

# ROOTS OF CIVIC COOPERATION

The Impact of Social Inequality on Social Capital

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## Management Summary

There is a widespread perception that trust and social capital have declined in Switzerland as well as other advanced economies, whereas social inequality has tended to increase. While previous research has noted that measured trust declines as individuals become less similar to one another, this research study examines whether the downward trend in social capital is responding to the increase in social inequality. Also, this paper makes a number of contributions with implications for existing theories and practices in the field of social capital, with a specific focus on the endogeneity of the concept.

To test the hypotheses of this paper, an internet-based survey has been conducted on 211 students of the Zurich University of Applied Sciences in Switzerland. The internet-based survey was translated into two languages (German and English) and was conducted as a compulsory part during six lecture sessions allowing to achieve a well-balanced data collection. Through empirically validated instruments, the questionnaire was designed to systematically collect data on the two main research topics: On the one hand, the perception towards social inequality measured by income inequality, educational equity and intergenerational justice. On the other hand, the participants' level of social capital. In this research paper, social capital is conceptualized as a two-dimensional construct incorporating behaviors and attitudes. The basis for this conceptualization is twofold. It is based on the components of social capital defined by the World Bank as well as on Fishbein-Ajzen theory of reasoned action.

The results of the data analysis revealed significant findings in three areas: social capital theory, the importance of educational equity and the danger of meritocracy. At the theoretical level, insight has been gained into both the fundament on which components of social capital is built on and the two-dimensional nature of social capital. The results provided robust evidence that generalized trust is the bedrock of social capital and is the driving force behind the majority of the other components. This research study also confirmed that social capital is a two-dimensional construct,

composed of social capital attitude and behavior. Moreover, the data evidenced that social inequality influences an individual's attitudinal dimension of social capital. This interconnection mainly stems from the proved importance of educational equity. More specifically, the evidence that education rather than merely creating human capital plays a vital role in building a cohesive community and hence also impacts the level of social capital. The demonstration of education's relevance as primary institution for the generation of social capital and driver of social equality is, however, obscured by the identified equity problems in the Swiss education system along with the threats of meritocracy. While education has the potential to reduce inequality, today, it remains a principal venue for the reproduction of social inequalities and justification for the perpetuation of status quo. Which in turn, puts the level of social capital in a society, including the one of Switzerland, at risk.

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## List of Abbreviations

BFM	Beneficial for Me
BFS	Beneficial for Society
CEO	Chief Executive Officer
ETUC	European Trade Union Confederation
FSO	The Swiss Federal Statistical Office
NGO	Non-Profit Organization
NZZ	Neue Zürcher Zeitung
OECD	Organization for Economic Cooperation and Development
SKBF	Swiss Coordination Centre for Research in Education
SNSF	Swiss National Science Foundation
SRF	Schweizer Radio und Fernsehen
T	Trust
WEF	World Economic Forum
ZHAW	Zurich University of Applied Science

## 1 Introduction

The concept of social capital has generated enormous interest in the last two decades. Following the publication of James Coleman's (1988) account on the role of social capital in the creation of human capital and in particular, Robert Putnam's (1995; 2000) research papers on the ability of social capital to promote economic development and democracy, hundreds of books and thousands of articles have been published on the subject (Halpern, 2005). There are two reasons why social capital has generated widespread interest. Firstly, it is a concept that resonates with various social science fields. Anthropologists, historians, economists, sociologists and political scientists have all contributed to the rich body of literature. Secondly, the claims and the far-reaching research findings which have been obtained around the concept of social capital, additionally fueled the interest of scholars and policymakers. From the individual level to the aggregate economy and democracy, social capital has been claimed to matter in all walks of lives.

The expression 'social capital' refers to the group of informal institutions, relationships, norms, attitudes, reciprocity, trust and values that determine and structure social interactions, both in quantity and quality (Grootaert & Van Bastelaer, 2002). Further, social capital is the factor that facilitates the coordination and cooperation processes in associations between individuals and is directly linked to social cohesion, civic engagement and cooperation. Concepts such as cooperation, trust, cohesion, communities, and solidarity have been seen as crucial factors in the quality of social fabric and the sustainability of social and economic development processes. Yet, precisely these vital components have - in the light of the undergoing social crises and the experienced increase in social inequalities in most modern democracies - been under threat. Since the 2008 financial crises, the European Commission (2011), the Organization for Economic Cooperation and Development [OECD] (2015) and National Institute of Statistics and Economic Studies (Befy, Clerc & Thévenot, 2014) have all agreed on this fact: In recent decades, social inequality has significantly increased across Europe. This not only, as often perceived, in Southern Europe but also in countries such as Sweden, Germany

or Switzerland (Kilanowski, 2014). In their latest report, Benchmarking Working Europe (2018), the European Trade Union Confederation [ETUC], warned against the "increasing social inequality, the weakening of national solidarity mechanisms, and dismantling of national social models" (p. 54). As the secretary general of the OECD, Angela Gurría, expressed:

*"We have reached a critical point. Inequality in the OECD countries has never been higher than we now measure it. Figures show that growing inequalities impede growth. The topic for political action is as much social as it is economic. By not addressing the problem of inequality, governments destroy their social model and affect long-term growth"* (ETUC, 2018, p.22).

Confronting this unfavorable trends, the primary focus of this research paper is to investigate the impact of social inequality on civic engagement, cooperation and cohesion using the theory of social capital. Also, this paper envisages to make a number of contributions with implications for existing theories and practices in the field of social capital, with a specific focus on the endogeneity of the concept. The research is motivated by the belief that the identified increase in social inequality constitutes a danger to society and its level of social capital. Hence, the paper aims to contribute towards a better understanding of how these two constructs are interlinked and influence each other.

The first section of this paper will provide a theoretical framework by reviewing the current literature on social capital. Additionally, findings on social inequality research in Switzerland will shortly be summarized. Based on the literature review, an appropriate definition of social inequality and capital for the application in this paper will be chosen. The second section reviews theoretical concepts relevant for the survey conveyed in this research study and delineates the corresponding hypotheses. Moreover, the methodology, samples, and procedures applied to conduct the survey will be outlined. The third section will summarize the findings using correlation analysis. The fourth and final section will then discuss some implications, limitations and suggestions for future research.

## 2 Theoretical Framework

Few concepts in social science have had a comparable impact and have been disseminated more rapidly and widely than the concept of social capital. The conceptualization of the construct of social capital, nonetheless, is relatively young and has achieved popularity in research literature only in the last two decades. The first large part of the literature review, thus, provides background information on the development and definition as well as its connection to civic cooperation, trust and social inequality. Subsequently, in the second section, the current notion of social capital as capital will be explored. Additionally, social capital's variability and impacts at the micro-, meso- and macro-level will be delineated. Furthermore, the current social capital research in Switzerland will be summarized in section four. The second greater part will investigate social inequality including income inequality, educational equity and intergenerational justice. In every subsection, the corresponding definitions and current state in Switzerland will be delineated. The literature review, therefore, provides the general theoretical framework necessary to understand the context of the individual concepts measured in the survey of this research paper.

### 2.1 Social Capital: Civic Cooperation, Trust and Social Inequality

Tocqueville (1945) observed in the mid 19th century the willingness to participate in the American population:

*"As soon as several of the inhabitants of the United States have taken up an opinion or a feeling which they wish to promote in the world, they look out for mutual assistance; and as soon as they have found each other out, they combine. From that moment they are no longer isolated men, but a power seen from afar, whose actions serve for an example, and whose language is listened to (p. 584). [...] When the members of a community are allowed and accustomed to combine for all purposes, they will combine as readily for the lesser as for the more important ones [...]" (p.591).*

A century later, however, Tocqueville's findings were considered implausible by political scientists (Ordeshook & Riker, 1973) and economists (Downs, 1957; Olson, 1965). These scholars argued that rational people, considering the short-run costs and benefits associated with their participation, would not engage in civic affairs. In the course of research, however, it has been proven that people do participate and differences in civic cooperation are visible between countries. Various models account for why people "oppose" rationality and actively take part in their communities (Verba & Nie, 1972; Verb, Scholzman & Brady, 1995). These models also differ by types of participation, distinguishing political involvement from other types, primarily non-political volunteering and charitable giving.

In analyzing behavioral attributes of actors leading to collective action in civic affairs, trust takes a central role. In fact, trust is believed to be the basis for all transaction that individuals make, within a market as well as within civil society. The link between civic cooperation and trust is frequently encountered in social sciences and has experienced a boost in popularity in recent years with the rise of the concept of social capital. Indeed, trust is a central component in the measurement of social capital (see Figure 1). Putnam (2000) therefore argues that people who have trust in their fellow citizens and institutions will be more likely to get involved in their communities and this will than in turn increase an overall positive perception of others.

The linkage between civic cooperation, trust and social inequality have long been topic of discussion in various science fields. Especially since most forms of civic cooperation and generalized trust have deteriorated in the light of recent events. Nonetheless, the cause and effect of these interlinkages have been heavily debated. Putnam (2000), for example, demonstrates with the use of social capital that these trends are interrelated. He claims that an increase in public participation can augment social trust and thus lead to a more cooperative society and government. In contrast, Wuthnow (1998) and Uslaner (2002) argue that similar trends do not establish a causal relationship and there is not a single syndrome causing a decrease in civic cooperation. In fact, they evidenced that in some areas civic involvement has

increased and thereupon disbelieved that civic cooperation is the main driver of social trust. Rather, the roots of the decline in trust stems from increased social inequality. According to Uslaner (2002), as inequality grows, people feel more estranged from others and a general perception of mistrust arises. In turn, as individuals trust each other less, they are less likely to engage in civic activities and hence help those most in need.

This research paper shall investigate the relationships between various forms of civic cooperation, trust and social inequality. Thereupon, the paper advocates that the concept of social capital can be adapted as a framework for analyzing the situation on a micro-, meso- and macro-level, with particular application in measuring and quantifying civic cooperation and trust in a country.

## 2.2 Social Capital

### 2.2.1 Development and Definition of Social Capital

The concept of social capital has been an active field of research in the social sciences for quite some time now. It is to note, however, that social capital has achieved universal appeal and popularity in research literature only in the last two decades. Halpern (2005) reports that before 1984 no research has been conducted in the field of social capital per se, and by the year 1995 fewer than 10'000 research papers per year were published. After the turn of the century, however, research experienced an exponential growth and by 2003 almost 300'000 articles per year were released, a rate of growth which has continued until today.

While the board notion of civic association in communities has been researched and known for a long time, the concept of social capital in social sciences has its roots in the post-World War II era and started to gain popularity in the 1980's with the writings of Bourdieu (1986), Coleman (1988) and Wacquant (1992). Putnam disseminated the concept further in the social science community in the nineteen-nineties (1993, 1995) and finally to the broader public with its publication *Bowling Alone: The Collapse and Revival of American Community* (2000).

The literature offers a multitude of different definitions of social capital. They vary from vague to narrow definitions and others based on justifiable social theories. As Fukuyama (2000) aptly expressed, "[t]here are multiple alternative understandings of this intellectually fashionable but elusive concept" (p. 138). Nonetheless, as Ostrom (2009) elucidated, the majority support two basic assumptions: (1) social capital is a resource that is available to members of a social network and (2) social structure is often the type of capital that all members of a group can access to promote their interests. Table 1 displays the most recent and used definitions in chronological order:

Table 1: Definitions of Social Capital

Author	Definition
Hume, D. (1751), in McNally (1994, p. 169)	"Self-interest is the original motive to the establishment of justice. As society develops, a sympathy (or moral sense) with public interest is the source of the moral appropriation, which attends that virtue".
Bourdieu, P. (1992, p. 19)	"Social Capital is the sum of resources, actual or virtual, that accrue to an individual or a group by virtue of possessing a durable network of more or less institutionalized relationships of mutual acquaintance and recognition".
Coleman, J. (1994, p. 302)	"Social Capital is defined by its function. It is not a single entity, but a variety of different entities having two characteristics in common: they consist of some aspect of social structure, and they facilitate certain actions of individuals who are within the structure".
Putnam, R. (1993, p. 169)	"[...] features of social organization, such as trust, norms, and networks, that can improve the efficiency of society by facilitating coordinated action".
Ostrom, E. (2003, p. xiv)	"Social capital as an attribute of individuals and their relationships that enhances their ability to solve collective action problems".
Sabatini, F. (2006, para.5)	"The set of trust, institutions, social norms, social networks, and organizations that shape the interactions of actors within a society".

As can be retrieved from the above-standing definitions, the scholars most commonly divide social capital into two components: relationship content (norms, institutions, trust and values) and relationship structure (network size, configuration

and density). This, as argued by Ostrom (2003), since neither content nor structure provides substantial insights on their own. Therefore, in order to understand the real dimensions of social capital, it is of vital importance to analyze content and structure individually as well as jointly.

Notwithstanding the discord in the literature over the conditions for social capital, consensus can be reached on the fact that "social capital stand for the ability of actors to secure benefits by virtue of membership in social networks or other social structures" (Portes, 2000, p. 6). Even though this common ground can be interpreted in various ways, all scholars agree that the interactions of the members maintain and reproduce social capital - on a societal-group and individual level (Cook, Lin & Burt, 2002).

But that is where the similarities end. On the one hand, Bordieu (1992) defines social capital as the group of actual or potential resources associated with the possession of an enduring social network. On the other hand, Coleman (1994) describes social capital after its function:

*"social capital is defined by its function. It is not a single entity but a variety of different entities, with two elements in common: they all consist of some aspect of social structures, and they facilitate certain actions of actors – whether persons or corporate actors – within the structure. Like other forms of capital and human capital, social capital is not completely fungible but may be specific to certain activities. A given form of social capital that is valuable in facilitating certain actions may be useless or even harmful for others" (p. 302).*

In Coleman's (1994) concept, social capital is a resource that facilitates certain actions that would not be possible in its absence, since the social structure per se includes more elements than just a network.

Putnam (1993) takes yet another approach and defines social capital as "features of social organization, such as trust, norms, and networks, that can improve the efficiency of society by facilitating coordinated action" (p. 167). As per Putnam (2000), "the core idea of social capital theory is that networks have value and that



social contacts affect the productivity of individuals and groups. [...] [S]ocial capital refers to connections among individuals - social networks and the norms of reciprocity and trustworthiness that arise from them" (p. 19). Fukuyama (1995) agrees with Putnam's view and elaborated the most simplistic definition of social capital: "the ability of people to work together for common purposes in groups and organizations" (p. 10).

Hardin (2006) stated that for political scientists such as Putnam and Fukuyama, the linkage between collective outcomes and levels of social capital is of primary interest. In that respect, a certain level of social capital appears to be beneficial for collective well-being, for instance; efficient political institutions, economic development, low crime rate and lower frequency of other societal issues. Their main focus lays on trust, norms and networks at the individual level and hence how these factors influence the collective level - for example, the performance of institutions.

Consequently, as Hardin (2006) reported, Putnam and other scholars take a different approach from that of Coleman. Despite the fact that Coleman uses the term corporate actors, he does so to emphasize that certain social actions and activities would not be possible to achieve individually. Coleman (1994) used the examples of student political groups, doctor-patient relations and neighborhood child care. For political scientists, however, the importance of social capital is at the individual level, as individual level social capital facilitates the performance of institutions and fosters the economy. These causal relations are, according to Hardin (2006), not strong but significantly asserted by diverse correlations. Putnam (2000) argued that the main correlation is explained by the simultaneous decline in trusting the government and in generalized trust over the past two decades. Fukuyama (1995), yet noted that the main correlation is between the inter-societal differences in general trusting and the overall economic performance.

The primary difference between Coleman and the above mentioned political scientists is the direction of their casual arrows (Hardin, 2006). On the one hand, the political scientists focus on a bottom-up view, from the individual level to the

institutional level. On the other hand, Coleman's top-down view directs the causal arrow from institutional or social relation level to the individual level. Hardin (2006) used the example of trust to depict the two different approaches: For political scientists, trust at the individual level allows institutions to perform well. For Coleman, increased social relationships and networks enable individuals to trust each other more. Thereupon, as Hardin (2006) evidenced, social capital can be used to demonstrate various causal relations. The effect of social inequality on individual level relations, however, still remains unexplored.

So, while most scholars agree that social capital is an important phenomenon, until this day no agreement could be reached on how to define it. Seragelding and Grootaert (2000) stated that in consideration of the distinct definitions provided in the literature, an integrated view of social capital is needed to quantify and operationalize the concept. Particularly because, social capital can have impacts on various spheres, from democracy and institution to economic development, education and labor economics (Ostrom, 2009). Thus, more empirical assessments on the integrity of the concept and interdisciplinary approaches across the social sciences field are needed.

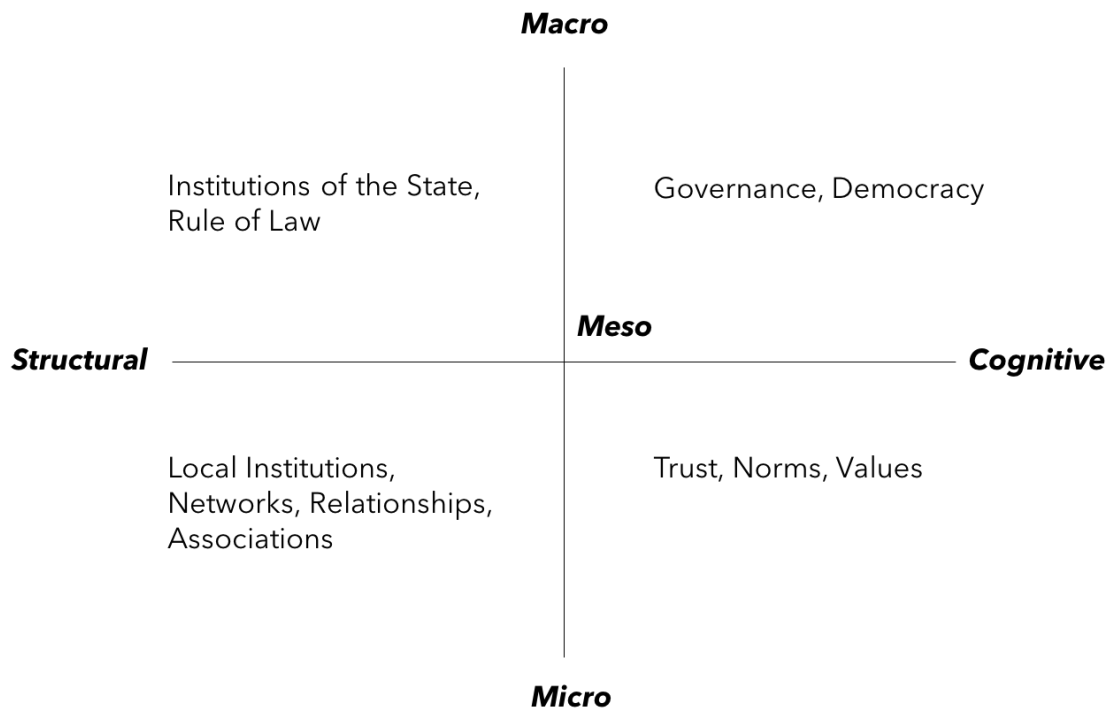
Summarizing and taking into consideration the above stated definitions, social capital can be defined as the comprehensive cluster of relationships, networks, institutions, attitudes, values and trust that govern interactions and relations among people. Which in turn lead to collective actions contributing to economic, social and institutional developments.

The research paper's definition, which is primarily aligned with The World Bank's interpretation, describes social capital on three levels; micro, meso and macro (Grootaert & Van Bastelaer, 2002). At micro-level, social capital can be identified in the form of local institutions and individual networks sharing values, norms and trust. At meso-level, vertical and horizontal relations among intermediary groups are depicted. Lastly, at macro-level, political and institutional framework of social activities, including economic incentives, institutional arrangements and main

determinants of legal, economic and social development, are defined. Figure 1 illustrates the outlined framework.

Figure 1: Micro-, Meso- and Macro-Level of Social Capital

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Source: Adapted from The World Bank / Grootaert & Van Bastelaer (2002)

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### 2.2.2 The Capital in Social Capital

Social theorists do not only debate the nature of social capital but also whether it rises and falls - comparable to the other forms of capital. In fact, social capital is in many aspects similar to other forms of capital. Firstly, as it requires an investment, it generates costs to produce - if not of monetary nature undoubtedly in terms of time and effort. In order to develop a trusting relationship among members of a leisure activity clubs or professional associations, for example, years of meeting and interacting are usually required. As demonstrated by Putnam (1993), social capital can take generations to build and many more to become fully effective. Moreover, recent example of civil conflicts worldwide evidence that trust is more easily

destroyed than re-built. Hence, social capital is attached to a certain level of maintenance expenses, usually in the form of effort and time.

The World Bank (2000) defines capital's main characteristic as "accumulated stock from which a stream of benefits flow" (p. 22). An asset per se has two dimensions; input and output - the input side constitutes the investment required to create an asset and the output side yields a stream of benefits. Thus, if social capital is an asset, it implies that it represents more than just a set of social associations or social norms. As evidenced in the next section (2.2.3), social capital does not only rise and fall according to the level of investment (input) but has the ability to enhance the productivity of other resources and lead to increased output.

While the scholars do not reach a universal agreement that social capital is capital (Dasgupta & Serageldin, 2000), the majority of the literature views it as an asset such as human or economic capital. Putnam (2000), for instance, identifies social capital as an asset in which can be invested: "just as a screwdriver (physical capital) or a college degree (human capital) can increase productivity [...] so too social contacts affect the productivity of individuals and groups" (p. 19). Wan & Lin (2003) further stated that "[s]ocial capital can also be envisioned as investments by individuals in interpersonal relationships useful in the market" (p. 27). Halpern (2005) also agreed "that people do indeed „invest“ in their social capital just as theory predicts" (p. 29). Evans and Syrett (2007), cogently summarizing the debate, concluded that "while there is considerable dissent over the view that there are different types of capital, the view that human, cultural and social capital are forms of capital which share the characteristics of being productive resources has much support" (p. 58).

### 2.2.3 Impacts of Social Capital at Micro-/ Meso- and Macro Level

Social capital has been used in various social science research papers as the missing link, explaining a wide array of economic and social phenomena. Nonetheless, there has also been the tendency to extend the concept too broadly, called upon to explain any asset that does not fall under the conventional categories of capital (Serageldin & Grootaert, 2000). The following two sub-sections delineate on a micro-

, meso- and macro-level a few of the findings about the variability and impacts of social capital. On the one hand, it demonstrates social capital's importance within the social and economic sphere and that it can, by no means, be bypassed. On the other hand, it also shows the widespread use of the concept and that if overused, it runs the risk of explaining nothing.

#### 2.2.3.1 Micro-/ Meso-Level

Social capital at the micro- or meso-level, in the literature mostly referred to as individual level social capital, reflects upon the social connectedness of the individual and the system of interpersonal networks (Dasgupta, 2002). Considerable research has been conducted on individual level social capital in diverse areas and disciplines. The most researched are career progress, personal income and well-being, healthcare, crime and non-market benefits.

Trust and trustworthiness are essential parts of networking which are closely related to career progress and personal income. Podolny and Baron (1997) associated career progress to an employee's network - the more contacts, the higher the probability of career progress. Furthermore, not only the establishment of company-internal contacts but also networking outside the company yielded a positive impact on one's personal career progress (Boxman & de Graaf & Flap, 1991). Burrough & Helyar (1991) stated, however, that just knowing a lot of people is not sufficient to attain career advancement; the creation of a trust relationship is needed. For founders of IT companies, research has shown that if a trust relationship between the company and venture capitalist is established, more venture capital is likely to be raised (Shane & Stuart, 2002). Similarly, for entrepreneurs, a company has higher chances to obtain better financing arrangements if the CEO is acquainted with the bank's manager (Uzzi, 1999). Hence it can be concluded that people with a higher level of social capital, whether as an employee or self-employed, are more likely to have success.

As Putnam (2000) noted, "of all the domains in which I have traced the consequences of social capital, in none is the importance of social connectedness so

well established as in the case of health and well-being." (p.326). Various studies demonstrated that individuals with a higher level of social capital are healthier and have an overall sense of well-being. Baron-Epel et al. (2008) correlated self-rated health and social capital for Jews and Arabs living in Israel. The research paper showed that the Arabs living in Israel scored lower in social capital as well as self-rated health. The identified differences, according to the authors, can be attributed to a lower level of institutional trust among the Arab community. Similarly, Wan and Lin (2003), measured the health status among three ethnic groups in Kazakhstan and compared it to social capital. They concluded that "social capital is directly linked with health status" (Wan & Lin, 2003, p. 163). Kim and Kawachi (2006) reached the same results. Here, the researchers measured and compared eight groupings of social capital indicators with self-rated health and evidenced "as anticipated, the majority of individual-level social capital measures were inversely associated with fair/poor health" (Kim & Kawachi, 2006, p. 823).

Scholars began to research the relationship between social capital and crime in the beginning of the 1990s (Sampson & Laub, 1993; Sampson, Raudebush & Earls, 1997). Sampson and Laub (1993), for instance, studied 1000 young men and divided them into three categories: some of whom had never committed a crime, some of whom had committed crimes but had then refrained and some of whom were leading a life of crime. The findings of the study evidenced that, controversially to what was believed, not the fear of legal sanctions or imprisonment are the main influential factors in keeping individuals from committing a crime, but rather the informal social controls and societal values and norms. Moreover, youth offenders who could subsequently establish social ties were less likely to become repeat offenders. The same findings were documented by Smith (1995) who concluded that "the formation of social bonds may turn out to be the central explanation for desistance from crime after adolescence." (p.115). These studies evidence that social capital plays a crucial role in keeping young people from committing crimes and those who committed crimes but subsequently increased their social capital are less likely to become repeat offenders.

Social connectedness and interpersonal networks can also generate non-market benefits. They are crucial for individuals in difficult times in which financial, as well as other support, are provided and thus work as informal insurance. Carter and Maluccio (2003) found that households in South Africa with more social capital were able to cope better with unexpected weather shocks. Lin, Cook and Burt (2001) further demonstrated that networks and social ties have various other non-financial returns such as respect, social recognition of wealth, prestige and other attributes. Where the market fails to offer available and affordable options, social networks become an integral part of everyday life where people support each other in whatever form or medium needed.

#### 2.2.3.2 Macro-Level

At macro-level, a wealth of empirical research demonstrated that social capital correlates with social, political and economic outcomes which are desirable for most people. Economic growth (Knack & Keefer, 1998), well-performing democratic institutions (Putnam, 1993) and democratic stability (Inglehart, 1999) representing only a few. For social capital to achieve these positive externalities, the social capital theory claims that it needs to be embedded in and related to a socio-economic and political context including legal and political institutions (Tarrow, 1996; Berman, 1997; Levi, 1998; Hall, 1999; Kumlin & Rothstein, 2005; Encarnación, 2006). Socio-economic conditions as well as government institutions and policies of a country, as per this group of researchers, build, channel and influence social capital. While institutions and the government play at the macro-level social capital an important role, Peters (1999) justifiably also claimed that "the concepts of 'social capital' and 'civil society' are really ways of saying that without the right set of social values, structural manipulation and constitution writing will produce little positive results" (p. 88). Nonetheless, Peters too agreed, referring to Linz and Stepan's (1997) research paper on democratization, on the importance of institutions and governments in influencing citizen's values: "if effective institutions can be constructed and managed then in time (and perhaps not very much time), the appropriate values will also be created" (Peters, 1999, p. 88).

On a macro-level, two main types of institutional and governmental relations to social capital can be distinguished: an institutional/governmental-structural approach and an attitudinal approach.

In the latter, the main focus of the scholars has been put in the correlation of intuitional political trust and generalized trust. Kaase (1999), for example, demonstrated a correlation of generalized trust and political trust in cross-national survey samples. Hall (1999) also found that the two types of trust are correlated in the United Kingdom. Notwithstanding, scholars interpret this correlation in different ways. Some scholars viewed generalized trust as the main driver of political trust. Lipset and Schneider (1983) argued, for instance, that in the United States the "feeling of confidence in institutions seems to derive from a personal outlook of optimism, satisfaction and trust" (p.120). Also, Newton and Norris (2000) interpreted the positive correlation in seventeen democracies as the demonstration that social capital "can help build effective social and political institutions, which can help governments perform effectively, and this, in turn, encourages confidence in civic institutions" (p.11). This line of argument is as well supported by Putnam (1993) who finds that the level of regional social capital influences the regional governmental performance. In contrast, it has also been evidenced, however, that the causality can be explained the other way around. Brehm and Rahn (1997) findings, analyzing the U.S. General Social Surveys, showed that the confidence in institutions has a larger effect on generalized trust.

The institutional/governmental-structural approach emphasizes the role of the state as an origin of social capital creator. This by enforcing the rule of law and monitor legislation, enabling fair contracts between citizens, supporting the integration and participation of the population, protecting minorities and the endeavor to ensure that social inequality within the country remains as low as possible (Levi, 1998). Yet, what is still missing in the wealth of empirical studies is a specification on how the causal mechanism between the perceived performance by the population of institutions and government (e.g., providing social equality) and social capital works.



#### 2.2.4 Social Capital Research in Switzerland

The Swiss Federal Statistical Office [FSO] presented in 2002 at the Social Capital Measurement Conference the current state of research and development with regard to estimating social capital in Switzerland. The synthesis report stated that "apart from this small number of promising studies, there have been no systematic investigations into social capital in Switzerland, unlike in some other countries such as the UK, Australia and the USA, as well as Sweden, France and Germany" (FSO, 2000, p. 5). Further as correctly pointed out, until today "no-one seems to be taking any initiative in this direction, either" (FSO, 2000, p. 5). As regards to a possible justification for this discrepancy, Switzerland has only recently been incorporated in the major international surveys and hence there was limited access to data. Nonetheless, a few research papers exploring social capital in Switzerland could be identified, which are delineated below.

Bornschier (2001) carried out an international comparison on one of the aspects of social capital - general trust among the population. Considering it to be a cultural asset, Bornschier defined general trust as a dependent variable. Further, he classified political styles as predictors of trust and correlated them with social characteristics. The research paper found that the social characteristics which support 'good' social order, such as social coherence, opportunities of mobility, avoidance of political conflicts and non-discriminatory access for the general public, were significantly positively correlated to general trust.

Freitag (2001) combined questionnaires from the Swiss Environment Survey and the Swiss Labour Market Survey as well as the World Values Survey to present a comparable empirical estimation of social capital in Switzerland. Freitag's findings diverged from Putnam's (2003) in the United States. Considering the degree of trust prevailing within the Swiss population and social commitment in clubs and voluntary associations, Switzerland "is not in danger of losing its social capital" (Freitag, 2001, p.87). A decrease in trust in national political and legal institutions over the same time period could, however, be observed.

Moreover, scholars in Switzerland also measured social capital in various approaches at a local level (cantonal or city). These studies mostly quantified only a single aspect of social capital in a specified area such as personal well-being (Lucchini, Della Bella & Crivelli, 2015), unemployment (Bonoli & Turtschi, 2015) and immigration (Baumann, Endres, Tunger-Zanetti & Behloul, 2012).

## 2.3 Social Inequality

Social inequality has increasingly been thematized in the twenty-first century and was usually the animating force behind recent social movements and contemporary political debates. In fact, various components of social inequality have been the subject of judicial action, debate, protest, and conflicts for much of the last century.

The causes and consequences of social inequality have been the subject of a large body of scholarship. Various academic disciplines ranging from economics, education, public policy through to anthropology, sociology and philosophy have accumulated a rich body of studies. As Carter and Reardon (2014), however, aptly stated "given this extensive scholarly attention, one would think that we know a great deal about social inequality [...]. While we have increased our knowledge about inequality, there are some aspects of inequality about which we have insufficient knowledge" (p. 1). One notable gap in the scholarship is the absence of knowledge and studies dedicated to the outcome of social inequality on the individual and community level. Indeed, in the last few decades, research has been more successful at documenting trends, patterns and in part causes of social capital compared to demonstrating its micro-level consequences (Carter & Reardon, 2014). In this research paper, the consequences and influences of social inequality incorporating educational equity, income inequality and intergenerational justice at individual and community level social capital will be investigated.

### 2.3.1 Definition of Social Inequality

Social inequality defines the differences between groups of people. At its most basic form, it considers the hierarchical distribution of political, social, cultural and

economic resources (Habibis & Walter, 2015). A closely associated concept, stratification, implies social inequality - if some groups have access to more resources than other, the unequal distribution of those resources is inherited. Thus, stratification refers to a "systematic and enduring pattern of inequality that is transmitted across generations, built into institutions and practiced in everyday activities" (Habibis & Walter, 2015, p. 3).

Therefore, in the study of social inequality, distributional inequality needs to be differentiated from equality of opportunity or meritocracy. Distributional equality refers to the extent to which individuals have access to similar economic resources (Carter & Reardon, 2014). The main focus is set on minimizing economic as well as social differences between individuals and groups, also in some instances described as egalitarianism. Equality of opportunity refers to the extent to which individuals have similar chances to achieve success, while less focus is put on the effects this has on the distribution of economic and social resources (Habibis & Walter, 2015). In the literature, egalitarianism has mostly been associated to socialism and communism while equality of opportunity has historically been referred to capitalist liberal democracies. Based on the premise that the social position in the population is not based on privilege but rather on individual ability and effort, liberal democracies are often considered to be meritocratic. As Switzerland will be used as the case study country, representing a liberal democracy, the term 'social inequality' will in this research paper thereafter be referring to equality of opportunity.

### 2.3.2 Income Inequality

#### 2.3.2.1 Definition of Income Inequality

Income inequality is defined as the extent to which income is unevenly distributed among a population. According to the Organization for Economic Cooperation and Development [OECD] (2018), "[i]ncome is defined as household disposable income in a particular year. It consists of earnings, self-employment and capital income and public cash transfers; income taxes and social security contributions paid by households are deducted" (para. 1). Income inequality can moreover be associated

with social mobility, in which generally countries with high social mobility have lower income inequality and vice versa (Alvaredo, Chancel, Piketty, Saez & Zucman, 2018).

Increased income inequalities and unequal distribution of economic growth have throughout the last decade raised major concerns in western countries. Political debates and policy discussions have frequently invoked the dangers of a widening gap between rich and poor and a shrinking middle class. During the global financial crisis preoccupations intensified, fuelled by the widespread debates over bank bailouts and bonuses. The alleged increase in the worldwide income inequality has been validated by numerous studies (Brandolini & Smeeding, 2009; Corina & Kiiski, 2001), the OECD (2008) report "Growing Unequal" and more recently by the World Inequality Report (2018). Income inequality is not only a crucial dimension of social inequality, but also, as stated by Wilkinson & Pickett (2009), "related to various indicators of life quality of the individuals comprising a society – from life satisfaction and the quality of social relationships to the prevalence of psychological illness, crime, obesity, and drug use" (p. 231). Which, therefore, indicates its influence on social relationships, networks and thus possibly also on social capital.

#### 2.3.2.2 Income Inequality in Switzerland

Dell, Piketty and Saez (2007) based on tax data in Switzerland analyzed changes in income inequality of the highest incomes and wealth over the course of the twentieth century. Switzerland, in contrary to the majority of the countries, evidenced almost no changes in the share of income and wealth held by the richest 1% and 0.1%. The scholars explained the stability by two factors: "first, the Second World War did relatively little to change the income structure in Switzerland; second, income and wealth taxes are generally not progressive, and inheritance taxes play a relatively insignificant role" (Dell, Piketty & Saez, 2007, p. 491).

By international comparison, the concentration of income and wealth was high in Switzerland in the 1960s and has decreased gradually since the 1970s. Ernst (1983) and Buchmann & Sacchi (1995) observed a similar decrease in the concentration of

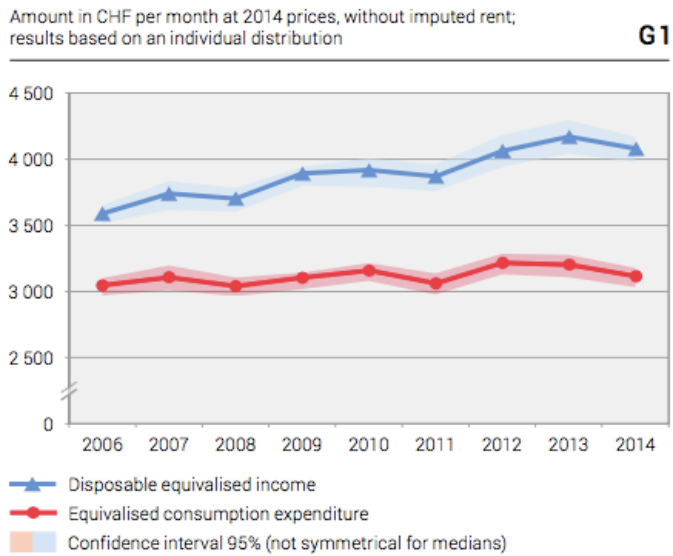
income and assets in the 1970s. In the 1980s, however, inequality increased again before stabilizing again in the first half of the 1990s (Buchmann & Sacchi, 1995).

While the FSO issues regularly a series of report on the current state of income inequality in Switzerland, only a few research papers could be identified. Müller, Marti, Oleschak & Osterwald (2004), for instance, with the aid of the national income and consumption survey, noted a minor increase in disposable income between 1990 and 1998, which could mostly be associated to overall economic growth. Moreover, in analyzing the tax data between 1987/88 and 1995/96, the scholars evidenced a reduction in income inequality. A minor increase in the Gini coefficient (the statistical measure used in analyzing income inequality) between 2003 and 2006 could be identified, which scores nonetheless still significantly lower than the worldwide OECD average (Peters, 2010). This increase was due to a disproportionate increase in income in the upper quintile.

The Income and Consumption Report published by the FSO (2017) reported in its latest review between 2006 and 2014, as depicted in Figure 2 to 4, three significant trends: (1) the median disposal income has risen by 14% since 2006, (2) the Gini coefficient has experienced only a very slight increase and (3) trends in quintile share ratios has shown only a marginal increase.

(1) Figure 2 depicts that in 2014 the median monthly income in the total population was CHF 4'069; thus, half of the Swiss population have an income greater than this, while the other half have an income lower than this amount (FSO, 2017). Besides a slight decline in 2014, the median income in Switzerland experienced a clear increase and rose by 14% since 2006.

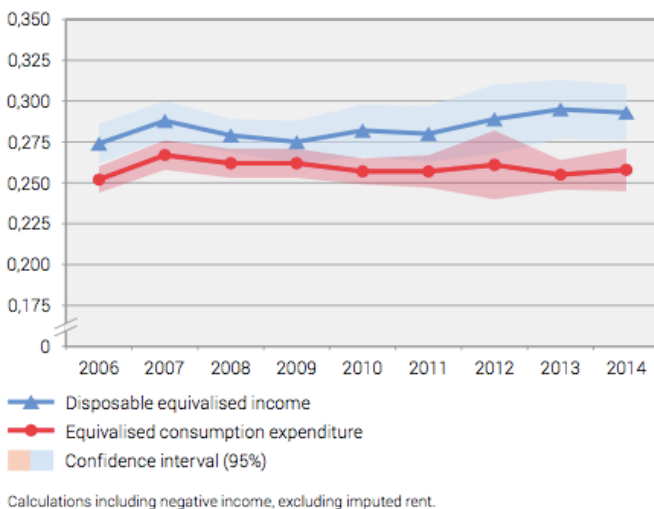
Figure 2: Median Disposable Income and Consumption in Private Households



Source: FSO - Household Budget Survey (2017)

(2) The Gini coefficient in Switzerland, as can be seen in Figure 3, decreased in the time period between 2007 and 2009. In contrast, the graph portrays from 2009 to 2013 a continual increase in income inequality, which can be explained by a favorable development of incomes in that period among richer income groups and the influence of the global financial crises on the other income groups (FSO, 2017).

Figure 3: Trends in Gini Coefficients

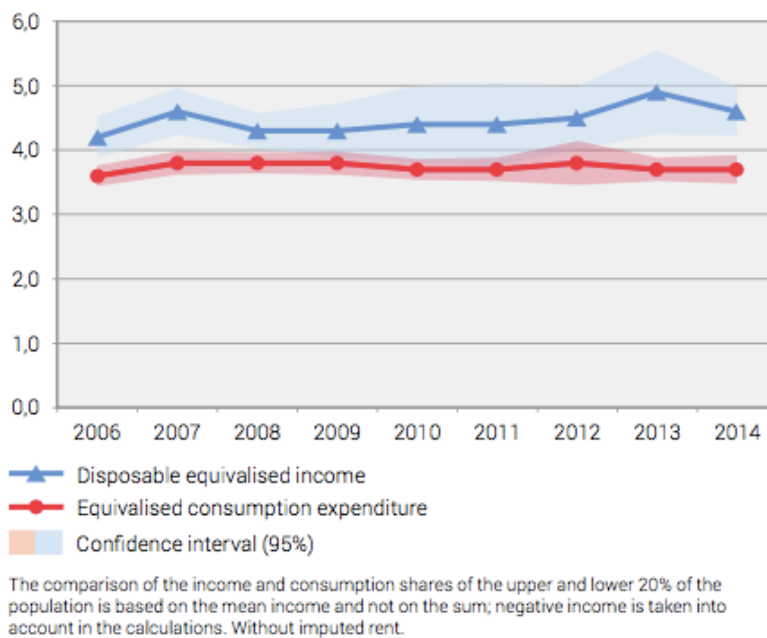


Source: FSO - Household Budget Survey (2017)

(3) The S80/S20 ratio compares the proportion of the generated income by the income-richest 20% with that of the income-poorest 20%. The more this ratio deviates from 1, the more unequal the distribution of incomes between these population groups. The development of the quintile share ratio from 2006 to 2014 (Figure 4) shows no substantial change. In 2014 the income quintile share ratio was 4.6 which means that the average disposable income of the 20% of the population with the highest income is 4.6 times higher than that of the 20% with the lowest income.

Figure 4: Trends in Quintile Share Ratios (S80/S20)

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Source: FSO - Household Budget Survey (2017)

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In the aggregate, it can be stated that considering the aforementioned research papers as well as the FSO reports, income inequality in Switzerland has remained stable since 1990 and has shown an above-average income equality score by global standards.

### 2.3.3 Educational Equity

#### 2.3.3.1 Definition of Educational Equity

The below definition of the Swiss Coordination Centre for Research in Education sums up the term educational equity and will hereafter be used in the paper:

*“Educational equity refers to an educational and learning environment in which individuals can consider options and make choices throughout their lives based on their abilities and talents, not on the basis of stereotypes, biased expectations or discrimination. The achievement of educational equity enables females and males of all races and ethnic backgrounds to develop skills needed to be productive, empowered citizens. It opens economic and social opportunities regardless of gender, race, ethnicity or social status” (Vellacott & Wolter, 2004, p. 6).*

Educational equity attained a growing key role in reducing social inequality based on the premise that an individual's level of education directly correlates to higher earnings, better health, and a longer life (OECD, 2008). Consequently, an academic structure that ensures educational equity represents a strong foundation for a fair, thriving and cohesive society. Which, in turn, might influence in some form or other the level of social capital in a country.

#### 2.3.3.2 Educational Equity in Switzerland

The World Economic Forum [WEF] in its Human Capital Report 2016 ranked Switzerland as the best education system in the world (WEF, 2016). WEF's fourth edition of the annual report stated that Switzerland "benefits from the very high quality of its primary schools and of the education system as a whole [...] but also from a strong rate of vocational training and high level of skill diversity" (WEF, 2016, p. 3). Furthermore, Switzerland invests more in education than of other countries. The most recent international figures available show that, in 2014, taking all levels of education together, Switzerland spent USD 16'090 per student, compared to the OECD mean of USD 9'487 and the EU21 average of USD 9'531 (OECD, 2015). According to OECD (2015), the above-average expenditures can be attributed to the

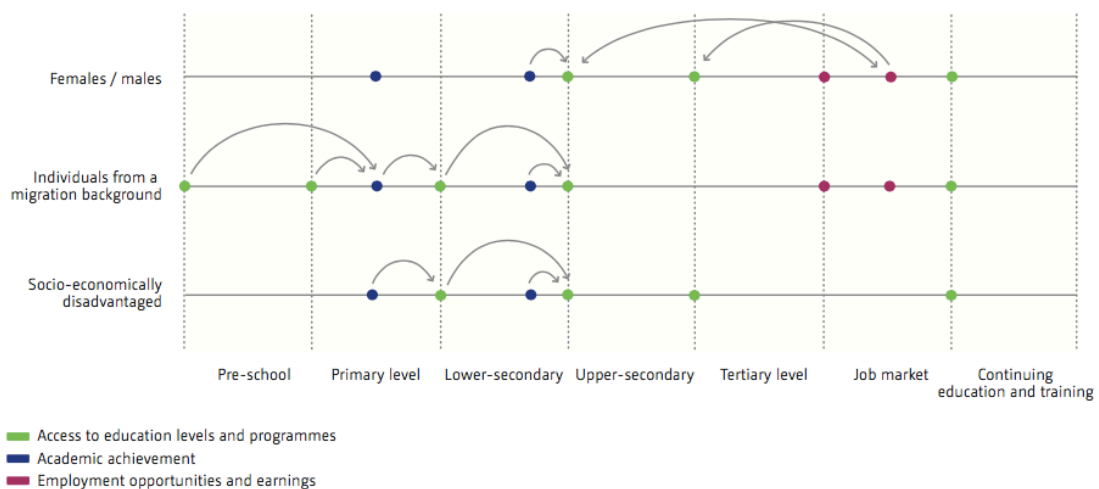


good quality of the educational infrastructure, the decentralized organization of the education system and the existence of four language regions.

Switzerland's education system is mainly characterized by the high degree of differentiation and the relative impermeability, which relies, as noted by Seitz, Metzger and Kobler (2005), on a distinct fundamental belief and value: "the Swiss educational system is designed to provide all students with an equitable start in primary education. Equity thereafter is defined not by offering the same types of opportunities, but opportunities that should have the same societal value" (p. 17). Hence, education, especially vocational education in Switzerland, is believed to have educational, economic and social values that go beyond the mere understanding of school education. It is important to note, however, that the worldwide unrivaled high emphasize on vocational and general education leads to the reproduction of values since the majority of the population has gone through the same system (Seitz, Metzger & Kobler, 2005)

The National Report on Equity (2005) identified equity problems in the Swiss education system in relation to three characteristics: gender, socio-economic status and nationality.

Figure 5: Educational Equity in Switzerland - Cause and Effect Relationship



Source: Swiss Coordination Centre for Research in Education [SKBF] (2005)

As depicted in Figure 5, the equity problems occur at principally all stages throughout an individual's educational career and still remain an issue despite the various policies to solve them (Vellacott & Wolter, 2004). The equity problems can be divided in two educational transitions: (1) from primary/secondary school to apprenticeship and (2) apprenticeship/tertiary level education to work.

A disadvantage for pupils with an immigration background can already be observed at the transition from primary to various types of secondary schools. Heaberlin, Imdorf & Kronig (2004) found that secondary schools with only basic requirements are significantly over-represented by secondos and immigrants compared with young Swiss. Moreover, at the transition to vocational education, young people with an immigration background as well socio-economic disadvantage are discriminated. According to Meyer (2004), both characteristics negatively influence the opportunity of gaining access to post-compulsory education programs, even if their educational performance were as good as other pupils. As for gender equity, there is clear tendency to select gender-specific jobs, as the majority of the youngsters yet choose to study and learn a gender dominated occupation (Herzog, Neuenschwander & Wannack, 2004).

At the transition from apprenticeship or tertiary level education to the working world, gender and migration background disadvantages can also be evidenced (Meyer, 2004). The inequality is persistent even if they successfully finished their apprenticeship or attended the same school. Therefore, firstly, the marginalization of immigrant students cannot be explained by lack of language skills or educational difficulties. Secondly, gender inequalities regarding salary or job placement is still a reality. Meyer (2003) in line with Seitz, Metzger and Kobler's (2005) above-stated findings, indicated that the Swiss education system, with its selective and segregating structures, not only reproduces social values such as meritocracy but also reinforces existing inequalities.

## 2.3.4 Intergenerational Justice

### 2.3.4.1 Definition of Intergenerational Justice

Governments in Europe and beyond are increasingly pressured in incorporating intergenerational topics in their agenda. The pressure is also likely to increase given the strained public finances, structural economic changes and demographic trends faced by many countries (Institute of Chartered Accountants in England and Wales [ICAEW], 2017).

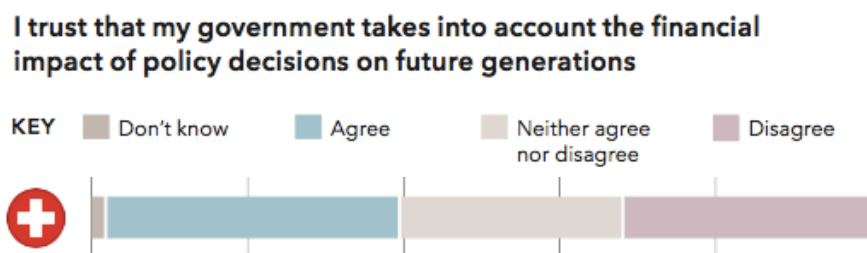
Intergenerational justice is an integral part of social justice. It refers to the concept of fairness and equity in relationships and transaction between generations (Stokes, 2017). According to Thompson (2010), a society is intergenerationally just "when each generation does its fair share to enable members of succeeding generations, both inside and outside its borders, to satisfy their needs, to avoid serious harm and to have the opportunity to enjoy things of value" (p. 5).

### 2.3.4.2 Intergenerational Justice in Switzerland

While the literature provides scarce data, the ICAEW (2017) and the PEW Research (2017) Center conducted a survey over 15 countries including diverse aspects on the debate of intergenerational justice. The most insightful results were found in: (1) trust in the government to consider longer-term impact of key policy, (2) prioritization of policy issues with strong intergenerational dimension and (3) financial prospects of future generations.

Figure 6: Intergenerational Justice - Trust in Government

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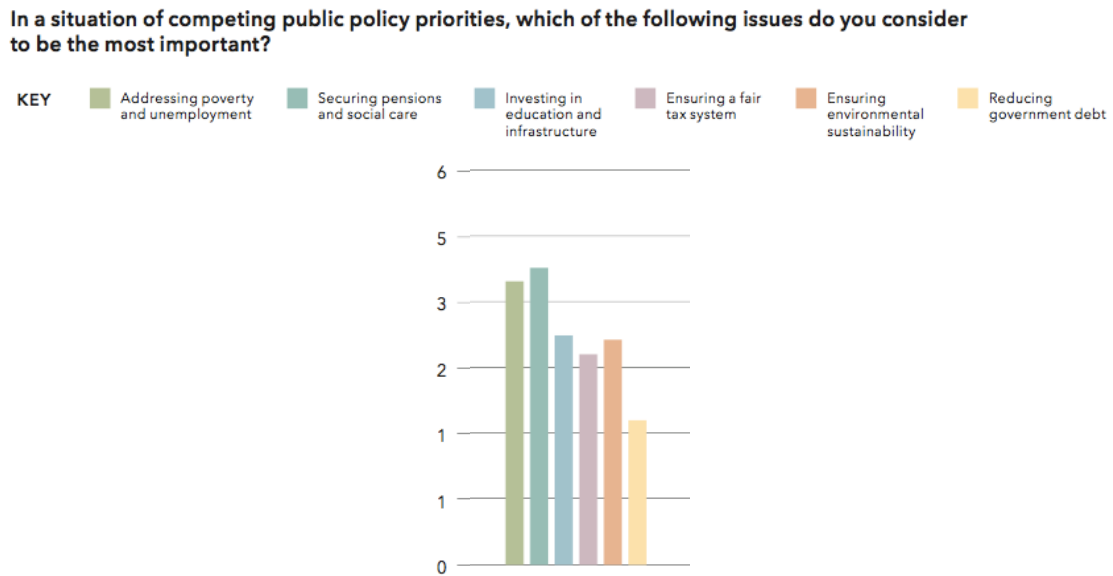
Source: ICAEW (2017)

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Figure 6 delineates that 38% trust that the government takes into account the financial impact of policy decisions on future generations in Switzerland, which is the second highest in Europe (average 26%).

Figure 7: Intergenerational Justice – Public Policy Priorities

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Source: ICAEW (2017)

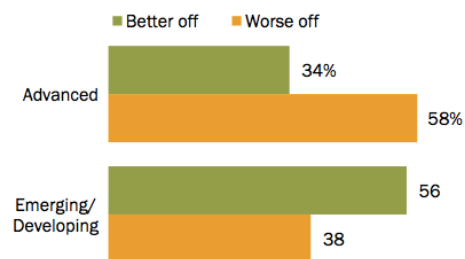
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Swiss citizens are particularly concerned about securing pensions, social care and poverty and unemployment (see Figure 7). Moreover, while a median of 51% in advanced economies believes that their current economic situation is good, only 34% are convinced that future generation will be better off than the current one.

Figure 8: Intergenerational Justice – Future Prospects

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*When children today in our country grow up they will be \_\_\_ financially than their parents*



Source: Stokes (2017)

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### 3 Methodology

The methodology section will provide a short literature review of the questionnaire relevant theories and of all instruments applied in the survey of this paper. Further, procedures and survey format, participants and instructions given to participants will be explained. Moreover, seven hypotheses were incorporated in the corresponding subsections supporting and accompanying the central research question whether social inequality has an influence on the level of social capital.

#### 3.1 Data Collection

##### 3.1.1 Sample Profile

The 211 participants were students from the German-speaking region of Switzerland. They were randomly chosen and encouraged to cooperate in this research study, no credits or other incentives were offered. The only requirement was that all participants were currently enrolled and active students at the Zurich University of Applied Sciences (ZHAW). All students at ZHAW have already completed a vocational apprenticeship and a large fraction of the student body is working part-time.

Table 2 outlines the basic demographics of the participants.

Table 2: Participants Demographics

Gender		
	Male	48.8%
	Female	52.2%

Age		
	18-20	10.9%
	21-25	77.3%
	26-30	10.9%
	Over 30	0.9%

Study Program

	BA: General Management	17.5%
	BA: Banking & Finance	9.0%
	BA: Accounting, Controlling & Auditing	8.1%
	BA: Economics & Politics	6.6%
	BA: Information Technology	8.1%
	International Management	50.7%

Household Income Level (quintiles according to FSO)

	Under CHF 4'000	8.4%
	Between CHF 4'000 - 6'000	10.2%
	Between CHF 6'000 - 10'000	23.4%
	Above CHF 10'000	58.1%

Citizenship

	Swiss Citizenship	91.9%
	No Swiss Citizenship	8.1%
	Multiple Citizenships	40.3%
	Only Swiss Citizenship	59.7%

Source: Survey

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### 3.1.2 Procedure and Design

The data was collected using an internet-based survey which was designed to measure the student's level of social capital as well as their perception of social inequality in Switzerland including income inequality, educational equity and intergenerational justice. The questionnaire consisted of a total of 25 questions; nine in order to measure social capital and eleven devoted to social inequality. Moreover, at the end of the survey, the participants were asked to indicate their demographic characteristics such as gender, age, study department, citizenship as

well as their household income level. Other than the demographic attributes, the majority of the questions were measured applying a 5-point Likert-scale and using the best choice method. On average the survey was completed below the target time of 15 minutes.

The internet-based survey was translated into two languages (German and English) and was conducted as a compulsory part during six lecture sessions at the ZHAW. The obligatory participation ensured that not only the more cooperative students participated and thus the social capital score would have been deemed biased, but allowed to achieve a well-balanced data collection. At the beginning of the respective lectures, the students were informed that they were about to complete a survey as part of a research project for a bachelor thesis. To ensure that the students were not aware that their willingness to cooperate respectively their social capital level will be measured, no additional instructions, details or definitions about the purpose of each question were given. To additionally improve the data accuracy, the participants were asked to complete the survey by themselves and were informed that the data collection is anonymous.

Table 3 delineates the respective lecture sessions' attendance and participation rate.

Table 3: Survey Participants

Module	Enrolled Students	Attended Students	Number of Participants	%-Rate Participation
06.03.2018: International Business	86	45	32	71.1%
08.03.2018: Corporate & Cross Culture	75	61	51	83.6%
08.03.2018: International Business	85	39	24	61.5%
08.03.2018: Corporate & Cross Culture	75	68	62	91.1%
09.03.2018: International Business	75	41	27	65.9%
09.03.2018: International Business	80	28	15	53.6%
Total		282	211	74.8%

Source: Survey

## 3.2 Instrument: Social Capital

In this research paper, social capital is conceptualized as two-dimensional construct incorporating behaviors and attitudes. The basis for this conceptualization is twofold. On the one hand, it is based on the components of social capital defined by the World Bank (2002). On the other hand, it also relies on Fishbein-Ajzen (1975; 1980) theory of reasoned action.

Given the dual conceptualization, the following sub-section will thereby first elucidate the connection between social capital and Fishbein-Ajzen's theory of reasoned action. Next, the selected survey questions and Grootaert & Van Bastelaer's groupings of social capital will be discussed. Lastly, the factors that might influence social capital's variability - income inequality, educational equity and intergenerational justice - in the context of the conducted survey will be delineated.

### 3.2.1 The Fishbein-Ajzen Model of Attitude and Behavior

The Fishbein-Ajzen model of reasoned action arose with the aim to enlarge the knowledge of consumer behavior in the field of mass and persuasive communication. Fishbein and Ajzen (1980) noted two fundamental flaws in the traditional theories of attitude and behavior. Firstly, the psychological predisposition (attitude to behave), according to the authors, has been insufficiently examined to clarify the connection between attitude and behavior. The model of reasoned action addressed that problem by "making a clear distinction between beliefs, attitude, subjective norms, behavioral intention and behavior" (Bright, Manfredo, Bath & Fishbein, 1993, p. 265). The importance of their distinctions in explaining the variability of social capital is to better understand the causalities and the totality of the concept. As it may that the shift of public attitudes influenced by social events and/or policies result in certain desirable or undesirable behaviors or vice versa. The two-dimensional conceptual framework of social capital in this research paper will allow to provide guidance in this field.



The second issue addressed by Fishbein and Ajzen is that in contrary to traditional theories that defined the receiver as a passive listener to messages, the model of reasoned action argued that the receiver is a rational interpreter. The scholars claimed, "that individuals process information in a systematic manner rather than as passive receivers" (Bright, Manfreda & Bath on Fishbein & Ajzen, 1993, p. 265). Fishbein and Ajzen (1980) argued that an individual's behavior is influenced by three attitudinal elements: norms, behavioral intention and values, and knowledge about a certain behavior and its consequences. As delineated in the aforementioned literature review, social capital is defined as a rational activity that includes on an individual level; beliefs, norms, values and intentions.

Fishbein-Ajzen's theory of reasoned action has been used to demonstrate and predict behaviors in various fields, including social capital. Sheppard, Hartwich and Warshaw (1988) noted that the theory "will predict the performance of any voluntary act, unless intent changes prior to performance or unless the intention measure does not correspond to the behavioral criterion in terms of action, target, context, time-frame and/or specificity" (p. 325). The scholars found, however, that the theory of reasoned action is not an accurate predictor if the behavior "is not completely under the subjects control" (p. 325) or not all necessary information is provided to form an intention. Nonetheless, for the majority of voluntary behaviors for which an individual has sufficient knowledge, the theory has proven valid. The approach of reasoned action has been used to research: consumer behavior (Brinberg & Durand, 1983; Miniard, Obermiller & Page, 1982), HIV prevention (Rhodes, Stein, Fishbein, Goldstein & Rotheram-Borus, 2007; Ewald & Roberts, 1985) and marijuana consumption among adolescents (Zhao, Sayeed, Hornik, Fishbein & Ahern, 2006)

The framework of the theory of reasoned action has also been applied to analyze social capital behaviors. Warshaw and Davids (1984, 1985) used the theoretical framework to analyze actions such as going out with friends, going to a campus pub, conversing with a stranger or attending a party. Bringberg (1979) used it to predict church attendance and Ajzen, Timken and White (1982) applied the theory to investigate voting behavior in presidential elections. Moreover, Farina, O'Higgins &

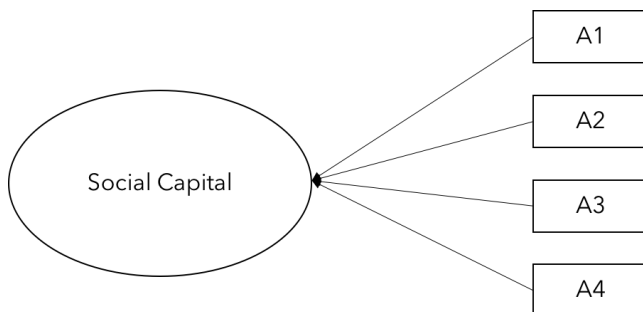
Sbriglia (2008) researched the relationship between two important primitives of social capital - trust and reciprocity. Conclusively, the aforementioned research papers illustrate that Fishbein- Ajzen's theory of reasoned action is increasingly and successfully being used in the context of social capital and therefore adequate for this research paper.

### 3.2.1.1 Application in this Paper

The application of Fishbein- Ajzen's theory of reasoned action does by and large not alter the conceptualization of social capital; attitudes and behaviors are used indiscriminately. The conventional one-dimensional conceptualization is satisfactory if social capital is treated as an exogenous variable, yet inadequate if used as an endogenous variable. Adapting the framework of the theory of reasoned action refines the conceptualization in order to examine the variability of social capital, allowing separate explanations of the attitudes and behaviors of social capital.

Figure 9: One-Dimensional Social Capital

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Source: Own Representation

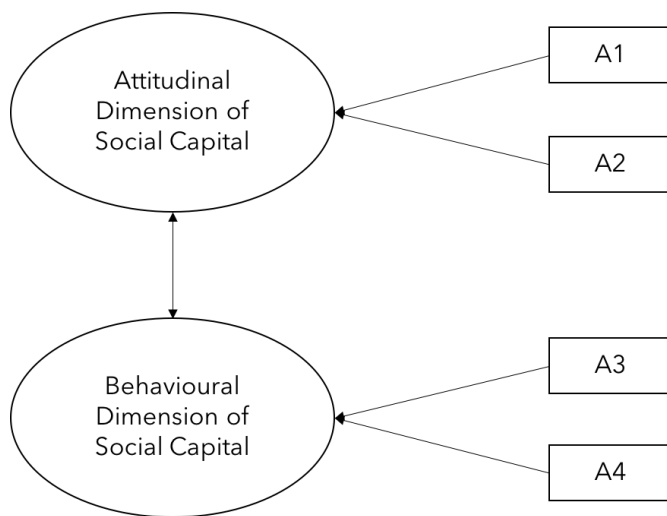
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Figure 9 portrays social capital as a single-dimensional construct. A1, A2, A3 and A4 outlining either a behavior or attitude of social capital. A1 and A2 could, for example, represent generalized trust and a belief that participating in associations is beneficial, respectively. A3 and A4 constituting examples for the behavior of social capital, for instance, political participation and belonging to an association.

The two-dimensional conceptualization of social capital, based on the theory of reasoned action, is depicted in Figure 10. Each attribute, A1 to A4, still represent the same behaviors and attitudes compared to the unidimensional theoretical model. The division in attitudinal and behavioral dimension, however, allows an adequate grouping of the corresponding variables and enables a more granular analysis in the variability of social capital.

Figure 10: Two-Dimensional Social Capital

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Source: Own Representation

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Two questions arise regarding the two-dimensional conceptualization of social capital: (1) Do the disaggregated parts - attitude and behavior - complete the construct of social capital? In other words, do social capital behavior and social capital attitude equal social capital as a totality? (2) Do the disaggregated parts - attitude and behavior - act in the same way as the whole?

(1) Assuming that A1 to A4 represent the complete construct of social capital, the two-dimensionality should not alter that representation.

**Hypothesis 1:** *The disaggregated parts - social capital attitude and behavior - are expected to represent the totality of social capital, evidencing that social capital is a two-dimensional construct.*

(2) Fishbein-Ajzen's theory of reasoned action noted that attitudes influence behavior and then, in an iterative process, behaviors influence attitudes (Fishbein & Ajzen, 1980). However, when compared with social inequality variables, the individual dimensions of social capital might, in some cases, act differently compared to each other as well as compared to the totality of social capital. For instance, a social inequality characteristics may influence social capital attitudes but not necessarily affect social capital behaviors or vice versa.

***Hypothesis 2:*** *The disaggregated parts - social capital attitude and behavior - as well as social capital as a whole are expected to yield different results when opposed to social inequality variables.*

### 3.2.1.2 Criteria for Statistical Analysis

In order to evaluate the argued two-dimensionality of social capital and the corresponding hypotheses, criterions for statistical analysis needed to be defined. To this end, multicollinearity, significance, reliability and goodness of fit were chosen, while the obtained data was analyzed using SPSS 15.0. The subsequent section will explain the chosen criterions.

#### **Multicollinearity**

Multicollinearity is the extent to which two or more variables are correlated. Although multicollinearity does not influence the predictive power of the two-dimensional conceptualization of social capital, it does affect the conclusions drawn about the individual predictors. Correlations between variables that are higher than .70 can indicate multicollinearity (Meyers, Gamst & Guarino, 2006). The Pearson correlation (r) test was used to evidence multicollinearity.

#### **Significance**

Statistical significance measures the likelihood that the effect was caused by chance. The hypothesis that the effect is coincidental or caused by chance is the null hypothesis and significance is the likelihood of rejecting the null hypothesis. This

measure is called the p-value, usually denoted by the Greek letter alpha. An alpha usually ranges from .80 to .99 according to the importance of rejecting the null hypothesis, which means that the likelihood of the finding being true falls between 80 percent and 99 percent (Bachman & Paternoster, 2004). This research uses an alpha of .05 and .01, meaning that there is a chance between 95 percent and 99 percent that the findings are true.

### **Reliability**

The measurement of reliability in statistics is the probability that the results will be consistent when repeated. While there are various methods to determine reliability, a Cronbach's Alpha of .70 and higher (Kline, 2005) is unarguably the most practiced, which will also be used for this research paper.

### **Goodness of Fit**

Goodness-of-fit indicators determine whether the model to be tested fits the data and should be accepted. As opposed to the above-outlined statistics, theorists lack consensus on goodness-of-fit criteria (Kilne, 2005). Nonetheless, considering the type of data in the study, the moderate complexity of the model, the rather small sample size and the use of SPSS; the Chi-Square test including its p-value ( $p$ ) and its Degree of Freedom as well as the PHI-Coefficient were chosen.

The Chi-Square test of independence is commonly used to determine if there is a significant relationship between two categorical variables. The null hypothesis for this test is that there is no relationship between the two chosen variables (e.g., social capital attitudes and behaviors). Opposed, the alternative hypothesis is that there is a relationship. To make a conclusion about the hypothesis with 95% confidence, the value labeled Asymp. Sig. (which is the p-value of the Chi-Square statistic) should be less than .05 (which is the alpha level associated with a 95% confidence level). Moreover, the Chi-Square Degree of Freedom should score less than four (Kline, 2005; Wan, 2002).

The Phi Coefficient is another method to measure the associations between two categorical variables. The interpretation of the Phi Coefficient is similar to the

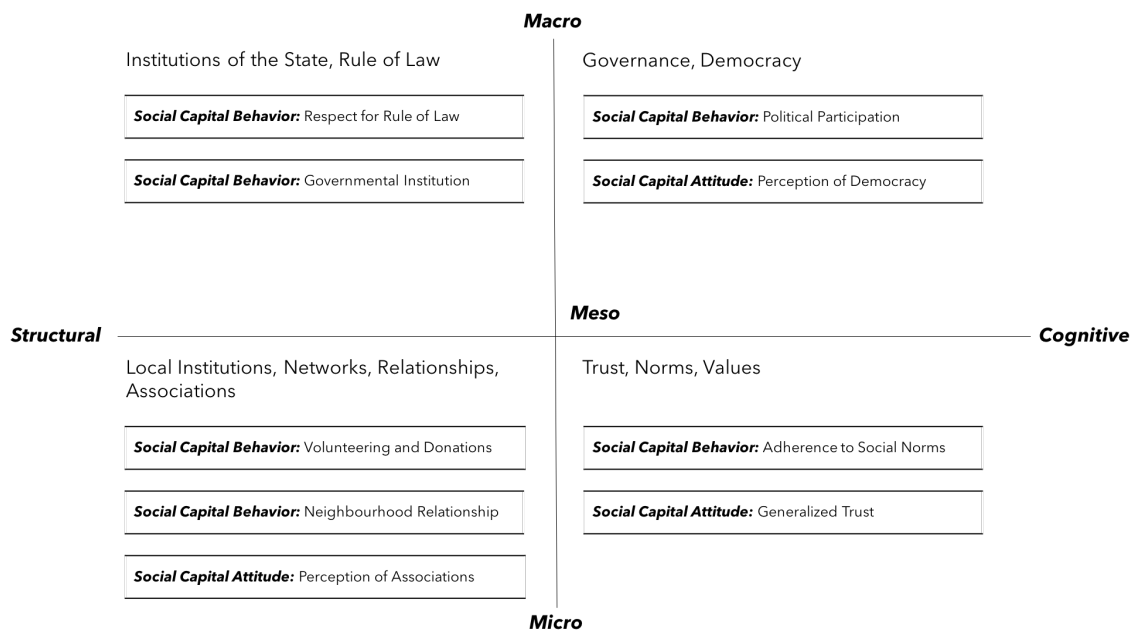
Pearson Correlation Coefficient (see Multicollinearity). The range is from -1 to 1, where: 0 is no relationship, 1 is a perfect positive correlation and -1 is a perfect negative correlation. According to Wiley (2006), a result higher than + or - .40 represents a strong positive or negative relationship.

### 3.2.2 A Multidimensional Construct at Micro-, Meso- and Macro-Level

Figure 11 portrays the twofold conceptualization of social capital used in this research paper. As delineated above, the theoretical model is based on the World Bank's conceptual framework as well as on Fishbein-Ajzen theory of reasoned action.

Figure 11: Social Capital - Multidimensional at Micro-, Meso- and Macro-Level

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Source: Adapted from Grootaert & Van Bastelaer (2002)

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In total nine questions were incorporated into the survey measuring social capital; three social capital attitude and six social capital behavior questions. These social capital components were then evenly categorized in Grootaert and Van Bastelaer's defined quadrants at micro-, meso- and macro-level. Moreover, in order to attain a more accurate measurement, the sub-thematic choices were based on current and significant topics of which the participants were believed to have been confronted

with. In the following subsections, each quadrant including the assigned survey questions will be discussed in greater detail.

### 3.2.2.1 Trust and Norms

Kim and Kawachi (2006) argued that trust represents the fundament on which attitudinal components of social capital is built on. As can be deduced from the aforementioned research papers in the literature review, trust is either implicitly or explicitly present in every definition of social capital. Adding to that, the scholars stated that "networks and shared norms can exist only in an environment of trust" (Kim & Kawachi, 2006, p. 47).

In this context, Ostrom and Ahn (2003) defined trust as "a particular level of the subjective probability with which an agent assesses that another agent or group of agents will perform a particular task" (p. xvi). Following this definition, Gambetta (2000) subdivided trust into three components: (1) a psychological disposition or attitude of a belief holder (2) about another entity that (3) can be either a person or a thing. Whereby, an institution, organization or government can be defined as a 'thing'. Closely related, in some cases also interlinked with trustworthiness, social norms "specify what actions are regarded by a set of persons as proper or correct, or improper and incorrect" (Coleman, 1990, p. 243). A rational actor's decision is not only influenced by norms, but also by the tangible or intangible cost and benefits which individuals take into account when exercising a choice (Coleman, 1990).

Various social theorists believe that trust is the bedrock of social capital. Kawachi and Kim (2006), as stated above, incorporate trust as their only attitudinal variable of social capital. Paldam and Svendsen (2000) stated that social capital is "the density of trust existing within a group" (p. 342). Furthermore, Reeskens and Hooghe (2008) argued that "generalized trust features as the most prominent attitudinal element of social capital" (p. 515). In contrast, however, some scholars contend that trust is not an integral part of social capital, but rather an outcome (Woolcock, 2001). According to Field (2003) "trust is not a necessary consequence of shared norms and strong networks and that it is best treated as a consequence rather than an integral

component of social capital" (p. 65). Conclusively, Cote and Healy (2001) view trust in their research both as fundamental components of social capital and as a consequence. Acknowledging the importance of trust, in this research paper, the theoretical model (see Section 3.3) incorporates trust as a component of social capital as well as a consequence of social (in)equality.

**Hypothesis 3:** *Trust is expected to be the bedrock of social capital and thus to correlate with the majority of the individual social capital variables.*

Table 4: Survey Part - Micro / Cognitive

---

<i>Variable Name</i>	<i>Attitude / Behavior</i>	<i>Quadrant</i>	<i>Source of Data</i>
Generalized Trust	Social Capital Attitude	Micro / Cognitive	In general, most people can be trusted.
Adherence to Social Norms and Trustworthiness	Social Capital Behavior	Micro / Cognitive	Assume you lost your wallet (with ID). How likely do you think it will be returned to you?

Source: Survey

---

A universal measure of trust, which has also been chosen for this research study (see Table 4/ Generalized Trust Variable), is the World Values Survey question on generalized trust: "Generally speaking, would you say that most people can be trusted, or that you can't be too careful in dealing with people?". This measure has been widely used in national-level as well as in cross-country comparisons, resulting in great variations in the findings. More than 50 percent of the Nordic countries agree that most people can be trusted, whereas fewer than 10 percent of Brazilians, Peruvians or Filipinos responded the same (Zak and Knack, 2001).

The second research question was inspired by The Reader's Digest (2003) conducted experiment in order to measure trustworthiness and social norms in a cross-country approach. Wallets containing cash, addresses and phone numbers of the putative owner were 'dropped' in cities around the world. Country-level



proportions of the number of returned wallets were then calculated, exhibiting wide variations, from up to 100 percent in Norway and Denmark, 60 percent in the US to only 30 percent in Italy. As can be retrieved from Table 4, in this research study the participants were thereby asked "Assume you lost your wallet (with ID). How likely do you think it will be returned to you?" to measure the perceived adherence to social norms and trustworthiness.

The World Values Survey question on generalized trust has led scholars to investigate the accuracy of its measurement on trust in relation to trustworthiness and social norms. Glaeser, Laibson and Sacerdote (2000), researched in their experiment whether the survey question (most people can be trusted) predicts trusting or trustworthy behavior (social norms) by participants. The authors found that this survey question predicts trusting behaviors only weakly, while trustworthy behaviors significantly correlated. Notwithstanding these results, there are strong reasons to think that the survey question of generalized trust is able to capture aggregate levels of trust in a society. Firstly, trusting attitudes would not withstand a society with only a few trustworthy people. Secondly, according to Keefer and Knack (2003), there is "substantial direct evidence of aggregate-level correlations between trust and trustworthy behavior" (p. 6).

***Hypothesis 4:*** *Trust and trusting behavior, thus adherence to social norms and neighborhood relationship, are expected to statistically significantly correlate.*

#### 3.2.2.2 Volunteering, Relationship and Associations

Social interaction, civic engagement, networks, relationship or voluntary association, however denominated, human associations represent the essential prerequisite for social capital. The various forms of associations are uncountable ranging from large, formal organizations such as international NGOs to small, informal groups like local sports clubs.

Putting structure in this wide range, the World Bank has, as outlined in Figure 11, grouped local institutions, networks, relationships and associations in the micro, structural quadrant. Thereupon this research paper examines associations as social capital attitude as well as neighborhood relationship and volunteering and donations as social capital behaviors (see Table 5).

Table 5: Survey Part - Micro / Structural

<i>Variable Name</i>	<i>Attitude / Behavior</i>	<i>Quadrant</i>	<i>Source of Data</i>
Perception of Associations	Social Capital Attitude	Micro / Structural	I am convinced that my participation in voluntary service (civic and/or leisure time association) is beneficial for society (e.g. politics, sport, education etc.)
Neighborhood Relationship	Social Capital Behavior	Micro / Structural	Suppose there is a problem of general interest in your neighborhood (such as cut in the provision of water, electricity or gas) which is the likelihood that neighbors will mobilize together in order to solve the problem.
Volunteering and Donations	Social Capital Behavior	Micro / Structural	With the exception of religious organizations, in the past year have you volunteered your time or donated money? This could include volunteering for a health cause to fight a disease, a school program, or to help elderly or poor?

Source: Survey

---

The relationship between social capital and voluntary associations has been the subject to a large body of scholarship. Civic (Putnam, 2000), professional (Petrusevich, 2005), service (Moir 2004) and political associations (Dolence, 20006) have proven to provide opportunities for social exchange and the strengthening of pro-social attitudes and social skills and hence to be interlinked with social capital. Moreover, neighborhood relationship has also been evidenced to generate social

capital. Smith (2006) found that the existence of a good neighborhood relationship and neighborhood associations significantly correlated with social capital. From these few mentioned examples, it can be deduced that a large number of different kinds of associations build social capital.

Volunteering and donations have, in the literature, been proven to be related to levels of social capital. Kim and Kawachi (2006) defined donation of time and money as one of the seven behaviors of social capital, arguing that it represents an extension of membership in clubs or religious organizations. Bekker (2001) who also supports this view, found that the people who devoted most time to charitable associations also donated the most money. Moreover, Lofland (1996) similarly to McPherson, Popielarz and Drobnic (1992) identified a direct correlation between the size of an individual's social network and the probability of that person to become a member of a voluntary association. Pearce (1993) and Laumann (1973) explained that correlation by evidencing that people with a larger network and friends conform to group norms and that one of that norm is volunteerism. Janoski, Wilson and Musick (1998) conclusively demonstrated that social capital compared to human capital is more strongly correlated when controlled for in people who volunteer.

### 3.2.2.3 Governance and Democracy

The advantages of trust and other parts of social capital are not absolute. They depend upon a society's environment and given social structures. As disclosed above, associations play an important role in the accumulation of social capital. Taken as a whole, however, local efforts to create social capital pale compared to the larger political environment. And in that, despite the current crises in most industrialized societies, democracies still outperform autocracies on the social capital ledger (Badescu & Uslaner, 2003). In fact, democracies are more trusting and trusting countries are proven to have a larger percentage of their citizens participating in voluntary associations (Putnam, 1995). Therefore, as delineated in Table 6, the perception of democracy and political participation has been chosen as the two variables measuring social capital on the macro, cognitive level.

The political participation variable in quantifying social capital comes in several forms. Social capital, in its pure state, is the mobilization of individuals to achieve a common end; thus it appears logical that a high level of social capital is related to political participation. Putnam (1993) evidenced this relationship in examining social capital and government efficacy in Italy. The author found correlations between voting, political participation, efficient government and social capital. Subsequently, in duplicating the applicability of Putnam's findings, other researchers came to the same results, among others, in the US (Knack, 2002), Germany (Cusack, 1999) and India (Rossel, 2002).

Table 6: Survey Part - Macro / Cognitive

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<i>Variable Name</i>	<i>Attitude / Behavior</i>	<i>Quadrant</i>	<i>Source of Data</i>
Perception of Democracy	Social Capital Attitude	Macro / Cognitive	I think I personally profit from direct democracy. So, I can take an active part in shaping my future.
Political Participation	Social Capital Behavior	Macro / Cognitive	How often do you generally vote in Swiss ballots/referendums?

Source: Survey

---

### 3.2.2.4 Institutions and Rule of Law

The last quadrant of this research paper's conceptual framework includes institutions of the state and the rule of law. As depicted in Table 7, one social capital behavior question respectively has been incorporated in the survey.

Public institutions and the rule of law play a determinant role in the development and engagement of a community. Political stability, predictable market, an absence of corruption and crime, integration of minorities and a reliable judiciary system are only a few capabilities of public institutions (Dasgupta & Serageldin, 2000). Rothstein and Dietlind (2008) proposed that in order for social capital to flourish, it needs to be embedded in and linked to certain political, administrative and/or political

institutions. The guiding principle being that public institutions influence and channel the level of social capital in a society. And vice versa, an individual's social trust and civic engagement is dependent on the performance of public institutions.

Knack and Keefer (1998) developed a measure to quantify civic cooperation related to institutions and adherence to the rule of law. The survey participants were asked whether the following actions can ever be justified: claiming government benefits to which respondents were not entitled, avoiding a fare on public transport or cheating on taxes if they had the chance. Similarly, in this research paper's survey, the participants were asked whether they would declare additional income even if the tax authority would not know about it. According to Rothstein and Dietling (2008), if public institutions or policies are perceived as unfair, citizens are more inclined to engage in illegal practices to thrive in daily life and thus influencing social capital.

Table 7: Survey Part - Macro / Structural

<i>Variable Name</i>	<i>Attitude / Behavior</i>	<i>Quadrant</i>	<i>Source of Data</i>
Respect of Rule of Law	Social Capital Behavior	Macro / Structural	Assume that you have been working a student job the tax authority does not know about and will not find out about it. How likely are you to declare this additional income to the tax authority?
Governmental Institutions	Social Capital Behavior	Macro / Structural	Recent political discussions have been about abolishing the mandatory fees that supported public broadcasting (No-Billag). Did you support this initiative?

Source: Survey

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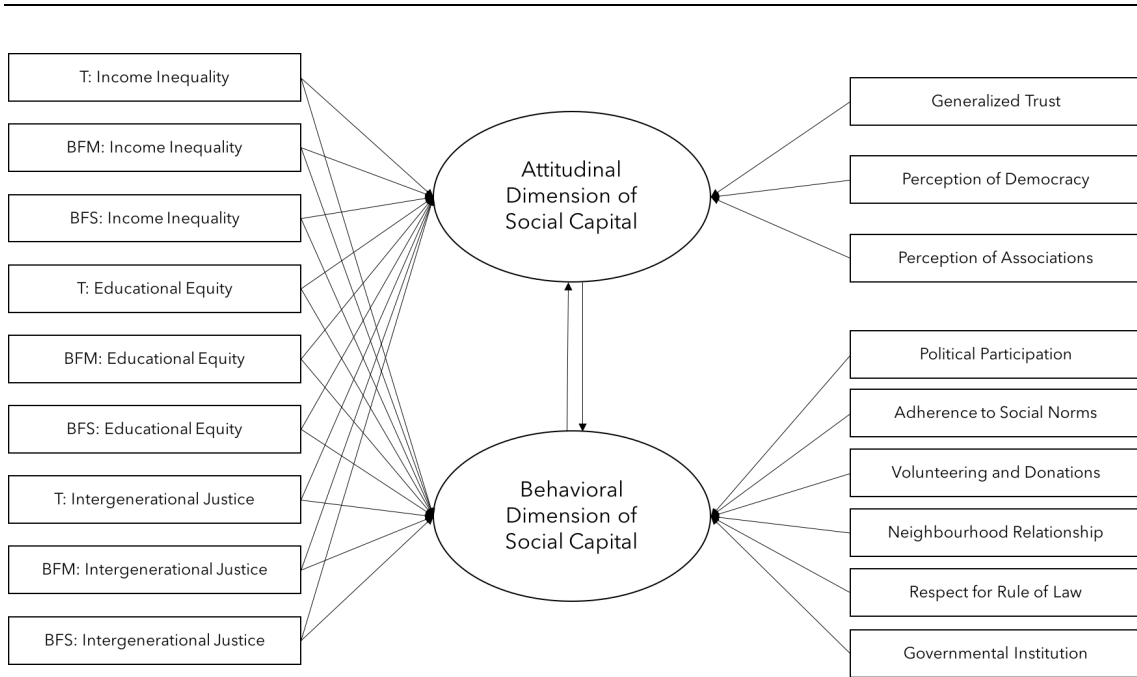
### 3.3 Instrument: Social Inequality

Stamm, Lamprecht and Nef (2001) in the Swiss National Science Foundation's (SNSF) research project on the 'Perception of Social Inequality in Switzerland' identified income, employment, education, occupational status and gender to represent the

main dimensions in Switzerland. Moreover, besides the aforementioned inequalities the report noted that the Swiss population takes a rather pessimistic view of the future and for the next generations. Despite the identified parts of social injustice, the researcher also stated that the question of how these inequalities affect living conditions, life forms and/or civic cooperation of a population remain largely unanswered.

Therefore, with the aid of the conceptual model portrayed in Figure 12, social inequality's effect on individual and community level social capital will be investigated.

Figure 12: Theoretical Model Social Capital / Social Inequality



Source: Own Representation

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**Hypothesis 5:** *Social Inequality given its omnipresence and alleged consequences on various dimensions on an individual's life is expected to influence social capital on attitudinal as well as behavioral level.*

In reference to SNFS's research project, income inequality, educational equity and intergenerational justice have been chosen as the three main variables quantifying social inequality. Three questions were formulated concerning educational equity and four questions respectively for income inequality and intergenerational justice. The formulation and structure of the posed questions followed two aims: (1) multidimensional approach and (2) relevancy of the chosen issues.

(1) The questions for measuring the sub-issues of social inequality, as portrayed in Figure 12, were posed on three dimensions: trust [T], beneficial for me [BFM] and beneficial for society [BFS]. Firstly, because as mentioned in Section 3.2.2.1 trust will be treated as a part of social capital and as a consequence, thus influencing an individual's perception of social inequality. Secondly, the division between BFM and BFS has the objective to not only measure social inequality on an individual, but also at aggregate level.

(2) To additionally improve the data accuracy, the questions more specifically their thematic were chosen according to the participant's current state as students and in some instances, as part-time workers. As such contextual and situational circumstances were taken into consideration in which the participants are or will likely be confronted with and hence have adequate knowledge.

In the subsequent sections, the incorporated survey questions will be illustrated and explained in greater detail.

### 3.3.1 Income Inequality

As depicted in Table 8, the included variables for income inequality are; income and wealth distribution, personal compensation, CEO remuneration and current public policies.

Table 8: Social Inequality - Income Inequality

---

<i>Variable Name</i>	<i>T / BFM / BFS</i>	<i>Source of Data</i>
Income and Wealth Distribution	Trust	I think income and wealth is distributed fairly among the Swiss population.
Personal Compensation	Beneficial for Me	I think I personally am and will be fairly monetarily compensated in correspondence to my contribution.
CEO Remuneration	Beneficial for Society	I think the total remuneration (salary and bonuses) of Swiss CEOs is justified.
Public Policies	Beneficial for Society	I think the current public policies (e.g. progressive income taxes at federal and canton level) in Switzerland is conducive to economic growth and at the same time good in reducing extreme income inequality and thus fostering a more stable society.

Source: Survey

---

While, as delineated in Section 2.3.2.2, there is undeniably a disproportional distribution of income and wealth in Switzerland, income inequality has remained stable over the last two decades and show an above-average income equality score by global standards. Therefore, overall a comparatively positive score is foreseeable and hence in turn income inequality might not represent the main driver of social capital.

**Hypothesis 6:** *The variables are predicted to score low on income inequality and to not significantly correlate with social capital (attitudes and behaviors).*

### 3.3.2 Educational Equity

Equality of opportunity, professional career and meritocracy, as indicated in Table 9, were at the trust, BFM and BFS level included in the survey to measure the perception of the participants towards educational equity. The participants' responses, being students themselves, will provide a current snapshot of Switzerland's educational equity. On one hand, however, as the respondents are



currently absolving a tertiary education and will hence attain a higher education degree, the survey results might be overvalued. On the other hand, balancing out this issue, the National Report on Equity (2005) identified that equity problems in the Swiss education system exist throughout an individual's educational and professional career - from pre-school till after tertiary education. Thus, the participants, besides attaining a higher education degree, might still experience injustices. Moreover, the diversity of the collected data - 40 percent of the participants have at least more than one citizenship, 52 percent are women and respondents of every household income quintile are included - will allow to examine differences in the three main causes of educational inequality: gender, socio-economic status and nationality.

Table 9: Social Inequality - Educational Equity

<i>Variable Name</i>	<i>T / BFM / BFS</i>	<i>Source of Data</i>
Equality of Opportunity	Trust	I think the Swiss educational system is fair and provides opportunities to everyone.
Professional Career	Beneficial for Me	I think my academic studies will help me to start a good professional career and will allow me to improve my socio-economic situation.
Meritocracy	Beneficial for Society	I think that the Swiss education system helps individuals to improve their socio-economic situation on the basis of merit and educational achievements.

Source: Survey

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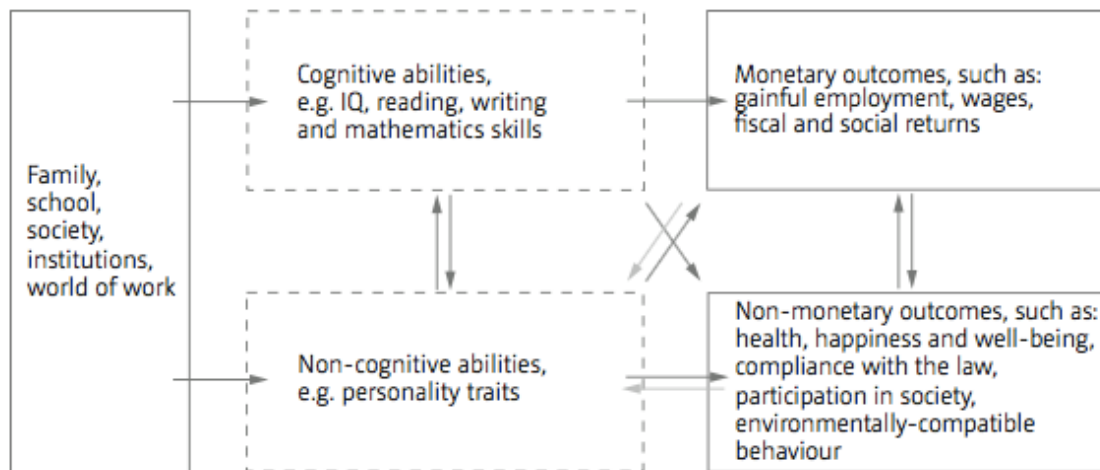
The importance of education for a fair and harmonious society is undisputed. Education brings many benefits at an individual level as well as for a society. At an individual level, these benefits include both monetary and non-monetary advantages (participation in society) and, at the level of society, both fiscal benefits and non-monetary effects, such as a functioning democracy. Moreover, empirical research increasingly stresses the importance of 'non-cognitive' skills for educational success and success in life. The acquisition of non-cognitive abilities and traits is promoted by a number of different factors. These include a person's family, their broader social

environment and – what is most important for this research paper – their school. As portrayed in Figure 13 non-cognitive abilities have the potential to influence monetary and non-monetary outcomes on a positive basis (SKBF, 2005). In the context of this study, especially the non-monetary outcomes are of major interests, which imply that the non-cognitive abilities acquired during the educational phase might positively affect an individual's participation in society and hence also their level of social capital. Furthermore, SKBF (2005) argued that educational equity, in particular the existence of equality of opportunity through meritocracy, encourages political participation and a functioning democracy.

**Hypothesis 7:** *Educational Equity is expected to correlate with the variable 'perception of democracy' and 'political participation' as well as have a significant influence on social capital (attitudes and behaviors).*

Figure 13: Cumulative Effect Model of Education

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Source: Swiss Education Report (2014)

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### 3.3.3 Intergenerational Justice

Intergenerational equity is a core concept of sustainability and equality, typically expressed as a concern for future generations. Intergenerational justice is ultimately also a question of the allocation of participation opportunities between the present and future generations. Consequently, current generations should not live at the expenses of future generations. Unjust transfers of burdens and negative economic, environmental but especially social consequences could have adverse impacts on the social cohesion and engagement of a population (Schraad-Tischler & Kroll, 2014). As outlined in Section 2.3.4.1, while governments in Europe and beyond are increasingly pressured in incorporating intergenerational topics in their agenda, their current effects on civic cooperation and social cohesion remain largely unknown. Therefore, the variables defined in Table 10 investigate the perception of intergenerational justice and its possible influence on social capital. The four questions examine intergenerational justice on three time-dimensions - the current situation, the personal future expectation and the expectation for future generations.

Table 10: Social Inequality - Intergenerational Justice

---

<i>Variable Name</i>	<i>T / BFM / BFS</i>	<i>Source of Data</i>
Current Situation	Trust	I think the current economic situation in Switzerland is ____ .
Personal Future Expectation	Beneficial for Me	I think I will be ____ financially than my parents.
General Future Financial Expectation	Beneficial for Society	Future generations in Switzerland will be ____ financially than me.
General Future Sustainability Expectation	Beneficial for Society	I think my generation will create a more economically and ecologically sustainable world for the future generation than our parent's generation did.

Source: Survey

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## 4 Results, Findings and Discussion

The following section presents and discusses the results of the questionnaire data analysis in three major parts; (1) social capital, (2) social inequality and (3) interconnection and influence of social inequality on social capital. Table 11 summarizes the descriptive statistics and correlation analysis of all social capital variables measured in this research paper, which shall serve as a guiding framework for the parts (1) and (3).

In a first step, the obtained questionnaire results of social capital including the formulated hypothesis as well as its two-dimensionality will be presented. Secondly, the inequality scores - educational equity, income inequality and intergenerational justice - will be individually assessed. Thirdly, the central research question whether social inequality has an influence on the level of social capital will be analyzed and discussed. Lastly, the limitations of this research report will be outlined in the final subsection.

Additionally, the subsequent seven hypotheses will be, with the help of the obtained questionnaire data, tested and discussed throughout Section 4:

**Hypothesis 1 - Section 4.1.1:** *The disaggregated parts - social capital attitude and behavior - are expected to represent the totality of social capital, evidencing that social capital is a two-dimensional construct.*

**Hypothesis 2 - Section 4.3:** *The disaggregated parts - social capital attitude and behavior - as well as social capital as a whole are expected to yield different results when opposed to social inequality variables.*

**Hypothesis 3 - Section 4.1.4:** *Trust is expected to be the bedrock of social capital and thus to correlate with the majority of the individual social capital variables.*

**Hypothesis 4 - Section 4.1.4:** *Trust and trusting behavior, thus adherence to social norms and neighborhood relationship, are expected to statistically significantly correlate.*

**Hypothesis 5 - Section 4.3:** *Social Inequality given its omnipresence and alleged consequences on various dimensions on an individual's life is expected to influence social capital on attitudinal as well as behavioral level.*

**Hypothesis 6 - Section 4.3:** *The variables are predicted to score low on income inequality and to not significantly correlate with social capital (attitudes and behaviors).*

**Hypothesis 7 - Section 4.3.1:** *Educational Equity is expected to correlate with the variable 'perception of democracy' and 'political participation' as well as have a significant influence on social capital (attitudes and behaviors).*

Table 11: Social Capital Questionnaire Score

Variable	M*	SD	1	2	3	4	5	6	7	8	9	10	11	12
<b>1. Social Capital</b>	2.79	0.55												
<b>2. Social Capital Attitude</b>	3.34	0.74	.708***											
3. Generalized Trust	3.19	1.34	.595***	.804***										
4. Perception of Association	3.44	0.83	.385***	.591***	.187***									
5. Perception of Democracy	3.44	0.83	.459***	.628***	.220***	.176**								
<b>6. Social Capital Behavior</b>	2.52	0.61	.918**	.379***	.329***	.184***	.242***							
7. Adherence to Social Norms	2.31	0.99	.382***	.148***	.182***	.397	-.047	.427***						
8. Political Participation	3.33	1.10	.549***	.218***	.189***	-.049	.293***	.594***	.080					
9. Volunteering and Donations	1.71	1.22	.486***	.229***	.125	.180**	.155**	.522***	.083	.210***				
10. Neighborhood Relationship	2.40	1.10	.468***	.185***	.157**	.096	.077	.514***	.256***	.134	.242***			
11. Respect or Rule of Law	2.41	1.43	.447***	.269***	.236***	.197***	.155**	.438***	.020	.106	-.044	.015		
12. Governmental Institutions	2.94	1.43	.457***	.103	.103	.035	.084	.543***	.043	.318***	.077	.037	.017	

\* 5 Likert Scale: 0 (negative score) - 4 (positive score). // \*\* Correlation is significant at the 0.01 level (2-tailed). // \*\*\* Correlation is significant at the 0.05 level (2-tailed).

Source: SPSS/ Survey

## 4.1 Social Capital

### 4.1.1 Two-Dimensionality of Social Capital

As outlined in Section 3.2.1.2, in order to prove the two-dimensional conceptualization of social capital and subsequently answer hypothesis 1 of this research paper various statistical criterion were defined, namely: Chi-Square, Degree of Freedom, Probability, Phi Coefficient, Cronbach Alpha and Pearson Correlation. As portrayed in Table 12 all indexes' corresponding criteria are fulfilled. Therefore, the null hypothesis can be rejected - social capital can be viewed as a two-dimensional construct and the division between the attitudinal and behavioral dimension of social capital is statistically validated.

Table 12: Goodness of Fit Statistics for Two Dimensions of Social Capital

Index	Criteria	Score
Chi-Square	The smaller the better	29.96
Degree of Freedom	< 4	1
Probability	< .05	.000
Phi Coefficient	> .40	1.395
Cronbach Alpha	> .70	.835
Pearson Correlation	> .40	.379**

\*\* Pearson Correlation is significant at the 0.01 level (2-tailed)

Source: SPSS/ Survey

---

Thereupon, hypothesis 1 can be accepted. The disaggregated parts - social capital attitude and behavior - represent the totality of social capital, evidencing that social capital is a two-dimensional construct. The acceptance of hypothesis 1 will allow to not only analyze the two dimensions individually as well as collectively but also to assess social inequality's influence on the two spheres of social capital - attitude and behavior.

#### 4.1.2 Attitudinal Dimension

Table 13 depicts the percentage responses of the three variables - generalized trust and perception of association and democracy - measuring the attitudinal dimension of social capital.

Table 13: Descriptive Analysis of the Attitudinal Dimension of Social Capital

---

Variable Question	#	Response	%
<b>Generalized Trust:</b> In general, most people can be trusted.	1	Strongly Disagree	3.9
	2	Disagree	10.1
	3	Somewhat Disagree	13.5
	4	Undecided	21.7
	5	Somewhat Agree	38.2
	6	Agree	11.4
	7	Strongly Agree	1.0
<b>Perception of Associations:</b> I am convinced that my participation in voluntary service (civic and/or leisure time association) is beneficial for society (e.g. politics, sport, education etc.)	1	No	1
	2	Rather No	5.4
	3	Rather Yes	35.6
	4	Yes	57.9
<b>Perception of Democracy:</b> I think I personally profit from direct democracy. So, I can take an active part in shaping my future.	1	No	0.5
	2	Rather No	6.4
	3	Rather Yes	34.4
	4	Yes	58.6

Source: SPSS/ Survey

---

With a mean score of 3.19 and 50.6% of the participants agreeing that most people can be trusted, it can be concluded that, according to the participants, Switzerland represents overall an environment of trust. Similar to Zak and Knack's (2001) research on cross-country analysis of generalized trust, this research paper's Swiss sample achieves a percent average as high as the Nordic countries, which are the unrivaled leader in aggregate levels of generalized trust. Moreover, the two other



variables achieve a clear result; 93.5% and 93.0% of the participants acknowledge the importance of associations and democracy on the individual as well as societal level.

Table 14: Correlation Analysis Attitudinal Dimension of Social Capital

---

		<b>Generalized Trust</b>	<b>Perception of Democracy</b>	<b>Perception of Associations</b>
<b>Generalized Trust</b>	Pearson Correlation	1		
	Sig (2-tailed)			
	N	207		
<b>Perception of Democracy</b>	Pearson Correlation	.220**	1	
	Sig (2-tailed)	.002		
	N	200	203	
<b>Perception of Associations</b>	Pearson Correlation	.187**	.176*	1
	Sig (2-tailed)	.008	.013	
	N	199	197	202

\* Correlation is significant at the 0.01 level (2-tailed).  
 \*\* Correlation is significant at the 0.05 level (2-tailed).

Source: SPSS/ Survey

---

The Pearson Correlation Test is used to test correlations of ordinal data. At the attitudinal dimension, it can be observed, as shown in Table 14, that all three variables positively correlate at the .05 significance level. Not unexpectedly, the highest correlation is between general trust and perception of democracy. Various scholars have proved the link between trust and democracy more specifically democratic attributes (Brehm & Rahn, 1997; Levi, 1997; Offe, 1999; Putnam, 1993; Uslaner, 2003). As Uslaner (2003) aptly put it: "Democratic societies are trusting societies" (p. 1). Firstly because, democracy promotes trust (Brehm & Rahn, 1997). Or even, democratic regimes may be prerequisites for interpersonal trust (Muller & Seligson, 1994). Secondly, strong government performance makes people feel better about the government and ultimately more willing to cooperate with each other (Putnam, 1993). Thirdly, honesty in government and fairness may promote interpersonal trust (Offe, 1999). Especially in Switzerland, where the Swiss population, through their quarterly referendum votes, are regularly confronted to take democratic decisions, interpersonal trust plays a major role. It has to be noted,

however, that democracies make trust possible - they do not produce it (Uslaner, 2003).

#### 4.1.3 Behavioral Dimension

Table 15 illustrates the percentage responses of the six variables - adherence to social norms, political participation, volunteering and donations, neighborhood relationship, respect for the rule of law and governmental institutions - measuring the behavioral dimension of social capital.

Table 15: Descriptive Analysis of the Behavioral Dimension of Social Capital

---

Variable Question	#	Response	%
<b>Adherence to Social Norms:</b> Assume you lost your wallet (with ID). How likely do you think it will be returned to you?	1	Not Likely	4.3
	2	Not That Likely	14.8
	3	Somewhat Likely	36.8
	4	Likely	33.5
	5	Very Likely	10.5
<b>Political Participation:</b> How often do you generally vote in Swiss ballots/referendums?	1	Never	5.3
	2	Rarely	5.8
	3	Sometimes	28.0
	4	Almost Always	60.9
<b>Volunteering and Donations:</b> With the exception of religious organizations, in the past year have you volunteered your time or donated money? This could include volunteering for a health cause to fight a disease, a school program, or to help elderly or poor?	1	Not at All	19.8
	2	Rarely	25.6
	3	Sometimes	26.1
	4	Regularly	20.8
	5	Very Often	7.7
<b>Neighborhood Relationship:</b> Suppose there is a problem of general interest in your neighborhood (such as cut in the provision of water, electricity or gas) which is the likelihood that neighbors will mobilize together in order to solve the problem.	1	Not Likely	3.8
	2	Not That Likely	20.7
	3	Somewhat Likely	23.1
	4	Likely	36.1
	5	Very Likely	16.3

<p><b>Respect or Rule of Law:</b></p> <p>Assume that you have been working a student job the tax authority does not know about and will not find out about it. How likely are you to declare this additional income to the tax authority?</p>	1	No, I Would Not Declare it.	13.5
	2	Not Likely	19.2
	3	Undecided	10.6
	4	Likely	26.4
	5	Yes, I Would Declare it.	30.3
<p><b>Governmental Institutions:</b></p> <p>Recent political discussions have been about abolishing the mandatory fees that supported public broadcasting (No-Billag). Did you support this initiative?</p>	1	I Was Not Interested	7.5
	2	Yes	17.1
	3	Rather Yes	8.0
	4	Rather No	8.5
	5	No	58.8

Source: SPSS/ Survey

---

Overall it can be stated that the presented percentage responses indicate a positive tendency towards an elevated level of social capital among the participants.

The first variable - social norms and trustworthiness - demonstrates that 80 percent of the respondents believe that it is somewhat likely that a lost wallet will be returned to the proprietor. Similar to the generalized trust score, the Swiss sample of this research paper yields a very high percentage score compared to international averages (see Section 3.2.2.1).

The presented results of the attitudinal social capital variable - the perception of democracy - also translates into to high political participation of the participants. 28 percent responded that they sometimes and 61 percent almost always vote in Swiss referendums. Considering that most participants are between 21 and 25 years of age, this is an unexpectedly high result.

Contrarily surprising is the rather low engagement in voluntary work and donations. Nearly half of the respondents (45.4%) indicated that they do not or only rarely devote their time or money to voluntary activities. In contrast, only one quarter are regularly or very often engaging in voluntary work.

In line with the yielded positive scores of the generalized trust and trustworthiness variable, the neighborhood relationship question achieves likewise a favorable result. 75 percent of the participants affirm that if there is a problem of general interest in their neighborhood, it is likely that the neighbors will mobilize together in order to solve the problem.

The rule of law variable demonstrates that there is not only a high level of trust within the population but also towards institutions. More than half of the respondent (57%) would declare additional income to the tax authority even if they would not know about it.

Lastly, the Billag-Initiative, which sought to abolish the license fee used to finance public radio and television, was used as a specific and current example in quantifying the confidence in governmental institutions. The campaigners argued the fee violated the freedom of media choice for citizens because they pay a fee regardless of their media consumption. A 'Yes' to the Billag-Initiative would have brought 13'500 jobs at risk and an all-around privatization of radio and television broadcasting. Which, according to the opponent of the initiative, would have restricted diversity of opinion and liberty of the press as well as damaged democratic values. Similar to the results achieved in the ballot with 72 percent against the initiative, 67 percent of the participants answered 'No'. The rejection of this ballot demonstrated in various aspects the high level of social capital, also evidenced by the other results of this questionnaire, which exists in Switzerland. Firstly, on an institutional level, the dismissal showed the confidence in governmental institutions, their corresponding performance and that some societal issues shall remain centralized in governmental control. Moreover, on a societal level, the 'No' symbolized an overall social cohesion and solidarity, also regarding the jobs at risk.

Table 16: Correlation Analysis Behavioral Dimension of Social Capital

		<b>Adherence to Social Norms</b>	<b>Political Participation</b>	<b>Volunteering and Donations</b>	<b>Neighborhood Relationship</b>	<b>Respect or Rule of Law</b>	<b>Governmental Institutions</b>
<b>Adherence to Social Norms</b>	Pearson Correlation	1					
	Sig (2-tailed)						
	N	209					
<b>Political Participation</b>	Pearson Correlation	.080	1				
	Sig (2-tailed)	.253					
	N	207	207				
<b>Volunteering and Donations</b>	Pearson Correlation	.083	.210**	1			
	Sig (2-tailed)	.233	.002				
	N	206	205	207			
<b>Neighborhood Relationship</b>	Pearson Correlation	.256**	.134	.242**	1		
	Sig (2-tailed)	.000	.055	.000			
	N	208	206	205	208		
<b>Respect or Rule of Law</b>	Pearson Correlation	.020	.106	-.004	.015	1	
	Sig (2-tailed)	.773	.129	.995	.828		
	N	207	205	205	206	208	
<b>Governmental Institutions</b>	Pearson Correlation	.043	.318**	.077	.037	.017	1
	Sig (2-tailed)	.548	.000	.283	.607	.812	
	N	198	196	196	197	198	199

\* Correlation is significant at the 0.01 level (2-tailed).

\*\* Correlation is significant at the 0.05 level (2-tailed).

Source: SPSS/ Survey

Compared to the attitudinal dimension of social capital, a different picture emerges in the behavioral dimension (see Table 16). While most of the variables correlate positively, only four are statistically significant; adherence to social norms and neighborhood relationship, political participation and volunteering and donations, neighborhood relationship and volunteering and donations, and political participation and governmental institutions.

The four positive significant correlations evidence that individuals who are exposed or devote more of their time to associative or voluntary activities (voluntarism, donation or political participation) are also more likely to adhere to social norms, be trustworthy and build a neighborhood relationship.

#### 4.1.4 Trust the Bedrock of Social Capital

Table 17 displays the correlations between the generalized trust and the other individual and aggregate social capital variables.

Table 17: Correlation Analysis Generalized Trust Social Capital Variables

---

<b>Variables</b>	<b>Generalized Trust</b>
<b>Social Capital</b>	.595**
<b>Social Capital Attitude</b>	.804**
Perception of Association	.187**
Perception of Democracy	.220**
<b>Social Capital Behavior</b>	.329**
Adherence to Social Norms	.182**
Political Participation	.189**
Volunteering and Donations	.125
Neighborhood Relationship	.157*
Respect or Rule of Law	.236**
Governmental Institutions	.103

\* Correlation is significant at the 0.01 level (2-tailed).

\*\* Correlation is significant at the 0.05 level (2-tailed).

Source: SPSS/ Survey

As delineated in Section 3.2.2.1, interpersonal trust is by various social theorist believed to be the bedrock of social capital (Woolcock, 2001; Kawachi & Kim, 2006; Reeskens & Hooghe, 2008). Table 17 depicts that apart from two variables (Volunteering and Donations and Governmental Institutions) generalized trust positively correlates, with a minimum of 95 percent confidence, with all social capital variables including the aggregate level variables - social capital, social capital attitudes and social capital behavior. Therefore, the above-presented data proves, also validating hypothesis 3, that generalized trust is the bedrock of social capital and is the driving force behind the majority of the other social capital components.

The results in Table 17 not only reinforces Kim and Kawachi's (2006) argument that trust represents the fundament on which attitudinal components are built on but furthermore evidence that generalized trust also has a significant influence on the behavioral dimension of social capital.

Moreover, while a few scholars (Woolcock, 2001; Field, 2003) contend that trust is not an integral part of social capital, this research study indicates that interpersonal trust plays an essential role in social capital theory as well as in facilitating activities which foster an elevated level of social capital.

Lastly, Glaeser, Laibson and Sacerdote (2000) argued that the survey question - most people can be trusted - would rather predict trustworthy rather than trusting behavior. In contrast and in line with Keefer and Knack's (2003) proposition, this research study in hypothesis 4, argues that the generalized trust variable is able to capture aggregate levels of trust in a society. And hence, trusting behavior measured in 'adherence to social norms' and 'neighborhood relationship' should positively correlate with the generalized trust variable. Indeed, as delineated in Table 17, there is a significant positive correlation between the aforementioned variables and therefore hypothesis 4 is validated.

## 4.2 Social Inequality

### 4.2.1 Income Inequality

Table 18 details the percentage responses of the four variable questions in measuring income inequality.

Table 18: Descriptive Analysis of Income Inequality

---

Variable Question	#	Response	%
<b>Trust - Income and Wealth Distribution:</b> I think income and wealth is distributed fairly among the Swiss population.	1	Strongly Disagree	6.7
	2	Disagree	31.9
	3	Undecided	20.0
	4	Agree	39.0
	5	Strongly Agree	2.4
<b>BFM - Personal Compensation:</b> I think I personally am and will be fairly monetarily compensated in correspondence to my contribution.	1	Strongly Disagree	0.5
	2	Disagree	7.7
	3	Undecided	18.7
	4	Agree	60.8
	5	Strongly Agree	12.4
<b>BFS - CEO Remuneration:</b> I think the total remuneration (salary and bonuses) of Swiss CEOs is justified.	1	Strongly Disagree	9.1
	2	Disagree	37.8
	3	Undecided	23.9
	4	Agree	22.5
	5	Strongly Agree	6.7
<b>BFS - Public Policies:</b> I think the current public policies (e.g. progressive income taxes at federal and canton level) in Switzerland is conducive to economic growth and at the same time good in reducing extreme income inequality and thus fostering a more stable society.	1	Strongly Disagree	0.5
	2	Disagree	8.8
	3	Undecided	27.0
	4	Agree	52.0
	5	Strongly Agree	11.8

Source: SPSS/ Survey

---



Income inequality's questionnaire percentage scores show a mixed picture; with two questions with a clear tendency towards income equality and two questions which take a partially negative connotation.

The fear of widening the gap between the income and wealth distribution in Switzerland as well as the exorbitant CEO remuneration have increasingly been in the headlines of the Swiss media. Therefore, it is not surprising that in both questions no clear tendency can be observed. In each variable, one-fifth of the participants were undecided whether or not to agree with the corresponding statements. Nonetheless, while 41.4 percent did agree that income and wealth are distributed fairly among the Swiss population, representing a slightly positive tendency, only 29.2 percent agreed that the total remuneration of Swiss CEOs is justified. This is an unexpectedly low score considering that most of the participants are business students. The slight increase of Switzerland's Gini Coefficient but mainly the disproportionate increase of the 20 percent highest income compared to the lowest 20 percent income, could offer a potential explanation. However, as presented in Section 2.3.2.2, income inequality in Switzerland has remained stable since 1990 and has shown an above-average income equality score by global standards. Therefore, as mentioned above, the media inevitably also takes a decisive role in shaping the public opinion.

On the other hand, from an individual perspective (beneficial for me), 73.2 percent of the respondents believe that they are and will be fairly monetarily compensated in correspondence to their contribution. Which is supported by the fact that the median disposal income has risen in Switzerland by 14% over the last ten years.

Lastly, with 63.8 percent, the majority of the participants consent that current public policies (e.g., progressive income taxes at federal and canton level) in Switzerland are conducive to economic growth and are at the same time good in reducing extreme income inequality and thus fostering a more stable society.

## 4.2.2 Educational Equity

Table 19 portrays the percentage responses of the three educational equity variable questions.

Table 19: Descriptive Analysis of Educational Equity

---

Variable Question	#	Response	%
<b>Trust - Equality of Opportunity:</b> I think the Swiss educational system is fair and provides opportunities to everyone.	1	Strongly Disagree	1.9
	2	Disagree	4.8
	3	Undecided	4.8
	4	Agree	35.7
	5	Strongly Agree	52.9
<b>BFM - Professional Career:</b> I think my academic studies will help me to start a good professional career and will allow me to improve my socio-economic situation.	1	Strongly Disagree	0.5
	2	Disagree	1.4
	3	Undecided	6.7
	4	Agree	47.8
	5	Strongly Agree	43.5
<b>BFS - Meritocracy:</b> I think that the Swiss education system helps individuals to improve their socio-economic situation on the basis of merit and educational achievements.	1	Strongly Disagree	1.4
	2	Disagree	4.3
	3	Undecided	11.6
	4	Agree	51.7
	5	Strongly Agree	30.9

Source: SPSS/ Survey

---

The educational equity score presented in this research paper yielded some surprisingly positive and clear findings. Firstly, 88.6 percent consider the Swiss educational system to be fair and to provide the same opportunities to everyone. Secondly, on an individual level, 90.3 percent of the participants believe that their academic studies will help them start a good professional career and allow them to improve their socio-economic situation. Thirdly, on the societal dimension, 82.6

percent agree that the Swiss education system helps individuals to improve their socio-economic situation on the basis of merit and educational achievements.

Seitz, Metzger and Kobler (2005) noted that the Swiss educational system is designed to not provide all students with the same types of opportunities, but opportunities that should have the same societal value, hence a meritocratic approach. As displayed in Table 19, the findings are in line with the scholars' argument - more than two-thirds of the participants indicate that merit and educational achievements are the basis for ameliorating an individual's socio-economic situation.

In contrast, the identified equity problems (National Report on Equity, 2005) in the Swiss education system appear not to have any influence. While it could be argued that as the respondents are currently absolving a voluntary tertiary education and hence will attain a higher education degree, the survey results might be perceived overvalued, the National Report on Equity (2005) identified that equity problems in the Swiss education system exist throughout an individual's educational and professional career - from pre-school till after tertiary education. Thus, the participants, besides attaining a higher education degree, did and might still experience injustices. Moreover, as illustrated in Appendix 8.4 - 8.7 none of the three identified characteristics related to educational inequality (gender, socio-economic status and nationality) seem to have a significant influence on the result of the above-stated variables. In fact, as depicted in Table 20, some variables achieve even a higher score.

Table 20: Descriptive Analysis of Educational Equity by Demographics

Variable Question	% Strongly Agree/Agree	% Average
<b>Trust - Equality of Opportunity</b>		
Female	85.6	88.6
Foreign or Dual Citizenship	87.9	
Household Income below CHF 4'000	85.7	
<b>BFM - Professional Career</b>		
Female	90.8	90.3
Foreign or Dual Citizenship	90.4	
Household Income below CHF 4'000	85.8	
<b>BFS - Meritocracy</b>		
Female	83.1	82.6
Foreign or Dual Citizenship	82.9	
Household Income below CHF 4'000	92.3	

Source: SPSS/ Survey

The Swiss education equity problems presented in the National Report on Equity (2005) should nonetheless not be ignored - on the contrary. Seitz, Metzger and Kobler (2005) argued that the worldwide unrivaled high emphasize on general as well as vocational education, leads to a reproduction of values since the majority of the population has gone through the same system that perpetuates these inequalities. Khan (2010) calls this a perspective of "democratic inequality", in which "differences in outcomes are explained by the capacities of people" (p. 196) while masking the durable inequality that a democratic inequality perspective perpetuates. This rationale allows students to maintain their sense of accomplishment and self-worth in a meritocratic system that cultivates inequality. In other words, while there indisputably are inequality problems in the Swiss education system, inequalities are more tolerated if its character is perceived as 'fair', based on resources and capacities of people.

### 4.2.3 Intergenerational Justice

Table 21 illustrates the percentage responses of the four intergenerational justice variable questions.

Table 21: Descriptive Analysis of Intergenerational Justice

---

Variable Question	#	Response	%
<b>Current Situation:</b> I think the current economic situation in Switzerland is ____ .	1	Very Poor	0.0
	2	Poor	0.0
	3	Acceptable	7.2
	4	Good	55.8
	5	Very Good	37.0
<b>Personal Future Expectation:</b> I think I will be ____ financially than my parents.	1	Worse Off	9.3
	2	More or Less the Same	44.4
	3	Better Off	46.3
<b>General Future Financial Expectation:</b> Future generations in Switzerland will be ____ financially than me.	1	Worse Off	21.6
	2	More or Less the Same	63.8
	3	Better Off	14.6
<b>General Future Sustainability Expectation:</b> I think my generation will create a more economically and ecologically sustainable world for the future generation than our parent's generation did.	1	Disagree	5.3
	2	Somewhat Disagree	17.3
	3	Undecided	21.6
	4	Somewhat Agree	35.1
	5	Agree	20.7

Source: SPSS/ Survey

---

The questionnaires findings resulted similar to PEW's research (Stokes, 2017) on intergenerational justice. On the one hand, the respondents see their current national economy in a positive light. 92.8 percent indicated that the current economic situation in Switzerland is good or even very good. On the other hand, many are concerned about the future: 46.3 percent of the participants believe that they will be financially better off than their parents but only 14.6 percent are

convinced that the generations to come will grow up to be better off financially than them. PEW's research noted, especially in advanced economies, a comparable pessimistic sentiment. Just 34 percent believe that young people's financial prospects will be better off than the current generation (Stokes, 2017).

In contrast, the general opinion on sustainability appears to paint a more optimistic picture for the future. More than half of the participants (55.8%) think that their generation will create a more economically and ecologically sustainable world for the future generation than their parent's generation did.

### 4.3 Impact of Social Inequality on Social Capital

Table 22 displays the correlations between the aggregate level variables of social capital and the social inequality components - income inequality, educational equity and intergenerational justice.

The findings reveal that the two dimensions of social capital, attitude and behavior, as well as the totality of the concept yield different results when opposed to social inequality variables. Therefore, hypothesis 2 has been confirmed. Which is a meaningful discovery; it implies that certain types of inequalities might influence a person's attitude but not necessarily have a significant impact on that person's behavior. For example, a sharp increase in income inequality in a society could eventually lead to a deterioration of interpersonal trust or perception of democracy. This, however, does not unequivocally mean that the citizens will cooperate less or devote less time to associative activities, which in turn positively influence the social capital level. The presented findings are also in line with various observable societal phenomena. In which in societies where high social inequalities exist, especially in emerging markets (e.g., Vietnam), an elevated level of social collaboration, solidarity and thus also capital can be found. Nonetheless, as Fishbein and Ajzen's theory of reasoned action noted, attitudes influence behavior and then, in an iterative process, behaviors influence attitudes (Fishbein & Ajzen, 1980). Therefore, focusing simply on one or the other dimension will not be as effective as addressing both.

Table 22: Correlation Analysis Social Capital and Social Inequality

		Social Capital	Social Capital: Attitude	Social Capital: Behaviour	Social Inequality	Income Inequality	Educational Equity	Intergenerational Justice
Social Capital	Pearson Correlation	1						
	Sig (2-tailed)							
	N	210						
Social Capital: Attitude	Pearson Correlation	.708*	1					
	Sig (2-tailed)	.000						
	N	210	210					
Social Capital: Behaviour	Pearson Correlation	.918**	.379**	1				
	Sig (2-tailed)	.000	.000					
	N	210	210	210				
Social Inequality	Pearson Correlation	.196**	.239**	.112	1			
	Sig (2-tailed)	.004	.000	.105				
	N	210	210	210	210			
Income Inequality	Pearson Correlation	.088	.136*	.034	.658**	1		
	Sig (2-tailed)	.205	.048	.627	.000			
	N	210	210	210	210	210		
Educational Equity	Pearson Correlation	.259**	.301**	.162*	.776**	.263**	1	
	Sig (2-tailed)	.000	.000	.019	.000	.000		
	N	210	210	210	210	210	210	
Intergenerational Justice	Pearson Correlation	.019	.004	.011	.543**	.046	.220**	1
	Sig (2-tailed)	.787	.090	.163	.000	.511	.001	
	N	209	209	209	209	209	209	209

\* Correlation is significant at the 0.01 level (2-tailed).

\*\* Correlation is significant at the 0.05 level (2-tailed).

Source: SPSS/ Survey

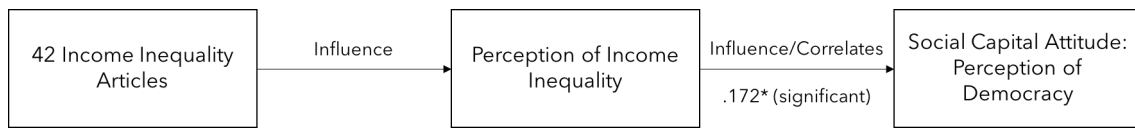
Slightly against expectation, and as formulated in hypothesis 5, social inequality does positively significantly correlate with social capital and social capital attitude, however not with social capital behavior. Thereupon, hypothesis 5 has only partially proven accurate. As mentioned before, the division of social capital into the two dimensions is of vital importance for understanding the influence of social inequality. Due to this division, this research study can demonstrate that social inequality does have an influence on the social capital level of a society. This influence, nonetheless, is only significant on the attitudinal and not behavioral dimension. Thus, a possible decrease in social activities, engagement or cooperation can, according to the result of this study, not entirely be explained by an increase in social inequality. The direct correlation between social inequality and capital can be described with the help of the iterative process, in which attitudes ultimately also influence behaviors. None withstanding, other aspects might have a stronger direct influence, which will be discussed in Section 5 (Suggestion for Further Research).

Table 22 also depicts the correlations between the three components of social inequality and social capital: Intergenerational justice appears to not impact social capital on any dimension. Also, income inequality only indicates to significantly correlate with social capital attitude. This result was, however, expected. Hypothesis 6 argued that due to the fact that income inequality remained stable for the last two decades and achieved an above-average income equality score by global standards, no significant correlation will be realized. The positive correlation between social capital attitude and social inequality can be argued to be to a large extent formed and disseminated by the Swiss media. As already addressed in Section 4.2.1, only last year (2017) the press agencies Schweizer Radio und Fernsehen [SRF], Blick, 20 Minuten and Neue Zürcher Zeitung [NZZ] published a total of 42 news article concerning income inequality. This can undoubtedly have an influence on an individual's perception of income inequality and ultimately influence the attitudinal dimension of social capital. Democratic values and beliefs, in particular, are the first to be questioned (see Appendix 8.8). Figure 14 portrays the above-explained casual arrow between income inequality and social capital attitudes.



Figure 14: Casual Arrow Income Inequality and Social Capital Attitudes

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Source: Survey/SPSS

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Lastly but most importantly, as detailed in Table 20, educational equity appears not only to significantly correlate with all dimensions of social capital, but also to be interlinked with the other social inequality components. The following sub-sections will assess educational equity's role as the main driver of social capital in more detail.

#### 4.3.1 Importance of Educational Equity

As delineated in Section 3.3.2, the importance of education for a fair and harmonious society finds much support among social scientists. In particular, the non-cognitive abilities, acquired during the educational phase, are believed to have a positive outcome on an individual's participation in the society and hence also the level of social capital (SKBF, 2005). Furthermore, SKBF (2005) argued that educational equity, in particular, the existence of equality of opportunity through meritocracy, encourages political participation and a functioning democracy.

While this research study also evidences the significance of education more precisely educational equity on the level of social capital of a society (see Table 22), the not-ignorable equity problems identified in the Swiss education system indicate that to some extent the identified high level of social capital in Switzerland is at risk. Figure 15 demonstrates that individuals experience injustices based on their gender, immigration background and socio-economic status throughout their educational career and beyond. This does not only endanger the vital acquisition of non-cognitive skills but also threaten Switzerland's social cohesion, solidarity and cooperation among the population.

Table 23: Correlation Analysis Social Capital and Social Inequality by Demographics

		Social Capital	Social Capital: Attitude	Social Capital: Behaviour	Social Inequality	Income Inequality	Intergenerational Justice
<b>Female:</b> Educational Equity	Pearson Correlation	<b>.312**</b>	<b>.351**</b>	<b>.218*</b>	<b>.769**</b>	.185	.106
	Sig (2-tailed)	.002	.000	.032	.000	.069	.302
	N	97	97	97	97	97	97
<b>Foreign or Dual Citizenship:</b> Educational Equity	Pearson Correlation	<b>.431**</b>	<b>.393**</b>	<b>.339**</b>	<b>.799**</b>	<b>.392**</b>	<b>.169</b>
	Sig (2-tailed)	.000	.000	.002	.000	.000	.127
	N	83	83	83	83	83	83
<b>Household Income below CHF 4'000 - CHF 10'000:</b> Educational Equity	Pearson Correlation	<b>.381**</b>	<b>.268*</b>	<b>.288*</b>	<b>.790**</b>	<b>.329**</b>	<b>.295*</b>
	Sig (2-tailed)	.001	.025	.016	.000	.005	.013
	N	70	70	70	70	70	70

\* Correlation is significant at the 0.01 level (2-tailed).

\*\* Correlation is significant at the 0.05 level (2-tailed).

Source: Survey/SPSS

Table 23 illustrates that the correlations remain visible and significant if controlled by gender, immigration background or socio-economic status. Which proves the robustness of this result. Moreover, hypothesis 7 argued, in reference to SKBF's findings, that due to Switzerland's meritocratic approach, educational equity is expected to correlate with the variable 'perception of democracy' and 'political participation'. As depicted in Table 24, educational equity appears to not only be significantly interlinked with the aforementioned variables but also with interpersonal trust. So, while hypothesis 7 can be confirmed, the proven correlation with generalized trust, which represents the bedrock of social capital, demonstrates the vital role educational equity plays on the level of social capital in a society.

Table 24: Correlation Analysis Educational Equity and Social Capital Variables

Variables	Educational Equity	*Female	*Immigration Background	*Socio-Economic Status
<b>Social Capital</b>	<b>.259**</b>	<b>.312**</b>	<b>.431**</b>	<b>.381**</b>
<b>Social Capital Attitude</b>	<b>.301**</b>	<b>.351**</b>	<b>.393**</b>	<b>.268**</b>
<b>Generalized Trust</b>	<b>.158*</b>	<b>.224*</b>	<b>.338**</b>	<b>.392**</b>
Perception of Association	.134	.131	.116	.281
<b>Perception of Democracy</b>	<b>.406**</b>	<b>.346**</b>	<b>.490**</b>	<b>.524**</b>
<b>Social Capital Behavior</b>	<b>.162*</b>	<b>.218*</b>	<b>.339**</b>	.184
Adherence to Social Norms	.071	.103	.181	.268
<b>Political Participation</b>	<b>.155*</b>	<b>.179*</b>	<b>.270*</b>	<b>.266*</b>
Volunteering and Donations	.047	.182	.206	.007
Neighborhood Relationship	.127	.170	.215	.256
Respect or Rule of Law	.113	.145	.147	-.010
Governmental Institutions	.003	-.105	.128	-.028

\* Correlation is significant at the 0.01 level (2-tailed). \*\* Correlation is significant at the 0.05 level (2-tailed).

Source: SPSS/ Survey

#### 4.3.2 Discussion: The Reproduction of Inequalities Through Meritocracy at the Expenses of Social Capital

"Reward for Work; Work for Reward" is a fundamental principle in the Swiss education system and work sphere. It represents the ideology of meritocracy in a system which rewards hard work and talent. At its core, meritocracy is a form of social engineering, aimed at identifying the talents of members of society so that individuals can be selected for appropriate opportunities (Khan, 2010). Such a system shall allow students with immigration background, different religion and socio-economic status as well as gender to have a fair competition. However, such fairness paradoxically leads to unfairness because of the existing inequalities between individuals. The degree to which these individuals have the same opportunities and can effectively change their social status has been questioned, already in the early days, by a rich body of literature (Karabel & Halsey, 1977; Bowles & Gintis, 1976; Bourdieu, 1984). Young (1958), in his book 'The Rise of the Meritocracy' which coined the term 'meritocracy', warned against a system in which the upper class will use notions of 'merit' to reproduce status and hence to sustain inequality in society.

Inequality issues will always be at the heart of societal discussions. Questions about inequality are not "Is there inequality?" but rather "Why do inequalities seem to reproduce themselves, considering the increased inclusion of democratic principles such as openness and access?". A possible explanation is that, if its character is perceived as 'fair', inequalities are more likely to be tolerated. In contrast, inherited inequalities which are transferred from generation to generation are more controversial. Societies are uncomfortable with the notion that the poor will always remain poor. Or, that ascribed characteristics such as religion, race, gender or socio-economic status determine an individual's life chances. A more contentious issue is the level of inequality. While some societies, including to some extent Switzerland, turn a blind eye on the gap between rich and poor if the poor attain a livable income, others feel that a widening gap in the distribution of resources and opportunities will generate social problems. The findings of this research study

contribute to the rich body of research that evidenced that inequality is 'bad' for societies and put the level of social capital at risk.

One of the most discussed social phenomena in recent years is that inequality has remained stable if not increased notwithstanding the fact that social institutions have increasingly allowed access to those previously excluded. Khan (2010) explained this as follows: "We live in a world of democratic inequality, by which I mean that our nation embraces the democratic principle of openness and access, yet as that embrace has increased so too have our levels of inequality. We often think of openness and equality as going hand in hand. And yet if we look at our experiences over the last fifty years, we can see that that is simply not the case" (p. 5).

If a better understanding shall be attained to why inequality is such a persistent phenomenon, the wealthy as well as the institutions that influence their production and maintenance must be assessed. Despite the fact, the income inequality in Switzerland, as delineated in Section 2.3.2.2, achieves an above-average income equality score by global standards. The income-richest 20 percent have a share of over 50 percent and earn approximately five times more than the average (FSO, 2017). While these results are undoubtedly not as severe as the ones of other advanced economies such as France or America, it surely also does not portray an equal environment. The findings in Table 22 demonstrate, however, that income inequality does not seem to have an important impact on the social capital level in Switzerland. Which is in line with the above-mentioned argument that as long as the lower class attains a livable income, existing gaps between rich and poor are more tolerated. The casual arrow depicted in Figure 14, nonetheless, is a warning sign that a sharp increase of income inequality will have a significant impact on the population's attitudinal dimension of social capital. Which in turn could put at risk the overall level of social capital.

These dual transformations of increasing openness and access, and yet maintenance of inequality is contradictory to traditional beliefs of how social processes work. How is it that the democratic ideal of greater openness has transferred into much better

life for the privileged few but stagnation for most of the remaining individuals? As evidenced by this research study and also supported by various social scientist (Coleman, 1988; Putnam, 1995; Sun, 1998; Hall, 2002; Ainsworth, 2002) education and educational equity plays a central role in the discussion of inequality and its reproduction. On the one hand, education is one of the best predictors of an individual's income level. Hence, schooling matters for wealth. On the other hand, the findings of this research paper suggest that educational equity is the main driver of social inequality.

And yet precisely in the educational system the National Report on Equity (2005) in Switzerland as well as various others research studies (Bourdieu, 1973; Willis, 1977; Bourdieu & Passeron, 1990; Apple, 2004; Apple, 2009) proved that a student's ascribed characteristics such as race, gender or socio-economic status determine his or her success chances. Moreover, this mechanism reproduces social inequalities and safeguard the continuity of elite privilege. Johnson (2006) in a more recent publication argued that 'the American Dream' and the ideology of meritocracy allows to overlook educational inequality and its profound impacts. The, in this research study, raised argument that education is a primary institution for the generation of social capital and driver of social equality obscures the reality that:

*" [...] sets of opportunities for children of different race and class backgrounds, structurally unequal from the start, further perpetuate structured inequality. The ideology of the American Dream, perhaps strongest around the arena of education, legitimizes race and class inequality by presenting these not as structures but as the inconsequential ramifications of meritocracy. In a context in which education is seen as the key to success and schools are persistently segregated and unequal, school decisions become pivotal for the life chances of a child. The ideology of meritocracy and the reality of the wealth gap operate together, and in the simple act of sending children to school, we contribute to perpetuating inequality" (Johnson, 2006, pp 172-173).*

So, while education has the potential to reduce inequality, today, it remains a principal venue for the reproduction of social inequalities and justification for the perpetuation of status quo. Which in turn puts the level of social capital in a society, including the one of Switzerland, in jeopardy.

#### 4.4 Limitations

There are three main limitations to this research paper;

Firstly, the homogeneity of the obtained data. All the participants were enrolled and active students at Zurich University of Applied Sciences. Thus, most students were from the German-speaking region of Switzerland and between 21 and 25 years old. Thereupon, limitations arise concerning geographical location as well as age.

Secondly, social capital in Switzerland is still a largely unresearched field. Although all of the survey items utilized for the purpose of this study were empirically validated, research validating the variables or questions are sometimes restricted to a particular culture or country. Which could not be guaranteed because of lack of data.

Thirdly, as this research paper is a cross-sectional study, a one-time look at the level of social capital and inequality is to some extent inadequate. This, due to the fact that the levels of social capital and inequality can fluctuate and variability connotes with time. Hence, only a longitudinal research can confirm or refute the findings of this research as well as bringing a deeper understanding of the impact of social inequality on social capital.

## 5 Suggestions for Future Research

This research has laid the foundation for considerable further research. Three of the areas for future research follow directly from the limitations discussed in the former Section. Several other areas could expand on the findings of this research.

### 5.1 Social Capital in Switzerland

As mentioned in the literature review and exemplified in the methodology part, social capital is indeed many-sided and difficult to measure. It is therefore suggested that further research should investigate and determine a universal theory that: (1) takes into account and does justice to the proven endogeneity of social capital in this research study and (2) determines methods by which the various forms and consequences can be analyzed.

In the case of Switzerland, to expand and improve the data, the following actions are recommended: Firstly, a systematic extension of the Federal Statistical Office's individual and household survey, incorporating social capital measurements. Secondly, the continuation of the Swiss Household Panel and the participation in international research programs such as the World Values Survey. Moreover, it would also be advantageous to participate in international research aimed to stringently define social capital and to develop suitable measuring instruments.

Further research is also recommended for the two dimensions of social capital - the attitudes and the behaviors of social capital. Fishbein-Ajzen theory of reasoned action proved that attitudes and behaviors are iterative, but that attitudes more strongly influence behaviors than vice versa. While this research study confirmed the two-dimensionality of social capital, further research is suggested to investigate if the iterative process holds also true in the context of social capital and which dimension more strongly influence the other. A better understanding of these interconnections will not only enrich the theory of social capital, but also enable social capital to be used more effectively as a tool of public policy.



## 5.2 Longitudinal Study of Educational Equity and Social Capital

In reference to the limitations of this research study, the first suggestion for future research is to expand the sample frame. As has been noted several times in this paper, the sample frame was limited to ZHAW students. Since most of the students come from the same geographical area and are in the same age structure, they are not representative of the general population. For the findings of this research to be generalizable to the Swiss population, the sample frame should be expanded to at least a random sampling of census blocks. The second recommendation for further research is to conduct a longitudinal study. The question of the social capital level inherently connotes time: things change over time. A second aspect of the time dimension is the relationship of educational equity to social capital. A strong association has been established, but causality has not. Causality has three characteristics: 1) a theoretical basis for believing that one thing may cause another, 2) a demonstrated association, and 3) precedence in time of the causing agent relative to the effect. This research established the first two but not the third. Longitudinal research can address both issues and the framework and structure have already been laid for doing so.

## 5.3 Impact of Immigration on Social Capital

In recent years, besides social inequality, ethnic diversity, community cohesion and immigration in Switzerland and other societies worldwide were well represented in public and policy debates. Moreover, there has been a growing preoccupation with the possible threats to social cohesion and identity represented by growing immigration flows and ethnic diversity. As this research paper only partially evidenced a direct link between social inequality and the level of social cooperation, cohesion and capital, a research study examining the effect of increased immigration is recommended. In fact, Mario Ritz, a fellow student at the ZHAW, has chosen to examine the above-mentioned interconnections and therefore it would be interesting to compare the obtained findings.

## 6 Conclusion

This study provides insights into how social inequality composed of income inequality, educational equity and intergenerational justice impacts the level of social capital. The research empirically validates that the two constructs are interlinked and influence each other as well as revealed significant findings in three areas: social capital theory, the importance of educational equity and the danger of meritocracy.

At the theoretical level, insights have been gained into both the fundament on which components of social capital is built on and the two-dimensional nature of social capital. The results proved that interpersonal trust is the bedrock of social capital and is the driving force behind the majority of the other components. This research study also confirmed that social capital can be viewed and used as a two-dimensional construct, composed of social capital attitude and behavior. This followed from the question that if the level of social capital is impacted, which dimension - the attitude or behavior - is more likely to be susceptible. Which in turn not only further expanded the understanding and mechanism of the existing theory, but also allowed to examine the construct on the two dimensions.

In the empirical section, robust support was found that social inequalities impact the level of social capital in a society. Nonetheless, the findings also revealed that the two dimensions of social capital, as well as the totality of the concept, yielded different results when opposed to social inequality variables. Which is an important discovery. It implies that certain types of inequalities might influence a person's attitude but not necessarily to have a significant impact on that person's behavior or vice versa. None withstanding, as Fishbein and Ajzen's theory of reasoned action noted, attitudes influence behavior and then, in an iterative process, behaviors influence attitudes. Therefore, focusing solely on one or the other dimension will not be as effective as addressing both. Based on these findings, it has been suggested that future research shall investigate the iterative process in the context of social capital and analyze which dimension more strongly influence the other. A better

understanding of these interconnections would also enable social capital to be used more effectively as a public policy tool.

The three measured components of social inequality revealed significant differences when opposed to social capital. On the one hand, intergenerational justice did not impact social capital on any dimension. Also, income inequality only indicated to significantly correlate with social capital attitude. This result was, however, expected since income inequality remained stable for the last two decades and achieved an above-average income equality score by global standards. Nonetheless, it represents a warning sign that a sharp increase in income inequality could have a significant impact on the population's attitudinal dimension. Which in turn could put the overall level of social capital at risk. On the other hand, educational equity appeared to not only significantly be correlated with all dimensions of social capital, but also to be interlinked with the other social inequality components.

The most decisive finding of this research study is the proved importance of educational equity. More specifically, the evidence that education rather than merely creating human capital plays a vital role in building a cohesive community and hence also impacts the level of social capital. The demonstration of education's relevance as a primary institution for the generation of social capital and driver of social equality is, however, obscured by the identified equity problems in the Swiss education system along with the threats of meritocracy. Educational inequalities based on gender, immigration background and socio-economic status throughout an individual's education does not only endanger the vital acquisition of non-cognitive skills, but also threaten Switzerland's level of social cohesion, solidarity and cooperation among the population.

Finally, one methodological conclusion from the data is inescapable: While education has the potential to reduce inequality, today, it remains a principal venue for the reproduction of social inequalities and justification for the perpetuation of status quo. Which in turn, puts the level of social capital in a society, including the one of Switzerland, in jeopardy.

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## 8 Appendix

### 8.1 Declaration of Authorship

I hereby declare that this thesis is my own work, that it has been generated by me without the help of others and that all sources are clearly referenced. I further declare that I will not supply any copies of this thesis to any third parties without written permission by the director of this degree program.

I understand that the Zurich University of Applied Sciences (ZHAW) reserves the right to use plagiarism detection software to make sure that the content of this thesis is completely original. I hereby agree for this thesis, naming me as its author, to be sent abroad for this purpose, where it will be kept in a database to which this university has sole access. I also understand that I will be entitled at any time to ask for my name and any other personal data to be deleted.

Furthermore, I understand that pursuant to § 16 (1) in connection with § 22 (2) of the federal law on universities of applied sciences (FaHG) all rights to this thesis are assigned to the ZHAW, except for the right to be identified as its author.

Student's name: Marco Lagalante

Winterthur, 24.05.2018 .....

Place, date Student's signature

## 8.2 Survey English

### Intro

Dear participant

This survey takes approximately 10 minutes and includes 35 questions. All your answers will be treated anonymously and only used for the purpose of our bachelor thesis.

Thank you in advance for your support.

Mario Ritz & Marco Lagalante

Students, Bachelor of International Management

### 1. Social Capital Attitude

	Strongly Agree	Agree	Somewhat Agree	Undecided	Somewhat Disagree	Disagree	Strongly Disagree
In general, most people can be trusted.							

	Yes	Rather No	Rather Yes	Yes
I think I personally profit from direct democracy. So, I can take an active part in shaping my future.				
I am convinced that my participation in voluntary service (civic and/or leisure time association) is beneficial for society (e.g. politics, sport, education etc.)				

## 2. Social Capital Behavior

	Very Often	Regularly	Sometimes	Rarely	Not at all
With the exception of religious organizations, in the past year have you volunteered your time or donated money? This could include volunteering for a health cause to fight a disease, a school program, or to help elderly or poor?					

	Yes	Rather Yes	Rather No	No	I was not interested
Recent political discussions have been about abolishing the mandatory fees that supported public broadcasting (No-Billag). Did you support this initiative?					

	Almost Always	Sometimes	Rarely	Never	I am not eligible to.
How often do you generally vote in Swiss ballots/referendums?					



	Yes, I would declare it.	Likely	Undecided	Not Likely	No, I would not declare it.
Assume that you have been working a student job the tax authority does not know about and will not find out about it. How likely are you to declare this additional income to the tax authority?					

	Very Likely	Likely	Somewhat Likely	Not that Likely	Not Likely
Suppose there is a problem of general interest in your neighborhood (such as cut in the provision of water, electricity or gas) which is the likelihood that neighbors will mobilize together in order to solve the problem.					
Assume you lost your wallet (with ID). How likely do you think it will be returned to you?					

### 3. Educational Equity

	Strongly Agree	Agree	Undecided	Disagree	Strongly Disagree
I think the Swiss educational system is fair and provides opportunities to everyone.					

I think that the Swiss education system helps individuals to improve their socio-economic situation on the basis of merit and educational achievements.					
I think my academic studies will help me to start a good professional career and will allow me to improve my socio-economic situation.					

#### 4. Income Inequality

	Strongly Agree	Agree	Undecided	Disagree	Strongly Disagree
I think income and wealth is distributed fairly among the Swiss population.					
I think the total remuneration (salary and bonuses) of Swiss CEOs is justified.					
I think the current public policies (e.g. progressive income taxes at federal and canton level) in Switzerland is conducive to economic growth and at the same time good in reducing extreme income inequality and thus fostering a more stable society.					
I think I personally am and will be fairly monetarily compensated in correspondence to my contribution.					

### 5. Intergenerational Justice

	Very Good	Good	Acceptable	Poor	Very Poor
I think the current economic situation in Switzerland is ____ .					

	Better Off	More or less on the same level	Worse Off
I think I will be ____ financially than my parents.			
Future generations in Switzerland will be ____ financially than me.			

	Agree	Somewhat Agree	Undecided	Somewhat Disagree	Disagree
I think my generation will create a more economically and ecologically sustainable world for the future generation than our parent's generation did.					

### 8.3 Survey German

#### Intro

Liebe Teilnehmerin

Lieber Teilnehmer

Die Umfrage dauert ca. 10 Minuten und umfasst 35 Fragen. Alle Antworten bleiben anonym und werden ausschliesslich für unsere Bachelorarbeit verwendet.

Wir danken dir für deine Zeit und wertvolle Unterstützung.

Mario Ritz & Marco Lagalante

International Management Bachelor Studiengang  
 ZHAW Zürcher Hochschule für Angewandte Wissenschaften  
 School of Management and Law

#### 1. Social Capital Attitude

	Stimme sehr zu	Stimme zu	Stimme eher zu	Unentschlossen	Stimme eher nicht zu	Stimme nicht zu	Stimme überhaupt nicht zu
Den meisten Leuten kann man im grossen und ganzen vertrauen.							

	Ja	Eher Ja	Eher Nein	Nein
Ich denke, dass ich persönlich vom demokratischen System in der Schweiz profitiere, da ich hiermit aktiv auch meine Zukunft				

mitgestalte.				
Ich bin überzeugt, dass das Leisten von Freiwilligenarbeit und ein intaktes Vereinswesen (z.B. Politik, Sport, Bildung) eine positive Auswirkung auf die gesamte Gesellschaft hat.				

## 2. Social Capital Behavior

	Sehr oft	Regelmässig	Manchmal	Selten	Nie
Ausgenommen von religiösen Organisationen, hast du im letzten Jahr Freiwilligenarbeit geleistet oder Geld gespendet? Dies schliesst Freiwilligenarbeit und Spenden für das Gesundheitswesen, Schulprogramme, Hilfeleistungen für alte Menschen und Arme, wie auch die Teilnahme an Kulturanlässen mit ein.					

	Ja	Eher Ja	Eher Nein	Nein	Ich war nicht interessiert
Letztens wurde die Abschaffung der Gebühren zur Unterstützung des öffentlichen Rundfunks in Betracht gezogen (No-Billag). Hast du diese Initiative unterstützt?					

	Fast Immer	Gelegentlich	Selten	Nie	Kann nicht
Wie oft nimmst du an Volksabstimmungen teil?					

	Ja, ich würde es angeben	Wahrscheinlich	Unentschlossen	Unwahrscheinlich	Nein, ich würde es nicht angeben.
Angenommen, du hast einen Studentenjob, von dem das Steueramt nichts weiss. Wie wahrscheinlich ist es, dass du dieses zusätzliche Einkommen deklarierst?					

	Sehr Wahrscheinlich (Wahr.)	Wahr.	Etwas Wahr.	Nicht so Wahr.	Nicht Wahr.
Angenommen, es gibt ein Problem von allgemeinem Interesse in deiner Nachbarschaft (z. B. eine Kürzung der Bereitstellung von Wasser, Strom oder Gas); Wie hoch ist die Wahrscheinlichkeit, dass die Nachbarschaft sich mobilisiert, um das Problem zu lösen?					
Angenommen, du hast dein Portemonnaie verloren (mit ID). Wie wahrscheinlich ist es, deiner Meinung nach, dass du es wieder erhältst?					

### 3. Educational Equity

	Stimme zu	Stimme eher zu	Unentschlossen	Stimme eher nicht zu	Stimme nicht zu
Meiner Meinung nach ist das schweizerische Bildungssystem gerecht und bietet gleiche Bildungschancen für alle.					
Meiner Meinung nach ermöglicht das schweizerische Bildungssystem Einzelpersonen ihre sozioökonomische Situation anhand von Verdienst und Leistung zu verbessern.					
Meiner Meinung nach ermöglicht mir mein Studium eine gute berufliche Karriere.					

### 4. Income Inequality

	Stimme zu	Stimme eher zu	Unentschlossen	Stimme eher nicht zu	Stimme nicht zu
Meiner Meinung nach sind Einkommen und Vermögen in der Schweiz gerecht verteilt.					
Meiner Meinung nach ist die Gesamtvergütung (Gehalt und Boni) der Schweizer CEOs gerechtfertigt.					
Meiner Meinung nach fördert das gegenwärtige					

Schweizer Steuersystem (z.B. progressive Einkommenssteuern, Steuerwettbewerb, etc.) eine gesunde wirtschaftliche Entwicklung einerseits, wie auch die Aufrechterhaltung einer stabilen Gesellschaft, indem es extreme Einkommensungleichheiten verringert.					
Meiner Meinung nach bin und werde ich in der Schweiz meinem Beitrag entsprechend lohnmässig fair entschädigt.					

### 5. Intergenerational Justice

	Sehr Gut	Gut	Akzeptabel	Schlecht	Sehr Schlecht
Die aktuelle wirtschaftliche Lage in der Schweiz ist _____ .					

	Besser	Etwa Gleich	Schlechter
Ich denke, ich werde finanziell _____ dastehen als meine Eltern.			
Künftige Generationen in der Schweiz werden finanziell _____ dastehen als ich.			



	Stimme zu	Stimme eher zu	Unentschlossen	Stimme eher nicht zu	Stimme nicht zu
Meiner Meinung nach wird meine Generation für die zukünftigen Generationen eine ökonomisch und ökologisch nachhaltigere Welt schaffen als die Generation meiner Eltern.					

## 8.4 Educational Equity - Female Score

Variable Question	#	Response	%
<b>Trust - Equality of Opportunity:</b> I think the Swiss educational system is fair and provides opportunities to everyone.	1	Strongly Disagree	1.0
	2	Disagree	6.2
	3	Undecided	7.2
	4	Agree	37.1
	5	Strongly Agree	48.5
<b>BFM - Professional Career:</b> I think my academic studies will help me to start a good professional career and will allow me to improve my socio-economic situation.	1	Strongly Disagree	0.0
	2	Disagree	2.1
	3	Undecided	7.2
	4	Agree	45.4
	5	Strongly Agree	45.4
<b>BFS - Meritocracy:</b> I think that the Swiss education system helps individuals to improve their socio-economic situation on the basis of merit and educational achievements.	1	Strongly Disagree	1.1
	2	Disagree	5.3
	3	Undecided	10.5
	4	Agree	50.5
	5	Strongly Agree	32.6

## 8.5 Educational Equity - Male Score

Variable Question	#	Response	%
<b>Trust - Equality of Opportunity:</b> I think the Swiss educational system is fair and provides opportunities to everyone.	1	Strongly Disagree	1.9
	2	Disagree	3.8
	3	Undecided	2.8
	4	Agree	34.0
	5	Strongly Agree	57.5
<b>BFM - Professional Career:</b> I think my academic studies will help me to start a good professional career and will allow me to improve my socio-economic situation.	1	Strongly Disagree	0.0
	2	Disagree	1.0
	3	Undecided	4.8
	4	Agree	52.4
	5	Strongly Agree	41.9
<b>BFS - Meritocracy:</b> I think that the Swiss education system helps individuals to improve their socio-economic situation on the basis of merit and educational achievements.	1	Strongly Disagree	1.0
	2	Disagree	3.8
	3	Undecided	12.4
	4	Agree	52.4
	5	Strongly Agree	30.5

## 8.6 Educational Equity - Foreign Nationality or Dual Citizen

Variable Question	#	Response	%
<b>Trust - Equality of Opportunity:</b> I think the Swiss educational system is fair and provides opportunities to everyone.	1	Strongly Disagree	2.4
	2	Disagree	6.0
	3	Undecided	3.6
	4	Agree	33.7
	5	Strongly Agree	54.2
<b>BFM - Professional Career:</b> I think my academic studies will help me to start a good professional career and will allow me to improve my socio-economic situation.	1	Strongly Disagree	0.0
	2	Disagree	2.4
	3	Undecided	7.2
	4	Agree	39.8
	5	Strongly Agree	50.6
<b>BFS - Meritocracy:</b> I think that the Swiss education system helps individuals to improve their socio-economic situation on the basis of merit and educational achievements.	1	Strongly Disagree	1.2
	2	Disagree	4.9
	3	Undecided	11.0
	4	Agree	51.2
	5	Strongly Agree	31.7

## 8.7 Educational Equity - Household Income Below CHF 4'000

Variable Question	#	Response	%
<b>Trust - Equality of Opportunity:</b> I think the Swiss educational system is fair and provides opportunities to everyone.	1	Strongly Disagree	7.1
	2	Disagree	0.0
	3	Undecided	7.1
	4	Agree	21.4
	5	Strongly Agree	64.3
<b>BFM - Professional Career:</b> I think my academic studies will help me to start a good professional career and will allow me to improve my socio-economic situation.	1	Strongly Disagree	0.0
	2	Disagree	0.0
	3	Undecided	14.3
	4	Agree	42.9
	5	Strongly Agree	42.9
<b>BFS - Meritocracy:</b> I think that the Swiss education system helps individuals to improve their socio-economic situation on the basis of merit and educational achievements.	1	Strongly Disagree	7.7
	2	Disagree	0.0
	3	Undecided	0.0
	4	Agree	53.8
	5	Strongly Agree	38.5

## 8.8 Correlation Income Inequality - Social Capital Attitude

<b>Variables</b>	<b>Income Inequality</b>
Generalized Trust	.042
<b>Perception of Democracy</b>	<b>.172*</b>
Perception of Associations	.121

\* Correlation is significant at the 0.01 level (2-tailed).