

The Age of Digitalisation

Market Entry in the Era of Financial Technology

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Bachelor's Thesis

Submitted to
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Hochschule für Technik und Wirtschaft
University of Applied Sciences
FB03

In partial fulfillment of the requirements
for the degree of

Master of Science (M.Sc.)
Economics and Management Science
Major Macroeconomics

October 13th 2017
Student ID 570635

Contents

1	Introduction	1
2	Theoretical Frameworks	1
3	The Fintech Industry	2
4	Literature Review	4
4.1	Previous Studies in the field of Internationalisation	5
4.2	Theoretical Framework	9
4.2.1	Dunning’s Eclectic Paradigm	9
5	The E-Market Environment	12
6	Projects and Tools	14
7	Conclusion and Key Takeaways	15
	References	16

List of Figures

3.1	Americans' Confidence in Banks (1979-2015)	3
3.2	Americans' Confidence in Different Organisations)	3
4.1	Push, Pull and Intermediating Forces in the Internationalisation Process) .	12

List of Abbreviations

ETF	Exchange-Traded Fund
BI	Business Intelligence
KPI	Key Performance Indicator
ETL	Extract, Transform, Load
SQL	Structured Query Language
SEO	Search Engine Optimization

1 Introduction

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2 Theoretical Frameworks

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3 The Fintech Industry

Financial Technology, often shortened to FinTech, describes the use of technology in the financial sector in order to provide applied financial solutions. It is important to note that FinTech, albeit an industry that is seemingly rather new, has actually been around since the 1800s. Buckley, Arner, and Barberis (2016) define three key periods in the evolution of FinTech: Fintech 1.0, Fintech 2.0 and FinTech 3.0.

FinTech 1.0 can be traced back to 1866 and is characterised by the implementation of the first Trans-Atlantic transmission cable that significantly reduced the communication time between North America and Europe from 10 days to as low as 17 hours. This in turn resulted in the development of the global telex which then improved financial services. Other applications during the period of FinTech 1.0 include the first handheld financial calculator (Thibodeau, 2019) and the introduction of credit cards in America (Markham, 2015).

Looking back to FinTech 1.0 a clear and noticeable pattern is noticeable and that the primary attribute that associated with FinTech is that technology acts as an enabler for certain processes that were previously either complex or not available. Thus, FinTech 2.0, which took part between 1967 to 2008, was primarily defined by the emergence of the internet and by 2001 "eight banks in the US had at least one million customers online" (Buckley, Arner, and Barberis, 2016, p. 11).

FinTech 3.0 commenced in 2008, post-financial crisis. A survey from 2015 dug into the question of how much confidence does one hold when being confronted with different names of institutions in the American society, the following figure displays the results of the study:

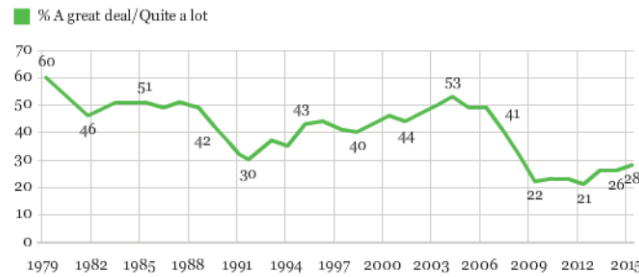


Figure 3.1: Americans' Confidence in Banks (1979-2015)

Source: Dugan for GALLUP, 2015

As illustrated in figure 3.1, only 28 percent of the people expressed a "great deal" of confidence in banks and the decreasing trend displayed since the financial crisis is evident (Andrew, 2015).

The crisis resulted in traditional banks perceived as less reliable which saw the rise of start-ups in the financial sector (Arner, Barberis, and Buckley, 2016). This period revolves around applications emphasising the power of data and the ability to leverage and harness its benefits. As previously mentioned, figure 3.1 demonstrates a clear change in the loyalty of the society. An additional research born out of cooperation between Instantly Brand Monitor and Statista (2015) displays previous statistics regarding the level of trust Americans display towards different types of firm.

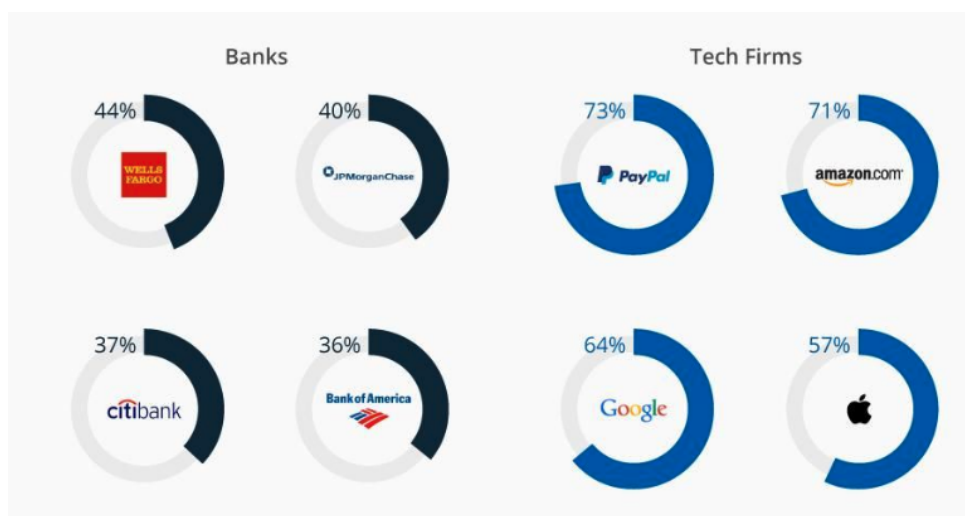


Figure 3.2: Americans' Confidence in Different Organisations)

Source: Instantly Brand Monitor & Statista, 2015

Figure 3.2 depicts a clear distribution between tech firms and banks, and as previously shown in figure 3.1, the trust placed in traditional banks had been reduced, while in comparison, financial tech firms are awarded with a significant and greater degree of trust.

The progress from FinTech 1.0 to FinTech 3.0 clearly shows how change in technology changed the rules of the game and how traditional institutions are not the only and unique entity existing any longer. Furthermore, this same understanding applies to the fact that the same theoretical frameworks previously applied in regard to the internationalisation processes of firms, possibly no longer applies as a one size fits all kind of solution.

4 Literature Review

Exploring existing approaches or seeking newer directions of inquiry are among the reasons of why literature can assist to improve, shape and give form to a research topic in mind. Rowley and Slack (2004) argue that such reviews play a meaningful role in the identification of relevant literature to the research in question, while giving it context or seeking ways to provide added value. Additional aspects include constructing a better understanding of theories, concepts and terminology. Hart (1998) contributes further benefits, among them are shedding light on any significant variables that may provide additional understanding to the topic while attempting to relate certain concepts, ideas and theory to applications. Therefore, this chapter will explore previous studies in the field of internationalisation in regard to E-Commerce companies and traditional theories in the field, while putting emphasis on assumptions, conclusions and key points.

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4.1 Previous Studies in the field of Internationalisation

Considerable amount of existing research demonstrates the benefits derived from using the internet as an enabler for breaking barriers previously set on the internationalisation borders (Chai and Pavlou, 2004; Shneor and Flaeten, 2008; Arenius, Sasi, and Gabrielsson, 2005). An exploratory research by Loane and Bell (2002) was set to inspect the internationalisation process of E-Commerce companies originating in New Zealand, Australia and the European Union. Eight firms were chosen and demographically analysed using measures including firm age, firm size, number of founders and the personal relationship between them (close family or not) and the speed in which those firms internationalised in terms of time. Many if not most of the case firms in the aforementioned research have undergone a rapid internationalisation, if not from their inception, in order to gain a competitive advantage. It was revealed that the case firms have used the means of internet technology across the organisation's departments and as a sales channel for their products and thus set themselves on the international stage in ways never possible pre-internet era as "The 'old' rules of business are not obsolete for internet-enabled firms" (Loane and Bell, 2002, p.1965).

A study by Fang et al. (2017) explores the internationalisation process of Scandinavian firms as they attempt to enter the Chinese market. The study integrates two commonly known and dominant approaches used to describe internationalisation, The Uppsala Model and the Born Global Model. However, instead of applying each theoretical approach separately, the authors attempt to unite both into a hybrid, or as mentioned in the paper "parachuting internationalisation". Out of the four firms, one is an E-Commerce company that followed the Born Global approach from inception and harnessed the full power of the internet in its internationalisation process. The internet accelerated the company's expansion across different markets and even allowed for simultaneous market entries. Furthermore, the experiences the four Scandinavian firms underwent in their entrance to China revealed several common factors with great impact: knowledge is of great importance and learning is of the essence; geographic locations are outshined by customer focus and psychic distance is not as promising as previously thought.

In contrast to Fang's finding in regard to psychic distance no longer being in the internationalisation stage limelight, Forsgren and Hagström (2007) find in their study focusing on E-Commerce companies, that at the beginning of the expansion process, firms choose markets of relative distance in the sense of psychic distance.

Psychic Distance is a concept introduced in Johanson and Vahlne study (1977, p.24) regarding the internationalisation process of firms and describes it as "the sum of factors preventing the flow of information from and to the market". The factors preventing the flow of information include differences in culture, business, language, education and how developed is the industry. This approach was empirically analysed by Kogut and Singh (1988) using Hofstede's cultural dimensions. The analysis revealed that the mode chosen by firms to enter different markets is influenced by various cultural factors. Karakaya (1993) further contributes by indicating another aspect that can shape and raise hurdles in the path of expansion. Karakaya describes market entry barriers and their impact on firms. These barriers include but are not exclusive to cultural, language, political, economic and governmental aspects.

Further emphasis is put on knowledge being a strong factor in the pattern of internationalisation of firms. Petersen's study (2002) concludes that due to the internet, processes conducted during the internationalisation of a firm are awarded with improved efficiency of market transactions. Moreover, with the access to a lake of data provided by the online horizon, firms can react to market changes and improve their learning processes and knowledge, which in turn propels firms into the global business arena.

Johanson and Vahlne (1977) describe internationalisation as an iterative and gradual process and distinguishes between four different factors: Market knowledge, market commitment, commitment decisions and current activities. The study highlights that a firm's market entry process will be influenced by how committed and invested it is in the target destination. Normally, a firm will enter a market while committing as little as possible and expand from that point onwards. Additionally, a corporation will usually enter markets that are familiar to it in terms of a higher psychic distance. The model

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This dissertation author’s review of extensive academical work finds certain factors that appear in a consistent manner across the broad scope of research explored. The following table provides a recap of factors, result of the studies covered in this chapter, that play a role in the internationalisation process of E-Commerce firms:

<i>Factors</i>	<i>Authors</i>
Market Entry Barriers	Chai and Pavlou, 2004; Shneor and Flaeten, 2008; Arenius, Sasi, and Gabrielsson, 2005; Karakaya, 1993; Terzi, 2011
Firm Size	Loane and Bell, 2002
Firm Age	Loane and Bell, 2002
The Internet	Loane and Bell, 2002; Fang, Tung, Berg, and Nematshahi, 2017; Petersen, Welch, and Liesch, 2002; Terzi, 2011
Managerial Structure	Loane and Bell, 2002; Terzi, 2011
Knowledge	Fang, Tung, Berg, and Nematshahi, 2017; Petersen, Welch, and Liesch, 2002; Johanson and Vahlne, 1977;
Relative Distance (i.e. Psychic Distance)	Forsgren and Hagström, 2007; Johanson and Vahlne, 1977; Kogut and Singh, 1988; Xu and Shenkar, 2002; Kostova, 1999; Tihanyi, Griffith, and Russell, 2005; Zaheer, Schomaker, and Nachum, 2012
Cultural Differences	Loane and Bell, 2002; Johanson and Vahlne, 1977

Table 1: Factors Impacting Internationalisation: Previous Studies

4.2 Theoretical Framework

Review of literature covered in the previous parts of this dissertations and other academical work imply that while internationalisation belongs to a broad scope of research fields, they mostly are based on theories that are dominant in the field. Each of these theories attempts to explain why firms expand and engage in activities overseas. Through the exploration of these academical works and theories, a set of factors that impact the internationalisation process will be noted in order to produce a set of factors, shared among the theories or not, that will assist in consolidating information scattered across the vast variety of existing research.

4.2.1 Dunning's Eclectic Paradigm

The eclectic approach first rose to awareness in 1976 by Dunning, **(eclectic'paradigm'dunning'extension)** who defines the functionality of enterprises as an entity that is supposed, by nature, to transform through production, inputs to outputs, while granting those outputs an added value in comparison to their previous form.

Also referred to as the ownership, location and internalisation (OLI) approach **(eclectic'paradigm'dunning)**, this theoretical work came to life in order to examine the international production of a firm and its determinants. The eclectic paradigm attempts to give reason and evaluate variables that shape a firm's production and its growth in external markets and it does so by dividing it into three different categories: ownership (O), location (L) and internalization (I) advantages **(Dunning'moremore)**. Dunning uses these three independent variables as a basis leading to a firm entering a new market.

For a firm to be able to competitively produce alongside firms domiciled in target markets, it must possess ownership advantages in a satisfactory degree to breakeven the costs linked with entering a foreign market. In other words, ownership advantages can award a firm with competitive advantage over other local firms and potential entrants. In order for a firm to unlock these benefits, it must have access to both tangible and

intangible assets, that other players in the target market do not have.

Location advantages speak of benefits that can be obtained by the process of a firm positioning its production or segments of it in foreign locations, furthermore, these specific benefits are location specific, hence, they cannot be transferred (i.e. different legislation in comparison to home country that contribute to lower costs, access to natural resources).

The third and last advantage Dunning speaks of is internalisation advantage. Unlocking these advantages is a result of a situation where there are more benefits to be reaped by the retention of specific skills, assets or production driving mechanism, a firm can unlock these advantages. Internalisation is an additional way to reduce operational costs including transaction and transportation costs.

The following table includes the main activities which Dunning describes in his study. Firms may or may not be involved in these activities, but they serve as a rough guideline for the expression of the three aforementioned advantages, result of this framework.

<i>Ownership Advantage</i>	<i>Location Advantage</i>	<i>Internalisation Advantage</i>
Capital	Access to resources	Control of supply and price
Technology	Raw material costs	Exploiting technology
Organisational skills	Labor costs	Reduction of transaction or information costs
Trade marks	Legislation	Brand reliability
Economies of scale	Governmental policies	
Market access	Geographic proximity	

Table 2: OLI applications

Table 2 depicts examples applying to each of the variables. The table can be looked

at in a general way and in different scenarios. For example, if a firm possesses certain tangible assets, special technology, patent rights or a reputable trade mark, it can unlock the benefits of ownership. Having exclusive and specific access to resources or operate in a country with favourable policies can unlock location advantages. Reducing transactional costs by keeping operational processes internal and not external can unlock internalisation advantages.

According to Dunning, each and one of these advantages, when fulfilled, will lead to a different internationalisation process of a firm in a form of market entry mode. These are distinguished in the study in the following way: According to the eclectic paradigm, if all three advantages exist, a company will engage in Foreign Direct Investment (FDI). If a firm will not profit by using locational factors with its ownership and internalisation advantages, then export will be the preferred way to enter a market. However, if a firm will only benefit by using its ownership advantages, then a licensing approach would be the way the firm will most likely choose. In order to simplify, the following table demonstrates all three scenarios:

<i>Ownership</i>	<i>Location</i>	<i>Internalisation</i>	<i>Market Entry Mode</i>
x	x	x	FDI
x	-	x	Export
x	-	-	Licensing

Table 3: Eclectic Paradigm Market Entry Mode Selection

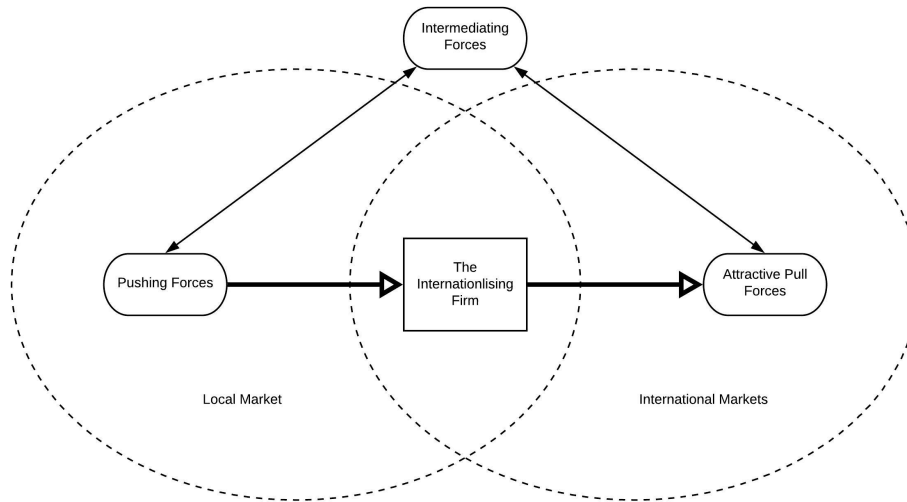


Figure 4.1: Push, Pull and Intermediating Forces in the Internationalisation Process)

Source: Etemad, 2004, p.5.

Figure 4.1 depicts a model covered in a study by Etemad (2004) that is set to bind three general measures in the internationalisation process: push, pull and mediating forces. Push factors are composed of internal (in most cases) factors that force a firm to internationalise due to the firm/ organisation being at a certain risk or conflict. Thus, these factors are in nature pushing or encouraging the internationalisation process in order to realise international opportunities. In contrast to push factors that drive a firm to move from the local stage to the international stage, pull factors are forces existing in the destination country that attract and incentivise the firm to enter its market. These forces are usually external and are composed of opportunities that may answer a certain need or market demand not existing at the time. The mediating forces are composed of a firm's general profile, characteristics and managerial orientation. These forces interact with both the push and pull forces and are influenced by a firm's internal dynamics.

5 The E-Market Environment

The internet changed the rules and supplied different conditions for companies operating online and digitalising their products. This chapter attempts to point out

how the internet has made things easier and more accessible for businesses.

Physical products, services or processes, can nowadays be digitised and communicated through networks. Examples can include the addition of electronic interfaces in smart cars and other smart appliances, visiting a website to shop instead of visiting a physical shop and even opening bank accounts or depositing money in savings accounts all over the world. Digital products can be distinguished from their physical counterparts using different measures. If a product can be sold using the Internet as a medium for its marketing, advertising and performing inbound and outbound transactions (payments tied to purchasing), then it can be defined as a digital good. This can be even further extended to the claim that anything sent and received over the internet is possibly a digital product or can be turned into one (Choi, Stahl, and Whinston, 1997). Furthermore, unlike physical products, digital products are harder to experience, or in other words, it is harder to know how good something is until you have experienced it in its tangible form (Shapiro, Carl, and Varian, 1998). Due to the nature of such transactions over the internet, it results in a situation where the buyer is in a riskier position in comparison to the seller, who is familiar with the product in question. The theory of reasoned action (Fishbein and Ajzen, 1977) explains how consumers take specific actions when there is a specific result expected, while depending on the available information. Therefore, the quality of information and its reliability can greatly impact a customer's buying decision, customer retention and customer loyalty. Trust issues aside, using the internet as a sales channel results in a high worldwide penetration and reaches a broad audience. A study made by Statista (2019) presented that by 2017, 60.2 percent of global internet users executed a purchase online. The data further presents forecasts up to 2021, where the percentage is expected to rise to 65.2 percent.

An additional distinguishing feature of the electronic marketplace is that the internet significantly reduces costs. First, the costs of exchanging information while making decisions, also known as transaction costs, are greatly reduced by the use of internet technology. The internet accelerates communication and lowers its cost, optimises product selection process, mitigates errors, and improves the link between buyers and suppliers

(Bunduchi, 2005). Furthermore, the development of a digital product or digital unit in the purpose of profit, often results in high initial costs, however, additional copies cost virtually nothing or are very easily reproduced. This can also be described in economic terms whereas fixed costs are large, while the variable costs of reproducing the item are small (**shapiroInformationRulesStrategic1998a**). Therefore, bigger volume of customers will lead to higher profitability.

6 Projects and Tools

7 Conclusion and Key Takeaways

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