Globalization & the Nordic Success Model: Part I

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GLOBALIZATION & THE NORDIC SUCCESS MODEL – PART I

GLOBALIZATION AND PRODUCT DIFFERENTIATION AS OPTIONS

Globalization & the Nordic Success Model – Part I:
Globalization and product differentiation as options
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ACKNOWLEDGEMENTS: WHY I APPRECIATE FAMILY BUSINESSES?

In 1970, I started my carrier in **Pori Cotton Factory (Porin Puuvilla Oy)** on the banks of the River Kokemäenjoki in Pori. The factory is the largest industrial complex ever built in Finland. It was founded in 1898 by **Gustav Ramberg**, and later owned by the Ahlström family. The production finally ended in 1994. Today, Puuvilla is a business, education and leisure center. In 1970 I was engaged to a highly dynamic company in which I assisted German consultants in the rationalization of production. The **German industrial method** was widely applied to reveal bottlenecks of the production process and make them detectable for operative production managers.

In 1971–1974, I worked in **Friitala Oy** that was known of high quality leather goods. Since the late 1950s, his family (later Hellemaa) collaborated with West Germany, which allowed the use of modern chemicals in the leather finishing. The fashion designed by e.g. Jukka Rintala was presented at international fairs in the same top category as the famous Italian collections. I had an opportunity to learn about the top fashion in international context. I could participate in some strategic projects although I was mainly responsible for factory rationalization. In the early 1970s a major worry was the unexpected wage drifts. One reason for that was the fact that the inflation rate was high in Finland in the years 1971–1974. We had difficulties with product calculations. In spite of continuous "political" strikes reliable deliveries to international customers were guaranteed since operative factory management could maintain pragmatic labor relations in spite of "political" strikes.

In 1975–1976 I worked in **Kone Oyj**, a global engineering company founded in 1910 and employs over 30,000 persons. I had an opportunity to make the acquaintance **Pekka Herlin**, the CEO as the architect of internationalization. He was an excellent strategic leader. He used his time to solve the bottlenecks of internationalization. **Pekka Korhonen**, the Group Controller in Kone Material Handling Group in 1988–1999 comments: "Kone's modus operandi which was often reflected in the saying: The Best is the Enemy of Good. In the early days one of the launched successful business concepts was after sales marketing, (e.g. maintenance and modernization of lifts and cranes) adding profitable service business to the traditional engineering and manufacturing business." This kind of practical system thinking is particular to the German firms. Kone's culture was encouraging. In the implementation of data systems "young men" such as me and **Hannu Bergholm** were allowed to work independently. I admired **Arvo Tuononen**, the economic director, who as a "spider man" controlled operative managers. He was calm and positive although his work load was huge. I did my first scientific research (Master's Degree Research) in which I constructed the mathematical optimization model of currency risk.

The forth family company in Finland that I know in-depth is **Nanso Group Oy** that produces knitted products, tights and socks. It was established in 1921. The current family owners who represent the fourth generation of **Emil Aaltonen** family are committed to the family company. Nanso's best-known brands are Nanso, Finnwear, Black Horse, Vogue, Amar, Norlyn and KS Socks. **Hannu Jaakkola** was the CEO who navigated the company through its transition period in 1987–2001. In 1987–1990 I was a board member. I advised the company to orientate towards the top quality fashion business in which I replicated the Friitala success recipe from the early 1970s and some research findings. However, the hero of drama was Hannu Jaakkola who was skillful in system thinking and a highly appreciated specialist in material and production technologies. Nanso Group's chairman of the board is **Juha Berglund**. I couched him to Nanso's strategy during my last year as a board member.

Each of these four family business stories is unique. Kone might be a "Big Champion" in Hermann Simon's conception. The company has been highly successful and is the global market leader in the elevator business. Nanso is a story of a successful turnaround. When I was a board member Nanso was an export winner and a potential Hidden Champion. Today, Nanso is the domestic market leader. Porin Puuvilla and Friitala were internationally well-known and profitable companies in the 1970s. The future success was jeopardized by two main factors. The most important was owners' inability to commit to the company in the way as Nanso's owners did. In the case Porin Puuvilla the main reason might have been that the Ahlström family had much better business opportunities in engineering industries in which their company (Alström Oyj) is a potential Hidden Champion. Friitala was dependent on the top design. The marriage couple **Kaarina and Pertti Hellemaa** was the team. Kaarina was an internationally recognized design manager and Pertti was a business manager. Friitala lost its vitality at the moment when Kaarina and Pertti Hellemaa were divorced. Another factor was continuous "political" strikes that have been common in Finland during past decades.

Family businesses in Germany have been a success story. The success rate has been about 90% as Hermann Simon reports (Hidden Champions of the 21st century). In Finland the family business success rate is low as it was in Britain a century ago by Alfred Chandler (Scale and Scope. The Dynamics of Industrial Capitalism). Chandler has been influential. His conclusion was that family-ownership was the main reason why Britain came in late to the second industrial revolution. Because of Chandler's view, the **personal capitalism was generally thought to be the old-fashioned model in comparison to the stock market capitalism**. As a part of my analysis of Germany's economic miracles I started to read Hermann Simon's book of German Hidden Champions once more and suddenly I started to think that Chandler's conclusion is wrong. **The family-ownership is perhaps the most sustainable governance model in the global economy**? The US is the winner of Chandler's stock market capitalism. However, the majority of US firms are domestic-market-oriented. In Germany **about 100,000 mid-sized firms have experiences about FDI operations**.

In 1977–1979, I worked for the **Federation of Finnish Technology Industries** that represents the biggest industrial sector in Finland: 55% of total Finnish exports and 80% of total Finnish R&D-investments. The total employment effect is around 700,000, equaling ¼ of the Finnish workforce. In 1977–1979, the major challenge was the internationalization in which we collaborated with the Nordic sister organizations. During that time I got to know how Finland's government made decisions of the devaluation of the Finnish currency – "Markka". The decision process was instructive. In the 1970s, **the US management method (e.g. PIMS and BCG)** became popular in Finland. I started to analyze the PIMS method since companies as Nokia had problems of getting reliable information on the US methods. Since that I have studied carefully the US dissertation data-bases. I was employed in 1980–1982 as a researcher at Helsinki School of Economics where I doctorated in 1983.

In the early 1980s, had an opportunity to make the acquaintance of **Howard Thomas** (Dean of Warwick Business School in 2000–2010). He encouraged me to continue to study the theme of my dissertation that was related to the Purdue IO studies (Hatten and Patton) and to the new Harvard IO (Hunt, Newman and Porter). Howard organized a seminar in Brussels about the emerging **European IO doctrine**. The results are summarized in Strategic Management Journal's article in 1986 (Strategic Groups: Theory Research and Taxonomy). Thomas provided me a research fellow position to develop further the European IO with him. Because of family reasons, I stayed in Finland and started my carrier as a professor in two broad areas (marketing and entrepreneurship), and qualified in both. I motivated my students (e.g. Salimäki, Killström and Luukkainen) to doctorate in the IO. I like to work with master students and I guided about 1,000 master's degree researches during four decades and wrote near 100 large working papers and books. As the chairman of the **Finland's Federation of Scholarly Association of Management** I had the position to coordinate the collaboration of Finland's big companies and business schools. Besides that I have been a board member in 30 SMEs, a specialist for organizations, such as the Council of Nordic Governments, OKO Bank, Electrolux and TeliaSonera. Since 1983 I have analyzed and partly consulted about 300 growth companies in ten EU countries.

Internationalization paths of SMEs are not straightforward. There are obstacles, barriers in the markets. The existence of a market failure is seen a justification for manipulating or regulating market forces. Market failures are difficult to avoid or correct. I have been collaborated with Nordic SMEs since the mid-1980s. In most cases, SMEs have only one option, to succeed first in the beginning. The first failure in an international operation in a certain market can be interpreted as a dead-lock. This interpretation can lead to withdrawal from the market and operation in question. In Finland this type of behavior can be seen in the past decades. In many cases, the reason behind is the involuntary operation, where the foreign market entry is initiated by customer interest or by market forces. In terms of entrepreneurial strategy making, this means the lack of intrinsic motives for internationalization. However, a market failure in foreign operations is the only means to gather real experience about the foreign markets.

In 1988 Finland arranged the International Small Business Conference, ISBC88 in Helsinki (Finlandia House). I was one of the key persons in the conference team. To activate Nordic countries to participate in the ISBC88, I did the **Nordic Small Business Research** with **Hannu Pirnes**. The study from the year 1987 included analyses of 60 companies in three Nordic countries (Finland, Sweden and Denmark) and in four industries (clothing, furniture, metal and engineering and the IT-industry). The collected extensive database contains information on the entrepreneurial background and the company's strategy and performance. An opportunistic entrepreneur characterised by broadness in openness in mind is the winner-type. Based on the research, positionistic behavior with about 80% opportunism and 20% craftsmanship is identified as the potential winner.

Networking, cooperation in international operations, such as joint ventures or industrial franchising or licensing, can be considered to accumulate social and trust capital for entrepreneurs without hazarding the cash flow. SMEs do need mutual collaboration to avoid the obstacles of internationalization. The **Furniture Excellence Club FEC** is the master work of **Mårten Johansson** who was working for the Council of Nordic Governments. We organized the FEC that had about 20 Nordic furniture firms four Nordic countries (Finland, Sweden, Norway and Denmark) firms as its member. The project stage was in 1988–1991 but the Club has continued its work since that. Our program was challenging since we organize EU-research that was my main obligation when travelled in the EU countries. One of the working methods was to organize four mutual meetings per year. This was wonderful project. Mårten Johansson was a real Cosmo politician who knew in-depth Nordic culture. I learned a lot of this project. Together, I have done some 20 field research trips to Nordic countries and I highly appreciate our common history and culture – we are civilized Vikings.

Subcontracting Excellence Club S.E.C ry[1] is a network of SMEs which have their special field of expertise in metal based industry, mechanical engineering, technical planning and industrial design. The SEC was established in 1993. **Pertti Kajanne** (director, Federation of Finnish Technology Industries) and **Timo Parmasuo** (chairman, Meconet Oy) both owned excellent social skills that was needed start this sort of Club. The S.E.C ry is the basis which the cooperation is built on and where the versatile skills of the members speed up the development of new ideas. The vitality of S.E.C ry is based on the prevailing synergy between the members and on the flexible cooperation of member firms. The ultimate goal of the S.E.C ry is to create added value for clients by means of networking and achieve competitive advantage for the members. The characteristic features of S.E.C ry are open communication and exchange of information between the members.

Joseph Schumpeter described capitalism as developing by gales of creative destruction, by which new technologies supplant the old ones. My mission in teaching and writing is: The future challenges in the global economy can best be solved through a better understanding of Schumpeterian entrepreneurship in its modern, global contexts. A paradox of the literature on entrepreneurship is that the process of opportunity recognition and exploitation is supposed to happen in a vacuum, separate from the market structure elaborated by the modern IO. However, about 100,000 multinational corporations dominate the international trade of commodities worldwide. There are rational reasons for that dominance. The main reason is the huge economies of scale available in the globalized markets. Another reason is the evolution of institutions that protect intellectual or immaterial properties in global context.

Hermann Simon's writings on Hidden Champions are useful and **important contributions to contemporary management theories**. I have read thousands of books and articles about management and applied economics. They are mainly nonsense. I came to life as a researcher when having read Simon's books that in my view revolutionize the US-dominating business theories and practices. Schumpeter's writings illuminate the difficulties that a company has in its efforts to combine market-driven business processes and radical innovations. Hidden Champions are doing that. These companies have occupied global leadership positions despite their small size. In general terms, the greatest innovations are likely to occur from the cross-fertilization of ideas and professions. This is how German Hidden Champions are acting. They are highly Schumpeterian in their action as Hermann Simon has noticed. The family leadership is highly authoritarian. In Kone the family leader was Pekka Herlin who could tolerate "young men" who liked to work highly independently and the "spider man" who controlled operative management in global contexts. Why family leaders can motivate their personnel better than average leaders? I think that the main reason is that family leaders have no need to compete away competent persons. They may favor the long-term thinking. A listed company is often stacked into a devastating internal power game of top management positions.

Today, Finland is in an economic crisis. Finland has only some 30 big export companies of which the majority is downsizing their activities in Finland. I believe that Finland needs to learn about the German management doctrine. Hermann Simon has found that the **Hidden Champions method is perhaps one of the most important element of Germany's global competitiveness**. Simon's view of Erich Gutenberg helped me to understand why German companies e.g. Volkswagen in the automotive sector tends to outperform other big companies such as Fiat in international competition. In Gutenberg's solution, the individual price-sales function (Preis-Absatz-Funktion) is assumed to be doubly kinked. In the monopolistic scope (monopolistische bereich) of the price-sales-function a firm can plan its marketing parameters (marketing mix), without having to fear reactions of competitors. German companies are able to interpret correctly the rules of the game of global pricing. Only some Finnish companies (e.g. Kone) are good in that. Most of Finnish SMEs do not know how to construct a realistic pricing policy in global context.

Paul Krugman (New Trade Theory) combines the industrial structure with the production function and assumes significant economies of scale. About 99% of Finland's SMEs are in the size-class under 50 employees. According to my studies, the critical size-class of having some economies of scale is **500–1,000 employees**. In that size-class there are some tens of companies and Finland is seriously stagnated. Finland has only some hundreds fully internationalized companies that can utilize significant economies of scale and about 300,000 small companies operating mainly in the domestic markets. Finland's large internationalized companies are investing in Asia and most of them have downsized their activities in Finland. So how to solve Finland's economic crisis? Finland has about ⅓ of work force out of job when Germany has only ¼ of work force out of job. Germany has the world's best infrastructure when Finland's infrastructure is inefficient, old-fashioned. Germany is the leading country in the EU's TENT-program. Finland is not investing in TENT traffic corridors although they could be important to Finland since Finnish export companies are paying much higher transportation and logistical costs of international trade of goods as German companies.

I would like to express my gratitude to all those who have contributed to this book. First of all, I would like to thank Prof. Dr. Dr. h.c. mult. Hermann Simon who is the highly appreciated specialist of Hidden Champions and the very person who firstly coined the concept. Professor Simon gave me the idea that the monopolistic competition theory by Chamberlin and Krugman is related to Gutenberg, and, thereby, to his own writing about Hidden Champions. I have also discussed with Adjunct Professor Dr. Bernd Venohr who is an active writer of Hidden Champions. He emphasized the niche concept and certainly Hidden Champions use to select their target markets bottom-up relying more on the learning-by-doing than on abstract economic models. I will express my thanks to family business owners, e.g. Heimo Aho, Jarmo Hallikas, Tomas Hedenborg, Risto Käkelä, Jari Paasikivi, Timo Parmasuo, Antti Zitting and managers, e.g. Ilpo Helander, Arvo Tuononen and Pauli Komi, in Finland, and many hundreds others in other EU countries, with whom I have had the honor to collaborate. I have noticed that family ownership is the most sustainable and progressive sort of capitalism of global markets. Professor Howard Thomas has been important since he encouraged me to continue my post-doc-studies around the topics of industrial economics.

February, 2017

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1 IMPEFECT COMPETITION AND ECONOMICS

1.1 COMPETITION MODELS

Joseph Schumpeter's contribution to microeconomics

Competition arises from the **scarcity of economic resources**. Most of classical economists, e.g. Smith (1776) and Ricardo (1817), felt no need for a precise definition of competition because they viewed monopoly as highly exceptional (Stigler, 1968). The model of perfect competition emerged as the standard model in applied microeconomic studies in the early 19th century when Leon Walras initiated the revolution of marginalism (Sandamo, 2011). The limitation of the model in dealing with real-world conditions is the reason for critics. Joseph Schumpeter was perhaps the most famous member of the German Historical School of Economics. In 1911 he wrote his book "Theorie der wirtschaftlichen Entwicklung" (see von Kurz, & Sturn, 2011). As the Harvard professor in 1932–1950 he published this book in English in 1934: **Theory of Economic Development** (Schumpeter, 1934).

Schumpeter tried to introduce his concepts into the set-up of the Walras' system but found it difficult since economic evolution is a slow wave-form process. Schumpeter (1934, 1942) appreciated Walras who relying on the French Rationalism initiated the use of mathematics in economics. Walras made theoretical assumptions. **One of them was to use the upward sloping parts of the average cost function, instead of the marginal cost function, as the supply curve of the firm that excluded the behaviour of real firms out of his frame, as Schumpeter (1934, 1942) criticized**. During his career as a Harvard professor, Schumpeter insisted on the discontinuity between the Walras' mathematically perfect model and entrepreneurship (Loasby, 1999).

Schumpeter (1934, 1942) introduced the **concept of temporary monopoly profit** as the lifeblood of innovativeness since he noticed that the so-called normal profit is not a satisfactory compensation of innovations and risk-taking under uncertainty. Parallel to Schumpeter, Frank Knight, the founder of the new (institutional) Chicago School wrote about risk-taking. Knight's (1920) risk theory distinguishes between the objective probability that an event will happen, and, the immeasurable unknown, such as the inability to predict the demand of a new product. Knight expected that an entrepreneur would make his profit in the market with immeasurable unknown or **true uncertainty**. Knight argued that perfect information on future events was not necessary or not even possible. Knight corresponded closely to Schumpeter's ideas.

The conceptualizations of Schumpeter and Knight are still valid and even more so in the time of globalization. Schumpeter and Knight were the forefathers of the entrepreneurship doctrine. They could identify the timeless function of entrepreneurs in a capitalistic society.

From the 1890s and the 1920s the most famous representative of the British Economic School was Alfred Marshall (Cambridge). He wrote eight editions of his book **Principles of Economics** (Marshall, 1920) and exerted great influence on the development of economic thought. Marshall was concerned with theories of costs, value, and distribution. His contribution was the **concept of marginal utility**. Marshall made a clear distinction between the internal and external economies of the firm. External economies, **economies of scale**, depend on a firm's adaptation to markets while internal economies, **economies of scope**, depend on a firm's resources, organization and management efficiency. For methodical reasons, Marshall introduced into microeconomic analyses the **concept of representative firm** as the theoretical unit of analysis. He focused economists' attention to the firm's cost-minimizing behaviour. Marshall is still highly appreciated as one of the pioneers of managerial economics (see e.g. Samuelson & Marks, 2003).

Schumpeter never denied the merits of Marshall (1920). As a Harvard professor he referred to Marshall's representative firm concept that **hide the fundamental problem of economic change** (Schumpeter (1939). His unique evolutionary analysis can be understood only by recognizing that he developed his analysis in relation to a study of strengths and weaknesses of the Walrasian system of Neoclassical Economics[2]. Schumpeter (1934, 1939) took care to distinguish his theory of economic development from the theory of the Walrasian process of adaptation. Although Walras' general equilibrium system is observationally equivalent to the economic system in which economic agents (suppliers, consumers, etc.) behave as rational optimizers, Schumpeter declares this to be an illusion. His view is that entrepreneurs who introduce (radical) innovations are **heroes of the drama**. (Lintunen, 2000).

By contrast to Marshall, Schumpeter gave much credit to the human agency. Schumpeter (1934, 1939, 1942, 1994) argued that entrepreneurs invest in (radical) innovations in the face of keen competition to achieve temporary monopoly profits and, thereby, generate (irregular) economic growth. Innovations are viewed as the source of dynamics in capitalism.

Edward Chamberlin/ Joan Robinson: imperfect competition

Edward Chamberlin and Joan Robinson are regarded as the parents of the modern study of imperfect competition (Chamberlin, 1933; Robinson, 1933). They provided the important building blocks for the Schumpeterian analyses of innovation and entrepreneurship. In their treatments of competition, Edward Chamberlin and Joan Robinson are often credited with simultaneously and independently developing the theories of imperfect competition. It has become customary in many treatments to regard them as having done just that, and modern textbooks tend to mention the two as if they were interchangeable.

Joan Robinson was a post-Keynesian economist who was known for her wide contributions to economic theories. She became a lecturer in economics at the University of Cambridge in 1937, joined the British Academy in 1958, and acted as a professor in the Girton College, and later in the King's College as the first female fellow. As a member of the Cambridge School of economics, Robinson (1956) contributed to Keynes' (1936) General Theory. Her contribution to economics concerned the **monopsony concept**, which is used to describe the buyer converse of the seller monopoly. She analysed also the **theory of economic growth**. At least two students who studied under her guidance have won the Nobel Prize in Economics namely Amartya Sen and Joseph Stiglitz.

Chamberlin acted 30 years (1937–1967) an influential professor of economics at the Harvard University. His important scientific contribution was the theory of monopolistic competition. His **concept of product differentiation** is parallel to Schumpeter's concept of innovation. Chamberlin's work was revolutionary. His concept of market structure is characterized by competitive and monopoly elements. That is the point that makes his work so important to the modern microeconomic theory. Chamberlin was frustrated. He was not appreciated as an economist. Chamberlin (1965) extended his analysis to competitive groups of firms that correspond to conventional "industries," depending on how broadly a "class of product". Chamberlin identified competitive groups of firms inside "industries". **Under monopolistic competition the equilibrium price is higher, and the volume of output probably lower, than under pure or perfect competition**.

Schumpeter and Chamberlin tried to solve parallel scientific problems. A combination of product differentiation and innovations is entrepreneurs' best competitive edge against the market power of big corporations. Today, multinationals are professional in marketing and in-house R&D when marketing and R&D are the major handicaps of entrepreneurs.

Monopolistic competition is the type of imperfect competition in which many producers sell differentiated products that are not perfect substitutes in terms of branding, quality, location, etc. Chamberlin's theory of monopolistic competition influenced greatly on the development of **marketing theory and thought** during his carrier until the late 1960s. Chamberlin was held in such a high regard by marketers that the American Marketing Association (AMA) awarded him the **Paul D. Converse Award** in 1953, the AMA's highest honour. Chamberlin's microeconomics contribution concerned consumer choice, and its connection to market prices (see Archibald, 1961, 1961).

During his carrier Chamberlin tried to modernize the neoclassical theory that solely relied on the two competition models (perfect competition and monopoly) and excluded imperfect competition theories of the frames of neoclassical economics[3]. Robinson's main contribution concerned the *concept of monopsony*, which is used to describe the buyer's monopoly position parallel to the seller's monopoly position.

Chamberlin offered the product differentiation concept as the main explanation for the downward falling demand curve of an individual product. He proposed that the demand of products depends on the quality of the product and selling activities.

In order to provide consumers more quality a firm under monopolistic competition **maintains spare capacities of production, marketing and R&D in the same way as big oligopoly firms**. This is risk taking for the quality of consumption since a monopolistic firm takes the prices charged by its rivals as given and ignores the impact of its own prices on the prices of other firms (Krugman, Obstfeld & Melitz, 2012). In comparison, an oligopoly firm impacts on prices by using its market power. The theory of monopolistic competition contributes to the strategic marketing doctrine. According to the narrow definition, industries with market structures similar to monopolistic competition include e.g. clothing, shoes, and services in large cities. According to the broad definition, monopolistic competition includes besides consumer goods industries also most of the B2B-industries in international intra-industry trade. A modern interpretation of Chamberlin's analysis of competitive models can be summarized in Figure 1.

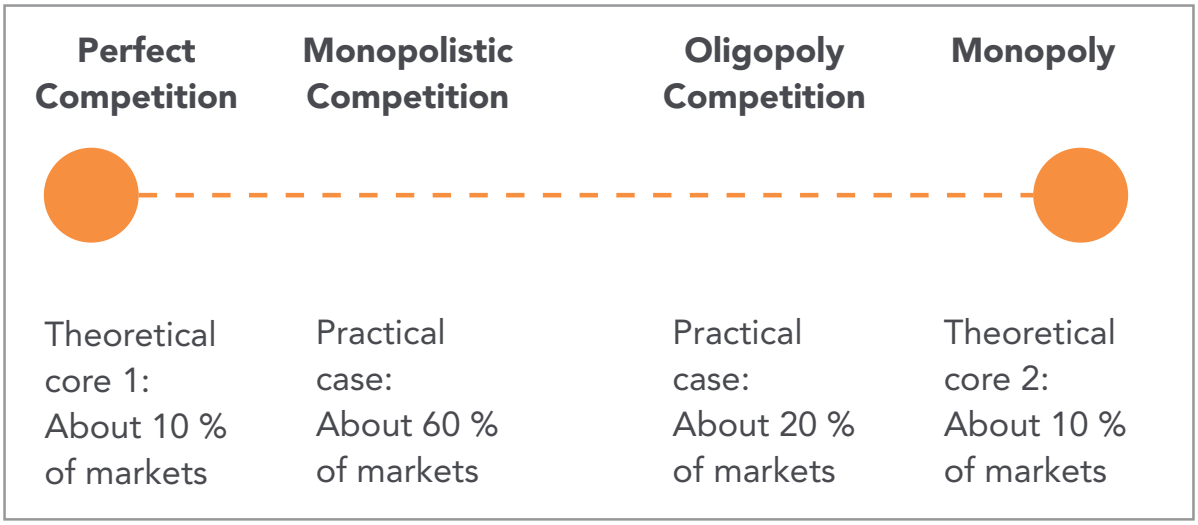

Figure 1: Competition and globalizing markets

In the global markets, most of firms tend to differentiate their products. According to my view, even 60% of firms follow mainly the principles of monopolistic competition and modern marketing theories.

The existence of economies of scale provides for various kinds of firms incentives to invest in international specialization and trade. This incentive may complement the explanatory power of differences in factor proportions, and may give rise to trade in the absence of such differences. Chamberlin tried to modernize the neoclassical theory. He failed in that. However, the modern Industrial Organization Economics (IO) is built on Chamberlin's model. In the global markets, the offerings of firms are heterogeneous and differentiated – the fact that Krugman (1979, 1980, 1981, 1995) has intelligently analysed in his writings about trade theories.

The admission of economies of scale calls for an analysis based on a market structure that allows prices above marginal cost and, thus, the two imperfectly competitive models (monopolistic competition and oligopoly competition) should be at the core in global market analyses.

The two important of competitive models are:

1. **Monopolistic competition** is the core of both modern marketing theories and the Industrial Organization (IO) doctrine. When the number of competitors is large, the mutual dependences of competitors are relaxed and marketing tools, e.g. advertising and selling, are important to differentiate a firm's offering from average offerings. Because the number of competitors is large, monopolistic competition embodies elements of perfect competition. As long as a firm maintains its differentiation strategy, features of monopoly are dominating.
2. **Oligopoly** is another area of the Industrial Organization (IO) doctrine. The IO is a theoretical construction on which extensions of managerial economics are built and the strategic management doctrine. Oligopoly, as Chamberlin interprets it, is accountable to the mutual dependences between competitors that are positioned in the same market.

1.2 MONOPOLISTIC COMPETITION THEORY BY EDWARD CHAMBERLIN

There are six characteristics of monopolistic competition (see e.g. Samuelson & Marks, 2003; Colander, 2008, Perloff, 2008; Goodwin, Nelson, Ackerman & Weisskopf, 2009; Krugman & Wells, 2009):

1. **Many firms**: There are many firms in each product group that is a collection of similar products and many firms are prepared to enter the market. The large number of firms gives each firm the freedom to set prices. In the market equilibrium the number of firms depends on mobility barriers such as fixed costs, economies of scale and the degree of product differentiation (Caves, 1985). The higher the mobility barriers, the fewer firms there will be at market equilibrium.
2. **Product differentiation**: Competing firms sell products that have real or perceived non-price differences. The elasticity of demand is high in the long run and the cross price elasticity of demand between competitive products is positive. This means that the competitive products are close but imperfect substitutes. They perform the same basic functions but have differences in qualities such as brands.
3. **Free entry and exit in the long run**: In the long run there are many firms waiting to enter the market each with its own unique products and in pursuit of supernormal profits. Any firm that is unable to cover its costs leaves the market without incurring liquidation costs.
4. **Independent decision making**: Each firm independently sets its terms of exchange for its product. Any action will have such a negligible effect on the overall market demand that a firm can act without fear of reactions by competitors. Each firm feels free to set prices.
5. **Some degree of market power**: Market power means that a firm can raise its prices without losing its customers. A firm has market power since it has relatively few competitors who sell the same kind of differentiated products. Market power means that firms face the downward sloping demand curves that are elastic but not flat as in perfect competition. Product differences are real but mainly perceived. Since a firm faces a downward sloping demand curve, it can raise its prices and demand will not drop to zero.
6. **Buyers and sellers do not have perfect information**: No sellers or buyers have complete market information on the target market (often segment). There are many firms producing similar products or a few firms producing multiple variations of the same products.

As Figure 2 shows, the short run behaviour of a monopolistically competitive firm is to produce at a profit maximizing level of output where marginal cost (MC) equals marginal revenue (MR). A perfectly competitive firm tends to produce at a profit maximizing level of output where marginal cost (MC) equals average total cost (ATC) and, following the rule of efficient scale of operation.

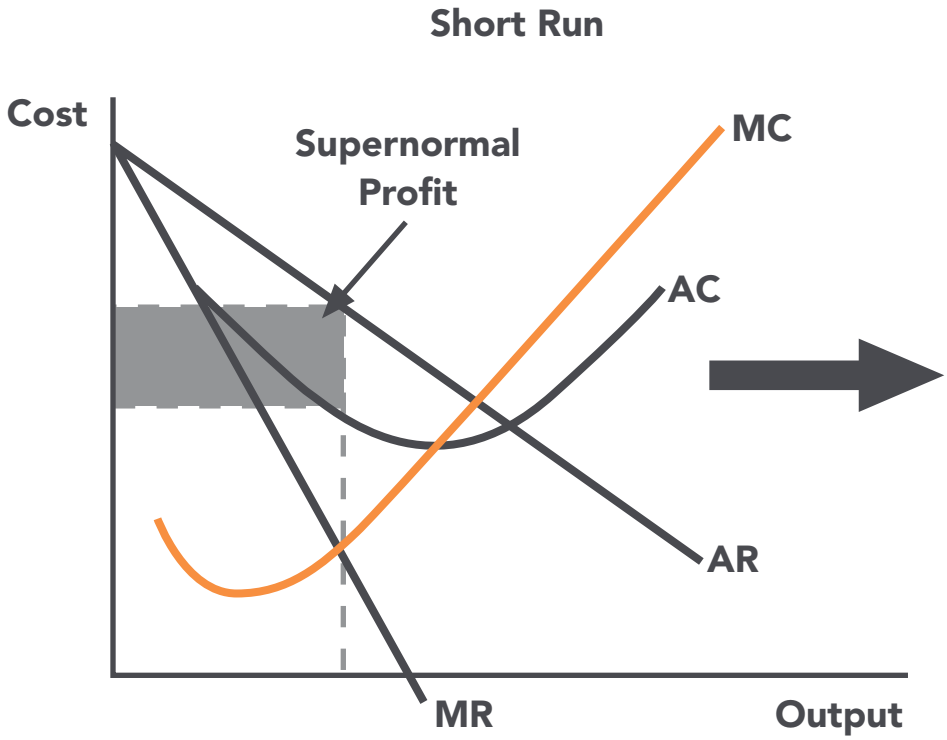

Figure 2: Monopolistic Competition – From Short Run to Long Run

The use of the assumptions of perfect competition as the foundation of the price theory for product markets is criticized since **firms are not passive price takers**. The key assumptions of perfect competition lack realism. **In international trade there are only few products that in broad terms are homogeneous**. In the real world, monopolistic competition models share characteristics both of a perfectly competitive industry and of a monopoly industry as Chamberlin has proposed. In a monopolistic competitive industry there are many products that are **close substitutes**. Differences between competing products are actual or perceived.

A monopolistically competitive firm faces a downward sloping demand curve in the same way as a monopoly firm. Unlike a monopoly industry, a monopolistically competitive industry is open for entry by new firms.

A monopolistically competitive industry provides supernormal profit in the short run. **Supernormal profits attract in new entrants, which shifts the demand curve for existing firm to the left**. New entrants continue to entry the market until only normal profit is available. This will shift the average revenue curve to the left until eventually average revenue (AR) is equal to average cost (AC) and the firm will earn **normal profit**. Unlike a perfectly competitive firm that produces at the minimum point of its average total cost curve (AC) a monopolistically competitive firm produces at the point where average revenue (AR) equals marginal cost (MC). A monopolistically competitive firm does not produce at an economically efficient point in the long run. However, a pure perfect competition is highly exceptional in practice, since it ignores the existence of capital that is necessary for manufacturing firms (Figure 3).

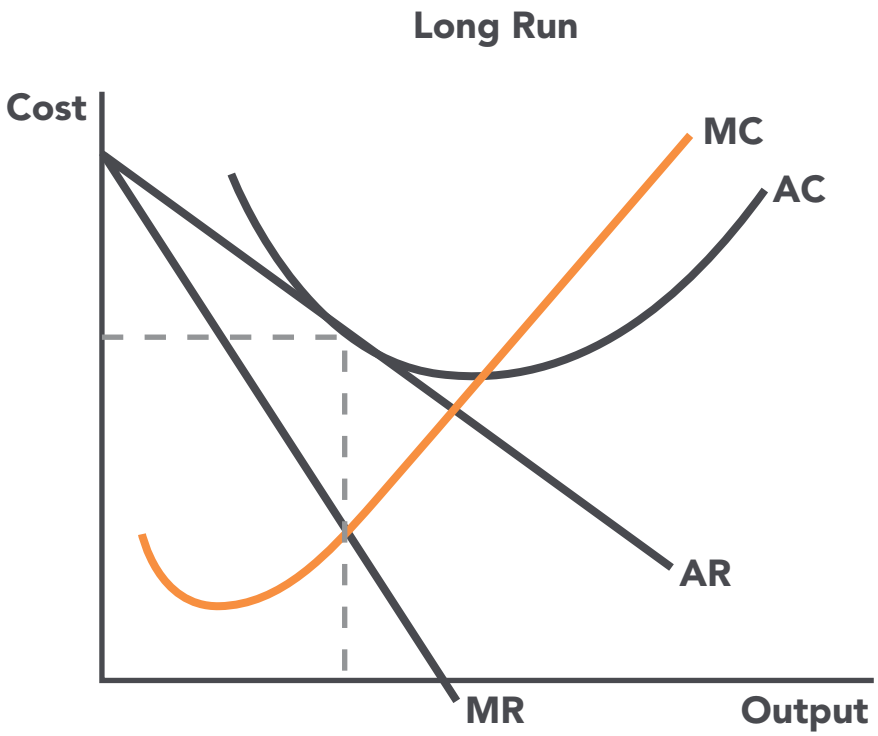

Figure 3: Monopolistic Competition – Long Run

In the short run, a monopolistic competing firm may be able to make supernormal profit, but in the long run these will be competed away by new entrants. As the consequence firms will only make normal profit.

Monopolistic competition should not be seen as undesirable in comparison to perfect competition since **monopolistic competition offers a rich variety in goods and services, and encourages product innovations**. According to Chamberlin (1965) the transition to perfect competition takes place through the **scaling of product substitution**. The neoclassical idea is that the transition towards perfect competition will take place only when the **number of competitors is scaled**.

In perfect competition the number of competitors is large and the slice of the demand curve each firm sees is a flat line. A firm is a price taker when it responds to changes in industry supply and demand by adjusting prices rather than attempting to influence the level of supply or demand. Price-taking firms can gain only competitive parity. In monopolistically competitive industries, the shape of demand curve is important to assess. **If a firm faces a downward sloping demand curve, it is no longer a price taker but a price setter**.

When a firm faces a downward sloping demand curve, it is no longer a price taker but a *price setter*. Therefore, pricing strategies are important for internationally operating firms. This is what Herman Simon has emphasized in his writings of Hidden Champions (Simon, 2009, 2014).

1.3 COMPETITION THEORIES UNDER DEBATES

The German contribution by Erich Gutenberg

The forefather of the German doctrine was Erich Gutenberg (1897–1984) who was an influential German economist. He received his Ph.D. in the University of Halle in 1921 and acted as a professor at the Friedrich Schiller University of Jena, the Johann Wolfgang Goethe University of Frankfurt, and the University of Cologne. He was the founder of modern German studies in microeconomics. In 1951–1966 Gutenberg was the **successor of Eugen Schmalenbach at the University of Cologne** where his main subject area was general business administration and industrial management.

Gutenberg's contributed strongly to the theory of monopolistic competition (monopolistische konkurrenz). Monopolistic competition is the most common in international trade. Examples of such markets are retailing of goods for everyday use (e.g. food, car, clothing, mobile phone, house and computer). Because of product differentiation, each provider firm has its own **monopolistic scope (monopolistische bereich)**. When a firm leaves the monopolistic scope, the rules of perfect competition are in force: The price is dictated by the market (Pindyck & Rubinfeld, 2009). In Gutenberg's solution, the **individual price-sales function (Preis-Absatz-Funktion) is doubly kinked**. In its monopolistic scope (monopolistische bereich) of the price-sales-function a business firm can plan its marketing mix, without having to fear reactions of competitors (Figure 4).

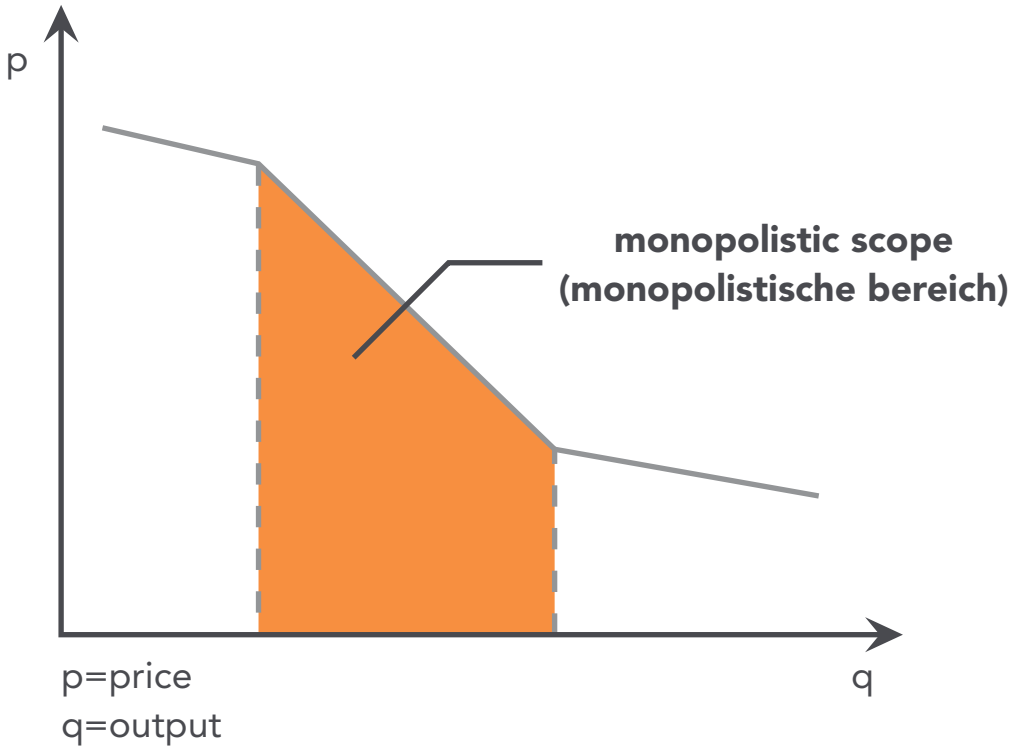

Figure 4: Gutenberg's price theory
Source: Piekenbrock, 2008.

Gutenberg's price theory is important for German industrial firms that are well aware of the importance of price positioning in international markets. The monopolistic scope (monopolistische bereich) concept is genius and visual for small and medium-sized enterprises (SMEs). This is a reason why German "Mittelstand" SMEs (Venohr, 2010) or Hidden Champions (Simon, 2009) have been so successful in international trade.

Germany is the only real success story in international trade in relation to the size on a nation. In Germany there are about 400,000 internationalized SMEs (Mittelstand) and about 100,000 of them have had FDI operations (Venohr & Meyer, 2009). Most of the German writers of international trade are not well known worldwide. They are "hidden" in the same way as the highly successful companies called the German **Hidden Champions** (see Simon, 2009). The US top business universities dominate the international debate on the competition models at a firm or at an industry level and related topics of competitiveness of nations of regions. The Harvard Business School and the Chicago University have dominant position in this respect. However, Germany is the world "champion" in international trade in relative terms (see Simon, 2009).

In the last few decades, the pendulum has swung back towards the German historical school of economics. Instead of relying on neoclassical theories of international trade, Paul Krugman (Krugman, 1979, 1980, 1981) included monopolistic competition to his model that become the standard in analyses of economies of scale and product differentiation, called the **New Trade Theory**. Erich Gutenberg's comprehensive view of the role of general management (Allgemeine Betriebswirtschaftslehre) is the core of business administration (Schmidt, 2000). Erich Gutenberg's conception is parallel to Alfred Chandler's conception (Chandler, 1962, 1990) emphasizing the role of management in the transformation of firms' strategies and structure as the response to technology revolution and to paradigm changes in global economies (Kreikebaum, 2000).

Gutenberg contributed to the doctrine of **production function of the firm** in the way that is more useful and practical in comparison to the neoclassical ones. Gutenberg's production function is widely applied in the operative production management in Germany and Nordic counties. Gutenberg's **input-output-model** is as well useful for practical business firms. An example of neoclassical production function is the **Cobb-Douglas production function** (Douglas, 1976) that was developed and tested against statistical evidence by Charles Cobb and Paul Douglas during 1927–1947 and widely adopted by economists such as Paul Samuelson and Robert Solow – Nobel-prize winners. This model was not developed on the basis of the in-depth understanding about engineering, technology or production that is the strength of the German doctrine.

According to the evaluation by Horst Albach (Albach, 1980), Erich Gutenberg's production function is the "…best-practice production function in German Industry."

Gutenberg's first book "Die Produktion" (Production) from 1951 contributed to German contemporary microeconomics. Two other boos integrate marketing and finance to production. Gutenberg's books are called as "Gutenberg Bible" by the students' jargon and "Opus magnum" meaning big works that cover fundamentals of business economics – not only sub-areas but the totality of a firm's functions. Gutenberg developed a **classification of factors of production**. He distinguished between system-independent and system-dependent factors of production. Following the idea of modern operation analysis, he could identify the **concept of bottleneck** that is the standpoint of operative analyses of firms. He is a forefather of customer-orientation in Germany. Today, Hermann Simon is certainly one of the most influential advocates of customer-orientation. Gutenberg's theory is characterized by the following features[4]:

1. **Holistic**. It covers all business management functions, under a view of input-output-productivity of a firm.
2. **Interdisciplinary**. It relates insights of many disciplines (psychology, sociology, engineering, law) in so far as they are relevant for the understanding of the productivity relationship.
3. **Formal**. It expresses the productivity relationship in "Gutenberg Production Function" and a "Gutenberg – demand function".

These kinds of practical but also highly analytical writings by Erich Gutenberg were highly appreciated in the 1950s and 1960s when the industrial growth was high in Europe and America. In the 1970s and 1980s, this link disappeared as the consequence of profound changes in microeconomic theories of the firm that underwent under the influence of the Chicago Schools of Economics. However, in both schools (New Institutional Economics and Monetarism) the leading professors at the University of Chicago (Knight, Stigler and Friedman) have made important scientific contributions. Since the oil crisis in the early 1970s, it was necessary to modernize the theories of international economics because of: (1) globalization of product/service and financial markets and (2) the growth of multinational corporations in size and numbers as the response to global market opportunities

The highly analytical writings of German economists, mainly by Erich Gutenberg, are useful for small and medium-sized enterprises (SMEs) that are operating in global markets to avoid excessive complexity of their business models. Simon (2009, 2014) is excellent elaboration of the German method: the case of Hidden Champions.

Monopolistic competition as the target of scientific attacks

Chamberlin's theory of monopolistic competition (1933) reoriented the theory of value, designed to base it on a synthesis of monopolistic and competitive theories. According to Chamberlin, neoclassical economists assess monopoly and competition as alternative. This is a wrong assessment since both models are at present in most of real world situations. Chamberlin's main point is that the **"impurities" in the nature of monopoly elements make "pure" competition impossible in the real word**. His view was not accepted by most of the orthodox economists (e.g. Kaldor, 1938) who relied on the two "pure" competition models (monopoly and perfect competition). Chamberlin's theory included monopoly and competition elements in the same model. He claimed that monopolistic competition need not bring higher profits to a marginal firm in a given industry. **Instead it allows a larger number of firms to earn normal profits**. Chamberlin argued that selling costs such as advertising are not a part of the cost of production, but are incurred to increase the sales of the given product and, thus, they affect the demand curve. Monopoly was exposed by Antoine Cournot (Sandmo, 2011) and elaborated by Marshall (1920). Chamberlin's idea is that, **no matter how slight, any differentiation strategy of a firm's product gives it to that extent an edge of monopoly**.

Monopolistic firms exist in a particular market in-between monopoly and perfect competition. None of these firms faces the entire demand curve in the way a monopolist would do, but **each does have some power to set prices**. In competitive market, market power exists only temporarily. A monopolistic firm cannot manipulate customers with excessive advertising as big oligopoly firms do: A monopolistically competing firm has a monopolistic scope (Gutenberg) as long as customers are willing to permit it. John Galbraight was an influential economist. **Countervailing power** is the concept of Galbraight that elaborates the collusion that large US firms tried to maintain with the US government in order to create supernormal profits. Galbraight also noticed that big American firms relied on excessively manipulative advertising in the US since the 1950s (Galbraight, 1956, 1958, 1967, 1973). For Chamberlin, perfect competition, per se, is an abstraction, because the real behaviour of firms is not like pure price competition. Chamberlin insisted on the claim that at an individual product level, there are two basically different kinds of competition:

1. **Price competition**
2. **Non-price competition**

Mainstream economists do not assume a priori that markets are preferable to other forms of social organization. They use to analyse cases in which the so-called market failures can lead to the resource allocation that is suboptimal. **Chamberlin's theory of monopolistic competition was pushed out of the frames of neoclassical economics since the 1960s**. The reason was that Chamberlin's theory did not fit with the dominant themes in economics (Keppler, 1998). Chamberlin challenged the leading neoclassical economists by claiming that most of the economic situations are composites of both competition and monopoly, and that, wherever this is the case, a false view is given by neglecting either one of the two forces and regarding the situation as made up entirely of the other (Chamberlin, 1937, 1965).

The monopolistic competition theory became the target of attacks, as Chamberlin highlighted the problematic nature of the neoclassical doctrine of economics that (1) relies on the use of mathematics in economic analyses, and (2) only accepts perfectly generalizable results in the empirical research.

The paradox is that in the 1980s Michael Porter (Harvard professor as Edward Chamberlin) became the world-known professor by replicating some of Chamberlin's main ideas such as the concept of differentiation without giving many credits to Chamberlin (see Porter, 1980, 1985).

2 INDUSTRIAL ORGANIZATION (IO) ECONOMICS

2.1 THE STRUCTURE-CONDUCT-PERFORMANCE (SCP) PARADIGM

The SCP Paradigm and the IO

The development of Industrial Organization (IO) economics as a separate field of economics owes much to two Harvard professors: Edward Chamberlin and Edward Mason (Mason, 1957), and their student Joe Bain who doctorated at the Harvard (Bain, 1951, 1956). The IO is a broad field of studies that are built on the theory of the firm by examining the structures and boundaries of industries and markets (see De Jong & Shepherd, 2007). The SCP adds multiple real-world imperfections to the competitive models, such as transaction costs (Coase, 1960, 1987, 1988, 1998), limited information (Simon, 1960, 1979), and barriers to entry of new firms (Bain, 1951, 1956) that are associated with imperfect competition models.

The **Structure-Conduct-Performance (SCP) Paradigm** is mainly developed by Bain (1951, 1956) to offer the causal explanation for the firm's conduct and performance in imperfect markets defined by Chamberlin and Robinson. The neoclassical field of the IO developed by Stigler and his students try to integrate real-world imperfections to the perfectly competitive model. According to the SCP, markets have a direct and short term impact on market structure. Market structure then has a direct impact on a firm's conduct which in turn affects market performance. Feedback effects occur since market performance may impact conduct and structure. In the model conduct may also impact on market structure. Additionally, external factors such as legal and political interventions affect basic conditions (demand and supply) of the SCP market framework and, by extension, to structure, conduct and performance of a given industry.

The SCP paradigm revolutionized the IO studies. For the first time it was possible to make empirical, statistical analyses of how firms are really behaving. With John Clark's theory of workable competition (Clark, 1940) the Chamberlin-Mason-Bain SCP paradigm begin to reach a consensus by which the US antitrust administration calibrated competition policies in highly diverse, international markets of goods and services.

The SCP model dates back to the pioneering works of Edward Mason. Mason was a professor and the Dean at the Harvard for 46 years (1923–1969) and the US government's adviser. In 1963 he founded the Harvard Institute for International Development and organized a program for officials from developing countries, the **Mason Fellow Program**. During the war-time, Mason's work dealt with the government-business-relationships. He was the President of the American Economic Association and a recipient of the Medal of Freedom and other honours. Mason initiated the SCP paradigm that he derived from Chamberlin's analysis of markets. Mason's main finding was: Market power is assumed to be positively related to profitability, i.e. the higher (lower) the market power the higher (lower) the profitability (Mason, 1957).

In 1940, Joe Bain finished his doctoral dissertation at the Harvard under Joseph Schumpeter's direction. He was the lecturer at the University of California, Berkeley in 1939–1975. His major works concerned the Pacific coast petroleum industries as the landmark in the empirical testing of the hypotheses of microeconomic theory. Bain tested entry barriers as the main determinants of industry performance. Bain (1951) utilized data from the US manufacturing industry over 1936–1940 and analysed the relation of market concentration (measure of oligopolistic market power) and profitability. He found that the highly concentrated industries had a higher profitability than the fragmented ones. His work culminated the analysis of entry barriers and competition.

According to Bain (1956) three main factors are important as entry barriers: economies of scale, product differentiation advantages, and cost advantages. Following the ideas of Chamberlin and Mason, Bain developed the first version of the SCP model of the relations of structure, conduct and performance (Mueller & Rauning, 1999).

From the 1940s to 1960s, the Harvard school of thought (Mason, Bain and their followers) produced many empirical works demonstrating the identification of even very strong correlations between industry structure and performance. For the highly concentrated industries (the concentration rate is measured for e.g. the largest 4, the largest 8, and the largest 20 firms), the SCP literature has provided convincing evidences of monopoly power that have found to provide for firms higher profits (monopoly profits) than firms in the diversified industries. **The SCP finding was the key to the implementation of the anti-trust legislation in the US from the 1950s to the 1970s**. From the 1960s the Chicago School propagated the idea that even the firm giants are efficient inside the highly concentrated industries. Because of the Chicago campaign against the SCP, most of economists rely on perfect competition and on econometrics as the main empirical research method.

The key issue is the concentration of firms in the same market. The early SCP studies verify that firms in the highly concentrated industries have supernormal profits in comparison with the diversified industries. This was the reason for Chamberlin to provide the monopolistic competition theory as the alternative to the orthodox economics mainly relying on the two "pure" models: Perfect competition and monopoly competition.

William Baumol defined a **contestable market**. He stated that a contestable market will never have an economic profit greater than zero when the equilibrium will be efficient (Baumol, 1982, 1990; Baumol & Binder, 2011). Markets are contestable when entry is absolutely free and exit absolutely costless, and the incumbent has no cost discrimination against entrants. These ideas could have been tested by the SCP model. The Chicago School was not open for the collaboration to integrate the two competing IO paradigms. The Chicago alliance campaigned at a political level in the US. The main claim was that the **institutions which guide the production and contractual operations of the particular market should be more liberal to the monopoly behaviour of big firms**. The debate between the Harvard SCP and the Chicago School occurred largely within these guidelines (see Hovenkamp, 2009).

According to the SCP, market structure determines conduct, and thereby, sets a level of market performance. The SCP can be applied to a diverse range of problems, from firms to financial crises. The SCP was discounted by game theorists mainly from the University of Chicago in the 1960s. **Hostility to alternative approaches that was not unique to the Chicago professors (Stigler and Friedman) led to a profound crisis in competition theories** (Colander, 2008). In the 1980s, the SCP was taken over by game theoreticians in the lead of Michael Porter at the Harvard. When that takeover happened, many universities suddenly stopped doing empirical research under the SCP and relied on Porter (1980, 1985) that are simplifications of the SCPs.

According to the neoclassical economics, given an industry structure with high fixed costs, firms were assumed to cut prices to marginal cost without sufficient revenue remaining to pay off investment. This paradox irritated the Chicago economists who became hostile to the US antitrust laws since by releasing the antitrust rules it is possible to keep firms profitable and still continue to use abstract models relying solely on the perfect competition model.

A practical implication of the Chicago economists has been that monopoly actions, such as a collusion of big firms, are not viewed as anti-competitive as they are in the mainstream of the SCP. The **game theory** and the **Nash equilibrium concept** (see Shoham & Leyton-Brown, 2009), together with econometrics as the main method in empirical analyses led to highly complex empirical models of technological changes, merger analyses, entry-exit models and market power analyses. The influential economists of the Chicago School were not fascinated to use the SCP model since their worries were more the excessively low profitability under the circumstances of perfect competition when only normal profit is available. The Chicago economists became hostile to the US antitrust laws although their major problem was and still is the abstract modelling that odds real market conditions.

The Chicago impact of and neoliberalism has been devastating in many of the EU countries that today are in a severe crisis, including Finland.

The SCP model

Frederic Scherer is the Aetna Professor Emeritus in the John F. Kennedy School of Government at the Harvard University. He finished his doctoral dissertation at the Harvard in 1963. His post-doctoral research was focused to the economics of technological change, leading to numerous publications. He acted as one of the chief economists for the Federal Trade Commission. In 1970 he summarized the state of art of the SCP in his book **Industrial Market Structure and Economic Performance** (Scherer, 1970) that is widely thought to be the best book of the SCP ever written. The SCP paradigm assumes that the performance of an industry is determined by how various kinds of firms in that industry conduct their activities in terms of the market structure. Frederick Scherer and David Ross summarized the relevant framework for the analyses of the SCP (Figure 5; Scherer & Ross, 1990, p. 5).

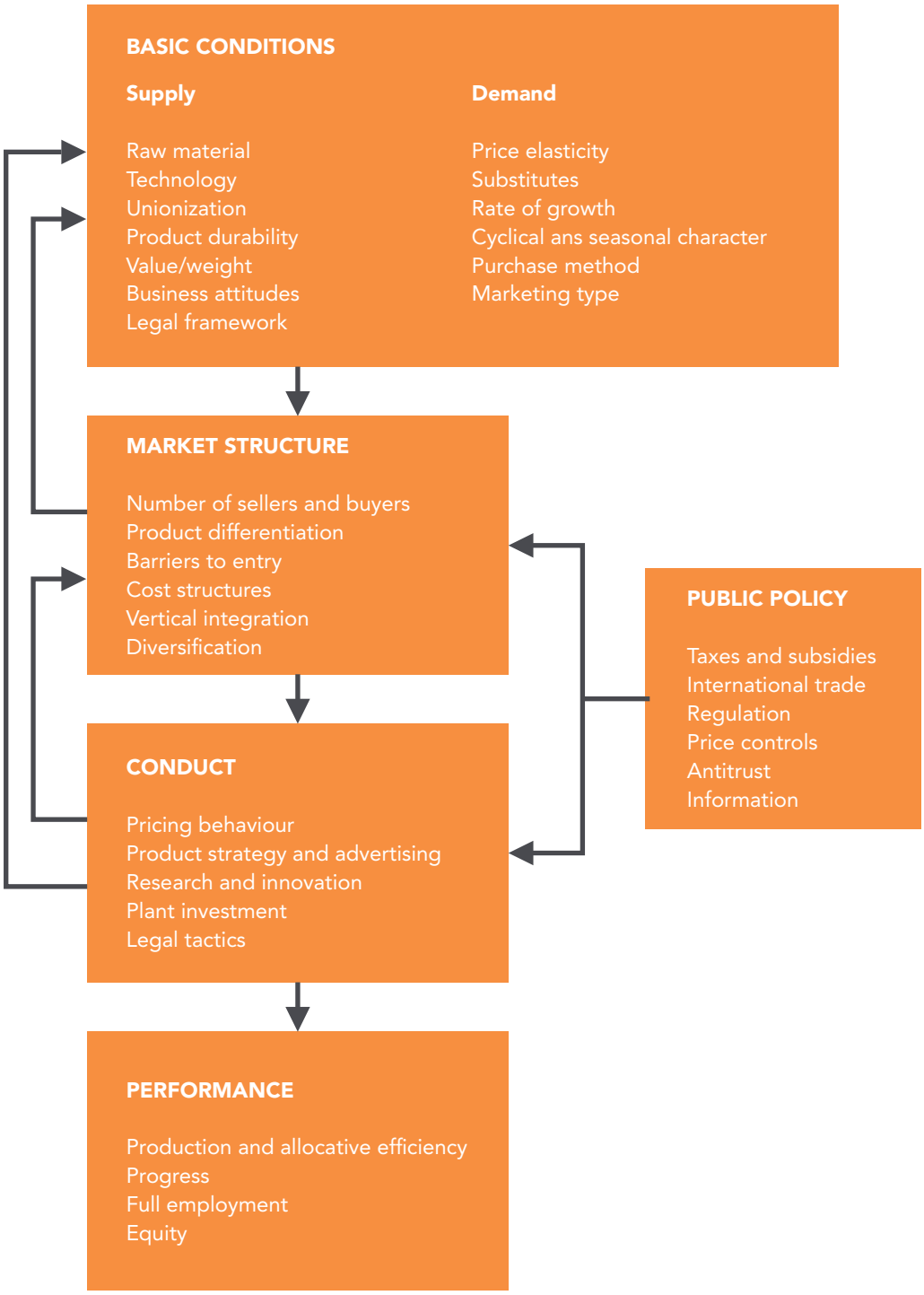

Figure 5: Scherer & Ross' (1990) SCP model

Frederic Scherer and David Ross (1990) divided the economic environment into:

1. **Basic conditions** – divided into demand and supply

   Demand in economics refers to the willingness of a consumer to pay a given price for a given quantity of a good or a service. This reflects consumers' needs and desires subject to his or her budget constraint (income and prices) assuming that the price of other goods and services are remained fixed. Consumers' demand function specifies what consumers would buy in each price and wealth situation, assuming the perfect utility maximization (Marshall, 1920). Neoclassical economists rely on the "pure" theoretical model of perfect competition in which the demand curve is flat both in the short and long run.

   In Chamberlin's monopolistic competition, firms face in the short run the downward sloping demand curve, and, therefore, firms are no longer price takers but price setters. In the long run, super-normal profits attract in new entrants, which shifts the demand curve for existing firms to the left. New entrants continue until only normal profit is available. In Gutenberg's solution, the individual price-sales function is doubly kinked. In a monopolistic scope of the price-sales-function a firm can plan its activities without having to fear extremely aggressive reactions of competitors. When a firm leaves the monopolistic scope, the rules of polypoly (perfect competition) are in force: The price is dictated by the market. In oligopoly, demand curves are various depending on the specific competitive models. As explicated earlier, the demand curves are basically different in various competitive situations. In monopoly, oligopoly and monopolistic competition, firms face downward sloping demand curves. In the model of perfect competition the demand curve is flat, and firms are assumed to behave as passive price takers.

   The growth rate of demand is usually perceived to signal favourable market conditions. Certain consumer markets, e.g. design industries, have **cyclical demand trends**. Business (B2B) markets have a **derived demand** that exists because of positive trends in primary markets. For example, the demand for steel is strongly linked to the demand for manufactured products and, thereby, to the changes in the economic cycles. Supply (Marshall, 1920) is the complete description of the quantity of a particular good or a service which a firm is able and willing to supply at each possible price. Assuming all other factors are constant, supply increases as price increases. In a real word, stock levels of goods and economies of scale as a result of globalization and technology revolution play an important role in production opportunities.

Price elasticity of demand **is a measure used in economics to show the responsiveness of the quantity demanded of a good or a service to a change in its price. It gives the percentage change in quantity demanded in response to a one percent change in price (ceteris paribus). Other elasticity measures are: income elasticity and elasticity of substitution.**

2. **Market structure**

The term structure refers to the industry's market structure, measured by such factors as the number of sellers/ buyers, entry barriers, cost structure, product differentiation, vertical integration and diversification. The basic conditions have the direct and short term impact on the market structure. The SCP literature has elaborated that the market structures in the industries with a relatively static demand and low growth rates are different from the market structure in the industries with an accelerated demand growth. The current SCP paradigm was developed through a series of empirical studies in the US industries. The key finding of these studies is: **Market structure determines conduct and conduct determines performance**.

The SCP approach has been subjected to criticism during the past six decades since the relationships of the SCP model elements are assumed to be more complicated in a real world than originally thought (Ferguson & Ferguson, 1994). The SCP is the basic tool used by industrial economists in competition analysis to determine the structure-performance-logic. A common measure of structure is the **firm size distribution**. Firms will exert more market power when there are few firms in the market. In the most SCP research studies, the total market share of e.g. four/eight leading firms in the market is used as the industry concentration measure. A market structure is affected by factors of basic conditions, such as technology, business culture and product durability. Government interventions are in the form of regulations, taxes and subsidies, international trade policies and price controls.

The Chicago School propagates for the free-market economy with the claim: Economic efficiency should be the exclusive goal. Economic efficiency has two parts namely productive efficiency and allocated efficiency. Practices that can improve the firm's productive efficiency can lower the allocated efficiency of the markets. The high product differentiation rate and the high market concentration ratio contribute to the anti-competitive issues (Perloff, Karp & Golan, 2007). The famous Chicago claim is: **Most of markets are competitive in nature although some markets have a few sellers**. The SCP concentration measures signal that the big firms in the US domestic markets have a strong market power. The difference is significant in comparison to the EU markets. In the EU, the high internationalization rate of markets is assumed to open up the EU economies for international competition (de Jong & Shepherd, 2007).

The main hypothesis of the SCP is: *the degree of seller concentration is inversely related to the degree of competition* (Bain, 1956). Barriers to entry, e.g. economies of scale, are the sets of economic forces that create disadvantages to firms that attempt to enter the market. Krugman (2010) has explained the global financial crisis by the anti-competitive behaviour of financial institutions in the US. This kind of huge market failure is the most striking evidence on a market failure and on the fact that the US regulatory agencies should still apply the logic of the SCP analysis. The SCP is the most powerful analytical tool since (1) it is straightforward in its line of reasoning and (2) it is highly useful in the identification of structural characteristics (Jones & Sufrin, 2010).

3. **Conduct**

Conduct refers to specific firm actions in an industry. Scherer's (1970) original model includes a broad list conduct of variables. Scherer & Ross (1990) modernized the list of variables to include the key elements of globalizing business environment, including pricing behaviour, product strategy and advertising, R&D, plant investment and legal tactics. Attributes of the industry structure within which a firm operates define the range of conduct options and constraints facing a firm. In oligopoly markets, conduct focuses on how a firm set prices. Firms need to determine whether the prices are in collusion with other firms in the markets (Perloff, et al., (2007). This kind of approach provides clear guidelines to firms regarding policymaking. In the neoclassical settings, the industry structure is supposed to completely determine both the firm's conduct and the long-run performance. A practical view is that the market structure of an industry affects the Industry performance but the market structure is not dependent on the performance (compare Delorme, Karnerschen, Klein & Voeks, 2002).

Firms impact on market structures by their strategic actions although the view that "strategy or conduct determines structure" is absurd. This view was popular in Finland the 1990s when the enormous success of the ICT firms in was commonly interpreted in the way that Finnish firms' managers – especially in Nokia – can write their own ever continuing success stories. Nokia's latest history demonstrates clearly that market structures are much more powerful than the best strategies/conducts.

4. **Performance**

Performance factors of Scherer & Ross (1990) include: price, production efficiency, allocative efficiency, equity, product quality, technical progress and profits. Today, the performance of an industry/a firm is measured primarily by profitability. In most cases, performance can be predicted by considering structural conditions of the market. Such conditions can provide sufficient information to predict how firms should behave. According to the neoclassical economics view (Stigler, 1983), firms generate, at best, returns that just cover their cost of capital in the long run, and social welfare (as traditionally defined in economics) is maximized.

5. **Public policy**

Public policy variables by Scherer & Ross (1990) include: taxes and subsidies, international trade, regulation, price controls, antitrust and information that is a modern view. According to the Chicago School, the price theory that drives the SCP paradigm is lacking in explanatory power that is simply an exaggeration since the SCP paradigm is used as a checklist for policymakers (Audretsch & Lehmann, 2006). The Chicago School has made its strongest contribution to the SCP by criticizing government interventions that **depend on the loosely demonstrated failures of market**, such as the abuse of market power that can be temporary in nature and will be eliminated by the entry of more innovative firms.

2.2 THE NEW IO APPROACH

The New IO approach by Harvard

In the 1970s, the Harvard Department of Economics, under the lead of professor Richard Caves, began to modify the traditional Harvard IO model of structure and performance to include differing positions or strategic groups of firms within industries. Caves' field of interest is vast including such issues as competition policy and regulation, multinational corporations, market structure, intra-industry trade, and economics of the arts (Caves, 1971, 1981, 1982, 1985, 2002). In 1976, Caves was the first recipient of the John Kenneth Galbraith's Graduates Award for Good Teaching in Economics[5]. His main contribution concerns the interface between international trade and Industrial Organization. Economies of scale, competitiveness, and trade patterns are his main topics. Caves studied since the late 1960s multiple economic topics under the IO and trade theories. His list of publications is simply astounding. He has explored the organization of creative industries, including the visual and performing arts, movies, theatre, sound recordings, and book publishing. Caves wrote analyses on the economics and organization of creative arts industries (Caves, 2002). During the 1970s Caves initiated the modernization of the Harvard IO that was developed by Bain and Mason. Relying on the game theory of neoclassical economics, Caves created the Harvard's New IO approach that seeks to explain the three key issues:

1. How market processes direct the activities of firms in meeting market demand?
2. How market processes are broken down to a firm level?
3. How these processes adjust to improve the economic performance of firms and industries?

The 1970s the so-called oil crisis was the period in which the economies of the major industrial countries were heavily affected the 1973 oil price shock. This was the momentum of uncertainly. The post-war growth trend in terms of Robert Solow's neoclassical growth theory was over in both product and financial markets that were turbulent in all industrial countries. Solow (2000) addressed that the technology progress has in the Western countries been the most important input factor allowing long-run growth in real wages. As a response to the oil price shock, industrial countries initiated national science and technology programs to speed up technology revolution.

Comparing the growth of GNP with R&D statistics Michael Jensen found that the growth of R&D expenditures has been twice as high as the growth of GNPs that has led to the **accelerating science-technology revolution** (Jensen, 1993). Technology was assumed to be exogenous in Solow's growth theory. The **new or endogenous growth theory** became popular since the 1980s. Romer (1989, 1990) recognized that technology (and the knowledge on which it is based) has to be viewed as an equivalent third factor (endogenous) along with capital and land. In the 1980s Solow started to think that, over the long run, countries have accelerating growth rates and, growth rates of countries differ substantially that cannot be explained by the neoclassical growth theory. In his Nobel Prize lecture, Solow referred to the Schumpeterian rivalry or occasional complementarities as the catalysts of innovations (Solow, 1987).

The endogenous growth theory is based on the idea that the long-run growth is determined by economic incentives. Romer (1989, 1990) found that inventions are intentional and generate technological spill overs that lower the cost of future innovations. The *endogenous growth theory* has become popular during the past two decades in the US and, later, in the newly industrialized countries, such as China and India that invest heavily in innovations.

Richard Caves studied rapidly internationalizing economies. His intelligent theoretical implication was that Bain's (1956) concept of entry barriers that dominate the IO/SCP analyses of an industry's degree of competition (Bain, 1956) needed to be reassessed (see De Jong & Shepherd, 2007). In terms of accelerating technology revolution, the concept of entry (and exit) barriers needs to be redefined. An industry was earlier thought to be characterized by a relatively permanent production technology. The technology revolution has made it difficult to identify an industry's boundaries since they are more mobile than static. **Caves redefined entry barriers to mobility barriers** since in the international markets firms try to find out a better positioning inside/in-between industries (Caves & Porter, 1977). As the strategic management doctrine advised, firms are making proactive (strategic) decisions of their products, markets and technologies. The continuous structural changes are going on in the global markets. In order to survive firms cannot barricade themselves inside an industry's boundaries.

Caves' outstanding scientific invention was to redefine Bain's entry barriers to mobility barriers. Mobility barriers are persistent structural features, not only at a firm level, but also at a strategic group level, that give rise to structural, asymmetric mobility barriers protecting a given strategic group from the entry of potential rivals and, thereby, permitting performance differences between groups and, hence, between firms.

Caves was influenced by John Kenneth Galbraith (1908–2006) who applied the Institutionalism School in his evolutionary approach. Galbraith's view of post-war capitalism is challenging the Chicago economists. According to Galbraith's critics, modern capitalism is dominated by large firms that invest heavily in manipulative advertising to create artificial wants and barriers. His concept of **countervailing power** is a parallel concept to Schumpeter's notion of trustified capitalism. Countervailing power describes the level of collusion between large firms and the government (Galbraight, 1956, 1958, 1967). Galbraith (1973) found that the static economic efficiency is a major barrier to innovate. Large firms grow because of technological imperative. Their size owes to economies of scale, large R&D budgets, and the unique ability to incorporate new technologies. As a Harvard professor in the early 1970s, Galbraith was highly influential and motivated Richard Caves and others to modernize the Harvard IO as the key building block of applied economic analyses in the internationalizing world.

This methodology selected by the Harvard's New IO approach is reasonable since the **cross-sectional industrial data-bases are easy to use but not fully compatible with the dynamic nature of the SCP**. Caves' new IO program contained three dissertations:

1. The concept of strategic group was proposed by Hunt (1972) in his doctoral dissertation. He used this term to describe the asymmetry amongst firms and explain the performance he observed in the strategies of firms of the US white goods industry in the 1960s. This asymmetry resulted in four different strategic groups.
2. Newman (1973) and Porter (1973) started to extend Hunt's analysis. The methodology used in these studies was a combination of cross-sectional industrial data-bases and econometrics.
3. Porter's analysis of two strategic groups (leader and follower) was not statistically significant. However, Porter concluded that leader groups outperform followers.

The existence of mobility barriers means that *some of strategic groups enjoy advantages over other groups*. Mobility of firms inside or between strategic groups can lead to a structural change in the whole industry. The redefinition of entry barriers into mobility barriers allows a richer and more realistic portrayal of the process of entry and the motives for diversification (cross-entry) (McGee, & Thomas, 1986, p. 155).

The Purdue University approach

There is another scientifically ambiguous tradition, associated with the Purdue University where Dan Schendel, together with Arnold Cooper, initiated the "brewing" studies which explored **empirical links between organizational resource choices that was interpreted as a firm's strategy and performance** (see Rumelt, Schendel & Teece, 1991). The Purdue approach conceptualizes strategic groups **bottom-up**: Firms with heterogeneous resource deployments are grouped into homogeneous groups. Firms are grouped, not because they are the same kind, but because they follow the same strategy yet differently (Hatten & Hatten, 1987). Caves' Harvard approach analyses strategic groups from the top-down perspective. The **strategic choice approach** by Purdue-studies (Hatten, 1974; Patton, 1976) assumes that systematic similarities and differences exist between firms as a result of strategic resource choices, i.e. decisions to invest in assets which are often difficult and costly to imitate (McGee & Thomas, 1989).

While the Harvard studies relied on the cross-sectional data in econometric analyses, **Purdue-studies used time-series data in their longitudinal studies to draw valid inferences of the relationship between strategic group membership and performance differences**. The Purdue studies focus on individual firms and their patterns of competition within a single industry. A very important trait of this new theoretical stream was the utilization of numerous variables linked to strategy to identify competitive or strategic groups selected within the context of the particular industry under study.

The Purdue model is the following:

1. **Performance = f (controllable; non-controllable variables)**
2. **Performance = f (operations; strategy; industry structure)**

The bottom-up approach opened avenues to diverse empirical studies (Cool & Schendel, 1987). An interesting result of the two dissertations (Hatten and Patton) was: In the strategic group of big brewing companies, the changes in market share and profitability over time were positively related but negatively related in the small firms' strategic group. This is an empirical evidence of the oligopolistic market power of big firms. The Purdue-studies' bottom-up approach is suitable to firms in different size categories from large firms to small firms, whereas the new Harvard approach is perfectly tailored to big multinationals. **Relatively small growth firms cannot apply the IO determinism (structure determines strategy) in the same way as multinationals**. Small firms can maintain their market positions only through internal economies of scope and through their entrepreneurial ability to internalize the true uncertainty (Knight, 1920) in the markets. Strategic groups can serve as reference groups or benchmarks, as the Purdue studies suggested. There are some empirical evidences of the success of mid-sized firms (Adams & Brock, 2004) with diverse demand and costs curves. The high market turbulence in the global markets provides market niches for mid-sized firms to conquer. This is an excellent foundation for their business strategies (Clifford & Cavanagh, 1985). Perhaps, the case Germany is the best contemporary example of that.

A strategic group is defined as a set of firms competing within an industry on the basis of similar combinations of scope and resource commitments (Cool and Schendel, 1987, p. 1106). McGee and Thomas (1986, p. 160) concluded that an oligopolistic interdependence and a homogeneity of firms become recognizable, not at an industry level, but at a strategic group level. Path-dependent strategic investments in information and technology capabilities acquired to develop factor market imperfections and isolating mechanisms are at the heart of strategic group formation. Firms making similar commitments develop similar competitive resources, pursue similar customers, view environmental opportunities in similar ways, and form strategic groups.

The concept of mobility barriers between strategic groups rests on the same structural features as barriers to entry into any of strategic groups from outside the industry (McGee & Thomas, 1986, p. 14).

Mobility barriers

An essential element of Caves' SCP re-engineering is to redefine the concept of entry barriers to mobility barriers. Bain's (1956) entry barriers were easy to identify and measure in any IO analysis, when mobility barriers are far from that. It is question of a relatively complex construct to any IO economist who tries to draw implications on a possible monopoly power relying on the modern IO. A positive aspect is that the redefinition of entry barriers into mobility barriers allows a richer and more realistic portrayal of the process of entry and the motives for diversification (cross-entry). McGee & Thomas (1986) collected lists of relevant mobility barriers. They divide mobility barriers into three distinct categories (Table 1). Market-related strategies represent Chamberlin's view of marketing theories. Industry supply characteristics summarise the history of IO studies. Characteristics of firms is an important contribution by the writers and important to the IO in global contexts.

Market-related strategies	Industry supply characteristics	Characteristics of firms
Product line **User technologies** **Market segmentation** **Distribution channels** **Brand names** **Geographic coverage** **Selling systems**	**Economics of scale:** • **production** • **marketing** • **administration** **Manufacturing processes** **R&D capability** **Marketing and distribution systems**	**Ownership** **Organization structure** **Control systems** **Management skills** **Boundaries of firms** • **diversification** • **vertical integration** **Firm size** **Relationship with influence groups**

Table 1: Sources of mobility barriers. Source: McGee & Thomas, 1986.

In the global markets there are about 100,000 multinationals that take advantage of most potential market segments. Multinationals are famous of their marketing capabilities, e.g. selling systems. Serving their customers worldwide with highly standardized products offers substantial **economies of scale** for multinationals that dominate commodities of international trade. Their high diversification/integration rates make it difficult for domestic firms to compete away in the same segments. Multinationals take advantage of the high mobility barriers but they do not aim to monopolize markets since it is not possible in global contexts without high transaction costs. Advances in the international communication systems may lead to growing similarities in the fashion and music or game preferences of youths around the world, and to the prevalence of global brands, such as Coca Cola, Windows, Levi Jeans, Sony Walkman or Angry Birds.

Looking at the list of 18 leading brands, most of them are owned by big multinationals (Table 2). Apple is on top for the first time (brand value 98,316 $m). Apple has been a mazing success story. The big loser was Nokia from Finland. Nokia was the 5th best in 2009 (brand value 34,864 $m) and in 2013 the 57th best (brand value 7,444 $m). Nokia's brand value has crossed **468%** in four years. In 2009 Apple was 85th best (brand value of 3,563 $m). Apple's brand value has shot up **27,593%** in four years. What happened in mobile-phone markets worldwide? Perhaps, the main reason for Nokia's market failure has been a rapid move from oligopoly to monopolistic competition in which product differentiation and market segmentation are critical elements.

Over 50% of new cell phone subscriptions globally are smartphones (Figure 6)[6]. In the global markets, most of firms tend to differentiate their products and even 60% of firms follow mainly the principles of monopolistic competition and modern marketing theories. Apple has been the global innovation driver of smartphones and Nokia a challenger. Nokia maintained its high innovation capacity for about two decades. In the 2010s, Microsoft was able to overtake Nokia's mobile-phone business. Why Nokia could not cash its huge innovation capacity? The problem was the misleading perception of the global markets. Nokia could not defend its market position by adaptions in product strategies. Nokia was not able to implement the revolution in its product concept.

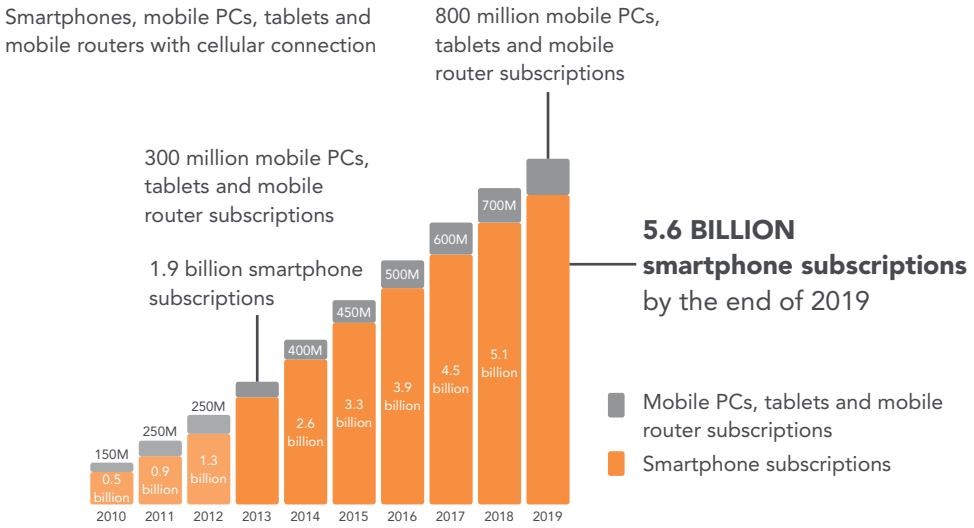

Figure 6: Smartphones subscriptions globally
Source: http://www.ericsson.com/news/1741771

Brand	Country	Industry	Value $m
1. **Apple**	United States	Technology	98,316
2. **Google**	United States	Technology	93,291
3. **Coca-Cola**	United States	Beverages	78,808
4. **IBM**	United States	Business Services	78,808
5. **Microsoft**	United States	Technology	59,546
6. **GE**	United States	Diversified	46,947
7. **McDonald's**	United States	Restaurants	41,992
8. **Samsung**	South Korea	Technology	39,610
9. **Intel**	United States	Technology	37,257
10. **Toyota**	Japan	Automotive	35,346

Brand	Country	Industry	Value $m
11. **Mercedes-Benz**	Germany	Automotive	31,904
12. **BMW**	Germany	Automotive	31,839
13. **Cisco**	United States	Technology	29,053
14. **Disney**	United States	Media	28,147
15. **HP**	United States	Technology	25,843
16. **Gillette**	United States	FMCG	25,105
17. **Louis Vuitton**	France	Luxury	24,893
18. **Oracle**	United States	Technology	24,088

Table 2: Brand values of 18 leading firms (2013)
Source: http://interbrand.com/best-brands/best-global-brands/2013/ranking/

2.3 THE FINNISH IO STUDIES BY AALTO

The pioneering study by Lahti (1983)

Relying on the Purdue-studies, Lahti (1983) initiated a rigorous theoretical and empirical analysis of links between the SCP model elements. Lahti (1983) is one of the first dynamic studies where the strategic group membership and performance linkages are explored in a whole industry composed of firms with different size (small, medium sized and big) and performance models (high performers/innovator and low performers/conservative). Lahti's empirical study the Finnish knitwear industry from the 1960s to 1980s contained a sequential process of analyses:

1. The **history analysis** was used to analyse the industry evolution from the 1960s to the 1980s in the period when Finland was integrated into international markets. During that time Finland and its export industries were in the highly turbulent stage. Finland's integration to the EEC was the main reason for that. Three major areas of turbulence were production technologies, buyer demographics/socio-economics and logistics/distribution channels. The Finnish knitwear industry was found to be in the trap because of the turbulence and the keen price competition in the integrated EEC markets.

2. **Econometric model** with time-series and cross-sectional data was used according to the methodological ideas of the Purdue-studies. The research data-base was collected from 13 firms and included a 13 year span (1969–1981). It was the actions of the leading sub-groups within strategic groups (big, medium-sized and small) that through their actions and performance created the image of industry attractiveness. This means that the industry evolution avenue options in a small and open country, e.g. Finland are often highly personalized. There were some visionary entrepreneur personalities in the industry. Some of them succeeded to utilize the technology revolution and the EEC-market integration. Some strong entrepreneurs run their firms into a total crisis because of excessive risk taking.
3. **Five firm cases** describe how these firms responded to the perceived turbulence in business environment. Researchers have showed that established mental maps lead managers to ignore contradictory data of the current state of a firm (compare Prahalad & Bettis, 1991). In the same way, a strategic group structure maintains collective mental maps of managers. Some strategic group member firms acted as the revolutionary agent inside the strategic group structures that were in the radical transition.

Case analyses were important part of the bottom-up perspective since it was possible to better understand the behaviour of entrepreneurs in the turbulent basic conditions of the markets.

The 13 knitwear firms that could provide complete data were divided into three strategic groups (big, medium-sized and small) according to their **size** (turnover) which seemed to be the most crucial element of strategic behaviour. The methodology selected was much the same as used in the Purdue studies. Lahti's empirical study was conducted so that the systematic differences in the strategy and performance were analysed within each of the strategic groups (big, medium-sized and small). This was a new contribution to the IO field of research. Because of innovative methodology, Lahti (1983) is one of the **pioneering studies** of the new IO in the substantive performance tradition within the strategic group literature (Table 3).

	Prior classification was via:			
	"Substantive" measures of		"Perceptual" measures of	
	Structure / conduct	Performance	Group structures	Patterns of conduct
Within sector studies	Hunt (1972)	Lahti (1983) Johnson and Thomas (1987)	Dess and Davis (1984)	Dess and Davis (1984)
Across-sector studies	Harrigan (1980) Tushman and Anderson (1986)	Porter (1979) Newman (1973) Rumelt (1973) Tushman and Anderson (1986)	Snow and Hrebiniak (1980)	Snow and Hrebiniak (1980)

Table 3: Studies Testing the Robustness of Groupings
Source: Pit & Thomas, 1994, p. 93

In order to operationalize the firm level IO model, Lahti (1983) used a more robust conceptualization of the IO model elements following the guidelines the Purdue-studies' model (Lahti, 1983, 1989, 1991, 2005). The model links Opportunities (basic conditions and market structure) to Strategy (Conduct) to Performance in the within-industry approach. **Learning** was found to be the key driver to maintain innovativeness for firms with idiosyncratic resources and performance variations according to the life cycles of innovations (compare Lawless, Bergh & Wilsted, 1989). Lahti's model (Figure 7) is meant for benchmarking of SMEs (compare Fiegenbaum & Thomas, 1995).

Figure 7: Lahti's model: Strategy-Performance model

Three related studies

There are many modifications of Lahti's framework model. Salimäki (2003) studied 13 leading design firms in Finland in the 90s and positioned them into three strategic groups so that they construct an empirically grounded model of the **mainstream pattern of Finland's design industry's internationalization in the 1990s**. Killström (2005) developed his own modification of Lahti's model that is called the **Advanced Strategy-Performance model, ASP-model** (Figure 8). This name refers to Killström's effort to develop further Lahti's model that is called the **Strategy-Performance model**. Killström has more detailed division of strategy making stages.

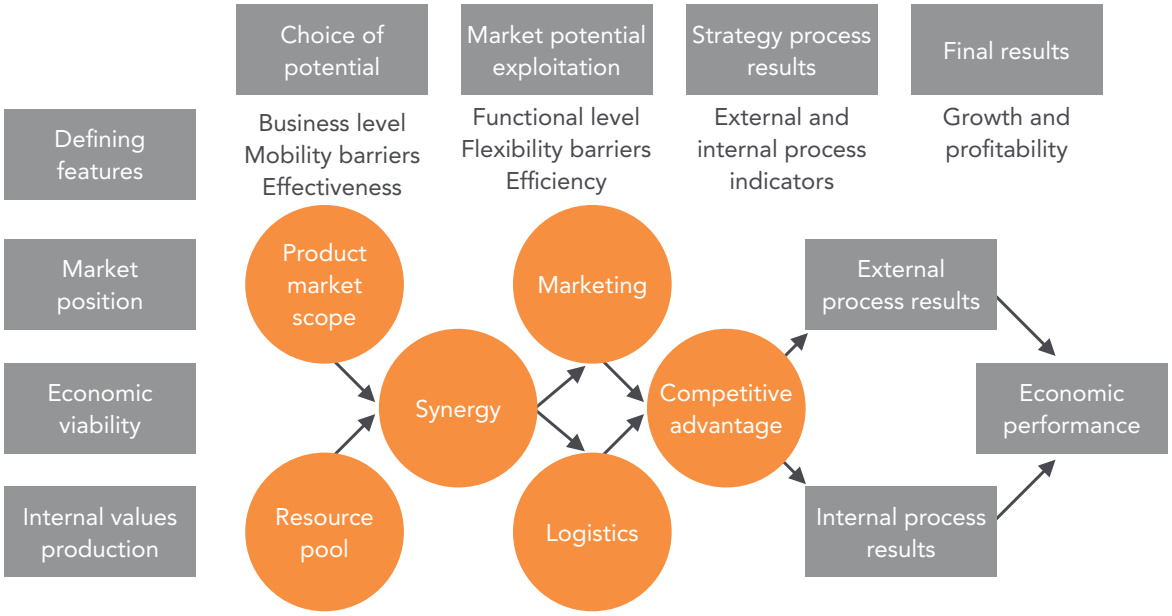

Figure 8: Killström's (2005): Advanced Strategy-Performance model

The applied ASP-model shows differences between the strategic groups. The dynamism and the role of the managers' mental models within the strategic groups are shown through the best and the worst performers. The strategic group evolution leaders were clearly identified. Despite the varying potential, the best performing group members followed systematically different strategies and performed systematically better in nearly all aspects compared with the poor performers. Killström's study showed that strategy-performance-linkages and industry evolution paths are relevant at the business level, and that the business model should include two result measures: (1) Effectiveness of strategic group mobility barriers and (2) Efficiency of operational level flexibility barriers, both of which together reflect the managers' mental decision models in practice (Figure 9).

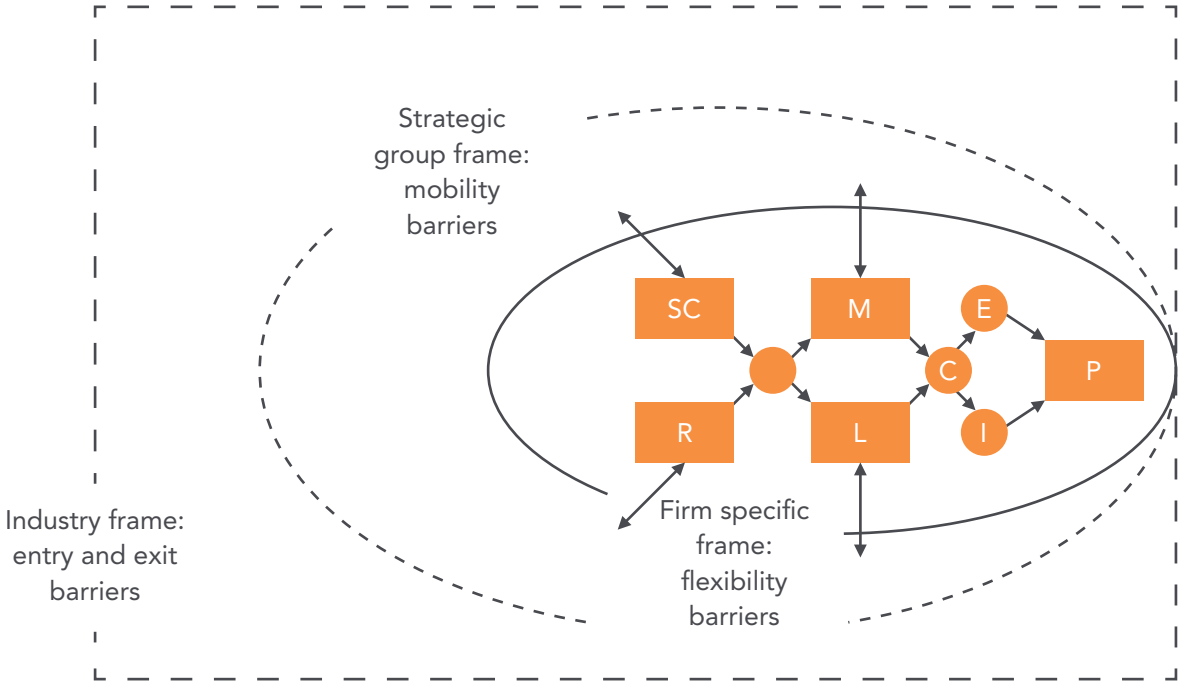

Figure 9: Killström's (2005): Flexibility barriers

In 2012 Luukkainen (2012) conducted his research for his doctoral dissertation at the Aalto University School of Business. He continued the theme of Salimäki (2003) and Killström (2005). In his dissertation, Luukkainen analysed the greenhouse sector in Finland as the target of empirical analysis. Luukkainen did a massive and extensive empirical study of greenhouses. He collected data of **121 greenhouse companies covering 11 years (1998–2008)**. Luukkainen combined many possible sources of data. He analysed carefully all financial statements by firms. Luukkainen analyzed 11 annual financial statements of 121 firms. Together, he did 1331 firm level analyses. Assuming that an analysis takes one hour, Luukkainen was obliged to use about 30–40 working weeks for analysis (40 hours per working week). In addition he used production data from the target industry and, thereby, he could estimate reliable time-series for all relevant factors of production function. In his study, the strategy process model was applied to the greenhouse sector that is currently undergoing significant structural change.

Luukkainen developed a **systematic four-step model** by which a firm can define its strategy by analysing its business environment and its field of operation. With the help of the model, a firm can develop its competitiveness based on its own strengths. In contrast to previous studies, Luukkainen's production function was employed in the identification of strategic groups within the field of operation. These groups occupy a central position in the analysis of the industrial context. The production function was used to simulate the system dependency of different combinations of productive input and output factors. The price and the capacity utilisation ratio of productive inputs are crucial as the firms' aims to achieve optimal results in its business environment. Luukkainen noticed that the profitability of the sector declined throughout the 11-year research period due to the import competition and to a simultaneous rapid increase in the production costs. The rapid increase in production potential in Finland has resulted in overproduction in the small domestic market, and sufficient resources have not been channelled to the development of export. Luukkainen developed a detailed model of production. Luukkainen used his research database to estimate input-output-model.

The major dilemma of the most studies under the new IO is the methodology selected. Using solely cross-sectional data is not a correct approach since the 'real' strategic groups are **highly dynamic**. The Finnish studies do not support the view that some firms consistently perform better than others within the same strategic group. A high performance is always temporary. In the most studies under the new IO the performance contribution of a strategic group to a firm's economic performance is weak. While mobility barriers can explain some of the sustainable performance differences among strategic groups and, among firms of different groups, performance differences exist among firms holding identical strategic positions within an industry (Carroll, Pandian & Thomas, 1994). The strategic group concept and the bottom-up analysing method can be used to identify the "real" strategy options. **The content of strategy configurations identified is complex and so do the strategy process**. Finnish researchers (Lahti, Salimäki, Killström and Luukkainen) had as their merits the long experience of industries under the investigations. This fact is obvious also as to the fifth Finnish IO studies namely Vikkula (1993).

The Finnish dissertations provide promising results of the notion that strategic groups are 'real', not artefacts. These kinds of observations are possible only if the researcher really understands the industry under his study because of a long work experience. When relatively small Finnish firms are concerned, the contribution of a strategic group to a firm level performance is going through the *mutual learning mechanism of group member firms*, not through operative profit making as such.

The Enhanced Structure-Conduct-Performance model (ESCP) by Pitt & Thomas (1994, p. 85) is shown in Figure 10. The ESCP try to model the complex, empirical reality. The orientation of early strategic group studies (Harvard and Purdue) has been "Realized strategy" in terms of Mintzberg (1980) (loop A) although the patterns of "Strategic group structures" as sub-elements of "Structure of total industry" are not studied carefully. Loop C links are relative weak in practice. Using ready-made data-bases and econometric models means that "Strategic group structure" is historical in nature. There are feedback mechanisms from "Firm performance" to "Firm conduct"' and to "Strategic group structure". A firm's performance outcome directly affects group structures subsequently; that is, variances in productive and allocation efficiencies produce differential long-run growth rates, potentially changing firm's postures and, ultimately, group composition. "Firm performance", "Firm conduct" and "Strategic group structure" are coupled (Loop B), as intended strategy in terms of Mintzberg (1980). Lacking systematic empirical evidence, Pitt and Thomas see these links as weak and loosely coupled (Figure 10).

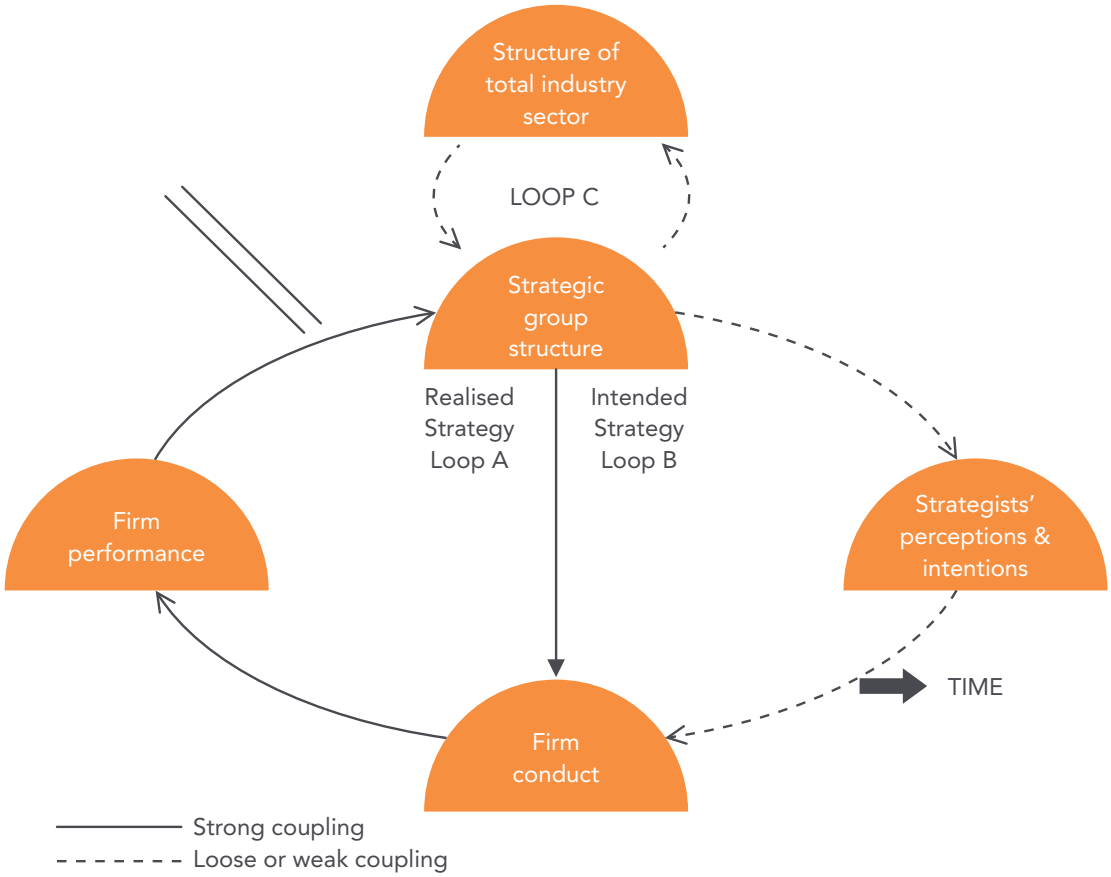

Figure 10: Enhanced Structure-Conduct-Performance (ESCP) model.
Source: Pitt & Thomas, 1994, p. 85.

The Finnish dissertations provide important evidence of both the loop A and B. Realized strategies that are estimated by econometric methods are difficult to interpret without knowing the perceptions and intentions of strategists. Therefore, the case and history analysis methods are useful parts of sequential analysis of strategic groups. When the loop A and B are well integrated it is possible to develop a simulation model that is important for practical business firms.

3 SCHUMPETER-CHAMBERLIN MANAGEMENT PARADIGM

3.1 THE RESOURCE-BASED VIEW (RBV)

The Schumpeter-Penrose-paradigm

The Schumpeter-Penrose-paradigm combines the writings of the **resource-based view** in economics. In the 1950s, Edith Penrose reinvented the theme of Joseph Schumpeter (Penrose, 1959). She **highlighted a firm's heterogeneity** and claimed that the unique capabilities of a firm are important giving rise to imperfect competition and the attainment of supernormal profits. Penrose took the **boundedness of cognition** for granted relying on the ideas of Herbert Simon, the Nobel-prize winner in 1978, who studied the decision-making theory since the 1950s. As Simon found, human rationality is bounded (Simon, 1960, 1979). Penrose provided a dynamic conceptualization of the firm. She noticed that a sustainable competitive is dependent on the heterogeneous resources, e.g. unique management skills, available to a firm. Penrose founded what has been called the **dynamic capabilities approach**.

The success story of German firms in international trade is based on the German doctrine of business administration (Betriebswirtschaftslehre). The practical but highly analytical writings by Penrose (1959) and Gutenberg (1951, 1955, 1969) were widely applied in Europe and America after the post-war time. Gutenberg's merit was that he understood deeply the relationship of labour and fixed assets in the productivity relationship. His idea was to solve the conflicts between management and employees in the production process. In Germany, firms are often family-owned. Owner-managers and employees have 'different personal utility functions'. The great achievement is the 'contractual forms for relationships which guarantee that these disparate objectives will not prove harmful or even disastrous to the firm.' (Albach, 1980) When firms in many other competing countries in the EU are in a continuous crisis, German firms maintain mutually useful collaboration between owner-managers and employees in the long run. This kind of management doctrine facilitates German family firms (Mittelstand) to keep organizations and processes dynamic.

A firm's growth rate is limited by the growth of (managerial) knowledge within it (Marshall's (1920). Germany is the best example of how a nation can win by the dynamic capabilities approach that can perhaps be called the *Schumpeter-Penrose-Gutenberg-paradigm.*

Chandler (1962) studied the transformation of capitalism between the 19th and the 20th centuries due to the revolution in communication and transportation technologies. Chandler's careful history analysis revealed what Schumpeter (1942) had claimed earlier. Big firms did not only passively adapt to markets. They grew to dominate sectors of the economy, and so doing, they may alter the economy as a whole. According to Chandler's axiom, a firm's **organization structure must be suited to implement strategy**. Chandler was the pioneer of **strategic management (SM) paradigm** that dominates the corporate landscape globally. The paradox of the SM is that most of writers have fully forgotten the genius ideas of "big economists" or they have fully misunderstood the grand idea visualized by Alfred Chandler.

Chandler (1990) compared the history of corporate capitalism in the US, Britain, and Germany. In the 18th century and in the early 19th century Britain was the pioneer of industrialization. Britain lost its leading position. According to Chandler, the reason for that was that **Britain's owner-managers failed to modernize their firms**. The industrial revolution and the British Imperialism were strongly combined. Britain turned its innovative technology to improve arms and shipbuilding (Ward, 1994). Britain was a powerful empire in the world during the Victorian era[7]. By the end of 19th century, Britain was left behind the US and Germany. British firms were to a large extent "personally managed". Their "club" owners were interested in stable income (dividends) rather than making investments in modern technology. Since the 1890s the US firms have agglomerated their competitive capabilities over industrial districts like Detroit, replaced what had earlier been a fragmented structure of industries, and won in the trade competition against Britain. **In the 20th century the US became the dominant industrial power worldwide**. During the past decades Germany has been the success story of international trade in B2B industries.

In machinery, electrics, chemicals and steel industries, German and the US firms bet Britain in the end of the 20th century. In the US universities (e.g. Harvard, MIT and Yale) played a big role to educate managers for the US giants that were the pioneers of internationalization. Germany paid much attention to educate work force in firms. German institutions of higher learning were pioneers in the transfer of knowledge, providing the best available technical and vocational training in the world in e.g. chemistry, electrical equipment, metals, machinery and optics.

The US national innovation system is the most powerful in the world. Scientific immaterial property rights (IPRs) are highly valuable commercial commodities and, perhaps, the most profound characteristic of globalization. Top universities all over the world produce technology innovations and IRPs for national firms, following the role model of the **University of California** in the US. Large firms are often closely integrated to top universities and research labs to get access to the up-to-date scientific knowledge at a global scale. In the early 1980, the US developed genius IPRs policies and working methods to promote the commercialization of research conducted with federal funding (Haour, 2004).

A series of laws referred as the **Bayh-Dole Act (DBA, 1980)** allowed the US universities to become active in patenting (Eisenberg & Nelson, 2002). In many field of science, e.g. molecular biology, the DBA (Churchill, Lorence, Chin, Peo & Gonzales, 2009) provides universities the first-right to commercialize patents, and, if they fail, the Federal agencies retain the ownership of patents and grant non-exclusive licenses to the third parties. **The Stevenson-Wydler Technology Innovation Act of 1980** enables federal agencies (e.g. National Institutes of Health) to enter into license agreements with firms that take the main risk to commercialize technologies developed by universities and research labs.

Germany has the same sort of entrepreneurial culture as the US had before the 1980s when the Friedman-Reagan Monetarism School took the political power (Krugman, 2009, 2010). In about 4 million firms German managers and workers know each other's capabilities in-depth. They are hard workers and team players and they appreciate each other's work. Neo-liberalistic nations, e.g. Greece and Finland have the risk to collapse because of unfair labour and economic policies following the notions of influential monetarists such as Milton Friedman from the Chicago school.

Schumpeter's wrings have been the foundation of national innovation system in German speaking countries, and, later in Asia. Schumpeter emphasized the unique function of entrepreneurs as innovators. By innovating, entrepreneurs challenge the dominant firms through a process of creative destruction, which is the engine of economic and technological progress in the global economy. The neo-Schumpeterian approach analyses the **generation, implementation and diffusion of knowledge and technology**, and, puts emphasis on the impacts of radical innovations (Freeman, 2008; Gilbert & Riordan, 2005) although the "destructive" part of creative destruction is not properly understood by most of academic writers. I have myself been an active mentor of inventors over many decades. In spite of that I am every time more or less surprised when I discuss with real "destructive" inventors. They are thinking and observing the world in that way that is impossible to replicate by any rational method.

Schumpeter's writings are widely applied in the East Asia. Japanese corporate clans follow Schumpeter's notion of endogenous technology progress in big firms. The **knowledge-creating theory of Nonaka & Takeuchi (1995)** is a proper analysis on the communication of what is already known tacitly by employees. The most valuable resources are those that are difficult to imitate or substitute for, and that are embedded as core competencies within the firm (Hamel & Prahalad, 1994). Such specialized resources are developed, not acquired, and should have low mobility. As Hofer & Schendel (1978) suggests (Figure 11) the internal model of resource allocation has a lot of feedback and interactive mechanisms. The efficiency of scope is not easy to maintain, since the most important internal resources (organizational, human and technological resources) are immobile and specified to certain external market structure (product/market resources and external capital market).

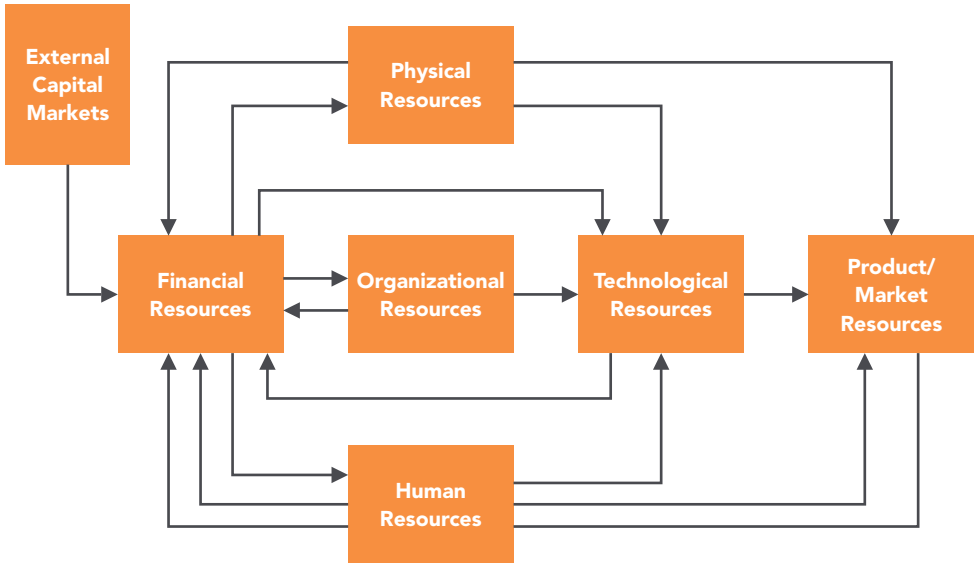

Figure 11: Hofer & Schendel's (1978) model of resource allocation, modified

According to the resource-based view, firms are considered to differ in terms of efficiency because of the differences in their competitive advantage due to endowed or acquired resources. Since imitation would diminish a part of the competitive advantage that firms have, the concept of sustained competitive advantage is often defined in the equilibrium terms by the economists following the dominant Harvard-Chicago-IO-paradigm. The SCP analysis reported earlier is the best alternative method to analyse the resource-based market structure, conduct and performance of various industries of firms. This is exactly what Schumpeter (1934,1939) did. His dilemma was how to analyse the growing monopoly power of US large firms.

Schumpeter's concept "temporary monopoly profit" is valid for markets and industries where competition processes are imperfect or monopolistic or at least workable (Clark, 1940, Chamberlin, 1933, Robinson, 1933). The problem is oligopoly or "permanent" market power by big firms. This is the dilemma that Schumpeter (1942) analysed in his last book. Schumpeter's notion of trustified capitalism was replicated by Galbraight (1956, 1958, 1967, 1973) who found that the static economic efficiency is a barrier to innovate. Large firms grow because of technological imperative. Their size owes to economies of scale, large R&D budgets, and the unique ability to incorporate new technologies. Today, the continuous R&D ('creative accumulation') of big firms and top universities or research labs is the sort of sustainable advantage which may last after all attempts at imitation have ceased (Foss & Mahnke, 1998). More generally, referring to Peteraf (1993), a firm's competitive advantage would be sustained if these criteria are met:

1. Resources are heterogeneous enough to account for efficiency differences and rent
2. Resources are ex ante economical (the present discounted value of their future prices is not higher than their current price)
3. Resources are ex post non-imitable
4. Resources are not perfectly mobile across firms

The efficiency of scope is not easy to maintain, since the most important internal resources (organizational, human and technological resources) are immobile and specified to certain external structure (product/market resources and external capital market). In Schumpeter's thinking, there is lot of scope for innovations. In Germany, Gutenberg's revolutionary idea is to maintain a good power balance by the mutually useful and long term collaboration between owner-managers and employees that stimulates innovations in a broad scope in operational processes as well as in product technology and design.

Knowledge can be explicit vs. tacit, individual, collective, common or context-specific. Tacit knowledge is valuable and unique, and provides competitive advantages because it is less imitable – thanks to almost integrated marketing channels. The knowledge-creating theory (Nonaka & Takeuchi, 1995) focuses on the transformation and communication of what is already known tacitly by employees. German Hidden Champions (Simon, 2009, 2014) are excellent in that. Their strategic management system is highly **auctorial** but their operative management system is **participative** generating supernormal profit for a firm.

Schumpeter's entrepreneur – some practical views

Joseph Schumpeter proposed that an entrepreneur, as innovator, creates profit opportunities by devising a new product, a production process, or a marketing strategy. An entrepreneurial discovery occurs, when an entrepreneur makes the conjecture that a set of resources is not allocated to its best use. A dilemma is that Schumpeter did not try to define what an entrepreneur looks like really. Schumpeter and other economists define the functions that an entrepreneur fulfils in an economy. Schumpeter suggests (Lintunen, 2000):

1. An **entrepreneurial function** is the act of will of the entrepreneur for the introduction of innovation in an economy, and a source of evolution in a whole society
2. **Entrepreneurial leadership** is the source of creative energy for innovation and evolution
3. **Entrepreneurial profit** is the temporary monopoly return on the personal activity of the entrepreneur

Later, Henry Mintzberg (1980) identified the **entrepreneurial mode of strategy making** as the one in which the power is highly centralized in the hands of one person. Strategy making in these entrepreneurial firms tends to be intuitive rather than analytical. A strategist is a man who has a 'feel' for business, not a staff planner or technocrat. Entrepreneurial opportunities come in a variety of forms. In principle, the whole world is open for entrepreneurs in the globalized, WTO-led economy. What is perhaps the main paradox is that only a small number on about 200 million entrepreneurs in the world do succeed to create a sustainable business firm. This paradox is fully understood by Peter Drucker (1985) who defined entrepreneurship as purposeful tasks that can be organized – and is in need of being organized – and is systematic work. **Entrepreneurship is neither science nor art. It is practice**.

Recognition of entrepreneurial opportunities is a subjective process, but the opportunities themselves are an objective phenomena since data on global markets is available to anybody. The revolution of information technologies and especially the rapid diffusion of Internet will provide "big data" for most of entrepreneurs worldwide. Data is not the same as an opportunity. An opportunity is a well-organized business firm targeted to fully utilize the perceived opportunity.

A Schumpeterian entrepreneur is the hero of the drama. He is the practical actor who is able to identify opportunities to define a new winning business concept or model. For an entrepreneur to obtain control over resources in a way that makes the opportunity profitable, his or her conjecture about the accuracy of resource prices must differ from those of resource owners and other potential entrepreneurs (Casson, 1982). As Kirzner (1979) has observed, the process of discovery in a market setting requires the participants to guess each other's expectations about a wide variety of things. The most fascinating writer of opportunities has been Peter Drucker who over about seven decades was perhaps the most influential business writer. Drucker is still appreciated in many countries and especially in German speaking countries.

Drucker (1985) has described three different categories of opportunities:

1. the creation of new information, as occurs within the invention of new technologies
2. the exploitation of market inefficiencies that result from information asymmetry, as occurs across time and geography
3. the reaction to shifts in the relative costs and benefits of alternative uses for resources, as occurs with political, regulatory, or demographic changes

These three categories of opportunities are well conceived. 'The creation of new information' is important to emphasize since e.g. the WIPO has a global data-base of about 10 million patents in force. These patents provides useful technical information to anybody who is willing to use time to analyze patents. Scientific data-bases are another sort of new information that is available over Internet. The problem is not an access to data-bases. It is more what Drucker regularly used to point out: '**Learning by doing**'. 'The exploitation of market inefficiencies' or 'the reaction to shifts in the relative costs and benefits' are referring to imperfect markets by Schumpeter's near college as the Harvard professor – namely Edward Chamberlin and monopolistic competition.

According to Drucker's fascinating thinking, entrepreneurship in always built on practice. Successful entrepreneurs are in many ways similar with successful managers or sportsmen. What is the major difference is that an entrepreneur is alone responsible for many practical things. He or she cannot success without a holistic view when a business manager can rely on the fact that he or she has a well-organized teams of specialists available who formulate annual budgets and programs of marketing, R&D, production, etc. that makes it easier to a top manager to construct a winning business strategy. Drucker understood that a business strategy is not good enough for an entrepreneurs. He or she needs to construct a holistic strategy that Drucker named as **entrepreneurial strategy**. Drucker (1985) has identified four specifically entrepreneurial strategies.

1. Being fustest with the moistest
2. Hitting them where they ain't
3. Finding and occupying a specialized ecological niche
4. Changing the economic characteristics of a product, a market, or an industry

These four strategies are not mutually exclusive. They can be combined. In the light of Schumpeter's entrepreneurship, the most interesting is '**Being fustest with the mostest**'. This is the strategy that a Confederate cavalry general in America's Civil War applied to win battles. Following this strategy, the entrepreneur is striving for leadership that is the **entrepreneurial strategy par excellence**. This is the core content of entrepreneurial literature and, especially the one used by high-tech entrepreneurs. Drucker's (1985) warning is that of all entrepreneurial strategies this leadership strategy is the greatest gamble, making no allowances for mistakes and permitting no second chance. But if successful, it is highly rewarding. However, this strategy is the most intelligent interpretation of Schumpeter's entrepreneurial spirit.

To choice of an entrepreneurial strategy requires a careful analysis. There has to be one clear-cut goal and all efforts have to be focused on it. The *leadership strategy* is not the one with the highest success rate worldwide. In average, the most rewarding entrepreneurial strategy is *creative imitation* – it is 90% of the whole as Peter Drucker has claimed.

In his book **'The achieving society',** David McClelland (1961) asserts that human motivation comprises three dominant needs:

1. **High need for achievement** – High achievers should be given challenging projects with reachable goals, and frequent feedback.
2. **High need for affiliation** is particular to the entrepreneurs that perform best in a cooperative environment. Networking is the actual concept.
3. **High need for power** – Entrepreneurs are looking for the opportunity to manage others. The prestigious power position is the main target.

David McClelland proposed that an individual's specific needs are acquired over time and are shaped by one's life experiences. People with a high need for achievement seek to excel and thus tend to avoid both low-risk and high-risk situations. They prefer work that has a moderate probability of success, ideally a 50% chance. Peter Drucker shared the same view in his leadership strategy. Taking moderate risks leads not to temporary monopoly profit. The second human motivation, a high need for affiliation is referring to harmonious relationships with other people. This type of entrepreneur performs well in client interactions. Schumpeter's creative destruction is not of that type. A person's need for power that can be personal or institutional. Entrepreneurs do not need institutional power. This is a managerial, not an entrepreneurial characteristic.

Rotter's (1966) **locus-of-control theory** proposes that an individual perceive the outcomes of events as being either within or beyond his personal control and understanding. Individuals who believe in the ability to control the environment through their actions are ready to take the risk of 'Being Fastest with the Mostest'. The internal locus-of-control is not only particular to Schumpeter's entrepreneurs. The real personality of Schumpeter's entrepreneurs is still to some extent a mystery or even confusing or often fully misunderstood. In order to provide some more relativity to the behavior of successful entrepreneur, we can refer to Vesper (1980) who has described that there is a whole range of entrepreneurial styles:

a. Solo-self-employed individuals
b. Team builders
c. Independent innovators
d. Pattern multipliers

e. Economy of scale exploiters
f. Capital aggregators
g. Acquirers
h. Buysell artists
i. Conglomerates
j. Speculators
k. Apparent value manipulators

A challenge is to identify the entrepreneurial act that has the characteristics of successful innovation. Entrepreneurs are supposed to be champions, winners and megabucks – not losers or adapters. The body of entrepreneurial literature has forgotten the Schumpeterian entrepreneur. The model (Figure 12) that seems to be valid to describe the reality of an innovative entrepreneur is the one developed by Hurst, Rush and White (1989). They have noticed that a creative management can operate in four levels:

1) Intuition
2) Feeling
3) Thinking
4) Sensing

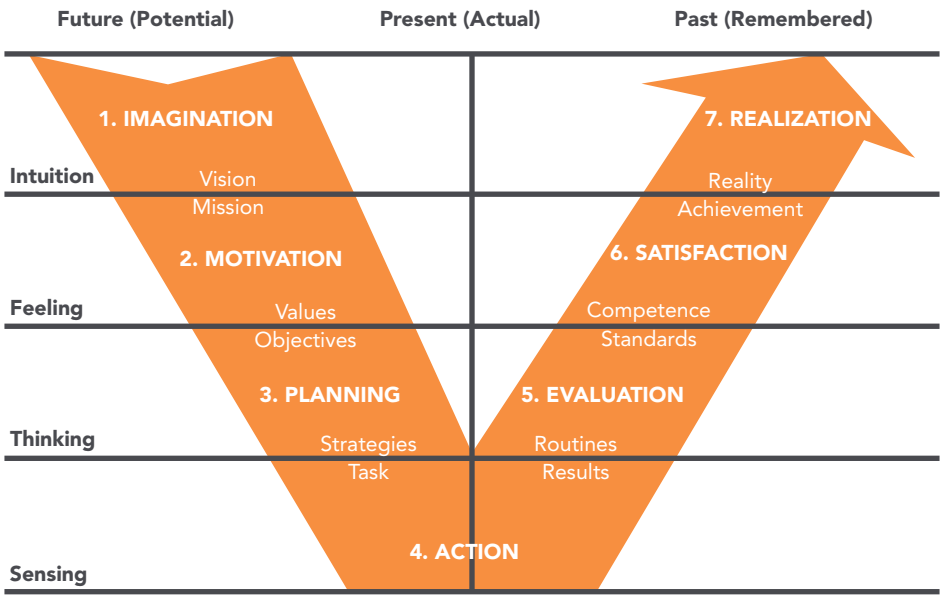

Figure 12: The entrepreneurial decision-making

Human behaviour is not due to chance; it is in fact the logical result of a few basic, observable differences in mental functioning. These differences concern the way people use their minds – the way they perceive and the way they make judgments. There are two ways of perceiving (Kummerow & Hirsh, 1998):

1. Becoming aware of things thru our five senses – **Sensing** and indirect perception by way of the subconscious – **Intuition**.
2. There are two ways of judging: **Thinking**, a logical process aimed at an impersonal finding and **Feeling**, consisting of things that have personal, subjective value.

Either kind of judgment can team up with either kind of perception but one process must dominate. This determines whether decisions are predominately made by perception or judgment. There are many combinations of personal styles of making decisions that are relevant to practical entrepreneurs. Some people dislike the idea of a dominant process and like to think of themselves as using all four equally. Carl Jung, however, holds that such style keeps all the processes undeveloped and leads to a **primitive mentality**[8].

One process – sensing, intuition, feeling or thinking – must be developed, if a person is to be really effective. A Schumpeterian entrepreneur is a person who keeps all the processes well-developed – hero of drama.

Although people must use both perception and judgment, they cannot be used at the same moment. In order to come to a conclusion, people use the judging and have to shut off perception for the time being. In the perceptive attitude, judgment is shut off. **Thinking is essentially impersonal**. Its goal is the objective truth, independent of the personality and wishes of the thinker or anyone else. When problems are impersonal, such as building a bridge, proposed solutions can and should be judged from the standpoint "true-false", and thinking is the better instrument. When the subject is people instead of things the impersonal approach is less successful. A dynamic, entrepreneurial business organization is more like network of powerful actors. They have many various roles and positions (like employer, self-employed, investor, partner, venture capitalist, gatekeeper or subcontractor).

In the sympathetic handling of people where personal values are fully appreciated and important, feeling is the most effective instrument. A commonly used metaphor is the hero of the drama.

The Nordic winners have been especially skillful in the internationalization process of their companies. According to my own view, the Nordic winners can match the five critical elements of innovative, entrepreneurial strategy making:

1. **Differentiating**
2. **Revolutionary**
3. **Holistic**
4. **Competitive**
5. **Realistic**

A Nordic winner entrepreneur or business manager is often a unique personality and can run his company with bold jumps (that means differentiating in marketing). In order to succeed in innovativeness, a winner entrepreneur should be ready to accept the true uncertainty in terms of Frank Knight (1921). In terms of a good management practice, a Nordic winner entrepreneur with high intellectual and practical capacity usually utilizes a common sense in order to understand that his co-workers are only normal human beings and the global markets are volatile (this means holistic thinking), and, therefore, cost rationality is a relevant issue (it means competitive behavior). Finally, an extraordinary personality has an inherent weakness of internal locus of control, although the only way to succeed is to accept the hard market facts (that is realistic attitude).

In the end of the 20th century, the dominant doctrine of industrial organization economics has been challenged. Many business writers seem to think that there are no law like theories such as economies of scale. In their books 'The Bigness Complex', Walter Adams and James Brock (2004) concluded that scientific evidences of the **bigness mythology** are contradictory. Small firms seem to produce about four times as many innovations per R & D dollar as middle-sized firms and 24 times as many as the big companies. Tom Peters (1990) refers to an industry fragmentation and to the vast emergence of niche companies. Some examples are these sort of companies are: minilabs (photo finishing), minifactory, industrial boutique, store within a store, and factory in factory. In addition to that there is a new arena of **business platforms** that are fully implemented in the Internet landscape. They can be more revolutionary than Peter's traditional niche companies.

In Mintzberg's (1980) terminology, the inherent nature of strategy making is intended and realized. The problem of decision making in global industries with uncertainty as the dominant circumstance is that the 'normal' strategy process

1. is **intended** but continues for ever that is **Deliberate** in Mintzberg's (1980) terminology or is implemented – **Realized**:
2. is more or less ad hoc co-ordination of chaotic processes that is not intended that is **Emergent** in Mintzberg's (1980) terminology or
3. is intended but never implemented that is **Unrealized** in Mintzberg's (1980) terminology

Figure 13 that is modification of the Minztberg's (1980) original model.

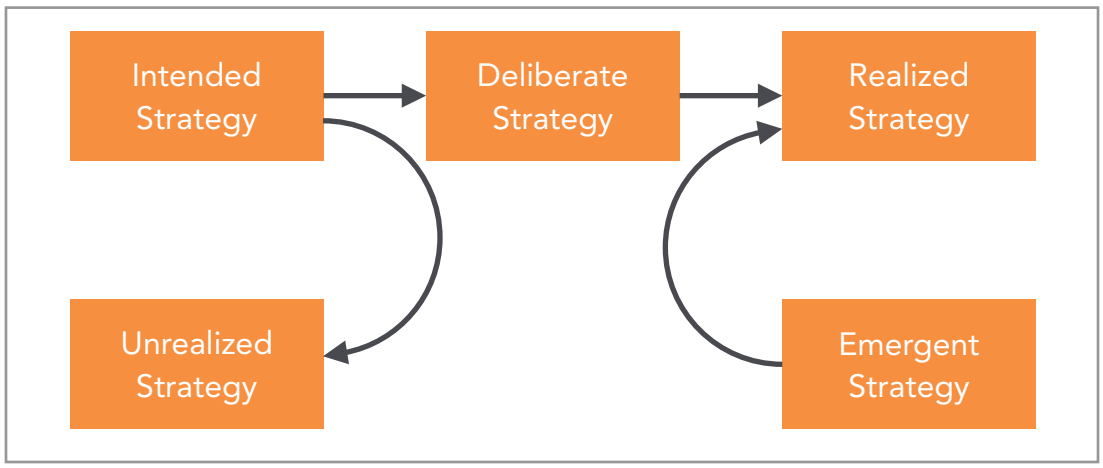

Figure 13: Mintzberg's model of decision-making

Judging types seems to believe that entrepreneurial decision-making should be intended (willed and decided), while the perceptive types regard decision-making as something to be emergent (experienced and understood). Both are entrepreneurial in mind.

In his book 'Entrepreneurial Megabucks', David Silver (1985) identifies a model of the valuation of business ventures that is well applicable to complex business problems. Silver characterizes his model as **fundamental law of entrepreneurial process**. In Silver's thinking the goal of investors, as well as entrepreneurs is the creation of wealth or high valuation (V), through the process of selecting a potentially successful entrepreneurial team (E) that can identify and conceptualize a large, multidisciplinary problem (P) and create an elegant solutions (S) which they intend to convey to the problem via a new company. In Silver's thinking an understanding of the equation will save billions of dollars of capital and perhaps trillions of hours of entrepreneurial time and energy.

V = E x P x S

Where V = Wealth or high valuation of a venture
E = Successful entrepreneurial team
P = Large, multidisciplinary problem
S = Elegant solutions

Formula 2: Silver's model of the valuation of business ventures

Silver's point is to analyze how successful entrepreneurs have succeeded in terms of 'fundamental law of entrepreneurial process'. Utilizing the model, Silver analyzed 'the 100 greatest entrepreneurs of the last 25 years'. His 'entrepreneurial scorecard' is inspiring since a company with high value (V) has many beneficiaries – entrepreneur, managers, employees and investors. In the epilogue Silver summarizes that 'being an entrepreneur is like being the builder of civilization'.

In Silver's thinking an entrepreneurial team takes holistic responsibility of the Schumpeterian process of 'creative destruction'.

As mentioned in Introduction chapter, Kone (Finland) has historically had the German kind of corporate culture. In the implementation of operative projects "young men" were allowed to work independently as I remember the era in the early 1970s. Such specialized resources as a encouraging corporate culture is developed, not acquired, and should have low mobility as Simon & Jonason (2013) has widely reported.

In sum, tacit, collective, context-specific knowledge is difficult to create, transfer, or integrate via markets and, provides a rationale especially for German Hidden Champions to continue their amazing success-stories.

System-approach that is particular to German speaking countries and integrated into German national system of innovation by Gutenberg is simply powerful in chaotic global markets.

3.2 CHAMBERLIN-CONTRIBUTION: STRATEGIC MARKETING DOCTRINE

Strategic Marketing: The IO foundation

Edward Chamberlin was one of the most influential US economist in the mid-20th century. In Chamberlin's (1933, 1957) thinking, marketing is seen as a firm's function and as a set of value-added processes for creating, delivering and communicating value to customers, and managing customer relationships. His contributions to microeconomics included competition theory and consumer choice, and their connection to prices. He coined the product differentiation to describe how a supplier may be able to charge higher profit margins for a product than perfect competition allows. Chamberlin (1948) even conducted some market experiments to illustrate why prices are not reaching equilibrium.

Product differentiation means the process by which sellers distinguish their products from others and make them attractive to buyers. Peter Drucker (1954) was the first who claimed that a firm's sole purpose is **to keep its customers satisfied** that still is the foundation of marketing. The **holistic marketing concept** by Philips Kotler (Kotler & Keller, 2012) looks at marketing as a complex activity that contains relationship marketing, internal marketing, integrated marketing, and socially responsive marketing. The challenge of marketing in practice is to find a balance 'Serve' and 'Create'. 'Serve' contends a firm's goals is identifying the needs of the target market and delivering products and services that satisfy these needs (Drucker). 'Create' refers to innovation and knowledge orientation that is the main source of superiority of a firm's products (Schumpeter) or product differentiation (Chamberlin).

Referring to Chamberlin, there are a lot of monopoly elements in international trade. Dixit and Stiglitz (1977) provided the foundations for the combined model of economies of scale and product differentiation. The growing demand for the product variety and economies of scale leads to intra-industry trade. To Krugman increasing return is the fundamental cause of international trade and of comparative advantages of, but its role has been neglected because of problems of modelling market structures. The **New Trade Theory** by Krugman (1979, 1980, 1981) is the standard in analyses of economies of scale and product differentiation. A firm under monopolistic competition maintains spare capacities of production, marketing and R&D. This is risk-taking for the quality of consumption (Krugman, Obstfeld & Melitz, 2012).

During the 1980s, the most influential writer was undoubtedly Michael Porter at Harvard. In a remarkably short time, his book **'Competitive Strategy'** became broadly used in teaching, consultation, and research projects. Indeed, Porter (1980, 1985) moved the IO economics closer to the strategic management and is the author of influence in the topic as the huge number of citation reveals. Unfortunately, Mikael Porter became famous by replicating the differentiation concept of Edward Chamberlin without giving many credits to Chamberlin who was the most intelligent Harvard-professor over time (Porter, 1980, 1985). The 'competitive strategy' (Porter, 1980, 1985) refers to "monopolizing" or even "monopoly" in the neoclassical frames.

Porter did not specify the difference between monopoly and monopolistic competition as Chamberlin did. For the marketing doctrine Porter's (1980, 1990) models are misleading. In spite of that these models are commonly used by marketing researchers e.g. in Finland.

Porter (1990) analyzes the clustered regions in the US and in some other nations. A dilemma concerns the Wall Street's gigantic financial conglomerates as a group that were not the kind of "permanent" success story of clustering as Porter (1990) "diamond" could imply. The banks behaved in the same way as "robber barons" or "natural monopolies" in the 2000s. As Krugman (2010) has found, the global financial crisis was mainly coursed by the anti-competitive behaviour of financial institutions in the U.\S. The most powerful diamond is the US financial cluster in which executives popped the housing bubble and the US government was obliged to save banks by huge bailouts.

The relevant scientific question is: To what extent markets are exogenous or endogenous? Shepherd (1990) has listed factors behind entry barriers that are a sub-element of mobility barriers:

1. Most of factors that are commonly mentioned in the SCP literature are **exogenous (economic/intrinsic)**: e.g.: capital requirements, economies of scale, product differentiation, diversification, vertical integration, R&D intensity, and absolute cost advantages.
2. There is a list of **endogenous (voluntary and strategic)** factors: e.g. selling expenses, patents, and control over strategic resources.

The SCP paradigm uses the concept 'Public policy' that is supposed to be fully **exogenous**. Porter includes government's interventions to his diamond model and assumed that in a state is **endogenous** to the market economy. This view is surprising since Harvard has long been an advocate of market liberalism. The basics of a market system is 'invisible hand', the term used by Adam Smith to describe the natural force that guides market capitalism through competition for scarce resources. Each of suppliers of buyers maximizes its self-interest. Their interaction leads to exchange of goods and services. To Porter (1990), firms in an industry can gain a permanent competitive advantage by maintaining the diamond, the most productive use of resources.

The neo-Schumpeterian view is: It is only through continuous innovations that an advantage can be sustained. As Krugman (1998) claimed, nations are not subjects of competition. Porter's (1990) diamond fit well with the U.S's "legitimate interest" to support big US firms that are "too big to fail". This is a sort of American nationalism in which perfect price completion is a strong culture combined with market power of big US corporations.

In Porter's (1990) diamond model 'Chance' events include breakthroughs in technologies, discontinuities in input costs (e.g. energy price shocks), external political shocks, etc. The context of 'Chance' is about the same as the 'residual' of the econometric models of neoclassical economists, e.g. the neoclassical growth model of Solow (2000). From that perspective Schumpeter's creative destruction is exogenous to the core elements of Porter's diamond model. **The Schumpeterian entrepreneurship is fully excluded from Porter's models**.

The major competitive problem is that big corporations like the US big banks are powerful enough to manipulate mobility barriers for their own good. Their view to market mechanism is **endogenous**. The main concept of corporate behavior in Chamberlin's SCP theory is 'Conduct' meaning that any firm in spite of big sized adapt to markets. The parallel concept is "Strategy" that has "monopolizing of market" as the main content. Therefore, Porter's (1980) model of generic strategies is trivial and useless. Porter divides a firm's market scope in two ones: **industry wide** and **particular segment only**. Anyone who has read Porter's dissertation (1973) could recognize that this is the same division into big (industry wide) and small (particular segment only) companies. In strategic marketing literature the right distinction is: **Market strategy** and **Customer strategy** (Figure 14).

Porter's model of generic strategies is even misleading. As Chamberlin noticed, monopoly (differentiation in Porter's model) and workable competition (cost leadership in Porter's model) are not strategy options. As Chamberlin insisted at a product level, there are two mechanisms of competition: (1) Price competition and (2) Non-price competition. Therefore, differentiation and cost leadership are not strategy options for firms. They need to be combined and especially in international markets there are millions and millions different kinds of combinations of that. In the figure above there are two combinations as an example. Multinationals may have their focus on cost leadership because they have the advantage of big scale. Growth firms focus on differentiation although the IO theory of growth firms is still emergent.

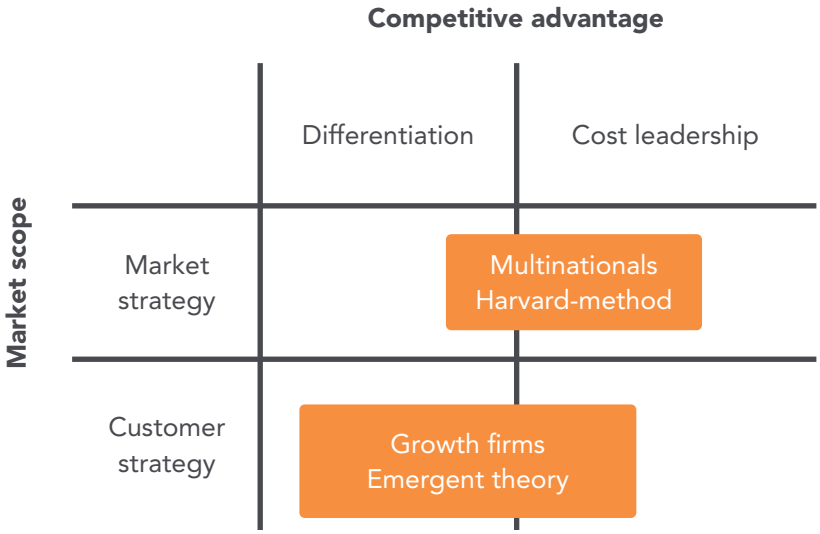

Figure 14: An interpretation of Porters generic strategies

In Lahti's benchmarking method, a firm's value is divided in the so-called **Winner-Model** into three elements (the theoretical model is shown in Figure 15):

1. **Goodwill-value or goodwill-value** is dependent on:
   1) Target market position
   2) Customer value utilization

2. **Substance value** is dependent on:
   1) Dynamics of resource agglomeration
   2) Mobilization of resource to create customer functions

3. **Market value** is the sum of goodwill-value and substance-value created by management through
   1) Strategic management decisions
   2) Operative management decisions

Theoretically the winner-model can be visualized in Figure 15.

Figure 15: Winner-model as a framework

Chamberlin can be seen as the father of marketing doctrine. The theoretical underpinning of marketing is economics. Marketing itself has borrowed more heavily from the economic theory than from any other disciplines (Bartels, 1988). The Winner-model signals that a high market value can be achieved by **rational marketing decisions** (see Oliver, 1997). Product/brand positioning is a core strategic marketing activity and firms can seek to adopt a number of distinct positions in the markets. This may involve positioning based on **premium product quality, superior value-added service and innovativeness**. The major problem in other EU-countries is the keen price competition that makes it difficult for SMEs to differentiate their products from others. The increase in marketing expenditures would only shift the average total cost curve up without giving major chances to fix price positioning upwards.

The standpoint for the monopolistically competitive markets is: **More than one firm in a given market can have a sustainable competitive advantage in the short run**. This standpoint resembles the comparative advantage concept of David Ricardo (1817) that promises opportunities of increased efficiencies and export-based cash flows for any nation or region participating in international trade with its best resources. In the modern international marketing theory a key ingredient is the Coasian transaction costs that the firm tries to avoid by selecting the most efficient governance mode (Coase, 1960; Williamson, 1991). The strategic marketing doctrine emphasizes that strategy development needs to be externally oriented, towards customers, competitors and markets.

As Staffan Linder (1961) claimed, an export product has its domestic market that *has a strong influence on product innovations.* That is what global markets are like. Only some few innovators (e.g. Microsoft or Google) can revolutionize global markets by launching their own global standards. For most companies the best market strategy is to follow the principles of Paul Krugman's intelligent theories of trade and geography.

In the **Uppsala-model** (Johansson & Wiedersheim-Paul, 1975; Johansson & Vahlne, 1977) a firm's internationalization contains continuous adjustments to the ever-changing international markets. The model presumes that the greatest barrier to internationalization is the lack of knowledge of foreign markets. The important building block of the Uppsala model is the **progressive deepening through learning-by-doing (**Arora & Fosfuri, 2000) of a firm's commitment in each of market arenas. As Penrose (1959) found, accumulated experiential knowledge of clients, market, and competitors constitute a subtle change in individuals and, thus, cannot be transferred. The importance of experiential knowledge increases with the sophistication of the product handled and with the complexities of the target market, allowing firms to perceive and formulate opportunities. This is part of the success recipe by German Hidden Champions, HCs. As to the product concept, HCs have developed their own broad concept that resembles the concept of Luostarinen (1979):

1. **Goods**: the physical output of a manufacturing firm
2. **Services**: planning, supervising, installation, testing, training, development, servicing and maintenance services
3. **Systems**: turn-key deliveries, co-production arrangements and franchising packages
4. **Know-how**: management, technological and marketing know-how, patent, trademark, pattern design and copyright

The product dimension is a major contribution since the nature of a product is related to the stage of internationalization. Physical goods are introduced first by manufacturing firms based on their domestic markets offerings. Services complement goods providing installation, maintenance, etc. The demand for systems or know-how selling is export-specific. In Germany's home markets, there is a long tradition to include value-added services into the delivery of goods. This is the major reason for the high export performance of German technology industries. Multinationals in Nordic countries, such as Kone and Wärtsilä in Finland, have made excellent profits by selling global internet-backed services.

The problem of SMEs in many countries is that big domestic buyers of subcontracting expect that services are cost-free parts of physical products. That is a reason why SMEs have difficulties to commercialize their services. The best model is a rapid internationalization in services as HCs have done in collaboration with multinationals. Krugman used Chamberlin's idea in his **theory of international trade** by combining the IO of industrial structures with production functions that provide major economies of scale. Countries with similar relative amounts of factors of production are predicted to have intra-industry trade. Today, a large share of trade occurred between countries with similar structures, which cannot be explained by comparative advantages, involving two assumptions:

1) Customers and industrial buyers in global markets prefer to have a diverse choice of brands, products and services.
2) Mass-production favours economies of scale. Small-scale-production is a vital option for technology advanced firms, such as German HCs.

The strategic management model (Figure 16) is constructed reflecting the German HCs way of acting.

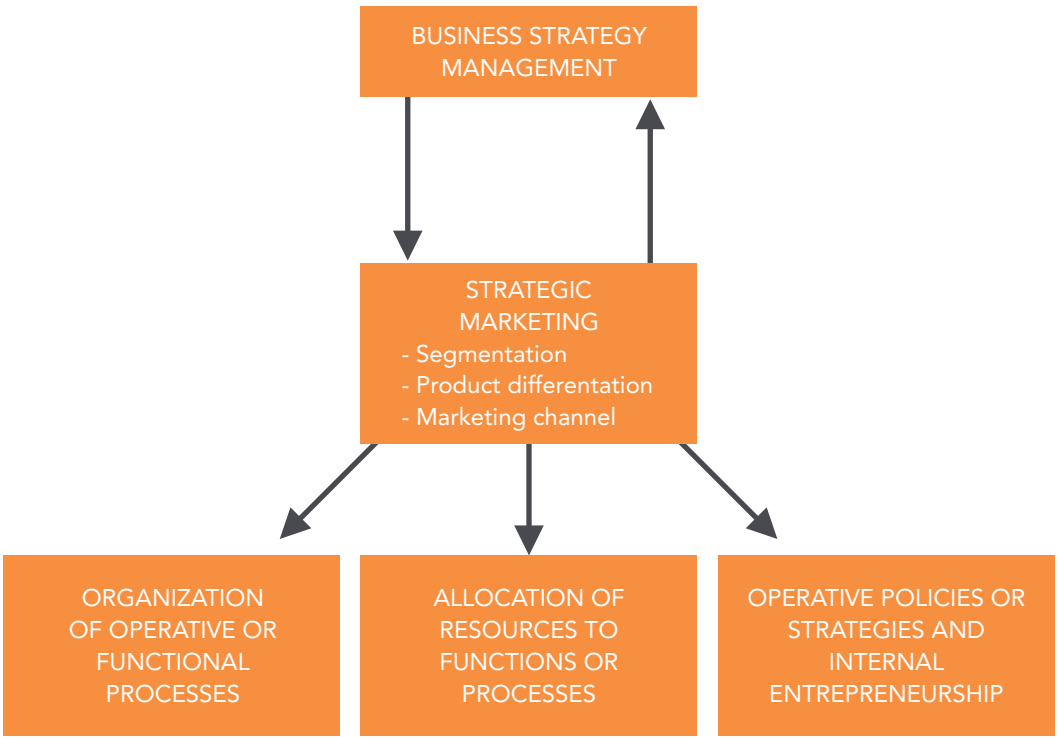

Figure 16: Strategic Marketing model

During two decades (1980s and 1990s) I did many field research trips in EU-countries. I analysed about 300 SMEs in both consumer and B2B industries in ten EU-countries. The Strategic Marketing model in Figure 16 is an outsider's view of the German method. I understood the method in depth when having red Hermann Simon's book (Simon, 2009). Looking back to my writings I noticed that I had tried to combine the same strategic marketing elements as Simon has done. German HCs try to balance the interests of owners and employees with honest contacting. The owners (mainly families) of HCs signal to their co-workers strong commitment to companies by investing major part of profits in their companies. This is an honest corporate culture. HCs has in financial terms a high goodwill value (GV) in their target markets. German HCs maintain high substance value in the long run by investing free cash flows (profits) to keep the firm's technology up-to-date.

German Hidden Champions have developed their own models of market leadership in which Schumpeter's (1934) innovation/entrepreneurship concept and Chamberlin's (1951) product differentiation/marketing concept is combined (Andersen, 2009) with the German management doctrine interpreted mainly by Hermann Simon (Simon 2009). The pursuit of sustainable competitive advantage has been the idea that is at the heart of much of the strategic management and, later, marketing literature (Day, 1990, 1992).

BCG and PIMS – empirical fact on marketing performance

One of the most fascinating business models is the Boston Consulting Group's (BCG, 1970) experience curve from the 1960s. Experience curve is the name applied to the overall cost behaviour in the 1960s by Bruce Henderson[9]. The BCG's original claim for the experience curve is that for each cumulative doubling of experience, total costs would **decline roughly 10% to 15%** because of economies of scale and learning-by-doing, and that experience-based cost reduction can continue indefinitely. Frederick Taylor was the first who noticed that labor hours per unit declines on repetitive tasks following a learning-by-doing pattern. Henry Ford experimented these ideas in the car (T-model) manufacturing.The experience curve contains the business recipe of conquering markets by a price war so that a firm should decline steadily its market price at a constant rate each time when its accumulated experience of a product has doubled. In broad terms this rule is a modification of the neoclassical model of perfect competition in the long run (Stigler, 1968).

The BCG provided convincing data showing experience effects in a variety of industries. The BCG suggests that there is no naturally stable relationship with competitors on any product until one of the competitors has a dominant market share of for that product and until the growth saturates. Under stable market condition the profitability of each competitor is a function of his accumulated experience with that product. The logic of the experience curve is convincing. For the first time there was a simple, parsimonious account of what competitive advantage is like, and how it is gained in the long run. A high market share means high experience and low costs, implying high profit margin. It implies improved cash flows whereas a low market share implies a loss of cash and profit. The BCG's experience curve is mainly applied for industrial firms. For knowledge intensive, growth firms such as Hidden Champions a combination of experience curve and economies of speed (Chandler, 1990) is useful. The **Experience Curve** (Figure 17) is a modification the original BGC model.

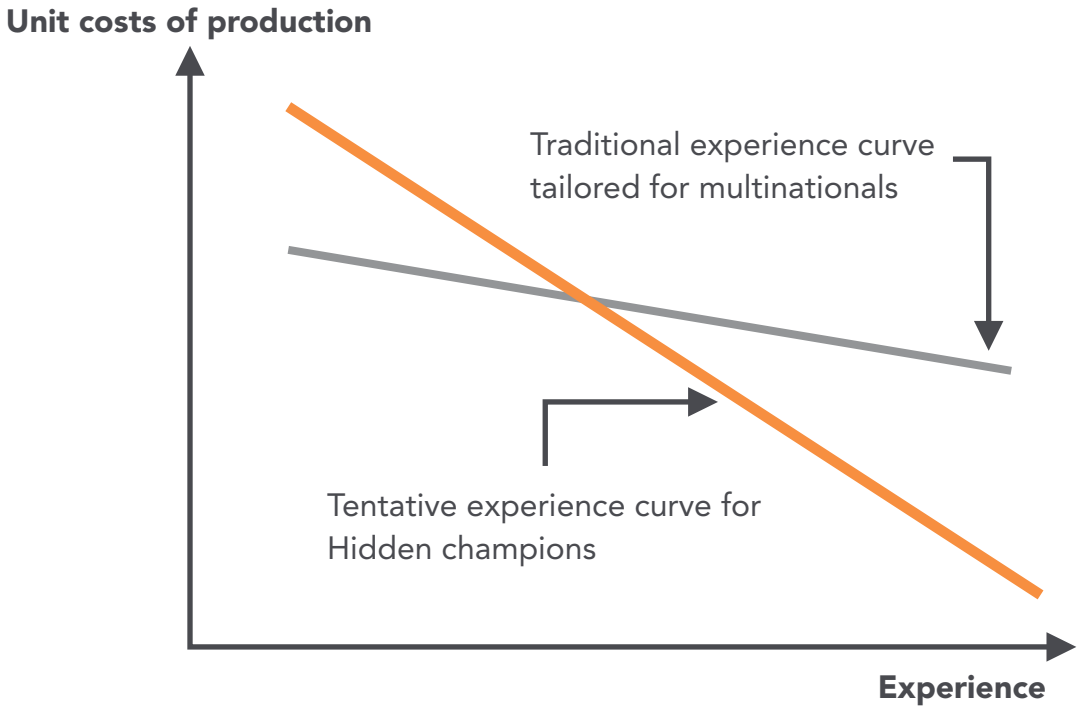

Figure 17: A modern interpretation of the BCG (1970) model, modified

The practical contribution by the BCG has been important. For the first time there was a simple, parsimonious account of what competitive advantage is like, and how it is gained in the long run.

BCG stimulated academic research, like the Profit Impact of Market Strategy (PIMS) studies In the 1970s, business schools began to look systematically at performance data. At Helsinki School of Economics, Professor Veikko Leivo motivated his students to study the performance linkages of business strategy. The story of the market-share effect provides a good illustration of this dynamic (Buzzell and Gale, 1987). In the 1970s, PIMS was an important benchmarking method in Finland. Many of the Finnish international enterprises have used the PIMS database to learn the "principles" of profit contribution. I worked as an economist in the central association of technology industries in the late 1970s. In that time, companies like Nokia started to apply PIMS.

The PIMS was initiated by General Electric in 1972 and housed at the Strategic Planning Institute (SPI). The PIMS informed managers that they could increase share and profit by redefining their market scope (i.e., redefine their competitors and presumably their market share position). The PIMS contribution has been to provide insight and principles derived from an analysis of statistical data. Since 1972 some 4.000 strategic business units have contributed annual data, for periods that range from 2 to 10 years, and covering a wide spectrum of industries in North America and Europe. It has been used by managers and planning specialists. For example, researchers have drawn on the PIMS to explore various dimensions of performance, economies of vertical integration or conditions favouring investments in mechanizing and automating. The PIMS is closely related to Marshall's (1920) principles school as a compact package of well-verified rules of the firm's profit making.

The PIMS completes the notion of a tentative experience curve for growth firms, often medium sized firms. There is empirical evidence for the success of medium-sized firms with diverse demand and costs curves. Market turbulence or creative destruction in global markets provides a lot of market niches for medium sized firms to conquer. This is a starting point of business strategies of SMEs.

For each of businesses three kinds of information are collected:

1. **Description of the strategy and tactics** that a business unit follows. These include such things as pricing, R&D spending and market expenses.
2. **Business unit's market structure**. Measures of market structure include such things as differentiation, market growth rate and entry conditions.
3. **Business unit's competitive position in market**. Measures of competitive position include relative market share and relative perceived quality.

The vital difference between the PIMS approach and portfolio classification systems is that the portfolio systems attempts to explain business performance in terms of a few key factors and portfolio systems utilizes the case data of a company and of an industry in attempt to posit a business into a matrix. For instance, the growth-share-matrix, as its name implies, assigns businesses to one of four groups based on market growth rate and relative market share. The PIMS Competitive Strategy Paradigm is described in Figure 18 (Buzzell and Gale, 1987). Internationalizing companies in the 1980s started to benchmark their market strategies, e.g. the Nordic success stories, such as Volvo, Ericsson, Nokia and Electrolux, against the PIMS principles.

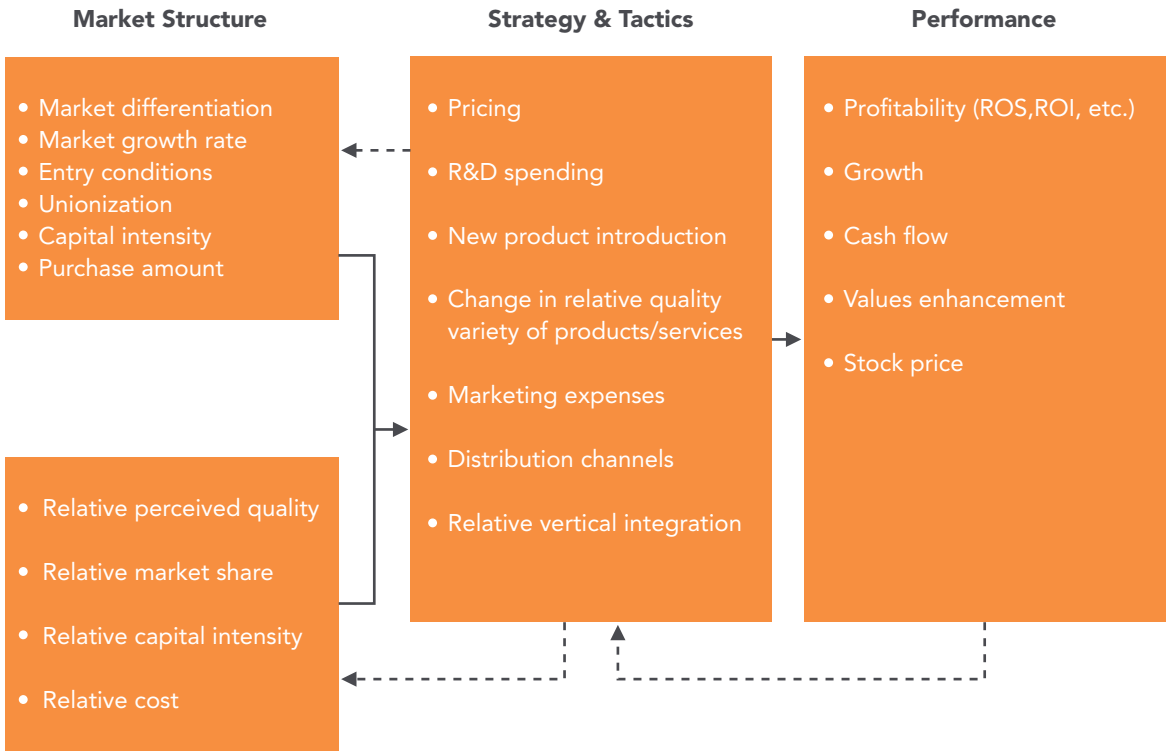

Figure 18: The PIMS Competitive Strategy Paradigm.
Source: Buzzell and Gale, 1987, p. 28.

The PIMS studies explore various dimensions of performance, structure, strategy and tactics. Market share and profitability are found to be strongly related. Business units (SBUs) with very large market shares (over 50% of their served markets) enjoy ROI three times greater than small-share SBUs (under 10% of their served markets) (Buzzell and Gale, 1987, Figure 19). The BGC and the PIMS have since the 1990s been the main doctrine for most of multinationals to maintain its "permanent" market leadership although the costs of leadership may have exceeded the payoffs. There are multiple cases of how multinational companies have been in serious crises after their strong growth period in global markets. The US banking sector is the most evident case example of the turbulence in the global markets.

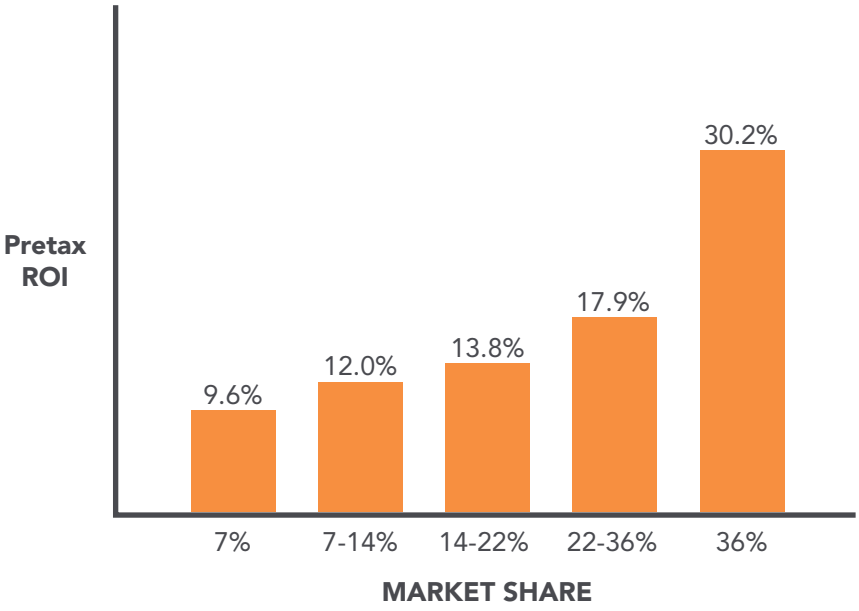

Figure 19: Main result of PIMS.
Source: Buzzell and Gale, 1987, Exhibit 1–2.

The share-profitability relationship, a strong market position combined with a high ROI ratio, is a reflection of management's skill or a good luck to construct the winning recipe of Market Structure and Strategy & Tactics factors. The costs of gaining high share may exceed the payoffs. In oligopoly markets the primary reason for the large-share business benefits are scale economies. Nokia was an example of that during its strong growth period in global markets since the 1990s. In the mid 2000s Nokia was one the leading R&D investors of all multinationals. In spite of that Nokia had an economic crisis in the early 2010s when over one half all new cell phone subscriptions were smartphones.

In the global markets even 60% of firms follow mainly the principles of monopolistic competition in which any kind of high performance is temporary. Because of misperceptions Nokia was not able to implement a real revolution in its products when Apple succeeded in that. Nokia was over-enthusiastic in the "experience curve pricing".

The costs attached to a share-building campaign may be prohibitive, especially if the primary means used is price-cutting. There are some econometric studies about the difficulties what mid-sized firms have to manage in their efforts to win market shares by aggressive marketing strategies, including price cuts (Hatten, 1974; Lahti, 1983). According to Porter (1980, p. 41), mid-sized, 'stuck-in-the-middle' firms have a low profitability. A more positive view of mid-sized firms is given by the PIMS[10]. There are some empirical evidences for the success of medium-sized firms (Adams & Brock, 2004; Clifford & Cavanagh, 1985) with the diverse demand and costs curves. Market turbulence in global markets provides a lot of market niches for medium sized firms to conquer. This is the wisdom of the Hidden Champions by Simon (2009). They adapted the PIMS-findings in the beginning of the 1990s. However, when Germans have made the strategic decision, they also implement it as efficiently as possible. This is one of the main differences in comparison to other EU-nations.

The problem is that the material in the PIMS database is relatively general and aggregated to give any guidance for strategy decisions in a specific industry. Some management authorities have doubt whether they are meaningful to such broad questions. They believe that each situation is so distinctive that generalizations are virtually impossible. The PIMS research program has been criticized by comparing 'the policy perspective' and 'PIMS perspective' that involves a mechanistic application of formulas to complex management problems. Buzzell and Gale (1987) answer to the criticism: "We do not claim to have discovered universal and precise 'laws of strategy', like those of physics. But, once again, we suggest that there are general relationships that can provide valuable guidance to mangers".

The PIMS® (Profit Impact of Market Strategy®) tools are a key part of the **Malik Strategy Intelligence Program**[11] that provides a firm accurate verifications of potential effects of business strategy in the market and on the bottom line. The PIMS is based on simple concepts. Initiated by General Electric in the 1960's for portfolio and investment analysis. The PIMS tools and databases have been refined by e.g. Harvard, and now as part of Malik. The PIMS Strategy database contains data for around 4,000 businesses with a minimum time span of three years, giving us 25,000 years of real business experience. The PIMS has made profound progress and innovations in strategy intelligence and also in a type of benchmarking which goes way beyond the conventional methods. The basic principles of PIMS can be summarised in Figure 20[12].

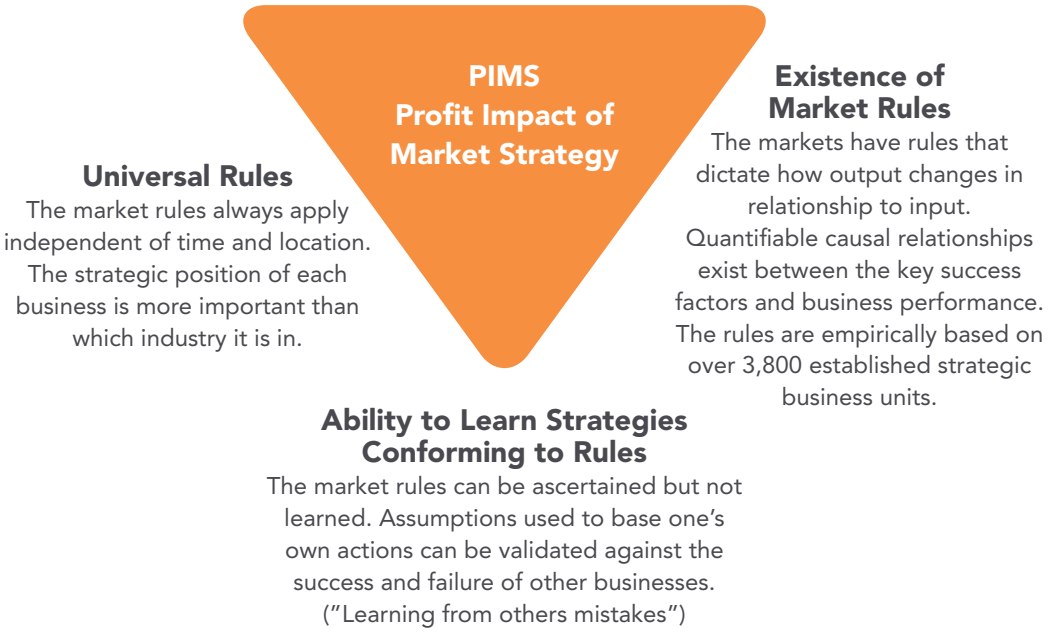

Figure 20: The basic principles of PIMS summarised by Malik

The practical contributions by the PIMS have been important. The PIMS is a comprehensive model and database of what competitive advantage is like, and how it is gained in the long run. The correct unit of analysis is the strategic business unit (SBU): selling a connected set of products through particular channels to a defined customer set against a defined competitor set. This is the arena in which a firm should make and implement marketing and investment decisions. What is well verified over decades is the **strong ROI contribution of the relative market share**. The PIMS findings contradict theoretical assumptions of neoclassical economic theory, e.g. that businesses should invest more if their marginal returns exceed the cost of capital. This implies that the orthodox economists are incapable to advice public policy makers, e.g. investment behaviour, job creation, innovation and growth. A more rigorous economic theory is needed to sustain entrepreneurship and dynamics.

The wisdom by Hidden Champions (Simon, 2009, 2014).

German HCs have proved to be real "champions" in international marketing. HCs are mainly family firms having a strategic vision: **To be the market leaders in their target markets**. HCs are the best success recipes are simple. German and Finnish marketing professionals are both honest and serious. When German marketers have succeeded to commercialize their **reliability, credibility and authenticity** for Finnish marketers the same kinds of qualities means a handicap in international market arenas. Finland has excellent multinationals that are at the same level as German multinationals. The main difference between German and Finnish SMEs is that Finnish mid-sized firms are domestic-market oriented (representing about 10% of Finland's total export) and German SMEs (Mittelstand) are globally oriented (representing about 25% of Germany's export).

The term "hidden champion" was coined by Professor Hermann Simon who was the first to use this term as a title of publication in a scientific German management journal (Simon, 1990). The first English book was Simon (1996). Perhaps, Simon's tittle signals also the paradox around his finding: "Hidden champions: lessons from 500 of the world's best unknown companies". In the 1990s and the 2000s, German HCs have attained the high customer loyalty worldwide with t**echnological superiority, top quality and customer-oriented marketing**. German HCs have excellent skills in customer services. They apply their model of monopolistic competition that is the theoretical foundation of marketing by Edward Chamberlin and Erich Gutenberg.

Germany's multinationals like Volkswagen, Siemens, BASF, Bosch, and others are not much different from other multinationals like GE, DuPont or IBM. Since the war, Germany's export strength has not been determined by multinationals. Germany has a large number of mid-sized firms (Mittelstand) who are strong exporters. Hidden Champions (HCs) studied by Professor Hermann Simon is a **unique super-sized strategic group of mid-sized firms**. HCs are normally known only in their own region and industry, by customers and suppliers, but not to the wider public[13]. These successful firms are often concealed behind a curtain of invisibility, and business secrets. Often, but not always, they are family owned. Their values are conservative: **hard work, strict selection, high performance, and high employee loyalty**. Leadership style is highly authoritarian on strategic issues but participative on operational issues. Because HCs are often locating in small towns, their deficit is competition of young talents worldwide (Venohr & Meyer, 2009). The main element of success by German SMEs (Mittelstand) is the **good leadership** with the ambitious goal to reach the top three position in global markets or the number one position in the own continent.

The market strategy behind leadership consist of (Simon (2009):

1) **A narrow market definition**
2) **Closeness to customers**
3) **Clear competitive advantages**
4) **All that with a global orientation**

A summary of key points of success is given by Simon (2009) and Venohr and Meyer (2009):

1. **They strive for market leadership worldwide or at least in their own continent in their narrow market segments.**
2. **Their market definition is a very narrow niche.**
3. **They serve the global target markets mainly through their own subsidiaries. They do not delegate the customer relationship to third parties, e.g. agents.**
4. **They are close to their customers. They are customer value – not price – oriented. Their competitive advantage is a top product quality and unique KIBS services, and a superior R&D capability.**
5. **They innovate continuously in both products and processes. Innovation activities are market and customer oriented.**
6. **The overall orientation is technology evolution and sometimes revolution in selected niche through market driven innovations.**
7. **They are close to their top competitors that are often German companies and defend their market position actively.**
8. **They rely on their own strengths and mistrust strategic alliances and outsourcing. They see the foundation of their competitive superiority in things which only they can do.**
9. **They have strong corporate cultures associated with excellent employee identification, selection and motivation.**
10. **Their leaders work in their companies often for many decades.**

There are many reasons for the mazing success of German HCs. Situational factors are important in any case of supernormal profit. German HCs have been in the right place at the right time. They invest systematically in international operations in rapidly growing market, e.g. China. In the long run, HCs have maintained supernormal profit according to the law of monopolistic competition. The reason for that is the resource strategy or inner strengths of HCs including e.g. the depth of customer-related knowledge, high performance employees and continuous innovations[14].

For HCs market prices are the major market strategy element as Simon & Jonason (2013) elaborates. Their pricing strategy relies on price rigidity and product differentiation. This means a long run commitment to serve customers and to invent in better products and services for them.

Marketing channel is the key element of German success receipt. German companies prefer to **internalize their marketing channels** to keep the customer secrets in a strict control. Germany's **customer-specific differentiation** is not well known since "global gurus" dominate the English literature and media. The paradox is that German firms have made a better global-market-specific version of the US industrial method that helped the US to succeed for about hundred years until the 1980s. Alfred Sloan (Sloan, 1963), the famous CEO of GM, was the first in the 1930s to utilize Chamberlin's product differentiation in positioning. The US oligopoly theories are accountable to mutual dependences between gigantic multinationals that are positioned in the mass-customized products and services and try to dominate core markets by internalizing them. The majority of multinationals follow the US oligopoly methods of competition. German HCs have top positions (Figure 21) in markets. They have their own interpretation of monopolistic competition theories by Chamberlin, Gutenberg and Krugman.

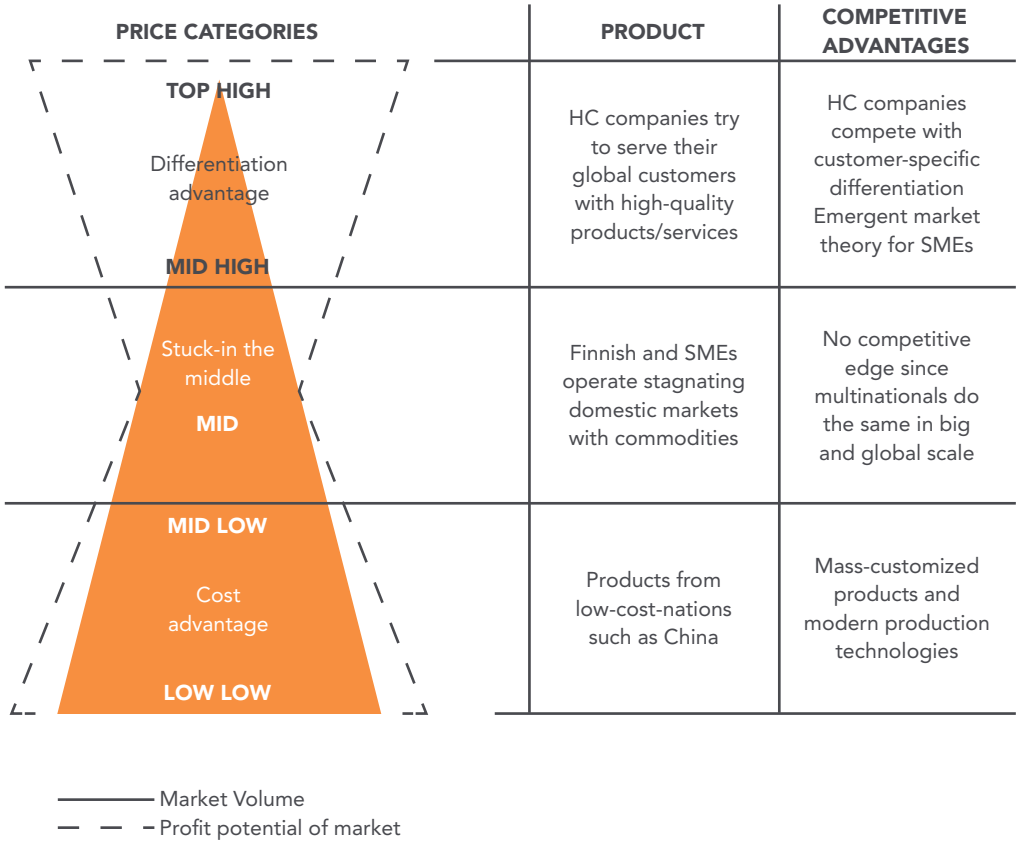

Figure 21: Price positioning of Hidden Champions

Customers' preference for diversity explains the survival of different versions of e.g. machines and tools by German HCs. Because of economies of scale, it is not profitable to spread the production all over the world. HCs' strategic core of production system is to concentrate in some few factories mainly in their home regions. Their integrated production systems provide the strong advantages of sustaining entrepreneurial culture which is the foundation of customer service and R&D worldwide. There is a tendency for excess capacity because HCs can never fully exploit their fixed factors. There need to reserve the extra capacity to respond quickly and effectively to customer's problems. This is complemented by the advantages of diversity and choice options provided to key customers. As to competition models, monopolistic competition is more realistic than perfect competition – many B2B markets have characteristics of this model. HCs have unique market definitions (Abell, 1980) to concentrate on small marginal market segments that multinationals avoid because of high customer-specific transaction costs. Their growth in turnover is usually double higher than the growth of personal generating economies of scale (Figure 22).

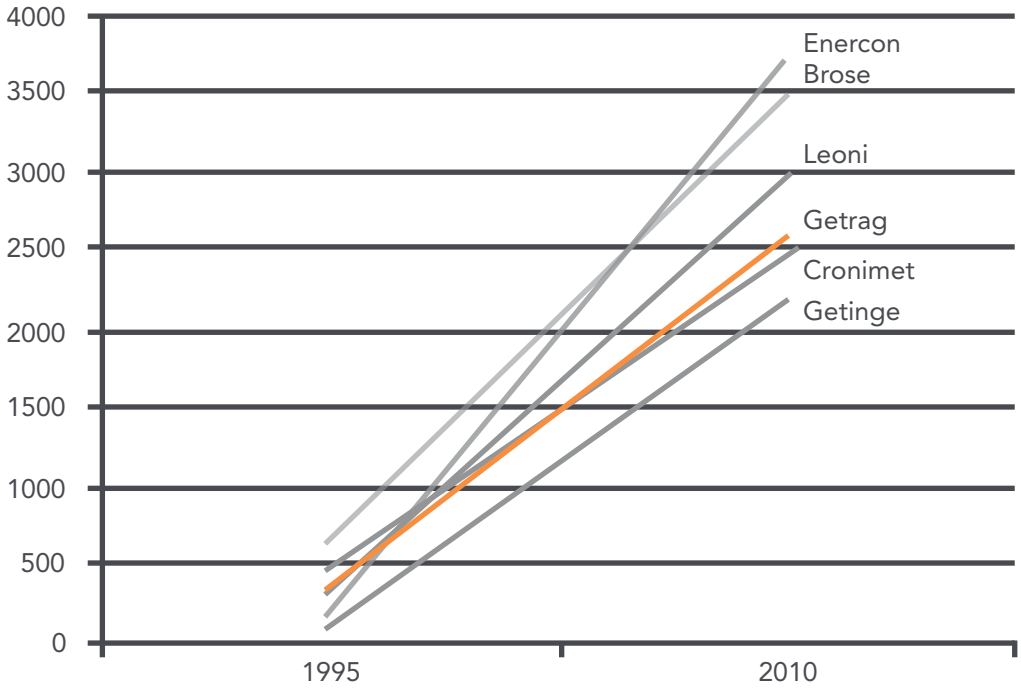

Figure 22: Some examples of Hidden Champions' growth performance.
Source: Simon & Jonason, 2013, p. 98.

4 SUMMARY

4.1 MONOPOLIZING OF MARKET AND THE CHICAGO DOMINANCE

A generally accepted view in the literature on multinationals is that they are active players in oligopoly competition in their target countries. The relevant indicator of the market efficiency is **contestability**. Markets are contestable, if they are open for new entrants. As Baumol (1982) found a perfectly competitive market is necessarily perfectly contestable, but not vice-versa. Therefore, the perfect contestability does not exist by definition in countries where economic nationalism is the historical culture. The most striking example is the success of German Hidden Champions (Simon, 2009, 2014). **Asian national champions** are emerging in many global industries but their success is more due to economic nationalism than just effective firm strategies (D'Costa, 2012).

Competition in global markets is working, not perfectly, but adequately to give consumers (and users) new, genuine alternatives of products and services. The German Hidden Champions doctrine is the best recipe for SMEs. The success of Asian firms is more due to economic nationalism.

Kenneth Arrow, the Nobel Prize-winner in 1972, claimed that a market leader in oligopoly markets is not ready to take the risk of radical or drastic innovations since a firm might jeopardize its dominant market position (Arrow, 1962; Arrow & Hahn, 1971). A market leader in oligopoly earns profits by replacing itself (Arrow effect) what small firms in monopolistic competition, by definition, cannot do. A market leader following the German "Mittelstand" doctrine is inventing new products or processes according to Schumpeter's creative destruction and, thereby, they extend markets. A multinational following the US oligopoly doctrine is continuously renewing its existing products or processes according to Schumpeter's creative accumulation. Multinationals or national monopolies may behave by blocking innovative firms markets (see Denicolo, 2001):

1) Pre-empt potential rivals
2) Slow down the diffusion of radical invention by new entrants
3) Maintain a permanent leadership

In economics, the Industrial Organization Economics (IO) is the field that is built on the theory of the firm by examining structures and boundaries of firms and markets (see De Jong & Shepherd, 2007).The Structure-Conduct-Performance (SCP) Paradigm is based on the ideas of Chamberlin and Robinson. The SCP model dates back to the pioneering work of Mason and Bain. Mason's main finding was: The higher the market power the higher the profitability (Mason, 1957). According to Bain (1951, 1956) three main factors are important as entry barriers: Economies of scale, product differentiation advantages, and cost advantages. Bain developed the first version of the SCP model of the relations of structure, conduct and performance (Mueller & Rauning, 1999). Scherer & Ross (1990) summarized the state of art of the SCP. External factors such as legal and political interventions affect basic conditions (demand and supply) of the SCP market framework and, by extension, to structure, conduct and performance of a given industry.

The SCP is separate from the (mathematical) neoclassical theories since the SCP model is based on empirical studies. In the SCP, market environment has a direct and short term impact on market structure. Market structure then has a direct impact on a firm's conduct which in turn affects market performance. The SCP adds multiple real-world imperfections to the competitive models, such as transaction costs (Coase, 1960, 1987, 1988, 1998), limited information (Simon, 1960, 1979), and barriers to entry of new firms (Bain, 1951, 1956) that are associated with imperfect competition models. In the 1970s, the SCP paradigm revolutionized the IO studies. For the first time it was possible to make empirical, statistical analyses of how firms are really behaving.

With Clark's theory of workable competition (1940) the SCP paradigm reached a new equilibrium by which the US antitrust administration calibrated competition policies necessary to produce satisfactory results in highly diverse, international markets of goods and services.

According to the SCP, market structure determines conduct, and sets a level of market performance. The SCP is applied to a diverse range of problems, from firms to financial crises. The SCP was discounted by IO theorists mainly from Chicago in the 1960s. **Hostility to alternative approaches that was not unique to the Chicago professors (Stigler and Friedman) led to a crisis in competition theories** (Colander, 2008). Later, the SCP was taken over by Michael Porter at Harvard. When that takeover happened, universities suddenly stopped doing empirical research under the SCP and relied on Porter's (1980, 1985, 1990) models that are simplifications of the SCP and intended for practical business managers. The confidence of Chicago economists in the orthodox theory can be explained by the fact that the neoclassical theory was commonly used for relating policies to effects. The problem that firms and industrial economists need to tackle is that the neoclassical IO is too abstract for practical purposes.

According to the neoclassical theory, given an industry structure with high fixed costs, firms were assumed to cut prices to marginal cost without sufficient revenue remaining to pay off investment. This paradox irritated the Chicago economists who became hostile to the US antitrust laws since by releasing the antitrust rules it is possible for big firms to earn continuous supernormal profit. This is what has happened. Large multinationals earn monopoly profit. The Chicago School calls this perfect competition – this is a moral hazard.

From the 1940s to 1960s, the Harvard SCP School produced empirical works. The key issue was the concentration of firms in the same market. The early SCP studies verify that firms in the highly concentrated industries use to earn higher profit (supernormal profit) than firms in the diversified industries which was a convincing evidence of monopoly power. **The SCP finding was the key to the implementation of the anti-trust legislation until the late 1970s**. Until the 1980s the Chicago School succeeded to propagate the idea that even big firms are efficient inside the highly concentrated industries. Because of the Chicago campaign against the SCP, most of economists rely on perfect competition model and on econometrics as the main empirical research method.

The Chicago School was not open for debate to integrate the two competing IO paradigms. The Chicago economists campaigned at a political level in the US. Their claim was: the **institutions which guide the production and contractual operations of the particular market should be liberal to the monopoly behaviour of big firms**. A practical implication of the Chicago economists has been that monopoly actions, such as a collusion of big firms, are not viewed as anti-competitive as they are when a SCP method is applied. The **game theory** and the **Nash equilibrium concept** (Shoham & Leyton-Brown, 2009), together with econometrics as the main method in empirical analyses led to highly complex empirical models of technological changes, merger analyses, entry-exit models and market power analyses. The debate between the Harvard SCP and the Chicago occurred largely within these guidelines (see Hovenkamp, 2009).

Chamberlin (1933, 1965) provides monopolistic competition models as the alternative to the orthodox, neoclassical theory mainly relying on the two "pure" models of competition: Perfect competition and monopoly. As Chamberlin found, competition in market is much more complex.

The influential economists of the Chicago School were not fascinated to use the SCP model (see Archibald, 1961, 1961). Their worry was the excessively low profitability under perfect competition when only normal profit is available. The Chicago became hostile to the US antitrust laws although the problem was and still is the abstract modelling that odds real market conditions.

4.2 MONOPOLISTIC COMPETITION: THE GERMAN NORDIC RECIPE

The long-run characteristic of monopolistically competitive markets is non-price competition. Monopolistically competitive firms tends to **internationalize** rapidly as many German, Nordic firms do. Much of the firm-specific internationalization process research has been based on the **Uppsala-model** (Johansson & Wiedersheim-Paul, 1975; Johansson & Vahlne, 1977) who developed a model of sequential entries into foreign markets. This is stage-model includes what Nordic industrial firms do. A firm's internationalization process is seen as **continuous process of adjustments to ever-changing international market** (Luostarinen, 1979). Because of the monopolistic, differentiation competition is the dominant model in international market, a firm are not able to make optimal decisions of investment in internationalization. The greatest barrier to a firm's internationalization is the **lack of knowledge of foreign markets and operations**. Knowledge can be acquired through experience in foreign operations.

Reijo Luostarinen (1979) developed a parallel model with the Uppsala model. His study included 92% of Finnish exporters in that time. He includes factors characterizing the domestic markets of firms. In Finland the domestic markets were small, peripheral and even open. Luostarinen interprets this fact so that **Finnish firms are "pushed" into internationalization**. Concentrating on the firms' product, operation and market (POM) strategies Luostarinen (1979) identified a systematic and consistent pattern of internationalization, which came to be known as the **POM-model**. Luostarinen (1979) describes internationalization of a firm through three dimensions: product, operational mode and market. As to the product dimension, the pattern of business operation is related to the export of business systems that combines (Luostarinen 1979, pp. 95–105):

1. **Goods**: the physical output of a manufacturing firm
2. **Services**: planning, supervising, installation, testing, training, development, servicing and maintenance services
3. **Systems**: turn-key deliveries, co-production arrangements and franchising packages
4. **Know-how**: management, technological and marketing know-how, patent, trademark, pattern design and copyright.

The German doctrine of rapid internationalization of family firms (Simon, 2009) has much similarities with the Nordic model. A major difference is that German firms and economists were aware of the rules of monopolistic competition. This was the contribution by Erich Gutenberg (1951). Simon's (2009) main findings are in balance with Gutenberg's **monopolistic scope (monopolistische bereich)** idea that visualizes the negative consequences of price war. The reason for the amazing success of German Hidden Champions (HCs) is their unique business models in global markets. Following their integrating model of marketing, HCs use to develop their own unique resource configuration models. A vital issue is pricing and the divide between **"good" market share** – earned by performance and the "bad" market share – earned by the price aggressions and discounting (Simon, 2009). About **90%** of HCs act in global B2B-markets. HCs specialize in market segments that multinationals avoid and use to win big multinationals by their **market strategies of avoiding the high market power of multinationals**.

In Gutenberg's solution the individual price-sales function is doubly kinked. German HCs take advantage of that. They are highly successful. The modern game-theory by e.g. John Nash is one of the most intelligent scientific innovations in economics. Gambling in terms of Peter Drucker is challenging since the probability of winning is 50/50 in the long run. German HCs have succeeded to win with the extremely high success rate.

Multinationals try to strengthen their market power through strategic alliances, joint ventures and in-house R&D. They make portfolio investments abroad to increase and obtain control over critical resources (Cross, 2000). German HCs have succeeded by **complementary business strategies**. In 1994–2004 HCs succeeded to grow by **8.4%** when German DAX companies (multinationals) grew by 4.9% (Venohr & Meyer, 2009). There are about 2,710 HCs worldwide and about 50% of them are in Germany (Simon, 2009; Witt, 2010; DZ Bank Group). HCs have verified the doctrine of continuous product innovations in "old" industries (machinenbau). HCs have revitalized "old" industries by moving the competition logic away from price competition to innovations. HCs have low competition risk since they have strong customer-based monopoly positions.

As Simon & Jonason (2013) has reported in the "Globalia" the critical process is the **customer relationship management**. The US big firms were winners in the 20th century by the highly professional marketing. German HCs are potential winners of the 21th century because they have created the customer-oriented "German" model in B2B business that match better than the "American method" with the huge diversity of customer needs and behaviour in the "Globalia". Since the 1990s, parallel with the accelerating globalization, HCs accumulated their superior managerial knowledge of how to achieve and maintain the **global leadership** in their narrow market segments[15]. As Simon & Jonason (2013) has widely reported, HCs prefer to have almost fully **integrated marketing channel**. In average, HCs have **tens of own subsidiaries worldwide** which has been a powerful method to maximize the managerial knowledge growth of "Globalia". Another important point is that their own network of own subsidiaries makes it possible to control efficiently **business secrets** of customer-specific product and service innovations which is the foundation of protecting intellectual properties (Simon & Jonason, 2013).

Multinationals try **to avoid heterogeneity of markets**. They focus on large-scale commodity products. Their competitive means are mass-marketing and mass-production combined with market power. HCs that in most cases are mid-sized companies in relation to multinationals cannot solve their market position in that way. **Their sustainable advantage is their learning capacity**. As Marshall (1920) and Penrose (1959) have noticed, management's learning capacity is critical to a firm's ability to grow. HCs utilize market complexity and heterogeneity as their competitive advantage. A **strategic group** (McGee & Thomas, 1986) is a useful concept because it cumulates a firm-group's market-specific learning capacity on mobility barriers (Lahti, 2005). Even medium sized companies are too small to learn alone the market strategy of the global markets in many continents.

The primary driver of the expansion in the number of global products over the past two decades has been the **pursuit of economies of scale**. The high fixed costs of R&D and the pressure to reduce the new product development time due to shorten the life cycle of products and services has placed a premium on generating larger revenue flows by selling the same products and services in many countries – globally. The emphasis is on building an efficient networks or platforms of production plants, sales units and service systems capable of penetrating markets around the world. Multinationals have strong technological and managerial competences, and access to capital markets. HCs produce high quality system products – perhaps the best in the world. For them market leadership means **"inner flame" to design top products** and to monetize in-depth knowledge of customer needs (Simon & Jonason, 2013, p. 144).

HCs accept the risk of being a single product manufacturer. That is the reason why *they need to grow and operate close to their customers*. They earn their market leadership through performance and not through price aggression. HCs are real "champions" in marketing as Simon & Jonason (2013, p. 163) advices. As Chamberlin noticed, diversity matters. Being customer-oriented, HCs provide their customers as much diversity they are willing to pay for. HCs are mainly acting in B2B-businesses supplying worldwide e.g. high-quality machines and related services, providing their customers competitive means to differentiate in their own markets.

The HCs' business recipe works well in international markets. HCs invest in their internationalization early in their growth paths. HCs operate close to their key customers, and customers' needs are the driver for their innovations. On the other hand, HCs' customers are dependent on their product lines and they cannot easily change their suppliers, meaning a **high co-dependence between HCs and their customers**. HCs have developed their main products as a result of customer-based innovations. This is the reason why they are able to keep leading positions in narrow niches. In spite of leadership, HCs do not compete according to the oligopoly rules. In oligopoly, there are high barriers to entry in the long run. A high level of co-dependence between HCs and their customers is not a barrier since the **customers have a free choice**. HCs are "hidden" but they do small things better than its main competitors. This is the **differential advantage** according to Alderson (1965, 1957).

HCs keep organization structure efficient (Simon, 2009, p. 378) and avoid the organizational slack (Cyert & March, 1992). Any of HCs has its advantage in its own unique organizational learning capacity and in technological innovations and IPRs. HCs are able to combine the **BCG's experience curve** and **Chandler's (1990) economies of speed in goods, services and IPRs** without jeopardizing their market positions by price wars. HCs have efficient contracts (social, legal) between owner-managers and their employees with "different personal utility functions" (Gutenberg). HCs' business system is **elastic** that makes it possible to cut quickly costs and to avoid cash-flow crises that are often disastrous to SMEs in other countries. HCs are market leaders (among three best) in their own market segments. HCs' intangible assets can easily been identified by competitors but their imitation is prevented through the legal system[16].

A market leadership position is often highly rewarding but difficult to achieve in the keenly competitive monopolistic markets. In Drucker's (1985) analysis, the striving for leadership is the **entrepreneurial strategy par excellence**. This sort of strategy has been the core content of high-tech firms and German Hidden Champions. Drucker's warning is: This strategy is the **greatest gamble, making no allowances for mistakes and permitting no second chance**. If it is successful, it is highly rewarding to a firm. In average, the most rewarding entrepreneurial strategy is **creative imitation** – it is 90% of the all success cases. German HCs are the population of **1,500 highly successful mid-sized "Mittelstand" firms** (Simon, 2014). In Drucker's thinking, German HCs are all gambling to achieve global market leadership. Their success rate as a population has been **near 90%** that is not possible in gambling in average.

The growth of multinationals in number has been remarkable rapid in global markets. In 2012 there were about **100,000** multinationals in the whole world and **900,000 foreign affiliates** with total assets value about $57,000 billion and sales about $33,000 billion. Multinationals as a firm group account for about **25%** of the world GDP, and their total share of the interregional trade of all commodities may at the level of **80%** (World Investment Report 2013). Including the intra-industry in which German Mittelstand SMEs called Hidden Champions are "world-champions" which means that the distribution of trade is in a good balance in Germany. Germany is exceptional since the internationalization of SMEs has been slow in most of the WTO-member countries. This is the reason why it is important to study carefully the global mobility barriers of SMEs.

4.3 THE GERMAN-NORDIC DOCTRINE – MY OWN EXPERIENCES

In 1970, I started my carrier in **Pori Cotton Factory (Porin Puuvilla Oy)** that was a highly dynamic and international design company in which I assisted German consultants. The **German industrial method** was very useful. Following the idea of modern operation analysis, out team revealed the **bottlenecks** of production process in serving key customers. In the 1970s I could not know that the method was the best in the whole world. In 1971–1974, I worked in **Friitala Oy**, a high quality leather company where German technology was widely used. In 1975–1976 I worked in **Kone Oyj**, an engineering company. **Pekka Herlin**, the CEO and architect of globalization analyzed bottlenecks of internationalization which helped him to innovate a radically new service business concept that today is widely used in many Nordic and German engineering companies. The forth family company that I know in-depth is **Nanso Group Oy** that produces knitted products, tights and socks. **Hannu Jaakkola**, the CEO, applied also the German system method to reorganize production system and to innovate new product concept in which he applied my strategic marketing model (see Figure 16).

Each of these family are unique stories. They made their own interpretation on the German doctrine. Kone is a "Big Champion" in Simon's (2009) conception, the global market leader in the elevator market. I was a board member in Nanso when it was a potential Hidden Champion. The fourth generation in the family led by **Juha Berglund** invested in the Finnish domestic market in which Nanso is the market leader. Porin Puuvilla and Friitala were famous firms in the 1970s. Their future success was jeopardized by owners' inability to commit to the firm in the way as Nanso's or Kone's owners did and what is the key success factor in German HCs. Another factor was "political" strikes that have been common in Finland during the past decades. In the top fashion business firms strikes are devastating to a design firm's market position and international reputation.

The family business in Germany is a real success story. Their success rate of HCs has been **90%** as Simon (2009, 2014) reports. This is something unique in the world and against the prevailing views of leading business writers. The family business success rate was low in Britain a century ago (Chandler, 1990). Chandler's conclusion was that the family-ownership was the main reason why Britain came in late to the second industrial revolution. As a part of my analysis of Germany's global, economic miracle I started to read Hermann Simon's books of German Hidden Champions once more and suddenly I started to think that Chandler's conclusion was fully wrong. The facts of Germany's family firms are convincing. The US is the winner of Chandler's stock market capitalism but the majority of US firms are domestic-market-oriented.

In Germany *100,000 mid-sized firms have experiences of FDI operations and 400.000 companies are internationalized*. Chandler (1990) claimed: Personal capitalism is generally thought to be the old-fashioned model in comparison to the stock market capitalism. Simon (2009, 2014) claimed: The family-ownership is perhaps the most sustainable governance model in the global economy?

In 1977–9, I worked for the **Federation of Finnish Technology Industries (FFT)**, the biggest industrial sector in Finland: over 50% of Finnish exports and 80% of Finnish R&D-investment. Today, the employment effect is 700,000, equaling ¼ of the Finnish workforce. In 1977–79, the challenge was internationalization following the notions by Luostarinen (1979). Finland collaborated closely with other Nordic countries in internationalization. During that time I got to know how Finland made decisions of the devaluation of the Finnish currency – "Markka". The decision process was very instructive. Finland's dependency on some few export companies was high – so it is today although currency is now "Euro".

In the 1970s, **the US management methods (PIMS and BCG)** became popular in Finland. I started to analyze the PIMS as a FFT economist to provide to firms as Nokia reliable information on international markets. I also studied the US dissertation data-bases. The Finnish IO dissertations (Lahti, Salimäki, Killström, Luukkainen) provide promising results of the notion that strategic groups are 'real', not artefacts. These kinds of findings were possible since the researchers with long work experiences really understood the industry under study. The main contribution was the **mutual learning mechanism of group member firms** by a strategic group. I had an opportunity to make the acquaintance of **Howard Thomas** (Dean of Warwick Business School in 2000–10) who was the leading gestalt in the EU in the IO studies who provided me collaboration as his partner to develop further the European IO doctrine. The major problem for that was to find research financing since in Finland the new IO was a fully neglected field of applied economics. Most of professors in schools of economics had the view that Porter (1980, 1985, 1990) was the full story the modern IO – **so stupid**.

As the chairman of the *Finland's Federation of Scholarly Association of Management* I collaborated with firms and business schools. Besides that I was a board member in 30 SMEs, a specialist for the IO for the Council of Nordic Governments, OKO Bank, Electrolux and TeliaSonera. I did the IO analysis for about 300 growth companies in ten EU countries.

My favorite economist is **Joseph Alois Schumpeter** who described capitalism as developing by gales of creative destruction, by which new technologies supplant the old ones. A paradox of the literature on entrepreneurship is that the process of opportunity recognition and exploitation is supposed to happen in a vacuum, separate from the market structure elaborated by the modern IO. About 100,000 multinationals dominate the international trade of commodities worldwide. There are reasons for that. The main reason is the huge economies of scale available in the globalized markets. Another reason is the evolution of institutions that protect intellectual or immaterial properties in global context. I am sure that Hermann Simon's writings on Hidden Champions are **important contributions to contemporary management theories**. I have read thousands of books and articles about management and applied economics. They are mainly nonsense. I came to life as a researcher when having read Simon's books that in my view revolutionize the US-dominating business theories and practices.

Professor Simon gave me the key idea that monopolistic competition by Chamberlin and Krugman is related to Gutenberg, and to his own writing about Hidden Champions. I appreciate also my discussions with Adjunct Professor Dr. Bernd Venohr who is an active writer of topics.

Finland has some 30 big export companies of which the majority is downsizing their activities in Finland. I believe that we need to learn more about the German management doctrine. The **Hidden Champions method is an important element of competitiveness in Nordic countries**. Simon's view of Erich Gutenberg helped me to see why German companies outperform others. In Gutenberg's solution, the individual price-sales function (Preis-Absatz-Funktion) is assumed to be doubly kinked. In the monopolistic scope (monopolistische bereich) of the price-sales-function a firm can plan its marketing parameters (marketing mix), without having to fear reactions of competitors. German companies are able to interpret correctly the rules of the game of global pricing. Only some Finnish companies (e.g. Kone) are good in that. Most of Finnish SMEs do not know how they should construct a realistic pricing policy in global context.

Paul Krugman (New Trade Theory) combines the industrial structure with the production function and assumes significant economies of scale. About 99% of Finland's SMEs are in the size-class under 50 employees. According to my studies, the critical size-class of having some economies of scale is **500–1,000 employees**. In that size-class there are some tens of companies and Finland is seriously stagnated. Finland has only some hundreds fully internationalized companies that can fully utilize the significant economies of scale and about 300,000 small companies operating mainly in the domestic markets. Finland's large internationalized companies are investing in Asia and most of them have downsized their activities in Finland. So how to solve Finland's economic crisis. Finland has **about ⅓** of work force out of job. Germany has the world's best infrastructure when Finland's infrastructure is inefficient.

Nordic Small Business Research (Lahti & Pines, 1988) is an example of empirical study to elaborate opportunistic behaviour. This study from the year 1987 includes in an in-depth empirical analysis of 60 companies in three Nordic countries (Finland, Sweden and Denmark) and in four industries (clothing, furniture, metal and engineering and the IT-industry). The collected extensive database contains information on the entrepreneurial background and the company's strategy and performance. The model of entrepreneurial strategy making was made so that it covers the two stereotypes and three contingencies in-between (Figure 23):

1. **Craftsman behaviour** is characterized by low social awareness and involvement, feeling of incompetence in dealing with a complex environment, and limited time orientation.
2. **Opportunistic behaviour** is characterized by high social awareness and involvement, confidence in his ability to deal with a complex environment, and an awareness of, and orientation to, the future.

A craftsman behaviour is a 'historical' stereotype of entrepreneur. Incapable in dealing with a complex environment, this type of entrepreneur is not successful any more in global industries. An opportunistic entrepreneur characterised by broadness in openness in mind is the winner-type. These personality trails are also particular to successful scientists or artists in the emergent global society.

Based on the research, positionistic behavior with 80% opportunism and 20% craftsmanship is identified as the potential winner.

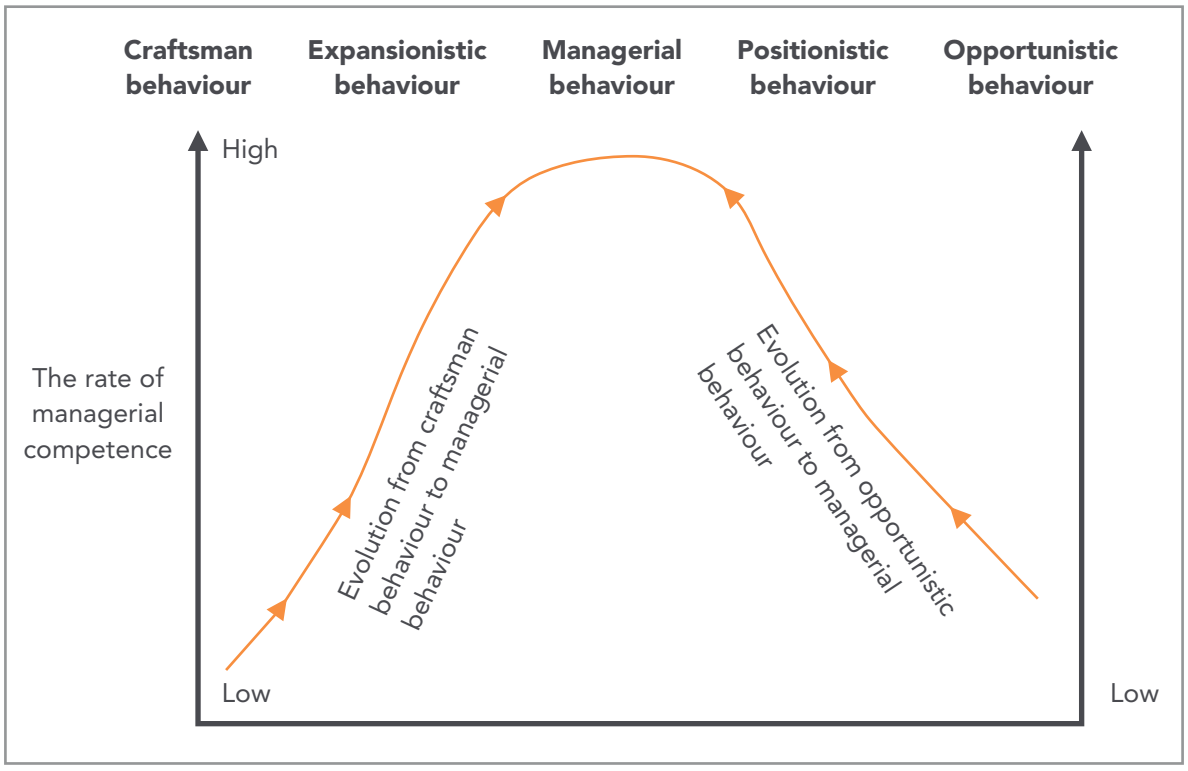

Figure 23: The five contingencies of entrepreneurs

Like the 'potentiality line' in Figure 24 demonstrates, positionistic entrepreneurs were supposed to beat their competitors in the 1990s, which actually happened. The most important finding was that the **strategic marketing orientation** (which is the crucial content of opportunism) seems to be the winning characteristic of the entrepreneurial strategy making in the three Nordic countries. But as well we could find that a high level of managerial competence seems to be a valid estimation of a future high level of economic performance, like Alfred Marshall noticed a hundred years ago.

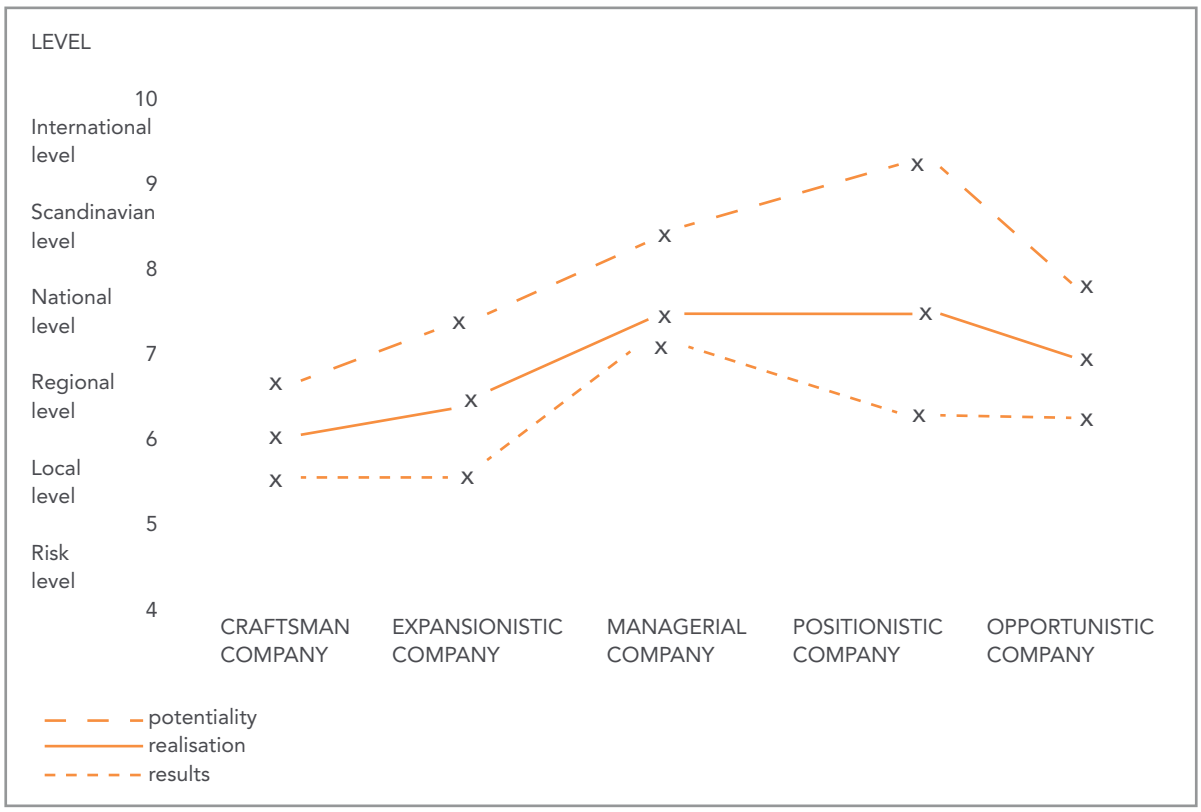

Figure 24: The performance of entrepreneurs

The Finnish success story in clustering in the 1990s has been the ICT-industries with at least the following advantages

1. **Young technology life cycle** – Nokia was the pioneering company in the rapid penetration of mobile technology
2. **Low capital costs** – Nokia and other companies of the ICT cluster could finance investments through the hype of the stock markets of the 1990s.
3. **Large expected demand in the selected global markets** – instead of focusing on current customers or product-markets, Nokia and its partners emphasize continuous reconfiguration of their offerings. They outperformed their global competitors and achieved a global leadership in the selected niche-markets.

4. **High industry profit margin** – Nordic ICT-companies adapted the notions of core competence by Hamel & Prahalad (1994) and utilized alliances and resourceful networks.
5. **Efficient but not too keen competition** – Nordic ICT-companies were able to source complementary competencies from small start-up companies through spin-offs, investment in start-ups, global distribution links, and the training and education of future entrepreneurs.

In the Nordic countries the inevitable success of the ITC cluster has much to do with **Ericsson** and **Nokia**. There are also more general institutional explanations. The Nordic countries have succeeded in their efforts to combine competitive and trustified capitalism in the Schumpeterian sense. The IT industry has earlier been state-owned. The early deliberalization and privatization transferred the focus from the state-owned trustified capitalism to the private and competitive capitalism. The pragmatism that often has been mentioned can be seen as the innovative, entrepreneurial behavior. Having its long history as a state-owned research laboratory, the core units of the Nordic IT companies have been able to combine the university organization culture with the competitive behavior. In the new challenging arenas of mCommerce (mobile commerce) entrepreneurial culture is powerful.

The Nordic IT companies have their own model of temporary monopoly profits in the Schumpeterian sense. Like Hamel & Prahalad (1994, 34–5) suggest **Nordic IT companies have shifted their focus from market share to opportunity share**. A trustified window of opportunities may be easy to see in the case of mCommerce. The huge speculation with the global, internet-based markets with a billion users means that the process of discovery in a market setting is totally chaotic. Because entrepreneurial opportunities depend on asymmetries of information and speculations in the stock markets, there are many winners and losers among the market participants.

Taken German as an example, it is possible to conclude that a good balance is needed between national multinationals and the entrepreneurial sector. In German small and mid-sized firms are profitable and even actively globalizing. Many other EU countries have stagnated since their small and mid-sized firms have not succeeded to globalize. An example of the sad country cases is Italy (the second biggest exporter after the US after the World War II). In Finland small and mid-sized firms are also stuck in domestic markets and **about 30 large firms represent 90% of Finland's export**. The success story of globalization is German Hidden Champions that in the early 90s succeeded to make their first bold jumps in the internationalization process. An empirical study of Finland's manufacturing sector (Lahti & Punakivi, 2012) gives an important explanation for that (Figure 25). The total sample size was 1,111 firms[17] (source: Asiakastieto Oy) that were divided into six size group according the number of employees:

1. 10–19 employees – 439 firms
2. 20–49 employees – 360 firms
3. 50–99 employees – 153 firms
4. 100–249 employees – 108 firms
5. 250–499 employees – 31 firms
6. 500–999 employees – 20 firms

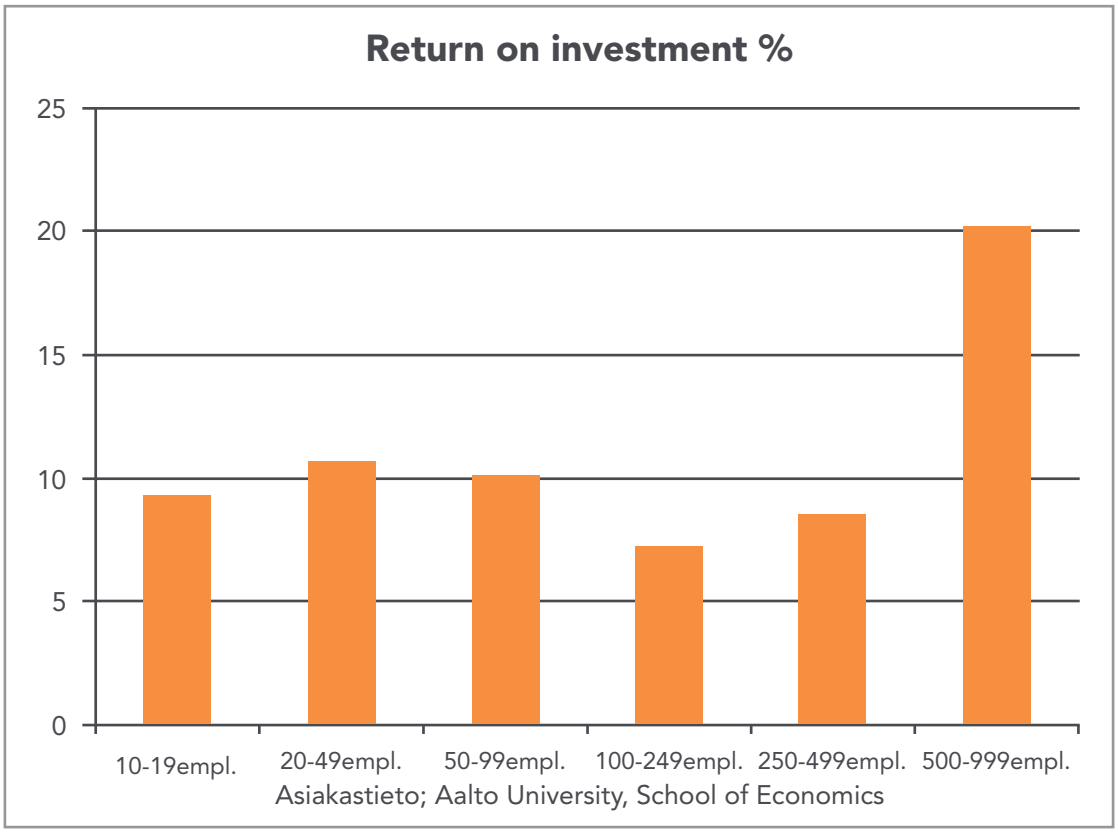

Figure 25: Finland's case

The key findings: The increasing returns on internationalization might be in the size class 500–999 employees in which firms are able to expand by hybrid operations, e.g. technology licensing. As the case HCs (Simon, 2009), there are no economies of smallness in globalization since SMEs are too small to utilize fully their intellectual capacity, including IPRs.

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ENDNOTES

1. Today, there are 18 top quality, entrepreneur driven companies in SEC, located mainly in the southern part of Finland. The cumulative turnover of the members is about EUR 200 million, and they employ some 2.000 individuals. SEC was established in 1993. http://www.secry.fi/english.htm
2. This development was largely performed in his first book "Wesen und Hauptinhalt der theoretischen Nationalökonomie" from the year 1908, which in English might be called "Essence and Scope of Theoretical Economics".
3. Chamberlin was one of the first theorists who applied the marginal revenue idea (implicit) of Cournot's monopoly theory. Brue & Grant, 2008, p. 543.
4. Horst Albach http://www.erich-gutenberg-arbeitsgemeinschaft.de/index.php/erich-gutenberg
5. Economics Graduate Students Give Galbraith Prize to Caves | News … www.thecrimson.com/…/economics-graduate-students-give-galbraith-prize/
6. http://www.ericsson.com/news/1741771
7. The Queen Victoria's reign from 1837 to 1901 was a period of peace, prosperity, refined sensibilities and national self-confidence for Britain. http://en.wikipedia.org/wiki/Victorian_era
8. Psychological Types, C.G. Jung (1921). Translation by H. Godwyn Baynes (1923) http://psychclassics.yorku.ca/Jung/types.htm
9. For instance, a curve showing a 15% cost reduction for every doubling of output is called an "85% experience curve", indicating that unit costs drop to 85% of their original level. https://www.bcgperspectives.com/content/classics/corporate_finance_corporate_strategy_portfolio_management_the_experience_curve_reviewed_history/
10. An average return on investment in market segments of less than $100 million dollars is 27%, while the return in large ($billion and over), and less differentiated markets averages about 11%, Buzzell & Gale, 1987.
11. http://www.malik-management.com/en/malik-solutions/malik-tools-and-methods/malik-pims
12. http://www.malik-management.com/en/malik-solutions/malik-tools-and-methods/malik-pims
13. According to his definition, a company must meet three criteria to be considered a Hidden Champion: Number one, two, or three in the global market, or number one on the company's continent, determined by market share, Revenue below $4 billion, Low level of public awareness. (Simon, 2009, p. 15)
14. http://meta.org.au/wp-content/uploads/2013/11/SimonKucherandPartners.pdf, p. 62.
15. Total count of Hidden Champions stands at 2734 worldwide and 1307 of them are from Germany and relatively large share from other German speaking countries: Austria: 116, and Switzerland 110. From Nordic countries Sweden has 49 HCs, Denmark 19, Finland 14 and Norway 13. http://meta.org.au/wp-content/uploads/2013/11/SimonKucherandPartners.pdf, p. 15.
16. HCs have had difficulties to protect IPRs in China where the protection of copyright is weak.
17. An empirical study of Finland's manufacturing sector (C, two-digit codes: 25, 26, 27, 28, 29, 30, 33)

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