MENDEL UNIVERSITY OF AGRICULTURE AND FORESTRY IN BRNO

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# ANALYSIS OF WATCHES INDUSTRY

Diploma Thesis

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Declaration

I declare that I have created this Diploma Thesis by myself and that I have used only resources which I quote and which are stated in the enclosed list of used resources.

In Brno, at 2nd July 2008 ……………..……………………………

I would like to thank to the tutor of my Master Thesis, Prof. Ing. Libor Grega, Ph. D. for the expert conduct and for the help provided by processing of the Master Thesis. My sincere thanks belong also to my family and friends for their never ending support to me.

# Abstract

This diploma work aims on qualitative market analysis in the branch of watchmaking with specialized aiming on wrist watch. This analysis relates to the world and also domestic market of Czech Republic.

In the theoretical part we describe SCP diagram from which we are coming out to identify relevant factors for this certain branch. As part of SCP diagram we focus on the description of market structure and its indexes.

In practical part we focus on branch description, market subjects characteristics and thein behavior in market environment and practical evaluation of existing market structure in the branch and its key characteristics.

# Abstrakt

Diplomová práce se zabývá kvalitativní analýzou trhu v oboru hodinářském, se speciálním zaměřením na náramkové hodinky. Tato analýza se vztahuje ke světovému trhu i k domácímu trhu – Česká republika.

V teoretické části si popisujeme SCP diagram, z kterého vycházíme pro určení relevantních ukazatelů pro dané odvětví. V rámci SCP diagramu se blíže zaměříme na popis tržní struktury a jeho ukazatele.

Druhá, praktická část je věnována deskripci odvětví, charakteristice jednotlivých subjektů na trhu, jejich chování v tržním prostředí  a praktické hodnocení existující tržní struktury v oboru a jejích klíčových charakteristik.

# Content

# 1 Introduction

Watchmaking is a part of production sector, earlier it was workmanlike making of watches, and today it is maturated rational industry.

Tradition of horological industry was born at the end of 17th century and is strongly connected with Switzerland, where it belongs to the pivotal sectors. At this time only in Switzerland this sector employs more than 30 thousand of qualified workers.

From that time watchmakers went through various transformations, expansions and even failures. Presently we can say that the watchmaking over the last 10 years is growing and that this sphere became really attractive business for lot of companies.

From my opinion not so many people paid sufficient amount of attention to this sector as it deserves mainly thanks to its history and characteristics of watchmaking.

By this diploma thesis I would like to show to attentive reader depths of horological sector. If we look at it closer we can see that watchmaking offers several possibilities of how to deal with it:

Watchmaking is a part of fashion: watch by itself are becoming an inseparable accessory of fashionmongers that use exploitation color schemes, material and manufacturing differentness of these composed products.

Watchmakers like complicated subtle machines: these machines epitomize meticulous work of watchmakers that show their acquirements to one of the smallest technically perfect machines.

Watchmaker's as a part of artistic production: wristwatches are nowadays already part of depository in many private collections and museums. This collecting usually becomes their hobby.

Watchmaking and its basic function – actual time showing: hardly anyone of us that is daily watch wearer, who forgets to put them on in the morning feels without them certain.

Owners of wrist watch should be aware of fact that he isn't only holder of time information but that he actually is an owner of personal work of art, stylish supplement, or perfectly processed machine that is connected with magic and history of this sector.

This all is the main reason why I chose this for my diploma thesis topic. Watchmaking is fascinating sphere, that is not only sphere of data and numbers, but has also gigantic magic as for firms, so for final consumer.

# 2 Objectives and metodology

Objective of this master thesis is analysis of world's watchmaking market, especially wrist watch. Watchmaking is specific sphere that doesn’t have personal independent nomenclature and is inclusion in accessories and jewels. Thesis bears universal view of worldwide production, with a focus on market structure.

Main objective of this thesis is to analyze the structure of watch industry market. At elaboration of this analyze we used using method of qualitative analysis where the point of work was SCP approach. With the help of SCP approach we have shown in theoretic part main partial objectives and in the following chapter we have evaluated the objectives that were important for the sector and we introduced them in practice. Partial objectives will be analysis of crucial determinants in this concrete industry. We will describe closely structure of the market and its concentration, product differentiation, barriers to entry and integration.

During the processing of partial aims we've used methods; analysis, study of literature, controlled talks with experts from the sector and own experiences.

Controlled talks were based on prepared structure. They were done telephone conversation where the preparation was made with use of information from the internet. The main subjects of talks was to question about size and character of companies, specially integration of companies, on which markets are targeted and type and gauge of consumers.

In the conclusion we will sum up records from analysis. We will also recall most important factors of sector and at what direction is going to. At the end of my thesis we will also sketch what are the possibilities for new subjects when entering into this branch.

# 3 Literature review

## 3.1 Markets and industries

A market can be defined as a group of buyers and sellers involved in exchanges. This definition, however, is rather vague since it fails to specify how the members of the group are to be identified. Intuition would suggest that all buyers and sellers of the same product should be grouped together. But what is the same product? A variety of definitions each based on any one of the many features that characterize a market transaction can be devised. Some of these relate to the physical characteristics of the product and others to buyer characteristics such as income, age or location, or to producer characteristics such as location of production, the production process or the raw materials used. [1]

### *3.1.1 Market structure – conduct – performance (SCP)*

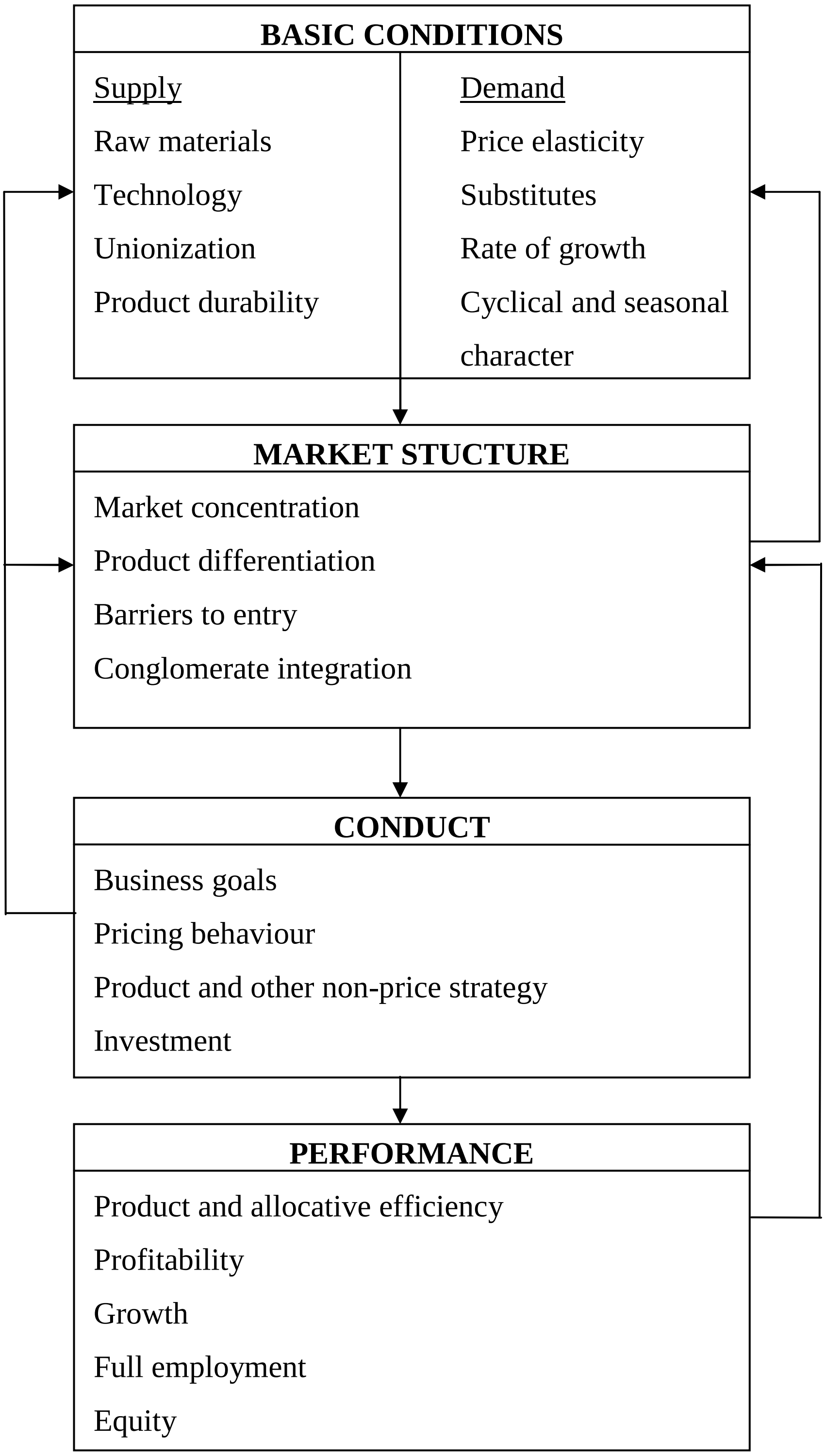
Market structure conduct and performance (SCP) framework was derived from the neo-classical analysis of markets. The SCP paradigm was the brain child of the Harvard school of thought and popularized during 1940-60 with its empirical work involving the identification of correlations between industry structure and performance. This SCP hypothesis has lead to the implementation of most anti-trust legislation.

**Structure**: refers to market structure defined mainly by the concentration of market share in the market.

**Conduct**: behavior of firms - competitive or collusive (pricing, R&D, advertising, production, choice of technology, entry barriers, predation...)

**Performance**: social efficiency: mainly defined by extent of market power (greater market power lower efficiency). [11]

Picture 3.1: *A model of industrial organization analysis*




*Source:* [2]

There are two competing hypotheses in the SCP paradigm: the traditional ***"structure performance hypothesis"*** and "***efficient structure hypothesis"***.

***The structure performance hypothesis*** states that the degree of market concentration is inversely related to the degree of competition. This is because market concentration encourages firms to collude. More specifically, the standard SCP paradigm asserts that there is a direct relationship between the degree of market concentration and the degree of competition among firms. This hypothesis will be supported if positive relationship between market concentration (measured by concentration ratio) and performance (measured by profits) exist, regardless of efficiency of the firm (measured by market share). Thus firms in more concentrated industries will earn higher profits than firms operating in less concentrated industries, irrespective of their efficiency. [1]

***The efficiency structure hypothesis*** states that performance of the firm is positively related to its efficiency. This is because market concentration emerges from competition where firms with low cost structure increase profits by reducing prices and expanding market share. A positive relationship between firm profits and market structure is attributed to the gains made in market share by more efficient firms. In turn these gains lead to increased market concentration. That is, increased profits are assumed to accrue to more efficient firms because they are more efficient and not because of collusive activities as the traditional SCP paradigm would suggest (Molyneux and Forbes, 1995).

Traditionally, these hypotheses have been examined using the traditional measures of profit/profit margin as indicator of performance. [1]

### *3.1.2 Market share*

Market share is the share of firm *i* in time period *t*. The proportion of the market that the firm is able to capture can measure the firm's performance relative to competitors. This proportion is referred to as the firm's market share. Market share is often associated with profitability and thus many firms seek to increase their sales relative to competitors. Market share is estimated by dividing individual firm's revenue with the total industry revenue.

The market concentration of firms in an industry is of interest to economists, business strategists, and government agencies. Here, we discuss one of the two most commonly used methods of measuring industry concentration - the ***Concentration Ratio***. The other commonly used method to compute the concentration ratio is the ***Herfindahl-Hirschman Index (HHI)***. The concentration ratio is the percentage of market share owned by the largest *m* firms in an industry, where *m* is a specified number of firms, often 4, but sometimes a larger or smaller number. In our study we used the 10-firm concentration ratio. The concentration ratio often is expressed as $CR_m$, for example, $CR_{10}$. The concentration ratio can be expressed as [2]:

$$CR_m = s_1 + s_2 + s_3 + ... + s_m \quad , \qquad (3.1)$$

where $s_i$ = market share of the $i^{th}$ firm.

### *3.1.3 Industrial concentration*

Market concentration refers to the extent to which production in a particular market is controlled by a few firms. This is also known as seller concentration and is determined by the number and size distribution of sellers. Buyer concentration is similarly defined by the number and size distribution of buyers operating in a particular market.

Seller concentration has important implications for the behavior of firms in both differentiated and homogenous product markets; this is for several reasons. [2]

**Measurement of concentration:**

If firms identical (symmetric), with $n$ firms, each firm has $1/n$ market share, concentration is inversely related to number of firms.

If firms hold unequal market shares, number of firms is not likely to capture concentration. [2]

***Concentration ratio***

The Concentration ratio ($CR_i$) is simply the sum of the market shares of the $i$ largest firms in a market, where $i$ is a small number (usually 3-5). Industry size can be measured in terms of value or volume of sales, employment or capital employed. The five-firm concentration ratio, $CR_5$, is commonly used in the UK while $CR_3$ or $CR_4$ are more common in the USA and other countries.

The *CR* is but one of a number of indices given by the concentration curve. The concentration curve is derived when we plot the cumulative sales (output or any other measure of market size) against the cumulative number of firms starting from the largest.

Compared with other indices, a *CR* has the advantage of simplicity in construction and interpretation. There are serious weakness of the *CR* relates to changes over time. [1]

***Herfindahl index of market concentration***

Suppose there are $n$ firms in an industry. For each firm $i$, let $q_i$ to be the output produced by firm $i$. Total output in the industry;

$$q = q_1 + q_2 + ... + q_n. \qquad (3.2)$$

The market share of each firm *i* is denoted by;

$s_i = q_i/q.$ (3.3)

Herfindahl index:

$H = s^2_1 + s^2_2 + ...s^2_n$ (3.4)

So, the Herfindahl index tells us that industry II is more concentrated. [1]

***Measurement of market power (Lerner Index)***

Market power usually measured by the relative mark-up of price above marginal cost, called the Lerner index. If all firms have identical marginal cost of production then

$L = p-MC/p$ (3.5)

What if firms have different MC of production? Then, the Lerner index looks at the weighted average of each firm's mark-up of price above marginal cost where the weight is the market share of each firm. If there are *n* firms and $s_i$ is the market share of firm *i*, $MC_i$ is the marginal cost of firm *i*, then

$\boldsymbol{L = s_1(p - MC_1/p)+s_2(p - MC_2/p)+....+s_n(p - MC_n/p)}$ ***(3.6)***

The SCP paradigm believed that H → L, differences in H explains differences in L. [3]

## 3.2 The substitutability criterion – product differentiation

In analyzing the behavior of firms the need to group similar products together arises because firms, as decision makers, select their decision variables after considering the possible reactions of other competing firms. But while all firms are likely to be affected to a certain extent by each other's actions, it is infeasible or extremely costly for a decision maker to consider the possible links and interactions of a large number of competitors. Decision makers are more likely to confine their attention to those firms whose behavior they believe to have a significant influence on the result of their own actions. It is reasonable therefore to assume that the extent to which firms take each other's actions into consideration depends on the extent to which products are considered as substitutes for each other by their consumers or producers. A market should, therefore, be defined broadly enough to embrace all those goods or services which are regarded as substitutes by buyers or sellers.

$$Cross-price\,elasticity\,of\;demand\,(e_c)-CED=\frac{\%\,change\,in\,quantity\,of\;x}{\%\,change\,in\,price\,of\;y} \quad (3.7)$$

This is defined as the ratio of the percentage change in the quantity demanded of one product $X$ over the percentage change in the price of another product $Y$ assuming that other variables such as consumer incomes or preferences remain constant.

High positive values of $e_c$ indicate close substitutes and very high values indicate almost identical products since small price changes induce customers to switch between the two brands. [2]

### *3.2.1 Product differentiation as a barrier to entry*

Product differentiation refers to the extent to which consumers perceive products to be different. Whether real or imagined, product differentiation can have a significant influence on consumer preferences which in turn influence the shape and position of each firm's demand curve and consequently the distribution of market shares and the degree of market concentration. To influence consumer preferences through product differentiation firms may need to incur higher costs since quality improvements may require additional resources and reputation effects may be sought through increased advertising or increased expenditure on R&D and other promotional activities. To the extent that firms succeed in concentrating preferences on their products, consumers become reluctant to switch to new products and the phenomenon of 'brand loyalty' arises. Brand loyalty reduces substitutability among products.

Strong product differentiation and brand loyalty affect the extent of barriers to entry for various reasons. First, to enter a heavily-advertising industry, potential entrants will need to raise sufficient capital to be able to match the advertising campaigns of the incumbent firms. Second, even assuming no advertising, differentiation can provide incumbents with the means of adopting a successful entry prevention strategy. This is true whether differentiation is vertical or horizontal. [11]

## 3.4 Barriers to entry

The theory of entry barriers originates from the seminal work of Joe Bain which he developed in order to explain his empirical observations on pricing. His observation that firms tended to price their products at a level lower than the profit maximizing level he attributed to the influence of potential entry. When entry into a market is possible, he suggested, firms may choose to charge a price lower than the full monopoly price in order to discourage or prevent entry so as to maximize their long-term profitability. His observation that potential competition did not force firms to charge the competitive price he attributed to the existence of entry barriers.

Bain (1956) defined barriers to entry in relation to the extent to which new entrants may be disadvantaged relative to established firms. More specifically, he defined barriers as "the extent to which established sellers can persistently raise their prices above a competitive level without attracting new firms to enter the industry". Barriers are therefore anything that allows a high price to persist in the long run. Indeed Bain defined the height of entry or the condition of entry E, as the percentage mark-up of the maximum entry forestalling price overt the minimum attainable average cost of the established firms:

$$E = \frac{P - \min AC}{\min AC} \tag{3.8}$$

Bain's definition enjoys widespread popularity. Yet, several other definitions of barriers to entry have been proposed which are independent of business conduct.

Demsetz (1982), for example, has suggested that barriers to entry are always related to government-based restrictions. In the absence of such restrictions competition would prevail and monopoly rents would be eliminated in the long run. Thus, any restriction imposed by government which increases cost of production constitutes entry barriers.

Stigler (1968) defines an entry barriers as a cost of producing (at some or at every rate of output) which must be borne by a firm which seeks to enter an industry but is not borne by firms already in the industry. According to this definition when established firms and potential entrants face the same cost and demand conditions there are no barriers to entry. In brief, Stigler's definition can be too narrow.

More recently economists interested in the welfare implications of business behavior and in questions of whether and under what conditions governments are justified in intervening to regulate the economy have defined barriers to entry in terms of their welfare implications. The laws on patents may be used to illustrate this. Patents are barriers to entry. They provide protection to innovators from imitation and competition by prohibiting entry over a certain time period. They therefore give monopoly power to patent holders.

The welfare implications of barriers to entry are explicitly introduced in the definition adopted by Weizsacker (1980) according to which barriers are socially undesirable limitations of entry, which are attributable to the protection of resource owners already to the industry. Clearly this definition extends the concept of barriers by considering explicitly their desirability. It is therefore more controversial than Bain's definition although the latter also incorporates some value judgments.

Joe Bain was one of the first economists to explore, in depth, barriers to entry/exit into industries, both from a theoretical perspective and from examining actual industries. One of his contributions was the classification of barriers to entry into next four broad groups. [1]

### *3.4.2 Absolute cost advantage*

Incumbent firms may be able to achieve lower per unit of production costs compared with potential entrant for various reasons which include the following.

1. They may have and exceptionally skilled management team or other scarce resources which new entrants cannot reproduce.
2. They may possess superior techniques and know-how possibly protected by patents. Ownership of patented superior resources confers a double advantage to the firm: a cost differential and protection from imitation. Patents are by their nature barriers to entry intended to provide innovators with protection from imitators for a certain period of time. Despite their restrictive influence on competition, patents may actually improve consumer welfare since the prospect of protection of expected profits may encourage further expenditure on R&D which is necessary for continued innovation and economic progress. It is possible, however, that patents may be used strategically with adverse effects on competition and innovation.
3. They may have control of the supply of raw materials. Monopolization of an essential raw material may imply higher costs for competitors since they have to use either more expensive or inferior substitutes. Furthermore, if control of an essential raw material is combined with vertical integration then the producer of the resource can refuse to supply its competitors at the succeeding stage of production or can supply them under unfavorable terms.
4. The cost of capital may be lower for existing firms. It is often the case that incumbent firms can build a good reputation which, especially when combined with financial strength, implies that incumbents are able to raise capital at a lower cost compared with new entrants. This king of barrier to entry, however, is created by imperfections in the capital market rather than by the structure of the producer sector or the behavior of producers.
5. The production of incumbent firms may be lower than the cost of potential entrants due to the beneficial effects of vertical integration. Bain found that in industries such as copper, cars and petroleum refinery backward integration by the entrant is necessary if serious cost disadvantages were to be avoided. But

vertically integrated entry implies that entry at a large scale must be contemplated which creates the need for larger initial capital requirements which can impede entry altogether. [1]

### *3.4.3 Capital requirements*

The existence of imperfect capital markets implies that when firms need to raise substantial sum of capital in order to start production, entry into a market will be difficult. This is confirmed by empirical studies which show that initial capital requirements are an obstacle to entry in the case of the production of steel, automobiles, oil refining, tractors, cigarettes, etc. The significance of this barrier is confirmed not only by case studies but by cross-section evidence. Orr (1974) for example, who used cross-section data from seventy-one Canadian industries to examine barriers to entry, suggest that initial capital requirements, advertising and concentration are the most significant entry barriers.

**Capital cost requirements**: dollar amount of capital necessary that a firm must possess in order for the firm to produce at the MES level of output in the market under consideration.

As the name suggests, this refer to a firm’s ability to raise sufficient capital, and the accompanying costs of acquiring that capital, so that it can compete in the market. If these requirements are high, they may constitute a barrier to entry into the market.

Capital cost barriers often arise from potential entrants facing higher costs of borrowing the financial capital needed to purchase the required physical capital. In other words, potential entrants may be charged higher real interest rates than their predecessors were.

The barrier here is not due to the potential entrant having capital cost requirements (which the existing firms also would have faced); instead, the barrier results from the potential entrant facing higher real financing costs than the existing firms in the market faced.

Some of the above answer does hinge on there being different risk factors associated with the 2 groups in question. However, economists have found that many banks actually charge smaller firms a premium above what is warranted by the risk differential between smaller and larger firms. In this case, a socially undesirable barrier to smaller firms is created. [12]

### *3.4.4 Economies of scale*

When economies of scale are important so that the volume of production at MES is large compared with the market size, the industry may be able to sustain only a small number of efficiently operating firms. Potential entrants may find it difficult to enter even if they can produce at the same cost as incumbents. This is particularly true since existing firms may be able to adopt a price which is both profitable and prevents new entry. When MES occur at large volumes, new entry must be a large scale if the potential entrant is to achieve the same per unit cost as an incumbent operating at or near MES. But, given the market size, this implies a substantial increase in output and a concomitant reduction in price. If price is expected to fall below the average cost of production the prospect of losses can discourage new entry. The extent of this barrier to entry depends both on the size of the MES in relation to the market and on the price elasticity of demand.

Economies of scale are best analyzed in terms of three categories: product specific economies, associated with the volume of any single product made and sold; plant-specific economies, associated with the total output of an entire plant or plant complex; and multi-plant economies, associated with an individual firms' operation of multiple plants. [3]

### *3.4.5 Vertical integration*

The production of any goods or service usually involves several technically separable stages. Vertical integration is the term used to indicate the exterit to which several stages of production are undertaken by a single business enterprise. The same term is also used, in a more dynamic sense, to refer to the process by which firms expand their operations vertically by investing new resources or by acquiring other firms in succeeding or preceding stages of production.

When the process of expansion involves succeeding stages, such as final production or distribution, the term forward (or downstream) vertical integration is used, while backward (or upstream) vertical integration refers to expansion into preceding stages, such as the production of raw materials or semi-finished products. The extent of vertical integration varies not only among industries but among firms of the same industry. [2]

#### *Measures of vertical integration*

When corporate decisions on expansion are predominantly induced by attempts to economize on costs, vertical integration enhances efficiency. There is some controversy, however, as to whether the efficiency motive of integration derives from production or transaction cost savings. The distinction may be of some significance in understanding the diversity of business behavior. [2]

***Production efficiency***

When two stages of production are technologically interdependent, integration that may reduce production costs. In addition to technological economies other cost savings can be achieved by integration. But the integration can not always enhance efficiency. If a firm specializes in one stage of production and sells and intermediate product to several other firms it may be possible to obtain economies of large-scale production which will not be present when production is restricted to the firm's own needs. [1]

***Economizing of transaction costs***

While technological interdependencies or other production cost savings may undoubtedly contribute to integration, Williamson (1975) and others have shown that production cost efficiency is rarely a sufficient explanation of integration. In other words, transaction costs may be present to an extent that renders inter-firm trading inefficient and induces integration. A transaction cost is the decisive factor. It is the presence of transaction costs that leads to integration rather than any technological interdependencies. Technology may indicate that two stages of production must be in close proximity but this is an issue quite separate to the question of who owns each stage. When the ownership of the two stages does not concide, however, a market exchange is required for the good to pass from one stage to the next. In circumstances in which such transactions become very costly, either because of contractual difficulties or because of post-contractual opportunistic behavior, common ownership economizes on transaction costs or integration becomes efficient.

To be able to assess the extent and impact of VI we need to quantify it. Quantification, however, is fraught with problems arising from the difficulties of product definition to measuring value added on each stage of production. As a result a variety of indices are used in empirical work, the main ones of which are as follows. [1]

***Value added/Total sales***

This index is based on the idea that the higher the value added by a firm the more integrated the firm is. But there are serious limitations to this index since any price changes or changes in profitability or taxation, over time, will appear as changes in the extent of integration. Additionally, this index may not be very useful for comparative objectives because its size reflects the stage in which the firm operates and not just the extent of integration. Thus, two firms with the same value added but operation at different stages, one at the initial and the other at the final stages of production, will appear to have a different degree of integration. [1]

***Value of inventories/Total sales***

The rationale of this index is that the more stages of production undertaken by the firm the higher the inventories will be in relation to total sales. This may be misleading since integration reduces the uncertainty related to supplies and will tend to reduce the required volume of stocks at each stage. Thus, the overall value of inventories may or may not increase. Moreover, relative prices may change over time giving, as noted under (1), different indices even though integration has remained the same. [1]

***Total inter-firm purchases or transfers/Total amounts of inputs used by the firm***

This has been used as an index of backward integration and the equivalent for forward integration is: total inter-firm transfers of output/total output at a stage. [1]

## 3.5 Vertical, horizontal and conglomerate integration

***Vertical integration***

The degree to which a firm owns its upstream suppliers and its downstream buyers is referred to as vertical integration. Because it can have a significant impact on a business unit's position in its industry with respect to cost, differentiation, and other strategic issues, the vertical scope of the firm is an important consideration in corporate strategy.

The concept of vertical integration can be visualized using the value chain. Consider a firm whose products are made via an assembly process. Such a firm may consider backward integrating into intermediate manufacturing or forward integrating into distribution. [13]

***Horizontal integration***

horizontal integration describes a type of ownership and control. It is a strategy used by a business or corporation that seeks to sell a type of product in numerous markets. Horizontal integration in marketing is much more common than horizontal integration in production. It is contrasted with vertical integration. Horizontal integration occurs when a firm in the same industry and in the same stage of production is being taken-over or merged with another firm which is in the same industry and in the same stage of production as of with the merged firm. [12]

### *Conglomerate integration*

Economies of scope or the existence of surplus resources provide an efficiency rationale for product or market extension rather than for pure conglomerate diversification. The only excess resource that could profitably be utilized in pure conglomerate diversification is the entrepreneurial and managerial talents residing within a firm. Such talents may be released by the adoption of an M-form organizational mode. Indeed, Williamson (1975) considers conglomerates as the logical outgrowth of the M-form organizational structure. In assessing investment opportunities, conglomerate firms may have distinctive advantages over external capital markets.

Multidivisional firms can establish an internal capital market which is more efficient in allocating resources than the external capital market. The reason for this is that shareholders and other members of the external capital market are not as well informed as managers about the opportunities available within firms. This information impactedness which renders capital markets less than perfect is due to informational costs and difficulties. Managers are not only better informed, they can better assess a diverse range of investment opportunities due to the monitoring and control system employed by M-form firms. The rationale for conglomerate firms, therefore, is the internal capital market. There are of course limitations to the superiority of the internal capital market. Bounds on rationality at the top may result in trade-offs between the breadth and the depth of investment opportunities. Managers may find it easier to acquire a better knowledge of a limited range of alternatives. More seriously perhaps, managers may not be motivated to pursue policies that maximize shareholder wealth. [2]

# 4 World market structure

Right before we apply theoretical part on horological industry we will present what is the right meaning of word "quality" in watchmaking industry and how is it defined. We will also look how far the roots of watchmaking industry go, what was its development, where the most crucial markets are and how their position in this sector is.

## 4.1 Definitions

### *4.1.1 Swiss made*

Watches, clocks and alarm clocks manufactured in Switzerland bear the designation “Swiss made” (or its abbreviation “Swiss”) as well as the logo of the producer or distributor. This label (“place of origin” in legal terms) enjoys a solid reputation throughout the world. And globalization of trade has done nothing to diminish its importance.

“Swiss made” embodies a concept of quality that has been forged over the years. It includes the technical quality of watches (accuracy, reliability, water-resistance and shock-resistance), as well as their aesthetic quality (elegance and originality of design). It covers both traditional manufacturing and new technologies (micro-electronics).

Law regulating the use of the name “Swiss” for watches” sets out the minimum conditions that have to be fulfilled before a watch merits the “Swiss made” label. This law is based on a concept according to which Swiss quality depends on the amount of work actually carried out on a watch in Switzerland, even if some foreign components are used in it. It therefore requires that the assembly work on the movement (the motor of the watch) and on the watch itself (fitting the movement with the dial, hands and the various parts of the case) should be carried out in Switzerland, along with the final testing of the movement. It also requires that at least 50 % of the components of the movement should be manufactured in Switzerland. [7]

***New criteria for “Swiss made” label***

The Federation of the Swiss Watch Industry (FH) has recently voted by handsome majority for strengthening criteria for the 'Swiss Made' label. According to the secret ballot, there were 52 votes 'for' and 8 'against' reinforcing of the federal law on the 'Swiss Made' label featured by watches.

The brand name is one of the major factors implying the product's quality and prestige in watchmaking, while the 'Swiss Made' label holds the second position by its importance. It is used as a valuable distinction that should not disillusion the customers. 'Swiss Made' indicates the watch's origin and serves as the customer's guidance when he is making his choice.

At the moment, 'Swiss Made' is basically relevant only to watch movements whereas customers acquire a finished timepiece. In fact, in 1992 the watch industry witnessed two amendments to the law specifying that the casing-up and final inspection must be carried out in Switzerland, but it almost did not change the situation.

The reinforcement of the Swiss Made label is expected to cause supply problems. It will require several years and suppliers, the same as watch brands, will have to adapt to the new criteria. The leading watch companies, with their weight within the Federation of the Swiss Watch Industry equal to their presence in the watchmaking market, had already supported the idea of stricter criteria.

The provisions voted by the assembly are relevant to both the timekeeping mechanism and the finished watch. The new project has suggested a value criterion for finished watches. So, what are the basic rules for the Swiss-Made mechanical watches to be worth featuring the 'Swiss made' label, according to the new ordinance? Consider the following:

1. the Swiss-Made mechanical watch must have ***at least 80 percent*** of its production cost relevant to operations conducted in Switzerland. For electronic watches, the rate makes ***up 60 percent***.

2. the watch's technical construction and prototype development ***must be fulfilled in Switzerland.*** Production cost does not include raw materials, gems and batteries.

3. under the old ordinance, 50 percent of the movement's value must be relevant to Swiss-made parts. For the mechanical movements, the FH proposed to increase this proportion to a minimum of 80 percent, and to 60 percent for electronic movements. [7]

At present time representatives of the watchmaking industry interested in the issue hope that Swiss Made will finally reflect quality worthy of the Swiss name.

## 4.2 History and development of watch industry

### *4.2.1 History of the wristwatches*

Up to these days the development was from pocket watch to a fashion accessory. What was once, in the earliest years of portable watches, considered to be unsuitable for men and only for women, has developed today into a fashion utensil that everyone has. In the meantime, the wristwatch is no longer only a tool to tell the time. It is a designer piece and can indicate much more than the time.

***A great deal of mechanics in a small housing***

The first verifiable portable timepiece was built in 1500. This was not a wristwatch, but more of a pocket watch. Through technical progress, which made it possible for people to house mechanics in an increasingly smaller space, the necessary parts of the clockworks were able to be brought into a manageable form. In this way, the first pocket watch was born, which at the time was still the size of an egg.

***The turn of the 20th century on the wrist***

With the turn of the 20th century, another level of technical progress was reached, which made it possible to house the mechanics in an even smaller space. It was now possible to condense the clockworks in such a way that one could fasten them to a wristband without a problem. The practical application of this new discovery allowed the pocket watch to be quickly replaced by the wristwatch. It quickly became the fashion to wear a wristwatch. It seemed like the models sprouted from the ground and the variety developed with immense speed. In the early years, however, wristwatches were worn only by women. Men did not wear timepieces on their wrists. It just wasn't done. The war brought a change of mind concerning this. The soldiers quickly recognized the advantage of a watch on the wrist, which didn't have to be pulled out of the pocket first. And in this way, the wristwatch prevailed with the male sex.

***Away from the mechanical - on to electronics***

While the first watches were still being wound, some innovations developed in relation to the mechanics. The automatic watch emerged, which no longer had to be wound manually, but was wound automatically through the movement of the clock. Later, at the end of the 20's, the quartz watch was invented. Time was indicated here by the so-called electronic oscillating circuit.

***The computerized wristwatch from Japan***

A completely new watch came onto the market in the 1970's from Japan, which had developed its own watch industry. The new watch from Japan was no longer set on a mechanical basis, but on a computerized control. This watch expanded its range of capacity quickly. The watch no longer just showed the time. The little timepiece on the wrist now also knew the date, the day of the week and even knew whether a leap year was involved.

***The wristwatch as jewelry***

Nowadays, the wristwatch is no longer just a watch. The wristwatch has become a fashion accessory. Watches come in all colors and shapes imaginable. One can also buy compatible watches from every fashion collection. The current watches are dominated by the correct fashion trends. Despite these different trends, there is something for every taste. The small watches, which require glasses to tell the time, and the extravagant giant watches, which make it hard to walk upright. In any case, one thing is sure: science is still likely to make so much progress - that the wristwatch will be found on the wrists of people for a long time, to answer the question as to what time it is.

***4.2.2 Main markets***

***Hong Kong***

In the 1950s, Hong Kong began assembling mechanical watches from components imported from the U.S.S.R., but had little impact on the mechanical watch market. In 1974 Hong Kong factories began assembling LED and then LCD watches for export. Concentrating on low-end modules that cost pennies to make, Hong Kong by 1978 exported the largest number of electronic watches worldwide. Both traditional watchmaking firms and the U.S. semiconductor companies competing in the consumer electronics market were irreparably damaged.

***The United States***

*The quartz revolution revitalized the U.S. watch industry.*

Before the quartz revolution, the American watch industry was in a slump. Although the U.S. had been a strong competitor in the international watch market since the 1870s, many American companies had gone out of business or had been bought out by foreign interests by the 1960s. This situation improved with the invention of the quartz watch in

1969. The U.S. took the technological lead in developing the new quartz watches thanks to microelectronics research for military and space programs.

*Price wars forced many competitors out of business.*

Even though Swiss and Japanese inventors were developing quartz capabilities of their own, it was the new U.S. semiconductor companies--Texas Instruments, Fairchild, and National Semiconductor, for examples--that started mass production of digital quartz watches. Competition among these companies quickly forced prices down. The traditional U.S. watch companies that had survived the lean years after World War II were unable to compete and further declined in number.

*The U.S. lost its lead to countries with cheaper labor supplies.*

The U.S. lead was short-lived. Countries with cheap labor supplies, like Hong Kong, began mass-production of cheap quartz watches and flooded the market. The American semiconductor companies that had survived their own price wars at home now dropped out of the watch business completely.

***Switzerland***

Switzerland had long been the world leader in watch production and sales. With a host of well-known brands extending from economical to luxury products, Swiss watchmaking had enjoyed a reputation of fine craftsmanship.

*The Swiss invented the world's first quartz watch, but did not immediately capitalize on their invention.*

In 1962 the Centre Electronique Horloger (CEH) formed to develop electronic watches. The key results were the world's first quartz watch prototypes, which were presented in 1967. The first manufactured product, the Beta 21, was developed and produced in 1968/9 and was commercially available in April 1970. Despite this headstart, the Swiss watch industry as a whole failed to see the enormous market potential of the quartz watch. Sure of their leadership, they focused instead on improving the existing mechanical technology.

The Swiss watch industry eventually recovered from the effects of the quartz revolution. Together with world economic recession, the quartz revolution forced the Swiss watch industry to make structural changes. While the number of Swiss watch companies dropped from about 1600 in 1970 to 600 today, the introduction of new technologies and modern production facilities, combined with new products and marketing strategies ultimately brought renewed success. The total export value of Swiss watches grew from

2.6 billion Swiss francs in 1970 to 8.1 billion Swiss francs in 1997, and today Switzerland continues to be the world's leading watch exporter in terms of total value. The success of Swatch undoubtedly helped to sustain this recovery.

***Japan***

*As with the U.S., Japan eventually lost its lead in the world market.*

Japan's labor costs, though, were no match for cheaper labor pools elsewhere, and Hong Kong became the world's leading exporter of watches. []

### *4.2.3 Trends*

We’ve all heard that watch is the single most important accessory for a man. It may appear that many men understand this since almost every guy has a watch on his hand, but for watches to be considered fashion accessory watches must be not only functional but also stylish and “in vogue”.

The big trend is big watches, both in size and in shape. Many are more than 40 millimeters in diameter. This trend will surely continue as every watchmaker is picking up on this trend. Every celebrity I’ve seen recently is also picked up this trend. Actually, if you spot a celebrity with a small watch we’ll buy you one. Women watches are also affected with this trend, so you better know in case you want buy one as a gift for her. Also popular watches trends are larger numbers on dials.

Hot trends in watches styling and design are retro looks in tonneau (French for “barrel”) shape and “TV screen” shape, and most of all in geometric rectangular shaped case. Of course round look still dominate in casual category. Slim watches (usually 3-4 millimeters) are also in.

The most sought after watches trends in dressy watches this year are classic retro looks with mechanical movements. Inspired by nostalgia trends watchmaking are now looking into their archive of designs and re-issuing classic watches. New watches are retro but also contemporary.

Popular combination in materials remains steel and diamonds, but gold is returning to its dominance among finer brands. This year most producers create collection with rose gold and brown gold. Hot new material is titanium. Trend in bracelet materials is towards leather and some new exotic materials in casual styles. Stainless steel and gold is still popular in dressy styles, but with ever growing popularity of vintage watches leather bracelets now dominate not only in casual designs but also in classic designs.

Leather band watches with wide leather bands are also very popular casual looks these days. Bands often have a lot of details, texture, layers of leather or stitching.

To accompany this year's preppy colorful look, watches trends are saying that watches are not required to be in formal colors anymore. This trend is picked up not only by casual designs but by classic designs too. "In" thing are bright leather straps in red, yellow, and even orange. Electric blue is hot color for dials. These new colorful watches will surely catch the eye and leave everyone with an opportunity to add a dash of color in rather neutral look.

New trends in men's watches are new functionalities like two-dial, dual-time features. Moonphase indicator function is also very popular. From luxury watches is popular tourbillone or double-tourbillone for this year. All these new functions are there less because of function and more because of their look on the dial witch leaves watch designers with lot of free area to provide a variety of new styles.

### *4.2.4 Exhibitions of watches*

The two leading international rendezvous for watchmaking professionals, the Baselworld and SIHH exhibitions, are where the world's leaders in timepieces unveil their newest wares, often months, sometimes even years, in the research and development stages. Once launched, they typically enter the respective international markets for retail sale sometime in early fall. These are the watches that will set the trends for wrists around the world for the coming year and longer.

***Salon International de la Haute Horlogerie exhibition***

Geneva – Turnout at the Salon International de la Haute Horlogerie (SIHH), the exclusive six-day trade show dedicated to the Richemont brands, remained level in 2007, with 13,000 attendees from across the globe.

The show's press office reported that the 16 brands "declared themselves as highly satisfied with the amount of business" conducted at SIHH, held from April 16-21.

In addition to appointments with brands, attendees visited the SIHH exhibition "Fine Watches, Homage to Women," which featured contemporary timepieces from exhibiting brands and powerful photographs of women.

The SIHH began in 1991 when five brands (Baume and Mercier, Cartier, Daniel Roth, Gerald Genta and Piaget) left BaselWorld to create their own more exclusive and upscale show because they felt BaselWorld was letting too many "substandard" exhibitors into the fair.

***Baselworld exhibition***

Baselworld is the leading event for the watch and jewels industry. It is also unique opportunity where 2.109 exhibitors, specialists in watches, jewelry, precious gems and related brands, showcase their latest products to those in the industry. Visitors can browse through a select assortment of products in luxurious surroundings covering over 160,000 $m^2$ of exhibition area on several floors. Many world-famous names in the watch and jewelry industry choose to show their products exclusively at Baselworld. Basel is your only chance to see their very latest creations.

The selection of products showcased at Baselworld is unique. Baselworld is the only place where you can find such a broad cross-section of products from the entire industry all in one place. Products sectors are clearly segmented and divided between the six exhibition halls. Watch brands, jewelry brands and related brands have their own halls and there are also national pavilions. A show designed to give you a complete market overview and provide you with an ideal business platform.

Every year in spring time, over 101,700 retailers and wholesalers from all over the world make the journey to Basel to visit this presentation of the latest trends and creations offered by the watch and jewel industry.

## 4.3 Key competitors at the world market

### *4.3.1 Richemont*

***Company overview***

Richemont is one of the world’s leading luxury goods groups. The Group’s luxury goods interests encompass several of the most prestigious names in the industry including Cartier, Van Cleef & Arpels, Piaget, Vacheron Constantin, Jaeger-LeCoultre, IWC, Alfred Dunhill and Montblanc. Each of the Group’s Maisons represents a proud tradition of style, quality and craftsmanship which

Richemont is committed to preserving. The individual heritage and identity of each Maison is rigorously guarded, the designers and craftsmen being constantly challenged to keep the heritage alive through a continuous process of reinvention and innovation.

In addition to its luxury goods businesses, Richemont also holds a significant investment in British American Tobacco – one of the world's leading tobacco groups.
Richemont is pleased to announce that it has agreed to acquire Les Manufactures Horlogères SA ("LMH") from Mannesmann AG. LMH owns three luxury watch businesses, namely 60 per cent of Jaeger-LeCoultre, 100 per cent of International Watch Co. ("IWC") and 90 per cent of A. Lange & Söhne.

Richemont also announces that it has acquired from the Audemars Piguet group the 40 per cent interest in Jaeger-LeCoultre not already owned by LMH. Richemont intends to transfer this shareholding to LMH.

The combined cost of the acquisitions on a debt free basis is CHF 3,080 million in cash, comprising CHF 2,800 million for LMH and CHF 280 million for the 40 per cent interest in Jaeger-LeCoultre.

Mannesmann has owned LMH since 1993 and decided to sell the business following the acquisition of Mannesmann by Vodafone AirTouch in February 2000.

The acquisition represents a major strategic step for Richemont and will strengthen its position as one of the world's leading manufacturers of quality watches. It offers a unique opportunity to acquire an integrated family of watch companies with an excellent manufacturing capability.

LMH's products have a well-deserved reputation for technical excellence and occupy a unique position in the "classical" segment of the market for luxury watches. They complement Richemont's existing portfolio of watch companies which, in addition to Cartier, includes Vacheron Constantin, Piaget, Baume & Mercier and Officine Panerai.

In terms of manufacturing, LMH is a vertically integrated group and a leader in "Haute Horlogerie". Its expertise in manufacturing high value movements adds significantly to Richemont's existing capability in this area.

Richemont's well established worldwide distribution network will open up significant opportunities for Jaeger-Le Coultre, IWC and A. Lange & Söhne in major markets where they have the potential to increase their market share, such as the United States.

*Financial statements 2007*

Sales increased by 12 per cent to € 4 827 million.

- Operating profit from the luxury goods businesses increased by 24 per cent to € 916 million. Excluding non-recurring items, operating profit increased by 26 per cent to € 900 million.
- Net profit, including the Group's share of the results of British American Tobacco, increased by 21 per cent to € 1 329 million. Excluding the impact of non-recurring items in both years, net profit attributable to unit holders increased by 21 per cent to € 1 350 million.
- The overall dividend for the year, at € 1.25 per unit, represents an increase of 14 per cent.
- Cash generated by the Group's luxury goods operations was € 970 million.

*Source: annual reports 2007, [9]*

### *4.3.2 The Swatch Group Ltd.*

*Company overview*

The Swatch Group Ltd. is the world's second-largest watchmaker. The Company offers watches in all price and market categories: Brequet, Blancpain, Jaquet Droz, Glashuette Original, Leon Hatot, Omega, Longines and Rado in the prestige and high-range segments; Tissot, ck watch & jewelry, Certina, Mido, Hamilton, Union and Blmain in the middle-range segment; Swatch and Flik Flak in the basic-range segment, and Endura in the private-label segment. Swatch watches are sold at some 15,000 retailers worldwide, plus at more than 500 Swatch stores, about 1,000 shop-in-shops, and some 140 kiosks, primarily in Switzerland, but also in France, Germany, Italy, Thailand, Malaysia and China. Active in the manufacture of finished watches, jewelry, and watch movements and components, the Group produces nearly all of the components necessary to supply its eighteen watch brand companies and the entire Swiss watchmaking industry, and operates its own worldwide network of distribution organizations. Chairman Nicolas Hayek's family controls about 38 % of The Swatch Group Ltd. The Group employs more than 20,000 persons in over 50 countries. Gross sales in 2007 increased by +12.3 % from the previous year to 5.0. The Swatch Group Ltd. is also a key player in the electronic systems sector.

The Swatch Group Ltd. takes its name from the extraordinarily successful story of Swatch, one of the world's most widely recognized consumer brand names. Less than twenty-five years ago, the Swiss watchmaking industry was battling a serious crisis, and the first Swatch watches were not released until 1983. The years since then have seen the recovery of the Swiss watchmaking industry as a whole and the establishment of The Swatch Group Ltd. as a strong, diversified industrial holding. This solid foundation has allowed the Group to broaden its reach and extend its range of brands. Today, The Swatch Group offers watches in all price categories, and The Swatch Group brands hold leadership positions in all market segments:

- Breguet, Blancpain and Glashütte-Original hold strong positions at the very top end
- Léon Hatot, Jaquet-Droz, Omega, Longines, Rado and Union hold key positions in the luxury market
- Tissot, ck Calvin Klein, Certina, Mido, Hamilton and Pierre Balmain maintain a strong presence in the mid-range
- Swatch and Flik Flak hold a substantial share of the broad consumer segment
- Endura produces private-label watches

Today, The Swatch Group Ltd. continues to invest heavily in research and development, driving the steady expansion of its leading position in materials and process technologies and in product design and manufacturing. In particular, The Swatch Group Ltd. engages in significant development activities in microelectronics and micromechanics. The Group is also active in the field of telecommunications and in the automobile and service sectors. Sports timing and measurement technologies, although not a core business, play a key role in terms of brand and Group visibility—a number of The Swatch Group companies serve as official timekeepers at a variety of international sports events, including the Olympic Games.

***Financial statements 2007***

Gross sales in 2007 up 17.6 % to a record CHF 5 941 million

- Strong growth in all Group divisions, notably in the Watches & Jewelry as well as Production segments
- Marginally favorable currency effect of 0.3 % in 2007
- Above-average increase in operating result and net income expected
- Net income exceeds CHF 1 billion for the first time.
- Operating margin improves to 21.9 % (2006: 20.2 %), operating profit reaches CHF 1 236 million (2006: CHF 973 million), a rise of 27 %.

- Proposed dividend increase of 21.4 %, per bearer share CHF 4.25 (previous year CHF 3.50), per registered share CHF 0.85 (previous year CHF 0.70).
- Ongoing optimistic outlook for 2008, double-digit growth in January expected, strong trend continues

*Source: annual report 2007, [11]*

Year 2007 saw record sales in all Group segments, with the finished watch segment as well as the Production segment once again reporting the strongest growth.

Foreign currencies had a marginally favorable impact on Group sales of 0.3 %, largely due to the strong and stable development of the Euro.

The Watches and Jewelry segment achieved record, double-digit growth of over 20 %, with all price categories and brands contributing.

The continued selective expansion of retail activities has given the Group brands a strong visual presence in premier retail locations, enabling direct contact with customers and enhancing sales in each brand’s diverse market environment. In addition, robust development in the jewelry activities sector contributed with above-average growth in the overall performance of the Group's core business.

Asia, including the Middle East, posted outstanding double-digit sales growth, with Europe, America and Oceania also recording solid double-digit growth rates.

The Group is excellently positioned and represented across all price categories and regions. Targeted expansion will serve to further underpin this global strength.

### *4.3.3 Seiko Corporation*

#### *Company overview*

Seiko Co. consists of three core companies, namely Seiko Holdings Corporation, Seiko Instruments Inc., and Seiko Epson Corporation, each of them playing its own distinctive role in the group and contributing to its dynamic growth. The historic co-operation between these 3 independent companies brought precision and quality standards to the timepiece business that established Seiko timepieces in their present preeminent position.

Scheme 4.1: *Seiko Group divisions*

**SEIKO GROUP**

**SEIKO CORP.** **SEIKO INSTRUMENTS INC.** **SEIKO EPSON CORP.**

- Seiko Watch Corporation
- Seiko Clock Inc.
- Seiko Precision Inc.

*Source:[10]*

***Seiko Corporation***

It was founded in 1881. On becoming wholly public share holding company in July 2001, the company diversified its business into production of timepieces, optical / ophthalmic parts, electronic devices, sports, toiletries and also information services.

***Seiko Watch Corporation – segment information***

Seiko Corporation established Seiko Watch Corporation as an independent company for watch business in July 2001. Its responsibilities cover product planning, designing and also the full range of marketing activities such as sales promotion through advertising, sales and customer services throughout the world.

Seiko Holdings (formerly Seiko Corp.) is way beyond its tradition of marking time – whether it's wristwatches, clocks, or timing devices for athletic events. The corporation serves as a holding company for subsidiaries such as Seiko Watch, maker of watches such as the Kinetic and Thermic series that generate power by the movement of the owner's wrist or body heat. The watchmaker also makes mass-market watch brands Pulsar and Lorus. Seico Watch's other timepieces range from small bedside alarm clocks to large-scale public clocks. Seiko Holdings other subsidiaries include Seiko Clock, Seiko Epson, Seiko Instruments, Seiko Optical Products, and Seiko Precision. The Hattori family controls Seiko Co.

### *Financial statements 2007*

For the fiscal year ended 31 March 2007, Seiko Corporation reported consolidated net sales of 209.1 billion yen, a decline of 2.1 % from the previous year. Domestic sales were 116.6 billion yen (an 8.9 % decline from previous year), and overseas sales were 92.4 billion yen (an 8.0 % increase from the previous year).

In the watch business, sales of high-price products were brisk, and both sales and profits were higher. In the precision products business, sales of the solution and semiconductor businesses were not enough to offset a substantial fall in sales of electronic devices, and resulting in declines in both sales and profits. The optical products business recorded a decrease in sales because of fierce competition among lenses for mass merchandisers in Japan, but improvements in profitability led to and increase in profits. In the clock business, intense competition among low-priced products in the domestic market resulted in slow sales, while increases in manufacturing costs at overseas manufacturing facilities caused a substantial decline in profits. Other businesses ended on a weak note.

### *4.3.4 Citizen Holdings Co., Ltd.*

#### *Company overview*

In 1924, Citizen's forerunner, the Shokosha Watch Research Watch Institute produced its first pocket watch the "CITIZEN". The then Mayor of Tokyo, Mr. Shimpei Goto, named the watch "CITIZEN" with the hope that the watch, a luxury item of those times, would become widely available to ordinary citizens and be sold throughout the world.

The Citizen Watch Company, Ltd. was established in 1930. Citizen Holdings Co., Ltd. is the world's largest watch company. More people depend on a watch made by Citizen than other timepiece. Citizen Holdings Co., Ltd. produced 292 million timepieces in 1999, about 24 % of the world total.

Citizen Holdings Co., Ltd. has played a leading role in the international watch market for years and has set the de facto standards for movements. The Japanese manufacturer has also been able to repeatedly develop pioneering technologies that take their power from natural energy sources.

One of these innovative energy solutions is called Eco-Drive and is already to be found in many Citizen Watches.

Eco-Drive generates power with sunlight and eliminates the need to change batteries. It also makes no use of hazardous metals for secondary cells to store energy. Winning high marks for these environment-friendly features, it was the first watch to be certified under the Eco Mark Program

Through the use of highly sensitive photocells, even the weak light from candles can be converted into electrical energy to power the movement.

Since excess energy is automatically saved in storage cells, these watches can continue to keep time even after they have been in the dark for months.

A further advantage of the Eco-Drive models is that no battery change is necessary. This not only saves money but also helps protect the environment.

Besides innovative technology, the Citizen watches are characterized by a high-quality finish, superior materials and an attractive design.

About 300 engineers and scientists, as well as dozens of designers work on the development of new watches at the Citizen Research centre. Citizen Holdings Co., Ltd. has repeatedly set new standards in the watch market.

***For example:***

1975 the most accurate watch in the world

1976 the first solar watch

1978 with a width of less than 1 mm, the slimmest wrist watch

1980 measuring only 9 x 7 x 2 mm, the smallest movement

1983 the first watch with a thermometer, waterproof up to 100 m

1985 the first diver's watch with an electronic depth gauge

1987 use of the high-tech material, titanium

1989 the first professional mountaineer's watch with integrated altimeter and barometer

1990 the first multiple-time-zone radio-controlled watch

1994 the first diving watch with a PC interface

1994/95 introduction of the environmentally-friendly Eco-Drive technology

1996 radio-controlled Eco-Drive watches

1997 Citizen Eco-Drive Signature. Amazing accuracy for a quartz watch of +/- 10 sec. per year

1998 the Citizen Eco-Drive Duo featuring the revolutionary hybrid-movement (Eco-Drive + Automatic) and the first professional diving watches to use light energy, the Citizen Promaster Aqualand Eco-Drive Chronograph

1999 the innovative Eco-Drive Thermo is powered by the temperature difference between the back of the watch's case, warmed by body heat, and the surrounding air temperature

2000 the Eco-Drive Vitro features specially developed photocells incorporated almost invisibly into the watch's glass face, thereby enabling new designs

***Financial statements 2007***

The Group’s strategy of promoting high-value added products such as Eco-drive and radio-controlled watches with the flagship CITIZEN brand showed success nationally and internationally. Net sales for watches and clocks increased despite uncertainties such as the economic slow down centered around the U.S., sharp appreciation of the yen and low demand for watches world wide. With regard to the movement business, the price maintenance strategy in standard products and aggressive expansion of value added products resulted in higher net sales than the previous year. The Q&Q business struggled due to sluggishness in the popular price market as a whole, but the overall sales increased thanks to the healthy sales of overseas designed products and other factors.

As a result, sales and operating income for watches and clocks both increased, each recording 109 billion yen (7.8 % increase from the same period of previous fiscal year) and 18.3 billion yen (5.2 % increase).

## 4.4 Market structure

For setting up of market concentration in watchmaking industry we will use as sing of structure of market concentration ratio. This sign is profitable from the point of sector and accessibility of information. Throughout this sector is roughly over 400 of producer of wrist watches. This judgment was set up from information gathered at fair in Basel, where's the biggest concentration of small and big producers of watches.

For adequate view of industry we will present concentration ration of 4 dominant firms in industry; The Swatch Group Ltd., Richemont, Citizen Holdings Co., Ltd. and Seiko Co. With them we will calculate $CR_{4.}$ As a subject of concentration ratio calculation we use sales of individual mentioned players.

### *4.5.1 Concentration ratio*

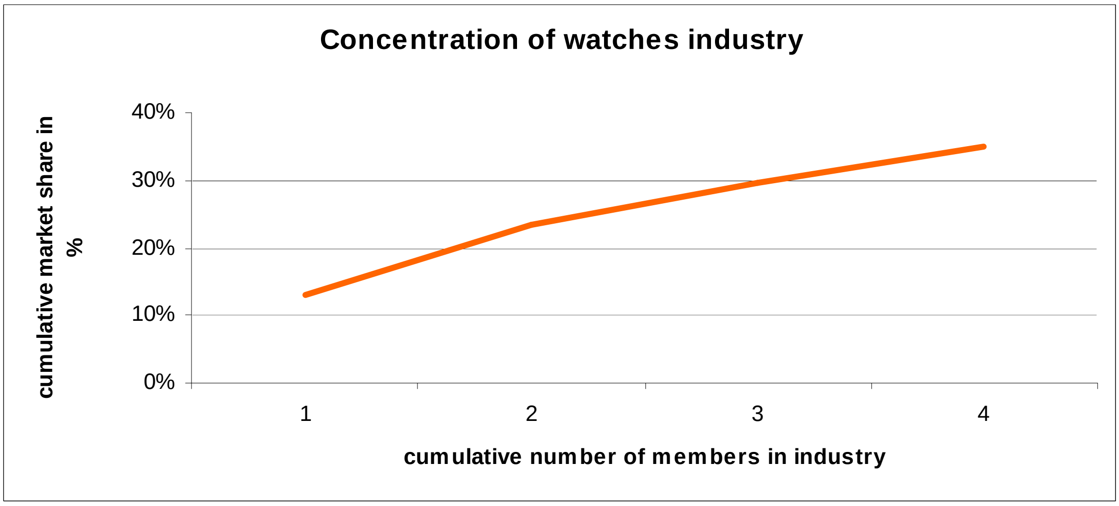
For calculation of concentration ratio we used data about 4 dominant firms on market; The Swatch Group Ltd., Richemont, Citizen Holdings Co., Ltd. and Seiko Co. We calculate $CR_4$. For determination concentration ratio we used sales of individual mention players.

Table 4.1: *Sales of major player on trade*

| corporation | sold watches | market share |
|---|---|---|
| | in mil $ | in % |
| The Swatch Group Ltd. | 4305 | 13% |
| Richemont | 2167 | 10% |
| Citizen Holdings Co., Ltd. | 1344 | 6% |
| Seiko Co. | 1124 | 5% |

*Source:annual reports 2007 of corporations*

Graph 4.1: *Concentration of watches industry (4 major players on market)*




*Source:own work*

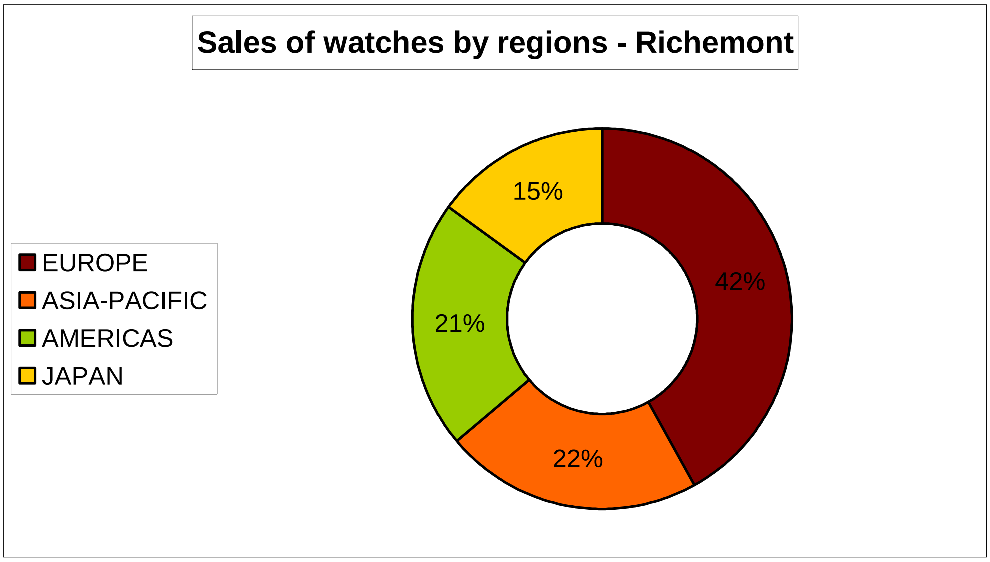
***$CR_4$ = 35 %***

Four main coroporations have concentration ratio 35 %. The Swatch Group Ltd. is the biggest company in watches industry. This is the share which they occupy on world market. In the industry is around 400 of pruducers of watches. We can say that these companies have important role in market but there can be also other companies with similar market share. Total sales estimated Swiss Bank Vontobel on 18 billion € in 2007. (All data were transformed in $ according recommended rates).

#### *4.5.2 Concentration of sales*

Concentration of sales shows us where the key players have their most important markets for produced watches. This graphic illustration will help us to show which continents govern this sector, what the general drift of market is, which markets influence the development of whole sector and how concentration of customers we can show in next graphs looks. Graphs show marketing individual company in world only in watch industry.

Graph 4.2: *Sales of watches by regions – Richemont*




*Source:annual report 2007, [9]*

#### *Europe*

The overall increase of 13 % is growth in all business areas. Montblanc and the specialist watchmakers all performed very well over the course of the year.

#### *Asia-Pacific*

Sales grew at a faster rate during the fourth quarter than had been seen during the first nine months of the year. Excellent demand was seen in all business areas. Both Montblanc and Alfred Dunhill benefited from the development of their own retail distribution networks in mainland China during the year. Sales in mainland China, representing 16 per cent of regional sales, increased by 47 per cent at actual exchange rates. The high rate of growth reflects the

Group's investment in this market, including the establishment of distribution subsidiaries and retail and wholesale platforms in mainland China, as well as the growing demand there.

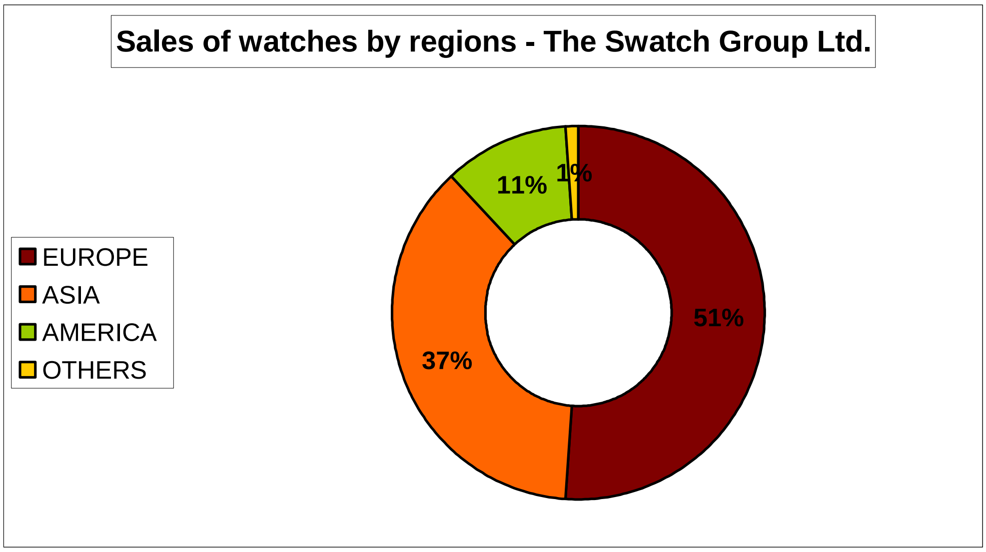
### *Americas*

The Americas region reported strong local currency growth of 18 per cent, notwithstanding the good performance seen in the prior year and the challenging comparative base. The decrease in the value of the dollar relative to the Euro during the year resulted in sales growth of 12 per cent at actual exchange rates.

### *Japan*

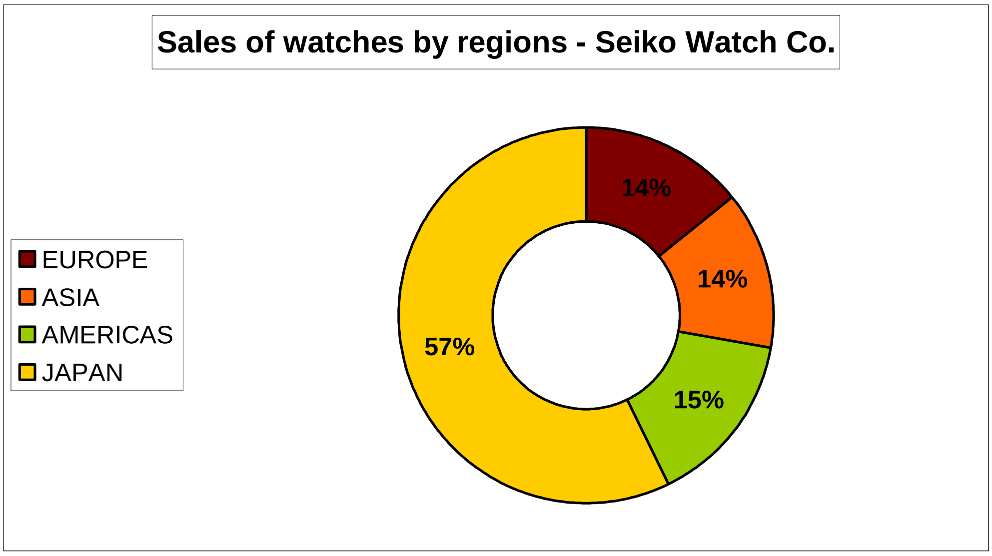
Sales growth of 10 % in the domestic Japanese market was largely offset by the weakness of the yen when translated into euros. At actual exchange rates, sales grew by only 1 per cent. Sales in Japan represent 15 per cent of Group sales.

Graph 4.3: *Sales of watches by regions – The Swatch Group Ltd.*




*Source:annual report 2007, [12]*

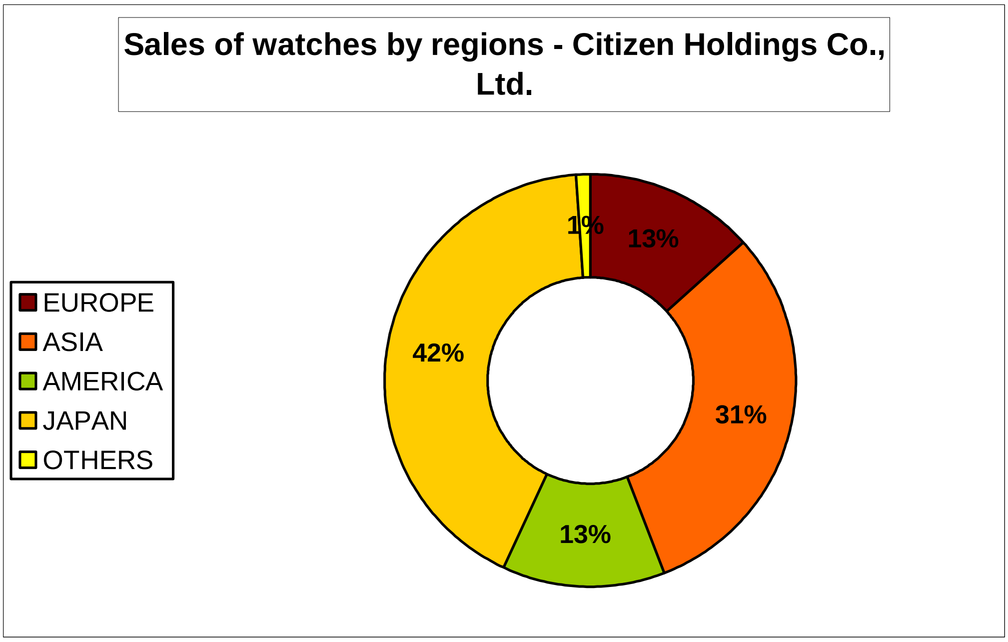
Graph 4.4: *Sales of watches by regions – Seiko Co.*




*Note: used data are from watches division of Seiko Co.*

*Source:annual report 2007, [10]*

Graph 4.5: *Sales of watches by regions – Citizen Holdings Co., Ltd.*




*Note: used data are from watches segment of corporation*

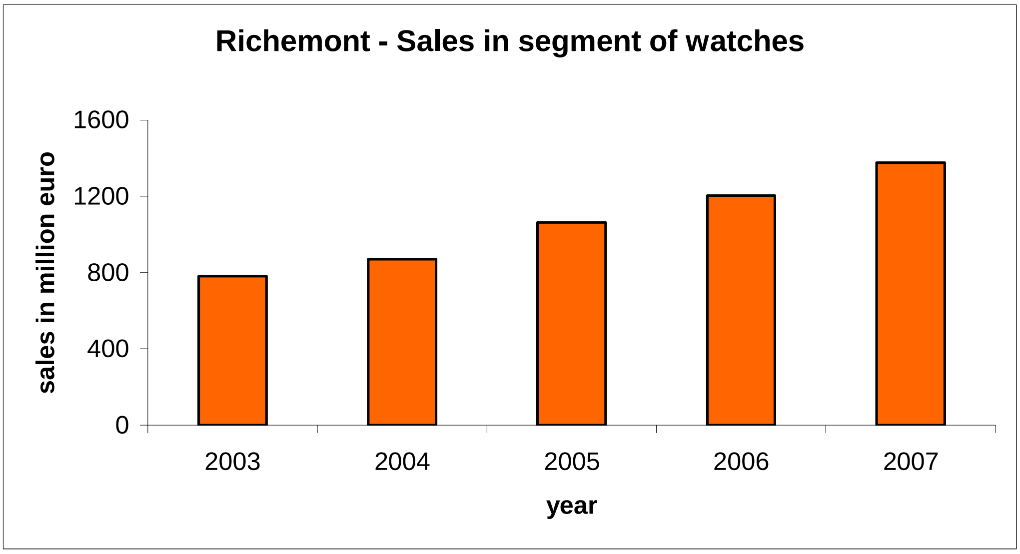
*Source:annual report 2007, [5]*

In the case of The Swatch Group Ltd. and Richemont is the pivotal Europe market. We can say that Europe is more focused on watches that are mechanical, fashion, luxurious. In the case of Seiko Co. and Citizen Holdings Co., Ltd. are the pivotal markets Japan and Asia from where the main production of watches originates.

*Trend in sales*

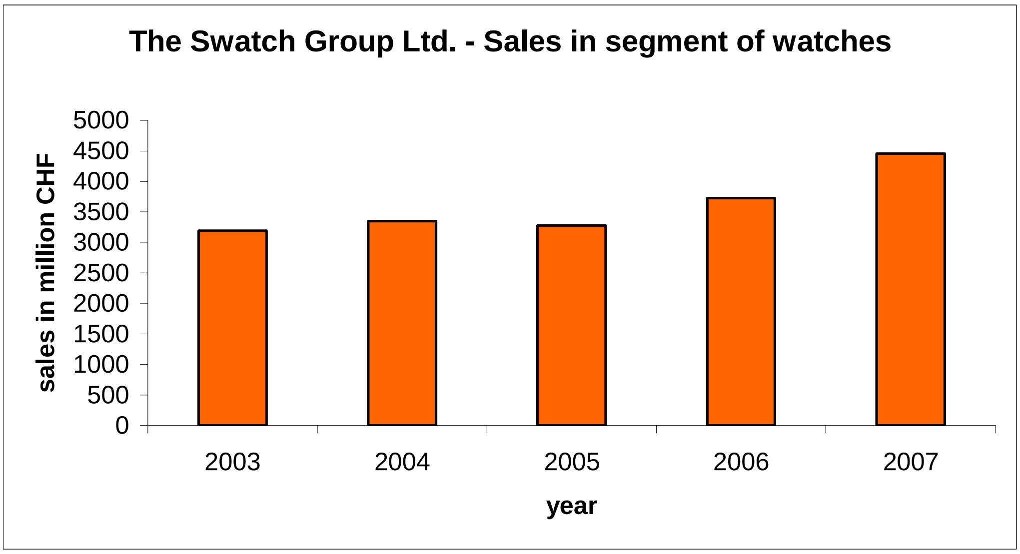
During last 5 years we can see from the graphs below the development that is growing in positive numbers. The possitive development run longer time, but we describe only last 5 years under available information.

Graph 4.6: *Development of sales in watches segment in year 2003 – 2007 – Richemont.*



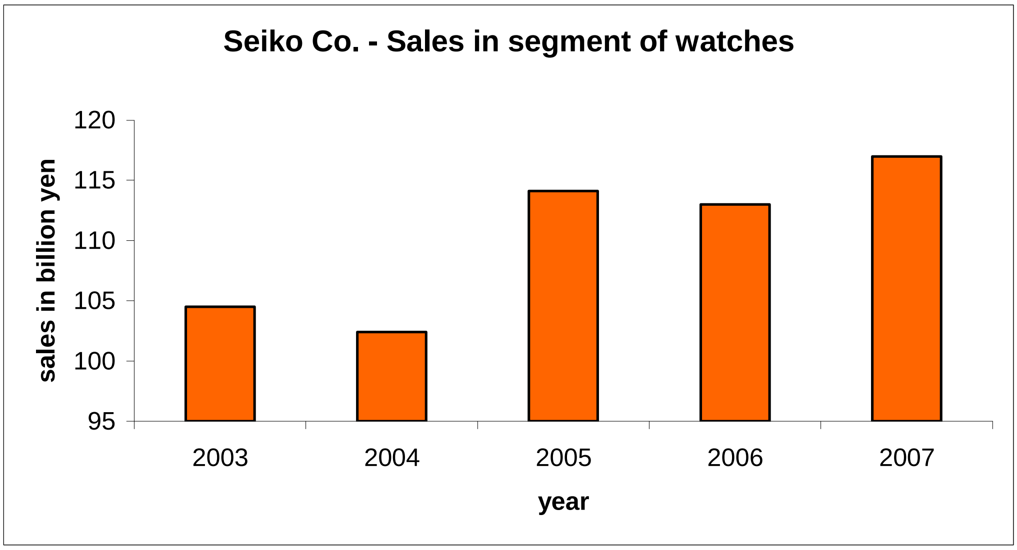

*Source:annual report 2007, [9]*

Graph 4.7: *Development of sales in watches segment in year 2003 – 2007 – The Swatch Group Ltd.*



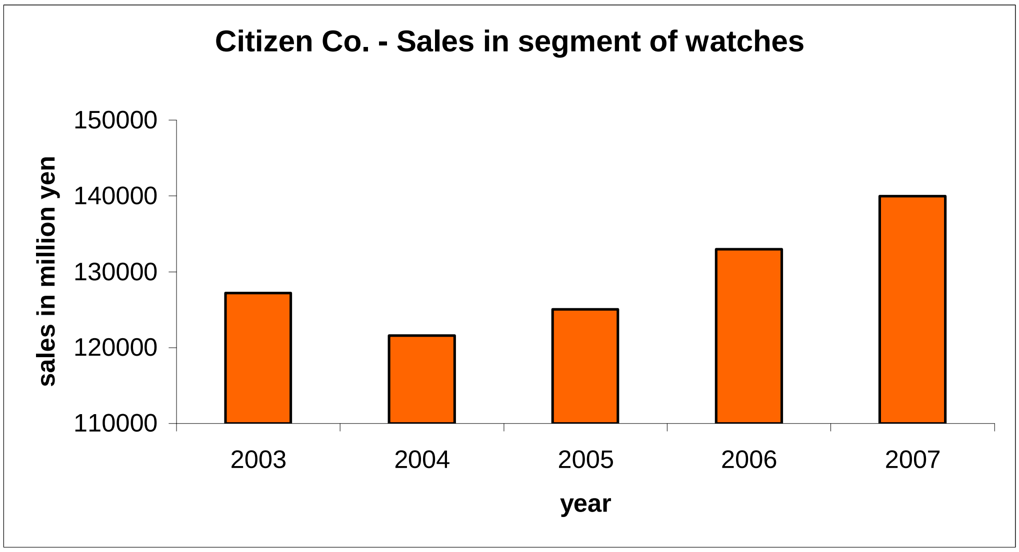

*Source:annual report 2007, [12]*

Graph 4.8: *Development of sales in watches segment in year 2003 – 2007 – Seiko Co.*




*Source:annual report 2007, [10]*

Graph 4.9: *Development of sales in watches segment in year 2003 – 2007 – Citizen Co.*




*Source:annual report 2007, [5]*

### *4.5.3 Concentration of production*

In important watch producing nations are included United States, Hong Kong, Japan, Switzerland, Italy, France, Great Britain, and Germany. With the exception of Great Britain, all the other countries are watch producers, beginning of course with Hong Kong, the outlet for China and the world's largest exporter in terms of volume, followed by Japan with its four large brands that are formidable players in the mid-range and watch instrument categories.

China and Hong Kong produce the big quantity of watches each year. Switzerland is also strong producer of watches, but not in so high volume of units. Because the average export price of a Chinese watch was CHF 7 compared to CHF 378 for a Swiss watch, a multiple of 54.

China (including Hong Kong) continues to be the largest watch producers in the world by volume, manufacturing about 80 percent of world production in units.

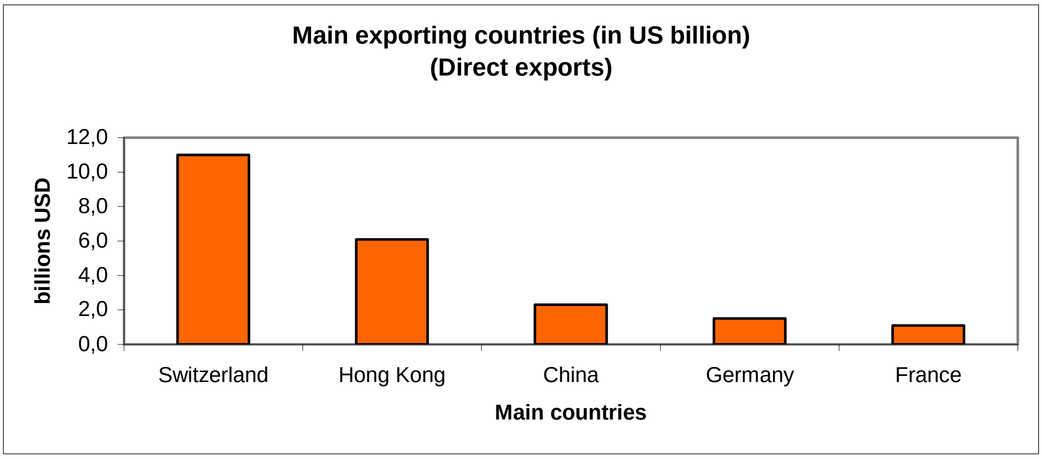
#### *4.5.4 International trade*

The main source of information on structure of sector is for us even international trade. Not always watches that are made on native market are there also consumed. Rule is that watchmaking is allocated by the requirements of consumers on watches. In Asia the watches are produced for mass market. On the other hand in Switzerland watches are attached label "Swiss made".

#### *World watch export*

In an international comparison, Switzerland was the principal exporter of horological products in 2007. Thanks to strong growth in local currency terms (excluding exchange effects) by 16.2 %, the total value exported by Switzerland reached 13.4 billion dollars. Hong Kong reported a level of exports or re-exports which was fifty per cent lower at 6.4 billion dollars. Growth on 2006 was +6.1 %. Watches and other horologic products originating from or transiting through Hong Kong went to the United States, China, Switzerland and Japan for the most part. China proved as dynamic as Switzerland in terms of horological exports with growth of +16.0 % in local currency terms. However, the value was much weaker at 2.4 billion dollars

Graph 4.10: *Main exporting countries in USD billion - Direct exports*




*Source: statistics, [6]*

Thanks to comparable growth (+15.8 %); France became the fourth exporter of homological products in 2007 with a value of 1.3 billion dollars. The main destination of these exports was Switzerland. For the second year in succession, Germany reported a fall (-6.9 %), at 1.2 billion dollars. Here too, the first destination was Switzerland.

***Wristwatch exports***

As the beacon product of the watch industry, wristwatches were exported on a massive scale by China in 2007. In all, 638.3 million left that country, down by 7.7 %. Hong Kong experienced a comparable development with a reduction in units by 9.3 % to reach a level of 472.9 million timepieces exported. Switzerland was the leader in value terms, and ranked third for the number of units. It exported 25.9 million wristwatches in 2007, equivalent to growth of 4.2 %.

Table 4.2: *Main Watch exporting countries - Direct exports*

| **Countries** | **Units in millions** | **change** |
|---|---|---|
| | **in mil units** | **in %** |
| China | 691.6 | -14 % |
| Hong Kong | 521.1 | -14 % |
| Switzerland | 24.9 | 2 % |
| Germany | 13.5 | 22 % |
| USA | 7.3 | -23 % |
| France | 4.4 | -11 % |
| Japan | 3.6 | -7 % |

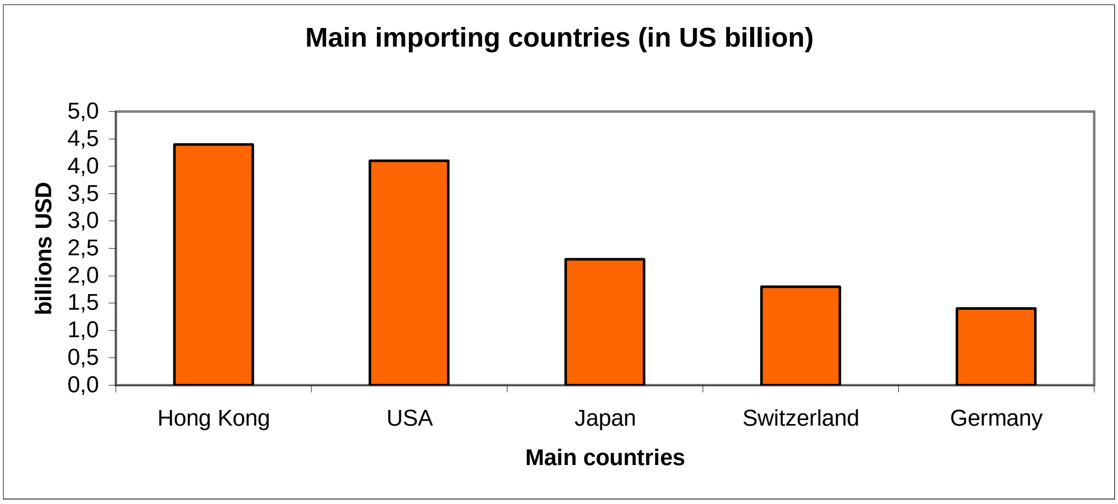
*Source: statistics, [6]*

While the quantity of wristwatches exported by China fell, their value grew significantly. As a result, the average price was higher, reaching 2 dollars in 2007. Hong Kong slightly increased the average price of its exported timepieces to 9 dollars. With a much greater focus on products in precious metals and mechanical watches, Switzerland reported an average export price of 479 dollars.

***World watch import***

The country which imported the most horological products in 2007 was Hong Kong with a total value of 5.3 billion dollars. This was up substantially on 2006. A high percentage of these products were re-exported. The United States was also a major consumer. The value of their watch imports reached 4.5 billion dollars, up on the previous year. Japan maintained its 2006 level by importing the equivalent of 2.3 billion dollars. With a substantial increase in imports, Switzerland followed close behind Japan with a value of 2.1 billion dollars. Finally, France increased its consumption of foreign horological products greatly with imports worth almost 20 % more at 1.8 billion dollars.

Graph 4.11*: Main importing countries (in USD billion)*




*Source: statistics, [6]*

## 4.6 Product differentiation

Differentiation of product and relation of change in price of one product, when increase in volume of other product, isn't in this sector functional. As may seem that some brands compete by volume or price, isn't this phenomenon based on truth. In the branch of wrist watches we can find several diversities, according to purpose of use, according to machine, and so on (it was already introduced at the beginning those thesis).

***There are few types of difference of products. The differences we can find in purpose of using, price level, materials and technical equipment***

### *4.6.1 Classification according purpose of use*

This classification is a commonly acknowledged mainly among consumer and is done for theirs easier orientation. This sector classification isn't pivotal and doesn't have influence on its character and behavior.

***Men's***

Men's watches are more robust, technical and in men's colors (black, brown, blue)

***Women’s***

Women’s watches look more like jewelry. There are many possibilities for design => colors and ladies patterns, materials of straps (like octopus, ostrich, etc.) , materials of metal and stones.

***Unisex***

This type of watch is suitable for men and women.

***Fashion***

Watches comprising the fashion market are primarily quartz-analog watches but also include some digital watches. Watches in the fashion category are generally made with stainless steel, gold finish, brass and/or plastic and are manufactured primarily in Asia. Fashion watches feature designs that reflex current and emerging fashion trends. Many are sold under licensed designer and brand names that are well-known principally in the apparel industry. In addition to the Company’s Tommy Hilfiger brand, well-known brands of fashion watches include Anne Klein II, DKNY, Fossil, Guess, Kenneth Cole and Swatch.

***Classic***

Classic category has simple and conservative design without any extreme complications. It is basic class of watches.

***Sports***

Watches are equipped robust materials and movements with adequate resistant and glass. It depends on type of activity for which the watch is used.

***Diving watch***

A diver’s watch is water resistant to a depth of fifty or one hundred meters or more and is marked on the dial. The bezel of a diving watch is designed to rotate in one direction this function allows the diver to determine the amount of dive time or remaining air time. Instead of the regular push-pull type of crown, diving watches often have a screw down crown to create a more effective water seal. The band on a diving watch is usually made of rubber or a similar material so the salt water does not deteriorate it. The numbers or hour marks are usually larger and often glow in the dark to improve readability under water on watches designed for diving. These watches are at different price levels.

### *4.6.2 Classification by price*

Price classification is criterion that brings meaning how for consumers, so for producers. Dividing includes several groups, however in terms of market analyze we can find classification on watches that are luxury and other.

***Mass Market Watches***

This type of watch is all around and the spread of price is till $50. Mass market watches typically consist of digital watches and analog watches made from stainless steel, brass and/or plastic and are manufactured in Asia. Well-known brands include Casio, Citizen, Pulsar, Seiko and Timex.

***Middle-Price Watches***

Watches are selling between $50 and $299.

***Upper Price Watches***

The price level is $300 to $999. Most moderate watches are quartz-analog watches. Moderate watches are manufactured primarily in Asia and Switzerland. These watches typically are made with gold finish, stainless steel, brass or a combination of gold finish and stainless steel. There are HUGO BOSS, Juicy Couture and LACOSTE brands, well-known brand names of watches in the moderate category include Anne Klein, Bulova, Citizen, Guess, Seiko and Wittnauer.

***Luxury Watches***

Luxury watches are either quartz-analog watches or mechanical watches. These watches typically are made with either 14 or 18 karat gold, stainless steel or a combination of gold and stainless steel, and are occasionally set with precious gems. Luxury watches are primarily manufactured in Switzerland. In addition to a majority of the Company's Ebel watches, well-known brand names of luxury watches include Baume & Mercier, Breitling, Cartier, Omega, Rolex and TAG Heuer. The price level is $1000 and above. These watches have strong and various types of marketing.

### *4.6.3 Classification by function*

***Mechanical watches***

Mechanical watches have spring mechanism and needs hand winding up. Because of its technical characteristics mechanic watches are not as accurate as electronic or quartz watches. But despite this fact nowadays namely mechanic watches become a symbol of prestige of its wearer. Their price is usually higher than quartz watches price.

***Automatic watches***

Automatic watches are mechanical watches with an automatic winding up function. If you wear your watch regularly (8 hours per day will be enough) there's no need for winding it up. But if you have not worn your watch for some time, you should wind it up by hand.

***Quartz watches***

Quartz watches have a quartz crystal as a vibration system. Though electronic watches are also quartz, they usually say "quartz watches" only speaking about electro mechanic watches.

Quartz watches are most convenient in usage because there's no necessity to wind them up or worry that they'll stop if you do not wear it for a couple of days. A battery is a source of energy for this watch; it is intended for several years of working.

Quartz crystal provides high accuracy of movement. But quartz is subject to war that's why with time quartz watches began to be fast.

Quartz mechanism peculiarities allow creating thinner and lighter watches, but some people like pleasant weight on the wrist. Moreover, quartz mechanism permit producers to create everything they want with watch design. It's possible to make it small, three-cornered or zigzag letter-shape, cross-shaped, crescent-shaped etc.

***Electronic watches***

Electronic watches basis is a chip, its work is provided by batteries. With the special signals time, (in some watch models date, month and week day) is shown on the display.

As well as cars Swiss watches are divided into classes: lower, middle and high. Moreover, watches can be classic, sporty, complicated and collection.

The bands on watches are as varied in material and design as the watches themselves. There are metal bands that stretch, there are bands made of material similar to the straps on backpacks and that fasten with Velcro. There are bands of cloth, hemp, metal links and bands that come in one or two pieces.

***Meca-Quartz***

Besides the mechanical and quartz movement there is another revolutionary type of movement which is created using the two technologies at the same time. It is so-called parallel technology movement or meca-quartz. The latter represents a quartz movement that includes many mechanical parts. Today the Swiss watch manufacturers create a number of timepieces in which the parallel technology was applied among them being Jaeger Le Coultre with its Caliber 631, which is a movement that uses the electric power of the battery to display the hours, minutes and seconds and at the same time mechanically allows the timepiece to display the chronograph function.

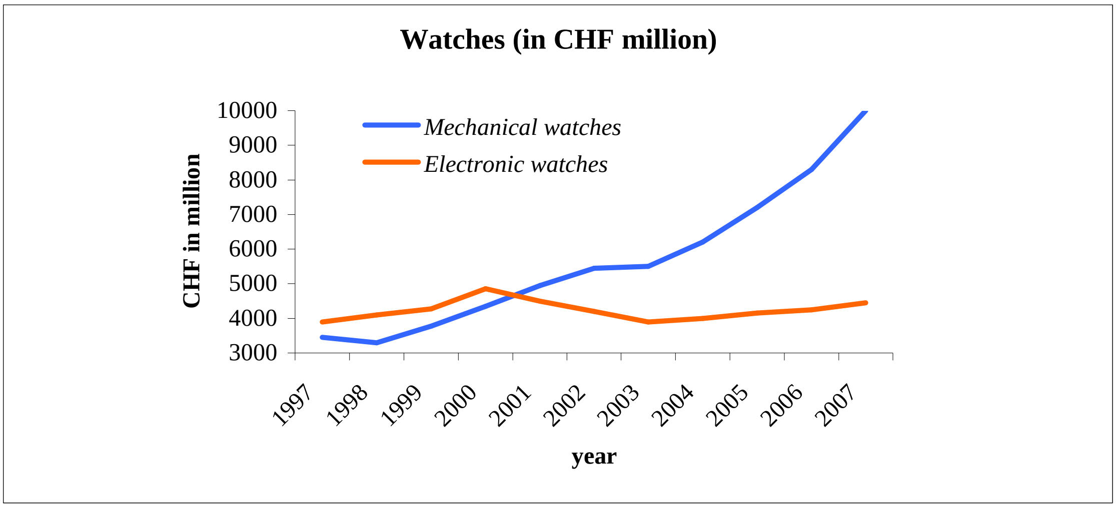
From this classification the most important for the statistics are watches mechanical and quart.

Quartz movement is much younger than mechanical one and the cost on production are lower. The watches with mechanical movements are produce in mass quantity.

The mechanical/automatic movement has complicated production. Production is usually situated in traditional smaller manufactures.

Mechanical watches reported above average growth in 2007. Their value was 19.3 % higher, while the number of units exported rose by 12.3 %. The volume of electronic timepieces rose more modestly, but nevertheless by a significant amount (+2.7 %). On the other hand, their value posted a two-figure rise (+10.3 %). The gap between mechanical and electronic watches continued to widen, but to a less significant extent than in previous years.

Graph 4.12: *Mechanical vs. Electronic watches (value)*




*Source: statistics, [6]*

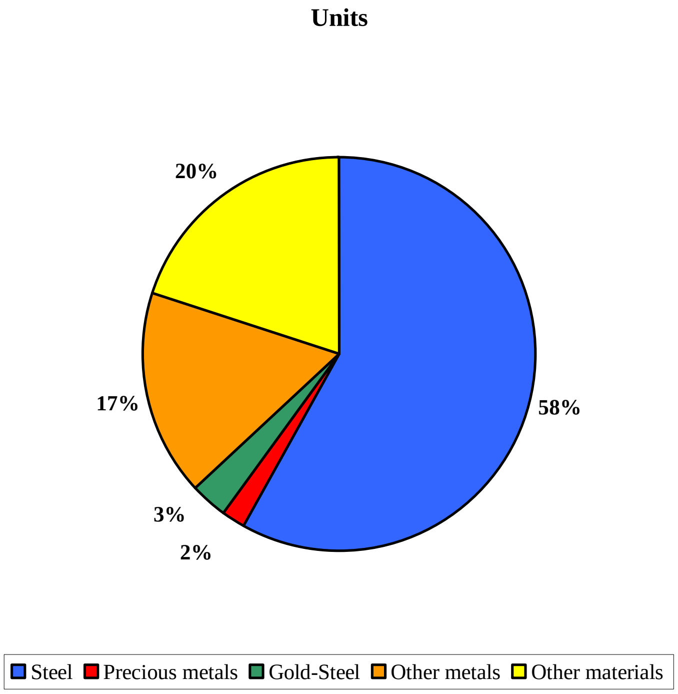
All products produce by the industry are divided in two main groups: Battery watches and Mechanical watches.

### *4.6.4 Classification according the use of materials*

Watches are produced from different materials. We compare few basic materials; steel, precious metals, gold-steel metals, other metals, other materials

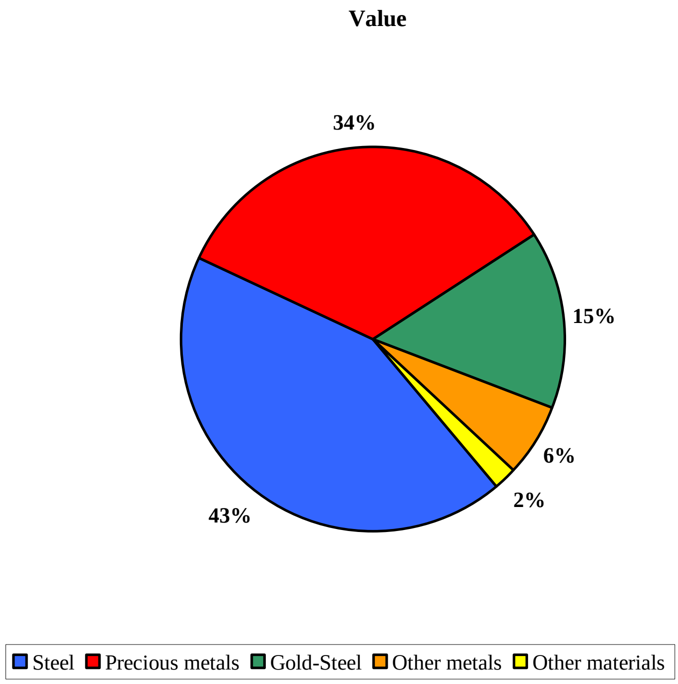
Exports in steel wristwatches in steel generated the most substantial value at 6.3 billion francs. This was 14.7 % more than in 2006. Timepieces in 18 carat gold made still greater gains, up 24.9 % on the previous year, representing an increase of nearly one billion francs at a level of 4.8 billion. Bimetal products, generally made of gold and steel, posted more moderate growth (+8.0 %). Their value reached 2.0 % billion francs. These three materials accounted merely 90 % of the total value of wristwatches.

Graph 4.13: *Watches by materials (units)*




*Source: statistics, [6]*

Graph 4.14: *Watches by materials (value)*




*Source: statistics, [6]*

The increase in the number of pieces exported was accounted for largely by steel, which gained 9.9 % at a total of 14.8 million units. Increasingly present, steel was used in the cases of 58 % of watches exported by Switzerland in 2007. The category of other metals remained stable at 4.1 million units, while the group of other materials was down 7.0 % at 5.2 million exported wristwatches.

***Product differentiation as a barrier to entry***

Differentiation of product can be one of the barriers for entrance into sector/market. Firstly, strong product differentiation can be barrier, but also benefits for entry to the market. If taking in mind diversity as barrier, we can add to it also brandy loyalty. These two crimp demand at first very strong and powerful marketing support and hence sufficient amount of capital. In horological sector usually takes up to 3 years to introduce new brand. This time is needed for presentation of brand in the marketplace and creation brand loyalty. Time that entrance takes and stabilization of this product might differ according to market and culture of consumers. In Czech Republic it is basically 3 years. This period is attached with big capital heftiness and marketing support of this new brand.

## 4.8 Barriers to entry

### *4.8.1 Absolute cost advantage*

Firms which are already in the market are able to achieve lower per unit of production costs compared with potential entrant for various reasons which include the following.

For new entrants is more costly to develop skilled management. New entrants need to analyze the market in which they want enters. They could used this analyze as a basic point. The other important slightness is different legislation, culture of purchase, members in chain in distribution, etc.

When the company wants to start with production of new watches? In the watch industry it should be sold where the factory will be situated. They need to decide which product they want to produce. The strongest concentration of production watches is situated in Asia, because of lowest production cost. If the company decides to produce special series or luxury watches it will concentrate in Switzerland or only part of production. In this case there will be compared the initial, production costs, transportation cost in contrast with the market on which it would be focused. With production relate patents. The patents are directed according the law – protection of industrial rights. Wrist watches can have patents on movements or design. In watch industry it is important part for producers, because in this industry is very common that mainly design is replicate. On the world market we can find many replicas of mostly luxury watch brand. For normal consumer is hard to recognize the original from replica.

Strong and luxury producers protected their parts strong. For example, their developed movement or modify the movement. Manufactured cannot sold the movement nobody else then the company which it develop. This is secured by the law. This is kind of protecting the resources.

Another protection for entering on the market is agreement about exclusive representation. The agreements are settled on the concrete period. This period can be different. It depends on business, financial plans or relationship with suppliers.

Important barrier to entry is capital options for new firms. This rule is known from all trade areas. New firms do not have any history for the financial institution. When the company begins in this industry as unknown company, there is the rule of payment in advance. It refers to capital requirements again. You have only one possibility how to finance the entering in industry. You need your own sources of finance or available foreign ones. Incumbent firms have two possibilities how to solve capital options.

During the time partners received the experience (good references) and enough information about partners and on this base it can impose on confidence of supplier and pay in term. Term is different with different firms. Normally it is up to 90 days. The second type of financing is receiving the bank guarantee. It is important for international trade. The bank guarantees that it they will pay in case that the creditor is insolvent. There is also the third possibility. International company provide guarantee on the base experiences, the information and financial statements of company.

### *4.8.2 Capital requirements*

Watch industry behaves snobbish. New firms in industry need to present that it is adequate partner for all. It is psychical barrier for new entrants.

Capital requirements are distinguished by character of single entering subject. If I look on problems from the producer point of view I can find two possibilities how to get into production of wrist watches. One is that producer rent part of production, he doesn't develop new designs and technology and he only produces watches that are combined from already developed models and designs with the minimum variations of colors. After that they give them personal brand name. Other variant is to own a factory, when producer makes his decisions during whole production from development over using of technologies to production by itself. All of this has to be covered by licenses and patents. This alternation is much costlier than the previous one and requires high initial capital on whole draft of production. With lease of production there are no initial costs with development of designs and technology nor even investments in real estate (buildings) or to movable things (machines). Everything is in form of rent.

Next characteristics of subject that enter into the marketplace are special production in limited quantity that is focused on horological specialties. In this case the capital requirements are much less expensive, but strong barrier to entry is high requirement on qualification of workers.

If distributor of watches enters the marketplace, his requirements on capital will be especially connected in publicity of brands, dealing with warranty service after warranty service and investment into products. Products are bought in bigger range and supply of goods is based on payment in advance mainly if the subject is in this market new. This is a kind of guarantee.

### *4.8.3 Economies of scale*

New firms on market in position of distributor have to accept the price recommended by producer. The costs are higher on the beginning than for incumbents firm and the margins are the same.

Economies of scale is not in horological sector main barrier and do not have influence at decision making about entering the market.

## 4.9 Vertical integration

When we look at the list of activities of key players we see that there are included few of different stages of production. To setting up of character of vertical integration we will use measuring of inventories value to total sales in period of 3 years at single pivotal market players.

I have gathered mentioned data from their annual reports - from consolidated balance sheet.

We will evaluate the vertical integration by following relations:

*Value of inventories/Total sales.*

Table 4.3: *Rate of vertical integration – Richemont (in million EUR)*

| Year | Inventories in mil € | Total sales in mil € | Rate of vertical integration |
|---|---|---|---|
| 2007 | 2,076 | 5,302 | 0.39 |
| 2006 | 1,732 | 4,827 | 0.36 |
| 2005 | 1,623 | 4,308 | 0.38 |
| 2004 | 1,522 | 3,717 | 0.41 |
| 2003 | 1,604 | 3,375 | 0.48 |

*Source:annual reports 2007 of corporations*

Table 4.4: *Rate of vertical integration – The Swatch Group Ltd. (in million CHF)*

| Year | Inventories in mil CHF | Total sales in mil CHF | Rate of vertical integration |
|---|---|---|---|
| 2007 | 2,273 | 5,941 | 0.38 |
| 2006 | 1,877 | 5,050 | 0.37 |
| 2005 | 1,724 | 4,497 | 0.38 |
| 2004 | 1,615 | 4,152 | 0.39 |
| 2003 | 1,415 | 4,152 | 0.34 |

*Source:annual reports 2007 of corporations*

Table 4.5 : *Rate of vertical integration – Seiko Co. (in million yen)*

| Year | Inventories in mil yen | Total sales in mil yen | Rate of vertical integration |
|---|---|---|---|
| 2007 | 36,463 | 209,154 | 0.17 |
| 2006 | 34,978 | 213,726 | 0.16 |
| 2005 | 34,594 | 206,891 | 0.17 |
| 2004 | 35,556 | 209,813 | 0.17 |
| 2003 | 40,130 | 226,734 | 0.18 |

*Source:annual reports 2007 of corporations*

Table 4.6: *Rate of vertical integration – Citizen Holdings Co., Ltd. (in million yen)*

| Year | Inventories in mil yen | Total sales in mil yen | Rate of vertical integration |
|---|---|---|---|
| 2007 | 64,805 | 336,685 | 0.19 |
| 2006 | 55,980 | 336,188 | 0.17 |
| 2005 | 52,416 | 335,940 | 0.16 |
| 2004 | 50,469 | 357,288 | 0.14 |
| 2003 | 50,977 | 375,715 | 0.14 |

*Source:annual reports 2007 of corporations*

In case of expanding integration the inventories rise and accordingly we reduce uncertainity from market transactions. As a consequence of reducing the uncertainity in market transactions is the reduction of inventories. Even though the indication is relatively gentle we can speak about market integration. The whole movement of integration may be more dominant than we can see from the above mentioned columns, because the integration is being affected by two opposite factors. On one side the companies reduce their inventories and on the other side they invest into technology development.

Seiko Co. and Citizen Holdings Co., Ltd. have more stages of production. We know the activities of companies, so we can also logically conclude that index are correct.

These companies have usually both characteristics, they are selling on more markets, and at the same time they offer more kinds of products. As noted previously in theoretical part, they cut risks by it. The Swatch Group Ltd. shows that expansion on foreign markets brings fixation of its position in the marketplace and also obtains bigger market power. But at the same time its integration isn't on such levels as is for example at Citizen Holdings Co., Ltd. and Seiko Co., nevertheless they still expand on new markets. In several previous years they almost didn't broaden its portfolio of products. Above all its policy is to be focusing on new markets.

Richemont is society similar to The Swat Group, Ltd. Richemont obtained position in LMH. The main contribution of this was an enlargement of products and diversification of risk in other company. Its aim wasn't then to expand to new markets for obtaining of power fixation, but they rather chose the way that they entered into a different company.

Seiko Co. and Citizen Holdings Co., Ltd. are big companies both of them are worldwide known mainly in electronics. This helps to these companies to have much greater diversification in width of production and they realize bigger savings and at the same time are better protected against pertinent risk.

## 4.10 Conglomerate integration

Subjects have next possibilities for reaching to conglomerate integration:

Buy back or go into a place of other firm that is in different sector or to extend its production by products of different sector inside their firm.

Conglomerate integration is in horological sector standard matter. Over here the combination of companies happens, and also the dissemination of production. Two general trends of conglomerate integration happen most often.

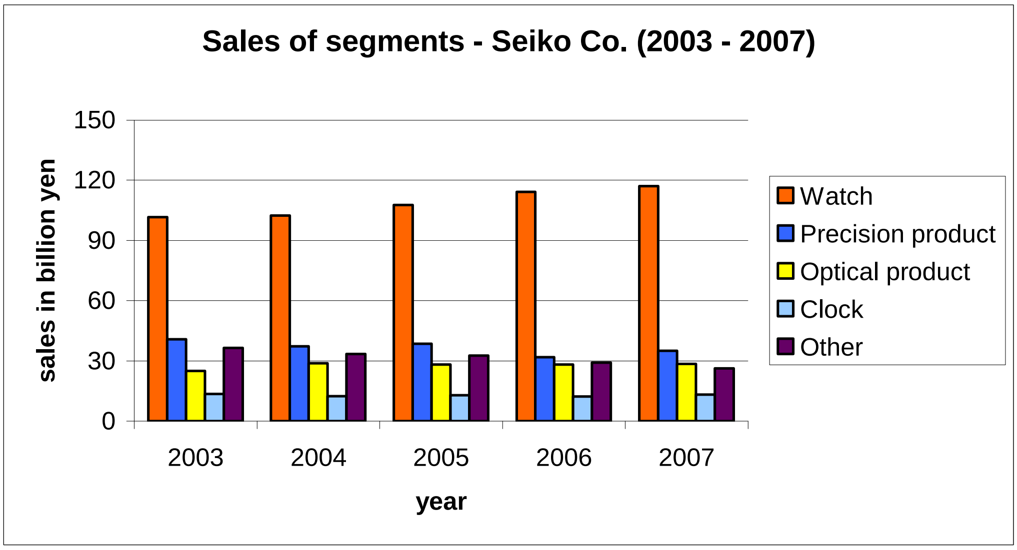
1. Companies that specialize on quartz watch substitute also other electronics e.g. (printers, PCs, cameras, calculator etc.) This type of conglomerate integration usually originates at not watch firms that extended on horological market by the help of already mentioned quartz watches.

2. Companies specializing on mechanical – luxury watch substitute also jewelry, precious stones and other luxury goods (e.g. pen, handbag, chaffs and other accessories). This type of conglomerate integration is much more natural and firms do

this extension of portfolio more often in direction of stylish accessories. The reason is affinity of objective markets and usage of common information and characteristics of markets. There may be also used linkage of requirements on qualified workers, especially at usage and processing at production of raw materials (precious metals, stones, qualitative leather, etc.)

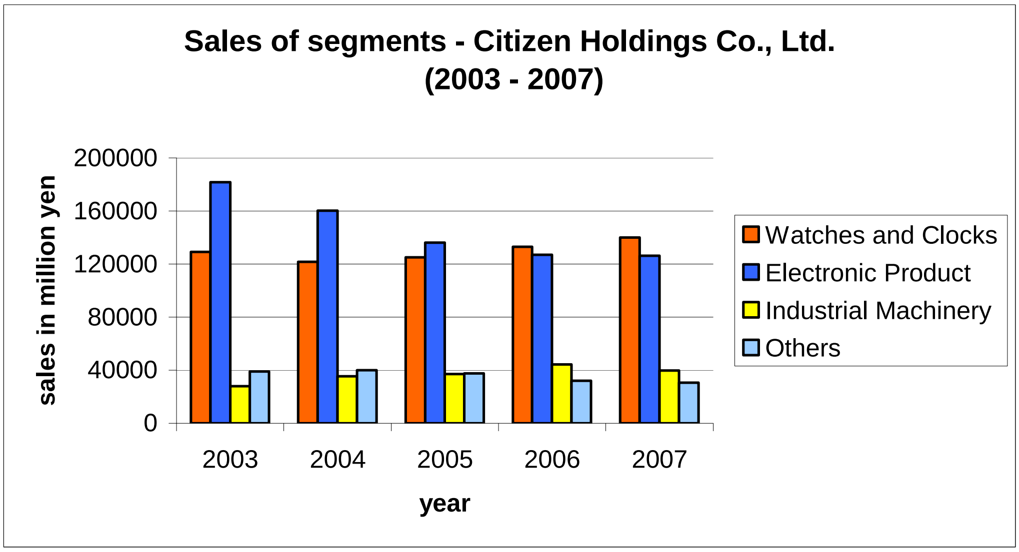
We can look at their sales that are divided according to the segment/product in next graphs.

Graph 4.15: *Sales of segments in Seiko Co. (2003 – 2007).*




*Source:annual report 2007, [10]*

Graph 4.16: *Sales of segments in Citizen Holdings Co., Ltd. (2003 – 2007)*



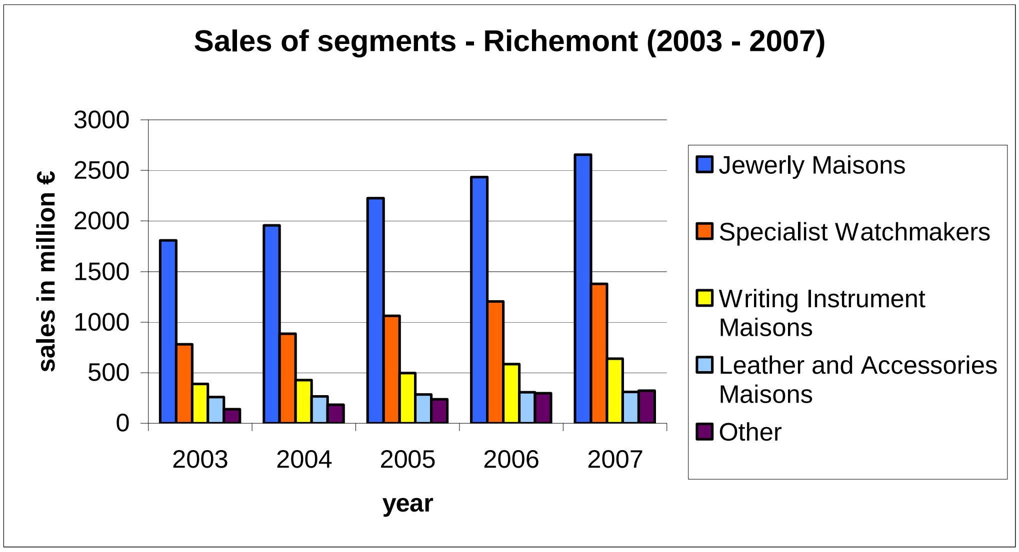

*Source: annual report 2007, [5]*

Seiko Co. brings as first the quartz movement. They develop this technology from electronic which was their main business goal till this moment. Similar development was also in Citizen Holdings Co., Ltd. Citizen started with developing of watch parts.

The other view on the multi-product firms we show on The Swatch Group Ltd. and The Richemont. These two companies extend their product portfolio on jewelry. The connection between the wrist watches and jewelry is not only chance. The watches have high quality and technical precise processing like the movement so design. The precious stones and metals are used on the jewelry and on the wrist watches again. We can talk here about luxury watches. Portfolio of product is concentrated on luxury market and customers. Thanks the same raw materials used during the production, they can reduce the cost and also cost on distribution network and marketing activity.

By observing conglomerate integration during the time we can see how for example Citizen Co. watchemakers strenthens every year and other branch like electronical products declines. Fluctuations we can find at this company in the industrial machinery segment however significant segments remain still watchmakers and electronics and they have opposite trends.

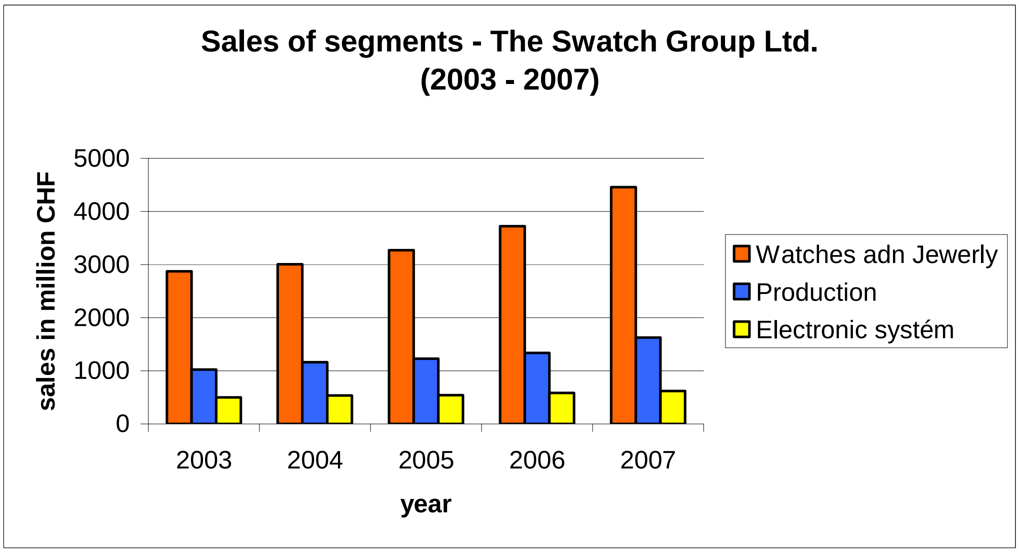
Graph 4.17: *Sales of segments in  Richemont (2003 – 2007)*




*Source: annul report 2007, [9]*

The Swatch Group Ltd. is a good example where we can see how trend of luxury goods rises every year and so is in all representative branches of the society.

Graph 4.18: *Sales of segments in The Swatch Group Ltd. (2003 - 2007*




*Source: annual report 2007, [12]*

Conglomerate integration is significant pattern of the branch. By this companies prevent risks from the watch demand fluctuation.

# 5 Structure of domestic market

## 5.1 Market structure

Czech market is small market in the heart of Europe, where we experienced among 70's and 90's the failure of horological sector. National producers were dropping out from production, buying power of citizens wasn't very high and foreign trade was highly restricted. Presently became the Czech market attractive to watchmaker's and over the last 5 years we saw huge inflow of new brands. Now is this market mainly orientated toward the import of watches. The group of sellers in Czech Republic is composite from distributors.

### *5.1.1 Concentration of sellers*

In Czech Republic is not any producer or is not dominant or own by Czech company. Important group of competitors are Bentime, Fast and in the past it was also Timex. They “infest” the market their cheap watches in worse quality. Czech customers do not know the comparison cheap and more expensive watches. Product of Bentime and Fast we can almost find in each shop, supermarkets or kiosk. Another type of competitor is Hibernia, Nest, Michal Tvrdik, and Janeba Time. These competitors are focusing on similar customers like Manilla, s.r.o. They have wide portfolio of brands, different design and price level. They use partly similar strategy like Manilla, s.r.o.

***Distributor on domestic market***

Company Manilla, s.r.o. has similar preferences like other distributors on domestic market.

Manilla, s.r.o. is a private business company. Its main activity is wholesale with wristwatches. Company posture itself as a distributor of wrist watch. At this time Manilla, s.r.o. trades on Czech and Slovak market. Its collateral activity is Internet sale of watch, retail sale and distribution of logo watch for other than horological companies.

Manilla, s.r.o. was found on 21st April 2005. Since year 2006 Manilla distributes watches on Czech market, in 2007 they broadened business activities also on Slovak market. Now employs 3 salesmen with a focus to retail sale of wrist watch. These deputies have market divided into Bohemia, Moravia and Slovakia. Sale of logo watch meanwhile caters one employee that has free action on Czech market and one external worker on Slovakia. General payroll on full time is 7. Ownership is divided among two principal individuals who putted up the initial investment.

Mission of a firm is to offer to consumers' selection from high - quality and abroad known and tested brands. Manilla, s.r.o. chooses its portfolio of brands according to quality, diversity of design, price and business policy of producer, service and also guarantee.

Manilla, s.r.o. is tax paying subject that means that all buying from the manufacturer in terms of EU are Duty and VAT free, but on ascent is burdened with high tax levy.

Collaboration with manufacturers is based on agreement on exclusive representation for concrete market. Additional markets have to be negotiated separately. Some distributors are overlaying more markets and in this market they hold to the rules about banning of entering on already engaged market. If new distributor wants to compete to current distributor of some concrete brands, producer doesn't give to the second distributor wholesale conditions, but either refers to local partner or rarely supply goods with retail conditions.

Portfolio of watches should included middle and upper price level brands. One of the most important recent trends is that potential watch buyers are willing to spend higher amounts on watches because of the enhanced image appeal.

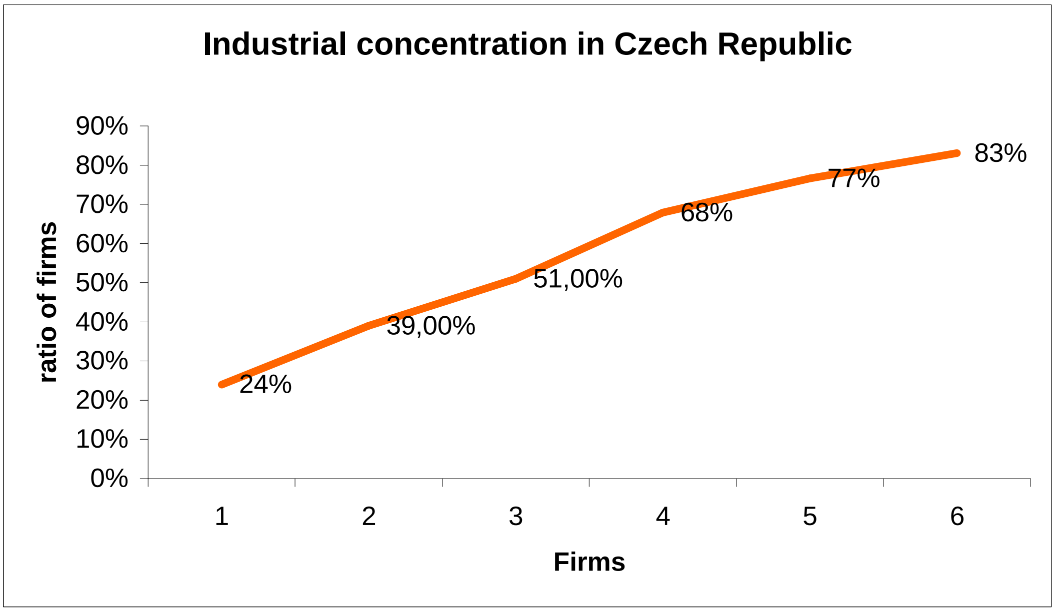
Table 5.1: *Market share of distributors (in %)*

| **Name of distributor (ČR)** | **Market share** |
|---|---|
| Bentime | 24.0 % |
| Michal Tvrdík | 15.0 % |
| Janeba Festina | 12.0 % |
| Fast CR s.r.o. | 16.9 % |
| MPM Quality s.r.o. | 8.7 % |
| Olympia spol. s.r.o. | 6.5 % |
| Jasněna Vláhová | 6.2 % |
| Senti s.r.o. | 5.2 % |

*Source: own work*

For discovering of market share by single distributors we have started from information learned on the basis of controlled telephone conversation. We have compared this information with information obtained by company Manilla, s.r.o. during market survey.

Graph 5.1: *Industrial concentration in Czech Republic*




*Source: own work*

As was mentioned all the company are distributor and do not produce the watches. Only one specialty is Bentime. This is Czech company which own manufacture in Asia.

On Czech market is huge amount of strong companies, for which is watchmaker's industry pivotal region of theirs business. Also is here second group of firms that have watches as completive part of business.

On Czech market is still room for new subjects however at this time have much greater scope of success companies that pay big strove to distribution and fixation of brands in the marketplace.

### *5.1.2 Concentration of buyers*

Biggest concentration of consumers is in bigger cities, where even the culture of sales is at higher level. At the same time in bigger cities is concentration of foreign customers that have the shopping culture of wrist watches on higher level than domestic customers. Biggest concentration of customers is mainly in Prague, Brno, Ostrava, Olomouc, Hradec Králové, Karlovy Vary, Plzeň and České Budějovice. Especially at the borders with Germany and in spa cities is higher sales concentration of luxury watches. This is based mainly on composition and quantity of consumers; tourists from different countries - not only Germany. Purchase of watch in our country is for foreign customers very profitable because sellers are able to lower price by deduction of VAT.

## 5.2 Product differentiation

On the Czech market we can find product differentiation according to categories as stated above. In this article we will describe portfolio of Manilla, s.r.o. Other firms in the marketplace have similar portfolio and they trace similar purposes. Some distributors do not watch general drifts in watchmakers, they lag and their set of brands is obsolete or inadequate to given market.

Portfolio is various - how price, so stylishly. We can find here watches for pretentious consumer but also watches for common use. This composition of brands was elected purposely, to help Manilla fit to consumers and their needs.

This difference bears some hazard - trade with prestigious and common watchmakers together and also wide portfolio bears high spending on this trade and publicity.

On the other side benefits are in flexibility for consumer. Every consumer often searches for different type of watches. Introducing of new brands on market lasts about 3 years in average.

The watches are in different price level from 100 USD to luxury level which is up to 10 000 USD. We describe each brand separately. Brands: Gevril, Du Bois, Invicta, Lancaster, Lip revival seventie's, Certus, Go

***Gevril***

Gevril are luxury watches with combination of classical and Italian design. Foundation of this brand is dated back to the year 1758. Its founder was Jaques Gevril. 60's of 18 century was the time when began the history of Swiss watches. Jaques Gevril was native Swiss and his name was soon known abroad. He was recognized as inventor in horological line. At present is this brand secured by horological enthusiast Samuel Friedmann - that is the reason why the brand was moved to USA.

Gevril watches are manufactured only in limited editions. Production and design of these watches is very specific. Long-time history, diversity, patents, expensive materials (gold, jack, diamonds, and so on) and limited editions pew this brands on high price level. Watches of this series are consumer able to buy from 150.000 as far as 1.100.000 CZK per piece. Price may vary based on the exchange rate of USD.

Gevril makes it possible for distributors to take only a few pieces at the time - this makes it not so costly.

*Du Bois*

Story of this brand is stretched to the year 1785, when it was found by Phillip Du Bois from Switzerland. Conventional horological company that is inherited in family from generation on generation is still to be found in original foundation place. Du Bois watch are classical, largely men's. You can find between them limited sets, gold watch and of course automats. These watches are as well as Gevril's for exacting consumers. Price level of these watches usually starts at 35.000 and goes up to 230.000 CZK. All of these prices depend on course of EUR or CHF.

Company Du Bois makes it possible to take only a couple of pieces, which isn't burdening for distributor. On the other side purchase price of watch is higher and which presents not really small cost.

*Invicta*

This mark was also found in Switzerland. It was found in 1837 by Raphael Pikard that came with the idea, which even high - quality Swiss machinery may be on market offered in reasonable price surface making them accessible for more consumers. Trade name is coming - out from word „invincible" and it stands to this word. After more than century this small business was manufacturing manual and automatic recall watch with splendid design. In 70's of 20th century was Invicta hit by quartz in break. In these days is production partly divided among Switzerland, USA and Japan. Watch are attached by brands "Swiss made" or "partly Swiss made".

Yearly they put out wide and fancy collection of different colors, forms and for various purposes. Draft of this brand is very fit for selling on different markets, even though that whole performance is controlled by demand in USA. Price level of this brand has also very wide scatter, starts at 2.500 to the 500.000 CZK depending on USD exchange rate. Main Invicta models are price between 10.000 and 30.000 CZK.

Nowadays, The Invicta Watch Group has new division in Europe in Netherlands. It brought advantages and also disadvantages.

Advantages: communication in the same time zone, closer for personal meetings, orders in small amount

Disadvantages: lower margins for distributors, higher purchase price, one more member in chain of distribution

***Lancaster***

At this time this brand is not included in portfolios of Manilla, s.r.o. but some negotiations on exclusive representation were already done and brand is going to be from the beginning of 2009 in Manilla stock. This brand is native Italian and its performance surveys on other kinds of accessories such as are wallets, glasses and chaffs. This watch has top - echelon processing and strong Italian design. Its appearance contradistinguishes from Central European watch and that is a reason why they are good candidate for presentation on local market. For example the specialty of this brand is using of material called as „high tech ceramic" for case and chaffs of watch. Further employs in its collection chaffs from octopus. These watches which carry these chaffs point out its sumptuousness. As well as all previous these watches are also ranked among luxury once. Producer cooperates without any difficulty even with small partners. Lancaster is small and adaptable company.

***Jovine***

This brand has its origin in France and that is the reason why it has such a strong design. These watches are expressive and are rate among dress accessories. Watches are expressive not only by its size, but also by the use of different leather origin, colored clock-face and expressive Italian element, like e.g. digit, engine - turning. Price level of brand Jovine is nice to consumers and for fast market introduction. Introduction to the market is not only based on the price level but some difficulties may be done by special appearance of watches that satisfy preferentially exacting consumers.

Supplier is the same like at previous brand Lancaster that means that conditions for cooperation are acceptable.

***Lip***

Brand Lip starts from old tradition, but collection Lip – revival seventies is new special when manufacturers turn back to design and processing in 70's. Inside watch you can find high - quality Eta machines, that are laid in noble steels and completed by strong and unyielding genuine leather, perhaps only nostalgically and a little ironically manufacturers used synthetic slide (plastic). But they didn't even underestimated synthetic slide and used one with cured synthetic glass to correspond with level of whole watch. New collection is coming - out each year and is in limited supply, about 50 models.

For Manilla is purchase of this brand also one from less expensive. Terms of payment are divided on 30 % pay in advances and 60 days payment maturity. Price level of collection starts usually at 4.000 CZK and goes as far as 8.000 CZK.

***Certus***

Tradition of Certus brand is not stretched too far in past, but ever since they try to aim for high - quality performance and price that is accessible to everyone. Collection offers a lot of models of watches: ladies', gentlemen's and now even watches for children. New models are introduced almost in monthly intervals and support or permute current collection. Watches are above all classical, quartz and ladies' elegant plated.

Certus is presently strongest partner for Manilla, s.r.o.. After common experience during dealing, company Manilla, s.r.o. got better terms of payment and purchase costs are not as huge problem as before.

***Girl Only***

Go is determinated only for girls. This brand is considered as modern and young, partial competition to watch Esprit - that are on Czech market pretty extended. Brand is not as known and has short history; introduction on the market will be a little bit more complicated. On the other side is brand money wise unpretentious. The price starts at 1.200 and goes as far as 2.000 and consummation of this brand might help to get it more to know in future.

Suppliers do business on the basis of pro-forma invoice that means payments before consignation of goods and for transportation is employed FOB Incoterms 2000. Producer dispatch only from factory and sets them up at specified place for transporter. At the point of takeover by transporter is happening the passing of costs, insurance, diversification and next duties that are connected with dispatches on buyer - in this case on Manilla, s.r.o.

Summary information you can see in next table.

Table 5.2: *Description of brands (in euro)*

| brand | movement | design | minimum cost/1st order in euro | payment conditions | price level |
|---|---|---|---|---|---|
| Gevril | MM | luxury | 20,000 | in advance | luxury |
| Du Bois | MM | luxury/classic | 15,000 | in advance | luxury |
| Invicta | MM/QM | fashion/sport | 20,000 | in advance | upper/luxury |
| Certus | QM | classic | 12,000 | 30 % + 30 days | upper |
| Go | QM | fashion | 12,000 | 30 % + 30 days | upper |
| Lip | QM | fashion | 5,000 | 30 % + 30 days | upper |
| Jovine | MM/QM | fashion | without limits | in advance | upper |
| Lancaster | MM/QM | fashion | without limits | in advance | upper |

*Note: 30 % + 30 days men as 30 % of total payment is settled before sending the shipment and the rest is paid in term 30 days.*

*Source: own work*

Czech consumers start to be sophisticated and he is looking for higher quality, price and unique design. I would divide Czech market on three major group according the design/purpose of use of watches; one third of customer still looking for classic category of watches, second third is relatively young group which is concentrate on fashion watches and the third group of consumer prefer sport watches.

Regarding to type of movement there is still massive distribution of quartz watches. Mechanical movements will prefer more and more new generation of customers.

## 5.3 Barriers to entry

Next barrier were major, when Manilla, s.r.o. were entering in the market. These barriers guided Manilla, s.r.o. also next 3 years of existence at minimum.

### *5.3.1 Absolute cost advantage*

Absolute cost advantage is included only in agreement with supplier. Manilla, s.r.o. brought on the markets new, interesting brand and received the status exclusive distributor. Nobody else can distribute the same brands.

Incumbement firms on Czech market have exclusive agreements and nobody else can supply this already settled brand on market. Market becomes more concentrate and new entrants are limited by agreements. They can distribute on the market only brands which are not already represented on market. We can conclude that each new entrant fight with introducing of new brand. How intensive is introducing of new brand is depend on marketing activity of producer or distributors from close markets.

### *5.3.2 Capital facilities*

When the company start to cooperate with producer it should convince the producer about its abilities to pay, provide services, make marketing, etc. Manilla has to start with high minimal order. Most of producers require starting big order to select weak company. Company had to pay in advance for each shipment and is hard to receive the bank guarantees form bank without business history.

The second higher cost at the beginning was network of sale representative and their equipment.

The third important cost is strong marketing. The brands are unknown in Czech market and the customers do not believe the new brands, so they are careful in purchase. Here belongs also the setting up of service center no matter of they already forms collaboration with qualified company or if they build their own.

## 5.4 Vertical integration

Vertical integration isn't priority of subjects of Czech watchmakers industry. Exception is only Bentime, that is producer, distributor and has constructed personal service center. This is only rare example on the market and most of firms only distribute watches from the manufacturer to retail or wholesale consumers. Service work is done through agreement between distributor and qualified watchmaker.

## 5.5 Conglomerate integration

With conglomerate integration we can meet even on our market. We can find here several firms that will confirm the thinking that we have presented in terms of world's scale. Typical representatives are:

***Fast ČR, s.r.o.***

Fast ČR, s.r.o. supplies on Czech market watches Casio and Secco (quartz, digital and sport) and further several of fashion brands. In the area of fashion they don't have strong position yet. It is also likely to be through the general composition of supplied goods. Except for wrist watches it also concentrates on black and white electronics and music tools. Auxiliary areas of trade affect also the culture sales, selection of consumers and markets. Electronics is sold more massively than watches and is accessible in stone shops, on Internet and even in hypermarkets. The same happens also in the case of watches.

***Klenoty Aurum***

The main focus of activity for Klenoty Aurum is jewelry. During the time company focused on wristwatch and fixed important position in the marketplace. Klenoty Aurum is comparable with behavior of firm Richemont.

***Hibernia, s.r.o.***

Company Hibernia, s.r.o. is a part of The Swatch Group Ltd. From The Swatch Group Ltd they took over whole philosophy. They distribute on Czech market as well as its home company watches and jewelry.

Conglomerate integration has the same general trend as on big so on partial market.

Manilla, s.r.o. is an example of firm that isn't conglomerate integrated.

Distributors on Czech market are private companies without duty to be making annual reports. That is why it is impossible to obtain information about the sales and shares of single sector on their sales.

# 6 Conclusion

The market analysis helped us to understand the law of rules, relationship and the market structure in the branch of watches. Watchmaking branch has been concentrated in Europe – in the cradle of watchmaking - in Switzerland. After the coming out of quarz clockwork the branch has brought Asian states into the business as well. These days the production centers are Hong Kong, Japan, Switzerland, Germany, France and Italy. We can find the production of watches in other countries but this production is not so important for the market characteristics so we did not engaged in it.

Quarz watches are produced in larger quantities than mechanical ones and are mass-distributed to the whole world. The scale of production severity reflects in the price. Mechanical watches are much more complex for the production – higher qualification of labour force is required and the clockwork is made of more complex small parts. The price of mechanical watches much exceeds the price of quarz ones. On the other hand it is produced in smaller quantities.

The biggest consumptionary of watches produced is Europe and Asia and right behind them are the US. Europe as for the area is the biggest consuming continent. Asia consumes a big part of it´s production on domestic markets and the rest exports to Europe and the US.

It is necessary to follow the fashion and trends on the fashion and engineering markets in watchmaking branch. This branch has expanded in the past and the regression followed. This regression has been brought in by the mobile communication. So that we can say that watchmakery is sensible at fashion and technology development. Raw materials like metals, stones, leather can be important as well. These raw materials may affect the trend in watchery business in the way of style or price.

There are a few entities on the market which try to earn the largest possible market share.

To success in meeting this target it uses entering new markets.

Producers use their seles representatives to select those markets. Than they enter the market by their own and by establishing a new branch office or they select a convenient agent (distributor – outer entity) for doing business on the market. Typical example is the Czech market which has been entered by aproximatelly 20 new brands in past 3 years. New markets expansion is now a strong motivation for producers.

Watchmaker companies do not stay only in watchmaking branch and expand their activities on similar branches like jewelery, fashion accessories, leather products, small electronics, etc. This is caused by the sensitivity of the branch on factors from other branches and accessibility and prices.

For entering a new market the most important factor is financial potency and qualification. There are other ways how to enter a market, which do require neither capital nor qualification.

These forms of market entering are excluded by the trend which orientates watchmakery and from the long-run point of view this entering wouldn´t be efective.

We are considering the entering from the position of producer who does not control the production but just hires a part of it that is already established in the manufacure and keeps the concept of watches already produced.

That is why there can be watches of same appearance, construction under different quality conditions and brand on the market.

If the company would enter the market in position of a distributor of watches it is up to it to build up a network of business affiliates, brand promotion, service background creation.

Producers behave scepticaly and cautiously what means higher starting investment due to difficult business conditions for new companies in the branch. By that behavior the producer protects his brand and relies on experienced or financialy strong partner. Business is based on contracts about exclusive distribution that are usually signed for a certain period of time and when this period is over there can be renewal or the cooperation can cease. The producer can substitute himself on another market by other distributor. One of the distributors may earn exclusive agency for more markets and may become a strong partner for the producer. The producer can leave him for example the whole European market. This strong partner than has got a dominant influence on production and development of the brand that he stands for.

Price policy is very simple and is equal for all brands and entities. Final prices are highly recommended or fixed and hardly anybody has got a reason not to keep them.

When negotiating with producers about the prices the subject is prepared and it can earn a price advantage in the form of brand promotion sharing, quantity or turnover discounts or service sharing by the means of spare parts discounts or spare parts free of charge.

We have already mentioned that it is important to follow the trend which defines future development in watchmaking business.

Although it may appear strange the production of watches influences the trend in fashion. Designers like fashion ones try to design novel new models in combination with new materials used. Watches are classified as fashion accessories so that the fashion affects this branch.

Watchmaking specialty is the hearth of the watch – the clockwork. Watchmakers try to improve it technically to achieve preciseness and as small size as possible, artistic design or jeweling of the clocwork. Only the watchmakers decide about the development. The clockwork is mostly the base for a competition advantege earning before others.

The quarz clockwork which can be compared by its rendering with the mechanical one had topped this technical preciseness in the past.

The quarz clockwork have brought massness into the business and had taught the customer that watch is a consumption goods. The period of quarz expansion had only had a temporary character and after a few decades producers came back to classical watchmakery.

At the very end I would like to assess watchmaking branch as prestige and conservative and that is why entering the branch by a new subject should not be underestimated.

Watchmakery keeps its high level of presentation and merchandise and that can reflect on your success in the future.

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# Register of used abbreviations

| | |
|---|---|
| SCP | structure – conduct – performance |
| HHI | Hirschman Index |
| MES | Measures of economie of scale |
| FH | federation horologie |
| CEH | Centre Electronique Horloger |
| SIHH | Salon International de la Haute Horlogerie |
| LMH | Les Manufactures Horlogères SA |

# Register of tables and graphs

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