection. For new products, appropriate inspection systems may have to be devised. As a result, imports may be banned until the inspection regime can be put in place.

4.2.1.6 Labelling and Verification Requirements

Most countries are becoming increasingly stringent with respect to labelling. Each country has different specific labelling requirements, but most demand that all the basic information pertaining to the product itself be put on the packaging. For instance, the EU does not allow genetically modified organisms, or GMO products to be imported (Skogstad, 2003). Therefore, they require exporters to meet standards of testing, tolerances and segregation strategies in order to market non-GMO grains.

4.2.1.7 Testing

Testing is done when countries have stringent importing regulations regarding certain products. Again, look at the EU and GMO products; due to the EU's strict policies with respect to products that may contain GMOs, many different types and levels of testing have been implemented. These tests are essential in detecting GMO content in non GMO content shipments (Wilson et al., 2007). Testing can occur at any point in the marketing system and usually starts at the country elevator for grain in order to detect the presence of any GMO grain (Johnson and Lin, 2005). Testing can cause delays and exporters often have to pay for them on a cost-recovery basis. For new products, an appropriate testing regime may have to be devised or the tests developed. The ability to export may be delayed for a considerable period.

4.2.1.8 Tolerances

Tolerances, along with sample size, number of events to detect, as well as time constraints all contribute to the selection of an appropriate testing method and potentially high levels of testing costs (Wilson et al., 2007). A country's tolerance toward a product may not just include the product itself but can also deal with the products' use of chemicals (pesticides/insecticides), ingredients in the case of food products or even the way in which it is manufactured. Exporting firms need to be aware of the varying tolerances among countries. Countries whose tolerances are very low will require more testing on products prior to import. These tests will add additional costs to the transaction, and if they are not met, may result in the product being disallowed into the country. In the case of a new product, tolerances may have to be established, which could inhibit exports over the development period.

4.2.2 TBT - Technical Barriers to Trade:

Technical barriers to trade, according to the World Trade Organization, refer to technical regulations and product standards. These may vary from country to country. The purpose of TBT agreement is to try to make certain that standards, regulations, certification and testing procedures do not create unnecessary obstacles (World Trade Organization 2011).

4.2.2.1 Hazards

Allergies can threaten an individual's health so products must be properly labelled. Take one of the most common examples; if an individual is allergic to peanuts and the product contains trace amounts of peanuts but does not clearly state so and the person ingests the product the result could be as serious as death. Thus, while imports may be allowed, countries have hazard thresholds and labelling requirements that must be understood by exporters. In the case of new products, it may have to be determined if a hazard exists. If a hazard is found to exist, appropriate labelling requirements will also have to be devised. These processes will take time and importing governments may require the provision of costly information.

4.2.2.2 Legal requirements for due diligence

Due diligence refers to the care that a person takes in order to avoid harm being done to other persons or their property. This can then be applied to such things as labelling and food quality. Reasonable care has to be taken to inform the public of such things as ingredients to ensure customer health and safety. As well, there is the need to control risks, such as Salmonella and E. Coli O157:H7 in order to restore consumer's peace of mind. Product safety is controlled through both direct regulation and product liability. Direct regulation is *ex ante* and can take the form of inspections, product testing and standards. Product liability is *ex post* regulation. It

penalizes firms who produce products of insufficient quality through damage awards to those harmed (Henson and Caswell, 1999).

With respect to the use of product and tort liability there are important differences, for example, between the U.S. and the UK. In the UK, the product liability system for food products has hinged on the concept of due diligence (Henson and Caswell, 1999). This due diligence provides a defence against liability. In the U.S., in contrast, product liability plays a less important role than a direct incentive for quality assurance. A reasonable standard of care (the U.S.'s rough equivalent to due diligence) may or may not serve as a defence for product liability cases (Henson and Caswell, 1999). Exporters must be aware and meet importing country due diligence requirements prior to production and export of their product if they wish to avoid liability cases and penalties.

4.2.2.3 Language of Labelling

In order to export a product into a foreign country, labels may have to be translated to the requirements of that particular country. For example, if an entrepreneur wishes to export to Canada, they must have both English and French on the label.

4.2.2.4 Labelling Requirements

Labelling requirements vary from country to country, and the entrepreneur must be knowledgeable about the specific requirements for each country. In Canada, according to the Canadian Food Inspection Agency (CFIA), the general labelling requirements state that all the information found on the labels must be true, as well as not deceptive or misleading. There are bilingual requirements; the label must contain the net quantity, name and address, list of

ingredients and a nutrition facts table (Canadian Food Inspection Agency, 2010). Each country will be different.

Many countries are even more specific with respect to labelling. For example, in the EU, the directive when dealing with the labelling on cigarette packages, requires a label stating “Tobacco seriously damages health” in a constant font on the front of the package. On the back of the package, countries can then choose from an additional 15 warnings (Aftab et al., 1999) but they must have at least one. New product exports may have to await the development of labelling requirements suitable for their products.

4.2.2.5 Label Approval Process

One of the things that entrepreneurs may fail to consider is the time that it takes to get all the necessary approvals before they can begin selling their product in a foreign market. For example, say that the labelling on the product was not up to standard and therefore the business had to order new labels before the product could be sold. It can take up to two months depending on the label to get labels made, and that creates a problem because the entrepreneur has to wait an additional two months without generating any revenue and still incur costs. If labels must be officially approved, delays may be considerably longer.

4.2.2.6 Allowable claims

Different countries allow different claims to be made for different products. It is important to know what the importing country will allow on the label. CFIA makes it mandatory for all labels to contain only information that is true. This may not be the case in other countries, or it may not be enforced to the degree that it is in Canada. There are also restrictions on what health

claims can be made. With respect to food, according to Health Canada, a health claim is “any representation in labelling and advertising that states, suggests or implies that a relationship exists between the consumption of foods or food constituents and health” (Health Canada, 2007b). In Canada, regulations regarding foods, drugs, and natural health products are the responsibility of the federal government and fall under the Foods and Drugs Act (Farrell et al., 2009).

4.2.3 Other Barriers:

The Other Barriers category is a general category as many of the column headings would not fit under any other heading.

4.2.3.1 Movement of People for After Sales Service

Some sales require a service to be provided post sale. This service could be assembly of the product or services or maintenance and repair of the product. Problems may be incurred if the technical staff are unable to, for example, cross a border to perform such after sales services. In the event that technical staff are unable to perform the post sale service additional costs may be incurred. For example, an additional set of staff may have to be hired in that geographic area in order to fulfill the post sale obligations.

4.2.3.2 Is the Intellectual Property Enforced

There is evidence that suggests that a significant deterrent to economic growth is a lack intellectual property protection (Gould and Gruben, 1996). Although intellectual property protection has ties to economics, it can also be embedded in culture. Nations whose focus is more on collective rights may be less prone to protect intellectual property than others, such as

Western nations who are more receptive to individual rights (Marron and Steele, 2000). As a result, developing countries tend to be more lax on the enforcement of intellectual property rights compared to developed countries. For entrepreneurs trying to enter a foreign market, there may be little to no protection for their intellectual property. When there is little to no protection on intellectual property, it provides the opportunity for 'copycats' to steal the entrepreneur's idea without any repercussions. For new products, there may be delays in obtaining protection.

4.2.3.3 Obtaining Protection for Intellectual Property

Perhaps the most common form of intellectual property protection is patents. A patent is a document that entitles the creator of an invention the sole right to that invention.

Enforcement of patents are usually done through civil lawsuits. However, some countries deem some patents invalid based on their domestic patent legislation in their countries. It also may be the case that the country in which you are exporting has no desire to protect intellectual property, if this situation occurs, then it may be very difficult to ensure that intellectual property is respected. The lack of intellectual property rights is a significant problem because intellectual property rights are of primary importance to those involved in innovation.

4.2.3.4 Domestic Standards

Different countries have different standards or norms. Some things that are acceptable in one country may not be in another. Take labour laws or worker rights, for example. These can also include such things as, food production processes with regards to animal welfare. In the EU there is the Directive requiring a minimal animal welfare standard for all farm animals that are

reared for food production (Blandford and Fulponi, 1999). If the entrepreneur is unaware of these production standards and attempts to export into these countries their products could be denied entry, which will result in additional incurred costs. For new products, new standards may have to be devised and argued.

4.2.3.5 Domestic Packaging Regulations

Some countries have domestic packaging regulations. In Asia, since 2008, more than 16 new laws have been passed in regards to packaged material; this is an attempt to lessen 'excessive packaging' and to be more environmentally friendly. For example, laws restricting the distribution of plastic retail shopping bags have been put in place. However, perhaps one of the most current issues with regards to packaging may be the green movement. This has been apparent in German packaging laws for over a decade. In the mid 1990s, Germany took an active initiative to reduce the amount of packaging for products in an effort to reduce package waste. The result of this initiative was the implementation of new regulations and legislation regarding packaging. First, packaging can only be manufactured from environmentally friendly materials. Second, packaging is to be restricted in weight and volume to the amount that is actually required to protect the product (Livingstone and Sparks, 1994). Germany has also implemented the 'Green Dot'. The Green Dot is placed on products whose manufactures are willing to take back packaging and have it recycled or reused. It is suggested that firms trying to export into Germany will have difficulty selling their product if it does not display the Green Dot. With respect to the legislation, the law refers just to Germany and German products,

however this is not to say that importers and distributors may not accept products from suppliers who do not comply with the new legislation (Livingston and Sparks, 1994).

4.2.3.6 Need for a Domestic Agent

It has been observed that independent middlemen or agents, handle the majority of world trade. The benefits of these domestic agents or middlemen include, strong local market knowledge, ability to provide sophisticated marketing services as well as crucial contacts with foreign buyers (Clasen, 1991). Furthermore, Root (1994) states that agents can be viewed as an alternative institutional arrangements or governance modes for conducting the marketing-distribution functions that are necessary for export. A study done by Bello and Lohtia (1995) to determine the efficiency based aspects of export channel design found that the nature of specific assets, production cost economies and the market diversity all have an impact on a firm's decision whether or not to enlist a foreign-based agent (Bello and Lohita, 1995). In some countries it is mandatory that the exporting country have a domestic agent in the importing country. Usually in these cases, the importing country will only deal through domestic agents. This adds additional costs to the entrepreneur trying to export, as they will have little to no choice but to hire an agent.

This is the case in the United States. After September 11, 2001, the United States implemented many anti-terrorist measures to increase homeland security. As a result, the United States Food and Drug Administration or FDA has made it mandatory for every foreign entity that registers with the FDA to employ a domestic agent (Federal Register, 2010). It is the understanding of the FDA that these domestic agents will assist foreign entities and act as a

communication liaison (Kerr, 2004). However it is unclear how these domestic agents will actually reduce the threat of terrorism.

Nevertheless, these agents may pose more of an irritation than anything to foreign firms, without presenting much of a benefit, these agents only contribute to the overall cost of international transactions.

4.2.3.7 Product Categorization

Product categorization is very important. In order to make sure that the product is evaluated by the appropriate standards that are applicable to its features and risk level, proper product categorization is essential (Farrell et al., 2009). Health Canada states that product categorization “is the process that allows regulators to decide which legislative and regulatory group or class, with its associated authorities and requirements, applies to a given product” (Health Canada, 2007a)

4.3 Summary

By following this checklist, a business will be able to export with low risk. By eliminating oversights, it can speed up the process of exporting as well as potentially lowering costs that may arise due to extra time needed for stalled products at the border. In Chapters 5 and 6 the checklist will be applied to two case studies in order to test its applicability and efficacy.

Chapter 5.0 Canadian Prairie Bison Case Study

5.1 Background

In 2001 the Bison Feeder Cooperative of Saskatchewan was formed. Four years later, in 2005, the marketing group Canadian Prairie Bison was formed. Canadian Prairie Bison evolved from the Bison Feeder Cooperative of Saskatchewan, primarily in an effort to have a better fitting name that provided a more accurate representation of the group's producers. As Canadian Prairie Bison has members from British Columbia, Alberta, Saskatchewan, Manitoba and Ontario, the name Bison Feeder Cooperative of Saskatchewan was too restrictive.

Bison being native to North America have advantages over some of the other species that are commercially produced but have origins elsewhere. The bison is physically adapted to harsh Canadian climates, be it the frigid cold winters, dry dusty summers or sweltering heat waves. Bison have thick furry hides in the winter which shed down to a thin sleek coat for the summer heat. They are a much larger animal than beef cattle and are considerably more agile and quick. Furthermore, the bison has a better adapted digestive system than that of cattle. This enables bison to graze through almost anything Canadian weather presents (Stats Canada, 2009).

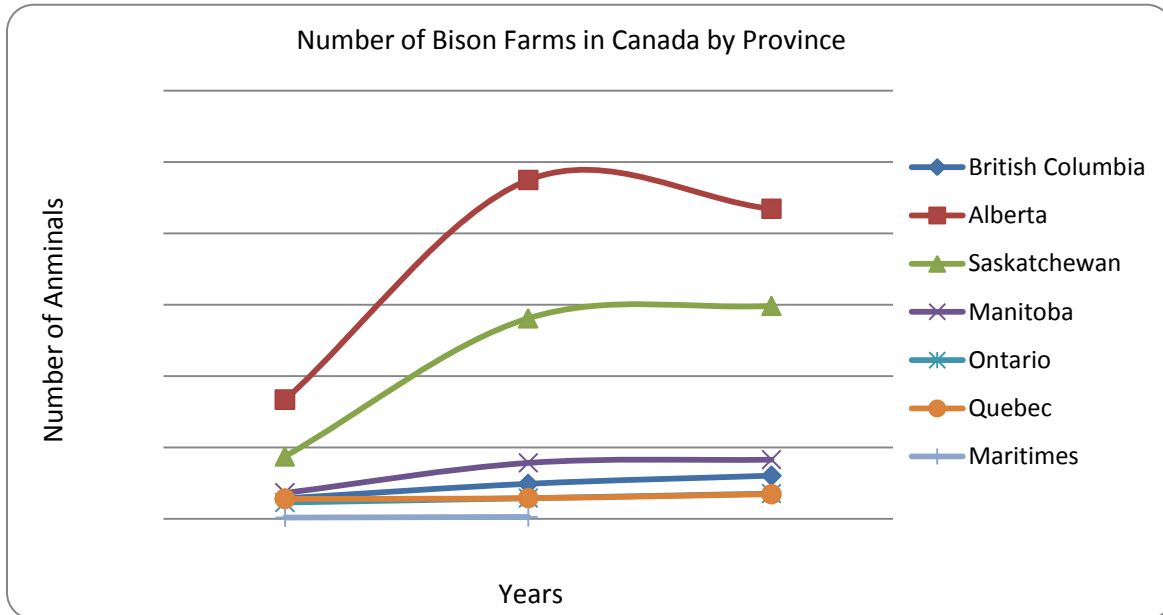
Table 5.1 – Increase in Number of Bison Farms and Bison per Province

	Number of Farms			Number of Bison		
	1996	2001	2006	1996	2001	2006
British Columbia	57	98	121	6,245	8,964	12,656
Alberta	334	950	869	22,782	79,821	97,366
Saskatchewan	175	562	597	7,006	34,781	57,395
Manitoba	73	157	166	4,621	13,473	19,609
Ontario	46	58	71	2,344	3,755	4,106
Quebec	56	58	69	2,236	4,192	4,322
Maritimes	n/a	4	5	n/a	n/a	274
Total	745	1,887	1,898	45,235	144,950	195,728

Source: Stats Canada 2008

According to Stats Canada, over the past 15 years bison herds across Canada have increased considerably as well the number of bison farms has also increased. Table 5.1 shows the increase in number of bison farms, from 1996 to 2006, across Canada. Additionally, the table also illustrates the increase in the number of bison per province. The most rapid growth these farms and herd numbers experienced was over the period 1996 to 2001. Growth still occurred from 2001 to 2006, just not to the extent that had been previously experienced.

Figure 5.1- Increase in Size of Bison Farms By Province in Canada




Source: Stats Canada 2008

As figure 5.1 illustrates, since 1996 there has been a substantial increase in the number of bison farms as well in the size of these farms, with Alberta and Saskatchewan leading the way. The figure shows that the largest increases in numbers have come in Alberta and Saskatchewan. This is due to the topography and access to rangeland for the bison. The bison is native to these areas and it has only been of late that these animals have been raised on farms, and although the number and size of bison farms are growing, bison are still not considered to be domestically produced. Rather they are still considered a wild animal (undomesticated) (Stats Canada, 2008). Range-fed bison produce one of the most healthy meats that can be consumed. It is a very lean meat and has a low fatty-acid content (Rule et al. 2002). In addition, research has also shown that bison meat is lower in calories, fat and cholesterol than beef, pork or

skinnless chicken. Bison meat contains 25-30% more protein than beef as it is less marbled (interior fat content in cuts) (American Bison Association, 1993).

As a result of these health benefits, high quality markets are beginning to develop for bison. The current bison meat supply is still too small to support supermarket distribution on any sustainable scale (Hobbs and Sanderson, 2000), however, these markets are growing. There are also strong and consistent indications of a growing demand for bison in other parts of the world, particularly the European Union (EU) (Hobbs and Sanderson, 2000). Although processing regulations and trade barriers have hampered the growth of North American exports, as of late these exports are beginning to grow.

Canadian Prairie Bison is attempting to fill the market demand in the EU and other parts of the world by exporting their premier bison products. Given that bison is native only to North America, the only competition that Canadian Prairie Bison has is that from the United States. An official listing of eligible suppliers to the USDA Bovine EV (export verification) programs are available from the USDA (U.S. Department of Agriculture, 2009). This may be of interest to Canadian exporters as it is essentially a list of all potential competitors.

Figure 5.2 illustrates how the addition of a foreign market can benefit Canadian Prairie Bison. In the domestic market (Canada), Canadian Prairie Bison is not making a profit. This is represented by the lighter shaded box (). In the Canadian market, Canadian Prairie Bison produces a quantity of Q, at a price of P with their costs being C. However, with the addition of the foreign market, the demand curve is shifted outward from D Canada to D Canada + EU, due to the increase in market size. With the addition of a foreign market more often than not, comes


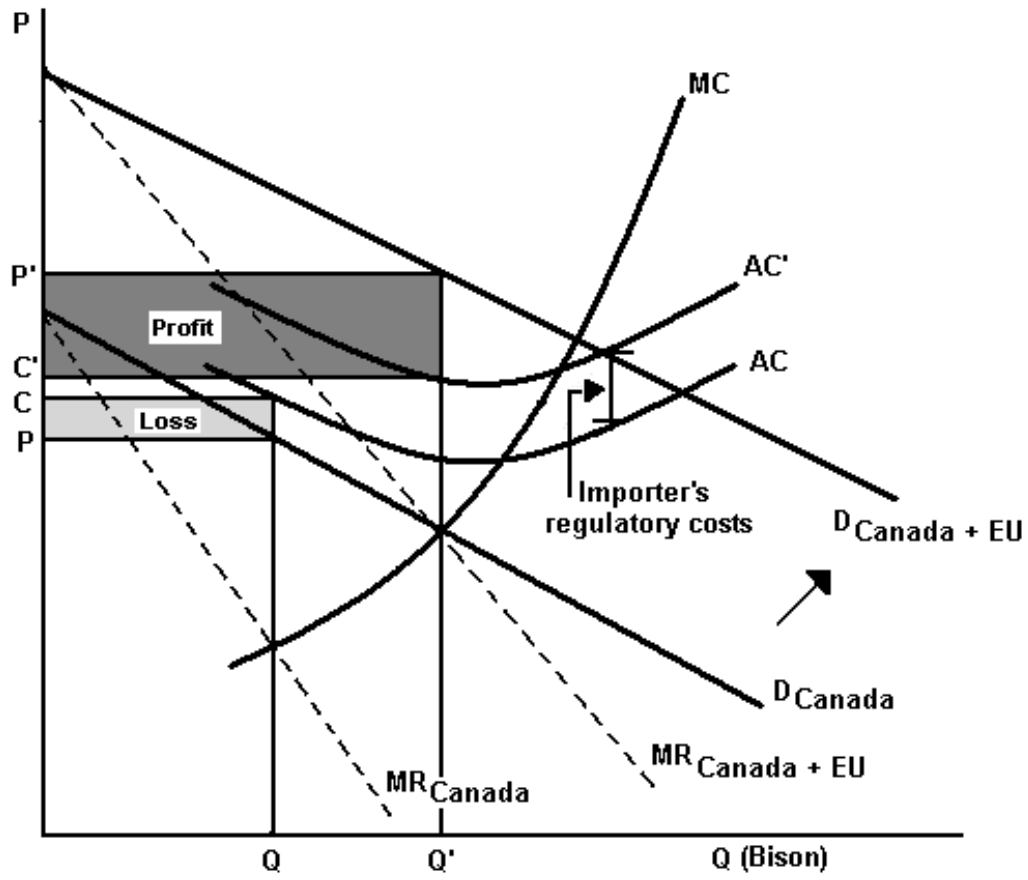
with additional costs. These costs could include regulatory costs, standards and grading costs or tariffs. In Figure 5.2, the consequence of these supplementary costs is represented by an upward shift of the AC curve, to AC'. Therefore, although Canadian Prairie Bison's costs have increased from C to C' they are now making a profit with the addition of the foreign market, Canadian Prairie Bison is now producing at Q' at a price of P'. The profit generated from the increase in market size is represented by the darker shaded box ().

Figure 5.2 Canadian Prairie Bison – Addition of a Foreign Market



There are, however, a number of barriers to trade that Canadian Prairie Bison must deal with in order to get their products into the EU market. The checklist developed in Chapter 4 of this thesis is used to identify, understand and suggest strategies for dealing with the barriers faced by Canadian Prairie Bison. As the checklist is generic it can be applied to different products but not all of the columns may pertain to each product. An 'X' is placed in each column that pertains to Canadian Prairie Bison.

Table 5.2 – SPS Barriers to Trade – Bison Case Study

	SPS Barriers to Trade									
	Tariff Barriers			Non-Tariff Barriers						
	No appropriate tariff			Domestic Export Requirements	Quantitative restrictions on imports	Boarder inspections for food, animal and plant safety	Inspection costs	Testing	Tolerances	Labelling requirements
Is there a tariff? How big is it?	Determine what tariff will apply	Creation of a new tariff								
Totally New Product	X	X	X	X	X	X	X	X	X	X
Change in products Characteristics										
Change in inputs to a product										
Innovations that contain Intellectual Property										
Innovations that alter consumer risk										
Innovations that alter animal disease profiles										
Innovationst that alter plant disease profiles										
Innovations that require after sales service										
Innovations that require consumer education/information										

Bison, as stated previously, is native only to North America and as a result of this, there is virtually no bison production in the EU. The bison market is in its infancy in the EU. Market research indicates that there is a demand for bison in the EU, just no production of it (Hobbs, and Sanderson, 2000). This puts bison into the Totally New Product category on the left hand side of the checklist.

Exporting into the EU

5.2 SPS Barriers to Trade

All of the SPS barriers to trade on the checklist apply to Canadian Prairie Bison, except for labelling requirements.

5.2.1 Is there a Tariff? What Tariff will apply? How big is it?

A tariff allows unlimited access for an exporter into an importer's market at a competitive supply price plus the amount of the tariff (Gaisford and Kerr, 2001). A major market access barrier for the bison industry is tariffs. Bison does not have its own tariff line and as a result, is lumped in under beef with respect to access to the EU market. The EU's beef tariff ranges between 40 and 50 percent depending on the particular beef product (Hobbs et al., 2000). It is presumed that bison has been included in this tariff due to its genetic closeness to beef.

However, this has negatively impacted the bison industry. According to Hobbs et al. (2000) the biggest detriment hindering the development of the Canadian bison market in the EU is the lumping of bison with beef for market access purposes (Hobbs et al., 2000). Furthermore, the EU's beef tariff is a good example of layered barriers to trade. Even if the EU were to remove the high beef tariff, most Canadian beef would still be prohibited into the EU. This is the result

of the EU's ban on imports of beef produced using growth hormones (Viju et al., 2010). Bison are not produced using growth hormones.

5.2.2 Creation of a new Tariff Line

In order for countries to be able to track imports and exports as well as the ability to charge the appropriate tariffs when products enter the customs territory of the importer, internationally moved products are classified into standardized categories (Kerr and Loppacher 2005). When a new product is introduced it is likely that there is no tariff line for it. It is under these conditions that products become lumped in with another category of products. This is the case for bison being exported into the EU.

However, because there is no bison industry in the EU and, hence, no protectionist vested interests in the EU for bison, and no export subsidy regime, this is an area where Canada could lobby the EU to create a new tariff line for bison (Loppacher and Kerr, 2005, Viju et al., 2010).

Although this would be the most desired solution for Canadian Prairie Bison producers, the wait may be a lengthy one, as the process to create a new tariff line is quite involved and complex. The first step typically involves private farms, industry, or trade associations contacting their governments. From there, the national government reviews the request and begins to establish a national position by asking for input from all parties involved. Once a national position is agreed, the government then presents a proposal to the World Customs Organization's Review Sub-Committee. In order for other governments to have the time required to form their own national positions, the issue is generally held over for a second or even third review. Once it is agreed upon, an amendment is drafted. Once drafted, the

different governments have six months to enter any objections. The implementation of the amendment is typically a two and a half year process, this is due to the time required to develop rules for coordinating the old system with the new one and updating all necessary information (Loppacher and Kerr, 2005). The entire process takes approximately seven years to complete.

5.2.3 Domestic Export Requirements

In order to export meat or meat products into the EU, one must first obtain an exporting license. A formal request must be made by the national authority of a third country to the Directorate General for Health and Consumer Protection of the European Commission to export meat or meat products to the EU (European Commission, 2010). The request should contain verification that the authority can complete all appropriate legal provisions to satisfy EU requirements. After the formal request has been sent the Directorate-General for Health and Consumer Protection will send out a questionnaire which is to be filled out and returned. At this stage, if it has not already been done, the residue monitoring plan of the exporting country must be submitted and approved. The EU has specific requirements for the residues of veterinary medicines, contaminants and pesticides and as a result, a monitoring system must be in place. If the residue monitoring plan and questionnaire are positive, an inspection by the Food and Veterinary Office is carried out in an effort to assess the situation on the spot. Based on the guarantees given by the exporting country and the results of the inspection, the Directorate General for Health and Consumer Protection proposes the listing of the country, the specific conditions under which imports from that country will be authorized and the list of

approved establishments in the country. This will then be discussed with the representatives from all of the EU Member States. If there are no objections from the Member States, the European Commission will adopt the specific import conditions (European Commission, 2010).

For Canadian Prairie Bison, this process took approximately two years. Prior to obtaining an export licence, Canadian Prairie Bison was only able to export one 100kg box of meat per year in order to prove that all relevant legal provisions and EU requirements could be met. Also, as the licences are issued on a monthly basis, only 1/12 of the overall quota may be available each month (Government of Canada, 2010).

5.2.4 Quantitative Restrictions on Imports

Under the EU's tariff for beef is the Hilton Quota. The Hilton Quota is the informal name given to the particular quota pertaining to beef in the EU. This means that under the Hilton Quota, meat being exported will not be subjected to the approximate 40 – 50 percent tariff imposed on beef and bison imports by the EU. As suggested above, bison has no specific tariff line and is lumped in with beef. The out of quota rate varies between 12.8% + 176.8 Euro/100kg to 12.8% + 303.4 Euro/100Kg depending on the cut. The in-quota tariff is 20% (Government of Canada, 2010). The Hilton Quota states that, it is a quota of a 58,100 tonnes of high quality fresh, chilled and frozen beef. The suppliers of the 58,100 tonnes are Australia, New Zealand, United States, Canada, Argentina, Brazil, Uruguay and Paraguay.

According to the European Commission Regulation (EC) No 936/97 high quality beef is defined as selected cuts of fresh, chilled or frozen beef obtained from bovine animals which do not have more than four permanent incisor teeth, the carcasses of which have a dressed weight of not

more than 327 kilograms (720 pounds), a compact appearance with a good eye of meat of light uniform color and adequate but not excessive fat cover (Commissions of the European Communities, 2010). Since bison is lumped in under beef, the attributes that make a high quality cut of beef, are also the attributes that make a high quality cut of bison.

In the EU there are three different means for how the quota portions of the TRQs are allocated. These methods include: allocation as a proportion of licenses requested, allocation to traditional importers and on a first come first serve basis (Government of Alberta, 2009). These allocation methods have not raised many controversies. Beef (bison) falls under the category of allocation to traditional importers. Quotas are distributed by country. However, most out-of-quota suppliers (producers who are subject to the 40 percent or higher tariff) are internationally competitive. This could be a function of either efficiency or currency movements (Government of Alberta, 2009). In an effort to open access to the market and avoid any rigidity that may occur, a share of the EU's quota is reserved to new importers. For example, for live cattle there is 20% of the quota that is allocated to newcomers and the other 80% goes to traditional importers. This stipulation also exists for quotas such as beef, wheat, milk, bananas, mushrooms, butter and skim milk (Bureau, 2000).

Regarding the Hilton Quota specifically, there is no specific allocation to producers or marketing groups in either Canada or the United States. If a producer/marketing group wishes to use the quota, the quota is open on a monthly basis by the EU and applications must be submitted in the first 5 days of each month. The EU then issues permits to all eligible applicants, unless the quota is oversubscribed for that period. In the event of oversubscription, the quantity is

allocated on a pro rata basis to all eligible applicants. These permits are valid for a period of three months.

In May 2009, after a long running trade dispute over hormone-treated beef, the EU, the US and Canada reached a provisional agreement, the EU will maintain its twenty one year ban on growth hormones. However, the new provisional agreement of May 2009 also states, that currently Canada and the United States are permitted to export 11,500 tonnes of hormone free beef without paying duties. Under the new agreement, during the first three years an additional 20,000 tonnes will be allowed and then in fourth year another additional 45,000 tonnes (Government of Alberta, 2010). Bison producers have historically been able to access the Hilton Quota because Canadian beef is produced using growth hormones. As a result, beef producers cannot use the Hilton Quota. Growth hormones are not used in bison production meaning that bison producers can access the quota. With the recent expansion of the Hilton Quota, it is expected that some Canadian beef producers may want to begin producing beef without growth hormones. If this comes to pass bison producers will have to compete directly with beef producers for allocations of the Hilton Quota.

Since the EU put the import ban on all meat that contains growth hormones of any kind, it has become a topic for debate as countries have lobbied for the EU to remove the ban. As a result, after reaching a provisional agreement in May 2009 to settle the trade disputes over hormone-treated beef, the EU, will maintain its 21 year ban on imports of Canadian and American beef treated with growth enhancing hormones. However, the EU did agree to increase the Hilton

Quota, or the amount of hormone free beef that can be imported from these countries over the next four years.

While this provisional agreement initially grants more exports for bison into the EU, if these provisions continue to expand it may entice some beef producers to start to produce their beef hormone free. Currently, beef as a whole is produced using growth hormones which, as stated, is banned in the EU therefore this beef cannot be exported into the EU leaving the majority of the Hilton Quota open for the use of bison. Perhaps a question that needs to be brought up and addressed is that if beef begins to be produced hormone free will bison be able to compete with beef for the Hilton Quota? Further, how much of the Hilton Quota, if any, will be left for bison? How will it be allocated?

5.2.5 Inspection Costs

When exporting meat or meat products into the EU, the meat or meat products must enter the EU via an approved Border Inspection Post of the EU under the authority of an official veterinarian. In addition, each shipment is subject to an identity check, a systematic documentary check and, if appropriate, a physical check. Physical check frequency depends on the results of previous checks as well as on the risk profile of the product (European Commission, 2010). The physical check is performed on the animal itself to evaluate the animal's physical health.

Animals may be *ante mortem* and/or *post mortem* inspected. All inspections must be done by an accredited veterinarian. *Post mortem* inspections include the liver and head (Canadian Food Inspection Agency, 2010). An official veterinarian must also make the final review of the establishment in order to confirm compliance with all applicable requirements prior to a

recommendation for approval being forwarded to the Canadian Food Inspection Agency headquarters (Canadian Food Inspection Agency, 2010).

5.2.6 Testing and Tolerances

In order to export beef, bison, and pork or horse meat into the European Union for human consumption, it must come from slaughterhouses, cutting plants and cold stores in Canada that are approved by the EU. Canadian Prairie Bison uses a federally inspected slaughter plant in Alberta. The bison is cut and wrapped at these facilities prior to export. In addition to having been processed at a federally inspected facility, the animal must also be inspected by an accredited veterinarian.

5.2.7 Labelling Requirements

The labelling requirements that Canadian Prairie Bison have contend with are dealt with in the Specific Labelling Requirements column (refer to page 83).

5.3 Technical Barriers to Trade

As table 5.2 illustrates, the technical barriers to trade, or TBT barriers that are relevant to the export of bison into the EU are; legal requirements for due diligence, language of labelling, specific labelling requirements, the label approval process and allowable claims. To show that these categories are applicable, an `X` has been placed in each column.

Table 5.3 – Technical Barriers to Trade – Bison Case Study

TBT Barriers to Trade						
Hazards	Legal requirements	Labelling for ingredients	Language of labelling	Specific labelling requirements	Label approval process	allowable claims
Brand New Product	X		X	X	X	X
Change in products Characteristics						
Change in inputs to a product						
Innovations that contain Intellectual Property						
Innovations that alter consumer risk						
Innovations that alter animal disease profiles						
Innovationst that alter plant disease profiles						
Innovations that require after sales service						
Innovations that require consumer education/information						

5.3.1 Hazards

One of the most important hazards is food allergens. However, bison meat is not included as one of the major food allergens and, therefore, does not require a food allergen label.

5.3.2 Labelling for ingredients

As bison is not a prepared product the labelling of ingredients or list of ingredients do not pertain to bison.

5.3.3 Label approval process

The label approval process may vary in the time it takes, however at the very least it will take upwards to two years, as it takes two years to obtain an export licence into the EU alone. As well, this process may take longer if all contingencies are not addressed. For example, if the health mark was to be overlooked, it would take time to order it and exports would not be permitted in the meantime. The health mark identifies which plant processed and packaged the product. As suggested above, labels are not required for bison

5.3.4 Language of Labelling

The EU has at least twenty official languages, and as a result, the language that is used becomes very important. According to the general principles for veterinary certification (Council Directive 2002/00/EC) the certificates must be in the official language of the Member State of destination, in addition to those of the Member States where border inspection is carried out (Government of Alberta, 2010). As suggested above, however, labels are not required for bison.

5.3.5 Specific Labelling requirements

The European Union is by far the biggest importer of food worldwide. The European Commission acts as the competent authority on behalf of the 27 Member States. Import rules and regulations for meat and meat products are harmonized and the EU Commission is the only negotiating partner for all non-EU countries in questions related to import conditions for meat and meat products (European Commission, 2010).

When importing into the EU there are a number of labelling requirements that must be adhered to prior to export. Since bison, as previously stated, is lumped under beef in the EU, the beef labelling requirements also pertain to bison. According to the Regulation (EC) No 1760/2000 of the European Parliament and of the Council of 17 July 2000, under Section I – Compulsory Community beef labelling system, Article 13 general rules; the compulsory labelling system shall ensure a link between the identification of the carcass, quarter or pieces of meat and the individual animal or group of animals concerned (Government of Canada, 2010). This means that every piece of meat must have the ability to be traced back to the original animal that it came from, the original farm it was raised on and the particular slaughterhouse used.

Furthermore, the label shall include the following under general rules 2;

- (a) A reference number of reference code ensuring the link between the meat and the animal or animals.
- (b) The approved number of the slaughterhouse at which the animal or group of animals was slaughtered and the Member State or third party in which the slaughterhouse is established.

- (c) The approval number of the cutting hall which preformed the cutting operation on the carcass or group of carcasses and the Member State or third country in which the hall is established.

In January of 2002, it was stated that in addition to the above stated and under Article 13 (5)(a) operators and organizers must also include;

- (i) Member State or third country of birth;
- (ii) All Member States or third countries where fattening took place;
- (iii) Member State or third country where slaughter took place;

(b) However, where beef is derived from animals born, raised and slaughtered:

- (i) In the same Member State, the indication may be given as “Origin: (name of Member State)”;
- (ii) In the same third country, the indication may be given as “Origin: (name of third country)”;

There is also a voluntary labelling system under Article 16 according to the Regulation (EC) No 1760/2000 of the European Parliament and of the Council of 17 July, 2000 (Government of Canada, 2010).

In addition, a label bearing the health mark must also be applied to products that have fully met the EU requirements at the time of packaging. The health mark identifies the plant that processed and packaged the product. The health mark must be placed on the packaging in such

a way that when the package is opened, the mark is destroyed to avoid any unauthorized tampering with the product. The label must also contain a serial number (Canadian Food Inspection Agency, 2010). The official veterinarian must supervise the health marking process.

5.3.6 Legal requirements for due diligence

Reasonable care must be taken to ensure such things as customer health. Testing for Tuberculosis and E. Coli O157:H7 should be done in order to ensure said safety. As well as safety, the producer/exporter must be aware of all the different regulations and requirements that will arise. The producer/exporter should also do their own research so they are able to answer any questions or concerns that may come up regarding their herd.

5.3.7 Allowable claims

A level that will allow for the label claims to be substantiated, for example, an identification system – must be in place for animals from which beef and beef products are derived. The declaration “Product of Canada” can only appear on products derived from animals that are born and raised in Canada (Canadian Food Inspection Agency, 2010b). Figure 5.4 illustrates which other barriers to trade affect Canadian Prairie Bison.

Table 5.4 – Other Barriers to Trade – Bison Case Study

	Other Barriers to Trade						
	Movement of people for after sales service	Is intellectual property enforced?	Obtaining protection for intellectual property	Domestic standards	Domestic Packaging Regulations	Need for a domestic agent	Product Categorization
Brand New Product							X
Change in products Characteristics							
Change in inputs to a product							
Innovations that contain Intellectual Property							
Innovations that alter consumer risk							
Innovations that alter animal disease profiles							
Innovationst that alter plant disease profiles							
Innovations that require after sales service							
Innovations that require consumer education/information							

5.4 Other Barriers to Trade

The only Other barrier to trade that pertains to Canadian Prairie Bison is product categorization.

Although Canadian Prairie Bison uses a domestic agent as a distribution agent they are not required to do and as a result a 'X' is not placed in that column.

5.4.1 Movement of people for after sales service

Canadian Prairie Bison does not have the need for the movement of people for after sales service so therefore it does not apply to this case study.

5.4.2 Is intellectual property enforced? Obtaining protection for intellectual property

Intellectual property rights and intellectual property rights enforcement is not an issue for Canadian Prairie Bison, as it does not have intellectual property rights to enforce or protect.

5.4.3 Domestic standards and Domestic packaging regulations

Most domestic standards and packaging regulations that must be met prior to export with respect to bison are dealt with at the labelling stage.

5.4.4 Need for a domestic agent

Canadian Prairie Bison uses a domestic agent as a distribution agent. Canadian Prairie Bison ships all of their meat to the Netherlands and from there a domestic agent distributes the meat to each EU member country; Germany, France, Belgium, etc. There is no specific regulation that states that a domestic agent must be used. Canadian Prairie Bison uses an agent because it helps facilitate the export process.

5.4.5 Product Categorization

Product categorization is important to ensure that product gets placed in the proper category and the proper legislation and regulations are applied or enforced. Canadian Prairie Bison is placed in the beef category (as it has no category of its own) and as a result is able to have access to the Hilton Quota.

The practical application of the checklist proved to be a very useful tool in determining the proper procedures for exporting bison meat into the EU. This also proved to be a good example of illustrating how like products get lumped in together when there are not specific categories per product. As well, it demonstrated the different processing and packing certifications that must be undertaken in order to export bison meat into the EU.

5.5 Summary

Bison however, is already exported and the entrepreneurs involved have learned and adapted from their experience. The checklist might have been useful prior to bison having been exported. In chapter 6 another case study is undertaken on the practical application of the checklist, however this time it will be on an entrepreneurial firm with a new product that is not yet exporting.

Chapter 6.0 Golden Grains Farm Company Ltd. Case Study

6.1 Background

Golden Grains Farm Company Ltd. was formed in 1994 and is located in Dinsmore, Saskatchewan. Golden Grains Farm Company Ltd. or Golden Grains as it will be referred to from here on in, processes hulless barley into flour and rolled barley. Hulless barley is a variety of barley in which the hulls come off during harvest. This is advantageous because when processing the whole kernel is left, providing more nutrients. This is in contrast with pearl barley, which is made from conventional barley where the kernel is fused with the hull. When this is the case, the hull is polished off before processing and as a result there is the loss of the seed coat as well as nutrients.

Golden Grains also uses a stone mill to ensure a high quality and a uniform product for their barley flour. A stone mill is composed of two stones. The kernel falls between the two stones and is ground into flour. For the rolled barley products, Golden Grains uses a roller mill. The kernel is flattened between two spinning rollers with a roller mill.

Golden Grains has three main products; hulless barley flour, thick rolled barley and an instant or quick rolled barley cereal, all of which are 100% whole grain. The difference between rolled barley and thick rolled barley is the method of processing. For rolled (instant) barley the rollers on the roller mill are placed close together to achieve a finer product. The thinness of the flake is correlated with the cooking time. Therefore, the thicker the flake the longer it takes to cook. Such is the case with the thick rolled barley. It will take 5 minutes to cook as opposed to the

rolled (instant) barley. In order to attain a thicker flake when milling, the rollers are placed further apart.

Golden Grains products come in a variety of sizes. The instant or quick barley comes in 40g, 2Kg, and 8Kg bags. The thick rolled barley is available in either 2Kg or 8Kg bags and the barley flour comes in 1Kg, 2Kg and 8Kg bags. The packaging for all the products is similar. Golden Grains products also declare a number of nutritional facts regarding the products on the front of their packaging. These include; “100% whole grain”, “natural old fashion flavour”, “high in dietary fibre”, “no additives” and “low fat”.

Consumers all around the world are becoming increasingly aware that what they eat can influence their health in important ways. As a result of this realization, people are continually looking for ways to improve their health through dietary means. One of the most common methods consumers have engaged in to improve their health is modifying their eating habits and paying more attention to the quality of the food they eat (Agriculture and Agri-Food Canada, 2010).

While some individuals are modifying their eating habits, others are exploring beyond basic nutritional benefits to things such as disease prevention and health enhancement from foods. These can be found in plants, animals, marine products and micro organisms. It is from this that *Functional Foods* and *Natural Health Products* have gained popularity (Agriculture and Agri-Food Canada, 2010). Although there is no universally accepted definition for functional foods and nutraceuticals, according to Health Canada (Section 2.2) “a *functional food* is similar in appearance to, or may be, a conventional food that is consumed as part of a usual diet, and is

demonstrated to have physiological benefits and/or reduce the risk of chronic disease beyond basic nutritional functions” (Health Canada, 2011).

Canada produces a wide range of functional foods and natural health products. According to Agriculture and Agri-Food Canada these products rank among the world’s best in terms of nutrition, quality, taste and scientific research (Agriculture and Agri-Food Canada, 2010).

Hulless barley flour and rolled barley are considered to be a functional food. Therefore, as a result of this shift towards healthy eating, the nutritional and health giving attributes of barley would likely be of interest to North American consumers.

Hulless barley has many health attributes such as high fibre and low fat, however, most of the medical properties that barley possesses are linked to the presence of mixed-linked β -glucan. It is through increased viscosity in the small intestine that β -glucan reduces postmeal blood glucose response and lowers cholesterol levels (Ames et al., 2006). Barley also contains a number of antioxidants. Antioxidants may reduce the incidence of chronic diseases such as; some heart diseases, brain dysfunctions, cataracts, cancers and allergies (Miller et al., 2000, Ames et al., 2006).

Golden Grains’ products were approved for the Heart and Stroke Foundation’s Health Check symbol. The Heart and Stroke foundation has founded a non-profit food information program to help consumers choose foods that are part of a healthy diet. According to the Heart and Stroke Foundation, in order to be eligible to display the Health Check symbol it must meet exact nutrient standards based on Canada’s Food Guide. These standards are developed by a volunteer Technical Advisory Committee of independent nutrition experts from across Canada

as well as the Heart and Stroke's own team of registered dieticians. The food is evaluated based upon total fat, saturated fat, trans fat, sugar, sodium, fibre, calcium as well as vitamins and minerals (Heart and Stroke Foundation, 2009). It should also be noted that in order for a business to display the Health Check symbol, they must first pay a fee.

At present, Golden Grains is returning only a modest to less than modest profit. Golden Grains is operating at an excess capacity, (refer to Figure 3.2). Golden Grains might be able to rectify this problem by increasing their market size, one way to do that is exporting. Like most entrepreneurial businesses, Golden Grains exhibits economies of scale. As expansion takes place, Golden Grains will move further down the long run average cost curve, therefore by increasing their sales volume through exporting, their per unit cost may decrease as the fixed costs can then be spread over a larger volume. By exporting into the United States Golden Grains products are exposed to a larger number of potential buyers. According to Statistics Canada, (2010) the Canadian population in 2010 was 34,108,800. In contrast, projected population of the United States for February, 2011 is 310,795,054 (U.S. Census Bureau, 2010). Furthermore, Golden Grains is a value-add product. Value-add products according to Golden Grains, can be a difficult product to sell in a farming demographic. Golden Grains have heard many customers' responses as to why the farming demographic is less enthusiastic to purchase the product. The most common response is, "Why would I buy it when I could mill it myself?" for reasons not to purchase their product. This would not likely be a problem that would inhibit sales in the United States as there are far more 'off the farm' consumers and households and "milling it themselves", for example, would not likely be an option.



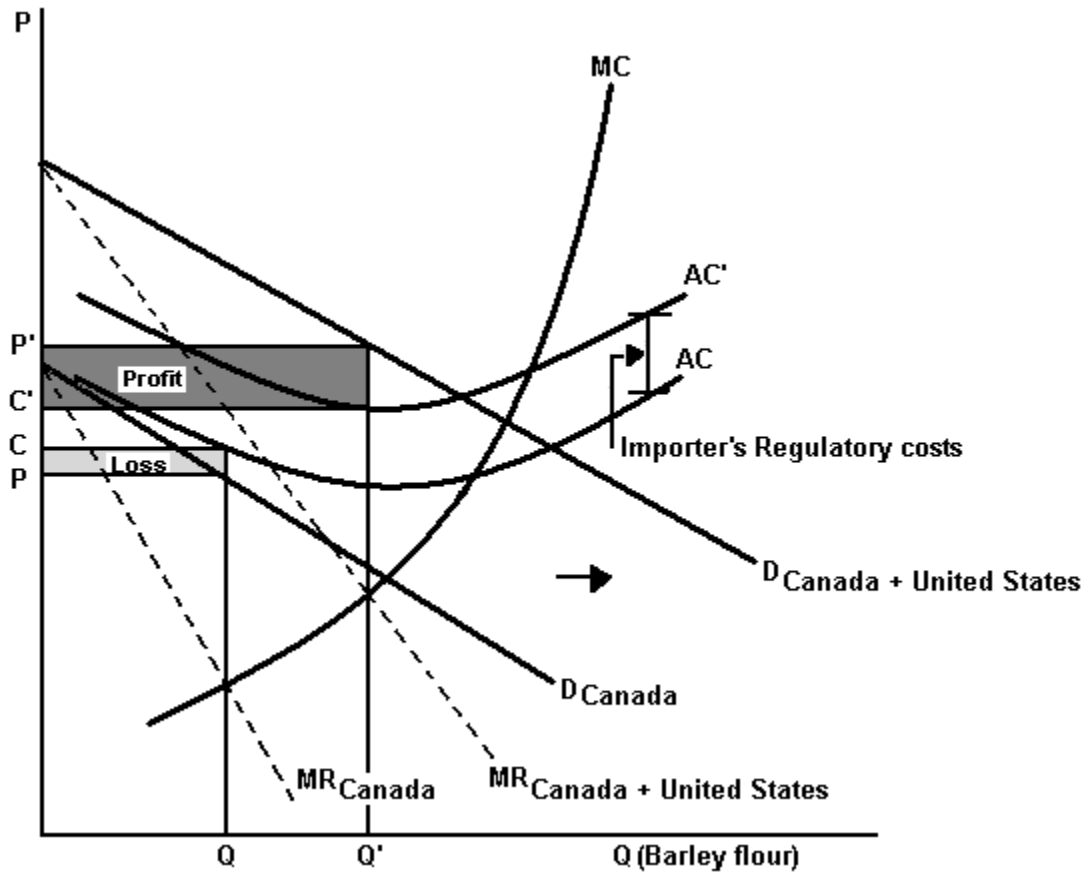
Golden Grains is making a less than modest profit, this is shown by the lighter shaded box () in figure 6.1. With the addition of a foreign market however, Golden Grains stands to increase their profits dramatically. In the domestic market (Canada), the demand is low and is represented by D_{Canada} . When the foreign market is added, the demand curve shifts outward to $D_{\text{Canada}} + \text{United States}$ in response to the increase in market size. Due to this increase in market size, Golden Grains is now making a profit which is indicated by the darker shaded box (). However, as a result of such things as importer's regulatory costs, Golden Grains costs increase from C to C' . The addition of the regulatory costs shift the AC curve up from AC to AC' . These additional costs can be absorbed because the quantity at which Golden Grains is producing increases from Q to Q' and price is increased from P to P' . The regulatory costs could be associated with such things as need for a domestic agent for example.

Figure 6.1 Golden Grains Farm Company – Addition of a Foreign Market



Exporting into the United States

6.2 SPS Barriers to Trade

Table 6.1 illustrates which of the Sanitary and Phytosanitary Barriers apply to Golden Grains.

SPS barriers include Domestic export requirements, Quantitative restrictions on imports, Golden Grains falls under the category of totally new product on the left hand side of Figure 6.1.

Golden Grains is considered a specialty flour, as opposed to being lumped under wheat flour, as it shares similar characteristics to whole grain flour.

Table 6.1 – SPS Barriers to Trade – Golden Grains Case Study

	SPS Barriers to Trade									
	Tariff Barriers			Non-Tariff Barriers						
	No appropriate tariff			Domestic Export Requirements	Quantitative restrictions on imports	Boarder inspections for food, animal and plant safety	Inspection costs	Testing	Tolerences	Labelling requirements
	Is there a tariff? How big is it?	Determine what tariff will apply	Creation of a new tariff							
Totally New Product				X		X	X	X	X	X
Change in products Characteristics										
Change in inputs to a product										
Innovations that contain Intellectual Property										
Innovations that alter consumer risk										
Innovations that alter animal disease profiles										
Innovationst that alter plant disease profiles										
Innovations that require after sales service										
Innovations that require consumer education/information										

6.2.1 Is there a Tariff? What Tariff will apply? How big is it?

On January 1, 1998 the phasing out of the Free Trade Agreement's tariffs was complete. As of that date, practically all the tariffs between Canada and the United States were eliminated. The agricultural tariffs that do remain are that of Canada's supply-managed dairy and poultry sectors and for certain products such as cotton, sugar, dairy and peanuts entering the United States (Foreign Affairs and International Trade Canada, 2010).

6.2.2 Creation of a new Tariff Line

Due to the North American Free Trade Agreement, tariffs on Golden Grains products between Canada and the United States have been eliminated. As a result, there is no need for the creation of a new tariff line.

6.2.3 Domestic Export Requirements

Prior to exporting into the United States, there are requirements that Canadian businesses must fulfil in order to export. A North American Free Trade Agreement or NAFTA, certificate of origin must be obtained in order for the importer in the foreign country to claim preferential tariff treatment. The NAFTA certificates of origin may be acquired from any Canadian Customs office (Foreign Affairs and International Trade Canada, 2010). The exporting business must also have a *business number*. The business number must be included on all export declarations, no exceptions. The business number is comprised of 15 digits: 9-digit account number, the letters RM (which represent the import/export program) and a 4 digit program account dedicator that must be activated for exports to take place. A business number can be obtained by calling 1-800-959-5525.

The exporting business must report all exports. The reason for this is threefold. Firstly, to control the export of strategic and dangerous goods, in addition to other controlled and regulated goods. Secondly, it allows for the collection of information on Canadian exports and finally, in an effort to control the outbound movement of goods in transit through Canada (Foreign Affairs and International Trade Canada, 2010). Exports may be reported by submitting an export declaration. The export declaration may be submitted through the Canadian Automated Export Declaration (CAED), or through the G7 Electronic Data Interchange (EDI) Export Reporting.

6.2.4 Quantitative Restrictions on Imports

Again, as a result of North American Free Trade Agreement, there are no quantitative restrictions on imports from Canada into the United States or Mexico.

6.2.5 Inspection Costs

In order to monitor compliance with the requirements of the Canada Border Services Agency, border services officers may examine the exporter's shipment. The Canada Border Services Agency has the right to request that the exporter (carrier or freight forwarder) hold the goods for examination prior to export (Canada Border Services Agency, 2009). In regards to the United States, importing requirements varies depending on country of origin, type of food and whether or not there are quota restrictions on the food which is to be imported (U.S. Customs and Border Protection, 2011). The United States Department of Agriculture (USDA), Animal Plant Health Inspection Service (APHIS), Food Safety Inspection Service (FSIS) and/or the Department of Health and Human Services Food and Drug Administration (FDA) determine the

whether or not various food products can be exported into the United States. Prior to exporting food products into the United States, foreign manufactures must register with the FDA before their good will be admitted (U.S. Customs and Border Protection, 2011).

6.2.6 Testing and Tolerances

Pesticide residue in foods has become an important issue in recent years, as it poses a potential public health hazard. The United States' Environmental Protection Agency sets these tolerances and the FDA and USDA are responsible for the regulation. The FDA chooses which foods are collected at ports of entry based on a number of factors, rather than just a random search; however, raw agricultural products are at the forefront (Wessel and Yess, 1991). The results of these tests over the last several years have only indicated that less than 1% of tested foods had an over tolerance of pesticide residue.

6.3 Technical Barriers to Trade

There are many technical barriers to trade that are applicable for Golden Grains. These include, legal requirements for due diligence, labelling for ingredients, language of labelling, specific labelling requirements, and allowable claims. Figure 6.2 illustrates this with the placement of an 'X' in the relevant columns.

Table 6.2 – Technical Barriers to Trade – Golden Grains Case Study

		TBT Barriers to Trade						
		Hazards	Legal requirements	Labelling for ingredients	Language of labelling	Specific labelling requirements	Label approval process	allowable claims
	Brand New Product		X	X	X	X	X	X
	Change in products Characteristics							
	Change in inputs to a product							
	Innovations that contain Intellectual Property							
	Innovations that alter consumer risk							
	Innovations that alter animal disease profiles							
	Innovationst that alter plant disease profiles							
	Innovations that require after sales service							
	Innovations that require consumer education/information							

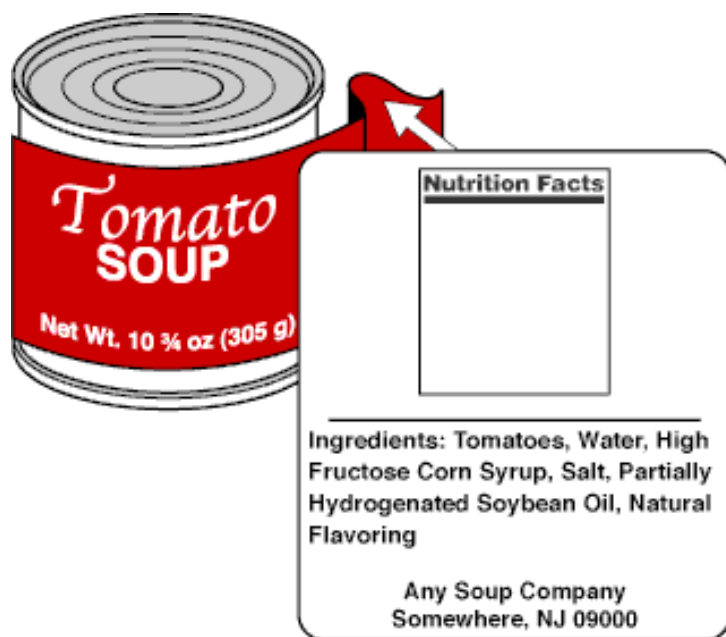
6.3.1 Hazards

Allergies are becoming more and more prevalent and it is important to some individuals' health that products be properly labelled. In 2004, the Food Allergen Labelling and Consumer Protection Act of 2004 was passed in the United States. According to the Food Allergen Labelling and Consumer Protection Act of 2004 a major food allergen is an ingredient of the following eight foods or products derived from one of them; milk, egg, fish, Crustacean shellfish, tree nuts, wheat, peanuts and soybeans (U.S. Food and Drug Administration 2009a). As Golden Grains Farm Company Ltd. does not include any the above food allergens in their products, they do not have to be concerned with labelling for them.

6.3.2 Labelling for ingredients

The ingredient list on a US food label is the listing of each ingredient in descending order of proportion. The ingredient list can be placed on either the information panel or the principal display panel or PDP. It can be placed on the same label panel as the name and address of the manufacturer or distributor. Figure 6.1 provides an example of an appropriate place to put the Ingredient List. The Ingredient List should be clear and easy to read (U.S. Food and Drug Administration, 2009a).

Figure 6.2 – Ingredient List Placement on Packaging



Source: United States Food and Drug Administration 2009a

6.3.3 Label approval process

In order to export into the United States, the product's label must first be approved. There are a number of aspects with regards to the label sketch that the Food Safety and Inspection Service will look for during the label approval process. These include; product name, USDA inspection legend, net weight, handling system, address line, ingredient statement, nutrition facts and safe handling instructions (U.S. Department of Agriculture, 2011). If the product being exported is meat, poultry or eggs further label approval will be required, such as the USDA/FSIS Label Submission Form 7234-1.

6.3.4 Language of Labelling

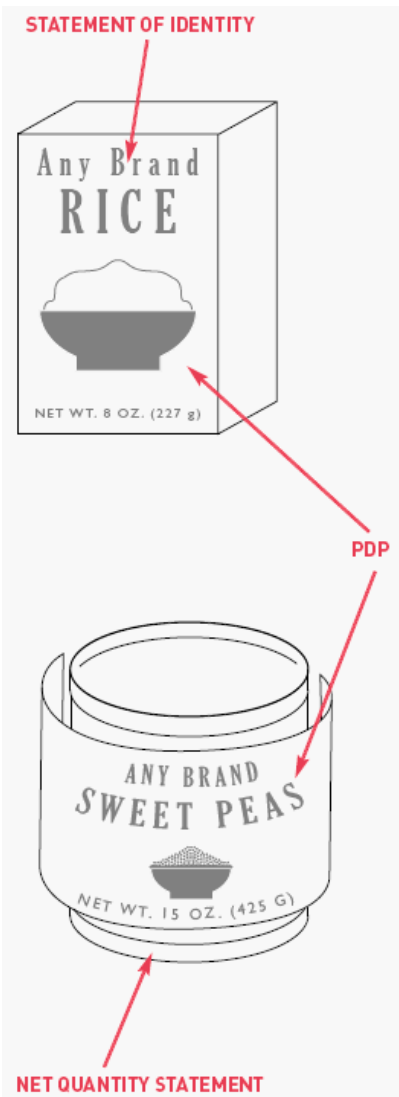
It is permitted to have a foreign language on a product label. However, if a foreign language is used, all required label statements and information must also appear in English. The country of origin statement does not have to be placed on the principal display panel but it must be clear and noticeable (U.S. Food and Drug Administration 2009d).

6.3.5 Specific Labelling requirements

6.3.5.1 Required General Labelling

In the United States, there are two different places that label statements may be placed on containers or packages. All of the required label statements may be placed on the front label panel. Specified label statements may be placed on the principal display panel or PDP as well as other labelling on the information panel. Figure 6.2 illustrates an example of what the packaging might look like. The information panel is the labelling panel immediately to the right of the PDP (as seen by the consumer facing the product) (U.S. Food and Drug Administration, 2009b). The PDP is the part of the label that is most likely to be presented, displayed, shown or examined under customary conditions of display for retail sale (GPO Access – National Archives and Records Administration, 2011).

Figure 6.3 – Statement of Identity and Net Quantity Placement on Packaging

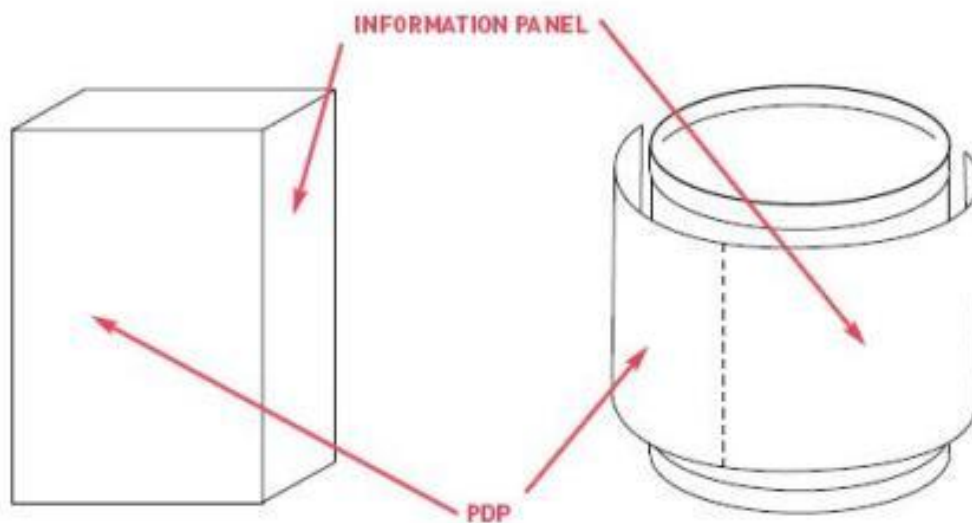


Source: United States Food and Drug Administration 2009b

There is information that is required to appear on the PDP. Figure 6.3 shows the difference between the information panel and the PDP on the product. The statement of identity or name of the product, and the amount of the product or net quantity must be placed on the PDP. As previously stated, the information panel is the label panel immediately to the right of the PDP.

Informational panel labelling includes name and address of the manufacturer, packer or distributor, the ingredient list and the nutrition labelling and any required allergy labelling according to 21 CFR 101.2 (b) and (d), Section 403 (w) of the FDA Act (U.S. Food and Drug Administration, 2009b). Informational panel labelling must be a type size or print that is prominent and conspicuous and easy to read. Letters should not be more than three times as high as they are wide and the lettering must contrast sufficiently with the background in an effort to be easily read.

Figure 6.4 Information Panel and Principal Display Panel



Source: United States Food and Drug Administration 2009b

Information that all food labels must include;

- i. Name and address of the manufacturer, packer or distributor. Unless the name given is the actual manufacturer, it must be accompanied by a qualifying phrase which states the firm's relation to the product ("manufacturer for" or "distributed by")
- ii. Street address if the firm name and address are not listed in a current city directory or telephone book.
- iii. City or town
- iv. State (or country, if outside the United States)
- v. Zip code (or mail code used in producing country) (U.S. Food and Drug Administration, 2009b).

6.3.5.2 Nutrition Labelling

The Nutrition Facts label may be placed on the PDP or on the information panel with the ingredient list and the name and address. The nutrition information must be in a box but can be either parallel or perpendicular to the base of the product. Nutrients must be included on a product's Nutrition Facts label if the nutrients are added or if a claim is made about the nutrients or product literature provides information connecting the nutrients to the product or if the nutrient is added as a nutrient supplement (U.S. Food and Drug Administration, 2009c). For new products, in order to make a nutritional claim, a nutritional test must first be carried out by certified food lab.

6.3.6 Legal requirements for due diligence

As was previously stated, due diligence refers to the care that a person takes in order to avoid harm from being done to another persons or their property. Due diligence can be applied to such things as labelling and food quality as reasonable care must be taken to inform the public of such things as ingredients to ensure customer health safety.

6.3.7 Allowable claims

In the United States, there are three categories that claims which can be used on food fall into; nutrient content claims, structure/function claims and health claims. According to FDA, a health claim must contain both a substance (food, food component, or dietary ingredient) and a disease or health related condition. The statement must contain both of these or it is not a health claim (U.S. Food and Drug Administration, 2003). Furthermore, dietary guidance statements used on food labels must be truthful and not misleading.

The Nutrition Labelling and Education Act of 1990 allows the use of a label that characterizes the level of a nutrient in food. These claims are nonspecific and describe the level of a nutrient or dietary substance in the product with terms such as *high, low* or *free* (U.S. Food and Drug Administration, 2003). The requirements used to determine the use of nutrient content claims help ensure that the descriptive words *high, low* etc. are used consistently for all types of food products and are thus meaningful to consumers. For example, the FDA defines *healthy* by regulation, as an implied nutrient content claim that characterizes a food that has “healthy” levels of total fat, saturated fat, cholesterol and sodium.

Structure/function claims are used to describe the role of nutrient or dietary ingredient that is intended to affect the normal function in humans (U.S. Food and Drug Administration, 2003). Moreover, structure/function claims may characterize the means by which a nutrient or dietary ingredient acts to maintain such structure/function, for example, “fibre maintains bowel regularity”. Structure/function claims are very relevant to Golden Grains’ products as hullless barley is considered to be a functional food.

6.4 Other Barriers to Trade

Table 6.3 refers to other barriers of trade that do not fit under technical barriers to trade or sanitary and phytosanitary barriers to trade. From Table 6.3, domestic standards and packaging regulations, product categorization as well as the need for a domestic agent are all relevant to Golden Grains.

Table 6.3: Other Barriers to Trade – Golden Grains Case Study

	Other Barriers to Trade						
	Movement of people for after sales service	Is intellectual property enforced?	Obtaining protection for intellectual property	Domestic standers	Domestic Packaging Regulations	Need for a domestic agent	Product Categorization
Brand New Product				X	X	X	X
Change in products Characteristics							
Change in inputs to a product							
Innovations that contain Intellectual Property							
Innovations that alter consumer risk							
Innovations that alter animal disease profiles							
Innovationst that alter plant disease profiles							
Innovations that require after sales service							

6.4.1 Movement of people for after sales service

Golden Grains Farm Company Ltd. does not have the need for the movement of people for after sales service so therefore it does not apply to this case study.

6.4.2 Is intellectual property enforced? Obtaining protection for intellectual property

Intellectual property rights and intellectual property rights enforcement is not an issue for Golden Grains Farm Company Ltd., as it does not have intellectual property rights to enforce or protect.

6.4.3 Domestic standards and Domestic packaging regulations

The FDA is committed to ensuring consumer safety and as a result has implemented packaging regulations. Packaging regulations do not solely pertain to the packaging itself, it also includes food contact substances. Section 409 of the FD&C Act defines a food contact substance as “any substance that is intended for use as a component of materials used in manufacturing, packaging, transporting or holding food if such use of the substance is not intended to have any technical effect in such food” (U.S. Food and Drug Administration, 2010). These substances must be approved and pose no detrimental health effect to the consumer. Packaging regulations are much more restrictive for foods such as milk and meat. Although Golden Grains does not contain any milk or meat, they still have to adhere to FD&C Act with respect to the type of bags used as well as the glue used to seal the bags.

6.4.4 Need for a domestic agent

In order to export into the United States a firm will need a US FDA agent. The US FDA agent is required to be the communications liaison between the United States government and the

exporting firm. The US FDA agent must also have the legal capabilities to fulfil their responsibilities to the exporting firm confidentially (FDA Agents, INC,2011). A US FDA agent has many other responsibilities to the exporting firm as well, these include;

- Handling FDA registrations (food processing facility and FDA registration number)
- FDA agents serve as the exporting firms' mandatory US agent for foreign food facilities.
- FDA agents monitor the registration laws and regulations and notifies the exporting firm upon changes that may affect the firm.
- FDA agent can act as a translator for registration questionnaire.
- FDA agent ensures that the exporting firm is in compliance with all US laws

The US FDA agent is not the same as a distribution agent.

6.4.5 Product Categorization

Product categorization is important to ensure that product gets placed in the proper category and the proper legislation and regulations are applied or enforced. Golden Grains barley flour is considered to be a specialty flour.

6.5 Summary

The practical application of the checklist in this chapter proved to be suitable for entrepreneurial firms. It outlined many labelling issues that need to be dealt with prior to export as well as such things as allowable claims. Although when dealing with entrepreneurial products there may be areas where there is no legislation due to the uniqueness of the product, it would be almost impossible to include every possible scenario that may arise. Ultimately this checklist would be a valuable tool for either an existing product that has like products or an entirely new product with no substitutes.

Chapter 7.0 Summary and Conclusion

7.1 Summary

For businesses that are looking to increase their sales, foreign markets are a potential avenue to explore. For entrepreneurial firms, the addition of a foreign market may be a crucial one. As was discussed in Chapter 3, entrepreneurial firms tend to build plants that are capable of producing output greater than what is presently projected. In this situation, foreign markets begin to look more attractive to the firm as these markets may provide additional demand which both increases revenues and leads to lower average costs.

In Chapter 3, the theoretical framework provides evidence that although there may be risks to exporting, it can revive a failing business with the increased sales that it provides. However, firms exporting into a foreign market will incur additional costs, these costs include; importing or foreign regulatory costs as well as import restrictions such as tariffs. Prior to export, the firm must ensure that these additional costs will not offset the extra demand and revenue generated.

Once the firm has determined it may be beneficial to export, there are still many contingencies that must be considered before the firm can begin to export. To help aid this process a checklist has been developed in Chapter 4. This checklist is a broad generic list of what the firm can expect to encounter prior or during exporting. Again, it is very important for the firm to consider the proper processes to export into specific countries, as countries vary regarding import regulations. If there are oversights on the firm's behalf, the firm will likely incur added costs to that of the regulatory costs and import restrictions, potentially making exporting a

disadvantageous venture. Firms with new products or new product attributes may face particular hurdles to be able to export successfully.

The checklist was then applied to two businesses in an attempt to determine its practicality.

The first case study was on exporting an existing product, bison, into the European Union. This case study was a good example of exporting a product that did not fit into any current category with respect to tariffs or tariff lines. The second case study was on an entrepreneurial firm that is considering exporting a new product into the United States. Entrepreneurial firms may pose more of a problem if their products are too unique and regulation laws or legislation do not encompass them. However, for Golden Grains that was not particularly a problem.

The biggest strength of the checklist is that it shows firms exporting for the first time what they need to be aware of before they start to export. It provides a wide array of contingencies that must first be investigated and ultimately compared. The checklist is broad enough that it can be used by almost any firm exporting almost any product. From that also arise its weaknesses, because it is a broad guideline it cannot be guaranteed that these are the only procedures and regulations that a firm must consider. In addition, it was mentioned that when the product is too unique there may be problems in that legislation or regulations do not fully pertain to the product. Exporting may become a very cumbersome task if this proves to be the case.

However, all in all, it was concluded that the checklist provides a beneficial tool to businesses contemplating exporting for the first time. Of course, use of the checklist may suggest additional rows and columns that should be added.

Once a business has begun to use the checklist, finding the relevant information may prove to be an onerous task. Foreign government websites on customs and importing as well as the domestic country's websites may prove helpful in locating this information. Foreign embassy websites are also useful.

7.2 Limitations of the research

The case studies in this thesis were not chosen randomly and do not represent a truly unique product. The more unique a product is, the higher the chance the existing regulations, legislation and procedures do not pertain to that product. It is when this occurs that complications may arise when trying to export. Complications such as extra paper work and uncertainty can add time delays which may result in additional costs. Furthermore, as the checklist is a general guide, care needs to be taken to ensure firms know that this checklist may not be an exhaustive list of everything involved to export their product.

Case studies were difficult to identify and to obtain cooperation from entrepreneurs. As a result, both case studies dealt with new products, the first row of the checklist. A better test of the checklist would have included a wider range of product types.

This thesis also assumes that the entrepreneurial products that are being exported are new products and therefore these products are in a monopolistic market and are facing a downward demand curve. This may not be the case in every situation and research needs to be conducted on a product to product basis to ensure it is a profitable venture to export as there was no case study done on a product that was not a viable option for export.

7.3 Avenues for further research

Further development of this thesis, and more specifically, the checklist may prove to be very beneficial. The checklist could be integrated into the many entrepreneurial and business development workshops as a tool to improve the profitability of export success. Prior to this, additional research on the checklist itself could be preformed. Testing the checklist against a larger set of products; such as new as well as more established products, health care products, food products, technological products, environmental products and so on could prove beneficial in gaining a broader understanding of the potential of the checklist for entrepreneurs.

7.4 Contribution to the industry

Although there are guides to export already available, there are none which target entrepreneurial products specifically. It is these products that may incur the most difficult challenges to exporting. By creating the checklist, firms can feel more comfortable that they have not overlooked anything. With entrepreneurial products being some of the more difficult products to export, the checklist may help reduce the hesitation that some firms have towards exporting and firms can feel more comfortable that they have not overlooked a critical aspect.

Allowing for a more effortless exportation operation also comes with benefits that affect more than just the exporting firm themselves. Exporting may have a positive economic impact as well. Profitable exporting firms bring additional revenue into the domestic economy. Due to exporting, these firms may grow and as a result, more jobs may be created. In a time of economic turmoil, this is a very positive result.

7.5 Conclusion

It is possible that an entrepreneurial business can benefit from exporting into a foreign market, whether the purpose is to increase market size or perhaps to find a market that is a better fit for the product. However, these increases in sales can only be achieved if the exporting businesses have an overall understanding of the proper procedures and pertinent regulations that need to be addressed prior to export. If the procedures and regulations are neglected or are not followed properly, these incentives cease to exist, and extra costs incurred by the businesses may have irreversible effects. The proposed checklist provides entrepreneurs with a list of all the standard contingencies that may be encountered. This will assist in eliminating the possibility of potential oversights and increase the ease of which exportation takes place.

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