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Tesi di laurea
Il potere dei latecomer
The power of latecomers

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*Alla mia famiglia, Anna, Flavio e Jona, alle mie nonne e parenti
ed agli amici di una vita.*

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Abstract

Attraverso lo studio di una particolare categoria di imprese, i cosiddetti “latecomer”, si cercherà di spiegare in che modo questi riescono a diventare delle imprese leader e a superare la concorrenza, partendo dai fattori che determinano il loro momento di entrata in un determinato mercato, analizzandone i vantaggi ed i rischi. Utilizzando come esempi concreti alcuni casi studio (il settore dei semiconduttori in Giappone e Korea ed il caso Samsung) si cercheranno di indentificare le cause che hanno incentivato queste industrie ad aprirsi al mercato globale, individuandone le caratteristiche e le possibili strategie adottate o ancora da adottare.

Introduction

Well-defined and not always easy decisions should be taken in order to enter a determined market: these decisions depend on the expectations from an uncertain future or other factors that have to be considered because they can influence the future performance of the firm and they are the so-called “strategic decisions”.

One of them is the answer to the question: “*when should a firm enter a specific market?*” and it has been for long time the main topic in many areas of study.

Entering the market as first mover can be seen as an advantage, as it is the best position and can choose the “rules of the game”¹. But sometimes there is no other choice than entering late, due to, for example, already existing incumbents, such as underdeveloped markets, lack or delay in knowledge in specific fields or other factors associated to the environment.

Taking Japan and Korea (both latecomers) as examples as of semiconductor manufacturers, it can be explained how late entrants become eventually leaders, overcoming possible disadvantages and leapfrogging early movers, always from a follower-based perspective.

The Japanese industry blew away the leadership position of USA in the above-stated market and Korea could reach from the scratch the top position among the best DRAM (dynamic random access memory) producers.

There are two different lines of research: from the industrial economics (conducted by Mansfield) and from the marketing approach.

The first one deals with leadership advantages that result from entry barriers that deter latecomers. The aim of these researches is to understand the imitation of innovations, according to technological changes, creating models of simulations.

The marketing researches, instead, study the influences that entry order has on the relationship between these early movers and customers (early movers have the possibility to preempt clients). This other approach gives also the attention to the preferences of the consumers after having known and learnt the product (the so-called “learning process”).

Furthermore, according to the these researches, there are different ways to refer to the two categories stated above: first movers (first firm or group of firms), called also pioneers in the production of specific products/services (USA’s companies in the semiconductor industry), early followers and late entrants (like Japanese and Korean ones).

¹ Dong-Sung Cho, Dong-Jae Kim, Dong Kee Rhee. “Latecomer strategies: evidence from the Semiconductor industry in Japan and Korea”. *Organization Science*/Vol. 9, No. 4, July-August 1998.

After all these premises, the advantages and disadvantages of being an early move firm according to market, competition and the firm itself can be pointed out.

For what concerns the advantages, starting from the market (or consumers), being an early mover permits to build an image, loyalty and a reputation. Indeed, in situations of uncertainty, the client will choose familiar products, that he/she already knows. Customers have already assessed the product and they have built their preferences, so that they become change-averse, considering also the switching costs. However, on the other hand, these firms have to consider that the market is not static: it changes and so do the tastes of the customers. New entrants can easily adapt to these changes, they are more willing to take risks and they can use the latest technologies (while setting new industry standards). Moreover, entering late avoids them the costs for explaining the products to the customers and costs for R&D (thanks to the information spillover, which helps imitating and learning opportunities from early movers' mistakes).

Both positive and negative outcome on the performance can be determined also from the competition: early movers can preempt customers' behaviors, resources, suppliers, employees etc. before others. They also have the opportunity to prevent the entrance of the late ones. However, it is fair to point out that resources are based on early market requirements and most of the time they are very difficult to be adapted and redefined after the changes of this early market (Porter called them "exit barriers"). Furthermore, people who compose the firm organization have grown within the firm with their own beliefs and values, which are even harder to be changed, especially when they have been built when the firm was successful.

The last, but not least factor to be considered talking about early movers is that arriving earlier allows first firms to gain more experience in adding value and learning about the market. Their leadership position would be held up also through patents.

On the other side, latecomer can take advantage of these early-firms moves letting them explore and test the market and afterwards entering the same market, after having seen positive signals and responses. This strategy implies less uncertainty and the possibility of improving the resources; sometimes late entrants can use their previous experiences or complementary assets for the production of a new product and service, reducing their costs (economies of scope).

Analyzing Japanese and Korean case regarding the semiconductor industry it has been also explained how environmental forces (demand, market evolution...), skills and resources influence the performance of the firm.

A more general research has been then conducted to understand more specifically the characteristics and the strategies adopted by a latecomer firm. An important role has been played also by the global economy, which gave the latecomers an impulse to internationalize and the opportunity to catch-up with pioneers, eventually occupying an important (if not leader) position in the market.

To conclude, it will be presented an example of an emergent giant in the recent years that managed to leapfrog the competition and become one of the leaders in the technology market: Samsung.

How can they use the opportunities that come from entry order and all the above-mentioned aspects to overcome early entrants and gain a leader position in a specific market?

Introduction of a “latecomer”

Before introducing the concept of a latecomer, first, some premises have to be made, that are needed to reach this crucial topic: it is important to understand where this word is rooted in the economic environment.

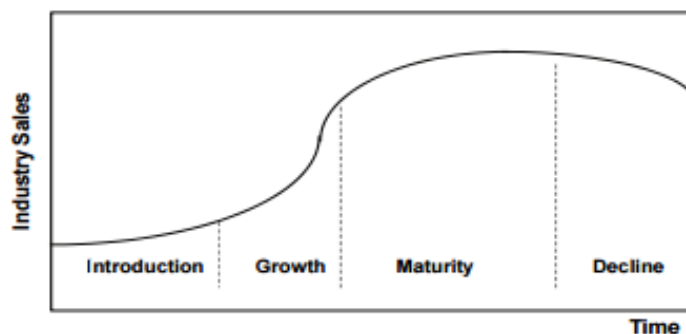
2.1

Industry lifecycle

To foresee and build successful strategies, industries need to understand and analyze all the variables of the environment. To this aim, the management tries to use some models to draw a simpler example of what the reality is, so that they can have a better overview of what it is surrounding the firm. Indeed, an industry goes through different stages during its lifecycle in a specific market: so, like a person, who is born, grows, becomes mature and then eventually dies, so does a firm and its products. It is referring to the industry life cycle theory, first developed by Raymond Vernon on 1966, in which he analyzes how the entry of companies from developing countries can affect the development stage of an industry.

This analysis has been then adjusted according to Michael Porter’s theory in 1980 and it is based on the fact that every stage, in which a company goes through, can influence in different ways the strategies of the firms. These stages are almost the same for all industries, but they experience them in different ways: some stay longer in a determined phase and others shorter. Every sector or industry passes through the first phase, the so-called introduction of an innovation, through the development of a demand, through the maturity phase and sometimes also through the decline phase. [Fig. 1]

Fig. 1: Phases of the industry lifecycle



Source: Adjusted according to Porter, 1980

In the first phase, there are the pioneers who take first the risks related to the introduction of a new product or service. The aim is to spread this innovation and see the responses of the market. If they are positive, then new firms enter this market: the competition is very low or sometimes it doesn't even exist.

In the development stage, studies found out that firms which create a product using the so-called "dominant design" or "standard design" (characteristics of a product that all producers at the end will use) are able to reach the best results. However, by doing this, it reduces the differences among products and the product innovation: to be competitive, variations of the product, cost reduction and quality increase have to be considered as the main drivers. Furthermore, the use of patents allows firms to safeguard new products, increasing profit margins.

From this point on, the maturity phase will be entered.

The process of production is standardized and rigid, which makes it hard for the firm to adapt to the new changes of the market, and so are products: there is a low level of innovation, the materials used are extremely specialized and there is a constant tendency to decrease.

The main strength for the firm is to understand the different competitive forces that will operate in these lifecycle stages, because in each of them opportunities, threats and rival strategies always change.

In the initial stages there are high risks and high returns on investments, instead, in mature phases, industries are exposed to less risks but also low returns.

2.2

Lifecycle of a latecomer

By saying that a firm is a “latecomer” it is meant that this is a manufacturing company (which already exists or potential) that arrived to a specific market of products or services late in comparison to others.

Latecomer firms come from developing countries and they use to enter the market at the mature phase of the industry lifecycle (saturated market), so almost at the standardized end: in this stage, there is a contraction in the market in which the growth is stable. The demand is represented by substituting old products, indeed innovation and R&S investments tend to decrease drastically. Products and services are becoming more and more similar and customer fidelity to them and to the company starts to decline. All the processes are standardized and the attractiveness is low: it starts a war for the prices, in which firms try to reduce costs and to consolidate the fidelity to a brand. The barriers at the entrance start to raise, deterring new entrants.

Extending Vernon’s idea, it can be said that early entrants have already sustained the costs for initial investments in technology and R&D and developing countries can take advantage of it. Latecomer firms gradually try to assimilate technology by learning and at every chance of innovation they try to reduce their technology gap compared to the leader companies, advancing step by step. By doing this, late entrants are beginning the activities associated with the early phases of the industry lifecycle, but starting from the mature phase of a product’s life. These firms will begin to acquire their basic production competencies, focusing on the cost minimization and learning by doing processes. They will increase their productivity and speed of production, as well as the control over the quality, but they still remain under the dependencies of the leaders and their sources.

After having started with these new industry lifecycle stages, in which late entrants try to imitate firms that have already established in a market, they arrive to a phase in which the product design and being original are quite crucial. The considered companies start developing design skills and start taking the control over the technology used for the production process.

The next stage is about developing the new product and trying to innovate, as the late entrant firms have gained the necessary experience, resources and skills. The strategy is to break all dependencies from leaders that have been formed since the entrance the market. Indeed, these firms may have now connections with their own goods suppliers and have their own R&D for their new products.

From this point on, the attention will move to the final stage, in which finally latecomers reach the position either of a follower or of a leader, in terms of technological and innovation advance. They gradually managed to reduce the lack of information technology, developing very complex products, conducting more effective researches, conducting their own stable business.

It has to be said that the concept of a latecomer can be applied also to countries, and not only to firms, and it isn't a static definition, but mutable and relative: as an example, also USA and Germany could have been defined as latecomer countries. Analyzing the technological and innovative process, the first leading country has been Great Britain. USA and Germany weren't leaders, at that time, but they became such, and eventually becoming also the first undiscussable leader (USA case).

2.3

Follower or a leader? Latecomer

Normally, a leader is identified as a person, an individual, or, in general, a subject that can influence a group of individuals to achieve a common goal.

A follower, instead, is influenced by the leader and behaves and performs following its guidance and instructions.

When it is referred to latecomer countries and economies (or firms), it is meant those countries (or companies) that are not able to innovate by themselves and, at the beginning, at a global level. They are “fast transforming developing countries”² or even the least developed countries. Talking about firms, when they first enter a market, they cannot be considered leaders, of course, because leaders are able to create new products and processes, so that they can gain the higher position in the market. Normally, leader firms have a powerful and advanced R&D department that allow them to generate innovation and that help them increasing their competitive advantage. Thanks to their competencies and capabilities, these leaders may also have strong relations with universities, research centers or technological infrastructures, as well as suppliers, that latecomers still don't have.

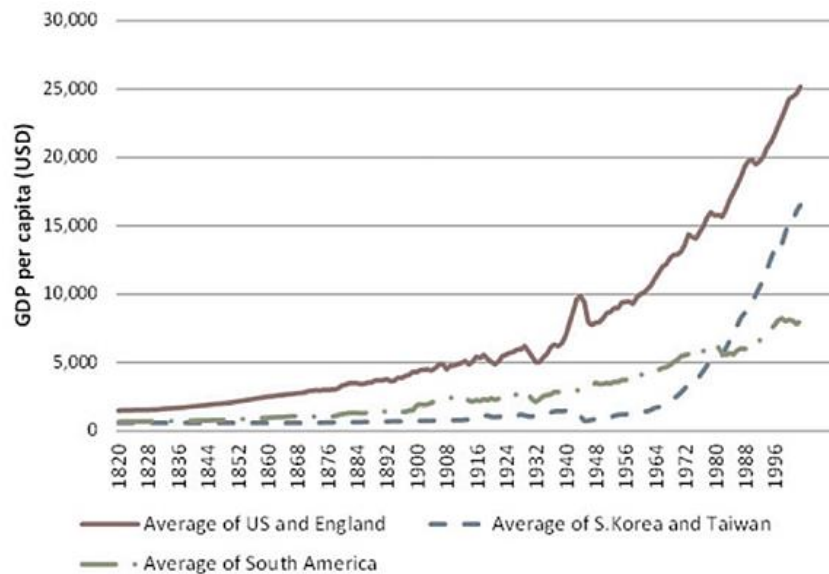
But latecomers, cannot be defined as followers neither: followers are connected to the advanced market, as leaders are, even if followers are and they will be always behind them. They have the technological resources necessary to imitate and learn from the leaders' experience and also profit from their mistakes (Freeman, 1974), avoiding costs of researches.

Latecomers are from developing countries so they are weak technologically and they don't participate to the “advanced users' life”. However, it will be seen in the next chapters, they can have advantages over leaders and followers, and they will determinate their market late-entry strategy. Their aim, indeed, is to manage to leapfrog entry barriers of the initial market and to acquire the necessary technology capabilities to increase the market share and export sales. They should try to reach the level and to conform to the models of the already developed countries. Latecomers are able to assimilate new techniques much faster than leader economies can invent them, and that is why poorer countries (and firms) could “catch up” with richer ones³ (there are different point of views and opinions about this last statement) and these last ones do not grow or cannot grow at such high rates.

² Banji Oyelaran-Oyeyinka, PhD. *Nigeria Vision 2020 and Beyond - Imperatives of Science Engineering and Technology*.

³ Commission of Growth and Development. *The Growth Report: Strategies for Sustained Growth and Inclusive Development*.

Graph. 1: comparison of GDP per capita between early and late-starting industrialized countries



Source: Taiyoo Kim, Almas Heshmati⁴

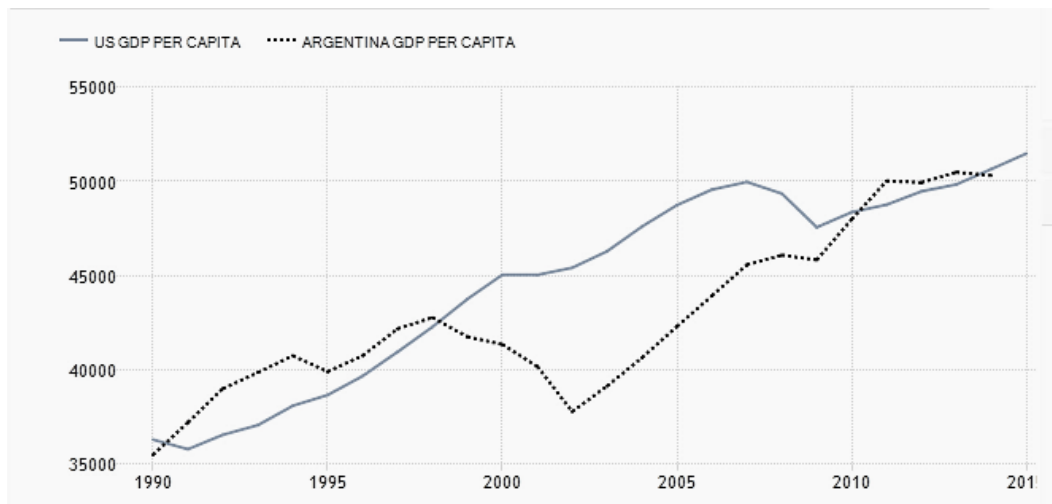
Graph. 1 shows that, taking into account the GDP growth rate from 1820 until 1996, latecomers countries' growth rate (in this case South America, South Korea and Taiwan) raised after the second half of 20s, right after the Great Depression in 1929. South America, indeed, managed to produce merchandise at a higher percentage than USA and England, but it was just to satisfy the domestic demand, because it wasn't able to expand in the international market⁵. Korea and Taiwan maintained the gap with leaders' countries, but they faced faster growth than South America, after 1980.

But, comparing more recent data, for example, just between Argentina and the USA (Graph. 2), it can be seen that Argentina growth rate per capita was sometimes also higher than the one of USA (example from 1990 until 1998 and from 2010 until 2013).

⁴ Taiyoo Kim, Almas Heshmati. *Economic Growth: The New Perspectives for Theory and Policy*. Springer. 2013.

⁵ Studies show that USA and England had a percentage of manufacturing industries of 29% the first and 33% the second, versus a percentage of 35% for Argentina, 33% for Brazil and 39% for Chile (Taiyoo Kim, Almas Heshmati. *Economic Growth: The New Perspectives for Theory and Policy*. Springer. 2013).

Graph. 2: comparison of GDP per capita between Argentina and USA



Source: Trading Economics⁶

Multinationals are able to spread technologies and can be considered as leaders: they are also attracted by cluster, like for example in Malaysia, (Penang, the Klang Valley, Johore, electronic clusters) where they obtain advantages, such as in taxes and work labor.

Technology and learning

As stated above, latecomers try to imitate and learn, taking as example leader firms. The learning processes allows firms to raise their awareness towards products and mechanisms, developing and improving the skills of their workers (Dodgson, 1991).

Learning is something abstract, difficult to measure and observe. The knowledge is possessed by humans and it matures in the specific context of application through learning by doing processes, which are very costly. Learning is composed by knowledge and experiences and can be acquired by training or imitation, resulting in the improvement of skills and new ideas, including their diffusion and use. This ability is one of the most important things for an economy long-run prospects (World Bank Report, 1998).

The process through which firms acquire technology is the so called “technological learning”: technology, indeed, is important because it embodies physical capital but also human skills and entire structures (firms). It is not something that grows somewhere, something that you can get, something given or a static resource, but it is a capability which is flexible, dynamic, used to modify and adapt skills and production processes.

⁶ Trading Economics, see in the website: <http://www.tradingeconomics.com/united-states/gdp-per-capita>

Latecomers are able to collect and accumulate knowledge imitating from leaders to develop their own market and capabilities, also thanks to the information and technological spillover⁷. Indeed, thanks to the openness and integration that the world achieved, technologies and know-how have spread more easily towards developing countries.

“Latecomers have fewer resources, such as human capital, for the generation of new knowledge and technologies. They need more external knowledge at the beginning of their innovation activities and, have, therefore, more linkages to external sources.”⁸”

⁷ Definition: “By technological spillovers, we mean that firms can acquire information created by others without paying for that information in a market transaction, and the creators (or current owners) of the information have no effective recourse, under prevailing laws, if other firms utilize information so acquired.” Gene M. Grossman and Elhanan Helpman. *Innovation and Growth in the Global Economy*. 1992

⁸ Chung-Anh Tran. *Role and Dynamics of "late-comers" in the Global Technology Competition*. 2011.

Characteristics of a latecomer country

To better identify what a latecomer in reality is, it has been tried to summarize the main characteristics that almost every latecomer country has in order to be defined as such.

The word “latecomer” can be referred to a country that has the following characteristics:

- This country is underdeveloped, characterized by a low-productivity economy based on agriculture and limited services activities. Even if industrial activities and services are increasing and becoming an important part for these countries, these activities are basic on handcrafted work, trading and commercial services, like mining or crude oil exploitation.
- Its percentage of exportation on the total amount of merchandise export is very low, even if some countries (not all of them) managed to exports something different than primary commodities, such as labor- and resource-intensive products or services, like tourism.
- Its GDP is very low. Some of the latecomer countries have increased the share of manufactures in the total value-added. As an example, 13 economies reached 7% or higher GDP growth rate, twice as high as developed countries for 25 years (Commission of Growth and Development led by Michael Spence, Growth Report).
- Population of latecomer countries is very low instructed (the level of education is very low).
- Investment and human capital is also very low and weak. Recently, just a low percentage of people worked in the tertiary industry, compared to the developing countries.
- Always compared to developing countries, in latecomer ones there are just few infrastructures that are needed for innovation and mass production.
- These countries have some lacks in some important areas, for example lacks of access to knowledge that is specific and has to be used for a particular context and country in a specific period of time. They may not have the possibility to absorb and use this knowledge, that can depend on the availability of human skills and on the role of institutions, that should provide some help to create some innovation and take advantage of these opportunities.
- Following the previous point, lack of institutional framework can influence negatively the performance of the country, resulting in a chaotic situation composed by overlapping of responsibility and disorganization or missing organization, as well as lack of financial

instruments to reduce risks and uncertainties that could be faced during the innovation process.

- Sometimes, latecomers do not have a good public sector, which allows them to conduct researches according to the different areas of development (such as science, or agriculture, or social area and so on).
- There could miss some connections that allow mobility of knowledge and information, as well as lack of collaboration between countries or institutions.

It must be said that these are just some of the characteristics that latecomer countries have in common and they may not have all of the stated ones. It always depends on the degree of development achieved by these countries.

Table 1: Institutional characteristics of Latecomer Countries

Innovation characteristics	Frontier countries	Fast Followers	Latecomers
1. Initial conditions and nature of Production system	<p>Pre-existence and continued existence of large local entrepreneurship.</p> <p>Knowledge bases quickly developed through imitation of advanced industrial countries. Beneficial interactions with foreign and domestic suppliers.</p>	<p>Emergence of entrepreneurship Knowledge bases developing through imitation and investments into networks with local and foreign collaborators.</p>	<p>No pre-existing entrepreneurship; largely traditional craft-based or artisanal industries.</p> <p>Systems of subsistence trade but no factory-type system at the onset of efforts to industrialize. Importation and import substitution characterize initial technology learning efforts, which are largely unsuccessful.</p>
2. National technological and Infrastructure Capabilities	<p>Built-up strengths in mechanical engineering and electromechanical fields, rapidly acquire telecommunications, information and computer technology.</p>	<p>Evidence of pay-offs from investing in technological capabilities over the past two decades in fields like pharmaceuticals, software and hardware.</p>	<p>Weak capabilities in mechanical and engineering industries.</p> <p>Trade-based commodity economies. Few users of new technologies.</p>
3. Systemic externalities and networking capacities	<p>High to average degree of:</p> <ul style="list-style-type: none"> • Links between buyers and suppliers (global and domestic) • Community-based technical networks. <p>Building of institutions occurs through policy measures and spontaneously.</p> <p>Buyer and supplier competence.</p>	<p>Average degree of:</p> <ul style="list-style-type: none"> • Links between buyers and suppliers (global and domestic) • Community-based technical networks. <p>Institutional strengths evident through assertive policy making.</p> <p>Certain shortcomings can also be traced to policy lacuna that needs to be rectified.</p>	<p>Very weak in:</p> <ul style="list-style-type: none"> • Links between buyers and suppliers (global and domestic) • Technical problem solving (local networks largely absent and almost entirely reliant on foreign technical services). • Informal networks and enterprises. <p>Institutions are weak or absent.</p>

Source: Banji Oyelaran-Oyeyinka, Padmashree Gehl Sampath. *Latecomer Development: Innovation and Knowledge for Economic Growth*. 2009

2.5

From a follower to a leader: Japanese example

Some firms then start as latecomers and become leaders. In this chapter, it will be pointed out (or at least, there is an attempt) the mechanism, analyzing the case of Japanese semiconductor firms (NEC, Toshiba and Sharp) which overcame the US leadership, to understand how a firm can improve its position.

Timeline of Japanese industries:

<i>Mid 1950s</i>	Entry of Toshiba and NEC (specialized in telecommunications equipment and general/electronic);
<i>1970</i>	Entry of Sharp (specialized in consumer electronics);
<i>1980s</i>	Capital investments in the scale production (DRAM) way bigger than USA thanks to cross subsidization and low interest rates; USA firms had limited resources, many exited;
<i>1984</i>	NEC's introduction of V series microprocessor, first effort to be innovator;
<i>1985</i>	Toshiba's introduction of C-MOS technologies, instead of N-MOS, another effort to be innovator;
<i>1986</i>	Toshiba leader in one mega dram (with C MOS tech); Dominant position, overcome of USA;
<i>1986 - 1992</i>	38 – 46 % market.

Not always early entrants can maintain their position over time. Latecomers, such as in the semiconductor industry in Japan, can take advantage of the opportunities of the market and obtain a the “biggest slice of the cake”, adopting specific strategies.

It took a little bit more than 30 years for Japanese companies to leapfrog the dominance of the United States in the semiconductor industry, from their entry with Toshiba and NEC in the mid-50s and with Sharp in 1970. These industries managed to increase their production volume at an average rate of 18% per year from 1971 and managed to reach leadership between 1986 and

1992, increasing their part in the control of the market of semiconductor industry (reaching up to 46% of it).

Table 2 shows the percentages of the market owned by the different firm: in 1990 Japanese companies owned 31% of the total market, while US owned only 23% (the other 4 companies).

Tab. 2: Change in industry leadership, 1980 to 2000

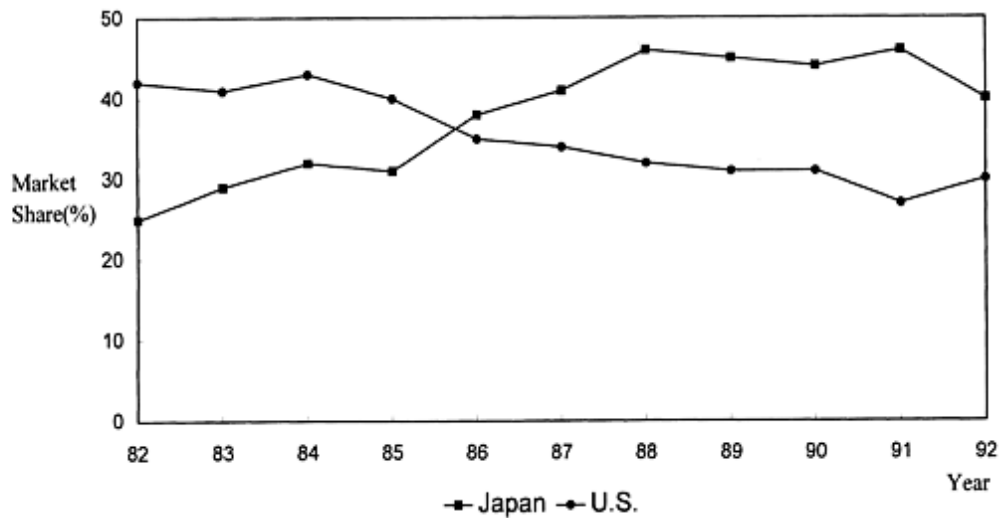
1980		1990		2000	
Total market \$9.4 billion		Total market \$44.6 billion		Total market \$197.1 billion	
Texas Instruments	14%	NEC (Japan)	8%	Intel	15%
National Semi.	7%	Toshiba (Japan)	7%	Samsung (Korea)	5%
Motorola	7%	Intel	7%	NEC (Japan)	5%
Philips (Europe)	7%	Hitachi (Japan)	7%	Texas Instruments	5%
Intel	6%	Motorola	6%	Toshiba (Japan)	4%
NEC (Japan)	6%	Texas Instruments	6%	STMicro. (Europe)	4%
Fairchild	5%	Fujitsu (Japan)	5%	Motorola	4%
Hitachi (Japan)	4%	Mitsubishi (Japan)	4%	Micron	3%
Toshiba (Japan)	4%	National Semi.	4%	Hyundai (Korea)	3%
Mostek	4%	Philips (Europe)	3%	Hitachi (Japan)	3%

Source: market research by Clair Brown and Greg Linden⁹

Graph 3 shows how the market share in the world's shipment of this industry changed over the years (from 1982 to 1992).

⁹ Market research by Clair Brown and Greg Linden. *Chips and change: how crisis reshapes the semiconductor industry*. 2009.

Graph 3: Changes in Market Share: United States and Japan in 1982-1992



Source: Nikkei Tsushin

But, which factors allowed Japanese firms to reach success?

Analyzing this specific case study, the following can be considered the success factors that contributed to the Japanese escalation.

The first factor was the ability to build gradually the competencies over time, which allowed them to reach a solid competitive position and also resist to the environmental changes. There was a strong leadership by top managers, an effective top-down communication of the vision and objectives, and they were willing to take risks. Furthermore, in this competence-building, Japanese firms followed three important steps:

- a. Development of an internal (or captive) demand: first they had to be sure that they were ready to start the business, also using other product lines already in the market (like NEC and Toshiba) or creating new products (like Sharp). Second, they concretely created this captive demand, so that they could use it as a test market and source of information. They used customers' interaction and feedback to eliminate deficiencies, with the possibility to learn and improve the quality and marketability of the products.
- b. Going on with the steps and gaining experience, they made investments (like Toshiba's "Operation W" regarding DRAM in 1982) to exploit economies of scale and learning curve effects, in order to improve manufacturing skills, even after uncertainties and recession periods (for example NEC's big investment

even after oil shocks). These consistent capital investments were possible also thanks to cross-subsidization¹⁰ and low interest rates.

Table 3: Capital spending by semiconductor companies

Region	1980	1985	1990	1997
United States	60.4%	35.5%	29.8%	33.0%
Japan	28.9%	46.7%	50.0%	25.0%
Europe	10.7%	8.3%	9.9%	9.0%
Rest of world	0.0%	9.4%	10.3%	33.0%
Total	100.0%	100.0%	100.0%	100.0%

Source: Macher et al. (1999, fig. 4); data collected by Clair Brown and Greg Linden, Chips and change: how crisis reshapes the semiconductor industry, 2009, supplied by author.

After having solved initial issues, they started addressing the external demand. US focused only on semiconductors and had few accesses to external demand: many companies exited the market, also because they couldn't afford the competition with Japanese firms.

- c. The third step was based on the increase of investments in R&D (such as NEC's R&D expenses, which raised by 21% annually on average), improving their technological capabilities: changing technologies (Toshiba's case, substituting N-MOS with C-MOS, becoming the leader in 1M DRAM) and focusing on design capabilities (like Sharp, leader of optoelectronics and integrated circuits specific for applications).

The second factor for success was the technological overcome: they managed to improve technologies, adapting them to industry changes. Sometimes, changes can be a disadvantage for early movers: they can be stuck in their prior investments (difficulties to change technologies and mind of social organizations). Latecomers can leapfrog first firms destroying old capabilities with new competencies and taking advantages of the new characteristics of the industry (like Toshiba and NEC with their C-MOS technologies).

¹⁰ Def: "A strategy where support for a product comes from the profits generated by another product. This is usually done to attract customers to a newly introduced product by giving them a lower price. The low price is sustained by the earnings of another product sold by the same company". Definition by *Businessdictionary.com*, see in the webpage: <http://www.businessdictionary.com/definition/cross-subsidization.html>

The last factors were the fall of the dependence from chip producers (from 60% to 30%), the improvements of products due to close collaboration and the importance of winning the domestic competition, which brought confidence and spillover effects to other companies, with the consequently higher quality and lower costs.

An important role has been given also to the government, which supported, protected and coordinated since 1976, after the launch of VLSI Project (integrate circuits in large scales).

Early mover advantages

In this chapter the advantages of being an early mover in a specific market and consequently the disadvantages of being a latecomer will be pointed out.

Let's start from a simple sentence, a proverbial saying: "the early bird gets the worm". The early bird can be seen as a company that first establishes in a market or industry, and this is what it has been already defined as early mover in the previous chapters. First movers try to gain a competitive advantage by moving as first and basing their business before other competitors in a specific market.

First of all, an early entrant (or pioneer) has to recognize the opportunity of being first at something (thanks to skills or luck) and then it has to be able to catch the benefits that can derive from this position.

The first advantage is always related to the technology: they have what they need to success and they should use the technology in ways so that it is hard for others to copy and re-use it. To gain the leadership position, early movers should learn how to reduce costs, also through accumulating experience: this process, called learning or experience curve effect, allows them to produce at lower costs and increase their experience and knowledge, making the production faster. Another method to take advantage of the technology leadership is to use patents for the technologies they utilize to protect themselves and avoid competitors to steal and copy it (see pharmaceutical patents). As first movers, they can establish their own product following the industry standards: in this way, it can be difficult for late entrants to acquire new customers and their fidelity.

Using the above stated strategies (patents and establishing the product according to certain standards) these leader firms collaborate to create entry barriers.

Another benefit for an early mover is that they have the possibility to use the resources that are necessary to establish their own business, for example the location, the supply of raw materials, contacts with skilled or even the best employees or suppliers, having more time to refine and to perfect their production processes and services.

Even if "luck" can be an important driver for the choice of the successful drivers, the first mover has to consider also all the other characteristics of the market: demand, resources, networks and opportunities.

Moving to the market area, it will be found that the company has the possibility of creating and building its own image, reputation, brand recognition and fidelity in the mind of the customers. These are things that can be crucial for a company.

Usually the client can assess the attributes of a product and can identify which is the best for him/her and if it can fit his/hers need(s), by a learning process. Indeed, in case of uncertainty, customers are more likely to choose products that they already know and to repeat the purchase (Schmalensee, 1982).

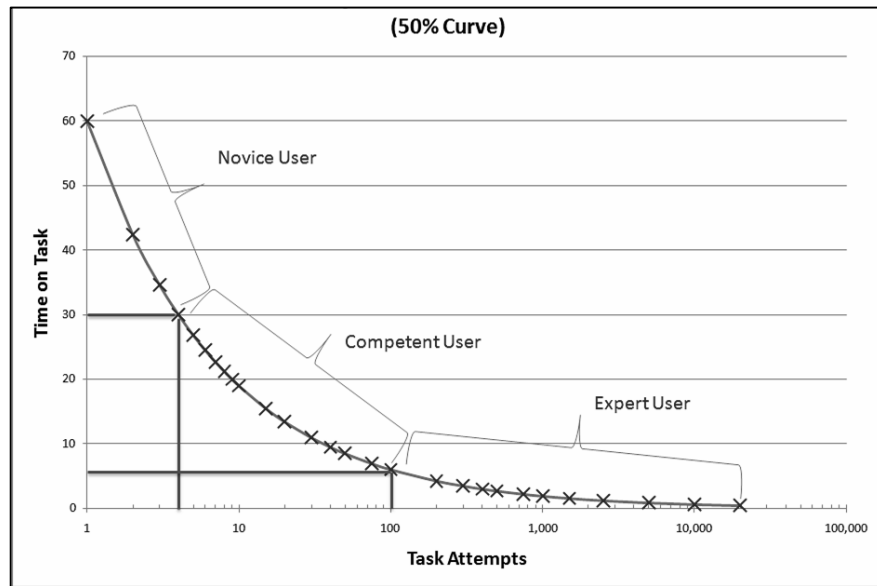
Moreover, first movers can enjoy the benefit from the high costs that customers may face in order to switch brands at a later date (the so called switching costs). They can be referred to monetary costs, psychological, effort- and time-based costs. High switching costs can prevent customers from choosing other products, so that it becomes difficult for late entrants to compete and attract customers.

Always related to customers, another important benefit is brought by network effects: customers usually search for standard products or try to interact with other users. Possessing a network allows the pioneer to create preferences among buyers (the so called “network effects”) for the standard products and these effects can be considered as switching costs and can attract valuable and important alliances with other similar firms.

An early mover can obtain some advantages also from the competition, preempting different types of resources (Lieberman and Montgomery, 1998). In this way early movers can preempt the various opportunities in the market, like the geographic position, human resources, materials (Cho et al., 1998), networks – suppliers and buyers – and so on. Furthermore, once the firm enters a market first, it can have access to superior information and can buy assets at a lower price compared to the ones that can prevail once the market evolves. This firm can choose the most profitable business and can take strategic actions, limiting the entry of other firms, as in the market the space just for few profitable firms.

Another important benefit from entering first can be found within the firm itself: starting as first means to have more time, and more time implies more experience. In this way, firms have the opportunity to improve their processes and focus on better strategies, for example adding more value to the activities, in producing, selling the products and in customer service. They have more time to analyze and understand the market earlier than the others. They can accumulate experience and then they learn how a process is done: at the beginning, the amount of time needed is very high, but then, once it is repeated, the time to produce decreases. The process by which firms reduce the costs and time to produce is called “learning curve effects”, exploiting the learning by doing processes.

Graph. 4: Learning curve



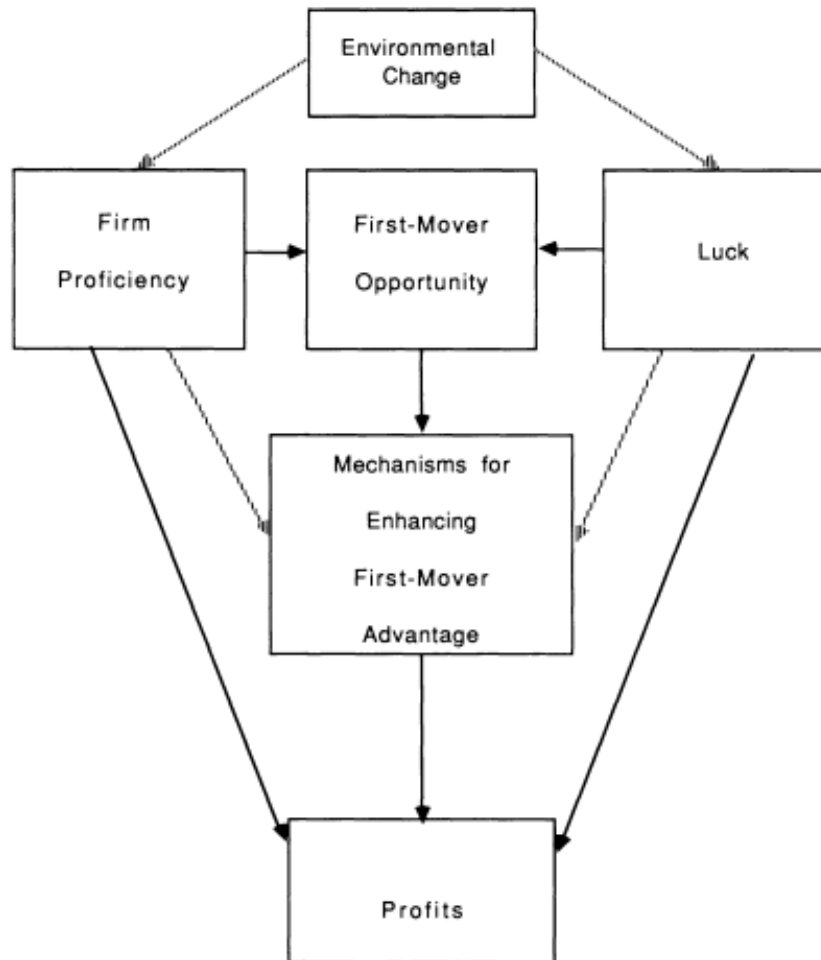
Source: Sehlhorst, Scott.¹¹

Graph. 4 shows how a learning curve works: at the beginning, it takes a lot of time for the production process because the firm is still a novice user, then, as time passes, it takes always less time to produce a bigger amount of product, until the firm becomes an expert user. A steep learning curve enables first-movers to gain significant advantages over late entrants (Lieberman, 1987).

Fig. 2 can sum up what has been stated before, splitting the process of creating profit into some stages, starting from environmental resources, luck, firm proficiency and then mixing all together to create the firm strategy to exploit advantages.

¹¹ Tyner Blain. "Why Do Products Fail? – Forgetting that Users Learn". September 25, 2012 <http://tynerblain.com/blog/2012/09/25/why-do-products-fail-ignoring-learning-curves/>

Fig. 2: Endogenous generation of first mover advantages.



Source: Marvin B. Lieberman, David B. Montgomery¹²

¹² Marvin B. Lieberman, David B. Montgomery. *First-Mover Advantages*. Strategic Management Journal, Volume 9, Issue Special Issue: Strategy Content Research (Summer, 1998), 41 – 58.

Early mover disadvantages (latecomer advantages)

Being the first to enter a certain market gives a firm some advantages, that it has been already seen in the previous chapter, but it doesn't guarantee success. Indeed, the benefits of being a pioneer can be counterbalanced by disadvantages, which are advantages enjoyed by latecomers.

Even if an early mover can use certain technology as first, sometimes this specific technology, as well as R&D, can represent high costs for the firm. A lot of late entrants may let pioneers to provide the needed technology and to test the market so that they can avoid the initial costs: they can acquire modern technology innovated in developed economies, often at a fraction of the original research and development (R&D) costs, thereby leapfrogging many decades of technological progress (Teece 2000). They can take advantage of advances already made (Gerschenkron 1962) by previous firms and this can happen directly through foreign direct investment (or FDI) or technology purchase (imports, licensing arrangements, ...) or indirectly through technology spillovers¹³ (Bell and Pavitt 1997; Hayter and Edington 2004) like the transfer of know-how with the simple interaction among people and firms (Saxenian 1996; Dicken 2003). A clear example are the cases of Japan, Korea and Taiwan, which grew thanks to acquisitions, imitation and copying by industrialized economies (Lim 1999).

Furthermore, as the market is not static, technologies can change: this is an opportunity for latecomers because, by entering late, they can adapt easily to the new market requirements, while the technologies used by leaders are becoming old and obsolete. But not only technology can face changes: also the tastes of the consumers can! Sometimes these may be ignored by early entrants and can be overtaken by latecomers, who are more willing to take risks and can meet the market changes. In this case, especially if the firm had success and there are significant economies of scale, people who are working in the firm can find it hard to change the processes, values and beliefs that are already fixed in their minds, that are likely to persist even if changes are necessary.

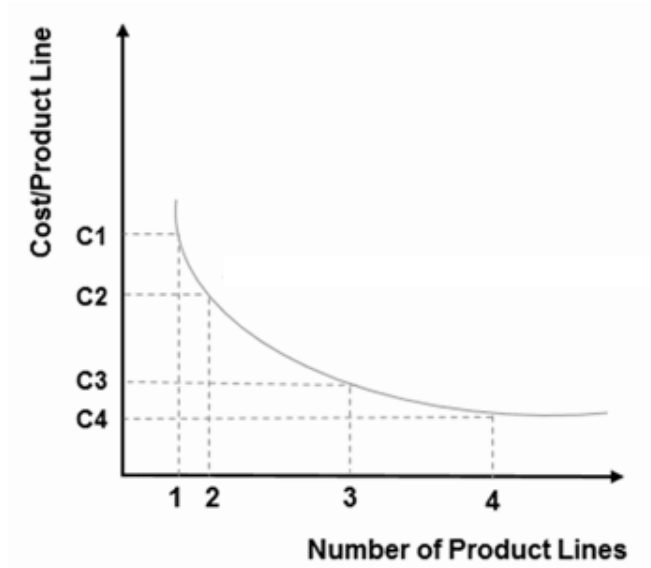
Another benefit for latecomers related to customers and technology is that these kind of firms can save a lot of money to educate clients to use the product: first movers have to make customers aware of what they are selling, convince them to try the product and teach them how it works and this can also be very expensive. First of all, they have also to teach the team how

¹³ See chapter 2, 2.3, *Follower or a leader? Latecomer*, p. 12.

to produce and to sell something which is new in the market, followed by the search of new suppliers and distribution channels.

Disadvantages for pioneers may come also from the firm itself (as it has been identified previously also some advantages for early comers): it can be used to see and explore the market before concretely enter, so that late entrants can see the response to initial movements of competitors and decide whether it is the right moment to establish a business or not. Late entrants can benefit from a bigger amount of information and less uncertainty. Once the early movers test the market and once late comers receive indirectly from them positive signals, they can leapfrog the firsts by entering with incomparable new resources and technologies developed for that specific purpose. Late entrants can also reuse the technology used for other previous productions using assets that are in common with the new product (Teece, 1987) exploiting in this way economies of scope¹⁴ (see Graph. 5).

Graph. 5: Economies of scope



Source: Managerial Economics Club¹⁵

¹⁴ Definition: “Economies of scope is an economic theory stating that the average total cost of production decreases as a result of increasing the number of different goods produced. Specifically, economies of scope describe situations in which the long-run average and marginal cost of a company, organization or economy decreases, due to the production of similar complementary goods and services.” Economies of Scope Definition, Investopedia. See in the website:

<http://www.investopedia.com/terms/e/economiesofscope.asp>

¹⁵ See in the website: <http://www.managerial-economics-club.com/economies-of-scope.html>

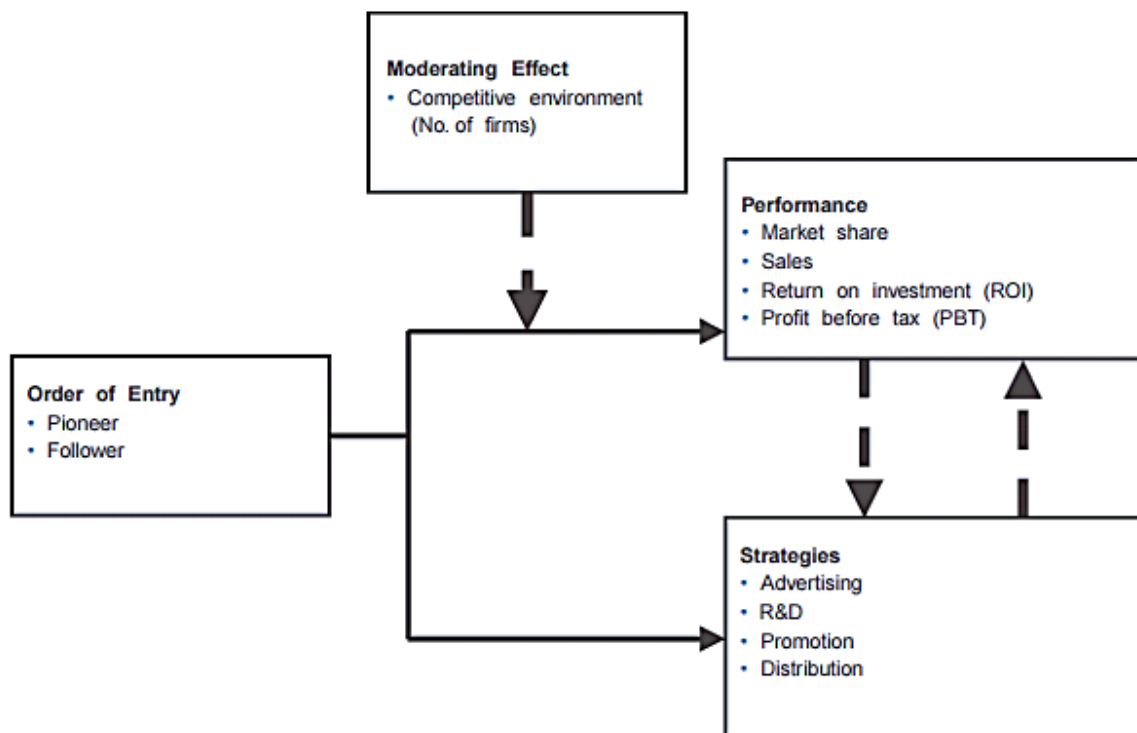
Finally, it can also be said that opportunities in the wide-open market are not so easy to identify and are hard to capture. Furthermore, it takes time sometimes and they need an immediate action. You can easily see the benefit that firms, which arrive late, have.

The table below sums up what are the main advantages and disadvantages for latecomers.

Source	Latecomer disadvantages	Latecomer advantages
Demand / Market / Consumers	<ul style="list-style-type: none"> • Switching costs: consumer loyalty, uncertainty, transaction costs, formal contracts, reputation 	<ul style="list-style-type: none"> • Mature consumer • Changes in consumer tastes • Changes in technologies • Free-rider effects: consumer education, information spillover, skipping trials and errors
Competition	<ul style="list-style-type: none"> • Incumbents' preemption of input factors, production capacity, market-side opportunities • Already fierce competition 	<ul style="list-style-type: none"> • Differentiation • Incumbent inertia, lock-in of assets/resources, organizational inertia • Skipping incumbents' errors
Technology & Product	<ul style="list-style-type: none"> • Lag in technology • Learning curve effect • Unfavorable regime 	<ul style="list-style-type: none"> • Technology spillover • Changes in technology • Favorable regime
The firm	<ul style="list-style-type: none"> • Learning by doing: technological leadership, learning curve effect, overcoming market complexities 	<ul style="list-style-type: none"> • Enhanced level of information: shared experience or assets, resourcefulness

Latecomer strategies

The order of entry as well as other factors can affect the achievement and sustain the pioneering advantage (based on researches by Varadarajan and Peterson, 1992). These can influence both strategies and performance of the firms in a specific market.



Source: Sharad Mittal and Sanjeev Swami¹⁶

Usually, those companies which perform better (for example, they have higher market share) are likely to invest more in R&D, advertising, promotion, and distribution, based on different strategies, and are likely to have better performances than the ones which experienced less success.

In this chapter market and position strategies that can allow late entrants to succeed despite pioneers will be presented.

¹⁶ Sharad Mittal and Sanjeev Swami. *What Factors Influence Pioneering Advantage of Companies*, VIKALPA, volume 29, NO 3. July - September 2004.

5.1

Basic strategies and performance overview

Basic and general strategies

As it has been seen in the previous chapters, being first can provide significant benefits and market share advantages over late entrants. Strategies always depend on the market environment, the positioning and product portfolio of the already existing players. Usually, the basic strategies base themselves on the price, products, new markets and innovation.

The price strategy is that firms have to reduce the price to start selling in a specific market. In this way, latecomers can attract new customers, who may not be interested in purchasing the same product and can also attract pioneers' customers, inducing them to switch. The risk for latecomers is that if the price is too low there will be less profits, because of the costs they had to face, unless the cost of production is cheaper¹⁷.

If late entrants want to compete properly in an industry, they should start focusing on a niche market and improving a product or service by being innovative. With the innovated product/service, firms may be able to attract customers who are not the current target for this specific product or service; it can even attract a smaller segment of the market. It is crucial to introduce any new product at the perfect time, especially in high-tech industries, in which companies experience short life cycles and it is hard for latecomers to catch-up pioneers.

Furthermore, for the already existing products it can be found a new geographic market: companies always try to go outside the mature market and find a more profitable one. But developing new channels of distribution is not the only solution and it can be very risky: high investments which cannot give the expected and proper return. Companies in general should choose whether to focus in a new market or in the already existing one: in this last case, the pioneer company knows already the environment, that usually means less risk and higher success.

Depending on the order of entry, companies decide which strategies suit them best. Studies and researches show the tendency of pioneers to invest more heavily on strategies, that could be like improving R&D, distribution and promotion, than latecomers, which instead are deterred from entering the market through the rise of entry barriers. For explaining better, it has been

¹⁷ Gurumurthy Kalyanaram, Ragu Gurumurthy. *Market Entry Strategies: Pioneers Versus Late Arrival*. Strategy+business: Corporate Strategies and News Articles on Global Business, Management, Competition and Marketing. July 1, 1998 / Third Quarter 1998 / Issue 12 (originally published by Booz & Company)

reported an example taken from Sharad Mittal and Sanjeev Swami's article "*What Factors Influence Pioneering Advantage of Companies*", summed up on tab. 4. It presents the comparison of the average spending on strategies both for pioneers and latecomers over the years (using ANOVA results).

Table 4: Effect of order of entry on strategies

(Rs million)

	Pioneers			Followers		
	1993	1997	2001	1993	1997	2001
R&D	018.0	050.4	060.3	02.8*	030.2	028.8**
Advertising	031.2	090.7	156.0	18.8	047.5	083.4**
Promotion	436.8	728.5	224.9	36.4	068.1	150.0**
Distribution	240.0	403.8	763.7	62.3*	100.7*	194.9**

* difference significant at 1% level, ** significant at 5% level.

Source: Sharad Mittal and Sanjeev Swami

It can be seen what it has been just stated for the year 2001 of the example on the table: over the years, pioneers seem to be more aggressive in pursuing these strategies (concerning R&D, distribution and promotion) and are more focused in creating entry barriers. For their survival and performance, firms understood the importance of the strategies: for the year 2001, indeed, pioneers' investments in these strategies are much higher than strategies of the late entrants (followers).

Effects of order of entry on performance

As well as it has been stated for strategies used by companies, also related to performances studies show that pioneers have higher market share than competitors (Robinson, 1988; Robinson and Fornell, 1985; Urban et al., 1986, Whitten, 1979). The order, indeed, of market entry affects significantly the market share of both early movers and late comers (Lambkin, 1988). Consequently, pioneers are more likely to have greater sales and profits than those of late entrants, but not returns on investments. Table 5 shows the comparison of average values of performance both for pioneers and latecomers over the years: pioneers are able to maintain their superior performance, however the difference in the performance decreases over the years. Indeed, in 1993 the difference is significant at 1% level, but in 2001 it is at 5%! This means that latecomers' performance is improving compared to pioneers. Returns on investments are better for late entrants than pioneers.

Table 5: Effect of order of entry on performance

	Pioneers			Followers		
	1993	1997	2001	1993	1997	2001
Market share (%)	11.20	10.50	09.30	07.50*	06.85*	06.96**
Sales (Rs billion)	8.9	17.03	27.66	02.96*	05.63*	10.63**
Return on investment (%)	25.40	15.70	17.56	21.40	20.30	15.20
Profit before tax (Rs billion)	0.46	01.08	01.72	00.12*	00.39**	00.40**

* difference significant at 1% level, ** significant at 5% level.

Source: Sharad Mittal and Sanjeev Swami

The data for table 4 and table 5 are based on a sample of firms (394 companies¹⁸ across 32 industry segments like consumer goods, beverages, etc.) classified on the basis of their year of incorporation (see PROWESS database¹⁹) and collected on strategic variables related to expenses in R&D, advertising, promotion and distribution and on performance variables like sales, profit before tax, return on investment, and market share.

¹⁸ List of Top 500 Indian companies (Business World, October 7, 2002), selected according to revenues and asset base. The list has been reduced to 394 as they were not all available in PROWESS.

¹⁹ "Prowess is a database of the financial performance of Indian companies. Annual Reports of individual companies is the principal source of this database. The database covers listed and unlisted companies. For listed companies, the database includes data sourced from the stock exchanges.". Prowess, Largest Database of Financial Performance of Indian Companies. Powered by a Versatile Software that Empowers the User.

5.2

Some specific latecomer strategies

It has been already stated that being first is not always the right solution and does not always guarantee success. Sometimes, pioneers may lose their advantages and market share very quickly.

How can this happen?

- 1) A pioneer may be not able to offer a proper and superior level of customer service;
- 2) With new technologies, costs can change and late entrants can leapfrog pioneers by offering similar or better service at lower costs;
- 3) New ways to enter a market, like innovative distribution, can help with the entrance of late entrants;
- 4) Late entrants can concentrate on the price, focusing on selected segments;
- 5) If the product becomes more complex and technical, it is hard for customers to learn how to use it, so the advantage of the pioneer is limited;
- 6) Or if there are too many brand in a market, the customer may become confused;

Which is then the solution (strategy) applied by latecomers to deter early movers?

As it has been seen, late entrants should choose a strategic position in the mind of consumers: this can be realized by modifying product or promotion strategies, for example changing advertisement.

Late entrants can also find creative ways to increase product trial²⁰: “a temporary offering intended to provide market information by allowing consumers to examine, use or test a product prior to fully committing company resources to a full launch”²¹. Considering consumer goods, customers just need a sample-product for a trial; in the case of non-consumer goods, instead, new mechanisms should be created; software products require demonstrations for the usage, while automobiles and other products can be tested.

Latecomers companies can segment the market and particular targets or they can adapt their strategies to different markets: if they are not able to do it, this can be a barrier to entry. They

²⁰ Gurumurthy Kalyanaram, Ragu Gurumurthy. *Market Entry Strategies: Pioneers Versus Late Arrival*. Strategy+business: Corporate Strategies and News Articles on Global Business, Management, Competition and Marketing. July 1, 1998 / Third Quarter 1998 / Issue 12 (originally published by Booz & Company)

²¹ Business Dictionary, Product trial. See in the website: <http://www.businessdictionary.com/definition/product-trial.html>

can also start targeting types of customers who are willing to pay something more for the product or the service.

To offer something different compared to pioneers, they should increase their creativity in marketing, advertisement and customer-service field.

And to do so they can take advantage of environmental changes, such as technological ones (even if this kind of innovation refers to a limited period of time, because incumbents may improve it, too), regulations, and general breakthroughs that can improve the process of production and the product itself.

Gurumurthy Kalyanaram and Ragu Gurumurthy in their article “Market Entry Strategies: Pioneers Versus Late Arrivals” for the webpage “strategy+business: Corporate Strategies and News Articles on Global Business, Management, Competition and Marketing” brought up I.B.M. as an easy example to explain what it has been just stated: it became a leader in the personal computer market in which it entered late developing and promoting the technology. Then, Compaq and Dell refined this business, reducing costs (Compaq) and introducing new easy ways of purchasing, like mail-order or direct channels (Dell). I.B.M. unfortunately was too slow to react and lost the 1980’s-gained-lead in 1990’s.

5.3

Pioneer (defensive) strategies

Leadership is not easy to maintain: leaders-pioneers should be in a position to react or anticipate potential entrants and should “build” some entry barriers.

Indeed, building up entry barriers is an example of defensive strategies that could be adopted by firms which want to prevent latecomers to entry a market and maybe steal their position. These barriers are factors or conditions, natural or artificial, in the competitive environment that can represent a threat for new businesses to begin operating in a specific market²². There are different kinds of barriers, such as economies of large scale production, network effects, ownership of key resources, high set-up and R&D costs, low prices, predatory acquisition (purchase many/all shares to gain controlling interest), switching costs²³, powerful and strong advertising, brand and loyalty, vertical integration and exclusive contracts, patents²⁴ and licenses. These are not going to be explained, as it has been already explained in the chapter related to the advantages of being a latecomer.

Pioneers should innovate faster than competitors, especially in high-tech industries, launching or announcing (at least) next generation products. As it has been already stated, for late entrants it is easier to learn from companies that have already established in the market, that is one of the reasons why pioneers should never stop being creative and innovative: when there is more complexity and hardworking, it is also harder to copy it, so that it could result difficult for late entrants to have access to the market.

Furthermore, they should have a complete understanding of their end-user segments and they should group them into different price ranges, so that they can differentiate better the customers and obtain the maximum profit from each of the segments. Pioneers should be able to offer better and higher customer service packages or reward programs, so that it will be difficult for these customers to switch (see also switching costs).

Another important aspect that these pioneers should consider is the channels of distribution: all companies, in order to sell and make profits, use various distribution channels and each firm must consider what is realistically available. It is the task of these pioneers to try to lock up the

²² Jim Wilkinson. *Threat of New Entrants (one of Porter's Five Forces)*, WikiCFO, The strategic CFO, July 24, 2013.

²³ See chapter 3, *Early mover advantages*, p. 22

²⁴ See chapter 3, *Early mover advantages*, p. 22

key channels of distributions, even if it is not possible to have access to exclusive distribution rights. Investments in this branch, as well as for advertisements, are much higher than the ones of followers/latecomers, even if, with time, these last ones seem to have understood this processes and the importance of them and they too have begun to be quite aggressive.

These are all strategies that should always consider the market dynamics and should have a responsive organization that can adapt and it is flexible to all the environmental changes, not only fighting potential competitors but also trying to develop in advance their strategies.

Examples of strategies and related consequences:

Strategies	Pioneers	Latecomers (at the beginning)	Consequences
Advertising expenses	High	Low	In favor of the pioneers: they can create entry barriers for late entrants in the market.
Advertising economies of scale	High	Low/Limited	In favor of the pioneers if the market is too small for the late entrants to benefit from economies in purchasing.
Advertising campaign	High	Low/Limited	
Capital costs	High	Medium	No salvage value if a late entrant is unsuccessful.
Consumer response	High	Low	The low consumer response for late entrants may be due to (1) a lack of experience with their product and (2) having to 'shout louder to be heard' (Robinson and Fornell, 1985).
Good quality	High	Limited	Pioneers developed brand loyalties.
Market share	Wide	Limited/Small	
R&D	High	Limited	Acquisition of product process and organizational innovations.
			Enhance product performance or create switching (source of competitive advantage)
Organizational systems and structures	Wide	Small	It is source of sustainable competitive advantage (Kerin, Varadarajan and Peterson, 1992).
Distribution coverage/channels	Wide	Restricted	Difficult for late entrants to acquire enough shelf or channel space to sell their products.
Distribution expenses	High	Low	
Pre-emption	High	-	Differentiation advantage.
			Selection the most attractive niches in terms of geographic space (locations), perceptual space (product characteristics space), and distribution space (Kerin et al., 1992).

How can a simple latecomer firm become a leader?

6.1

Internationalization

It has been seen in the previous chapters that innovation is very important for all kind of firms and that latecomers manage to innovate by imitating early movers. However, to do so, late entrants need more external knowledge than leaders, because internal and domestic resources are not enough. Opportunities, like learning processes, becoming integrated globally and attracting global clients (Lee, 2001) are available only to firms that are ready to internationalize. These opportunities can be found in other countries and give a company the possibility to grow its business.

What is exactly internationalization?

It is a process in which firms adapt their productions to the standard of the global requirements: their products, originally designed for local markets, meet the needs of foreign countries or they can be adapted to do so (Investopedia.com). It is referred to “integration” and “international activities”.

It is described as gradual acquisition, integration and use of knowledge about operations and a “successively increasing commitment to foreign markets” (Johanson and Vahlne 1977, 36). But there is not only one definition of internationalization: Thus Welch and Luostarinen (1988, 36) defined it as “the process of increasing involvement in international operations”. With this last definition, it is implied that it is a sequential process of increasing involvement, excluding firms that want to be excluded from their international exposure.

Calof & Beamish (1995) tried to solve this problem giving the following definition for internationalization: “the process of adapting firms’ operations (strategy, structure, resource, etc) to international environments” (1995, 116)

Going deeper into the definitions of latecomers and trying to mix it with the definitions of internationalization, it will be found out that the case of internationalization needs to be reconceived as a “pull” rather than a “push”²⁵: they are not compelled to internationalize, but it is just a chance for them to adapt and grow.

²⁵ John A. Mathews. Accelerated Internationalization from the Periphery. Macquarie Graduate School of Management, April 2001.

Firms are multiple connected to the global economy, which allows them to be involved across national borders, thanks to transacting relationships (like contracts, licenses, etc.).

To develop a sustainable and competitive advantage, firms can base their strategies on internationalization activities (it puts together international business planning, resource management, international networking and market intelligence – Peng, 2001). In this way, intangible assets can be developed, like brands, innovation cycles or product development. But, as it has been anticipated at the beginning of this chapter, in order to do so firms (in our case, latecomer firms) should learn and absorb these competencies through learning commitment and high receptivity (de Rond, 2003).

Internationalization is a way to become from a domestic to a global player and firms can benefit from creating a global presence. Companies which don't have this "global perspective" can emerge and internationalize slowly, if at all. In reverse, switching from domestic to global mean to start trading not only in one foreign market, but in the world.

Impulse to internationalization

The starting point talking about the impulses that drive firms to internationalize is the fact that they have the ability to exploit and use their advantages (already existing assets) abroad (theory formulated in 1960s by Hymer and Kindleberger). Multinationals enterprises (MNEs) exploited their dominant domestic experience expanding and developing abroad (Mathews, 2001). In reverse, latecomers weren't able to do the same thing (exploit existing assets), but they were able to access to those resources only through their international expansion. These latecomer firms (in general) do not possess overwhelming domestic assets, in order to be exploited abroad, as with MNEs, but they search for brand new ones. This is the reason why they have to expand quickly, to consolidate gains. They try to build partnerships and joint ventures, so that they can reduce the risks. Pioneers try to expand abroad to exploit their domestic resources, while, in reverse, latecomers move abroad to have access to resources that would be otherwise unavailable, occupying a global position. But, doing so, multinationals and pioneers have much more to lose if they share to the world their knowledge and if they build alliances, while for latecomers it is an advantage because they can copy and imitate the success of the incumbents. The world for them is full of resources that have to be found and used, obviously using the right strategies and organizational forms.

Accelerated internationalization

Talking about developed and emerging economies, it is referred to a new phenomenon of the world economy that can be identified as fast internationalization or as accelerated internationalization (Schrader et al., 2001).

To obtain it, latecomers have to overcome some disadvantages that it has been already seen in the previous chapters, for example the need of innovative technology. The factors on the basis for the success of this fast internationalization are important moves that are suitable for the changing of the conditions of the global economy (managerial factors), exploiting their latecomer status. As they are latecomers and newcomers, “they have to be able to find innovative ways to make space for themselves in markets that were already crowded with very capable firms”²⁶. They tend to have a global outlook from the start (Rugman, 2003). Right after the beginning, they quickly move towards international exports and production, moving rapidly into international markets, also without having initial sales in their home domestic markets (McInsey & Co., 1993; Oviat and McDougall, 1994; Knight and Cavusgil, 1996).

This accelerated internationalization, according to John A. Mathews, is made possible by organizational and strategic innovation conducted by latecomer firms (the famous LLL model). This theory consists in identifying some factors that can help these firms to overcome initial technological, financial and organizational disadvantages, which are linkage, leverage and learning. Through linkages, late entrants have access to technology and know-how developed elsewhere (Li, 2007) thanks to connections to foreign firms (for example with strategic alliances). Through leverage of resources, they manage to spread acquired knowledge and technology internally. And, in the end, through learning they can acquire dynamic capabilities and build advantage from experiences.

What does determine accelerated internationalization?

According to some researches, it has been brought up that the main driving forces behind this accelerated internationalization are: firm specific advantages, domestic institutional contexts and the dynamic interaction of these two.

Concerning the firm specific assets, important drivers for accelerated internationalization are based on relations and competences, capabilities to learn and build, network and business

²⁶ John A. Mathews. *Accelerated Internationalization from the Periphery*. Macquarie Graduate School of Management, April 2001.

groups and corporate entrepreneurship. Instead, institutional incentives and constraints are the main drivers for what is related to the domestic institutional context.

What is more significant for latecomers is the possession and exploitation of relational capability, which can help the firm to overcome the difficulties that the environment can present. Furthermore, managers are more able to move inside other countries with poor governance conditions like latecomers, because they can understand better how to conduct business there. Latecomers are better prepared to adapt and operate in these environments both at home and abroad: the lack of technology does not prevent them to have other valuable capabilities that may help them to expand internationally.

Also, these type of firms focus themselves in upgrading their capabilities and in the search for reducing their competitive gap with pioneers, building new technologies and skills.

This is another strategic advantage that help a late entrant to internationalize together with the creation of networks and business groups. Indeed, latecomer firms are characterized by weak internal resources, but they are linked by strong networks, which allow them to reduce information asymmetries, offering them learning opportunities and exposing them to foreign businesses and overseas markets²⁷.

These networks can be defined as “strategic networks” or network of knowledge: financial, managerial and organizational resources can be shared, as well as the influence for the international growth.

Empirical studies found out also that overseas investments and acquisition by latecomers can be another strategic choice for a long-term growing. They need, indeed, to acquire foreign brands, technology and other competences.

For what concerns the domestic institutional contexts, there are two main institutional forces: institutional incentives and institutional constraints.

It can be defined as institutional incentive the support of government through policies from many emerging economies. When the government has an active role, it represents an important aspect to influence the internationalization process, behaviors and strategies of the firms. Government encourage firms, especially latecomers, giving them a variety of supports (for example loans), like in the case of the Chinese government, in which the majority of Chinese firms’ initial “go-global” capital was loaned by government-owned banks (Deng, 2012).

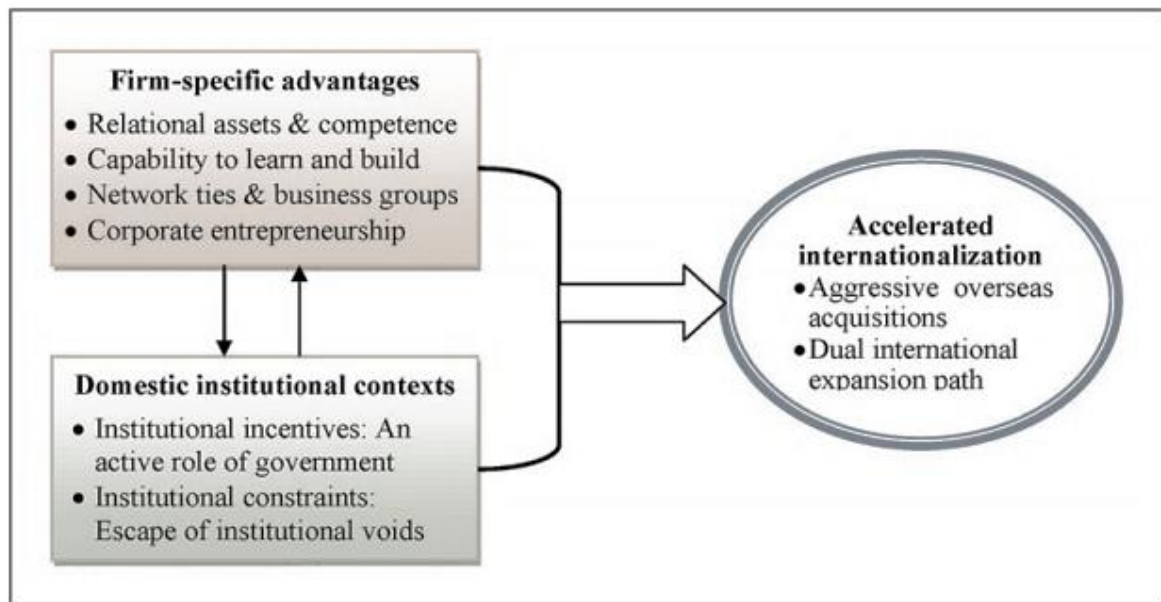
But, in contrary, firms may want to escape from institution, due to their restraint or voids. Going global, indeed, help latecomers to avoid poor institutional domestic environments and it is a

²⁷ Ping Deng. *Accelerated internationalization by MNCs from emerging economies: Determinants and implications*. *Organizational Dynamics* (2012) 41, 318—326

strategy, an exit strategy, rather than an entry one into foreign markets. The domestic environment may be characterized by institutional and competitive voids (like absence of specialized intermediaries, systems for regulations and contract enforcements), caused by macroeconomic and political volatility, that prevent late entrants from capital or talents.

Fig. 3 sums up what it has been just explained: accelerated internationalization is the result from institutional processes and the resources that are adopted by latecomer firms to try to fit the environment and to these contexts. All of them can be defined as strategies that enable emergent companies to catch up already well established incumbents.

Fig. 3: Determinants of Accelerated Internationalization



Source: Ping Deng

Latecomers in the global economy

Talking about internationalization by emergent multinationals, it is made in offshore factories which are located in developing countries (Feenstra 1998; Gereffi and Sturgeon 2004). Emerging countries such as Brazil, China, India, Mexico or Turkey are becoming more and more original design manufacturers (ODMs), even if they started as original equipment manufacturers (OEMs), selling their own standardized commodities with a foreign firm's brand affixed, while a much smaller number have become original brand manufacturers (OBMs), see the case of Samsung.

In particular, most internationalizing firm were born as suppliers of established incumbents and used their latecomer status to capture all the advantages of being late (the ones it has been already seen in the previous chapters), including the access to the market through globalization.

Latecomers have been able to achieve accelerated internationalization and reach their positions through organizational innovations (such as global operations), that can be adapted to changing circumstances of the global economy, and through linkages with incumbents, instead of technological innovation only. Late entrants have been able to make space for themselves in very crowded markets of capable firms with new ways to “complement” the strategies of incumbents, creating partnerships (forming joint ventures and strategic alliances) to reduce risks, acquiring knowledge, offering contract services, through licensing new technologies, and gradually increasing commitment to overseas markets rather than just through large investments, as pioneers have done already. Furthermore, they implemented these strategies through strategic innovations that enabled them to exploit their latecomer status (Mathews, 2001).

Through the leveraging for resources from the strengths of others, latecomers managed to have a place in the global economy.

A case study: Samsung

7.1

The story of the company

What was originally meant to be a groceries trading company, exporting various products from South Korea to Beijing, China, Samsung has become the world's largest technology providers. At the moment, this South-Korean multinational possesses a number of holding companies and subsidiaries. Samsung can be associated with different business establishments (electronics, information technology and development) both in South Korea and in the world.

Founded in 1938 by Lee Byung-chul, the company had only few (forty) employees. The founder was very ambitious and soon he had ventured into various other sectors like in the sugar refinery, insurance, retail and securities.

Then, during the 80's, Samsung Electronics (born in 1969) was merged with Samsung Semiconductors and Telecommunications continuing to grow and starting their large-scale productions in telephone, fax machines, switchboards with great success. All these production units, at the end, came under one company named Samsung Electronics Co., Ltd.

After the founder's death (1987), Samsung continues its large-scale expansion and development, increasing also the investments in research for better technologies.

Samsung, which was born to become a simple household operating in its mother country, started to expand to many other cities internationally. Indeed, it started building its factories in New York, Texas, London, Portugal etc.

The company did not stop and focused on its construction company: member of a joint venture with the Belgian group Besix and the Arabtec, Samsung managed to build the Burj Khalifa (world's tallest building in Dubai, United Arab Emirates), the Taipei 101 (skyscraper in Taipei, Taiwan) and also the Petronas Twin Towers (Kuala Lumpur, Malaysia).

The priorities in the 1990's became electronics, constructions and chemical.

After something more than 50 years from its constitution, Samsung kept on going beyond its boundaries and became the world's leader in the production of memory chips and was only second after Intel in the chip-making industry. Adopting a new form of management, it revolutionized the television hardware industry creating the first LCD (Liquid Crystal Display,

mid 90's) screen, followed by picture tubes, Samsung printers and other high-tech high quality products. all the other companies had to pay Samsung royalties to use their technology²⁸.

A subsidiary of this company (Samsung Techwin) became in 2001 supplier for specific engine parts for airplanes (Boeing 787 Dreamliner and Airbus A380) and in 2002 it became the leader in the mobile phone production (the highest in the world) also overtaking Nokia.

The success of Samsung, now the largest conglomerate in South Korea, is due to patience and dedication in developing new technologies.

In 2012 it represented nearly 15% of South Korea's GDP and its total revenue was nearly \$265 billion (\$26 billion profits).

Over the years, it has extended its control over many markets, counting with more than 425,000 employees.

The quality control, work and entertainment expertise and management structures make Samsung the "world's best" technology provider with the best products in the whole world.

Its philosophy? Simple: *“to devote our talent and technology to creating superior products and services that contribute to a better global society”*²⁹.

²⁸ Samsung Group Success Story, Successstory. See in the webpage:

<https://successstory.com/companies/samsung-group>

²⁹ Samsung, Values & Philosophy. See in the website:

http://www.samsung.com/us/aboutsamsung/samsung_group/values_and_philosophy/

Samsung's catch-up

The crucial point that a firm has to consider is that, in emerging markets, this firm has to overcome the capabilities of already established multinationals. In the case of latecomers, they have to be able to catch-up with them.

In this chapter it will be explained the processes that Samsung adopted in order to become, from a locally established firm for the trade of groceries, one of the world's leader in the technology field.

According to different studies, latecomer firms may follow similar stages for developing specific capabilities. They manage to successfully move from relying on country-specific advantages to their own strengths (firm-specific advantages).

The first stage, was to try to spot the opportunities of the market and figure out how to exploit them. The demand for the products can remain stable for a certain period of time, but then can drastically change, for example, due to government policies (like deregulations, or privatization) or due to the emerge of a new middle class of consumers. As in the case of Samsung, the founder, Mr. Lee Byung-chul, since the beginning wanted it to be a world player. He was very ambitious and managed to recognize the opportunities offered by the environment: Samsung has been defined as "a militaristic organization," by Chang Sea Jin, a professor at the National University of Singapore. Indeed, it is the top managers who decide which strategy to adopt and there's no discussion. Samsung, indeed, managed to adapt to the industry's standard business model firstly to the local market.

The second stage was about building the strengths: once established in a market, a firm has to be able to improve its capabilities by linking them internally and then externally. The firm needs to learn the business through internal development, contracts, licensing, partnerships and so on, that help it to take advantage of the market. Samsung, understood the needs of the people and the changing of the environment and it ventured into various other sectors, which could have been also totally different from the previous ones. Samsung tried to establish as leader in all of these industries. Once the infrastructure was in place and was able, through the huge amount of investments, to create good quality products, Samsung began to sell its components to other companies, which had also supplied, and began to compete with them.

In the third stage, the firm has to consolidate and to build scale, through an organic growth and acquisition of other local competitors, in order to reduce costs, because the firm is still weak.

At the same time, the market has to be difficult to enter (barriers): Samsung, indeed, tried to produce key components for the industries it was in, components that cost a lot of money to manufacture. This, due to high investments, allows Samsung to build barriers to entry to limit competition. It has been helped also by the president Park Chung Hee, who placed great importance on industrialization and on domestic conglomerates, protecting them from competition and assisting them financially. Samsung then invested in new companies (such as Samsung Mulsan Gongsang, or the Samsung Trading Corporation) or acquired existing ones (for example Gumi-based Hanguk Jeonja Tongsin).

Moving to the fourth and last stage, firms should grow by moving up to higher-value segments (domestically and internationally). They should develop new capabilities while learning how to reconfigure them into a new capabilities system and how to fill the existing gaps. Samsung continued entering new sectors (such as telecommunications) and continued to invest heavily in research and development, pushing the company into the global industry. It also participated to the construction of some world's famous building (Twin Towers in Malaysia, Taipei 101 in Taiwan and the Burj Khalifa in United Arab Emirates) and merged other operations to concentrate on electronics, engineering and chemicals. It then became the world's leader of LCD television and passed Nokia to become the world's largest mobile-phone manufacturer.

These were just some of the steps that Samsung has taken during its life and they were just some examples to try to explain how, from a simple firm, it became the world's undiscussable leader in the technology market (especially in the smartphone one).

This entire thesis raised up valuable hypothesis and then analysis that try to explain and to understand what latecomers are and how they behave in a specific market.

In general, latecomers have to face saturated market, entering in the maturity phase of a life-cycle industry. Referring to latecomers, it is meant fast transforming developing countries and firms that are not able to innovate by themselves, which are weak technologically and don't participate to the "advanced users' life". They have to face an already fierce competition, that can provide opportunities and strengths, which have been called "advantages" for late entrants, or disadvantages for pioneers (like technology spillover or the ability to change in technology), but also threats and difficulties, which are what have been called "disadvantages" for latecomers, or advantages for leaders (such as switching costs, consumer loyalty, uncertainty, transaction costs, formal contracts, reputation). These can depend on a variety of factors: the combine effects of them determine the strategies and performances of the firms. Indeed, this type of firms has similar characteristics and can adopt strategies depending on the environment, the competition, the customers and on what they want to achieve: the analysis shows that late entrants can compete successfully against pioneers and eventually catch-up with them. In this thesis, it has been proposed some frameworks for strategic decision related to timing of entry under specific conditions. Studies and researches show the tendency of pioneers to invest more heavily on strategies, that could improve R&D, distribution and promotion, than latecomers, which instead are deterred from entering the market through the rise of entry barriers.

Latecomers have to leapfrog those of the initial market and have to acquire the necessary technology capabilities to increase the market share and export sales. They are able to imitate and learn, taking as example leader firms, developing their own market and capabilities, also thanks to the information and technological spillover. They can build gradually the competencies over time, which allowed them to reach a solid competitive position, or resisting to the environmental changes, adapting to them or managing to improve technologies and raise investments over times.

They assimilate new techniques faster than leader economies can invent them, and that is why poorer countries (and firms) could "catch up" with richer ones. But, not always pioneers can maintain their position over time, that's why they should adopt "defensive strategies".

Latecomers, such as the ones in the semiconductor industry in Japan or the Samsung conglomerate, presented in the last chapter of this thesis, could take advantage of the opportunities of the market and obtain a the “biggest slice of the cake”.

Studies show that pioneers have higher market share than competitors and that the order of market entry affects significantly the market share of both early movers and late comers.

However, pioneers are not always able to maintain their advantage status, because they may be too slow to adapt to changes in technologies and the costs can raise or they may be not able to give a superior level of customer service and late entrants can leapfrog pioneers by offering similar or better service at lower costs. To avoid these difficulties, pioneers try to building up entry barriers or should innovate faster that competitors, especially in high-tech industries, launching or announcing (at least) new products.

When a firm tries to adapt its operations (strategy, structure, resource, etc.) to international environments is a process called “internationalization”: there are different definitions of it, but it can be identified as a sequential process of increasing involvement and integration, being connected to the global economy. It allows them to be involved across national borders, thanks to transacting relationships, and to adopt strategies to reach the competitive advantage.

Talking about developed and emerging economies, it is referred to fast internationalization or as accelerated internationalization in which latecomers use their latecomer status to capture all the advantages of being late and they internationalize and learn faster than the others. It has been explained that the driving forces behind this accelerated internationalization are: firm specific advantages, domestic institutional contexts and the dynamic interaction of these two.

These firms can have access to the market through globalization and, through the leveraging for resources from the strengths of others. Latecomers, even if at first they were born as suppliers of established incumbents, managed to have a place in the global economy and eventually become what it is called “leaders”.

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