



To what extent do Aspects of Sustainability Impact Established Firms' Resilience

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A comparative Case Study of the Luxury Watchmaking Industry in
Switzerland

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Abstract

An organizations' level of sustainability has so far been primarily been analyzed within the context of economic performance. This study changes that dependent variable to "resilience", namely a company's ability to recover from potential lethal shocks or disruptive events. The research questions aims to investigate whether sustainability and resilience are related. This study utilizes the financial crisis from 2007/08 as disruptive event, as it encompassed market phase-out but also survival by established firms. Two Swiss luxury watchmaking companies have been chosen as industry sample and the study's investigation is based on a comparative case study approach. The latter applies both quantitative data, in the form of the respective annual company reports, and qualitative data, in the form of semi-structured interviews with three stakeholder groups. Findings indicate that the investigated measures of sustainability are related the investigated companies' level of resilience. These findings contribute to the building of new theory towards resilience as this study outlines specifically which measures have been proven to be of relevance for companies' resilience. Moreover, the results are of high relevance for companies that are operating in constant evolving markets and struggling adapting to any disruptive environment as it is outlined why and how comparative companies have to be sustainable in order to become more resilient towards future shocks.

Foreword

After several months of challenging and rewarding work, I want to use this opportunity to express my gratitude to the various people who assisted me through the entire thesis process. First and foremost, I would like to thank my supervisors Marc van Wegberg and Miguel Pina e Cunha for the valuable feedback and guidance throughout the entire research process. I would like to thank my thesis group, which consistently provided me with helpful and highly valuable feedback. Combined, this support enhanced the quality of my thesis and helped me to overcome all challenges and throwbacks I faced during the overall process. Additionally I would like to thank all interviewees as the gained practical relevance and information allowed for a comprehensive analysis and significantly enriched the final result. Finally, I want to thank my family, friends and especially my boyfriend for being patient and supportive during my studies, the entire thesis process, and all other aspects of life.

Table of Content

1	Introduction.....	1
1.1	Problem Definition and Objectives.....	1
1.2	Course of Investigation.....	2
2	Theory Development and Literature Review.....	3
2.1	Changes in the Economic Environment.....	3
2.2	Resilience.....	5
2.3	Sustainability.....	7
2.4	Correlation of Resilience and Sustainability.....	8
3	Industry Context.....	11
3.1	The Swiss Watchmaking Industry.....	11
3.2	The Swiss Luxury Watch Industry.....	12
3.3	Company Profiles.....	15
3.3.1	Swatch Group.....	16
3.3.2	Richemont.....	16
3.4	Disruptive Innovation and Shocks in the Swiss Watch Industry.....	17
3.4.1	The Quartz Crisis.....	17
3.4.2	Financial Crisis.....	18
3.5	Preliminary Industry Results.....	19
4	Conceptual Framework.....	20
5	Research Methodology.....	23
5.1	Case Study.....	23
5.2	Quantitative Data.....	24
5.3	Qualitative Data.....	26
6	Data.....	30
6.1	Analysis of Quantitative Data.....	31
6.1.1	Analysis of Share Price Development on Resilience.....	31
6.1.2	Analysis of Measures Towards Environmental Sustainability.....	33
6.1.3	Analysis of Measures Towards Social Sustainability.....	34
6.2	Analysis of Qualitative Data.....	38
7	Research Results.....	42
8	Conclusion and Limitations.....	47
	References.....	51
	Appendix.....	55

1 Introduction

1.1 Problem Definition and Objectives

In the late 1970s, the quartz technology innovation and the resulting low prices of quartz-based watch models disrupted an entire industry and heralded the start of organizational failure and bankruptcy. The Swiss watchmaking industry, which encompassed about 1,600 watchmakers in 1970, shrunk to around 600 firms in 1985 (Cassia, Fattore, & Paleari, 2006). Up until 2008, the watchmaking industry recovered at a relatively steady pace, but was interrupted by the global financial crisis in 2007/088. Although only a very few watchmaking firms became insolvent in direct consequence of the crisis, firms in the luxury segment struggled for profits because their products are not necessities, in contrast to items like clothing; as a result, potential purchase decisions are easily postponed. Moreover, industry analysts declared the official announcement of the Apple Watch on September 10, 2014 the next disruptive innovation for the luxury watchmaking industry (Kharpal, 2014). Needless to say, the announcement resulted in share price losses of stocks for companies active in the Swiss luxury watchmaking industry; specifically, Swatch Group's share price declined by 2% same day, while Richemont's share price declined by 1.3% by the same day.

Innovations or shocks with a particularly destructive character are defined as disruptive shocks or disruptive innovations. Consequently, the question arises why some organizations survive and are resilient while others struggle and fail. The term "resilience" refers to an organization's ability to recover from potentially fatal disruptive innovations or shocks. However, what actually makes established organizations resilient? Previous research identified three major factors that lead to resilience: financial autonomy, the creation of an internal community of cooperative people, and the construction of an external ecosystem of partners (De Geus, 2002). Moreover, recent research has linked an organization's level of sustainability to the concept of resilience (Folke et al., 2010).

Organizations' behavior is mostly driven by economic factors. In contrast, measures of sustainability are e.g. related to consumers' increasing awareness regarding an organization's compliance with social and environmental standards, meaning non-economic factors. Consequently, the question arises whether it is worthwhile for companies to invest in sustainability. As a significant amount of existing research has investigated the impact of sustainability on an organization's financial performance, this study replaced the dependent variable "performance" with "resilience." Based on this fundamental adjustment, this study

investigates the influence of sustainability on organizations' resilience and the respective ability to survive disruptive innovations or shocks. Subsequently, the research question was formulated as follows: "How Does Sustainability Relate to Organizations' Resilience?".

In order to determine how sustainability is related to an organization's resilience, it is essential to identify an industry that encountered external shocks, preferably through disruptive innovations. Based on this precondition, the industry also has to be characterized by exit or market phase-out as well as survival by existing organizations contingent on the respective event. With the Swiss luxury watchmaking sector, this study has incorporated an industry that has survived both a disruptive innovation in the form of quartz technology in the 1970s and an industry shock in the form of the global financial crisis in 2008. The practical relevance of the utilization of the Swiss luxury watchmaking industry as the foundation of this study is concluded by the industry's economic relevance as the Swiss luxury watchmaking industry was the third highest exporter with CHF 21.4 bn (USD 22.9 bn) in 2013 (Credit Suisse, 2013). The comparative case study approach of this study is based on investigating a sample of two of the biggest watchmaking companies in Switzerland, i.e. Swatch Group and Richemont. As no existing theory offers feasible answers on how sustainability relates to resilience, this study aims to close the existing theory gap between available literature and practical relevance and, moreover, provides a perspective on the relation between sustainability and resilience as well as the ability to be resilient against future disruptive innovations or shocks. This theory development is not only important to the world of research, but also to organizations operating in constantly evolving markets, struggling to improve their ability to recover from shocks, that is, their resilience.

1.2 Course of Investigation

The thesis proceeds as follows: Chapter 2 presents the current state of theory by defining and describing the main terms and concepts involved in the study and related to the research question. Chapter 3 describes the watchmaking industry and more thoroughly introduces the two investigated watchmaking companies. Chapter 4 functions as a transition between the theory development and the industry in terms of the research question as well as the applied research model. Chapter 5 describes the methodology in the form of a comparative case study before the data and results are presented and discussed in Chapter 6 and Chapter 7. The conclusion (chapter 8) synthesizes the findings and discusses the implications for the overall

luxury watchmaking industry. Additionally, some limitations are outlined and some opportunities for future research are presented.

2 Theory Development and Literature Review

Most industries in the 21st century are increasingly affected by predictable and unpredictable changes in the economic environment. These changes tend to create shocks, which may have the intensity to restructure the respective industry or the entire market. Therefore, researchers and practitioners have demonstrated a growing interest in methods to cope with shocks. This chapter aims to discuss the changes in the economic environment, more precisely unpredictable shocks and disruptive innovations. The chapter will further discuss the concept of resilience as well as environmental and social sustainability.

2.1 Changes in the Economic Environment

In the field of economics, a “shock” is an unexpected or unpredictable event that creates a significant change within an economy (Dewald & Bowen, 2010). Economic shocks can occur in several forms, such as through technological, organizational, or social innovations, and typically impact the supply or demand throughout the industry or market. Taleb (2010) called these shocks “Black Swans,” which are characterized by three main attributes: (1) they are outliers, positioned outside of our expectations as nothing of such nature has occurred before, (2) they have an extreme impact, and (3) they exhibit retrospective predictability, meaning that they seem predictable and explainable after the event. One example of a Black Swan, according to Taleb (2010), is the event of the terrorist attack on the World Trade Center in 2011. The unpredictability of Black Swans, innovations, or shocks in general highly influences any organization’s chances of survival. The advent of unpredictable events can have either a positive impact by providing new opportunities or a negative impact by having a disastrous effect on the industry. Analysts describe an event as a disruptive shock if it has significant market upsetting characteristics or if it might even be the first of its kind to the specific industry. Examples of disruptive shocks are technological product innovations such as disk drives, but also services and business model innovations such as discount shops.

With regard to the definition and the scope of disruptive innovations, researchers have engaged in a substantial discussion, resulting in a virtually incomprehensible variety of explanations (e.g. Adner, 2002; Christensen & Bower, 1996; Danneels, 2004; Govindarajan & Kopalle, 2006). According Wessel and Christensen (2012), “*Disruptive innovations are*

like missiles launched at your business” (p. 5). disruptive innovations have the ability to broaden and develop new markets or introduce new functionalities, which might disrupt established organizations in the market (e.g. Adner, 2002; Christensen & Bower, 1996; Danneels, 2004; Govindarajan & Kopalle, 2006).

Christensen (2014) described the development process of disruptive innovations more specifically as “*a process by which a product or service takes root initially in simple applications at the bottom of a market and then relentlessly moves up market, eventually displacing established competitors*” (first paragraph). While some researchers have supported Christensen’s model of disruptive innovations by introducing slightly altered definitions that build on Christensen’s theory (e.g. Adner, 2002), other researchers have challenged Christensen’s model (e.g. Danneels, 2004; Tellis, 2006). Danneels (2004) claimed that all definitions provided by Christensen are neither precise nor consistent. Still, most researchers have provided a perspective that is relatively similar to Christensen’s model of disruptive innovations. For example, Govindarajan and Kopalle (2006) introduced a new innovation measure, which is able to quantify the level of an innovation’s disruptiveness

Nonetheless, researchers have wondered why some established organizations fail to survive disruptive innovations, while apparently inferior organizations gain huge market shares and even replace incumbent organizations. Disruptive innovations appear to occur so intermittently that the parties concerned usually do not have a routine process for managing them (Christensen & Overdorf, 2000; Downes & Nunes, 2013). When being confronted with a disruptive innovation, established organizations face a dilemma. The latter have to decide whether the disruptive innovation is adopted, if possible, to the existing model or ignored, which increases the risk of long-term squeeze out. However, by adopting the new product or service of the potentially disrupting entity, organizations must consider the risk of damaging and undermining the existing business or business model (Charitou & Markides, 2012). Thus, the challenge is to identify a disruptive innovation as an opportunity, and to capitalize on it without diluting the existing resources and products. This approach is especially challenging as disruptive innovations are typically both an opportunity and a threat (Dewald & Bowen, 2010). Succeeding in adapting or being able to ignore a disruptive innovation while preventing potential displacement is generally referred to as resilience.

2.2 Resilience

The term “resilience” has its origin within the field of ecology. External conditions to ecosystems such as pollution or changes in climate often change unexpectedly and relatively short term. While some ecosystems respond in a smooth, continuous way to such changes, others respond more strongly once the external conditions reach a critical level (Scheffer, Carpenter, Foley, Folke, & Walker, 2001). Scheffer et al. (2001) analyzed that, for some environmental conditions, the ecosystem has two alternative stable states, separated by an unstable equilibrium that marks the border between the “basin of attraction” of the states. Shifts between these described stages can lead to both ecological and economic resource losses, while restoring a desired state can involve radical and costly intervention (Mäler, 2000). As a preliminary conclusion, one can argue that the theory of ecosystems has formed the foundation for most studies of resilience; specifically, observed ecosystem resilience is closely related to an organization’s ability and capability to resist shocks and return to a stable state after a disruption (Holling, 1973; Mäler, 2000; Scheffer et al., 2001).

Based on this determination, researchers constructed the concept of organizational resilience, which is a relatively new field of research (Lengnick-Hall & Beck, 2005) that has been applied to several contexts (Hamel & Valikangas, 2003). Organizations’ resilience is related to the ability to anticipate disruptions, adapt to unpredictable events, and create lasting value. The interconnectivity of different social systems, economic marketplaces, the mobility of capital, and the availability of instant communication have led to a situation where the effects of instable environments and unpredictable shocks, such as the financial crisis in 2008 or the terrorist attack on the World Trade Center in 2011, are usually no longer limited to the respective economy of origin. As a result, the concept of resilience is gaining more recognition by academics as well as the general economy.

Definitions of organizational resilience differ among and within the different disciplines, as do the units of analysis in which the definition has been used (Dewald & Bowen, 2010). Some researchers have distinguished between passive and active resilience. Active resilience is not simply a reaction to disruptive events; rather, it describes every effort that enables a firm to better cope with different forms of surprising or disrupting events. More precisely, active resilience includes identifying potential risks and proactive steps to avoid any form of replacement or disruption (Longstaff, 2005). In contrast, some economic studies have defined resilience in passive terms. Sutcliffe and Vogus (2003) described resilience as the ability to

capture change with a minimum of disruption. Others (e.g. Lengnick-Hall & Beck, 2005) have defined resilience as a firm's ability to simply rebound from an event that creates disruption or a crisis situation. Considered this way, resilience is basically a reaction to a disrupting event or crisis situation and hence viewed as a "*pattern rather than a prescribed series of steps or activities*" (Lengnick-Hall & Beck, 2005, p. 2).

Summarizing, organizational resilience is related to the theory of disruptive innovation, whose introduction contributes to a fast-changing business environment. As described in section 2.1.2, the challenge for organizations is to create new organizational routes or deploy the disruptive innovation in order to address the threats and opportunities arising from the initial innovation as well as the consequently changing environment (Dewald & Bowen, 2010). De Geus (2002) illustrated that "*even big, solid companies [...] seem to hold out for not much longer than an average of forty years*" (p. 2) and that "*in some countries, 40% of all newly created companies last less than 10 years*" (p. 2). Thus, the question arises how some organizations have developed an ability to be resilient to shocks and why others have not.

Developing organizational resilience seems especially difficult for small organizations, as they tend to be more dependent on the efficient usage of resources and consequently more inflexible regarding responding to and adopting environmental change from a goods-producing or service-providing perspective. On the other hand, smaller organizations tend to be less limited by compelling corporate roles and contexts and might thus be able to develop organizational resilience more easily than corporate decision-makers of larger organizations (Corbett & Hmieleski, 2007). Gilbert, Eyring, and Foster (2012) proposed a dual transformation approach to develop resilience. The first transformation adapts the core business to the realities of the disruptive marketplace. The second transformation creates a new business that ensures an organization's growth. Both transformations need to be separate, parallel efforts. Thus, management can utilize the development of a new core strategy whereas the innovation business can grow and develop independently without distraction while minimizing potential influence on the core business (Gilbert et al., 2012). De Geus (2002) identified four major factors that lead to long-lasting companies: sensitivity to the environment, cohesiveness with a strong sense of identity, decentralization and tolerance of activities on the margin, and conservative financing.

As this study's research question addresses how sustainability is related to an organization's resilience—or, in other words, an organization's sensitivity to the environment—the subsequent subchapter serves as an introduction to sustainability.

2.3 Sustainability

In 1987, the Brundtland Commission of the United Nations defined sustainable development as the ability to “*meet the needs of the present without compromising the ability of future generations to meet their own needs*” (Brundtland Commission, 1987, p. 41). Even though sustainable development is not a recent trend, only in the past decade has the topic gained more attention by different political, economic, and private institutions as well as the general public. The increased popularity can be observed, for example, in the field of academic research as demand for studies on the topic increased noticeably during the same time period. Additionally, consumer preferences indicate an increased demand for products produced in a sustainable way (Linton, Klassen, & Jayaraman, 2007). As a consequence, organizations are challenged by the simultaneous improvement of social and human wellbeing and the resulting effects on consumer behavior on the one hand and the reconciliation of reducing the ecological footprint while ensuring the efficient achievement of economic goals on the other hand.

Combining the effects and considerations of sustainability with organizational behavior, one can conclude that a sustainable organization contributes to sustainable development by rising to the challenge of delivering economic and social as well as environmental benefits simultaneously. The three principles of sustainability, namely economic, environmental, and social sustainability, are built on this challenge and while facing this challenge organizations always impact at least one of the three principles (Harris, 2000). Economic sustainability highlights the balance between the economic system and an organization’s production, governmental expenditure, or customer’s consumption, among other aspects. Environmental sustainability implies the maintenance of a stable and balanced ecosystem as well as the prevention of overexploitation of natural and renewable resources. Social sustainability includes distributional equality and reasonable provision of different social services, e.g. healthcare and education, as well as gender equality, political accountability, and participation and other basic human rights. Hence, moving toward sustainable development encompasses the consideration of each principle. (Hart & Milstein, 2003).

However, even if each principle is approached within the described process, sustainability itself is a more complex and multi-dimensional concept that cannot be addressed by a single corporate action. As organizations are forced to act on several levels, Hart and Milstein (2003) introduced four sets of drivers that should be addressed by any organization in order to

create and incorporate sustainability. The first set is related to the reduction of pollution and material consumption associated with increasing industrialization. The second set contributes to value creation through transparency and responsiveness, driven by civil society stakeholders. The third set is related to the development of new, disrupting technologies that replace existing ones and, thus, reduce the size of the ecological footprint. The last set contributes to an organization's value creation by meeting the needs of humans at the bottom of the world income pyramid in a manner that supports inclusive wealth creation and distribution (Hart & Milstein, 2003).

2.4 Correlation of Resilience and Sustainability

The previous subchapters outlined the current state of research concerning shocks and innovations, resilience, and sustainability. Unpredictable shocks and disruptive innovations can directly affect an organization's ability to conduct its core business. Consequently and as outlined previously, an organization's ability to be resilient is a growing area of interest not only within operation management, but also in other fields. First, the statement that "*business cannot succeed on a planet that fails*" (Winston, 2014, p. 59) indicates the critical fundamental relationship between sustainability and resilience. Any organization, despite its size or productivity, is not able to succeed in the long term, if the ecological environment no longer exists. Even though this statement does not yet directly determine a potential effect of sustainability on resilience, it builds the foundation of this subchapter's aim as it first implies that resilience cannot exist without sustainability. Second, as described in subchapter 2.3, the term "resilience" has its origin in the field of ecology and was first interpreted and communicated by Holling (1973) in his work "Resilience and Stability of Ecological Systems". Holling (1973) defined resilience as the ability of a system to absorb disturbances or changes in the ecological system.

Moreover, engaging in environmental sustainability can reduce disturbances or changes in the natural environment and ecological system. This recognition again initially links sustainability to resilience and, moreover, provides the first evidence of a potential influence of sustainability on (ecological) resilience. Environmental sustainability and the usage of resources are related as disruptive ecological shocks that can have an effect on the supply of renewable resources, such as crops. Winston (2014) pointed out that organizations investing in fewer and alternative resources will eventually be more competitive as it can be assumed that the respective organizations will become less affected by disruptive ecological shocks.

By making improvements in operational efficiency, such as by reducing evitable waste of material, organizations become more flexible and competitive (Winston, 2014).

Building on the subject area of environmental sustainability, a global survey conducted by McKinsey revealed that consumers are influenced by organizations' approaches to environmental problems and climate change. More specifically, the approach not only affects the degree of customer trust but also whether consumers would actually make a specific purchase decision (Bonini, Hintz, & Mendonca, 2008). Furthermore, as more customers become aware of and show increasing interest in environmental circumstances, expectations, requirements, and needs change. According to De Geus (2002) an organization's sensitivity toward the environment contributes to its longevity. By implication, one could consequently assume that investing in environmental sustainability, and thus addressing customers' changing needs toward sustainability, might lead to or increase an organization's resilience. Moreover, since relying on sustainable resources and preventing the overexploitation of natural resources are part of environmental sustainability, the validity of the previously made assumption appears to be reinforced.

However, fulfilling customers' adjusted and changing needs is possible only if an organization's engagement in environmental sustainability is transparently communicated. Information technologies and the previously described global connectedness can potentially make an organization's engagements, but also non-existent engagements, visible and appraisable. The Internet, social media networks, and consumer protection organizations increase the general level of awareness and enable consumers to be informed about a product or the manufacturing process with decreasing research effort (Winston, 2014). By transparently disclosing product origins, including materials and manufacturing conditions, an organization can gain its customers' trust and improve its chances of resiliency in a situation where the economic environment changes might improve (Hart & Milstein, 2003).

However, some aspects of transparency are also applicable to social sustainability. De Geus (2002) noted, "*The amount that people care, trust and engage themselves at work has not only a direct effect on the bottom line, but the most direct effect of a factor on your company's expected lifespan*" (p. 10). This statement claims that involving people in organizational development, such as investing in employees and building an internal community of corporate people, is an additional factor that can support resilience. Sheffi and Rice Jr (2005) supported this opinion and referred to the importance of organizational culture and employee empowerment to increase resilience. McKinsey explained that firms that improve

their employees' benefits and conditions can increase their reputation and improve their customers' willingness to purchase their products (Bonini et al., 2008). The findings revealed that these changes arise not only because customers value the appropriate treatment of employees, but also because satisfied, motivated, and well-trained employees are assumed to provide better products and services. Therefore, ongoing investment in employee development, including education and healthcare, builds social sustainability, which in turn might lead to increased customer satisfaction and the chances of resilience in case of a changing market environment. As most aspects of social sustainability are relatively detached from the purchased product or service, customers might not be able to recognize an organization's potential investment in this principle of sustainability, resulting in a need to emphasize transparency.

In conclusion, De Geus (2002) claimed that organizations that co-exist sensitively with the environment are better prepared to cope with shocks or changes in the economic environment. More specifically, previous studies have found that the detected correlations between sustainability and resilience rest on the three principles of sustainability described in subchapter 2.3 (Hart & Milstein, 2003). The assumption that "*business cannot succeed on a planet that fails*" (Winston, 2014, p. 59) and the basic theory as well as the origin of economic resilience within the field of ecology present the first link between the general concepts of sustainability and resilience within this subchapter. The organizational aspect of resources linked to environmental sustainability showed not only another association between the two concepts, but also a first potential explicit influence of sustainability on resilience. Transparency as an aspect of environmental and social sustainability presents an additional correlation and another potential influence of sustainability on resilience.

As outlined in previous subchapters, the relationship between sustainability and resilience, and more precisely how sustainability affects resilience, has not been investigated extensively in existing theory. Significantly, no existing theory offers feasible answers to this issue. Current research has mainly addressed the relationship between sustainability and performance. By contrasting the detected links between sustainability and resilience with the absence of academic theory on this relationship, a need for a new and better theory was identified. Thus, this study's aim to build theory on how sustainability relates to resilience depends on the practical relevance of this investigation. Building upon this chapter's outline of the theoretical principles chapter 3 introduces this study's industry context, namely the luxury watchmaking industry in Switzerland.

3 Industry Context

As mentioned previously, the aim of this study is to determine how sustainability relates to organizations' resilience, particularly with regard to disruptive innovations or other types of industry shocks. Moreover, the previous subchapter detected the general existence of a relation between sustainability and resilience from an academic perspective. In order to accomplish this study's necessary practical reference, the theoretical background is applied to a specific industry. The Swiss watch manufacturing industry was selected for this study because it was struck by and survived a disruptive innovation as well as an industry shock within the last 50 years. Furthermore, the intensive usage of scarce metals and gemstones could be considered contrary to the concept of sustainability, which makes this industry even more attractive for this study. This chapter begins with a detailed introduction to the selection of the industry. Subsequently, subchapter 3.3 presents this study's sample concerning the two organizations that were selected as objects of investigation. Finally, this chapter concludes with the disruptive innovation and shock that confronted the industry.

3.1 The Swiss Watchmaking Industry

The tradition of the Swiss watchmaking craft dates back to the 16th century. In the late 1960s, Switzerland dominated the global watch industry with 65% of the world market share and over 80% of the respective profits. This success was mostly built on the characteristics of Swiss craftsmanship and the accuracy of the watches' mechanical movement (Tajeddini & Mueller, 2012). This dominance almost evaporated in the 1970s when corporations such as the Japanese firm Seiko and the US company Timex offered watches that utilized the newly developed quartz technology at considerably lower prices (Glasmeier, 1991). This event was given the title the "The Quartz Crisis" (Barrett, 2000). However, due to structural changes in the Swiss watchmaking industry, which will be outlined more specifically in subchapter 3.2, as well as the focus on high-end mechanical watches, Switzerland was able to achieve an impressive comeback within the last 30 years (Credit Suisse, 2013).

Today, China and Switzerland dominate the global watch market. While most Swiss watches are positioned in the high-end or luxury segment, Chinese watches are generally positioned in the lower end of the price range. Consequently, China is leading in terms of volume and exported approximately 634.4 million wristwatches in 2013. In contrast, the Swiss watch industry exported approximately 28.1 million units within the same time period. Due to Switzerland's focus on luxury watches, those exported units resulted in the generation of

approximately USD 23.6 billion in revenue, while China generated merely approximately USD 5.6 billion in revenue with exports of approximately 634.4 million watches. In conclusion, with a market value close to 100%, Switzerland enjoys a near-monopoly position in the global luxury watch segment (Federation of the Swiss Watch Industry, 2014). Consequently, the supremacy of the Swiss watchmaking industry identifies its economic relevance in the industry investigated in this study. Based on the dominance of luxury watches, the Swiss luxury watchmaking industry was chosen for this study.

3.2 The Swiss Luxury Watch Industry

Before introducing the Swiss luxury watch market, the term “luxury” has to be clarified. The following table distinguishes four different segments: exclusive luxury, accessible luxury, mid-price, and low price.

Movement	Watch market	Segment definition	Retail price	The Swatch Group	Richemont	Bulgari	LVMI	Hermès	Gucci	Others
Mechanical 33%	48% of total watch market value	Switzerland (close to 100% *)	Exclusive LUXURY (22% of market value)	More than EUR10,000 EUR10,000 to EUR6,000	Breguet Glashütte Original Jaquet Droz Léon Hatot Blancpain	A. Lange & Söhne Piaget Vacheron Constantin	Daniel Roth Gerald Genta			Patek Philippe F.P. Journe Audemars Piguet Franck Muller Roger Dubuis Parmigiani Ulysse Nardin
			Accessible LUXURY (26% of market value)	EUR6,000 to EUR2,000 EUR2,000 to EUR1,000	Omega Joeger-LeCoultre IWC Cartier Van Cleef & Arpels Officine Panerai	Bulgari	Zenith Chaumet Ebel Louis Vuitton	Bédat & Co. Boucheron	Rolex Girard Perregaux Chopard Tiffany Hublot Breitling	
Quartz 66%	52% of total watch market value	Switzerland (nearly 11%)	Mid Price	EUR1,000 or lower	Tissot Mido Certina Hamilton cK Watch Pierre Balmain					Eterna Festina Maurice Lacroix Mondaine Sector Seiko Casio Others
		Others (less than 10%)								
		Asia (nearly 70%)	Low Price		Endura Swatch Flük Flak	Baume & Mercier Montblanc Dunhill	TAG Heuer Dior	Hermès	YSL Gucci	Raymond Weil
Sales from watch business				EUR1,986m	EUR1,705m	EUR293	EUR552m	EUR114m	EUR221m	

Figure 1: Positioning of Swiss watch brands (Pictet, 2003)

In general, luxury watches are defined as those types/models with a retail price of over EUR 1,000. This segment is differentiated by the subsections “exclusive luxury” and “accessible luxury.” Accessible luxury watches are defined as those that are sold for retail prices between EUR 1,000 and EUR 6,000. The technologies used are mainly based on mechanical movements and to a lesser extent quartz movements. The exclusive luxury segment, on the other hand, represents watches with a retail price in excess of EUR 6,000 with no upper limit given. The production of the latter involves demanding craftsmanship and processed technologies that are generally based on premium mechanical movements (Pictet,

2003). In order to avoid a lack of conceptual clarity, this study's wording of "Swiss luxury watch industry" includes both the exclusive and the accessible luxury segments.

The success of the Swiss watchmaking industry over the last decades can be attributed particularly to structural changes within the industry and a refocus on luxury watches. The change started in the middle of the 1990s with the distribution of new electronic communication devices such as computers and cell phones. These new electronic devices indicated the time more precisely than former (mechanical) watches. As a result, the relevance of watches as timekeepers became increasingly insignificant. The Swiss watchmaking industry detected this change of thinking relatively early and rested a respective reaction on the reinforcement of the symbolic and emotional product aspects (e.g. aesthetics, technical know-how, or brand reputation). Additionally, the reinforcement enhanced watches' economic, cultural, and particularly social status. In particular, mechanical watches turned into prestige and luxury items and status symbols over time, as they could easily be related to tradition, craftsmanship, and uniqueness (Credit Suisse, 2013).

The industry's structural changes are reflected in the number of watch exports as well as the economics of the luxury watchmaking industry. In unit terms, the Swiss watchmaking industry currently exports around 25% fewer watches than two decades ago. However, the respective exported watches carry a significantly higher value than two decades ago. Accordingly, the average export price of a Swiss watch increased from CHF 160 in 1992 to CHF 690 in 2012. The reasons for that adjustment within the last 20 years are various. Every fourth watch currently exported from Switzerland includes a mechanical movement, whereas this share was less than 10% in the beginning of the 1990s. It could be assumed that the significant price increase of approximately 430% is largely due to the growing interest in mechanical watches. Moreover, mechanical watches tend to be more expensive compared to quartz watches due to a more complex technology and required expertise involved in the development and manufacturing process (Credit Suisse, 2013). Finally, the application of scarce materials depicts considerable value improving aspects as well (Cheuvreux, 2012). In summary, the craftsmanship as well as the use of high-quality materials has led mechanical watches to become a luxury item and status symbol, which in turn has led to an increase in prices over time (Credit Suisse, 2013). Although Switzerland dominates the luxury watch segment worldwide, the mid- and lower end price segments also contribute to the Swiss watch industry's success. Even though watches in this price segment account for only 13% of export

sales, this price segment generates more than 80% of the export value of the Swiss watchmaking industry.

The high export volume from the low- and mid price segments contribute to the luxury watchmaking industry by creating a high degree of visibility for “Swiss Made” manufacturing worldwide. For a watch to bear the “Swiss Made” label, 60% of its manufacturing costs have to be incurred in Switzerland (Deloitte, 2013). The label is associated with high quality and luxury as well as exclusivity, reliability, and modernity. The quality and reputation of Swiss watches are the basis of the successful export economy and serve as an important marketing tool (Credit Suisse, 2013). Over the last decade, Swiss watch exports have grown at an average annual rate of 7.2%, which is significantly faster than all other Swiss industrial exports together. After the pharmaceuticals and machinery industry, the watchmaking industry presents Switzerland’s third largest export. Over the years, “Swiss Made” has become a valuable trademark that is associated with high quality and luxury (Credit Suisse, 2013). François Thiebaud, head of Swatch Group brands Tissot, Certina, and Mido, noted *“If a client learns that French Bordeaux contains Chilean wine, he will feel cheated because the designation of origin will not match anything at all. For the Swiss made, it is the same”*(Cheuvreux, 2012, p. 46). This comparison illustrates the importance of the “Swiss Made” label for every watchmaking company in Switzerland. This label is particularly important for the luxury watch industry, as it represents the luxury branch’s main characteristics, i.e. quality and luxury.

Today, three watchmaking companies, Swatch Group, Rolex, and Richemont, dominate the Swiss luxury watch market. Even though some market participants might be, from the perspective of corporate structure, a group of companies, within this study all portrayed companies or groups of companies will be solely referred to as “company/-ies.” Combined, the three companies named above account for an estimated 46% of global watch sales. Besides Rolex, whose portfolio includes only the brand Rolex itself, other market participants are fighting for the acquisition of additional (luxury) brands. During the last fifteen years, several companies have increased their existing brand portfolios by taking over smaller, independent brands. For example, Swatch Group includes not only “Swatch” but also brands, such as Omega, Glashütte Original, Breguet, or Blancpain (Euromonitor, 2014).

In addition to the evident oligopoly regarding the existing dominant market players, the Swiss watchmaking industry depends on one leading supplier in terms of watch components, namely Swatch Group. ETA, a producer of watch movements owned by Swatch Group, is

responsible for 70% of the Swiss watch movements. In addition, Swatch Group has a monopoly on the production of balance springs, which balance and regulate watches. Swatch Group's subsidiary Nivarox-FAR produces about 90% of all balance springs processed and sold in Switzerland. As a result and given the considerable market share up to 90% on some specific watch components, all watch manufacturers are directly or indirectly dependent on Swatch Group. Even big brands such as Richemont are obligated to use components produced by subsidiaries of Swatch Group (Credit Suisse, 2013). In conclusion, the following subchapters build upon the previously described company dominance within the Swiss watchmaking industry. However, considering the entire watchmaking industry is virtually impossible within the scope of this study. On this basis, a representative sample was utilized, which resulted in the consideration of Swatch Group, Rolex, and Richemont, as these three are the global leaders in terms of export sales. However, because Rolex is a private company, it is not compelled to make its financial statements publicly available. The subsequent lack of required data concerning Rolex led to the choice of Swatch Group and Richemont for the case study. As a result, the following subchapters briefly introduce Swatch Group's and Richemont's key financial data as well as company structure. These companies form this study's representative sample and are applied with regard to the required practical relevance.

3.3 Company Profiles

As mentioned previously, considering the entire watchmaking industry is virtually impossible within the scope of this study. This section briefly introduces the two watchmaking companies of the representative sample, namely Swatch Group and Richemont.

The Pictet Report (2003) outlined that 10 out of 18 brands of Swatch Group are ranged in the luxury segment whereas all watches by Richemont are classified as luxury watches. At last, even though the companies' product portfolios differ, this does not imply incomparability of the representative sample. Richemont has predominantly focused on jewelry, which accounts for approximately half of the company's revenue, while watch-related revenue accounts for approximately 26%. In contrast, Swatch Group's entire business is related to watch manufacturing. As both companies' shares in the global watch market are relatively similar and because both companies' gross sales are also comparable, this study's investigation on how sustainability and resilience are related can be considered unbiased. Whether or not Richemont achieves a similar market share while some parts of the company generate

relatively more revenue than the watchmaking department is of little to no relevance for this case study. In the following subchapters each company will be examined in more detail.

3.3.1 Swatch Group

Swatch Group is currently the world's largest manufacturer of finished watches in terms of retail value. In 2013, the company's retail value share of the Swiss watch market amounted to 35.9% (Euromonitor, 2014). The company employs almost 33,600 employees in 39 countries. In 2013, gross sales amounted to approximately USD 9.50 bn, which depicts an increase of 11.52% from 2012 (approximately USD 8.50 bn). The company is highly profitable, earning a net profit of approximately USD 2.2 bn in 2013, which corresponds to a 21.39% net profit margin (Orbis, 2013).

Swatch Group is a highly diversified company, owning 18 watch brands from the low-end to the luxury segment. The company vertically integrates 13 watch and watch-part manufacturing brands. In addition, the company structure encompasses five electronic systems companies that support the production of micro-batteries and accurate timing systems for sports events, among other functions (The Swatch Group Ltd., 2009). The company's value chain includes the manufacturing of every separate part of the watch including the final assembly. This ability is supported by the fact that Swatch Group is also a leading supplier of watch parts to most competitors (Euromonitor, 2014).

Not only is Swatch Group vertically integrated backwards, a new strategic focus promotes frontward vertical integration concerning the company's retail locations. Although most of the watches are sold through approximately 15,000 retail stores worldwide, the mono-brand store presence is permanently expanding. Swatch Group operates more than 900 Swatch boutiques, above 1,000 shop-in-shops, and approximately 140 kiosks. By pursuing this strategy, the company tries to expand control over the customer buying experience while gaining information in terms of regional customer tastes. Furthermore, absolute authority over in-store prices reduces the risk of reputation losses or decreasing price performance ratio based on increasing discounts given (Credit Suisse, 2013).

3.3.2 Richemont

Richemont employs approximately 27,700 employees worldwide. In 2013, the company's gross sales amounted to approximately USD 8.80 bn, which depicts a price increase of 9.96% from 2012 (approximately USD 8.00 bn). Like Swatch Group, Richemont is also highly profitable, earning a net profit of approximately USD 2.57 bn in 2013, which corresponds to a

19.75% net profit margin. However, these numbers are based on Richemont's whole group sales and profits, including the division's jewelry, premium accessories, writing instruments, and other luxury products (Orbis, 2014).

Richemont's watch division encompasses nine different luxury watch brands including one joint venture with Ralph Lauren Watch and Jewelry Co. The share of the watchmaking division in the group sales accounted for 28% with approximately EUR 2.75 mil. gross sales in 2013 (Compagnie Financière Richemont SA, 2014).

Richemont's luxury products are sold through a network of shops owned and controlled by the company, franchise operations, and shops owned by third parties. The company's luxury businesses operate globally. Richemont's main market is Europe, which generates around 40% of sales (Compagnie Financière Richemont SA, 2014).

3.4 Disruptive Innovation and Shocks in the Swiss Watch Industry

Building upon the brief introduction of this study's representative industry sample, this subchapter relates the theoretical background with the industry and concludes with the previously described events that led to the initial selection of the industry. Resilience describes an organization's ability to cope with industry shocks or market disruptions. In order to investigate whether sustainability might influence an organization's ability to be resilient, an industry sample has to be observed in the context of an industry shock or market disruption. Therefore, this subchapter briefly outlines two major industry shocks of the last several decades, in particular the Quartz Crisis of the 1970s as an example of an innovation disrupting the global watch market and the financial crisis in 2007/08 as an illustration of a worldwide industry overlapping shock.

3.4.1 The Quartz Crisis

Over decades, Swiss companies dominated the global watch industry. This dominance, however, almost evaporated in the 1970s when companies such as the Japanese firm Seiko or the US-based company Timex offered watches at considerably lower prices that used quartz technology (Glasmeier, 1991). Conductive quartz crystals use electronic means in order to accurately measure time, while incorporating significantly less moving parts than mechanical watches. Moreover, with the advent of the quartz crystals, time could be displayed by conventional means (analogue) or by digital display (such as light-emitting diode). With enhanced accuracy, quartz watches were also able to integrate other features, like alarms and

calculators. The extended degree of functionality of quartz watches as well as the ability to produce the respective watches at significantly lower prices depicted a disruptive innovation at that time (Glasmeier, 1991).

As a consequence, the Swiss watch industry lost considerable market share and underwent a significant industry reduction (Tajeddini & Mueller, 2012). However, instead of adopting the new quartz technology, most Swiss watch manufacturers chose to stick with traditional mechanical watches. As watch manufacturers increased prices to compensate shrinking sales, the number of consumers preferring reasonably priced quartz watches over relatively expensive mechanical watches manufactured in Switzerland increased as well. Consequentially, several established firms were forced to exit the market. In particular, the extensive Swiss watch manufacturing industry, which encompassed about 1,620 watchmakers in the 1970s, declined to around 600 firms in 1985 (Cassia et al., 2006). For the United States and Japan, this decade became known as “The Quartz Revolution,” while Switzerland referred to this period as “The Quartz Crisis” (Barrett, 2000, p. 362).

3.4.2 Financial Crisis

The global financial and economic crisis of 2007/08 is considered the most serious financial crisis since the Great Depression in the 1930s. The first stages dated from August 9, 2007, when BNP Paribas halted redemptions from three investment funds. A temporary peak was later reached when Lehman Brothers, one of the largest investment banks worldwide at that time, failed. This single bankruptcy threatened the total breakdown of several other financial institutions. Even though the collapse of the entire market was prevented through the bailout of several banks by the US government, stock markets' share prices reflected the resulting investor insecurity. Respective effects on the worldwide economy encompassed radically declining transaction volumes, customer wealth, and consumer confidence along with collapsing housing markets and increasing unemployment. As a result, even if a product-based organization would hypothetically not have been active on the financial market and unconstrained from leverage, the overall economic circumstances decreased sales and weakened profit margins.

Consequently, the financial crisis affected the Swiss watchmaking industry rather indirectly as demand declined, especially for luxury products as the respective purchase decision can be postponed indefinitely. From 1990 to 2000, the Swiss watchmaking industry had been able to almost double its export amounts from approximately CHF 6.8 bn to around CHF 10.3 bn,

with an average annual growth rate of about 4.3%. Moreover, between 2000 and 2008, watch exports grew by an average annual rate of 6.5%. This stable growth, however, halved as a consequence of the global financial crisis in 2007/08, and the watch export rate slowed down and then declined from the end of 2008 (-22.3%) (Credit Suisse, 2013, p. 10).

3.5 Preliminary Industry Results

As outlined previously, the Quartz Crisis almost eliminated the Swiss watchmaking industry. To evoke the turnaround within this crisis, Switzerland's banks merged the country's two giant (and financially bankrupted) watch manufacturers Société Suisse pour l'Industrie Horlogère (SSIH) and Allgemeine Schweizerische Uhrenindustrie AG (ASUAG). After assembling a group of investors, Nicholas Hayek became the CEO of the new company Société Suisse de Microélectronique et d'Horlogerie (SMH), which was renamed Swatch Group in 1998 (Taylor, 1993). While most Swiss companies were sourcing their manufacturing to so-called low-cost countries, Hayek understood the importance of producing in Switzerland while incorporating the previously described "Swiss Made" label. In order to stay competitive, Hayek incited the engineers to design watches that cost less than 10% in direct labor to manufacture. Indeed, Swatch Group was able to innovate its manufacturing process to produce watches virtually as cheap as quartz manufacturers while being able to brand the watches "Swiss Made." Among other factors, the "Swiss Made" label became a significant characteristic of the company's survival in the long run (Taylor, 1993).

Although Switzerland dominated the high-end segment of the industry, the lower-end segment was rather neglected. The underestimation of this segment's potential allowed quartz-based competitors to successively increase their market share. In order to manage quality, cost, and thus the company's share in the middle and high-end segment, Hayek decided to compete within the low-end segment as well (Taylor, 1993). However, instead of simply adopting the quartz innovation, Hayek introduced a new entry-level brand called "Swatch" in 1983. Slimming the new model by reducing the amount of components from around 150 to 51 lowered manufacturing costs accordingly (Barrett, 2000). As a result, Seiko's and Timex's quartz price advantage was in effect eliminated. With an increased focus on style and design, Swatch Group produced several different styles and models that were refreshed semi-annually in order to keep customers excited. The fundamental idea behind Swatch was to make a watch so affordable and stylish that people would own more than one; indeed, the name "Swatch" stands for "second watch" (Taylor, 1993).

The introduction of Swatch revitalized the entire Swiss watchmaking industry. On the one hand, the brand restored the Swiss industry's credibility with the public and re-established the Swiss trustworthiness concerning trade (Taylor, 1993). On the other hand, the action resuscitated mechanical watches. While Swatch Group took over a global mass-market audience with its low-end watch Swatch, other traditional mechanical watch manufacturers benefited from Swatch's success and reinvented themselves as luxury status symbols celebrating craft and tradition (Taylor, 1993). In summary, the Swiss watchmaking industry turnaround was mostly evoked by a transition from high-end watches to a broader product range including low-end watches. The return toward tradition and Swiss craftsmanship, combined with a necessary reduction of production costs, led to the overall industry recovery.

Swatch Group with regard to its legal structure emerged from the Quartz Crisis. Because the company did not exist beforehand, it is impossible to investigate which potential measures and principles of sustainability might have contributed to the company's apparent resilience and sustainability. A similar situation presents itself concerning Richemont, as the company's legal structure was set up in 1988. Based on these circumstances, this study is confronted with a recurring issue within any research-based academic dissertation. On the one hand, due to the timeframe of the Quartz Crisis, finding sound and comparable data with regard to the companies' financial statements has proven to be virtually impossible as several companies, which are now part of the representative sample, did not make internal documentation publicly available during that time period. On the other hand, any strategic documents that could serve as basis for further academic investigation regarding which measures the companies had taken in order to be resilient are also either not available or available only with considerable difficulty that surpassed the available timeframe and scope of this study.

Given these preliminary results and the timeframe and scope of this study, the global financial and economic crisis in 2007/08 will be utilized as the starting point of the conceptual framework of this study. The following chapter presents the conceptual framework on which the study was based.

4 Conceptual Framework

The previous chapters aimed to provide an in-depth background and understanding of the theoretical framework in terms of disruptive innovations, resilience, and sustainability. Based on this theoretical framework and the detection of various potential correlations, chapter 3 presented an understanding with regard to this study's industry focus, namely the luxury

watch manufacturing industry in Switzerland. Chapter 4 functions as a transition between the previous chapters and the research question. Although an analysis of all detected correlations would exceed the scope of this study, two correlations seemed highly relevant with regard to this study’s industry. First, (a) organizations that co-exist sensitively with the environment (i.e., those that invest in environmental sustainability) might be better prepared to cope with shocks or changes in the economic environment. Second, (b) transparency with regard to information linked to social and environmental sustainability increases customers’ trust and loyalty with an organization, which in turn might enable the company to better cope with potential future shocks. Hereinafter, the indicated correlation between sustainability and resilience will be applied to this study’s industry and serve as a foundation to the research as well as introduce the answer to the proposed research question.

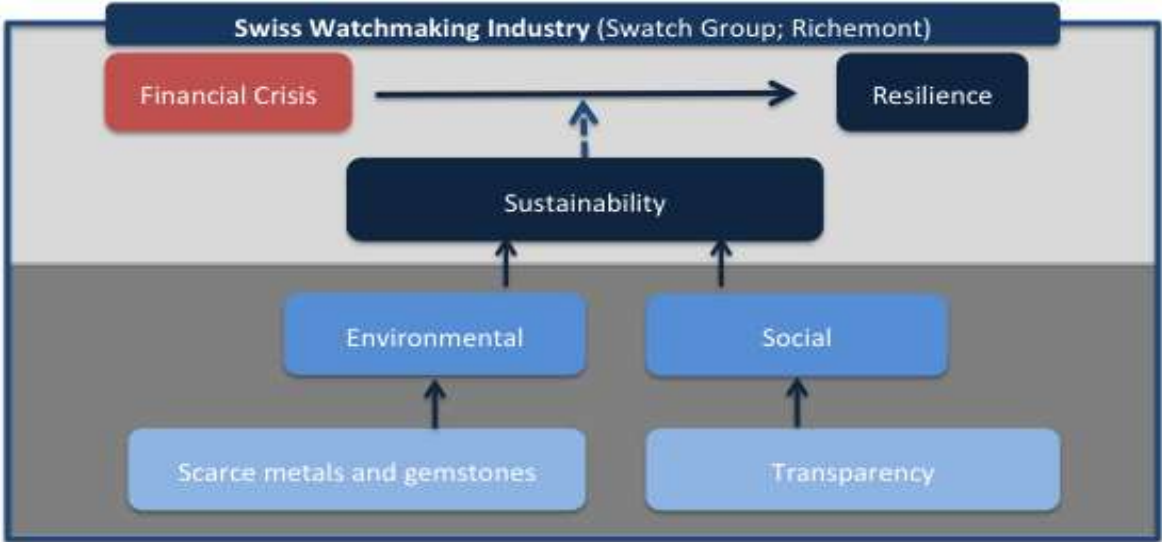


Figure 2: Theoretical Framework

(a) For an organization that creates luxury watches, one of the most significant areas of environmental sustainability relates to the usage of scarce metals and gemstones, in particular gold and diamonds. These materials are intensively used in the luxury watchmaking industry and among other things justify the corresponding price and value of a luxury watch. In contrast to these materials’ glamorous appearance, however, the mining operations of gold and diamonds are often related to environmental concerns. Diamonds are predominantly sourced from developing and emerging countries, such as Russia or some African countries. These countries account for around 70% of the world’s diamond production (Bain & Company, 2013). Due to media coverage in the 1990s, the industry became increasingly associated with terms such as “blood diamonds” or “conflict diamonds.” The term stems from the fact that the usage of those diamonds has been proven, for example, to finance civil wars

in African countries (Bain & Company, 2013). Similar to diamonds, some gold exports originate from African conflict regions. As a result, gold is classified as one of the four “conflict minerals” (along with coltan, cassiterite, and wolframite) (Bain & Company, 2013). Aside from gold mining operations’ environmental problems, statistically the amount of waste per unit is higher in contrast to any other metal (Earthworks & Oxfam America, 2004). Based on this information, the luxury watch industry could appear far from being sustainable concerning these scarce materials. Concluding, this chapter’s necessary transition of applying the theoretical findings of chapter 2 to the specifically chosen industry was successful and thus the foundation for proceeding with the data analysis has been established.

(b) As luxury watches are categorized as consumer goods, consumers present one of the most significant stakeholder groups for watchmaking companies. Chapter 2 outlined that today’s consumers increasingly care about social and environmental standards and detailed characteristics of purchased products and brands. Customers expect instant access to information about the things that are being purchased. By transparently disclosing relevant information with regard to aspects of social and environmental sustainability, organizations can improve consumers’ trust in the organization and its products. As a result, the degree of transparency appears to be directly or indirectly related to potential purchase decisions. Thus, it can be assumed that companies that transparently communicate efforts toward environmental and social sustainability increase their ability to handle future shocks.

Still, it could be assumed that the luxury watchmaking industry might not be known for an above average degree of transparency regarding sustainability. In particular, the Swiss oligopoly industry structure might suppress the impression of actual consumer market power, especially since the request for transparency is relatively detached from the product itself. Nonetheless, transparency is more than just marketing. Transparency includes the disclosure of various data concerning in this case environmental- and social-related information, such as specific data about the carbon emission or information about efforts toward employee development. Any luxury product manufacturing industry is generally highly dependent upon the customers’ desire to purchase, independent from an oligopoly or even monopoly industry structure. As the products are relatively expensive, the potential customer group is smaller in relation to mass products. Thus, customers’ market power must not be underestimated, and applying the theoretical findings of chapter 2 to the chosen industry was successful.

In conclusion, both, scarce metals and gemstones as well as transparency, have proven to constitute an industry-relevant theoretical foundation. Within the subsequent chapter, the

research methodology will outline this study's case study approach to the theoretical framework, the selected industry, and the representative industry sample.

5 Research Methodology

Before presenting the data and research results this chapter outlines the applied methodology used to answer the research question. Subchapter 5.1 explains the applied methodology before discussing actual data collection strategies in subchapter 5.2 and subchapter 5.3.

5.1 Case Study

Most of the current research on resilience has built on quantitative data with regard to moderating variables, such as “financial performance”. However, this study changes the moderating variable to “sustainability”, a field that has not been covered adequately so far. While hypothesis testing is a good approach to test a theory that is relatively mature and detailed, case studies emphasize new research fields by investigating topics or complex contemporary phenomena that have been covered poorly or not at all. Given that the topic of this study is rather new and not well covered, the approach of conducting a case study is justified.

A case study is “*an empirical inquiry that investigates a contemporary phenomenon within its real-life context (...) in which multiple sources of evidence are used*” (Yin, 2014, p. 23). By collecting various evidence and information sources, case studies examine a phenomenon from multiple perspectives and enable the detection of patterns and potential explanations that were initially not expected or researched. The aim of a case study tends to be theory development beyond its current emergent state (Blumberg, Cooper, & Schindler, 2005). Given the primary focus on resilience and sustainability considered independently from each other, this study contributes to existing research by investigating the potential relationship between the two. Moreover, the exploratory nature of the case study approach permits the examination of data and information while further elaborating theory and concepts throughout the entire research process. In short, the case study approach allows for the evaluation of theory by answering “Why?” and “How?” questions (Blumberg et al., 2005).

This research involves a comparative case study in which two Swiss watchmaking companies are evaluated. In analyzing these two cases, several sources of evidence are investigated, including quantitative data analyses as well as qualitative methods in the form of semi-structured interviews. The usage of multiple sources allows compensating weaknesses of one

approach with strengths of another to form a complete understanding of the investigated phenomenon. However, it has to be underlined that the quantitative data does not test the qualitative data; rather, they complement each other (Blumberg et al., 2005). Both the quantitative and qualitative methods are described hereinafter.

5.2 Quantitative Data

The quantitative analysis aims to determine the sustainability performance of Swatch Group and Richemont, and to provide an understanding of the firms' resilience.

Resilience is measured in terms of the relative stabilization of the share price of each organization after the financial crisis in 2007/08. As resilience is defined as the ability to return to equilibrium after a disruption (Tilman & Downing, 1996), the return of a share price to a pre-crisis value can provide evidence and traceability of the organizations' resilience. A share price represents the cost of purchasing a security on an exchange and can be affected by several aspects, such as market volatility, economic conditions, and the organization's popularity. Hence, a share price represents an indicator or how a market shock, such as the financial crisis, usually impacts a company. Richemont's and Swatch Group's share prices were retrieved from the SIX Swiss Exchange's website. The observation of the share prices covers the period from 2007 to 2010. The first measurement was retrieved from August 8, 2007, one day before the official beginning of the active phase of the financial crisis. In addition, the date and the share price when the companies reached the pre-crisis level (equilibrium) were identified and the time span (in weeks) from the advent of the financial crisis until the return to the pre-crisis level was calculated. Furthermore, the date and share price of each organization's peak was identified and the number of weeks from the peak until the return to the pre-crisis level was calculated. The observation of the return to the pre-crisis point allows for the proof of resilience, whereas the time span to reach the pre-crisis level provides a better understanding of each firm's level of resilience relative to each other.

A thorough analysis of the organizations' annual reports of the period from 2005 to 2010 was conducted as a means of discovering and determining sustainability-related activities and investments done in the years prior to and after the financial crisis. Swatch Group's and Richemont's report data were used because it depicts the most detailed data available on the investigated issues. Additionally, the annual reports guarantee the most stable reporting throughout the years, which relieves the intra- and inter-company comparison over time. The reports were retrieved from the "Investor Relations" sections of the respective company

websites. During the period of review, neither of the organizations published a corporate social responsibility report (or any similar report). Therefore, a thorough analysis of the “Environmental and Social Policy” section (Swatch Group) and the “Corporate Responsibility” section (Richemont) of the respective annual reports were conducted.

One way to measure sustainability is to compile and compare data of organizational sustainability expenditures (GRI–Global Reporting Initiative, 2006). However, neither Richemont nor Swatch Group published data with regard to these expenditures. Thus, other sustainability measurements related to the study’s correlations within subchapter 2.4 were sought. With regard to the “Sustainability Reporting Guidelines” by Global Reporting Initiative, core measurements were selected that allowed to draw a conclusion about both companies’ levels of sustainability (GRI–Global Reporting Initiative, 2006).

	Measurements
Scarce metals and gemstones:	Number of memberships in officially sanctioned initiatives regarding the proper dealing of scarce metals and gemstones
	Duration of memberships in officially sanctioned initiatives regarding the proper dealing of scarce metals and gemstones
Transparency:	Location of production
	Amount of water consumption
	Amount of waste
	Amount of carbon emission
	Amount of energy consumption
	Number of initiatives towards employee training and development
	Employee training and development expenditures
	Number of supported community projects
	Community expenditures

Table 1: Overview of sustainability measurements

The first two measurements in the above overview are related to scarce metals and gemstones. The process from mining to retailing involves several different stakeholders. Environmental issues, corruption, and poor working conditions present the main concerns involved in this process. Because only officially sanctioned initiatives guarantee a basic traceability for scarce metals and gemstones, the number of memberships in these initiatives as well as the duration of these memberships serve as a measurement for this study. As only officially sanctioned initiatives are taken into account, the number of initiatives provides evidence for the awareness and level of involvement in environmental issues. Furthermore, the membership duration was measured to derive potential connections with the financial crisis as well as to provide further evidence for the level of each organization’s involvement. All other measurements in table 1 are linked to transparency and aim to build evidence for the level of each organization’s transparency with regard to reported information about social and environmental sustainability. Environmental measurements cover performance related to inputs, such as energy, and outputs, such as emissions. Social measurements are related to the

impacts an organization may have on the social system in which it operates, including the impact on employees and the local community. All these measurements present data that extends the legal reporting and furthermore concerns the content linked to sustainability. The annual reports were reviewed in terms of the amount of presented data related to each measurement and in terms of the accuracy and traceability of the data.

5.3 Qualitative Data

Complementary to the gathered quantitative data, interviews were conducted to get a professional opinion on the topic of interest. In total, eight interviews were conducted over a span of four weeks, most lasting between 45 and 90 minutes. Six out of the eight interviews were conducted face-to-face in comfortable environments such as conference rooms that were relatively free from distraction. Due to scheduling difficulties, the remaining two interviews were conducted by telephone. Regardless of the format, each interview was semi-structured. Semi-structured interviews aim to discover the perspective of the interviewee on a specific issue and are thus able to confirm the findings detected in the quantitative analysis. By creating an interactive dialogue, a semi-structured interviews allow additional questions and ideas to arise during the interview as a result of the interviewee's statements (Blumberg et al., 2005). To focus on the intended topic and in order to ensure continuity across the various interviews, a structured framework of subjects and specific questions was used. This framework ensured the discussion of the identical topic in each interview, while allowing for individual follow-up questions. In order to limit potential bias, several knowledgeable interviewees who viewed the topic of interest from diverse perspectives were selected (Eisenhardt & Graebner, 2007). Apart from preventing potential bias, conducting interviews with multiple stakeholders and viewpoints allowed a 360-degree view of the topic, which contributed to the formation of theory and the provision of evidence for this study. Thus, the interviewees included organizational actors from Richemont and Swatch Group, actors from an interest group (Amnesty International), and customers of luxury watches.

On the organizational level, two respondents, one from each company, were approached and willing to conduct an interview for this study. As mentioned in subchapter 3.3, these companies were chosen with regard to their leading positions within the luxury watchmaking industry in Switzerland. The purpose of the interviews was to gain a better understanding of the influential factors of organizational resilience and, moreover, to explore the motivations of efforts with regard to sustainability, observed within the quantitative data analysis. In order to

avoid any potential influence beforehand, the interview requests related to this interview group contained only the information that the case study aimed to explore: how companies deal with different kinds of shocks. During the interviews, the interviewees were asked what the respective company had done with regard to the financial crisis in 2007/08 and how they evaluate these measures in terms of their effectiveness. Specific questions concerning the topics of sustainability and resilience were not asked to avoid any influence of the responses and to obtain open to any information which might not have been considered or expected.

Both interviewees had to deal with organizational constraints with regard to confidentiality. Therefore, the main challenge in gathering qualitative data was to maintain the interviewees' confidentiality while presenting rich, detailed organizational data. The approach applied in this study was built on suggestions developed by Kaiser (2009). At the beginning of the data collection process before the interviews were conducted, both parties agreed on the terms and conditions regarding the publication of the respective data. Based on these confidentiality agreements, the interview data were "cleaned" by removing all identifying details, such as company names. However, although personal identifying details can be removed easily, contextual identifying details, such as special events, which can only be linked to one company, will remain. This challenge is particularly daunting in this comparative case study, in which only two companies are compared and contrasted. Thus, even without stating the name of the company or interviewee, readers might be able to identify the organization according to the statements of the (anonymized) interviewee. To deal with this problem, one can change specific details to render data unidentifiable (Kaiser, 2009). However, unlike changing the name of the company or an interviewee, changing additional details can modify or even destroy the original meaning of the data. Therefore, the gathered interview data was detached and reviewed by the interviewee, and only data released by the interviewee was used and indicated in subchapter 6.2 of this study. All other data was not published to avoid harming the confidentiality agreement.

As this study assumes that scarce metals and gemstones represent a particular issue in terms of environmental sustainability of companies that manufacture luxury watches, an interview with an interest group was conducted. The aim of this interview was to get a professional opinion of the particular issues and to gain an understanding of the effectiveness of various supporting measures and actions taken by the companies. The selection of the organization followed the requirements of the theoretical sampling method, which selects elements based on their particular suitability *"for illuminating and extending relationships and logic among*

constructs” (Eisenhardt & Graebner, 2007, p. 27). Amnesty International is an international, non-governmental organization. Compared to other interest groups or non-governmental organizations, such as Greenpeace, Amnesty International has maintained a primary interest in conflict metals and gemstone. Over the last two decades, Amnesty International regularly tried to increase awareness for the conflicts accompanying and involved within the sourcing process of conflict metals and diamonds. For example, in 2004, they published a brochure that enlightened customers and provided customers support to purchase products whose gold and diamonds did not fund any conflicts. However, the aim of this brochure was not only to enlighten and support customers, but also to force producers and retailers to implement a system of guarantees that ensured that suppliers dealt only in conflict-free diamonds and gold. Another, more recent example is represented by the report “Mining and Human Rights in Senegal: Closing the Gaps in Protection,” published in May 2014 by Amnesty International. This report informs readers about conflict gold and aims to shed light on the still existing conflict. Based on the constant actions taken by Amnesty International to support conflict-free gold and diamonds, the organization is assumed to be highly knowledgeable and thus able to offer further insight into the underlying issue. Therefore, a volunteer from Amnesty International was interviewed to gain deeper theoretical insights.

At last, as watches generally represent a consumer good, it seems logical to also consider the customer perspective. These interviews aimed to gain an idea about the consumers’ purchase decision process of a luxury watch and about potential awareness and interest in terms of sustainability linked to luxury watches (Appendix A). The selection of the consumer interviewees was based on the convenience sampling method was used, as it is appropriate to test or gain ideas about the subject of interest. Convenience samples are non-probability samples and unrestricted (Blumberg et al., 2005). More specifically, interviewees were selected based on the criteria of owning at least one luxury watch, i.e. a watch with a selling price above EUR 1,000. In total, five personal interviews were conducted, most lasting between 30 and 45 minutes. This total number of customer interviews is related to the theoretical saturation of the category, meaning the point where “*gathering fresh data no longer sparks new theoretical insights, nor reveals new properties of these core theoretical categories*” (Charmaz, 2006, p. 113). As the fourth and fifth customer interview did not provide additional insights, no further interviews were conducted.

In order to compile, organize, and make sense of the interview data, all interview data was coded. Coding describes “*segments of data with a short name that simultaneously summarizes*

and accounts for each piece of data” (Charmaz, 2006, p. 43). The aim of coding is to cover similar themes in several interviews or in different parts of one interview in order to compare interviews as well as to get an appropriate understanding of what the interviewees have said about different themes (Rowley, 2012). Hence, it builds the pivotal link between the data collection and the actual explanation of the data. Before the initial coding process started, preliminary deductive coding was applied to one already conducted interview. As this coding process generated an unsatisfying outcome and was difficult to apply to the different groups of interviewees, the analysis of the qualitative interview data builds on inductive coding, more precisely the inductive coding process described by Creswell (2002). According to Creswell (2002), theory develops “*from the particular or the detailed data to the general codes and themes,*” i.e. inductive theory building (p. 238).

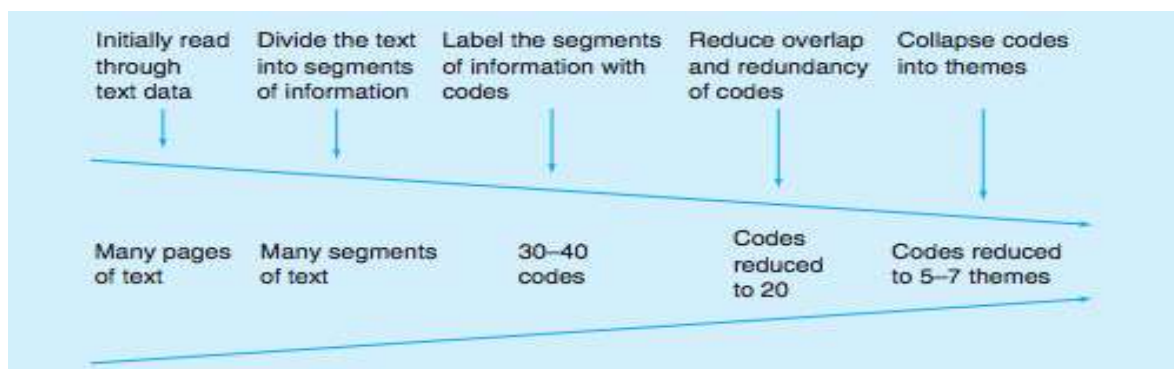


Figure 3: A visual model of the coding process by Creswell (2002)

As visualized in figure 3, the coding process included five major steps. The first step consisted of becoming familiar with the interview data to gain an understanding of all themes covered in the interview. This step began the process of thinking about key themes of the interviews. Therefore, all interviews were thoroughly read and the first annotations for key items were made. In the next step, the interview data was divided into several segments by considering the underlying meaning and reflecting on single ideas or concepts of what the interviewee said in each sentence or group of sentences. The third step started the actual coding process by assigning code words or phrases that accurately reflected the idea or concept to each segment. The next step consisted of reducing overlapping codes, by grouping similar codes and looking for redundant codes. Afterward, the interviews were coded again, based on the codes of the new, reduced code list, to see whether new codes emerged. The last step involved a further reduction of codes into themes or descriptions of the interview data. These themes were built on “*similar codes aggregated together to form a major idea in the*

database” (Creswell, 2002, p. 245). The finalized themes present the areas in which insights have been generated and build the foundation for the narratives in the data chapter 6.

Because the interviews of the three interview groups (i.e. employees, interest group, and consumers) had a different purposes, each had a different question framework with various specific questions related to the issue of interest. Therefore, the interviews of the respective interview groups were coded separately to ensure a reflective coding outcome. The actual coding process of the interviews with the organizational actors identified 261 codes, which were combined and reduced into 23 abstract codes. Based on these reduced codes, two main themes were detected: (a) measures to deal with the financial crisis, and (b) measures to deal with future shocks. The coding process of the interview with Amnesty International identified 42 codes, which were further reduced to 6 abstract codes, and finally, to one theme: importance of scarce gemstones. The coding process of the consumer interviews identified 145 codes that were combined and reduced to 16 abstract codes. Afterwards, the combined codes were ultimately organized into four central themes: (a) reason for the purchase, (b) criteria that positively influence the purchase of a luxury watch, (c) criteria that negatively influence the purchase of a luxury watch, and (d) interest in the production process.

The entire coding process was supported by the qualitative analysis tool “MAXQDA,” which allows for organizing and classifying large quantities of raw data and developed codes. To reduce potential bias in interpretation another researcher was invited to check the classification and coding of the interview data. As all interviews were conducted in German, the entire coding procedure was also conducted in German. After completing the coding process, the finalized themes were translated into English. Again, in order to reduce bias in the translation, a translator was invited to review the translation of the themes into English.

After having outlined the research methodology, the following chapter 6 will introduce the quantitative and qualitative data gathered from this study’s investigation.

6 Data

Chapter 5 outlined the applied methodology as well as the data gathering- and data evaluation processes of this study. It was initially necessary to determine whether both organizations of this study’s representative sample were indeed resilient with regard to the advent of the financial crisis in 2007/08. For this purpose, the first part of this chapter analyzes Swatch Group’s and Richemont’s ability to recover from shocks based on quantitative data collection, i.e. the respective share price development. Once conclusions about the resilience of each

organization will have been made, an analysis of the potential relation of sustainability and resilience is conducted based on qualitative data and qualitative data.

6.1 Analysis of Quantitative Data

Quantitative data builds on share price related analysis and thus publicly available financial data as well as findings extracted from the companies’ annual reports (financial years 2005–2010). As outlined in subchapter 5.2, the detected sustainability measures and the analysis of their existence within the quantitative data gathered provides a first understanding of the companies’ sustainability efforts toward transparency and handling of scarce metals and gemstones. Subsequent to the analysis of share price development on resilience in subchapter 6.1.1, subchapter 6.1.2 presents data that reveals whether supporting ethical and sustainable sourcing of scarce metals and gemstones, i.e. environmental sustainability, may have an effect on organizations’ resilience. Chapter 6.1.3 discovers whether transparency with regard to social sustainability enables organizations to better cope with shocks and to be resilient.

6.1.1 Analysis of Share Price Development on Resilience

The main shock that the luxury watchmaking industry faced in the last decades was the global financial crisis in 2007/08. By analyzing the development of the respective share prices, this subchapter draws a conclusion regarding how Richemont and Swatch Group were affected by and coped with the crisis from an economic and financial perspective. Figure 4 below illustrates the share price development of Richemont and Swatch Group scaled by percent between August 2007 and December 2010. Scaling share prices by percent has the advantage that the overall performance can be identified on a percentage basis, starting at 100% at the point in time of the observation’s start. This illustration is especially useful when comparing two or more absolute stock prices, which would otherwise be not comparable as, for example. the shares’ starting price already might have been different and thus a comparison of absolute numbers would provide no added value academically.



Figure 4: Share prices of Richemont (CFR) and Swatch Group (UHR) (2007–2010)

The red line (UHR) represents the share price development of Swatch Group, while the blue line (CFR) represents Richemont’s share price development. The data analysis started on August 8, 2007, one day before the official beginning of the financial crisis, dated on August 9, 2007. As described earlier, share prices’ development is set to 100% at this date. The graph makes underlines that both organizations reacted analogically to the general course of the financial crisis. More specifically, both companies’ share price experienced a strong slow down until the beginning of 2009 and a slow recovery from the beginning till the end of 2010. The turn of the year 2010 marks the point of recovery as Richemont’s share price surpasses the previously set start point of 100% shortly before, Swatch Group’s share price development follows with a slight delay of approx. 2-4 months. However, even more striking and of increased relevance for this study’s investigation is the similarity of both companies’ share price development towards each other. As highlighted in Figure 4, both circles underline both relative share price developments’ similarity with regard to slight changes up- as well as downward. As announcements in the respective investors’ relations’ sections did not shed light on this development, especially regarding similarity, it can be assumed that this share price development suggests a generally homogenous market. This assumption is underlined by comparing this observation with the share price development of LVMH, the next biggest public Swiss watchmaking company. It appears that the industry is well-balanced as all shares of the compared companies move similarly

	Start	Share price (close)	Peak in bottom	Share price (close)	Equilibrium	Share price (close)
Swatch Group (UHR)	Aug 6, 2007- Aug 8, 2007	340,25	Mar 2, 2009- Mar 6, 2009	124,50	Mar 22, 2010- Mar 26, 2010	343,20
Richemont (CFR)	Aug 6, 2007- Aug 8, 2007	32,44	Mar 2, 2009- Mar 6, 2009	14,44	Nov 23, 2009- Nov 27, 2009	33,10

Table 2: Highlights of share prices during the financial crisis (Richemont; Swatch Group)

Besides the share prices on August 8, 2007, Table 2 displays the dates and share prices of the companies’ share price development bottom and equilibrium, i.e. the point they reached the pre-crisis level again. Surprisingly, both companies’ share price development reached the bottom within the same week, i.e. March 2-6, 2009. As already indicated by the graph in Figure 4, Swatch Group recovered to its pre-crisis level in the week from March 22 to 26, 2010, i.e. 137 weeks after reaching the all time low within the selected time period. In contrast, Richemont returned to its pre-crisis point in the week from November 23 to 27, i.e. 120 weeks and therefore 17 weeks earlier than Swatch Group. Similarly, the period between bottom and equilibrium amounted to 55 weeks for Swatch Group and 38 weeks for

Richemont. At last, the share price of Swatch Group fell in total by 63.41%, while Richemont's share price fell only by 55.49%.

The results from the analysis show that both companies were able to recover, i.e. return to their pre-crisis points, after they were affected by the financial crisis in 2007/08. Furthermore, the analysis of the financial data determined that, based on the finding of when pre-crisis stock level was reached, how steep the decline has been for each company, Richemont had a tendency to better cope with the financial crisis than Swatch Group. In order to determine whether this finding is related to both companies' activities concerning sustainability, an analysis of the companies' sustainability-related activities and investments was conducted subsequently.

6.1.2 Analysis of Measures Towards Environmental Sustainability

For a company that manufacturing luxury watches using scarce metals and gemstones, one of the most significant areas with relevance to environmental sustainability is the ethical and sustainable sourcing of gold and diamonds. This subchapter presents quantitative data gathered from Richemont's and Swatch Group's annual reports within the time period of 2005 to 2010, more specifically the information that is related to dealing with scarce metals and gemstones. As mentioned in chapter 5.2, detected sustainability measurements concerning circumstances related to scarce metals and gemstones are (1) the number of memberships in officially sanctioned initiatives regarding the proper dealing of scarce metals and gemstones as well as (2) the duration of memberships within these initiatives. With regard to these measures, the data presented within the annual reports is presented hereinafter.

(1) Number of memberships in officially sanctioned initiatives

Richemont is involved in three different initiatives that are concerned with the ethical and sustainable sourcing of scarce metals and gemstones: (a) the Responsible Jewelry Council (RJC), (b) the Kimberly Process, and (c) the Convention on International Trade in Endangered Species (CITES).

(a) The RJC was established in May 2005. Cartier, one of Richemont's leading brands, is a founding member of the RJC. The council is a voluntary initiative, whose participants are committed to the promotion of responsible business practices across the diamond and gold sourcing supply chain. More precisely, all participants implement procedures that ensure that gold and diamonds entering the supply chain have been sourced without harming the environment or the community in which the sourcing has taken place. To understand the

controls of the different steps within the sourcing process of metals and gemstones, “Richemont has taken steps to review the processes being implemented by [...] meeting with gold refiners and banks, which supply the bulk of the gold used in our jewelry and watchmaking processes” (Compagnie Financière Richemont SA, 2011, p. 53).

(b) The Kimberley Process Certification Scheme requires all rough diamond exports and imports of participating countries to be documented, uniquely certified and approved via a government bureau, in order to support conflict-free diamonds. In addition, Richemont requires all its suppliers to comply with the “System of Warranties,” a continuation of the Kimberley Process Certification Scheme. This voluntary system relies on the creation of a chain of written warranties from original Kimberley Process certificates to invoices of all different transactions involving the purchase and sale of diamonds as well as their cutting and polishing.

(c) CITES is related to the procurement, import, usage, and export of leather and other raw materials issued from endangered or protected species.

In contrast to Richemont, Swatch Group is committed only to the Kimberley Process Certification Scheme. Specifically, Swatch Group’s diamond trade is entirely compatible with the Kimberly Process regulations.

(2) Duration of memberships in officially sanctioned initiatives

In 2005, Cartier, one of Richemont’s leading brands, co-founded the RJC. Within 2005 and 2010, other Richemont Group companies, such as Van Cleef & Arpels, Piaget, and Montblanc joined the RJC. Since 2006, all diamonds used by Richemont’s companies are Kimberly Process compliant. The 2008 annual report contained the first reference to CITES, yet it is not clearly stated when the company began to apply the procedures and regulations of the respective initiative. In 2010, Swatch Group first reported its policy regarding suppliers and the sourcing of raw and scarce materials. However, the annual report does not indicate when the company began following the Kimberly Process regulations.

6.1.3 Analysis of Measures Towards Social Sustainability

Similar to subchapter 6.1.2, the quantitative data presented in this chapter was collected from Richemont’s and Swatch Group’s annual reports from 2005 to 2010. Data related to the years after 2010 were not included. To ensure a better understanding and in order to provide a comprehensive overview, the gathered data is presented with regard to (social) sustainability

measurements related to transparency: (1) location of production, (2) amount of water consumption, (3) amount of waste, (4) amount of carbon emission, (5) amount of energy consumption, (6) number of initiatives toward employee training and development, (7) employee training and development expenditures, (8) number of supported community projects, and (9) community expenditures. As mentioned in chapter 5.2, these measurements aim to build an understanding of the degree of transparency with regard to sustainability efforts by Richemont and Swatch Group respectively.

(1) Location of production

Richemont's operations are mainly based in Switzerland, France, and Germany. More precisely, 86% of the production is located in Europe. According to the annual report from 2010, Richemont does not have "*employees working in manufacturing in Asia*" (Compagnie Financière Richemont SA, 2011, p. 33). According to Swatch Groups annual report of 2010, the company operates worldwide and has subsidiaries in more than 37 countries. However, more detailed information about the locations of production were not published.

(2) Amount of water consumption

Richemont has reported specific data about amount of water consumed since 2007/08. For example, the water consumption increased by around 16.9% (640,000m³ to 748,000m³) between 2008 and 2009, but decreased the following year by 10% (from 748,000 m³ to 672,000m³). Apart from the information given, the report also states that the decrease was based on changes in the water-cooling system. Swatch Group reported information about the consumption of water over the entire period under review, except for 2008. However, instead of presenting specific numbers, the company displayed only the respective yearly decrease or increase. For example, in 2010, Swatch Group reported that "*compared to the previous year, the consumption of drinking water was reduced by 1.7% and that of non-drinking water increased by only 1.4%*" (The Swatch Group Ltd., 2009, p. 136)

(3) Amount of waste

Although Richemont reported the total amount of waste in 2008 (3,599 tons), the company discontinued collecting data with respect to the amount of waste by type as well as by disposal method in 2009. This decision was explained within the annual report by a review of the Corporate Social Responsibility (CSR) related priorities. However, the priorities were not specified in more detail. Swatch Group reported information concerning its waste

management during the entire period from 2005 to 2010, except for 2008. The reporting included information about the quantity of special waste, the share of recycled special waste, and the recyclable portion of other industrial waste. However, instead of specific data, the company displayed merely the percentage increase/decrease of the yearly amount of waste.

(4) Amount of carbon emission

Richemont has been measuring its carbon footprint since 2007. Within three years, the group became carbon free through activities such as sourcing energy from a “green supplier” and by purchasing carbon offsets equivalent to the prior year’s emissions and re-invoicing the cost of the offsets to the main emitters to increase awareness and to encourage efforts to reduce emissions. However, the reporting shows a continuous rise in volume, caused by an increase in general business. For example, during fiscal year 2010, Richemont had an increase in carbon of 24.8% (compared to 2009), accompanied by a 40% increase in sales. To measure its carbon footprint, the company has used a template adapted from the Greenhouse Gas Protocol of the World Business Council for Sustainable Development (WBCSD), an internationally accepted tool for the report on greenhouse gas emissions. Swatch Group reported yearly changes as a percentage of its carbon emission. Apart from an increase in 2008, Swatch Group managed to decrease its emission every year. However, the company did not publish data with regard to carbon emissions in 2008. The company only stated that the emission “increased.” Information about the calculation of the carbon emission data was not displayed.

(5) Amount of energy consumption

Richemont reported exact numbers of its total energy consumption. According to the respective reports, the company’s key energy usage is related to fuels, natural gas, heating and electricity, which the company consumes mainly with regard to its buildings and vehicles. While the energy consumption increased from 2008 to 2009, it decreased by 2% from 2009 to 2010. The main significant source of energy is electricity. However, in 2010, 24% of Richemont’s purchased electricity was electricity generated from renewable sources such as solar and wind energy. Compared to 2009, the organization increased its “green electricity” consumption by 6% in absolute terms. Swatch Group reported the percentage increase or decrease of its yearly heat consumption as well as its electricity consumption separately. The company managed to decrease its heat consumption every year, except for 2008. Apart from an increase in 2007 and 2008, caused by a major rise in production, Swatch Group managed to decrease its yearly energy consumption. However, no specific data, either in terms of heat

consumption or in terms of electricity consumption, was published in 2008. Swatch Group stated only that heat consumption “*increased slightly compared with the previous period,*” while “*electricity consumption rose to a lesser extent than the increase in the number of production hours*” (The Swatch Group Ltd., 2009, p. 132).

(6) Number of initiatives toward employee training and development

Richemont is collaborating with three different initiatives aimed at training and development of existing and future employees: (a) the Watchmakers of Switzerland Training and Education Programme (WOSTEP), (b) the Creative Academy in Milan, and (c) the Fondation de la Haute Horlogerie.

(a) WOSTEP is an initiative to develop craftsmanship skills that aims to secure the next generation of qualified watchmakers.

(b) Richemont supports and collaborates with the Creative Academy in Milan. The “Master of Arts in Design” degree involves lectures from CEOs of Richemont’s various companies as well as other experts along with three-month internships across the group’s businesses.

(c) In 2005, Richemont and others established the Fondation de la Haute Horlogerie, which fosters and promotes luxury watchmaking’s values of creativity, culture, and tradition internationally. One of the foundation’s main goals is to train fine watch professionals.

Swatch Group reported only one officially sanctioned initiative that supports employee training and development, i.e. the six Nicolas G. Hayek Watchmaking Schools, founded by Swatch Group. Through these schools, the group trains students to become professional watchmakers. In 2010, 56 students passed their final exams with success, while 65 new candidates were admitted.

(7) Employee training and development expenditures

Neither Richemont nor Swatch Group reported any data about expenditures with regard to employee training and development.

(8) Number of supported community projects

Richemont as well as the group’s individual companies supported in total 15 different community projects. One of these projects is the Teacher of Ten Thousand Generations Foundation, which takes children out of factories, places them in schools, and underwrites their housing and education costs. Another project is presented by Laureus, which is an

organization that harnesses social interest in sports to promote social change. Richemont is one of the main supporters and sponsors of Laureus's various initiatives including Laureus World Sports Academy, Laureus Sport for Good Foundation, and Laureus World Sports Awards. Swatch Group did not report information with respect to foundation support or community engagement in the period under review.

(9) Community expenditures

Richemont displayed specific data about its expenditures with regard to community engagement. For example, in 2008/09, Richemont's expenditures increased by 40% to EUR 20 million, which equates to around 2.4% of the company's profits before tax. Swatch Group did not report any data about community expenditures.

6.2 Analysis of Qualitative Data

The gathered qualitative data is based on the conducted interviews and is illustrated with the assistance of the analysis tool MAXQDA. This subchapter presents qualitative data derived from the semi-structured interviews. The outcome of the three interview groups, i.e. organizations, interest groups and customers, is presented based on the themes detected through the coding of the interviews. As especially the interviews with Richemont and Swatch Group did not comprise questions directly referring to resilience or sustainability, the presented findings are not yet related to the detected links outlined in the conceptual framework. However, chapter 7 links the qualitative data with the quantitative data in order to interpret the data and build theory with regard to the answer to this study's research question.

(1) Interviews with organizations

(a) Measures to deal with the financial crisis

The interview with Richemont unfolded a focus on expansion in terms of the company's brand and product portfolio, as a reaction to the financial crisis. In 2001, seven years prior to the financial crisis, Richemont initiated a company restructuring towards the expansion of the luxury goods business. Among other activities, the company extended its luxury brand portfolio, by engaging in a joint venture with Polo Ralph Lauren within this period. As the advent of the financial crisis decreased consumers' confidence, which resulted in a significant decrease in demand, Richemont focused even more on the expansion of its luxury business. In 2008, the company separated its luxury and non-luxury interests, mainly through large spinoffs, and furthermore pushed the extension of its brand and product portfolio to new

markets. In particular, the Asia Pacific region turned out to be a compensation for the decreased demand of luxury goods in Europe. Simultaneously, the organization tried to recover consumers' confidence by increasing the amount of advertisements and company-related information in annual reports as well as on the company's website.

The interview with Swatch Group revealed a similar approach in terms of consumer dialogue in response to the financial crisis. Similar to Richemont, Swatch Group perceived a sudden decline in demand as a consequence of the financial crisis. By advertising attributes, such as quality, tradition, and history, the company tried to regain former consumers and acquire new customers. Additionally, the interviewee revealed that, although no employees were let go as a consequence of the financial crisis, the company enforced other economies in cost, e.g. offers for employee training and development decreased in 2008. When asked about the main reasons for the company's good performance during the financial crisis, the interviewee exposed the company's broad product and brand portfolio. Specifically, the demand increase in one brand was compensated by the decreased demand for other brands of the group.

(b) Measures to deal with future shocks

In terms of measures to deal with potential future shocks, the Richemont interviewee revealed a focus on increased stakeholder dialogue. Based on the observed decrease in consumers' confidence as a result of the financial crisis, the company realized the importance of promoting and maintaining long-term trust with regard to stakeholders. Furthermore, the interviewee noted that Richemont perceived an increased stakeholder interest toward sustainability in the last ten years. In order to promote and maintain trust as well as to satisfy the increased interest in sustainability, the organization disclosed different codes of conduct and guidelines. Moreover, Richemont delivers a yearly corporate social responsibility report, in addition to the annual report.

The interview with Swatch Group displayed a focus on the reduction of watch component delivery in order to strengthen the company's position within the industry as well as to increase the barrier of entry for new companies. Furthermore, the interviewee expressed a focus on expanding the company's mono brand store concept in order to increase control over sales, including the presentation and price of its watches, as well as to get information about the customer buying process.

(2) Interview with interest group

According to the interview with Amnesty International, as significant amount of work

remains to be done in terms of raw materials. A significant portion of sourced gold has no traceability, while the quantity of ethical gold is still too limited to satisfy the needs of the watch industry or other industries. The interviewee explained that the RJC offers a medium level of assurance and confidence, but the certification should be seen as the minimum standard. The Kimberly Process, as the main symbolic and international initiative, affects only conflicts, while environmental and social issues, such as corruption, are not taken into account. However, besides these weak points, each initiative forces participating players to raise questions that may not be asked otherwise. Moreover, the overall sourcing process is consolidated thanks to these initiatives. However, according to Amnesty International, the awareness of the problem with scarce metals and gemstones is still low within the general public. According to the interviewee, it is customers who are the crux of the matter:

“If customers ask questions, such as ‘Do you know where the gold you sell comes from?’ or ‘Can you show me a written guarantee from your diamond suppliers stating that your diamonds are conflict-free?’ they can help to stop the trade of conflict and non-sustainable gold and diamonds.”

By questioning the origin and sourcing of the materials composing the watches customers’ purchase, they force companies to act. Only if customers insist on certificates and guarantees that state that materials were sourced in an ethic and sustainable way will a fundamental and long-term industry restructuring take place.

(3) Customer interviews

(a) Reason for the purchase

According to customer interviews, the main reason for the purchase of a luxury watch was to reward either oneself or another person. Furthermore, all interviewees gave evidence that the purchase of a luxury watch is an informed decision rather than a spontaneous purchase. Only one interviewee stated that it could be a spontaneous purchase. However, the same interviewee simultaneously noted that this spontaneous purchase was currently rather unlikely.

(b) Criteria that positively influence the purchase of a luxury watch

Customer interviews revealed that the main criteria leading to a purchase decision of a luxury watch are related to the processed material and the quality of the watch. All interviewees stated that these two criteria present significant influence factors in the purchase of a luxury watch. One customer noted:

“With a luxury watch, I mainly associate the quality of the watch as well as exclusive materials, such as gold or platinum. Hence, if I buy a new luxury watch, these aspects play the main role in the decision-making process. A price does not provide a luxury appeal – it’s the exclusive and scarce material and the high quality that differentiates a normal watch from a luxury watch.”

In addition, the traditions of the watchmaking company as well as the location of production are almost equally important for the purchase decision process. Subsequent to material and quality, these two criteria were coded most frequently as four out of the five interviewees mentioned these criteria. The location of production becomes relevant, as low-wage countries are associated with low quality, while a long tradition is connected with better quality. One customer explained:

“Switzerland is strongly associated with luxury watches. In my opinion, watchmaking companies of luxury watches are traditional brands. I’m attracted to a manufacturer that is interested in the sustainable receipt of a brand, while maintaining the local business location. Outsourcing, especially to Asia, would lower the symbolic value of a luxury watch.”

Customers gather information about the firm or brand they are interested in before buying a watch. However, the most relevant information concerns the tradition and history of the watch manufacturing company, brand, or specific watch model. The price of a watch, the manufacturer, and the status the watch affords do not seem to have a significant influence on the purchasing process, as each of these factors was mentioned only once.

(c) Criteria that negatively influence the purchase of a luxury watch

All five interviews indicated that information linked to low labor and production conditions would influence their purchase decisions. Furthermore, four interviewees revealed that data about destruction of the environment or high pollution might lead to a decision against a watchmaking organization. Surprisingly, three interviewees also mentioned that organizations, which are not transparent in terms of information with regard to the product production process, might harm themselves. One interviewee noted:

“If I see that humans suffer from poor labor conditions in terms of the production and material sourcing process and furthermore that the manufacturer does not provide any transparency to change or resolve this specific situation, the purchase of a watch from

this manufacturer will become highly unlikely. I don't like the idea of 'rewarding' a company with a high amount of money and, thus, indirectly advocat[ing] incorrect and unsocial behavior."

However, from the interviews it became apparent that customers do not specifically gather information about these issues by themselves. Their decisions are mainly influenced by media coverage related to this field.

(d) Interest in the production process

The interviews revealed that consumers of luxury watches are interested in the production process; specifically, all five interviewees mentioned interest in this field. This aspect seems to become especially important when it comes to the country where the production takes place, as outsourcing to Asian countries is associated with lower quality and craftsmanship. For example, one interviewee explained:

"I associate a watch that is 'Made in Asia' with low quality, whereas 'Made in Switzerland' is associated with high quality and luxury."

Concluding, this subchapter's aim was to outline all research results from the quantitative as well as qualitative data. Subsequently, the interpretation and the answer to the research question within chapter 7 will be followed by this study's overall conclusion in chapter 8.

7 Research Results

This chapter interprets and validates the previously presented quantitative and qualitative data to discover whether or not sustainability (i.e. ethical and sustainable sourcing of scarce metals and gemstones and transparency towards sustainability) have an effect on organizations' resilience. Initially, the quantitative data regarding the organizations' share prices is interpreted to validate Richemont's and Swatch Group's level of resilience with regard to the financial crisis. Afterwards, the data retrieved from the annual reports and the conducted interviews is interpreted along the two previously mentioned detected links.

Resilience

The results of the analysis of the data related to both company's financial data and stock price development in subchapter 6.1.1 detected three main outcomes. First of all, Richemont was able to recover faster from the shock in the context of the financial crisis, meaning the company was able to return to its equilibrium, i.e. pre-crisis level, with regard to the stock

price development in less time. Secondly, during the entire recovery since hitting bottom, Richemont's stock price development was continuously superior towards that of Swatch Group. Still, it was detected that both companies' stock price developments often followed market based ups and downs. Thirdly, Richemont's overall percentage decrease in share price was lower, compared to that of the Swatch Group. As a preliminary conclusion, based on the quantitative financial data utilized within the scope of this study, Richemont can be considered as more resilient with regard to the industry shock in the context of the financial crisis.

Scarce metals and gemstones

As outlined in subchapter 6.1.2, the two companies of the represented sample of this study were investigated with regard to the number of OFI initiatives both have been active in and how long this activity has been undertaken. Richemont has exhibited high efforts in terms of sustainable and ethical sourcing of scarce materials and gemstones by being a member in three different initiatives. In contrast to that, Swatch Group has engaged in only one officially sanctioned initiative. While Richemont reported its first initiative-related engagement in 2005, Swatch Group reported its first engagement in 2010.

Within the scope of this study, the investigation had to be based on the information that was publicly available with regard to the measures of sustainability described earlier. Even though it might be the case that a company is engaged within any initiative that is related to the scope of investigation, only those initiatives can be considered that this study was able to detect and analyze. Based on this assumption and the study's findings, it can be preliminarily concluded that Richemont's involvement in initiatives that aim to avoid the trade and sourcing of conflict and non-sustainable metals and gemstones, more specifically quantity and duration of the respective engagement, is superior to Swatch Group's involvement. Within the scope of this study and based on the measures for environmental sustainability investigated, it will thus be concluded that Richemont is the more sustainable company.

Transparency in terms of sustainability

Chapter 6.1.3 investigated the amount of reported data relevant for the determination of both companies' degree of sustainability, i.e. the measures of transparency described within the same subchapter. Specific quantitative data with regard to the amount of e.g. energy consumption or the amount of employee training and development expenditures merely serve as examples for the respective reporting. The absolute numbers were neither compared nor interpreted, as this would not have been academically feasible since comparing absolutes

between different companies can lead to false interpretations and conclusions. More precisely, this chapter interprets the amount of relevant reported data and thus the organizational level of transparency. As only two companies are compared within the scope of this study, it is assumed that a higher amount of reporting of relevant data is equal to stronger transparency. Table 3 presents a summary of the quantitative data related to aspects of transparency retrieved from the annual reports of Richemont and Swatch Group. Along all transparency measures, the “X” displays the organization that presented more relevant and in-depth data in the respective category.

	Swatch Group	Richemont	Comments
Location of Production		X	Insufficient data, reported by Swatch Group.
Amount of water consumption		X	No exact numbers / data reported by Swatch Group (only percentage change; no data in 2008).
Amount of waste	X		No data reported from Richemont since 2009.
Amount of carbon emission		X	No exact numbers / data reported by Swatch Group (only percentage change; no data in 2008) / no transparency in terms of measuring.
Amount of energy consumption		X	No exact numbers / data reported by Swatch Group (only percentage change; no data in 2008).
Number of initiatives towards employee training and development		X	Three initiatives reported by Richemont, one initiative reported by Swatch Group.
Employee training and development expenditures			No data reported by Swatch Group nor Richemont.
Number of supported community projects		X	No data reported by Swatch Group.
Community expenditures		X	No data reported by Swatch Group.

Table 3: Summary of quantitative data with regard to transparency

As indicated in the table above, it can be preliminary concluded that Richemont is generally more transparent than Swatch Group in terms of the transparency measurements conducted in subchapter 6.1.3. Although both organizations appear to be rather inaccurate in terms of data related to the location of production, Richemont reported more relevant data. Furthermore, compared to Richemont, Swatch Group is lacking in terms of depth, availability, and relevance of the entire data, especially in terms of specific figures regarding the amount of consumption. By displaying only the percentage change, Swatch Group does not offer effective traceability, especially since data from 2008 was either not published or replaced by vague statements. With regard to employee training and development programs, Richemont seems to be even more involved. While Richemont constantly engaged in three initiatives with regard to employee training and development programs, Swatch Group supported only one initiative. In contrast to all the previous findings, neither organization reported expenditures with regard to employee training and development. In addition, it becomes apparent that both organizations are lacking data in terms of the assessment of the intensity or

quality of training and development efforts or the benefits for employees and managers. At last and with regard to community engagement, Richemont seems to be superior by disclosing several community-related initiatives including the utilized amount of expenditures, whereas Swatch Group did not report any community-related engagement at all. The preliminary conclusion encompassing all findings concerning transparency in terms of sustainability is that Richemont is more transparent. Within the scope of this study and with regard to the measures investigated, it is assumed that Richemont is more sustainable.

Based on the results derived from the overall quantitative data, Richemont's level of resilience seems to be related to the measures of sustainability that have been investigated within the scope of this study. This preliminary finding is supported by findings the qualitative data gathered in the interviews with representatives of this study's selected sample, i.e. Richemont and Swatch Group. While both companies revealed increasing consumers' confidence as a measure of coping with the financial crisis, Richemont valued this aspect as also important related to potential future shocks. The latter is based on the assumption that by increasing the disclosure of diverse company data, e.g. aspects of environmental sustainability, Richemont aims to strengthen consumers' trust in the company. Consequently, the assumption that Richemont is more transparent in terms of sustainability-related aspects is reinforced and underlines that Richemont has detected a relation between certain measures of sustainability and resilience as well.

Apart from the findings in terms of transparency, the qualitative data gathered in the interviews with representatives of this study's selected sample revealed other measures, which were related to the financial crisis in 2007/08. While Richemont focused on the extension of its product and brand portfolio in order to cope with the financial crisis, Swatch Group initiated the reduction of the watch component delivery in order to increase the barrier of entry for competitors as well as new market entrants. Even though these measures might have a positive effect on both companies' resilience towards future shocks and might thus be of relevance for this study's research question, it can be concluded that these measures are not related to sustainability in the context of this study's perspective of investigation. Consequentially, these findings will be ignored.

As the interview with the interest group Amnesty International rather served as an additional source of information concerning ethical and sustainable sourcing of scarce metals and gemstones, the interpretable data towards the research questions is limited. Still, the qualitative data gathered from this interview reinforced the already detected importance of

being a member in officially sanctioned initiatives, which aim to improve the ethical and sustainable trade of scarce metals and gemstones. According to the interviewee, only officially sanctioned initiatives actually guarantee a minimum of traceability of scarce metals and gemstones. Inferred from that, within the scope of this study it is assumed that a potential non-existence of membership in the respective initiatives is considered as not acting sustainable as well as ethical in terms of scarce materials and gemstones. This assumption contributes to the previous findings and supports the result that Richemont is considered more sustainable in terms of scarce metals and gemstones.

The customer interviewees emphasized the importance of sustainability related to all fields of organization. Based on the findings of subchapter 6.2, aspects associated with poor labor conditions and climate change appear to be of high interest. Moreover, this aspect's linkage to a potential purchase decision seems to have strengthened as well, especially in those cases where the company might be confronted with negative headlines concerning working conditions. The basis of this development is mostly grounded on customers' increased desire to not only purchase a product but to purchase it without having negative feelings concerning the circumstances in which the product was manufactured. However, none of the customer interviewees revealed that aspects of climate change or a lack of general transparency have ever effectively eliminated the desire to make a specific purchase. Moreover, all interviewees gave the impression that, although transparency was virtually unanimously classified as important, none of the interviewees ever conducted actual in-depth research on e.g. the target company's labor conditions or efforts towards climate change before purchasing a watch.

These contrary findings complicate making distinct assumptions and drawing clear conclusions. On the one hand, it could be assumed that on the basis of this study's conducted consumer interviews, a relation between the investigated measures of sustainability, i.e. ethical and sustainable sourcing of scarce metals and gemstones and transparency, and resilience has to be denied. As underlying reason, it could be formulated that even if these aspects have increased in importance, a potential non-existence appears to have limited influence on the actual purchase decision. Consequently, it would have to be assumed that with the lack of influence on purchase decisions, companies' resilience would also be unrelated to sustainability as being sustainable would not result in increased or at least constant demand and assist the company to be resilient under troubling circumstances, e.g. industry shocks. On the other hand, it could be assumed that the detected lack of actual influence on consumers' purchase decision might be of minor interest and thus, the denial of

the relation between sustainability and resilience regarding the qualitative data gathered from the consumer interviews overhasty. The initial preliminary conclusion dismisses the increased importance of ethical and sustainable sourcing of scarce metals and gemstones and transparency under circumstances where a luxury watchmaking company is confronted with a specific transparency-requiring situation. Even if a purchase price decision appears to be unrelated from the described measures of sustainability, the increase in consumer interest has been proven previously. Consequently, it could be assumed that organizations must have the respective measures of sustainability available in order to be resilient in case e.g. media coverage reveals that a certain aspect of the watchmaking process violates environmental agreements. In order to be resilient towards such a situation, the proposed measures of sustainability, i.e. ethical and sustainable sourcing of scarce metals and gemstones and transparency, would indeed be related to resilience. In summary, one could assume that customers' awareness as well as requirements with regard to general transparency continuously increases. However, only a fraction of customers would agree that a lack of transparency has effectively modified a purchase decision.

Within the scope of this thesis the overall preliminary conclusion concerning a potential relation between the proposed measures of sustainability and resilience are based on a short- and long-term perspective. In the short-term, the qualitative data of the conducted consumer interviews detected that no relation between sustainability and resilience is assumed based on the lack of influence on actual purchase decision. With a long-term perspective, however, it can be assumed that a relation indeed exists, as the described measures of sustainability have become consumer requirements that any luxury watchmaking company has to comply with. Resilience with regard to future shocks has been proven to be related to measures of sustainability, i.e. ethical and sustainable sourcing of scarce metals and gemstones and transparency. This preliminary conclusion might be applicable to other products from the luxury price segment as well, as any consumer might be relatively uninterested in negative aspects as long as they are beyond a certain knowledge horizon. However, the social outcry can differ significantly under certain circumstances and consequences for economic results.

8 Conclusion and Limitations

The 21st century is characterized by the increasingly competitive economic environment and the strive for efficiency at any level of the market environment, among other aspects. The resulting market sensitivity is affected by predictable, but also unpredictable disturbances

with increasing frequency. As outlined in this study, these disturbances have the potential to create shocks that might restructure entire industries and result in exits and market-phase out by established firms. Companies that are able to survive such disruptions are considered “resilient”. Recent changes to the ecological environment generated adjusted consumer requirements towards any organization. More specifically, this study has found that consumers are increasingly interested in companies’ ability to balance business activities with unburdening and protecting the environment at the same time, i.e. being sustainable.

Existing research mostly relates sustainability to a company’s level of performance. This study changes the dependent variable “performance” to the previously described term “resilience”. As a result, the research question aims to investigate how sustainability is related to organizations’ resilience. This study applied the theoretical background to the financial crisis in 2007/08. The respective event was considered an appropriate industry disruption on which a representative industry sample is tested for resilience. Above all, however, this study investigates whether any activities related to sustainability have played an essential part in resilience. The described industry sample encompassed two of the biggest companies of the Swiss luxury watch making industry.

This study’s analysis of quantitative and qualitative data revealed that various industries are confronted with new and changing customer needs towards an increased interest in sustainability. As a result, companies are forced to develop solutions that satisfy these needs in order to be competitive. This study detected that the investigated measures of sustainability, i.e. ethical and sustainable sourcing of scarce metals and gemstones and transparency, are of significant relevance for companies within the luxury watchmaking industry. Moreover, this study also concluded that the existence or non-existence of measures of sustainability could be related to the industry sample’s resilience concerning the financial crisis. More specifically, it has been found that Richemont was more resilient with regard to the vent of the financial crisis in 2007/08. Firstly, the company was able to recover faster from the effects of the financial crisis with regard to the stock price development. Secondly, Richemont’s stock price development was continuously superior towards that of Swatch Group during the recovery. Lastly, Richemont’s overall percentage decrease in share price was lower compared to that of the Swatch Group. The conclusion that the existence of measures of sustainability could be related to resilience was based on the findings regarding Richemont’s involvement in initiatives that aim to avoid the trade and sourcing of conflict and non-sustainable metals and gemstones as well as all findings concerning transparency.

To begin with the final conclusion of this study, Richemont was superior towards Swatch Group concerning the set of investigated measures of sustainability and thus considered more sustainable. Moreover, it was found that Richemont is more resilient with regard to the company’s stock price recovery within the timeframe of the financial crisis. Concluding, within the scope of this study, i.e. in view of the company’s engagement concerning environmental sustainability as well as which measures of sustainability were reported more transparently and also more specifically, Richemont’s measures with regard to sustainability can be related to the companies resilience in the course of the financial crisis of 2007/08. Based on this conclusion, two prepositions are derived from this study. These prepositions present testable ideas for future studies or research, which can be utilized for further theory development.

P1: Transparency towards sustainability, especially with regard to aspects of social and environmental sustainability, increase established firms’ ability to be resilient

P2: Sustainability related to sustainable and ethical trade of scarce materials increases established firms’ ability to be resilient



Figure 5: Conceptual Framework (adapted)

Even though the considered quantitative and qualitative data has been sufficient for a meaningful conclusion within the scope of this study, this study is also accompanied by certain limitations that need to be considered within the interpretation of the results. While some limitations are related to the chosen methodology, other limitations are inherent to the investigated industry and thus, cannot be changed.

The first limitation corresponded to the approach used in this study, i.e. the comparative case

study. Although this approach is suitable for detailed and comprehensive assessments of individual events, it also has limitations. Most case studies' generalizability of the findings is limited, particularly with regard to observations and patterns. Although quantitative information on a large part of the Swiss luxury watch making industry was included within this study, the in-depth analyses were limited to the two companies of the representative industry sample. As described within this study, however, the homogenous character of the oligopoly industry allows deriving implications for the entire Swiss watch making industry. Still, it has to be underlined that this study would significantly benefit from comprising a larger sample in order to draw more specific assumptions as well as increase the amount of generalizable conclusions. The second limitation relates to the availability of (qualitative) data used. Several aspects of sustainability and resilience affect different departments within a company. However, as this study's timeframe merely allowed conducting one interview per company, the gathered qualitative data was limited to the knowledge and will to share information of the respective. Apart from that, the demanded requirements towards confidentiality reduced utilizable qualitative data even more. Thus, additional interviewees from different departments would have provided further insights, which would have allowed for an enhanced interpretation and potentially more distinct conclusions. The third limitation refers to the collection of an increase data basis and the consideration of additional measures of sustainability. On the one hand, the quantitative data applied within this study is the most appropriate information available for the present case study. However, additional data might have provided further insights that might have resulted in more diversified conclusions. On the other hand, the study at hand was limited to two specific aspects of sustainability, i.e. ethical and sustainable sourcing of scarce metals and gemstones and transparency, in order to investigate a potential relation to the industry sample's resilience in the course of the financial crisis of 2007/08. However, resilience is also affected by numerous other factors of sustainability. Therefore, future research might investigate other aspects of resilience and sustainability in order to come to more detailed and extensive conclusions about the relation between resilience and sustainability.

In conclusion, the availability of sound data presents one of the biggest challenges that a researcher has to manage. This study's theory building allows future research to investigate additional measures, which might close existing gaps of data and enhance as well as support the general conclusion of this study by determining a more generalizable perspective on how sustainability and resilience are related.

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Appendix

Interview transcript Christian Steinmetz

Date of the interview: 23th November, 2014

Interviewer: Hannah Werner (HW)

Interviewee: Christian Steinmetz (CS): owner and consumer of luxury watches

Conducted language: German, personally conducted in Hamburg, Germany

HW: Guten Tag, Herr Steinmetz. Vielen Dank, dass Sie sich die Zeit für dieses Interview genommen haben. Wie im Vorfeld bereits besprochen interessiert mich Ihre Meinung sowie Ihre Beweggründe hinsichtlich dem Kauf von Luxusuhren.

CS: Vielen Dank für die Einladung zu diesem Interview. Ich hoffe ich kann Ihnen entsprechend weiter helfen.

HW: Da bin ich mir sicher. Es gibt kein richtig oder falsch – ich interessiere mich ausschließlich für Ihre Meinung zu diesem Thema. Haben Sie vorab noch Fragen?

CS: Nein, ich denke nicht. Wir können gern starten.

HW: Ok. Sehr gerne. Als Luxusuhren werden all solche Modelle verstanden, für welche ein Kaufpreis von mindestens EUR 1000 oder mehr im regulären Handel gezahlt wird. Besitzen Sie eine oder mehrere Uhren dieser Kategorie?

CS: Ja, ich besitze zwei Uhren dieser Kategorie.

HW: Haben Sie sich diese Uhren selbst gekauft oder geschenkt bekommen?

CS: Beide Uhren waren ein Geschenk.

HW: Würden Sie sich eine Uhr dieser Kategorie auch selbst kaufen? Und wenn ja, unter welchem Umständen kommt für Sie eine solche Entscheidung in Frage?

CS: Ja, definitiv. Jederzeit. Allerdings nehme ich jedoch an, dass ich dies nur zu einem besonderen Anlass tun würde. Einen Spontankauf schließe ich eigentlich aus.

HW: Was ist Ihnen bei dem Kauf einer Luxusuhr besonders wichtig - welche Charakteristika in Bezug auf den Hersteller und das Produkt spielen für Sie eine Rolle?

CS: Ich denke mir ist besonders der symbolische Wert der Uhr wichtig. Die Materialien, die Marke, der Preis und viele weitere Faktoren spielen dahingehend eine Rolle, dass diese die Grundlage für die Existenz eines symbolischen Wertes sind. Existiert dieser jedoch nicht, dann kann die Uhr noch so wertvoll oder besonders gefertigt sein. Diese Uhr würde mich in der Regel immer weniger reizen, als eine Uhr mit Symbolcharakter.

HW: Was sind die Beweggründe für Sie sich eine Luxusuhr zu kaufen?

CS: Ich denke der Hauptgrund für den Kauf ist für mich immer mich selber oder eine zu beschenkende Person für etwas zu belohnen. Die Entscheidung ist also emotional bestimmt. Der Status oder was die Uhr repräsentiert spielt keine Rolle für mich. Momentan reizt mich auch nicht der Kauf einer Uhr, nur weil ich dies als gutes Geschäft erachten würde. Solche Beweggründe würde ich vielleicht später als potentieller Sammler in Erwägung ziehen. Daher

bevorzuge ich es derzeit dezente Uhren zu tragen. Mich reizt zu wissen, dass auch eine unscheinbare Uhr sehr wertvoll sein kann.

HW: Und welche Rolle spielt das Material einer Luxusuhr für Sie?

CS: Wie gesagt ist das Material die Grundlage für mich, so dass eine Uhr einen symbolischen Wert bekommen kann. Ich will das Gefühl haben, dass die Uhr hinsichtlich ihrer Verarbeitung und aber auch vor allem aufgrund ihrer Materialien ihr Geld wert ist. Die Wertigkeit insgesamt, und das umfasst auch den Produktionsprozess, ist mir an einer Uhr am wichtigsten. Wenn ich meine einen reinen „Markenaufschlag“ beim Preis einer Uhr zu entdecken, so verliert diese relativ schnell an Attraktivität.

HW: Sie würden eine Uhr also nicht allein, aufgrund der Marke kaufen?

CS: Nein. Aber, durchaus aufgrund der Qualität und der Tradition, die hinter der Marke steht. Sobald das Gefühl entsteht, dass die Marke diesen Faktoren, wie Qualität und Tradition nicht mehr gerecht wird, sondern sich auf Ihrer Marke und dem Image „ausruht“, würde Sie für mich uninteressant werden.

HW: Ok. Und welche Rolle spielt der Produktionsprozess einer Luxusuhr für Sie?

CS: Ich vermute, dass der Großteil der potentiellen Käufer sich nie über den Produktionsprozess einer Uhr Gedanken macht. Ich für meinen Teil kann jedoch sagen, dass ich mich, wenn auch oberflächlich, in der Regel mit dem Produktionsprozess des entsprechenden Herstellers auseinandersetze. Dabei spielt für mich auch der Produktionsstandort eine große Rolle. Die Schweiz verbinde ich beispielsweise stark mit Luxusuhren. Luxusuhrenhersteller sind in der Regel Traditionsmarken. Ich bin an einem Hersteller interessiert, wenn ich der Meinung bin dieser ist an dem nachhaltigen Erhalt seiner Marke und des lokalen Wirtschaftsstandorts interessiert ist. Outsourcing, insbesondere nach Asien, mindert meiner Meinung nach den symbolischen Wert einer Uhr.

HW: Also würden Sie eine Luxusuhr die in Asien hergestellt wurde nicht kaufen?

CS: Nein, definitiv nicht.

HW: Informieren Sie sich vor einem potentiellen Kauf einer Luxusuhr über den Hersteller bzw. vergleichen Sie verschiedene Hersteller?

CS: Ich denke ich habe vor jedem Kauf eine Vorstellung davon, was für eine Uhr ich suche, z.B. einen Chronographen oder eine sportliche, robuste Uhr. Mit dieser Denkweise habe ich dann bereits ein paar Hersteller im Kopf von denen ich meine dass diese in eine enge Auswahl fallen. In der Regel kenne ich diese Hersteller dann auch bereits zumindest ein wenig, kann mir etwas unter der Marke und dem Produkt vorstellen.

HW: Und welche Informationen sind dabei von Relevanz für Sie?

CS: Besonders relevant sind für mich die Tradition des Herstellers, das Firmenalter und das Image des Herstellers und der Marke. Hinzu kommen dann die Produktionsweise und vor allem, wie schon erwähnt auch der Produktionsstandort. Von der Qualität der verbauten Materialien gehe ich dann in erster Instanz aus, lasse mich jedoch in der Regel über alle Details der Uhr vor dem Kauf vom Juwelier bzw. Verkäufer informieren.

HW: Gäbe es unternehmens- bzw. herstellerrelevante Informationen, die Sie von dem Kauf einer Luxusuhr einer bestimmten Marke bzw. von dem entsprechenden Unternehmen abhalten würden?

CS: Ja. Im Endeffekt wären das alle Informationen welche darauf hindeuten dass der Hersteller nicht meinen Vorstellungen aus den vorangegangenen Fragen bzw. Antworten entspricht. Wenn ich erkenne, dass es sich bei der Uhr um ein Produkt handelt, unter welchem Menschen im Rahmen der Produktion oder der Materialgewinnung offensichtlich leiden und der Hersteller wenig Transparenz und Aufklärungsarbeit leistet um eine bestimmte Situation zu ändern oder darüber aufzuklären, dann rückt ein potentieller Kauf für mich sehr schnell in den Bereich einer großen Unwahrscheinlichkeit. Mir gefällt der Gedanke nicht, eine Firma mit einer hohen Summe für eine Uhr zu „belohnen“ und damit inkorrektes und unsoziales Verhalten, sei es auf jeglichen Teil der Produktion oder der Materialgewinnung bezogen, indirekt zu befürworten.

HW: Aber Sie sagten doch zuvor, dass sie sich nicht konkret über den Hersteller informieren. Oder habe ich das falsch verstanden.

CS: Das stimmt. Zwar informiere ich mich nicht konkret über diese Themen, allerdings würde ich ein Unternehmen, dass aufgrund schlechter Arbeitsbedingungen, Ausbeutung oder ähnlichem in der Kritik der Medien steht, nicht weiter mit meinem Kauf unterstützen. Der Fall Schlecker in Deutschland ist evtl. ein vergleichbares Beispiel. Natürlich habe ich mich nie in Jahresberichten oder ähnlichem konkret über das Unternehmen informiert, bevor ich dort eingekauft habe. Aber, nachdem bekannt wurde, dass die Mitarbeiter dort systematisch ausgebeutet werden, habe ich die Schlecker-Märkte vollständig gemieden und bei der Konkurrenz eingekauft. Ich denke, dass diese Aufdeckung der Medien und der damit verbundene drastische Rückgang der Kunden, letztlich auch zur Insolvenz geführt hat.

HW: Würden Sie sagen, dass das Aufdecken negativer Geschäftstätigkeiten, selbst größte Unternehmen in die Insolvenz treiben kann?

CS: Nicht zwangsläufig. Aber, wie man an dem Schlecker Beispiel und anderen Beispielen sehen kann, kann das durchaus passieren. Insbesondere bei Menschenrechtsverletzungen, oder negativen Schlagzeilen in Verbindung mit Tieren und der Umwelt, reagieren Kunden oder zumindest ich selbst sehr empfindlich.

HW: Darf ich dann nochmal ganz konkret fragen, würden Sie eine Luxusuhr kaufen wollen, von der Sie wissen, dass die Gewinnung der Materialien gesundheitliche Schäden, bei den Menschen verursacht, die für den Abbau diese Materialien zuständig sind?

CW: Nein. Gleiches gilt für Kinderarbeit oder andere Menschenrechtsverletzungen, Ausbeutung, oder ähnliches.

HW: Aber die Herkunft der Materialien Ihrer Uhren kennen Sie nicht, oder?

CW: Nein. Allerdings handelte es sich bei diesen schließlich auch um ein Geschenk. Aber ich vermute, nach diesem Interview werde ich mich bei einem potentiellen Kauf zukünftiger Uhren, genauer über den Hersteller bzw. die Marke und besagte Faktoren informieren.

HW: Gut. Ich denke, dann habe ich soweit erst mal keine weiteren Fragen mehr und bedanke mich sehr herzlich für das Interview. Vielen Dank, dass Sie sich die Zeit dafür genommen haben und so ausführlich geantwortet haben. Sie haben mir wirklich sehr geholfen. Bei Interesse stelle ich Ihnen gern meine Masterarbeit nach Fertigstellung zur Verfügung.

CS: Ja das wäre toll. Vielen Dank. Lassen Sie mich wissen, wenn Sie noch Fragen haben.

HW: Nochmals vielen Dank.