

International Taxation and Initial Foreign Entries

Hannah Alexander

The University of Tennessee

Advised by:

Dr. David W. Williams

The University of Tennessee

THESIS ADVISOR SIGNATURE APPROVAL PAGE

TO THE GLOBAL LEADERSHIP SCHOLARS PROGRAM:

As GLS Thesis Faculty Advisor for Hannah Alexander, I have read this paper and find it satisfactory.

GLS Thesis Faculty Advisor

Date

TABLE OF CONTENTS

Abstract	5
Introduction/Literature Review.....	6
Thesis Statement (Research Question)	9
Hypothesis Development	10
Methods.....	12
Research Design and Materials.....	12
Sample.....	13
Variables and Measures	13
Dependent variables.....	144
Independent variables.	14
Control variables.....	14
Data Analysis	17
Discussion	19
Conclusion	24
Appendix A.....	25

List of Figures and Tables

Table 1: Correlations Table	26
Table 2: Regression Analysis – Dependent Variable: Where to Internationalize	27
Table 3: Regression Analysis – Dependent Variable: How to Internationalize	28
Table 4: Logistic Regression of Controls and Independent Variables on Exporting Mode of Entry	29
Table 5: Logistic Regression of Controls and Independent Variables on Contractual Mode of Entry	30
Table 6: Logistic Regression of Controls and Independent Variables on Foreign Direct Investment Mode of Entry	31
Table 7: Regression Analysis – Dependent Variable: When to Internationalize.....	32
Figure A: Scatter plot including statutory tax rates and where countries internationalized	33
Figure B: Scatter plot including statutory tax rates and when countries internationalized	34

Abstract

To stay competitive, U.S. firms look towards expansion. In this expansion process, U.S. firms analyze a variety of factors ranging from market size and demographics to location. Research shows that foreign taxes affect foreign direct investment (FDI); however, other research indicates that many companies are not taking the necessary tax planning steps. Using a combination of a survey and secondary data, I analyzed the effect of statutory tax rates on firms' initial entries – *where* (to which country), *how* (using which entry modes), and *when* (how soon after firm founding). Results suggest that statutory tax rates have different effects for different internationalization decisions. I do not find an influence of tax rates on *when* firms internationalize for the first time, and, contrary to prior research, I do not find an effect of tax rates on *how* firms make their initial entry (mode of entry). Interestingly, tax rates appear to influence *where* firms make their first entry, yet the effect may be an artifact of other factors rather than the direct influence of statutory tax rates. Taken together, my results suggest that firms internationalizing for the first time may not be properly considering tax rates. This has important implications for internationalization theory, for tax professionals, and for internationalizing entrepreneurs.

International Taxation and Initial Foreign Entries

Introduction/Literature Review

In a global business environment, U.S. firms look towards expansion as a way to stay competitive in the market place. When deciding where to expand, U.S. firms analyze a variety of factors ranging from market size and demographics to location. For example, research shows that multinational firms “are not only concerned by the size of the host domestic market, but also by its density, i.e. the concentration of domestic demand around the main productive centers” (B’Enassy-Qu’er’e, Fontagn’e and Lahr’Eche-R’Evil, 2005, p.585). However, to be successful when expanding internationally, companies should also take taxation effects into consideration due to the effects taxation has on a firm’s profitability.

In order to understand the importance of taxation, it is beneficial to have a general understanding of the U.S. tax system. The U.S. tax code labels corporations that have been incorporated in the United States as U.S. persons, which allows the U.S. to gain tax jurisdiction on world-wide income. In order to aid the tax burden on U.S. corporations and citizens, the U.S. tax system allows a foreign tax credit or a tax deferral. A foreign tax credit permits a deduction in the U.S. corporate tax liability by reducing the tax liability by the foreign taxes paid. A tax deferral grants “American-owned foreign affiliates that are separately incorporated as subsidiaries in foreign countries” the option of waiting to pay U.S. taxes on income earned until the money is repatriated (Desai & Hines, 2001, p.5). However, income earned by “unincorporated foreign businesses, such as those of American-owned branch banks in other countries, are taxed immediately by the United States” (Desai & Hines, 2001, p. 5). Proper tax planning allows a company or corporation to retain a larger percentage of its after tax profits, which enables the business to utilize that money and reinvest, provide dividends to shareholders,

or reduce debt. In short, a lack of tax planning can lead to double taxation and missed tax deductions that negatively impact a firm's resources and profitability.

Although the United States government considers organizations incorporated in the United States as U.S. persons, the United States taxes individuals and corporations at two different rates. Therefore, if corporations do take tax rates into consideration when planning international entry, they would utilize corporate tax rates as set by the United States for operations within the U.S. and tax rates set by foreign nations for operations abroad. These tax rates are the rates that are stated within the tax law, also known as statutory tax rates.

Given the importance of corporate structure for taxation when entering an international market, it is not surprising that academic research demonstrates that taxation influences the mode of entry in a new market. Hebous, Ruf, and Weichenrieder (2011) find that tax differences influence the choice of greenfield investments, where a corporation builds a new venture from the ground up, versus mergers and acquisitions (M&A), where the corporation joins in a venture with another company, when entering foreign markets. They state that "there are reasons to expect that the location decision of greenfield investments are significantly more elastic to international taxation than M&A investments" (Hebous et al., 2011, p.818). Their study found that "an increase in the statutory corporate income tax rate of 10 percent reduces the probability of choosing a country to host a greenfield investment by about 6.4 percent. M&A investments, however, are less sensitive to differences in international tax rates as indicated by a tax elasticity of -2.8 percent" (Hebous, et al., 2011, p. 834). These findings conclude that "greenfield investments are more deterred in high tax states than are M&A" (Hebous, et al., 2011, p.819); thus firms are less likely to start a new facility in high tax countries.

Further, other literature explains that “while the effective marginal and average tax rates prove insignificant, the statutory tax rate shows a significant negative impact” on the likelihood of investing in a particular country (Buettner and Ruf, 2007, p. 159). A statutory tax rate is the tax rate that the corporations pay on their corporate income; while the effective marginal tax and average tax rates refers to the percentage of taxes a corporation pays in relation to its profits. In their research, B’Enassy-Qu’er’e, Fontagn’e and Lahr’Eche-R’Evil (2005) concluded that “there is an asymmetry in the impact of tax differentials on foreign direct investment (FDI): while lower tax rates in the recipient countries fail to significantly attract foreign investment, higher tax rates tend to discourage new FDI inflows” (p. 598). “Empirical evidence shows that multinational firms (MNF thereafter) do react to tax incentives, be they embedded in tax rules (which avoid double taxation problems through credit or exemption schemes) or tax rates” (B’Enassy-Qu’er’e, et al., 2005, p. 584). Additionally, Kneller and McGowan (2011) studied 17 European countries and found “that a reduction of the corporate tax rate from the median (30.04%) to the first quartile (27.57%) implies a .088 percentage point increase in the entry rate, whereas for the same sized reduction from the third quartile (33.44) to the median, entry increases by .027 percentage points” (p. 6-7). In sum, although the literature provides many examples on the effects of tax rates on certain entry modes (e.g., foreign direct investment), the extant literature remains relatively silent regarding other entry modes such as partnerships and exporting as well as whether the tax rate influences the choice of country or if the foreign direct investment was the firm’s first international move. This suggests that it is an open question if firms really do consider tax rates when making their first move internationally.

Tax professionals support the idea that companies may be failing to properly plan for tax consequences when expanding internationally. For example, Goulet (2011), a tax professional in

NYC with more than 25 years of accounting experience and a focus on emerging growth companies and entrepreneurs, explains the implications of failing to comprehend tax consequences: “when start-ups aspire to go global, they often overlook the impact that international tax structures and offshore operations will ultimately have on their operations and on their investors” (p. 4). She questions the importance that companies place on taxation when expanding internationally and foreshadows some of the consequences: “it is possible to restructure an existing business structure but it can be very expensive and the result will seldom be optimal,” (Goulet, 2011, p.8). Although this type of restructuring is an option, it is a difficult one that a company would like to avoid, if possible. Goulet (2011) further explains that start-ups’ attitudes towards taxation results from their inexperience with internationalizing. In line with this argument, Johanson and Vahlne (1990) explain that in companies “two kinds of knowledge are distinguished: objective knowledge which can be taught, and experiential knowledge which can only be acquired through personal experience” (p. 12). This suggests that the lack of experiential knowledge may play a role in why firms may or may not consider tax rates when commencing internationalization. As noted above, these findings further lead me to question whether or not companies are actually considering tax implications when preparing for their international future.

Thesis Statement (Research Question)

Based on the literature and professional opinions outlined above, taxation has an important effect on foreign direct investment and location choice and that companies may not be considering international taxation as much as they should. This information leads to the research question for this thesis:

Do firms internationalizing for the first time consider statutory tax rates? If so, to what extent are they considering them?

Hypotheses Development

There are three inter-related decisions that entrepreneurs must make when expanding internationally: where to expand (market selection), when to expand (timing), and how to expand (entry mode) (cf. Shrader, Oviatt, & McDougall, 2000; Vermeulen & Barkema, 2002). Below, I address the influence of tax rates on each of these key decisions.

Market location and selection plays a large role in the international entrepreneurship process. However, one must examine the forces that affect the selection of the market location. In general, firms seek to maximize after tax profitability. For example, Chen and Chen (2010) use mathematical modeling to demonstrate that which markets firms enter can significantly impact their ability to reach optimal after tax profit maximization. In short, they show the impact that after-tax firm profitability has on market selection. Building on this, taxation should influence market selection by deterring not just investment but also expansion, in general, to countries with high statutory tax rates. Thus, a high statutory tax rate discourages investment due to the fact that a company will receive less after tax profits upon repatriation of funds. Additionally, based on the literature, a low tax rate will not be more successful at attracting foreign investment than a high tax rate will be at deterring it. B'Enassy-Qu'er'e, Fontagn'e and Lahr'Eche-R'Evil (2005) found "that a higher tax rate in the host country is more harmful to inward FDI than a lower tax rate is attractive for foreign capital" (p.594). This idea suggests that the relationship between taxation and location may not be perfectly linear. From this knowledge, high tax rates ought to have a larger impact on the company's decision than lower tax rates. Hypothesis 1 looks to examine the relationship between the statutory tax rate set by foreign

entities and the market location decision. Thus, the higher a country's statutory tax rate, the less likely that an entrepreneur will select this country for his/her firm's first international entry.

Hypothesis 1: The statutory tax rate is negatively related to international market selection, such that a higher statutory tax rate leads to less likely (frequent) market entry.

When firms expand internationally, they have a variety of ways to accomplish this goal.

How firms expand internationally relates to their mode of entry, which range from a low level of commitment, such as exporting, to those with a high level of commitment, like a greenfield investment. Tax rates should influence this commitment because they directly relate to a company's bottom line. The higher the taxes, the lower the amount that a company will be able to reinvest in their business overseas or repatriate back into the U.S. Davis, Egger, and Egger (2010) conclude that countries can utilize tax policies to influence foreign entry mode to promote certain investment levels (p. 725). Additional research provides examples of taxation influences on entry modes: "export-oriented production is particularly sensitive to tax differences. This might be expected: if the location of production is not determined by the need to have close proximity to a market, then it is likely to be more sensitive to other factors, such as taxation" (Devereux and Lockwood, 2006, p. 5). Hypothesis 2 examines the relationship between statutory tax rates and the level of commitment a firm exhibits when expanding internationally. Thus, the higher a country's statutory tax rate, the less likely that an entrepreneur will select an entry mode that requires a high level of financial commitment.

Hypothesis 2: The statutory tax rate is negatively related to entry mode choice, such that as statutory tax rates increase, the level of market commitment decreases.

Finally, I address *when* firms expand internationally. I expect that increases in the statutory tax rate will have a dampening effect on *when* firms expand internationally for the first

time. The timing of initial international entry matters because by internationalizing early, ventures use up scarce resources that could be used on other business expenses, projects, and investments. Thus, “in order to deal with the resource constraints imposed by being both a new venture and internationalizing early, entrepreneurs seek ways to conserve scarce resources” (Williams, 2010, p. 80). These resources are usually limited due to the small size of start-up companies (Ovaith and McDougall, 1994, p.51). Accordingly, firms will look to conserve as many resources possible, thus internationalizing earlier to countries with lower tax rates. Further, managers of businesses are often risk adverse, and “because managers are risk adverse, venturing across borders starts late, evolving slowly and cautiously thereafter” (Sapienza, Autio, George, and Zahra, 2006, p. 927). Therefore, a higher tax rate would add to the risk of expanding internationally because the tax rate would reduce the amount of after tax profits. Hypothesis 3 investigates the relationship between statutory tax rates and the time at which a firm expands internationally. Thus, the higher a country’s statutory tax rate, the longer it will take for a firm to expand into a specific country.

Hypothesis 3: The statutory tax rate is positively related to age at initial international entry such that as the statutory tax rate increases, the age at entry increases (international expansion is delayed).

Methods

Research Design and Materials

I utilized a database composed of survey data from 105 influential managers of international firms. The survey asked the managers about their firms’ initial international entry, including questions associated with the entry process such as entry location, mode of entry, and age of the firm at entry, which form this study’s focal dependent variables, as discussed below.

In order to ensure the quality and validity of the data, the online survey was pre-tested with a group of internationalization experts, including managers of international firms, to review the survey's effectiveness and wording.

In addition to the data from the survey described above, I collected secondary data on statutory tax rates, which forms the study's independent variable. The statutory tax rates come from several sources, specifically *Trading Economics*, "The Indirect Side of Investment – Multinational Company Finance and Taxation", *Law and Tax News*, "Corporate Income Tax Rate Database: Canada and the Provinces, 1960-2005", and the U.S. Commercial Service's Trade Information Center. Also, I matched the statutory tax rates to the year and country for each international entry in the sample.

Sample

In order to ensure external validity, allowing generalizability of this thesis' results to other companies and industries, I made sure that the survey included multiple industries. The survey's sample frame focused on U.S. headquartered and independent firms, and the sample list comprises the clients of a non-profit international small business development organization in the Midwestern United States. The survey respondents included founders and top managers of these firms ranging from c-level management to presidents who had been involved with the decision of internationalizing the firm. By choosing a survey whose participants were all based in the United States, I had the ability to control for cultural effects, institutional effects, and additional country-level influences on the international entrepreneurship process.

Variables and Measures

The wording of the questions for all dependent and control variables from the survey is provided in Appendix A.

Dependent variables. The three dependent variables measured in this study include 1) market selection, 2) level of market commitment, and 3) age at initial international entry.

I measured the first dependent variable, market selection, as the likelihood for a country to be chosen as the firm's first international entry. Using the survey data on the first market entered, I calculated the frequency of each respondent's international entry and compared this decision with the other decisions in the data. From this variable, I was able to create a rank for every country and relate it to the frequency selected (Dow, 2000).

I measured the second dependent variable, the level of market commitment, on a one to seven scale based on market commitment related to the mode of entry. I broke down the categories into seven continuous segments, with 1 = exporting (low commitment) and 7 = wholly owned subsidiary (high commitment). As a robustness check, I also broke the entry mode dependent variable into three separate categories: exporting (low commitment), contractual (moderate commitment), and foreign direct investment (high commitment). Appendix A shows the full range of potential commitments measured for entry mode, and results for the different measures are reported below.

I measured the third dependent variable, the age at initial international entry, as the difference between the year of founding of the company and the year at which the company expanded internationally for the first time (Coviello and Jones, 2004; Oviatt and McDougall, 2005). I focused only on outward expansion rather than inward expansion which would partner with an international firm inside the United States or importing.

Independent variable. For this study, the independent variable will be the statutory taxation rate. The statutory tax rate is described as the tax rate placed on corporate operations in a specific country. I gathered the statutory tax rates from *Trading Economics*, "The Indirect Side

of Investment – Multinational Company Finance and Taxation”, *Law and Tax News*, “Corporate Income Tax Rate Database: Canada and the Provinces, 1960-2005”, and the U.S. Commercial Service’s Trade Information Center. Because extant research (cf. B’Enassy-Qu’er’e et al., 2005) suggests that the effects of the statutory tax rate may not be linear, as a further robustness check, I also tested the quadratic relationship (e.g., statutory tax rate centered and squared) between statutory tax rates and each dependent variable described above.

Control variables. Due to the numerous factors that can influence where, how, and when a firm expands internationally for the first time, I control for a number of additional factors in my data analysis. To account for alternative explanations for the results of this study, I control for geographic distance, market size, language distance, and industry.

The first control element included the geographic distance between the home and host countries as “international trade decreases with ‘distance’ as predicted by the gravity model” (Lankhuizen, de Groot, and Linders, 2011, p. 1395). All firms in the sample were U.S.-based and headquartered; thus, geographic distance is measured as the ‘great circle’ mileage between Chicago, the largest major city in the sampled firms’ region, and the capital city of each country selected by the firms in the sample. Distance can impact a firm’s decision to move because of the costs that are associated with transporting goods and people between the host and home countries (Boeh and Beamish, 2012).

The second control element concerns the market size of the host country. I measured market size as the GDP (gross domestic product) per capita in U.S. dollars. “Customers in foreign markets with GNP per capita similar to that of the domestic market are more likely to buy similar types of products and have access to similar types of media” (Mitra & Golder, 2002, p. 359). This difference can make it more appealing for firms to enter a country based on its

GDP per capita because it can predict buying patterns of potential customers. In addition, a larger GDP per capita suggests a larger, potentially more attractive market, which suggests an alternate reason why firms may select a particular country, enter it sooner, or use a particular entry mode (Clark and Pugh, 2001; Ellis, 2008).

The third control element deals with the extent to which there exists a common language between the home and host country. By utilizing a common language control variable, I can “catch cultural factors that significantly contribute to international trade and financial linkages between countries, for instance through network externalities” (B’Enassy-Qu’er’e, Fontagn’e and Lahr’Eche-R’Evil, 2005, p.586). If firms consider internationalizing in a country with significant language and cultural differences, they will have to consider the amount of work needed to successfully set up business in this country adding to the time and cost of the international move. The survey measured language distance by analyzing the similarity of language roots between the U.S. and the foreign market (Gordon, 2005). I looked at the distance measure from Dow and Karunaratna (2006) and focused on the major language spoken in each country. See Appendices A, B, and C in Dow and Karunaratna (2006) for full details on the language ‘distance’ measure. Data for this measure was downloaded from Douglas Dow’s website (<http://www.mbs.edu/home/dow/research/public/Language.html>).

The forth control element involves the firm’s industry. The type of industry a firm is in can impact its view on globalization. Fernhaber, McDougall, & Oviatt (2007) found “that new ventures are likely to pay greatest attention to and to imitate the behaviors most frequently exhibited by firms located near them in their industry” (p. 529). To control for this, I used each industry’s SIC code and created dummy variables based on the firm’s industry classified as manufacturing, agriculture, trade (reference category), or services.

Data Analysis

Before starting with regression analyses, I conducted two other analyses. First, I ran correlations on all the variables. Second, I plotted the independent variable (statutory tax rate) against each dependent variable (where, how, and when) to visually inspect the nature of the relationship. Then, in order to test the hypotheses, I analyzed the effect of the control variables, which included geographical distance, market size, language distance, and industry, and the independent variable of statutory tax rates on the dependent variables of *when*, *where*, and *how* a firm internationalizes. I used ordinary least squares (OLS) regression to test my hypotheses. For the categorical formulation of the *how* dependent variable, I used binary logistic regression.

However, before reporting the results of these regression analyses, I first consider the correlations between the variables. Table 1 lists the correlations between the control, independent, and dependent variables in this study. From this table, I note that statutory tax ($r = .204$; $p \leq .10$), language distance ($r = -.329$; $p \leq .01$), and geographical distance ($r = -.594$; $p \leq .01$) had a significant effect on where a firm located their initial international entry, while the industry had a significant effect on when and how a company internationalized. Specifically, service ($r = -.280$; $p \leq .01$) and manufacturing ($r = .351$; $p \leq .01$) industries influenced when a firm internationalized, and service industries ($r = -.225$; $p \leq .05$) correlated with the export, but not the contractual or FDI, mode of entry. I now turn to the results of the OLS and binary logistic regression analyses on the where, when, and how variables.

Hypothesis 1 argues that the statutory tax rate is negatively related to international market selection. Table 2 lists the effects of the control variables and independent variables on the dependent variable of international market selection. As shown in Table 2, the statutory tax rate significantly predicts international market selection (Model 2; $b = .016$, $p \leq .10$). This result

shows that an increase in the statutory tax rate results in more likely selection of a country for a firm's first international entry, which is opposite of the predictions of Hypothesis 1.

Furthermore, in this regression analysis, I found that geographical distance, a control variable, also impacted international market selection (Model 2; $b = -.123$, $p \leq .001$) such that greater geographical distance reduced the likelihood of market selection. Tests of the quadratic relationship indicate that a quadratic term also significantly predicts market selection ($b = -0.001$; $p \leq .05$). However, because these relationships were not in the hypothesized direction, I took a closer look at the data, plotting the data to visually inspect the relationship between the two. Figure A, the scatter plot of statutory tax rates and market selection, suggests that the statutory tax rate may not be directly influencing market selection (i.e., it provided no evidence of a linear, cubic, or quadratic relationship). I return to these results in the Discussion section.

Hypothesis 2 argues that the statutory tax rate is negatively related to entry mode choice. Table 3 reports the results of the OLS regression analysis (with entry mode as a continuous variable), and Tables 4, 5, and 6 report the binary logistic regression results (with entry mode as three categories: export, contractual entry, and FDI). Running the binary logistic regression on each different entry mode category provides a greater understanding of the effects of the tax rates by virtue of the finer-grained measures. In both the regression analysis and logistic regression analysis, the statutory tax rate had no effect on the mode of entry, in any of its formulations. Robustness checks using the squared term for statutory tax rates also show no significant effect on entry mode. As a result, I do not find support for Hypothesis 2. However, consistent with the correlation analysis reported above, I do find that service industries (Model 4; $b = 1.689$, $p \leq .05$; Model 6; $b = -1.664$; $p \leq .05$) do influence mode of entry, specifically exporting.

Hypothesis 3 argues that the statutory tax rate is positively related to the age of international expansion such that the larger the statutory tax rate, the later a firm internationalizes to that country for its initial international entry. Regression results reported in Table 7 indicate that although manufacturing industries (Model 12; $b = 14.623$; $p \leq .05$) influenced when firms expanded internationally for the first time, the statutory tax rate regression coefficient is not significant (Model 12; $b = .097$; ns). As above, I also ran a robustness check for a quadratic relationship between statutory tax rates and when a company internationalized. Results indicate that the squared statutory tax rate variable also does not influence when a firm internationalizes ($b = -.016$; ns).

Discussion

Although the literature suggests that statutory tax rates have an impact on *where*, *when*, and *how* a company internationalizes, I found conflicting results in my analysis. Hypothesis 1 suggests that high statutory tax rates lead to less likely (frequent) initial market entry. The logic supporting this hypothesis argues that firms will take statutory tax rates into account because higher tax rates in a target country reduce the firm's overall profitability, especially when controlling for market size. As stated in my results, I found a significant relationship between statutory tax rates – both a linear and quadratic relationship – and the location of initial market entry when utilizing regression analysis; however, plotting statutory tax rates (see Figure A) tells a different story. Post-hoc analyses of the data suggest that the significance found may result from clusters of countries located in similar areas. These clusters create three main groups (from the top of Figure A moving towards the bottom) composed of (1) Canada and Mexico; (2) Germany, Australia, India, and Japan; and (3) a mixed group of countries including Venezuela, Spain, South Korea, Indonesia, Portugal, Ecuador, Peru, Nigeria, Brazil, Russia, the U.A.E.,

Singapore, Libya, Panama, the Dominican Republic, South Africa, Israel, Yemen, Bermuda, Egypt, the Philippines, Switzerland, the Netherlands, Ghana and Italy. When analyzing these groups of countries, other factors influencing location preference potentially come into play. For example, the Canada and Mexico grouping could be caused by NAFTA, not just being 'geographically' proximate but also sharing a common border with the U.S., which influences transportation costs, and the cultures of these locations. Additionally, Germany, Australia, India, and Japan could be selected based on previous and current relationships with other businesses and these countries. The last group of countries could be explained by extraordinary circumstances particular to each company. These factors would lead to tax rates being shown as significant when, in fact, they may have just gone together with outside circumstances. These results were particularly surprising as they suggest that firms first internationalize to markets with higher, not lower, statutory tax rates.

Hypothesis 2 speculates that as the statutory tax rate increases, the level of market commitment will decrease. Prior literature suggests that tax rates have an important impact on entry modes, in general (e.g., B'Enassy-Qu'er'e, Fontagn'e and Lahr'Eche-R'Evil, 2005; Davis, Egger, and Egger, 2010), and the logical extension of this line of thought is that such tax rates should also affect the first international moves as well. Accordingly, I thought that *how* firms internationalized would be influenced by tax rates as tax rates impact the bottom line believing that this relationship would cause firms to search for the appropriate mode of entry. However, this relationship did not hold. Per the literature, I expected this relationship to be strongest, especially when related to FDI, as FDI was heavily discussed in the literature as having a relationship to taxation. However, these results may differ due to the fact that I focused on companies expanding for the first time rather than all international expansions. FDI is the

strongest financial commitment that a firm can make in regards to *how* a company internationalizes. These differences could demonstrate a shift in a company's analysis of taxation over time related to the mode of entry suggesting that further research may need to be done by distinguishing first moves from additional international moves.

Hypothesis 3 predicts that *when* a firm internationalizes will be positively related to the age at initial entry. I hypothesized this relationship due to the need for managers of new ventures to conserve scarce resources, thus internationalizing sooner to countries where the tax rates are lower (and thus costs of internationalizing are lower). I did not find significant results for the effect of statutory tax rates (linear or quadratic) on *when* firms internationalize for the first time. As above, post-hoc analyses utilizing the scatter plots (Figure B) and the raw data indicate that a relationship could exist between statutory tax rates and when a firm internationalizes. The scatter plot suggests that firms that internationalize within twenty years of founding select a wide variety of countries with a range of tax rates between 20 and 50 percent. This relationship is surprising due to the limited resources young companies have related to internationalization including, but not limited to, knowledge of managers, and relationships with companies/consumers in foreign countries.

These conflicting results lead me to believe that other factors are influencing companies' location decisions and that they are not taking statutory tax rates into effect. Furthermore, the lack of results regarding how a company decides to internationalize also suggests that companies may not be adequately considering tax rates during this stage of the process. These results support Johanson and Vahlne's (1990) conclusions about the two types of knowledge related to international expansion: objective and experiential. Objective knowledge is "knowledge which can be taught," while experiential knowledge is "knowledge which can only be acquired through

personal experience” (Johanson and Vahlne, 1990, p. 12). Johanson and Vahlne (1990) suggest that experiential knowledge is “a driving force in the internationalisation process” as it provides businesses with an ability to fully understand the steps and factors in internationalizing (p. 12). These arguments, taken together with the findings of this study, lead me to think that entrepreneurs are not taking taxes into consideration because they have not had the experience required. Furthermore, these results support Eriksson, Johanson, Majkgard, and Sharma’s (1997) argument that managers with previous international experience may analyze costs in different ways than managers with no previous international experience. Therefore, managers transferring from international companies to domestic companies may have more knowledge about internationalizing and may evaluate opportunities differently than someone with no international experience. Furthermore, these managers may utilize different variables when deciding where to go and may associate different costs with growth.

By looking back at the survey results, I read through the comments provided by the survey respondents when asked about their firms’ first planned international expansion. Only one respondent included taxation as a reason for expansion stating that the initial country of entry had a “preferential tax policy in the industry we were in” (Williams 2010). In contrast to my hypotheses, most respondents cited customers, potential customers who had reached out to the companies, advice from consulting companies, and a desire to enter into underdeveloped markets as reasons for selecting a particular country.

Understanding that non-significant results ought to be interpreted with care, my results lead me to conclude that entrepreneurs of U.S. based companies are losing savings by failing to incorporate statutory tax rates into their decision making processes. Not only do these decisions impact the bottom line during the year due to additional taxes, but they can negatively impact the

company when it repatriates its earnings. An incorrect forecast projected earnings can result from not incorporating taxation into the decision making process. These poor moves also represent missed business opportunities and investments into other countries. To remedy these situations, businesses should consider adding employees with international experience or hiring a consulting firm that specializes in international expansions. As business continues to become more international, firms that fail to consider statutory tax rates when expanding will fall behind.

In addition to having an impact on the expanding companies, these results also impact tax professionals. Tax professionals need to ensure that their current clients are considering tax implications early on during the expansion process and should discuss their business plan and timeline with them in order to maximize their clients' opportunities. Additionally, by working on internationalization tax planning, tax professionals have the opportunity to expand their business by targeting companies that have the potential for international expansion in the next several years. These changes will create a win-win situation for both the tax professionals and the companies expanding.

This study is not without limitations. I could have missed significant variables in regards to market selection that could skew my results. Also, the survey I utilized was composed of companies based in Illinois which could be too specific and not provide a diverse enough sample of companies based in the U.S. While the data set included various factors related to international expansion, the survey did not directly ask about taxation. This factor could lead me to make incorrect assumptions about the importance (or lack thereof) of taxation on these firms' decisions. Additionally, the survey allowed me to track the firm's decision but did not provide me with information regarding their decision making process or the effects of the decision on the company. This lack of information does not allow me to track the company's long term goals in

relation to internationalization, what factors they were taking into consideration during the expansion process, or the company's thoughts about the decision afterwards.

Further research areas include analyzing the monetary implications on companies regarding poor tax decision, attitudes of top management in relation to international entrepreneurship and taxation, and looking into country specific tax policy to see if foreign countries can find ways to more effectively recruit U.S. firms' investment.

Conclusion

In this study, I analyzed the affect foreign statutory tax rates had on *where*, *when*, and *how* U.S. companies internationalized for the first time. I challenged past research by approaching international taxation and international expansion from a new angle by focusing on international entrepreneurship, specifically a firm's first international expansion. Through my research, I found that statutory tax rates had a positive relationship with *where*, no relationship regarding *how*, and no relationship to *when* a firm internationalizes for the first time. In doing so, I hope to have brought attention to taxation and the impact of tax rates on the decision making process of U.S. based firms in regards to the internationalization process.

Appendix A: Survey Questions Used to Form Dependent and Control Variables

3. In what year did your firm make this expansion? _____ (year)						
4. To which country was this expansion? _____ (country)						
5. What entry mode did your firm use for this expansion?						
☐	☐	☐	☐	☐	☐	☐
Exporting	Licensing	Franchising	Strategic Alliance (No Equity Commitment)	Joint Venture (Equity Commitment)	Merger or Acquisition	Wholly Owned Subsidiary

Note: The Control Variables related to the country of entry (geographic distance, market size, and language distance) were calculated as described in the text using the answer to the question “to which country was this expansion?” The Industry Control Variables were determined with a question asking respondents to select their industry using the Standard Industrial Classification System (SIC) codes and descriptions for each industry.

Table 1 – Correlations Table

Variables	1	2	3	4	5	6	7	8	9	10	11	12
1. Where	-											
2. Method of Entry - Exporting	- 0.015	-										
3. Method of Entry - Contractual	- 0.039	0.576 **	-									
4. Method of Entry - FDI	0.051	0.653 **	- 0.234 *	-								
5. When	0.148	0.047	- 0.115	0.066	-							
6. Statutory Tax	0.204 †	0.024	- 0.081	0.134	- 0.004	-						
7. Language Distance	- 0.329 **	- 0.077	0.157	- 0.024	0.051	- 0.108	-					
8. Agricultural Industry	- 0.145	0.061	- 0.14	0.35	- 0.055	0.246 *	0.179	-				
9. Services Industry	- 0.003	- 0.255 *	0.161	0.126	- 0.28 **	- 0.028	- 0.032	- 0.168	-			
10. Manufacturing Industry	0.108	- 0.008	0.014	0.015	0.351 **	0.098	0.006	- 0.213 *	0.549 **	-		
11. Geographical Distance	- 0.594 **	- 0.188	0.095	0.137	- 0.064	- 0.003	0.312 **	0.126	0.046	0.032	-	
12. Market Size	- 0.085	0.063	0.096	- 0.122	0.103	- 0.394 **	0.254 **	0.042	0.074	- 0.206 *	0	-
M	- 1.45	0.61	0.17	0.21	20.18	33.29	- 1.41	0.08	3.59	0.24	0.48	37.09
SD	0.61	0.49	0.38	0.41	21.67	8.39	1.63	0.27	0.75	0.43	2.58	11.5
Range	1.5	0-1	0-1	0-1	92	58	4.39	1	1	1	9.15	48

*** $p \leq .001$ ** $p \leq .01$ * $p \leq .05$ † $p \leq .1$

Table 2: Regression Analysis – Dependent Variable: Where to Internationalize

Model 1: Control Variables				Model 2: Independent Variable			
	B		SE		B		SE
Constant	-1.145	***	0.255	Constant	-1.838	***	.459
Geographical Distance	-.131	***	0.020	Geographical Distance	-.123	***	.022
Market Size	.000		0.005	Market Size	.004		.007
Language Distance	-.051		.033	Language Distance	-.048		.036
Services Industry	.187		.149	Services Industry	.130		.158
Manufacturing Industry	.246	†	.131	Manufacturing Industry	.213		.139
Agricultural Industry	.034		.204	Agricultural Industry	-.149		.243
				Statutory Tax Rate	.016	*	.007
R^2	0.387			R^2	0.400		
Adjusted R^2	0.347			Adjusted R^2	0.346		
F	9.661	***		F	7.514	***	
Df	98			df	86		
ΔR^2				ΔR^2	.013		

*** $p \leq .001$ ** $p \leq .01$ * $p \leq .05$ † $p \leq .10$

Table 3: Regression Analysis – Dependent Variable: How to Internationalize

Model 3: Control Variables				Model 4: Independent Variable			
	B		SE		B		SE
Constant	2.100	†	1.122	Constant	2.430		2.220
Geographical Distance	.149		0.091	Geographical Distance	.094		0.096
Market Size	-.026		0.021	Market Size	-.029		0.031
Language Distance	-.018		.147	Language Distance	.098		0.159
Services Industry	1.611	*	.663	Services Industry	1.689	*	0.693
Manufacturing Industry	.734		.587	Manufacturing Industry	.714		.611
Agricultural Industry	.378		.958	Agricultural Industry	.800		1.151
				Statutory Tax Rate	.007		.036
R^2	0.122			R^2	0.121		
Adjusted R^2	0.063			Adjusted R^2	0.042		
F	2.076	†		F	1.521		
Df	96			df	84		
ΔR^2				ΔR^2	.001		

*** $p \leq .001$ ** $p \leq .01$ * $p \leq .05$ † $p \leq .10$

Table 4: Logistic Regressions of Controls and Independent Variables on Exporting Mode of Entry

Model 5: Control Variables					Model 6: Independent Variable			
	B	SE	Odds Ratio			B	SE	Odds Ratio
Constant	1.580	1.154	4.857		Constant	1.386	2.388	3.998
Geographical Distance	-.166†	.093	.847		Geographical Distance	-.138	.096	.871
Market Size	.009	.021	1.009		Market Size	.009	.032	1.009
Language Distance	-.104	.147	.901		Language Distance	-.206	.160	.814
Services Industry	-1.717*	.724	.180		Services Industry	-1.664*	.740	.189
Manufacturing Industry	-.896	.659	.408		Manufacturing Industry	-.899	.667	.407
Agricultural Industry	.163	1.026	1.178		Agricultural Industry	-.077	1.178	.926
					Statutory Tax Rate	-.005	.040	.995
χ^2	12.750	*			χ^2	11.860		
Df	6				df	7		
Nagelkerke (Pseudo) R ²	.167				Nagelkerke (Pseudo) R ²	.176		

*** p ≤ .001 ** p ≤ .01 * p ≤ .05 † p ≤ .10

Table 5: Logistic Regressions of Controls and Independent Variables on Contractual Mode of Entry

Model 7: Control Variables					Model 8: Independent Variable			
	B	SE	Odds Ratio			B	SE	Odds Ratio
Constant	-2.918†	1.558	.054		Constant	-3.442	2.814	.032
Geographical Distance	.061	.117	1.063		Geographical Distance	.108	.121	1.114
Market Size	.021	.029	1.021		Market Size	.035	.043	1.035
Language Distance	.277	.191	1.319		Language Distance	.272	.194	1.312
Services Industry	1.294	.888	3.647		Services Industry	1.073	.916	2.924
Manufacturing Industry	.740	.852	2.095		Manufacturing Industry	.845	.866	2.328
Agricultural Industry	-19.512	1393 5.264	.000		Agricultural Industry	-19.722	1585 1.005	.000
					Statutory Tax Rate	-.005	.047	.995
χ^2	10.100				χ^2	10.082		
Df	6				df	7		
Nagelkerke (Pseudo) R ²	.158				Nagelkerke (Pseudo) R ²	.174		

*** p ≤ .001 ** p ≤ .01 * p ≤ .05 † p ≤ .10

Table 6: Logistic Regressions of Controls and Independent Variables on Foreign Direct Investment Mode of Entry

Model 9: Control Variables					Model 10: Independent Variable			
	B	SE	Odds Ratio			B	SE	Odds Ratio
Constant	-2.297†	1.365	.101		Constant	-2.304	2.498	.100
Geographical Distance	.177†	.105	1.194		Geographical Distance	.113	.110	1.120
Market Size	-.026	.023	.974		Market Size	-.027	.034	.973
Language Distance	-.078	.167	.925		Language Distance	.048	.186	1.049
Services Industry	1.483	.927	4.404		Services Industry	1.457	.915	4.291
Manufacturing Industry	.906	.875	2.473		Manufacturing Industry	.673	.873	1.960
Agricultural Industry	1.043	1.111	2.839		Agricultural Industry	1.118	1.233	3.059
					Statutory Tax Rate	.021	.041	1.021
χ^2	8.446				χ^2	7.525		
Df	6				df	7		
Nagelkerke (Pseudo) R ²	.129				Nagelkerke (Pseudo) R ²	.130		

*** $p \leq .001$ ** $p \leq .01$ * $p \leq .05$ † $p \leq .10$

Table 7: Regression Analysis – Dependent Variable: When to Internationalize

Model 11: Control Variables				Model 12: Independent Variable			
	B		SE		B		SE
Constant	5.577		10.538	Constant	5.520		19.801
Geographical Distance	-.487		0.865	Geographical Distance	-0.616		0.956
Market Size	.307		0.196	Market Size	0.291		0.292
Language Distance	.536		1.365	Language Distance	1.458		1.528
Services Industry	-5.493		6.122	Services Industry	-5.380		6.677
Manufacturing Industry	13.595	*	5.421	Manufacturing Industry	14.623	*	5.911
Agricultural Industry	-1.872		9.179	Agricultural Industry	-7.841		11.574
				Statutory Tax Rate	.097		.316
R^2	0.164			R^2	0.188		
Adjusted R^2	0.108			Adjusted R^2	0.113		
F	2.917	*		F	2.508	*	
Df	95			df	83		
ΔR^2				ΔR^2	.024		

*** $p \leq .001$ ** $p \leq .01$ * $p \leq .05$ † $p \leq .10$

Figure A: Scatter plot including statutory tax rates and where countries internationalized

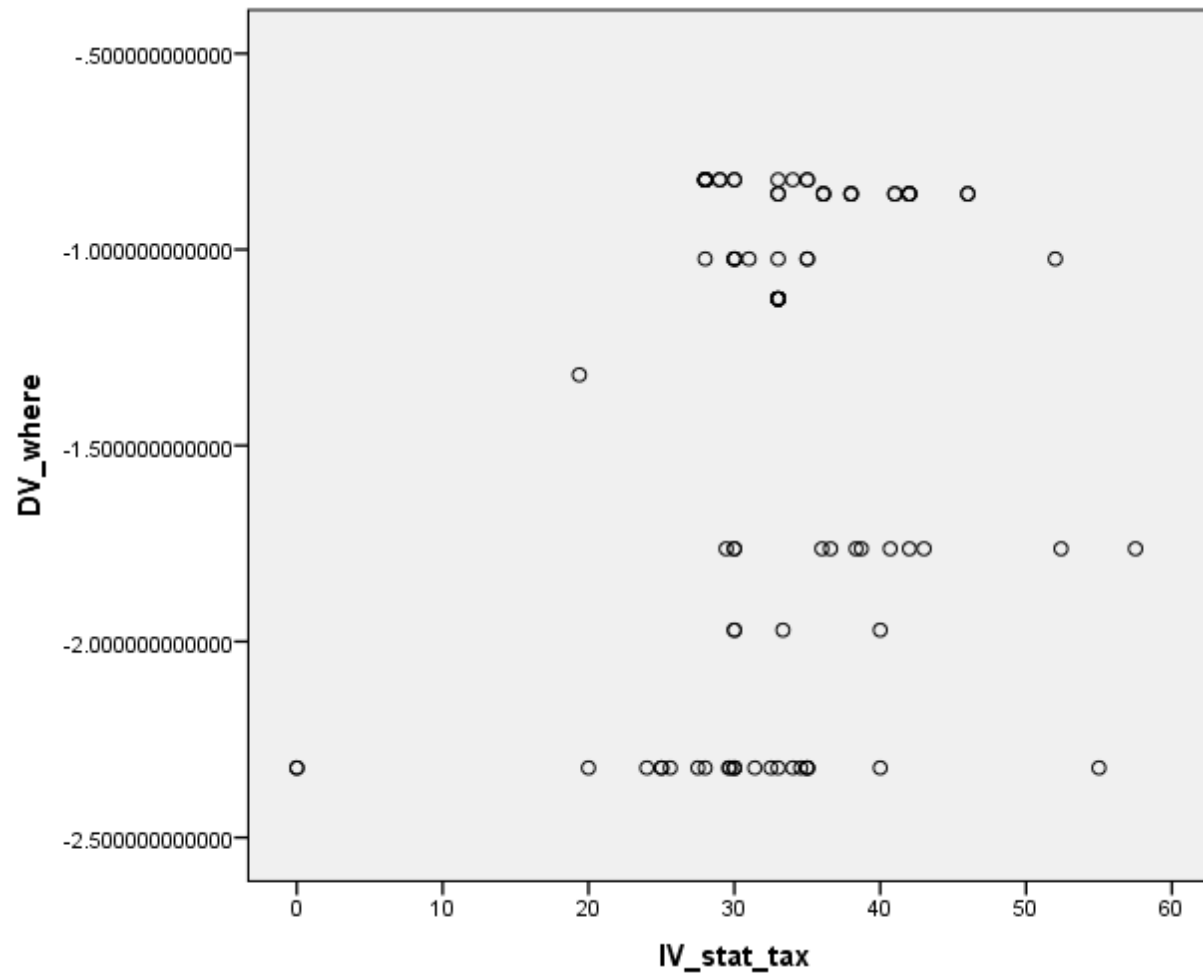
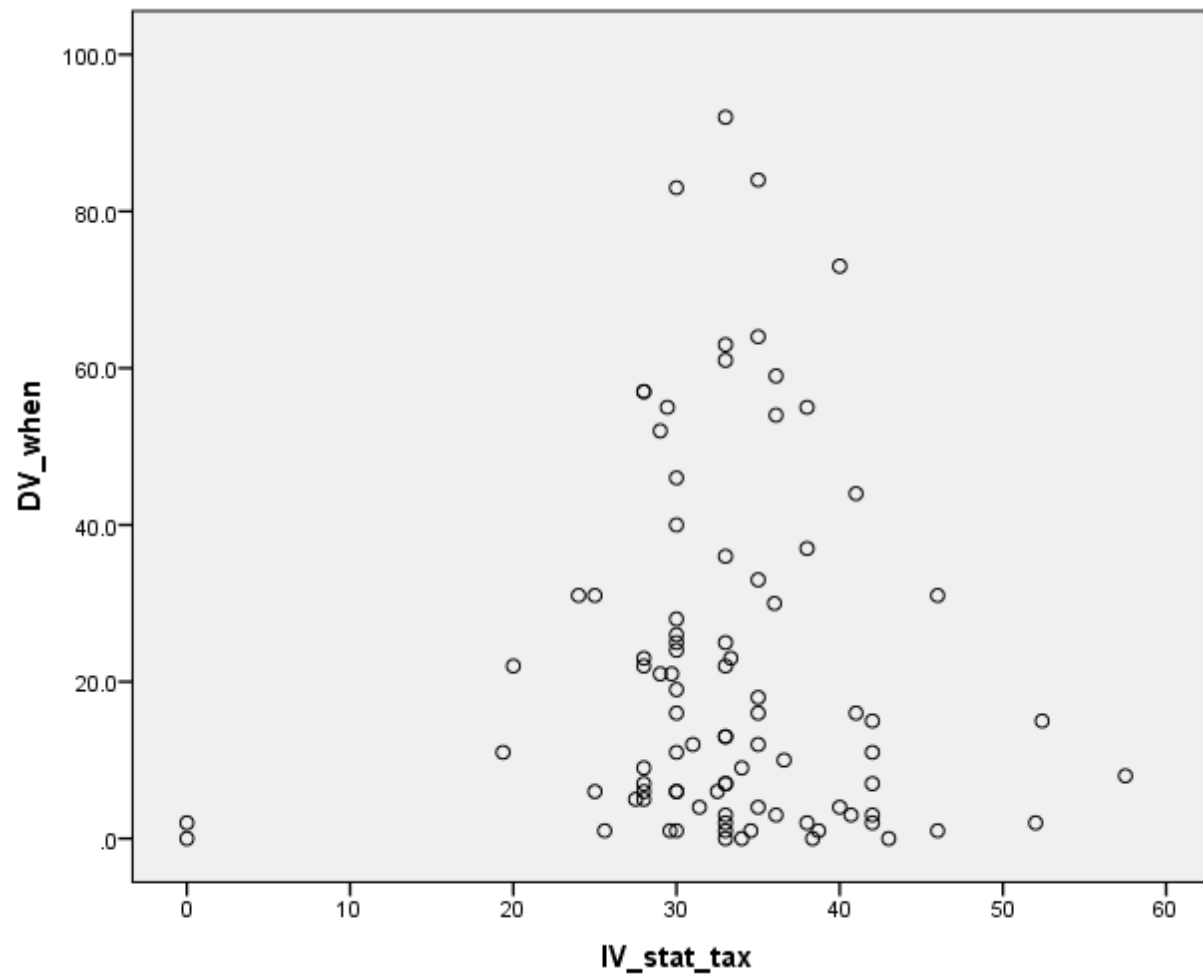


Figure B: Scatter plot including statutory tax rates and when countries internationalized

REFERENCES

- Bésassy-Quéré, A., Fontagne, L., Lahreche-Revil, A. (2005). How Does FDI React to Corporate Taxation? *International and Public Finance*, Vol. 12, No. 5.2005.
- Boeh, K. K., Beamish, P. W. (2012). Travel time and the libability of distance in foreign direct investment: Location choice and entry mode. *Journal of International Business Studies*, 43(5), 525-535.
- Buettner, T., Ruf, M. (2007). Tax incentives and the location of FDI: Evidence from a panel of German multinationals. *International Tax and Public Finance*, 14:151–164
- Cahill, Sean A., (2007). “Corporate Income Tax Rate Database - Canada and the Province 1960-2005”. No 52726, Economic and Market Information, Agriculture and Agri-Food Canada.
- Clark, T. & Pugh, D. S. (2001). Foreign country priorities in the internationalization process: a measure and an exploratory test. *International Business Review*, 10(3): 285.
- Chen, P.S., Chen, K.H., (2010). Multi-location Investment Scheduling Model with Different Value-based Time Limit under Centralized Sequential Advancement Strategy. *European Journal of Economics, Finance and Administrative Sciences*, 23: 58-66.
- Coviello, N., E. & Jones, M., V. (2004). “Methodological issues in international entrepreneurship research”. *Journal of Business Venturing*, 19(4): 485.
- Davies, R. B., Egger, H., Egger, P. (2010). Profit taxation and the mode of foreign market entry. *Canadian Journal of Economics*, 43(2), 704-727.
- Desai, M. A., C. F. Foley, & Hines Jr., J.R. (2004). Foreign direct investment in a world of multiple taxes. *Journal of Public Economics*, 88(12): 2727-2744.
- Devereux, M., Lockwood, B. (2006) “Taxes and the size of foreign-owned capital stock: which tax rates matter?” European Tax Policy Forum.
- Dow, D. (2000). A Note on Psychological Distance and Export Market Selection. *Journal of International Marketing*, 8(1): 51-64.
- Dow, D. & Karunaratna, A. (2006). Developing a multidimensional instrument to measure psychic distance stimuli. *Journal of International Business Studies*, 37(5): 578-602.
- Ellis, P. D. (2008). Does psychic distance moderate the market size-entry sequence relationship?. *Journal of International Business Studies*, 39(3): 351-369.

- Eriksson, K., Johanson, J., Majkgard, A., & Sharma, D. D. (1997). Experiential knowledge and costs in the internationalization process. *Journal of International Business Studies*. 28(2): 337-360.
- Fernhaber, S. A., P. P. McDougall, et al. (2007). Exploring the Role of Industry Structure in New Venture Internationalization. *Entrepreneurship: Theory & Practice* 31(4): 517-542.
- Gordon, R. G. (Ed.). (2005). *Ethnologue: languages of the world*: SIL International.
- Goulet, J. P. (2011). International tax planning--an essential step for global start-ups. *Corporate Taxation* 38(1): 3-8.
- Hebous, S. k., M. Ruf, et al. (2011). "The Effects of Taxation on the Location Decision of Multinational Firms: M&A versus Greenfield Investments." *National Tax Journal* 64(3): 817-838.
- Johanson, J. & Vahlne, J. E. (1990). The mechanism of internationalism. *International Marketing Review*, 7(4): 11.
- Kneller, R. & McGowan, D. (2011). Tax Policy and Firm Entry and Exit Dynamics: Evidence from OECD Countries.
- Lankhuizen, M., de Groot, H. L. F. and Linders, G.-J. M. (2011), The Trade-Off between Foreign Direct Investments and Exports: The Role of Multiple Dimensions of Distance. *World Economy*, 34: 1395–1416.
- Law and Tax-News.com. (<http://www.lawandtax-news.com/>).
- Mintz, J. M., Weichenrieder, A. J., (2010) *The Indirect Side of Direct Investment*, Hong Kong: Massachusetts Institute of Technology.
- Mitra, D. and P. N. Golder (2002). Whose Culture Matters? Near-Market Knowledge and Its Impact on Foreign Market Entry Timing. *Journal of Marketing Research (JMR)* 39(3): 350-365.
- Oviatt, B. M. & McDougall, P. P. (1994). Toward a theory of international new ventures. *Journal of International Business Studies*, 25(1): 45-64.
- Oviatt, B. M. & McDougall, P. P. (2005). Defining international entrepreneurship and modeling the speed of internationalization. *Entrepreneurship: Theory & Practice*, 29(5): 537-553.
- Sapienza, H. J., E. Autio, et al. (2006). A capabilities perspective on the effects of early internationalization on firm survival and growth. *Academy of Management Review* 31(4): 914-933.

- Shrader, R. C., B. M. Oviatt, et al. (2000). How new ventures exploit trade-offs among international risk factors: lessons for the accelerated internationalization of the 21st century. *Academy of Management Journal* 43(6): 1227-1247.
- Trading Economics. (<http://www.tradingeconomics.com/>).
- Trade Information Center. (2004). *Saudi Arabia: Foreign Corporate Tax Rate*. Retrieved from http://export.gov/middleeast/country_information/saudiarabia/Copy%20of%20Saudi%20Arabia%20Foreign%20Corporate%20Tax%20Rate.pdf
- Vermeulen, F. and H. Barkema (2002). Pace, Rhythm, and Scope: Process Dependence in Building a Profitable Multinational Corporation. *Strategic Management Journal* 23(7): 637.
- Williams, David W., "Why Do Different New Ventures Internationalize Differently? A Cognitive Model of Entrepreneurs' Internationalization Decisions" (2010). Managerial Sciences Dissertations. Paper 21.