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The Comeback of the Swiss Watch Industry on the World Market:

A Business History of the Swatch Group (1983-2010)*

Pierre-Yves DONZÉ†

Abstract

The objective of this paper is to contribute to a better understanding of the comeback of the Swiss watch industry on the world market since the end of the 1980s. It focuses on the Swatch Group (SG), currently the world's biggest watch company.

In 1983, the merger of the largest watch group (SSIH) and of the trust controlling the production of parts and movements of watches (ASUAG) into SG was the main measure taken to overcome the Japanese competition. Managed since 1986 by Nicolas G. Hayek (1928-2010), SG experienced a high growth and recovered its competitiveness on the world market, becoming a driving force for the entire Swiss watch industry. This success is traditionally explained by the firm itself and by scholars as the result of the launch of a new product (Swatch, a cheap plastic quartz watch first marketed in 1983) and the persistence of an old technical culture in Switzerland which enabled this rebirth.

This paper, based on SG annual reports, focuses on the strategy adopted by SG since 1983. It shows that, rather than product innovation (Swatch), it was the rationalization and globalization of the production system (concentration of strategic parts’ production in Switzerland; transfer of production facilities in Asia), together with a new marketing strategy (brand segmentation, distribution and retailing facilities, communication, etc.) which were the two main sources of the comeback of the Swiss watch industry on the world market. While Japanese still attach great attention to product innovation, SG largely established its competitiveness on non-technological innovation.

JEL: M31; N80

Keywords: Watch Industry; Switzerland; Swatch Group; Luxury Goods; Marketing Strategy

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**Introduction**

This paper tackles the comeback of the Swiss watch industry on the world market after the 1975-1985 crisis. The analysis focuses on the Swatch Group (SG), the main Swiss watch company since its foundation in 1983 and the current world leader in this branch, with the objective of shedding light on the strategic choices made by the firm and their implementation.

The Swiss watch industry was considered as virtually dead at the beginning of the 1980s, not having been able to repel the worldwide expansion of its Japanese rival. Thanks to the mass production of high-quality mechanical watches followed by quartz watches, the Japanese watch industry undertook in the second half of the 1960s a growth strategy aimed at putting an end to Swiss domination of the world market.\(^1\) The tremendous development of Japanese watch companies in the 1970s, whose production value skyrocketed from USD 350 million in 1970 to 2.0 billion in 1980, allowed the country to overtake Switzerland in 1981-1985. During this five-year period, the average value of Japanese watch production amounted to USD 1.96 billion, as compared with USD 1.69 billion for Swiss watch exports.\(^2\) These statistics do not include the Swiss domestic market, but it is unlikely that it had a decisive influence due to its very small size. Moreover, Japanese watch exports amounted to an average of USD 1.741 million in 1981-1985, that is, a higher value than Switzerland, a difference which clearly reflects how Swiss watchmakers had become less competitive on the world market.\(^3\)

Japanese competition triggered a major crisis in Switzerland, characterized by a drop and stagnation in exports as well as a steep decline in employment (from 89,000 in 1970 to 33,000 in 1985).\(^4\) Yet at the end of the 1980s, both countries moved into entirely different phases, marked by a huge growth of Swiss exports (USD 4.9 billion in 1990; 6.1 billion in 2000; 11.5 billion in 2009) on the one hand, and a stagnation then a drop in Japanese exports (USD 2.8 billion USD in 1990; 1.5 billion in 2000; 0.6 billion in 2009).

In Japan, since the 1990s, in the context of the decline of the watch industry, both the watch companies and the scholars have given high priority to product innovation in order to get out of the crisis and to become competitive once again with the Swiss watch industry. This obsession with product innovation has led firms to launch many new products (solar watch 1995; spring drive watch 1999; radio-controlled watch 2005), but has had very little impact in terms of growth.\(^5\) In the meanwhile, management scholars also continue to attach great

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2. Statistique annuelle du commerce extérieur de la Suisse, Berne: Federal Customs Department, various years; Kikai tokei nenpo, Tokyo: MITI, various years; Nihon gaikoku boeki tokei, Tokyo: Ministry of Finance, various years.
importance to technological innovation, emphasizing product diversification or product modularization as ways to recover competitiveness.\(^6\)

While the Japanese have stuck to technological innovation, Swiss scholars have given more weight to cultural issues and marketing strategy in explaining the shifts that have occurred in this industry since the 1990s. Two main approaches can be distinguished. The first and predominate one is an explanation based on the industrial district theory.\(^7\) The use of some key elements of Marshall’s district (industrial atmosphere, inter-firm competition-cooperation relations, etc.) made it possible to interpret the rebirth of the Swiss watch industry as resulting from a technical culture situated in a specific territory, which enabled the repositioning of the industry at the high end and the manufacture of quality products using traditional know-how. However, this kind of approaches cause problem, because they propose a model which is based on a disputable interpretation of industrial district and on an analysis which does not rely enough on documentary sources, on the one hand, and because they do not insert the Swiss watch industry in a global context, on the other hand.

The second approach interprets the revival of the Swiss watch industry as the consequence of a new marketing strategy aimed at a repositioning towards Japanese and Chinese competitors. Glasmeier briefly showed that the readaptation of the Swiss production system to global competition in the 1980s – what she called “reorganization à la Japanese”\(^8\) – was the source of the restored competitiveness of Swiss watchmakers. As for the works of Crevoisier and his team, they highlighted not only the transformation of the production system but also the decisive importance of new marketing strategies.\(^9\) According to Jeannerat and Crevoisier, the basis for the success of the Swiss watch industry is precisely a “non-technological innovation.”\(^10\) However, work dealing with the regional economy generally focuses on the period after 2000 and fails to situate this strategy as part of a historical process.

This contribution forms part of the second kind of approaches described above. It is aimed at furthering understanding of the implementation of the new marketing strategy adopted by the Swiss watch industry in the 1990s and, notably, at highlighting links with the production system. The approach adopted here is that of business history, with a special focus on the Swatch Group (SG). However, in view of this company’s unique position within the Swiss watch industry, as the biggest firm (26.6% of all employment in this sector in Switzerland in 1990; 28.9% in 2000)\(^11\), on the one hand, and as a quasi-monopolistic producer and supplier of parts and movements for the entire industry, on the other hand, understanding its development sheds light on the evolution of the industry as a whole.

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\(^8\) Glasmeier 2000, p. 247.
\(^9\) Crevoisier 1993.
\(^10\) Jeannerat and Crevoisier 2011.
\(^11\) Own calculations on the basis of Convention 2008, p. 13, and SG annual reports.
1. The creation of SG and the “legend of the Swatch”

At the beginning of the 1980s, the main measure adopted to pull out of the recession was the merger of the two biggest Swiss watch groups, namely ASUAG and SSIH (1983). With gross sales amounting respectively to CHF 1.3 billion and CHF 815 million in 1979, they outstripped other watchmakers, third place being commonly occupied by the Société des Garde-Temps SA and Rolex, whose gross sales at the time were evaluated at CHF 190 million.\(^{12}\) What is more, in 1979 ASUAG and SSIH employed about half of the workforce in the Swiss watch industry.\(^{13}\) However, this clout must be seen in perspective, as it was primarily due to the crisis which impacted other companies. In reality, ASUAG and SSIH faced huge industrial and financial difficulties, and their survival owed much to the support of the major banks.

ASUAG had difficulties due to the fast-paced growth and diversification of previous decades. Whereas this company had initially been founded in 1931 as a trust controlling the production of movements and parts for nearly all the industry and benefited from the support of the federal State, the liberalization of the 1960s called this traditional role into question. Consequently, the firm attempted in 1971 to diversify into the production of complete watches by setting up the group General Watch Co. (GWC), which included notably the companies Longines and Rado. This strategy had a deep impact on the company’s finances and management. Between 1970 and 1974, ASUAG assets shot up from CHF 54.5 million to CHF 234.1 million. Of course, gross sales were also growing steadily during this period, rising from CHF 760 million in 1970 to a peak of CHF 1.4 billion in 1974. However, ASUAG depended increasingly on outside capital, which made it possible to found GWC. It amounted to 28.3% of assets in 1974 as against 23.7% in 1970. As a result, when the Swiss watch industry went into a tailspin, ASUAG’s gross sales plummeted to less than CHF 1.2 billion per year in 1975-1978 and its dependency on bank capital deepened.\(^{14}\)

SSIH was also hit by the crisis after 1974. This group of complete watch-makers, including especially Omega and Tissot, diversified extensively in the 1960s and the early 1970s, especially into cheap mechanical watches (Economic Swiss Time Co.), which were not competitive on the world market. Between 1974 and 1982, SSIH collapsed. The volume of sales plummeted from 12.4 million to 1.9 million watches, while gross sales sank from CHF 733 million to CHF 537 million. As for employees, they numbered 7,300 in 1974 but only 3,400 in 1982.\(^{15}\) Banks kept the company going, granting credits and becoming involved in management. A restructuring committee, led by the Union Bank of Switzerland (UBS), the

\(^{12}\) JETRO 1982.  
\(^{13}\) JETRO 1982.  
\(^{15}\) Fallet 2003, p. 185.
Swiss Bank Corporation (SBC) and Credit Suisse (CS), was set up in 1980. The following year, a former director of UBS, Peter Gross, was appointed President of the Board of Directors. Between 1981 and 1983, banks injected more than CHF 900 million into these two watch groups and tried to withdraw as soon as they could.\textsuperscript{16}

1.1 The creation of SG and corporate governance in 1983-1986

To pull off this reorganization, banks turned to the consultant Nicolas G. Hayek. Born at Beirut in 1928 and trained at the University of Lyon (France), Hayek had founded in 1963 a consulting firm in Zurich, Hayek Engineering, working for several European industrial companies.\textsuperscript{17} In the reports he wrote for banks in 1982, he proposed as the main measure merging ASUAG and SSIH into a single holding company, the Société suisse de microélectronique et d’horlogerie SA (SMH). This was done in 1983, giving birth to the world largest watch group, which changed its name to Swatch Group in 1998 (hereafter SG).

The years 1983-1986 were a transition period when the merger was implemented. The whole structure of SG was indeed very unwieldy, as ASUAG and SSIH were both organized as holding companies possessing several groups of enterprises – sometimes with their own subsidiaries. In 1983, the various companies were grouped together into three sub-holdings, depending on their type of activity (complete watches; movements and parts; other), and initially characterized by rationalization. This policy was directed by a four-member Executive Management Board.\textsuperscript{18} Chaired by Pierre Arnold, CEO of the Migros chain store and a member of several Boards of Directors (CFF, Swissair), it also included three division managers from both merged companies (Ernest Thomke for watch production, Andor Helti for high-tech and Carl M. Meyer for finances). This board worked under the supervision of Nicolas G. Hayek, who was engaged until 1986 as a special adviser to the Board of Directors, and went on to become the real seat of power within SG.

As for the Board of Directors, it was still dominated by bankers, who wanted to monitor the success of the transition. In 1985, there were four bank directors among the eight members, and the presidency was occupied by François Milliet, an administrator of several companies including UBS. Arnold, SG’s CEO, was also a member of the Board, as well as two watchmakers, Norbert Schenkel, president of Roventa-Henex SA and obviously a former shareholder of ASUAG, and Paul Lüthi, president of Rado. This Board did not get involved in the operational management of the company.

In 1985, together with a group of Swiss German investors (Pool Hayek), Nicolas G. Hayek

\textsuperscript{16} Pasquier, « Swatch Group », in \textit{DHS}.
\textsuperscript{18} \textit{Journal de Genève}, 16 June 1984.
acquired the majority of SG’s capital. He then entered the Board of Directors and became president in 1986, in the stead of Milliet. The two watchmakers also left the board shortly thereafter, in 1986 for Schenkel and in 1989 for Lüthi. As for the bankers, they stayed on the Board but welcomed new members from the Pool Hayek.

In the short term, the main result of rationalization was to enable the company to become profitable once again. After a loss in 1983, SG was back in the black the following year. Of course, the profit margin, which amounted at less than 5% of gross sales until 1987, was weak and gross sales grew slowly in the 1980s. By the way, it was only in 1989 that SG reached the CHF 2 billion mark in gross sales, that is, the peak reached by ASUAG-SSIH in 1974. The second part of the 1980s thus appears as a turning-point when SG recovered its competitiveness on world markets. Usually, key importance is attached to the Swatch in this process, but this common view must be discussed.

Fig. 1: Gross sales for SG, as millions of CHF, and net profit as a %, 1983-2010

Source: SG annual reports

Note: net profit is the profit after depreciations, reserves and taxes.

1.2 The relative importance of the Swatch

The Swiss collective memory, the story told by SG and academic works usually portray the

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19 Annual reports of ASUAG and SSIH.
crucial role of a product innovation in explaining the success of SG and the comeback of the Swiss watch industry on the world market: the Swatch. Developed as a fashion product, this plastic-made quartz watch manufactured in Switzerland was launched in 1983 and experienced growing popularity in the world since the end of the 1980s. Its success supposedly enabled SG to invest in taking over and restructuring other brands and thereby relaunching the entire industry. According to the “legend of the Swatch”, Hayek’s launching of a cheap quartz watch, a product which traditional watchmakers did not trust because of their conservative mindsets, supposedly made it possible to rescue the Swiss watch industry and make it able to compete with Japan once again.

Due to the lack of data about the various SG brands and products, it is not possible to assess precisely the real impact of the Swatch on the firm’s management or to determine which products were responsible for its restored competitiveness. However, the Swiss foreign trade statistics and the annual reports of the Federation of the Swiss Watch Industry give some valuable clues. They indeed mention the value and volume of exports of “non-metal watches”. Even if these watches are not only Swatches, this brand obviously represents a very important place within this category, with the value of its export posting high growth after the launch of the Swatch (1983), rising from CHF 13.4 million in 1980 to CHF 225.9 million in 1985 and a high of CHF 798.7 million in 1993, before falling sharply until 2000 then stagnating at an average of CHF 297.6 million CHF in 2000-2009, that is, the same level as the second half of the 1980s.

These numbers do not fully reflect Swatch’s gross sales. On the one hand, they also include products from other brands, even if their share is obviously very low due to the general trend towards metal products within the Swiss watch industry. On the other hand, not all Swatches are contained in these numbers: Swatches sold on Swiss market and metallic Swatches (for example the Irony line) are excluded. Yet, as this is the only accessible data, it is interesting to compare the value of these exports to SG’s gross sales. This type of watches accounted for only a minority share of SG’s gross sales. In the years 1985-1990, it only came to an average of 16.0%. During the peak years 1990-1995, the value of exports of non-metal watches was as high as 22.8% of SG’s gross sales, but since 1999, this share has been less than 10%. This means that some 75-80% of SG’s gross sales came from other businesses in the 1980s-1990s, and some 90% in the 2000s. Even if it undoubtedly represents a major profit source, that is, a key supply of money for restructuring, the Swatch did not play the overwhelming role that is usually thought. In fact, SG’s regained competitiveness is based on two other major elements: the rationalization of production systems and a new marketing strategy.

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21 Statistique annuelle du commerce extérieur de la Suisse, Berne: Federal Customs Department, various years.

The years 1985-1998 were characterized by far-reaching streamlining of the means of production. The ASUAG-SSIH merger indeed led to a weakly integrated conglomerate of watch companies, and the reorganization of the production of watches, movements and parts was a major issue during the first few years. This policy rested upon two key points: centralization of movement and parts production in Switzerland; and globalization of production systems.

2.1 Centralization of movement and parts production in Switzerland

One of the first measures adopted was the centralization of movement and parts production within the company Eta SA, which belonged to ASUAG until 1983. This was not a new policy but rather a continuation of the strategy of merging Eta’s subsidiaries which Thomke pursued after he was appointed to head up the firm (1978). The objective was the same: the concentration of production aimed at rationalizing (reduction of number of models, interchangeability of parts) and automating production. However, contrary to what happened until the beginning of the 1980s, this policy was applied to all the group’s companies. It led to a deep upheaval within the biggest watch companies, which had to stop producing their own movements and concentrate on marketing. The rationalization brought functional dissociation at the group level, with some enterprises tasked with producing movements and others responsible for selling watches. This change particularly affected the most prestigious companies of the group: Omega, Longines and Rado stopped producing their own movements in 1984-1987.

The development of production systems also took the form of the acquisition of firms, essentially subcontractors for which SG was already a customer. Apart from assembly plants opened in Asia and in America (see below), the takeover of two Swiss companies, namely the watchcase maker Georges Ruedin SA (1989) and the crown-maker Meco SA (1990), must be underlined. Abroad, SG acquired two parts makers in France, Régis Mainier SA (1987) and Marc Vuilleumier (1990), as well as the company Frézard Composants SA (1991). In Germany, SG bought up a movement and parts maker, Pforzheimer Uhrenwerke PORTA GmbH (1990). Buying up production companies in Europe dovetailed with a verticalization strategy aimed at strengthening the control of parts supply.

2.2 Globalization of production systems

The international division of production was the second thrust of the rationalization strategy

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22 Vogt, « Eta », DHS.
adopted by SG in the years 1985-1998. In reality, it was not a new strategy in the Swiss watch industry. The liberalization of the industry in the 1960s made outward direct investment possible, and in the 1970s the main watch companies opened some production plants abroad, mainly in South-East Asia.\(^\text{23}\) Thus, in 1979, ASUAG had a stake in Beta SA, in Brazil, a company involved in the assembly of watch movements.\(^\text{24}\) As for SSIH, in 1981 it owned the company Economic Swiss Time, Hong Kong.\(^\text{25}\) Accordingly, SG’s strategy of globalization of production dated far back, but it was rationalized and extended to a larger scale.

The opening of a production center in Asia was a priority of the management since the beginnings of rationalization. As a result, Eta SA opened a plant in China in 1985, which was transferred to Thailand the following year due to administrative problems with the Chinese bureaucracy.\(^\text{26}\) The Bangkok-based company Eta (Thailand) Co. Ltd specialized in the production of watch components – primarily destined for supplying Swiss plants – and the assembly of electronic modules for the Asian market.\(^\text{27}\) It experienced high growth, characterized by the opening of a subsidiary in Malaysia, Micromechanics Sdn Bhd (1991). In 1998, Thai exports of watch movements and movement parts amounted to 137.4 million USD, of which 45.8 million USD to Switzerland and 72.2 million USD to Hong Kong.\(^\text{28}\) The expansion in Asia was pursued with the opening of a plant in China, Zhuhai SMH Watchmaking Ltd., in the Special Economic Zone of Shenzhen (1996). The objective of this company was the production of watch components as well as the production of quartz watches for the Chinese market.\(^\text{29}\) However, this second objective, essentially based on the launch of the brand Lanco, turned out to be a failure and the Shenzhen plant produced mainly quartz movements at the beginning of the 2000s.\(^\text{30}\)

As for America, the second base for the assembly of movements within the SG outside Switzerland, it included two subsidiaries. The first was an assembly plant opened in 1961 by American investors in the Virgin Islands, Unitime Co. Ltd.\(^\text{31}\) This company belonged to the American watch distributor Harris, which was taken over in 1973 by Mido, G. Schaeren & Cie SA, a member of the holding General Watch Co. controlled by ASUAG, with the objective of extending its activities on the US market.\(^\text{32}\) The second was also an assembly plant set up before the 1983 merger, the company SMH do Amazonas, in Brazil. Even if it was only mentioned since 1990 as an operational company in the SG’s annual report, it was

\(^{23}\) Blanc 1988.  
\(^{24}\) Annual report, 1979, p. 30.  
\(^{26}\) *Journal de Genève*, 13 September 1994.  
\(^{27}\) *Journal de Genève*, 13 September 1994.  
\(^{28}\) World Trade Atlas, foreign trade statistics for Thailand, numbers 9108 + 9110.  
of globalization of production systems. The share of employees in Switzerland, which was 80% in 1983-1985, dropped to 71% in 1990 and to 54% in 1998, a proportion which has remained stable until now. This internationalization primarily relies on the development of the Asian plants. The share of employees in Asia, not mentioned in the 1980s, indeed amounted to 21% in 1992 and to 33% in 1998.

2.3 Consequence: better productivity

The rationalization policy had two major results. Firstly, it boosted production growth. The volume of watches and movements produced by SG shot up from 44.3 million units in 1985 to 86.9 million in 1992 and to 118.8 million in 1998. Levels of growth are characterized by two periods, with high growth in 1985-1992 (annual growth of 8.3%), followed by weaker growth (5.3%), a difference related to productivity trends.

Secondly, it let SG regain its competitiveness on the world market thanks to better control over production costs. The company’s productivity trends between 1984 and 2004 clearly highlight the key issue of this period. Even if this index is approximate, as it does not distinguish between blue-collar and white-collar workers, or between complete watches and movements, it sheds some light on the issue of rationalization of production. The average amount of units produced per employee indeed grew steadily until 1992, rising from 3,329 in 1984 to 6,075 in 1992. Since 1992, productivity has remained relatively stable, with an average of 6,034 units in 1992-2004.

2.4 A movement producer

What watch types were made within this rationalized and globalized production system? SG’s annual reports contained very few detailed data on products. However, some production statistics published in 1986-1987 make it possible to grasp this question.

Data published in the 1986 and 1987 annual reports show that SG produced essentially movements (see table 1): their volume amounted to more than 30 million per year, as against 15 million for complete watches. Moreover, they were mostly quartz movements (98.4% of volume and 95.3% of value). The high proportion of movements can be explained by the fact that one of the two enterprises merged into SG in 1983, ASUAG, was actually a trust that had

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33 This company is not mentioned in the annual reports until 1989, probably due to the fact it was a minority stake. In 1990, SG possessed 70% of shares, which explains why it entered the list of companies belonging to SG.
34 The volume of production is unknown since 2004.
controlled parts and movement-blanks production for the entire Swiss watch industry since the 1930s. Accordingly, SG has perpetuated its historical role of movement supplier for virtually all Swiss watch enterprises. Thus, the proportion of movements sold in Switzerland amounted to 36.9% and 32.8% of the total, for volumes in excess of 10 million pieces. Obviously, movements represented a substantially lower average value (CHF 10.6 CHF in 1986) than watches (CHF 83.1 in 1986). Yet their sale was important for SG. In 1986, even if it amounted to a mere CHF 326 million, that is 17.9% of gross sales, it was a sum similar to the one for exports of non-metallic watches (Swatch) that year. The new growth experienced by the Swiss watch industry since 1985, with a volume of completed watches rising from less than 20 million pieces by year in 1982-1984 to 21.1 million in 1985 and 34.9 million on average in the 1990s, undeniably benefited the main producer of movements. Yet, since 1988, SG’s annual reports no longer provide any data related to movement volume and shares. The firm’s communication strategy has emphasized the worldwide success of the Swatch as the key profit source, and began to hide the fact that it was first and foremost a movement producer. Nevertheless, since 1997, the value of the division “movements and components” has represented sales of CHF 1.2 billion, that is, 32.2% of gross sales. Within ten years, this division apparently grew steadily. Finally, the point should be made that SG did not only sell watch movements to Swiss companies. Its main customers for this product in 1986 and 1987 were actually foreign companies, mostly Asian and American. It is not possible to know the nature of these movements, but these were apparently products made in SG’s plants abroad.

Tab. 1: SG sales as products, 1,000 pieces, 1986-1987

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<td></td>
<td>N</td>
<td>%</td>
<td>N</td>
<td>%</td>
</tr>
<tr>
<td>Switzerland</td>
<td>11349 36.9</td>
<td>1400 9.4</td>
<td>10040 32.8</td>
<td>1420 8.6</td>
</tr>
<tr>
<td>Europe</td>
<td>1494  4.9</td>
<td>6034 40.3</td>
<td>846  2.8</td>
<td>6762 40.7</td>
</tr>
<tr>
<td>Far East</td>
<td>10153 33.0</td>
<td>463  3.1</td>
<td>12510 40.9</td>
<td>762  4.6</td>
</tr>
<tr>
<td>America</td>
<td>7484  24.3</td>
<td>6169 41.2</td>
<td>7192 23.5</td>
<td>6700 40.4</td>
</tr>
<tr>
<td>Other</td>
<td>308   1.0</td>
<td>893  6.0</td>
<td>3    0.0</td>
<td>957  5.8</td>
</tr>
<tr>
<td>Total</td>
<td>30788</td>
<td>100</td>
<td>14959</td>
<td>100</td>
</tr>
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</table>


Regarding complete watches, the only data published are those concerning the years 1986 and 1987. Two comments are in order. Firstly, the domestic market appears as more important
than is usually considered, as it amounted to some 10% of the volume. Secondly, this underscores SG’s extreme dependency on big traditional outlets: Europe and the USA. SG, which exported 90% of its finished watches there, was more dependent on them than the Swiss watch industry as a whole (83.4% of exports). While Europe was still a competitive market for the Swiss watch industry, due to good control of the distribution network and a competitive advantage of Swiss brands over American and Asian ones, the US posed a problem for SG. The strong dependency on this market, which absorbed more than 40% of sales volume in 1986 and 1987, reveals above all the absence of other fast-growing markets, especially in Asia. The share of the Far East came to a paltry 3.1% of sales volume in 1986 and 4.6% in 1987. For the entire Swiss watch industry, only the three biggest Asian outlets – Hong Kong, Japan, Singapore – reached 5.7% of exports of complete watches in 1986.

2.5 Financial impact of restructuring

The main financial consequence of the restructuring of the means of production and of the distribution system was the progressive autonomization of the company as well as the end of reliance on bank capital. SG became a very lucrative company, ploughing back a large share of its profits into developing the firm. Net profit after depreciation, reserve and taxes posted continuous growth, rising from 3.3% of gross sales in 1985 to 10.7% in 1995. This excellent financial situation made it possible to distribute ever-larger dividends (5% in 1986; 12% in 1990; 18% in 1992).

Yet the relentless growth of profits should not obscure a key element of the firm’s management: its self-financing policy. The modernization of the means of production and the growth of the company went together with ever-diminishing dependency on the banks. A huge amount of profits were ploughed back into reserves. Apart from paid-up capital, SG’s accumulated equity capital came to CHF 2.0 billion in 1995, as compared with a scant CHF 190 million in 1985 and 750 million in 1990. Measured as a percentage of the balance sheet, shareholders’ equity posted a rising trend until 1997. Whereas it was only 32.1% in 1985, it passed the 50% mark in 1989 and reached 70.1% in 1995. This financial empowerment enabled SG to develop without relying on bank loans. For Nicolas Hayek, who was only a minority shareholder in 1985, this strategy was the way to become independent in the medium term. As for banks, their disinvestment from ASUAG and SSIH was an objective which went back to the 1970s. The evolution of SG’s governance clearly reflects this process of emancipation, with the successive departure of most of the bankers from the Board of Directors: Rolf Beeler (BPS) and Paul Risch (BCB) in 1993, followed by Walter G. Frehner (SBS) in 1997. Since 1998, there has only been one banker on the Board, Peter Gross (UBS).

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35 Data communicated by the Federation of the Swiss Watch Industry.
3. **A new marketing strategy**

The second main thrust of the strategy which made it possible for SG to establish itself as the world’s leading watch group was the adoption of a new marketing strategy. This occurred in two phases. Firstly, during the years 1985-1995, the focus was primarily on the restructuring of the distribution system, a move which dovetailed with the group’s overall rationalization policy. Secondly, since the mid-1990s, SG adopted a brand repositioning strategy.

4.1 **Rationalization of the distribution system (1985-1995)**

Since the middle of the 1980s, the restructuring of the means of production went together with a profound rationalization of the distribution system, characterized by the creation of distribution companies responsible for all of the group’s brands on the main markets. When SG was founded in 1983, each watch company had its own distribution network, as a result of which SG possessed several distribution and sale companies in some countries. For example, in 1985, it had eight subsidiaries in the USA, five in Germany and two in Hong Kong.

The principle of rationalization adopted in the second part of the 1980s was premised on a single distribution company in one market. As a result, SG closed several of them down. In 1991, it had only one such network in the USA and one in Germany. What is more, SG liquidated SA Longines pour la Suisse (1993), Omega Electronics Ltd in UK (1994) and SMH Trading Far East in Hong Kong (1994), as well as SMH Venezuela (1994). At the same time, however, it opened many other distribution companies in other countries: Brazil (1986), Ireland (1986), Netherlands (1986), Singapore (1986), Malaysia (1988), Austria (1993), British Virgin Islands (1993), Canada (1993), Portugal (1993) and South Korea (1994).

The control of distribution system appears as a key element in the construction of a global network to enhance all group brands worldwide. This geographical extension policy was subsequently pursued in the 1990s and the 2000s.

4.1.1 **SG’s brand strategy**

In an initial phase, the centralization policy had little impact on the marketing strategies of different brands. It focused essentially on logistics. In the second half of the 1980s, there was not really any brand strategy at the group level, even though top management decided to abandon some low-end brands which were not booming, such as Record Watch and Baume. Also, the only two brands launched during this period, the children’s watches Flik Flak (1987) and the fashion watches Pierre Balmain (1987), did not come from any marketing department but rather from the group’s movement maker, the company Eta SA, which had found an
opportunity to diversify its outlets and extend its activities. For other brands, the image differentiation between brands was not very pronounced. Omega and Longines remained the historical rivals they had been since the end of the 19th century, with various lines of products embodying very similar values (precision, sports, fashion, elegance). There was also ambivalence in the middle range (Certina, Mido, Tissot), where differentiation was also difficult, even if Tissot was chosen for launching new products, such as watches with a stone case, the Rock Watch (1985), a wooden case, the Wood Watch (1988) or with a dual analog and digital display, the Two Timer (1986). The two other brands to distinguish themselves were Rado, which featured a modern design, and Hamilton, which cultivated its American origins (so-called American Tradition line).

Clearly, the general lack of differentiation can be explained by the need to begin by reforming the in-house marketing strategy of each brand. The objective was rationalization, through a drastic reduction of the number of models. For example, at Omega, the number of different models, which amounted to some 1,600 at the beginning of the 1980s, was slashed to 850 in 1985 and to 284 in 1986. In October 1987, management announced a further reduction to about 100 different models. This reorganization of supply put Omega back in the black in 1986 for the first time in many years.36

In 1990, however, Hayek restructured SG’s Management Board to implement brand management on a group scale, characterized by brand differentiation and market segmentation, that is, a strategy requiring stronger coordination between the various brand managers. Thus, the Management Board, which had been in charge of overseeing the ASUAG-SSIH merger and the streamlining of the company in the 1980s, was reorganized. Apart from Anton Bally, head of production and Eta’s new director, the eight persons appointed at the Extended Group Management Board in 1990 were the brand directors for most of them: Walter von Kaenel (Longines), Hans Kurth (Omega), Peter Petersen (Swatch) and Roland Streule (Rado). There were also some representatives of high-tech companies (Willi Salathé) and of outside parts makers (Paul Wyser). Finally, two managers from marketing and distribution were appointed. The first was Raymond Zeitoun, president of the distribution company SMH France. The second was a manager who came from marketing and communications, Franco Bosisio, former brand manager at Procter & Gamble and marketing director at Cartier Italy, before joining SG (1986). This centralization of power in marketing enabled the adoption of a global strategy and the control of its implementation on the various markets.37

In the following years, appointments to the Management Board and at the Extended Management Board confirmed their role as a marketing platform. SG brands must not compete with each other, but rather target different groups. As far as the implementation of

37 Zou and Cavusgil 2002
this new strategy was concerned, the takeover of Blancpain proved pivotal.

4.1.2 A decisive step: the takeover of Blancpain (1992)

History and tradition entered SG through Blancpain. This brand, which belonged to SSIH, had been acquired in 1983 for the modest sum of CHF 18,000 by Jean-Claude Biver, former manager at Audemars-Piguet, and Jacques Piguet, CEO of Frédéric Piguet SA, one of the very rare independent luxury watch movement makers.\(^{38}\) The strategy adopted by Biver went against the entire industry: refusing to use quartz movements, he built the image of a brand based on tradition and technical excellence, the foundations of the brand’s repositioning as a top-end watchmaker. Quoting the year 1735 as the origin of the enterprise (Blancpain was the name of a family which has apparently been involved in watchmaking since this date), this company declared itself the “world’s oldest watch brand”\(^ {39}\) and encountered a quick and growing success, selling its watches, often equipped with complications (moon-phase, tourbillon, erotic figures, etc.) as craft products, that is, luxury goods. The firm’s gross sales were booming, soaring from CHF 8.9 million in 1985 to CHF 56 million in 1991.\(^ {40}\) Nevertheless, they were small in relation to SG’s gross sales (CHF 2.0 billion in 1991). Yet when Hayek bought Blancpain in 1992, he was interesting in doing more than merely enlarging market share – he was looking for a new kind of know-how, in marketing. Indeed, the takeover provided an opportunity to internalize the marketing skills of Biver – appointed to the Extended Management Board in 1992 and to the Management Board in 1993 – and his team, then to apply them to the group as a whole. Incidentally, Biver was entrusted with the rebranding of Omega, of which he has been Marketing and Communications Manager since 1992.\(^ {41}\)

4.1.3 The choice of Omega

In the mid-1990s, SG engaged in a policy of differentiation and repositioning of its main brands in the luxury segment, in order to boost their complementarity and help the company compete in various segments. This was particularly the case in the so-called accessible luxury segment, between the main historical brands of the group, Omega, Longines and Rado. The objective was to strengthen their own image and to depict them as different and complementary products, destined for different customers. Omega was selected as a luxury consumer good with the aim of competing with Rolex on the world market. It soon became

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\(^{38}\) It supplied notably renowned Swiss watch companies, such as Audemars Piguet or Vacheron Constantin. *Le Nouveau Quotidien*, 9 July 1992.


\(^{41}\) Information kindly communicated by Jean-Claude Biver.
the group’s main brand. In this perspective, Longines and Rado had to be repositioned to no longer compete with Omega.

Longines was repositioned in a less expensive segment and rebranded as a product of elegance and classicism, which did not clash with other brands in the same price range, Rado (high-tech and modern design) and Union Glashütte (technical tradition and classicism). For example, in the 1990s Longines refocused on sponsoring activities suited to an image of classical elegance (horse riding, gymnastics, ski, tennis, classical music), relinquishing former fields such as Formula One racing (1992). Moreover, it reinforced its image of a historical pioneer in watchmaking with the publication in 1992 of two books, one recounting the corporate history and the other being the editing of a famous report on American watch companies written in 1876 by Jacques David, technical director of Longines at that time. Unlike Blancpain, which emphasized the traditional know-how of the watchmaker’s craft, Longines meshes with the tradition of the manufacture that has played a pioneering role in modernizing and industrializing watch production, an image better suited to its accessible luxury position.

As for Rado, it underwent a development very similar to Longines, characterized by the disinvestment of the brand in favor of Omega. Founded as a watch movement making company in 1917, this firm launched completed watches with the brand Rado in 1954. It quickly established itself as one of the main Swiss watch brands in the Far East. In 1982, it posted gross sales of some CHF 200 million for an annual production of about 1 million watches, 96% of which were sold in the Far East. At the time, one of Rado’s features was the use of high-tech materials (hard metal, ceramic, lanthanum) for some of its models, since 1962 (DiaStar watch). Thus, when SG was created, Rado occupied a strong position among watch makers. Its CEO, Paul Lüthi, was even the only brand representative on the Board of Directors (1984-1989). Despite its restructuring in 1987, with the personal involvement of Thomke, Rado was clearly still one of the group’s main brands. However, SG’s new marketing strategy made it a global brand specialized in futurist designs. This differentiation aimed especially at giving Omega a free hand in the top range, especially in Asia. Thus, in 2010, new generations of urbanized Chinese were more familiar with the brand Omega than with Rado, unlike their elders.

4.2 Towards luxury (1995-2010)

The marketing strategy adopted in the early 1990s was pursued and developed in the
following years. The main thrusts of this policy were the repositioning towards luxury; the strengthening of differentiation between the brands; and huge investments in distribution systems. Thus, while the company’s growth relied on rationalization in the 1980s, it subsequently came to depends more and more on marketing. The production system was even reorganized from this perspective – with a shift from movement producer to complete watch seller.

4.2.1 First line: the repositioning towards luxury

SG’s repositioning strategy dovetailed with the general context of the sea change in the luxury industry that took place in the 1980s.\textsuperscript{46} Whereas this sector had previously been characterized by elitism, discretion and handiwork, it experienced in the 1980s a trend towards democratization based on brand globalization and the enlargement of customers, accompanied by a concentration of luxury enterprises within very profitable industrial groups. However, this democratization of luxury led to the stronger distinction between exclusive luxury and accessible luxury.\textsuperscript{47} Exclusive luxury describes high-quality and excessively expensive products, designed for a small social elite – that is, the traditional acceptation of luxury. As for accessible luxury, it designates brand products sold like luxury goods but financially accessible to a large clientele.\textsuperscript{48} This product differentiation aims at different targets and makes it possible to pursue simultaneously strategies based on exclusivism and democratization of luxury.

The watch industry is perfectly suited to this context, with, for example, the entry of Richemont (1988) and LVMH (1999) into the watch business. SG adopted a repositioning strategy based on both the firm’s acquisition and rebranding of products. The first objective was to enlarge its portfolio of exclusive luxury brands, as it only owned Blancpain in this segment, by purchasing four brands: Léon Hatot (1999), Breguet (1999), Glashütter Uhrentriebe (2000) and Jaquet-Droz (2000).

The strategy was the same in all four cases. SG snapped up prestigious brands whose main weaknesses were rooted in their marketing strategies: narrow distribution systems, and a lack of a distinctive design. Accordingly, SG defined specific designs for each brand (jewel-watch of Art Deco inspiration for Léon Hatot; hands and dials reminiscent of some key works of Abraham-Louis Breguet; modern design inspired by Pierre Jaquet-Droz’s classic models; classicism and grandes complications for Glashütter Original), integrated them into its

\textsuperscript{46} On the luxury goods industry in general, see Silverstein and Fiske 2004; Nueno and Quelch 1998.
\textsuperscript{47} In reference to Allères 1991. She distinguishes three categories of luxury (inaccessible, intermediate, accessible), followed by common consumer goods. However, in the particular case of the watch industry and of SG, the category “intermediate luxury” is hard to consider as a specific one, which is why it was not used in this paper.
\textsuperscript{48} Truong, McColl and Kitchen 2009.
worldwide distribution system and turned them into global brands. Moreover, the takeover of these four companies led to streamlined production of luxury watches, as the manufacture of high-quality movements was reorganized and centralized within SG in the 2000s.

Finally, the skills acquired in designing and marketing exclusive luxury watches led SG to sign an agreement with Tiffany & Co. in 2007. Since then, it has also produced watches for the prestigious American jeweler.

4.2.2 Second line: better brand positioning

The involvement in exclusive luxury aimed essentially at promoting accessible luxury brands, particularly Omega. Of course, some exclusive luxury brands boast ample profit margins, estimated at 23% for Breguet and at 20% for Blancpain in 2006. However, they amount to only a small share of gross sales. According to the consulting firm Helvea SA, they accounted for a mere 12.6% of SG’s watch sales in 2006 (see table 2). Yet they offer strong growth potential, due to their recent integration into a globally organized group.

The main benefit of these brands is rather indirect: they enhance the image of other SG brands and facilitate their repositioning. The brands that generate the largest profits are indeed accessible luxury brands, mainly Omega, which accounted for one-third of watch sales in 2006 (33.9%), but also Longines (9.7%) and Rado (9.3%). The weight of these brands highlights the issue of the democratization of luxury in the watch industry.

As for the mid-range, apart from Tissot, the group’s third brand in terms of sales in 2006, it represents only a fraction of gross sales: taken together, Balmain, Certina, Hamilton and Mido accounted for only 3.5%. Nevertheless, SG has not given up on this segment. As there is still a global market for such products, it pursues its involvement, for example by launching cheap watches for the American fashion company Calvin Klein in 1997. The same year, it tried once again to market the Lanco brand on the Chinese market. Even if the Lanco venture ended in failure, the attempt underscores SG’s interest in the mid-range.

Tab. 2: SG watch brands, 2010

<table>
<thead>
<tr>
<th>Name</th>
<th>Year of acquisition</th>
<th>Sales in 2006 (million CHF)</th>
<th>As a % of total watch sales</th>
<th>Selling price ranges (CHF)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Breguet</td>
<td>1999</td>
<td>305</td>
<td>7.8</td>
<td>&gt;10'000</td>
</tr>
<tr>
<td>Blancpain</td>
<td>1992</td>
<td>115</td>
<td>2.9</td>
<td>&gt;10'000</td>
</tr>
<tr>
<td>Glashütte Original</td>
<td>2000</td>
<td>60</td>
<td>1.5</td>
<td>&gt;10'000</td>
</tr>
<tr>
<td>Jaquet Droz</td>
<td>2000</td>
<td>9</td>
<td>0.2</td>
<td>&gt;10'000</td>
</tr>
<tr>
<td>Léon Hatot</td>
<td>1999</td>
<td>5</td>
<td>0.1</td>
<td>&gt;10'000</td>
</tr>
</tbody>
</table>
4.2.3 Third line: strengthening of the sale network

The vertical integration of distribution has been a key issue in the luxury watch industry since the end of the 1990s. The objective was not only to better control distribution and sales of products, but also to internalize profits from this activity. Thus, in order to strengthen the exclusive image of luxury goods, distribution became a major issue. As a result, the verticalization of distribution affected first and foremost the group’s luxury brands, through the creation of flagship boutiques.

The priority given to the distribution and sale of complete watches resulted in the creation of tens of new subsidiaries, whose number rose from 23 in 1998 to 65 in 2009. Two comments are in order as far as their functional breakdown is concerned. Firstly, so-called emerging markets were given special attention. Whereas SG focused on traditional outlets until the end of the 1990s, especially Western Europe, it shifted to new markets after 2000, with the creation of distribution companies in India (2001), Mexico (2001), Russia (2002), Thailand (2002), Poland (2004), Taiwan (2004), United Arab Emirates (2006) and South Africa (2009). SG also took stakes in retail companies, especially in Thailand (2002) and in the United Arab Emirates (2008). In this context, China occupies a special position, as it included ten distribution and sale companies in 2009 as against only two in 1998.

<table>
<thead>
<tr>
<th>Company</th>
<th>Year</th>
<th>Value</th>
<th>Margin</th>
<th>Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>Omega</td>
<td>1983</td>
<td>1'325</td>
<td>33.9</td>
<td>&gt;1'800</td>
</tr>
<tr>
<td>Tiffany &amp; Co</td>
<td>2007</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Longines</td>
<td>1983</td>
<td>380</td>
<td>9.7</td>
<td>900-3'000</td>
</tr>
<tr>
<td>Rado</td>
<td>1983</td>
<td>365</td>
<td>9.3</td>
<td>750-4'000</td>
</tr>
<tr>
<td>Union Glashütte</td>
<td>2000</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Tissot</td>
<td>1983</td>
<td>395</td>
<td>10.1</td>
<td>300-900</td>
</tr>
<tr>
<td>CK Watch</td>
<td>1997</td>
<td>150</td>
<td>3.8</td>
<td>150-1'500</td>
</tr>
<tr>
<td>Balmain</td>
<td>1987</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Certina</td>
<td>1983</td>
<td>138</td>
<td>3.5</td>
<td>350-2'000</td>
</tr>
<tr>
<td>Mido</td>
<td>1983</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Hamilton</td>
<td>1983</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Swatch</td>
<td>1983</td>
<td>640</td>
<td>16.4</td>
<td>&lt;70</td>
</tr>
<tr>
<td>Flik Flak</td>
<td>1987</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Endura</td>
<td>1983</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>


Note: these estimates obviously largely overevaluated Swatch’s sales, in comparison with the data of Swiss foreign trade statistics (exports of non-metallic watches)

Secondly, the creation of retail companies must be underlined, as it became a key thrust of marketing strategy. This was especially the case for luxury brands, with Les Boutiques companies opened in many countries (Germany, China, France, UK, Italy, Switzerland, USA). Since 2000, SG’s main brands have their own flagship boutiques, which are designed to serve not only as sales outlets but also as showcases and venues for events graced by global stars and ambassadors. Finally, the strengthening of links with local companies which control wide retail networks can also be observed, sometimes leading to the creation of joint ventures (China, United Arab Emirates, Thailand). In the United States, SG took over the chain store Borsack (1999) and signed an agreement with Tourneau to open watch stores in luxury malls (2006).

4.2.4 Fourth line: a production system devoted to marketing

The production system took on the group’s new strategy and reflects an evolution dictated by the repositioning towards luxury. Its main features are the vertical integration of producers of external parts (habillage); the end of the supply of movement-blanks and parts to Swiss watch makers outside SG; and the reorganization of production of quartz movements abroad.

On the whole, the production system reached equilibrium at the end of the 1990s. After 1998, the proportion of employees abroad was stable (54% in 1998; 51% in 2005; 54% in 2009) and productivity stagnated at an average of 5,903 pieces by employee in 1999-2004. The large-scale reorganization of the production system in the 1980s and 1990s was over. However, despite this apparent stability of the production system, its structure shows rather an important change, with the vertical integration of watch external parts producers (cases, dials, hands, straps). This strategy is consistent with the issue of brand repositioning towards luxury. The internalization of competences and know-how in the field of design became a major challenge and can be seen in other watch groups. Until then, SG relied primarily on independent suppliers. One after the other, it took over producers of cases Favre & Perret SA (1999), of hands Universo SA (2000), of dials Rubattel & Weyermann SA (2002) and MOM Le Prélet SA (2006), of indexes for dials Indexor SA (2007), and of oils Moebius & Fils (2008), all in Switzerland. Abroad, SG acquired the German dial maker Deutsche Zifferblatt Manufaktur GmbH à Pforzheim (2006). The internal reorganization of the production of high-quality movements and parts must also be underlined here. The movement maker Frederic Piguet SA, bought up in 1992, was merged by its main customer, Blancpain SA, while Valdar SA was merged by François Golay SA (2010). This dual restructuring made it possible to strengthen the production capacity of Blancpain with the verticalization of the manufacture, on the one hand, and to rationalize the production of high-quality parts, on the

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49 As the volume of production is unknown since 2005, it was not possible to measure productivity after 2004.
other hand. What is more, it reinforced the image of the traditional *manufacture* producing in-house all the parts it needs, used to maximum benefit in advertising.

The second feature of the production system since the end of the 1990s has been the decision to stop supplying movement-blanks and parts to customers outside the group. This change dovetails with the overall repositioning of the Swiss watch industry towards luxury, which was accompanied by a steady decline in the volume of watch exports, while their value kept rising. The number of watches exported averaged 34.9 million items in the 1990s, then dropped in 1998-2000 before stabilizing at a new average of 25.5 million items in 2001-2007. For SG, this marked a fundamental change: as the main supplier of movements to the whole industry, it implied a shrinking of the market. Movement-blanks and parts sold outside the group represented 17.1% of gross sales in 2000, 11.9% in 2005 and only 7.6% in 2010.

The repositioning towards luxury made it possible for SG to throw off the yoke of trade in watch movements, when management decided to stop supplying competitors. The announcement made in 2002 that SG would no longer sell parts and movement-blanks outside the group after 2006 led to fierce reactions: it was indeed estimated that at the time, SG produced 80% of movement-blanks and more than half all the movements produced in Switzerland.\(^51\) In 2002, the Federal Commission of Concurrence (Comco) opened an investigation into the company Eta SA for abuse of a dominant position, forcing it to continue its deliveries. In December 2002, Eta replied and announced a sharp price rise, especially for high-quality movements.\(^52\) Finally, an agreement was signed in November 2006 by Comco and SG, whereby the latter agree to keep selling movement-blanks until 2010.\(^53\) Subsequently, in 2010, SG’s management reaffirmed its desire to pursue its strategy and put an end to such trade. SG’s main competitors were no longer Japanese watch makers, but precisely other Swiss watch companies, whose growth SG clearly has no reason to support. Calibers supplied to competitors were sold worldwide as luxury products.

Finally, the third feature of the production system after 1995 was the pursuit of the production of movements in Asia, at least until 2005-2006. Even if data are very fragmented and virtually nonexistent since 2004, several clues militate in favour of such a hypothesis. Firstly, the production volume of watches and movements went from 103.5 million units in 1999 to 127.1 million in 2004, that is, a growth of 22.8% in five years. During this same period, however, the volume of Swiss exports fell steadily from 36.7 million units in 1999 to 30.7 million in 2004. Accordingly, even if we consider all these exports as SG’s products, this still leaves a balance of some 100 million units produced outside Switzerland in 2004. The company Zhuhai SMH Watchmaking Ltd. alone would have produced around 80-90 million units that

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51 *Le Temps*, 16 September 2002.
52 *Le Temp*, 20 December 2002.
According to Chinese foreign trade statistics, exports of watch movements to Switzerland amounted to an average of USD 37.9 million in 2000-2004, making Switzerland the second-largest outlet (28.7%) of the Chinese watch industry for movements, after Hong Kong (58.8%) but before Japan (7.5%). This trade decreased strongly in 2005 (USD 11.3 million) and after (less than USD 2 million per year in 2006-2009), precisely when SG announced its decision to cut back production in China.

Secondly, SG closed down assembly plants outside Asia. According to the annual reports, production was stopped in the Virgin Islands (2003) and in Brazil (2005), at a time when production in Thailand and in China was growing fast. Yet this reflected not a simple transfer of production to Asia, but rather a real globalization of production systems. America’s increasingly important role as an outlet for SG in the early 2000s – 7% of volume in 1999; 18% in 2004 – was clearly due to the delivery of quartz movements made in China or in Thailand.

Thirdly, and lastly, Asia took on growing importance in SG’s gross sales, rising from 28% in 1999 to 35% in 2004 and 44% in 2009. Yet this steady increase was undoubtedly not limited to the trade of luxury watches in China, a phenomenon which was not all that significant in the first half of the 2000s.

However, SG announced in 2005 the closure of “production facilities” in Asia, without giving any details. Was it Chinese plants of the group, which would explain the sudden drop in Chinese exports of movements to Switzerland since 2005? Owing to SG’s lack of communication concerning its production centers outside Europe, this question cannot be answered. In any case, even if the repositioning towards luxury of the Swiss watch industry would have led to a drop of parts sourced from Asia, SG’s production centers situated in China, Thailand and Malaysia are still integrated within the group’s organizational structure and still producing.

4.4 The case of Omega

Omega undoubtedly best embodies the changes experienced by SG since the mid-1990s. The success of this brand, which accounted for about one-third of all group watch sales in 2006, is indeed emblematic of SG’s new marketing strategy.

In the mid-1990s, SG decided to make Omega, one the oldest and most prestigious Swiss

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57 For example, the website of the movement and part maker Eta SA does not mention the existence of production centers in Asia and only proposes to online customers Swiss Made movements. www.eta.ch (site accessed 21 February 2010).
watch companies,\textsuperscript{58} its flagship brand and to reposition it in the accessible luxury segment with a view to competing with Rolex, the world’s best known watch brand.\textsuperscript{59} This strategy was worked out by a new management team led by Blancpain’s director, Jean-Claude Biver, who became Marketing and Product Director of Omega in 1994. He brought with him several new managers with whom he implemented a rebranding policy, especially Michele Sofisti and Aldo Magata.\textsuperscript{60} Former marketing director of Ferrari, Sofisti entered Omega in 1995 and was promoted to CEO two years later, before directing the brand Swatch (2000).\textsuperscript{61} As for Magada, he entered Omega as Vice-President of the Marketing Division in 1993, after a career in the pharmaceutical and electronics industry and four years as Product Manager at Piaget. He left Omega in 1997 to pursue a career in various watch companies (Ebel, Gucci, Reuge).\textsuperscript{62} The marketing strategy implemented by this team was characterized by the rebranding and the restructuring of the distribution system.

\subsection*{4.4.1 Rebranding strategy}

Firstly, the rebranding strategy was founded on the strengthening of Omega’s threefold legitimacy – technique, history and glamour – on which the new brand image has been based since then. To start with, Omega reinforced its image of technical excellence. The chronometry certificates, which attest to watches’ technical quality, show a trend since 1960 that highlights the strategic changes adopted by Omega in this respect during half a century. Relations with Rolex, which remained attached to a management model founded on the mass production of high-quality watches, also shed light on the challenge of Omega’s repositioning.\textsuperscript{63} Until 1974, Omega was, together with Rolex, the main manufacturer of chronometers: between 1961 and 1974, their shares amounted to 48.9\% for Omega and 38.2\% for Rolex. After 1974, Omega entered a period of crisis, which apparently spared Rolex. The number of certificates issued nosedived from 190,396 in 1974 to less than 30,000 per year in 1980-1983. After SG was established, the restructuring of the group, and of Omega in particular, led to a dramatic drop in the registration of chronometers, which averaged a scant 5,657 in 1985-1989. With only 5.7\% of all the certificates, Omega relinquished this segment to its rival Rolex, which enjoyed a virtual monopoly (89.2\%). Omega then adopted a new strategy in the early 1990s aimed at recovering its place in chronometry. Since 1994, Omega has evinced an upwards trend (108,516 certificates in 1994; 146,144 in 2000; 377,514 in 2008), enabling it to regain market share (12.7\% in 1994; 14.2\% in 2000; 23.6\% in 2008). Omega’s repositioning as the main chronometer maker in Switzerland alongside Rolex was

\textsuperscript{60} Information kindly communicated by Jean-Claude Biver.
\textsuperscript{61} \textit{Le Temps}, 15 October 2005.
\textsuperscript{62} Information kindly communicated by Aldo Magada.
\textsuperscript{63} Pasquier, « Rolex », \textit{DHS}. 
designed to restore the brand’s technical legitimacy.

This strategy was reinforced by the relaunching of a tourbillon model (1994) and above all by the use of a new kind of escapement, called “coaxial” (1997), followed by the launching of a new movement equipped with this escapement (2007). This purely marketing event marks a noteworthy break, insofar as the rationalization adopted in the 1980s aimed precisely at abandoning the in-house development of movements by each brand and at adopting standardization. However, the repositioning of some brands towards accessible luxury made this change a necessity. Even if the consumer has trouble understanding the working and usefulness of such an innovation, it enables Omega to affirm its own technical excellence.

Secondly, Omega reinforced its historical legitimacy, its communication strategy aimed at emphasizing the long tradition of its innovative nature and technical excellence. The 1998 commemoration of the 150th jubilee of Omega’s founding provided an opportunity to celebrate the firm’s historical roots, with for example the publication of a nearly 500-page corporate history – *Omega Saga* – underlining notably the development of sports timing, the prizes won in chronometry competitions and the involvement in the journey to the Moon, as many events combining tradition and excellence. However, the event which constitutes a real break in the historical discourse of the company was undoubtedly the organization of the auction *Omegamania* by Antiquorum in Geneva in 2007. In 1989, this auction company specialized in horology started organizing thematic auctions related to prestigious brands and watchmakers (Patek Philippe, 1989 and 1999; Breguet, 1991; Rolex, 1992; Vacheron Constantin, 1994 and 2005; Cartier, 1996; etc.), which significantly boosted brand recognition. The thematic auction devoted to Omega therefore helped to strengthen recognition of its historical value and technical excellence. Omega’s historical legitimacy was also backed by the establishment of special sale outlets, for example the Omega Vintage boutique, opened at Burlington Arcade, London, a store which sold only old models (2008).

Finally, Omega’s repositioning was based on glamour legitimacy. Whereas efforts to advertise and communicate this brand relied primarily on objects, that is, watches themselves, until the 1990s, emphasizing their technical and esthetical qualities, show business stars made a noteworthy arrival when American supermodel Cindy Crawford was engaged as an ambassador (1995). This change was not peculiar to Omega but could be seen throughout the luxury goods industry, where the status of Hollywood stars shifted from customer to emblem of the brands. Since then, Omega has hired various sport, fashion and movie stars as ambassadors, the best symbol of the globalization of luxury being obviously James Bond,

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64 Richon 1998.
65 Omegamania 2007.
67 Watch Around, No. 4 (Spring 2008), p. 32.
who also became an ambassador in 1995.\textsuperscript{68}

\subsection*{4.4.2 Reform of the distribution system}

The second thrust of Omega’s new marketing strategy was the reform of the distribution system, with a view to improving the visibility of the brand rather than the density of the sales network. The rise towards luxury and the transformation of a non-specialized brand into an accessible luxury good must go together with a distribution system that is consistent with this new image. Thus, as Helvea noted in a report on SG in 2006, Omega had a huge sales network in the early 2000s, but it was radically restructured in the middle of the decade: the number of sale outlets was slashed from 4,800 to 3,000, with Germany, UK and Japan experiencing a reduction of 20-30\% of the number of outlets.\textsuperscript{69} The sites that were dropped were usually retailers who did not offer the Omega brand sufficient visibility. Together with this reduction, the opening of Omega flagship boutiques was in full sway. Omega was indeed one of the main SG brands to benefit from the system of flagship boutiques. The first was opened at Zurich in 2000, in collaboration with an independent retailer with whom a joint venture was created. In 2010, there were 178 Omega boutiques in the world, of which 71 in continental China, 10 in Hong Kong and 3 in Macao.\textsuperscript{70} They play a key role in the marketing of Omega’s products.

\subsection*{4.5 A new Eldorado: China}

As the example of Omega shows, China has been the driving force of SG’s growth since the mid-2000s. Even though SG provides limited data on sales by region, Asia’s share of gross sales has jumped from an average of 28.3\% in 1995-2000 to 37\% in 2005 and 44\% in 2009. Of course, these data include other sectors than only complete watches – notably the sale of movements and electronic parts made in Asia. However, the growing dependence on Asia occurred parallel to the repositioning strategy towards luxury and the production of complete watches. Moreover, China’s position has become stronger and stronger in terms of SG’s gross sales. Since 2008, SG has published sales statistics for the so-called “Greater China” market, including continental China, Hong Kong and Taiwan. Business in this area amounted to 23\% of SG’s gross sales in 2008 and to 28\% in 2009.

\textsuperscript{68} On ambassadors, see McCracken 1989
\textsuperscript{70} www.omegawatches.com (site accessed 7 July 2010).
Fig. 2: Swiss watch exports to China, 2001-2010

Source: FHS

Note: these data do not include Hong Kong, where a large share of watch imports are re-exported to unknown destinations. Hong Kong accounts for an average of 15.2% of the value of Swiss watch exports between 2001 and 2010, and has experienced very high growth since 2009 (19.7% in 2010).

At present, dependency on China is a general tendency for the Swiss watch industry as a whole. After China joined the World Trade Organization in 2001, Swiss exports to the country boomed, rising from CHF 36 million in 2001 to a peak of 826 million in 2008, then falling slightly due to the world financial crisis (CHF 700 million in 2009) before increasing again to set a new record in 2010 (CHF 1,099 million). In terms of market share, business with China has also recorded steady growth, increasing from less than 1% of Swiss watch exports in 2001 and 2002 to 6.8% in 2010. If we add Hong Kong and Taiwan, Chinese outlets accounted for 22.4% in 2008 and 28.4% in 2010, that is, similar shares to SG.

Yet SG managed to strengthen its position in China during the world crisis: indeed, its sales in Greater China rose from CHF 1.3 billion in 2008 to 1.4 billion in 2009. If this sum includes only watches exported from Switzerland, this would mean that SH controlled 34% of Swiss watch exports to this region in 2008 and 46% in 2009. These proportions are obviously exaggerated due to the fact that SG sales in Greater China probably include products other
than watches (electronic parts) and some watch movements and parts produced out of Switzerland. However, it is not exaggerated to talk of SG’s growing domination of the watch business in China.

Above all, the key thrust of the marketing strategy was collaboration with one of the biggest Chinese watch distributors, Xinyu Hengdeli Holdings Ltd., in which SG took a strategic stake of 6% of the capital in 2005, raised to 8% in 2007 and 9% in 2009.\textsuperscript{71} In addition, since 2006, one of the eight members of the Board of Directors, Shi Zhongyang, has been a legal counsel for SG, whose employ he entered in 2000.\textsuperscript{72} This enables SG to access some internal information and to actively participate in the management of the firm, which is not the case with the rival luxury group LVMH, which also holds an interest in Hengdeli (7% in 2009). At its origin, Beijing Hengdeli Timepieces Shop was a State-owned enterprise founded in 1957 and active in the distribution and the sale of watches and clocks in China. Privatized in the late 1990s, it was acquired in 1997 by the Zhang family, who had been involved in the watch business in continental China and in Hong Kong since the early 1980s.\textsuperscript{73}

The distribution network of this former State-owned enterprise, combined with the marketing know-how of the Zhang family, made Hengdeli Group, listed on the Hong Kong Stock Exchange, the leading watch distributor in China. It sells not only SG and LVMH products, but also a wide range of Swiss and other brands. It also holds several Swiss brands (Nivada, Olma and Numa Jeannin). It has become a force to be reckoned with when it comes to organizing the expansion of sales on the Chinese market.

Tab. 3: Hengdeli Group, 2004-2009

<table>
<thead>
<tr>
<th></th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gross sales, total</td>
<td>1518</td>
<td>1396</td>
<td>2405</td>
<td>4578</td>
<td>5516</td>
<td>5899</td>
</tr>
<tr>
<td>Retail business</td>
<td>530</td>
<td>637</td>
<td>1363</td>
<td>3048</td>
<td>3742</td>
<td>4435</td>
</tr>
<tr>
<td>Wholesale business</td>
<td>974</td>
<td>745</td>
<td>1025</td>
<td>1439</td>
<td>1631</td>
<td>1329</td>
</tr>
<tr>
<td>Other</td>
<td>14</td>
<td>15</td>
<td>17</td>
<td>90</td>
<td>143</td>
<td>135</td>
</tr>
<tr>
<td>Retail as a %</td>
<td>34.9</td>
<td>45.6</td>
<td>56.7</td>
<td>66.6</td>
<td>67.8</td>
<td>75.2</td>
</tr>
<tr>
<td>Wholesale as a %</td>
<td>64.2</td>
<td>53.4</td>
<td>42.6</td>
<td>31.4</td>
<td>29.6</td>
<td>22.5</td>
</tr>
<tr>
<td>Other as a %</td>
<td>0.9</td>
<td>1.1</td>
<td>0.7</td>
<td>2.0</td>
<td>2.6</td>
<td>2.3</td>
</tr>
</tbody>
</table>

*Source: Annual reports*

In the second half of the 2000s, the Hengdeli Group grew at a fast clip, thanks to its

\textsuperscript{71} According to the SG annual report.
\textsuperscript{72} www.hengdeliholdings.com, site accessed 16 June 2010.
involvement in retailing and the geographical extension of its sales network. The fact that its gross sales shot up from 1.5 billion RMB in 2004 to 5.9 billion in 2009 was indeed due to the strengthening of retailing activities, which accounted for 34.9% of gross sales in 2004 and 75.2% in 2009. In particular, it has the biggest luxury watch chain store in China, and has extended its network by acquiring other companies. Consequently, the number of its own stores soared from 65 in 2005 to 270 in 2010. It also works with more than 300 wholesalers throughout China, and in 2005 entered into a strategic alliance with three companies with powerful distribution networks (Shanghai San Lian Group Ltd; Shanghai Oriental Commercial Building Ltd; Shenzhen Hengjili World Branch Watches Center Tdd.). Together, they reportedly control some 48% of the Chinese market. Moreover, Hengdeli extended its geographical network. In 2005, nearly half of retail sales were limited to Beijing (18.5%), Zhejiang (18.3%) and Shanghai (10.3%). The following year, the company began expanding outside continental China, with for example the acquisition of Elegant International Holdings Ltd., which had four boutiques in Hong Kong. By 2009, continental China amounted to only 61.6% of gross sales.

Accordingly, the cooperation with Hengdeli appears to have been one of the pillars of SG’s expansion strategy in China since 2005. Hengdeli’s involvement in retailing led notably to the creation of flagship boutiques for various Swiss brands, including those held by SG. In particular, it cofounded two major joint ventures, one for the exclusive distribution of Omega and Rado watches (2003) and the other for the management of flagship boutiques – especially Omega and Swatch stores (2007).

The establishment and large-scale development of flagship boutiques is another characteristic of the expansion on the Chinese market (see table 4). The fact that China was a virgin market obviously explains the weight of this strategy, as there was no need to negotiate with former distributors and independent retailers, on the one hand, and because nobody controlled the watch business at the national scale yet, on the other hand. Moreover, the Chinese customer had to be “educated” in terms of luxury and watch culture, and flagship boutiques played a very important role in this respect. In 2010, there were a great many flagship boutiques in China, especially for Omega, which had 84 of its 178 boutiques in China (47.2%) and Swatch, which had 66 (more than 10%). The Longines and Blancpain boutiques are also strongly represented on this market. This marked presence in China peaked in May 2010, with the opening of Swatch Art Peace Hotel, in Shanghai.

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Tab. 4: SG’s flagship boutiques, July 2010

<table>
<thead>
<tr>
<th>Brand</th>
<th>Total</th>
<th>China (Hong Kong included)</th>
<th>As a %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Breguet</td>
<td>19</td>
<td>1</td>
<td>5.3</td>
</tr>
<tr>
<td>Blancpain</td>
<td>21</td>
<td>5</td>
<td>23.8</td>
</tr>
<tr>
<td>Glashütte Original (Watch Atelier)</td>
<td>5</td>
<td>3</td>
<td>60.0</td>
</tr>
<tr>
<td>Swatch</td>
<td>&gt; 600</td>
<td>66</td>
<td>10-11%</td>
</tr>
<tr>
<td>Omega</td>
<td>178</td>
<td>84</td>
<td>47.2</td>
</tr>
<tr>
<td>Longines</td>
<td>20</td>
<td>11</td>
<td>55.0</td>
</tr>
<tr>
<td>Jaquet-Droz</td>
<td>6</td>
<td>2</td>
<td>33.3</td>
</tr>
<tr>
<td>Tissot</td>
<td>79</td>
<td>n.c.</td>
<td>?</td>
</tr>
<tr>
<td>Boutiques Tourbillon</td>
<td>17</td>
<td>2</td>
<td>11.8</td>
</tr>
</tbody>
</table>

Source: Internet website of each brand (sites accessed 7 July 2010).

Note: n.c. = not communicated

4.6 Financial impact of the new marketing strategy

Whereas the restructuring of 1985-1995 not only made the company more profitable but weaned it off outside capital, which were the consequences of the new marketing strategy in terms of finance and governance?

The tremendous growth in gross sales, which skyrocketed from CHF 2.6 billion in 1995 to 4.5 billion in 2005 and to 6.5 billion in 2010, was accompanied by fast-growing profits. Indeed, net profit after taxes and depreciation came to CHF 273 million in 1995 and to 763 million in 2009, after having peaked at 1 billion in 2007. Measured as a relative number, profits averaged 11.2% of gross sales in 1995-1999, 13.3% in 2000-2004 and 16.4% in 2005-2009. Thus, SG’s repositioning into luxury had a direct positive effect on gross sales growth and profit margins. Profits were generously distributed: the dividend rate shot up from 17% in 1995 to 55% in 2000 and 178% in 2008. Yet reserves also grew steadily, reaching CHF 2.0 billion in 1995 and 5.9 billion in 2009. Shareholders’ equity remained stable, at an average of 72.0% in 1995-2009, that is, the level reached in 1995.

The company’s development and growing profitability also had an essential impact on governance, whose main feature was the affirmation of Hayek family. When the bankers resigned from the Board of Directors, most of them were not replaced by new appointees, and the number of Board members fell from 9 persons in 1990 to 6 in 1998. Three new members, all appointed in 1995, were Nayla Hayek, daughter of the president, Professor Klaus Schwab, director of the World Economic Forum, and Ernst Tanner, president of the
chocolate company Lindt & Sprüngli SA and a member of the Board of Directors of the Credit Suisse Group. The next appointees (Johan-Niklaus Schneider-Ammann in 1999; Claude Nicollier in 2005; Jean-Pierre Roth in 2010) also had only very limited influence on corporate management. The appointment of Nicollier, who is not a shareholder, could even be interpreted as a marketing ploy: posing with his astronaut suit in annual reports and on the company’s website, he recalls Omega’s involvement in the Apollo space program and the trip to the Moon, thereby helping to strengthen the brand’s technical and historical legitimacy.

By allowing him to move away from bankers, the financial empowerment strategy enabled Nicolas Hayek and his family members to reinforce their grip, thanks to the constant enlargement of their shares. Indeed, the percentage of voting rights he personally controlled with his shares rose from 28.5% in 1998 to 36.4% in 2005 and to 40.2% in 2009. Moreover, he actively prepared the arrival of the second generation in the business. Thus, his daughter Nayla was appointed to the Board of Directors in 1995, whereas his son Georges Nicolas, known as Nick, employed in the marketing department of Swatch SA, an SG company in charge of marketing Swatch watches, became a member of the enlarged direction (1994) and then of the direction (1995) of the group, and was appointed CEO of Swatch SA shortly thereafter (1998). In 2003, Nicolas G. Hayek retired from his position of CEO of SG, which he passed on to his son Nick, but remained active as President of the Board of Directors. In addition, his grandson Mark A. Hayek was appointed Marketing Manager (2001), then CEO of Blancpain SA (2002), a dazzling promotion which is obviously not unrelated to Biver’s departure from SG (2003). Mark A. Hayek was also appointed to the enlarged direction (2002), then to the direction (2005) of the group. As a result, when Nicolas G. Hayek passed away suddenly in 2010, there was no break in corporate governance and management: Nayla became President of the Board of Directors and Nick remained CEO, while Mark has tended to strengthen his involvement in exclusive luxury brands.

**Conclusion**

In the space of some fifteen years, between 1985 and 2000, SG experienced a sea change which made it shift from a very disparate conglomerate of weakly integrated Swiss watch companies to a centralized, rationalized and globalized company. Whereas its Japanese rival – Seiko, Citizen, Casio – rushed headlong in the 1990s and 2000s into technological innovation as a possible driving force to enter a new growth phase, SG managed to establish itself as the world’s leading watch company without showing technological innovation. This “non-technological innovation”, as Jeannerat and Crevoisier called it, is basically rooted in two complementary policies: the rationalization of production system, and the implementation of a new marketing strategy.
The first phase of the rationalization of production systems lasted from SG’s foundation in 1983 until the end of the 1990s. Its main features were the centralization of movement and parts production within the company Eta SA, the vertical integration of parts producers and, above all, the globalization of production system with the opening of subsidiaries in Asia (Thailand, Malaysia, China). The rationalization boosted productivity and strengthened ETA’s historical function of a producer and distributor of movements for the entire Swiss watch industry.

Together with the finalization of this production rationalization process, a new marketing strategy was adopted during the first half of the 1990s, following the takeover of Blancpain (1992). Characterized by a deep repositioning of brands, this strategy aimed at making SG a producer, and above all a trader, of complete watches. Its major features were the acquisition of several exclusive luxury brands in 1999-2000 (Breguet, Glashütter Original, Hatot, Jaquet-Droz) and the choice of Omega as the main brand to conquer the global market of accessible luxury, traditionally a very profitable segment, and to compete with Rolex. This new marketing strategy had a key influence on SG’s entire organizational structure. Corporate governance tended towards strong concentration and centralization of power. Since 1990, the Extended Management Board has functioned as a marketing platform for coordinating the group’s global strategy between brands. Incidentally, it is interesting to underline here the strengthening of the firm’s family nature, with the growing involvement of the Hayek family on the operational side of business since 2000. In becoming a global leader, SG became a family firm.

References

1. Published sources
Gazette de Lausanne, various issues.
JETRO, Suisu no kinzokusei tokei bando shijo chosa, Osaka: JETRO, 1982.

Journal de Genève, various issues.

Kikai tokei nenpo, Tokyo: MITI, various years.

Nihon gaikoku boeki tokei, Tokyo: Ministry of Finance, various years.

Le Nouveau Quotidien, various issues.


SG, Annual reports, 1983-2010.


Statistique annuelle du commerce extérieur de la Suisse, Berne: Direction générale des douanes, various years.

Le Temps, various issues.


2. Articles and books


Donzé Pierre-Yves, “The hybrid production system and the birth of the Japanese specialized


Pasquier Hélène, « Rado », DHS.

Pasquier Hélène, « Rolex », DHS.

Pasquier Hélène, « Swatch Group », in DHS.


Vogt German, « Eta », DHS.
