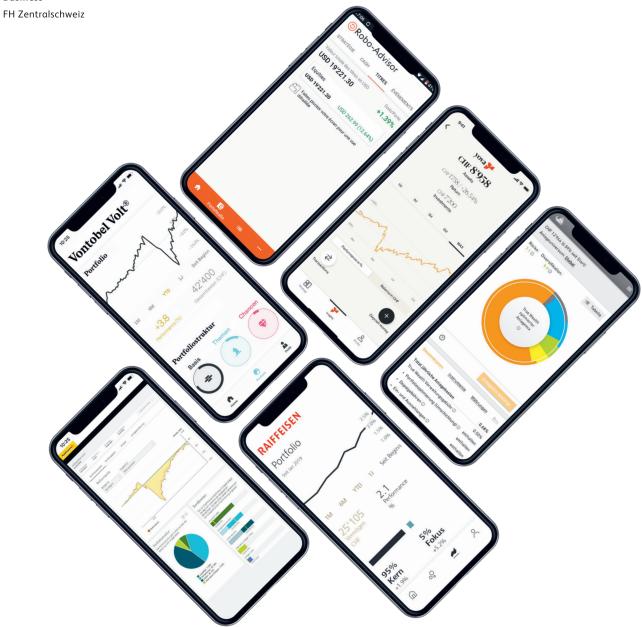
HOCHSCHULE LUZERN

Business



Digital Investing in Switzerland – A Market with Potential

A study published by the Lucerne University of Applied Sciences and Arts in collaboration with Raiffeisen and Vontobel, based on a representative survey

Authors: Prof. Dr. Andreas Dietrich, Dr. Tatiana Agnesens, Reto Wernli

RAIFFEISEN Vontobel

Contents

List	of figures	
	Introduction	
2.	The providers: business models and market overview	
2.1.	Digital investing solutions: four business models	5
2.2.	Overview of digital investing solutions providers	6
2.3.	Characteristics of digital investing	6
3.	The consumers: which clients are (potential) users of digital investing solutions?	9
3.1.	Overview of random sample	9
3.2.	General statements regarding investing and investment behavior	12
3.3.	Digital investing	19
3.4.	Pillar 3a	27
4.	Conclusion	32

List of figures

Figure 1: The four digital investing business models (Swisscom & IFZ, 2015)	5
Figure 2: Overview of Swiss digital investing solutions (Swisscom & IFZ, 2019)	6
Figure 3: The investment management style of digital providers	7
Figure 4: Assessment of digital investing business models in Switzerland (Swisscom & IFZ, 2019)	8
Figure 5: Participants (n=1,217) by region, area where they reside, age group, gender and household	l size
	10
Figure 6: Breakdown of participants (n=1,217) by education, employment status, income, financial v	wealth
and age group	11
Figure 7: Influence of the highest level of education attained on wealth	12
Figure 8: Participants' house bank in total and by region (n=1,217)	12
Figure 9: How interested are you in financial markets?	13
Figure 10: Do you currently hold securities or have you held securities in the past?	14
Figure 11: Which of the following investor types best applies to you?	15
Figure 12: Whom/what do you consult when making investment decisions?	
Figure 13: Which goals do you pursue with your investments?	17
Figure 14: According to which time horizon do you usually invest?	17
Figure 15: How do you classify your risk appetite when investing?	18
Figure 16: Which of the following investment products have you invested in?	18
Figure 17: How familiar are you with digital investing solutions?	20
Figure 18: Which digital investing offerings are you familiar with?	21
Figure 19: Investors by interest and use of digital investing products	22
Figure 20: Digital investing types by risk and autonomy score	23
Figure 21: Modeled probability of use by risk and autonomy score	23
Figure 22: Which of the following criteria were or would be most important when selecting a provide	er?.24
Figure 23: Why can you not see yourself using digital investing offerings?	25
Figure 24: What percentage of your assets have you invested in such products/would you invest in	
product?	25
Figure 25: How likely is it that you will "invest digitally" with the following partners in the future?	26
Figure 26: Which investment products could you see yourself investing in as part of a digital po	rtfolio
management solution?	
Figure 27: Do you have a Pillar 3a account?	
Figure 28: What percentage of your Pillar 3a savings have you invested in securities?	29
Figure 29: Can you see yourself investing part of your Pillar 3a assets digitally in the next 12 months?	?30
Figure 30: In your opinion, how important are the following features for a digital 3a account? (scale figure 30: In your opinion, how important are the following features for a digital 3a account?	rom 1-
5, with 5 being very important and 1 not important)	31

1. Introduction

Expertise in constructing securities portfolios, providing investment advice and using in-depth analyses to allocate assets with or for clients with a view to creating value in the short, medium and long term are the hallmarks of many banks. However, the emergence of new technologies and evolving client behavior are changing investment advisory, which is an important source of revenue for banks. In addition, new technologies and intelligent algorithms, in conjunction with the ubiquity of connectivity and mobile devices, are facilitating digitalization in the investing business. Certain client segments are now better informed than in the past, and therefore have increased demands with regard to digital and more personalized banking services.

In this study, we provide an overview, among other things, of the offerings currently available in the Swiss investing landscape. A multitude of innovative investing offerings is available today in Switzerland. These consist on the one hand of various fintech start-ups with new business models that have made inroads in this market. On the other hand, they include digital investing solutions launched by a number of established banks in response to these developments. Clients can now inform themselves about investments in a variety of ways, discuss investments as well as opportunities and risks in communities, and manage their money digitally.

Although there are numerous (also) Swiss studies that focus on different providers in the market, information about the behavior and wishes of Swiss investors with regard to digitalization is still rather scarce. This study therefore aims to shed light on the consumer perspective in this area through a comprehensive survey conducted with over 1,200 participants. Among other things, the survey explores the level of interest in digital investing solutions, the reasons that speak for or against the use of such digital investing business models, which investor types would be willing to have their money managed via digital channels and which clients will invest what percentage of their assets in such products in the future.

2. The providers: business models and market overview

In this chapter, we examine the digital investing providers in Switzerland. For the purposes of this study, we consider "digital investing" to be all forms of investing (discretionary mandates, investment advisory or social trading) for which an individualized and usually algorithm-based investment strategy is proposed, implemented or replicated either exclusively, or as an additional tool, online, and made available to the client in a B2C context for autonomous use online (Swisscom & IFZ, 2019). From a methodological standpoint, we have assigned these providers to four different digital investing business models, which were defined in the study "Digitales Anlegen Momentaufnahme 2015 und Ausblick 2020" (Digital Investing Snapshot 2015 and Outlook 2020).

2.1. Digital investing solutions: four business models

In 2015, the Swiss market for digital investing consisted of only seven providers and was thus still in its infancy. Nevertheless, the study "Digitales Anlegen Momentaufnahme 2015 und Ausblick 2020" (Digital Investing Snapshot 2015 and Outlook 2020) identified the four business models that digital investing providers continue to use today (see Figure 1): social trading, robo-advisors, the hybrid model and digital advisory.

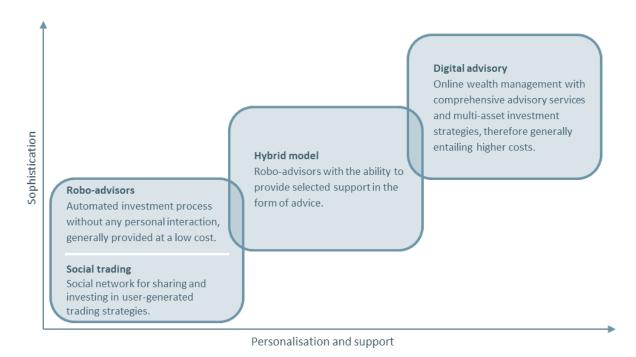


Figure 1: The four digital investing business models (Swisscom & IFZ, 2015)

In the 2015 study, a two-dimensional grid was developed to differentiate between the four business models. The "Sophistication" dimension was measured based on several criteria that can be used to analyze and distinguish the sophistication of the investment process in particular. The "Personalization & support" dimension was also assessed according to several criteria, which in particular reflect the investment recommendation's degree of customization.

Using these two dimensions, the individual providers can be shown in a two-dimensional graph that makes it possible to directly compare the respective business models. Overall, the assessment of the current business models of digital investing providers in the Swiss market shows broad coverage particularly in the

areas of robo-advisory and digital advisory. Conversely, the social trading and hybrid models are covered by only a few providers. Many bank offerings in the area of digital investing tend to primarily support the client advisor and do not allow the end client to work with the platform autonomously.

2.2. Overview of digital investing solutions providers

The number of digital investing solutions providers in Switzerland has almost tripled since 2015: in addition to the offerings of established financial services providers, a number of fintech start-ups now also exist, as do collaborations between established financial services providers and start-ups, and collaborations between established financial services providers (see

Figure 2). However, in 2019, three solutions – Investomat (Glarner Kantonalbank), ELVIA e-invest (Allianz) and Scalable Capital – were taken off the market.

Most providers operate in the so-called B2C segment, meaning they provide their own solutions directly to end clients. Such solutions are offered by both fintech start-ups as well as by established financial services providers. However, the B2B segment, in which solutions are offered to banks or institutional clients, has grown steadily in recent years. Various "hybrid forms" thereof exist. For example, True Wealth offers its solution directly to end clients (B2C). However, banks and other financial services providers can also purchase the corresponding solution as a white-label product and adapt it as desired. In Switzerland, the True Wealth solution is used at Basellandschaftliche Kantonalbank (since 2017) and Regiobank Solothurn (since 2019). An overview of various digital investing solutions is provided in Figure 2¹.

Start-ups	Established financial services providers	Cooperations between start-ups and established financial services providers	Cooperations between established financial services providers
Clear Minds Descartes Finance INVESTORY Plattform Säule Schweiz (PSS) Selma Finance Simplewealth True Wealth wikifolio Yova	Bank CIC (clevercircles) PostFinance (e-asset management) Swissquote (ePrivate Banking) Vontobel (Volt) VZ Finanzportal (Investing with ETFs)	Descartes Finance & BSU (investclick.ch) True Wealth & BLKB (Digifolio) True Wealth & Regiobank Solothurn (regiolnvest)	Raiffeisen & Vontobel (Rio)

Figure 2: Overview of Swiss digital investing solutions (Swisscom & IFZ, 2019)

2.3. Characteristics of digital investing

In the media, the term robo-advisor is often used as a general term for digital investing. However, robo-advisors are actually used for a wide variety of digital investing solutions. In the narrow sense, robo-advisors are purely digital portfolio managers that function without any human intervention. A computer program constructs a diversified model portfolio, generally consisting of low-cost ETFs and index funds, that corresponds to the client's risk profile, which is determined based on an online questionnaire. The portfolio is regularly rebalanced in order to continuously remain in line with the client's risk preferences. Many providers, however, deviate from this narrow definition by offering active portfolio management instead of purely passive investments and/or by providing human-supported advice in addition to a digital user interface.

 $^{^{\}mathrm{1}}$ We have not taken the digital Pillar 3a providers into consideration in this chapter.

The distinction between active and passive investment styles can be made at the portfolio construction (portfolio level) and the investment universe (securities level) level. At the securities level, the passive approach incorporates ETFs and index funds only, while the active approach includes other instruments and even single stocks. At the portfolio level, the passive approach is limited to regular rebalancing to realign the portfolio with the strategic asset allocation (SAA), while the active approach includes additional services such as risk management or tactical asset allocation (TAA). According to this classification, only five of the 18 digital solutions assessed are purely passive in terms of both product selection and portfolio construction. All other providers deviate from the passive-only approach and integrate active components into their strategies (see Figure 3).

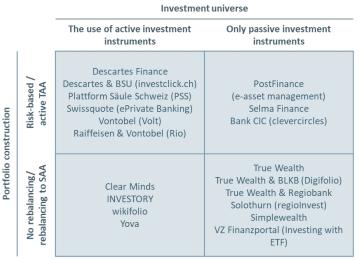


Figure 3: The investment management style of digital providers

As mentioned, robo-advisory solutions and hybrid models differ not only in terms of their investment management style but also with regard to the advice they offer. For more technical matters, many platforms provide support by telephone, e-mail or chat. With the hybrid approach, sporadic advice is also offered. Advisory support is available primarily from the established providers. One exception to this is the start-up Clear Minds, where clients can choose between the "Online" or "Personal" options and receive personal advice for a fee of 1% (incl. safekeeping fee).

Providers are also increasingly attempting to differentiate themselves through additional features relating to visual appeal, fee structure, service, investment strategy and target segment. As a result, a very heterogeneous range of products and services has emerged. The line between "true" robo-advisory solutions and digitally-supported, traditional portfolio management has become blurry (see Figure 4). This development is positive for investors: they now have a wide range of business models to choose from.

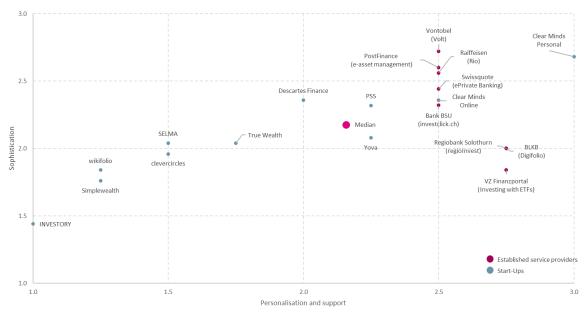


Figure 4: Assessment of digital investing business models in Switzerland (Swisscom & IFZ, 2019)

Despite a rapidly growing number of providers and the increasingly diverse range of products and services available, developments in terms of volumes have been rather disappointing in recent years. If the Pillar 3a solutions are excluded (e.g. the fintech VIAC has grown its volume to CHF 500 million), the two most important market participants are currently Swissquote (CHF 235 million) and True Wealth (CHF 290 million).

One reason for these rather low volumes is the particularities of the Swiss financial center as it compares to other such international centers. While in countries like the UK and the US, smaller clients tend to be neglected by banks for regulatory reasons, clients in Switzerland are courted by almost all retail banks. Secondly, many people are not familiar with the concept of digital investing opportunities. This is not least due to the fact that the larger retail banks, and even the two big banks, did not offer digital investing until this summer. With Vontobel's market entry and the newly launched offerings of Credit Suisse, PostFinance and Raiffeisen, this could possibly change soon. Trust is another important factor. The entry of established banks into this segment will undoubtedly be an important step in enabling this market to further develop. Finally, costs also play a role. Compared to foreign markets (especially the US), fees in Switzerland are only attractive in certain areas (IFZ/AMP Asset Management Study 2019).

3. The consumers: which clients are (potential) users of digital investing solutions?

The LINK Institute conducted a comprehensive online survey to analyze the relevance, needs and user behavior of the Swiss population in the area of (digital) investing and to quantify the interest in digital investing on the consumer side. The first step of this survey was to determine respondents' general affinity for "investing" and their "investment behavior". In a second step, they were asked whether, among other things, they were familiar with, used or could see themselves using digital investing offerings in the future. In addition, the participants were asked about their need for a digital 3a account and which features such an account should have.

3.1. Overview of random sample

1,217 people living in Switzerland participated in the survey. They answered the questionnaire between May 20 and June 3, 2020.² Figure 5 shows the descriptive statistics of this random sample. Corresponding with the population in Switzerland, 72% of the survey participants come from German-speaking Switzerland, 24% from French-speaking Switzerland and 4% from Canton Ticino. The majority of the participants live in cities or their surrounding areas (79%).

In our analyses, we have divided the data into five age groups (Pew Research Center, 2019):

- Generation Z (born 1997-2012)³
- Millennials also called Generation Y (born 1981-1996)
- Generation X (born 1965-1980)
- Baby Boomers (born 1955-1964)4
- 65 and above (born 1954 or earlier)

The youngest person in our random sample is 18 years old and the oldest person is 79. Generation X (37%) and Millennials (31%) account for the largest shares in the sample. The genders are represented in roughly equal proportions, both in the different age groups and in the overall sample. For household size, the share of smaller (1-2 person) and larger (3+ person) households is also balanced.

² Standard weighting by age, gender and region, and marginal mean weighting by employment status and household size. The table with the shares per sub-category in the random sample and the population as well as the weighting factors can be found in Appendix 1. For the age categories, a more refined subdivision was applied in the figures than in the weighting.

³ Of this group, only people born in 2002 or earlier were surveyed.

⁴ Baby Boomers are usually defined as those born between 1946-1964. Because retirement results in changed preferences with regard to the topic being addressed, we have divided the Baby Boomers into under and over 65-year-olds.

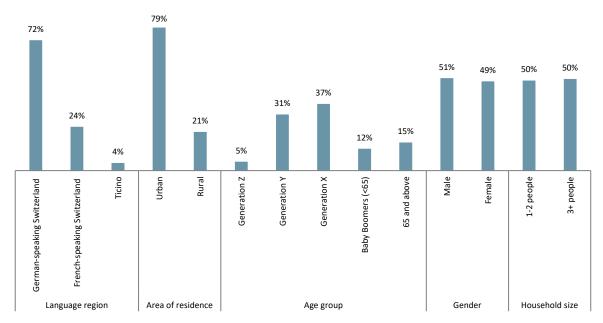


Figure 5: Participants (n=1,217) by region, area where they reside, age group, gender and household size

In addition to origin, gender, age and situation in life, the participants were also asked about the highest level of education they have attained as well as their employment status and income (see Figure 6). A distinction was made between a low/medium level of education (compulsory school/upper secondary level) and higher education (university degree). Less than half of the respondents have a university degree, with men who participated in this survey tending to be better educated than women. Millennials account for the highest percentage of university graduates (55%). Due to their young age, the percentage of university graduates is lowest among Generation Z. A large majority of those surveyed are employed (69%), with the share of employed being higher for men than for women. The share of employed people is highest among Generation X (87%), Millennials (83%) and Baby Boomers (78%). In the 65 and above age group, the majority of people (88%) are not (no longer) employed as they have reached retirement age. Most Generation Z respondents (61%) are still receiving their education. The monthly household income (gross in CHF) of the participants is mainly dependent on whether or not they are employed. People who are employed have a higher average income than people who are still receiving their education or people who have retired. The women in our random sample have a lower average income than men.

The participants were then asked about their financial wealth. Slightly more than half of the respondents indicate their financial wealth is less than CHF 100,000 (see Figure 6). 22% of the respondents have a financial wealth of less than CHF 20,000, whereas the wealth of around 7% of the respondents is above CHF 500,000. 16% of the participants did not provide any information about their financial wealth. Unsurprisingly, the financial wealth indicated increases with age. Furthermore, women in our random sample tend to have less financial wealth than men.

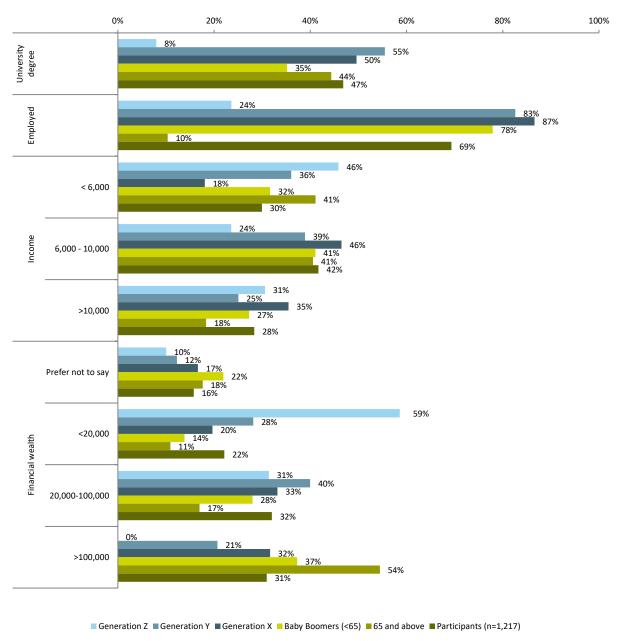


Figure 6: Breakdown of participants (n=1,217) by education, employment status, income, financial wealth and age group

The influence of the highest level of education attained on wealth is shown in Figure 7. The expected probability of having assets in excess of CHF 100,000 increases significantly in all age groups with a higher level of education – with the exception of Baby Boomers. Generation Z was not included in this analysis, as a large segment thereof is currently receiving their education. These results confirm that the level of education attained has a relevant influence when analyzing a client's potential with regard to investing.

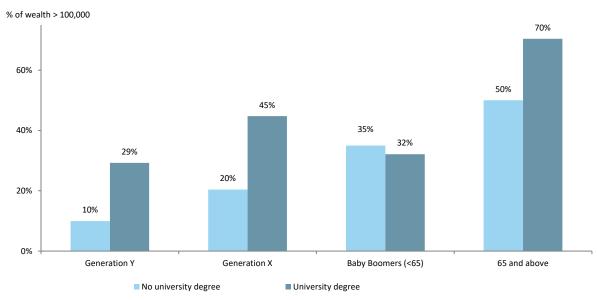


Figure 7: Influence of the highest level of education attained on wealth

In conclusion, participants were asked about their banking relationship (see Figure 8). Most respondents indicate that their house bank is a cantonal bank (27%) or Raiffeisen bank (24%). 18% of the respondents have a house bank relationship with a big bank and 15% of the survey participants have such a relationship with PostFinance. Almost none of the respondents regard digital banks as their house bank. The distribution between the various types of banks is very similar for all age groups and all genders. Of note, however, is that in Ticino, the cantonal banks play a minor role, while the Raiffeisen banks play a very important role as house banks.

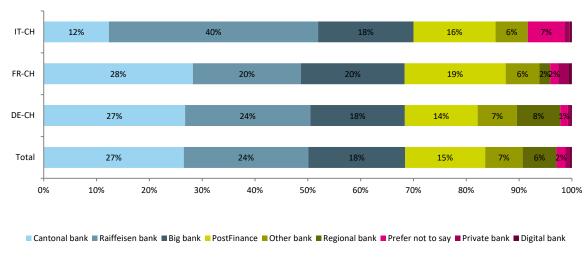
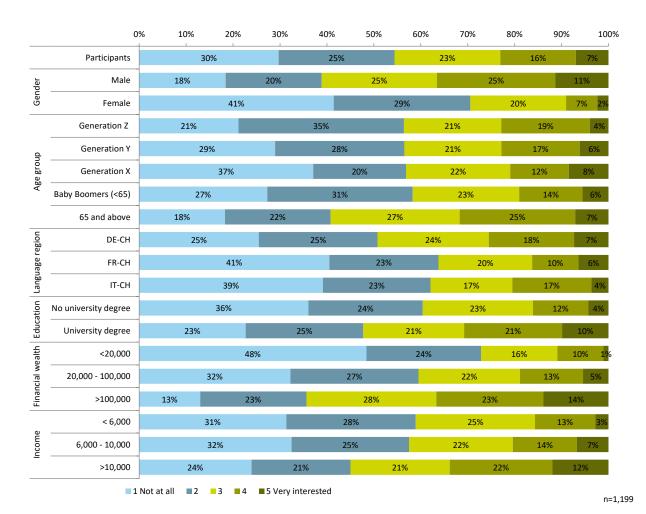


Figure 8: Participants' house bank in total and by region (n=1,217)

3.2. General statements regarding investing and investment behavior

In a preliminary step, the respondents were asked about their general attitude towards "investing" and their "investment behavior" was determined. Participants were first asked to rate their interest in financial markets on a scale of 1-5, whereby 1 was defined as "Not at all" and 5 as "Very interested". The results (see Figure 9) show that 55% of the respondents are not or only slightly interested in financial markets, while 23% of the participants indicate that their interest is strong to very strong. People in German-speaking Switzerland are significantly more interested in financial markets than people living in Ticino or French-

speaking Switzerland. As Figure 9 also shows, men are on average substantially more interested in financial market developments than women. Additional analyses⁵ have shown that particularly wealthy men with a university degree have an above-average interest in financial markets. The differences by age group, however, are small.



Average by age group and gender

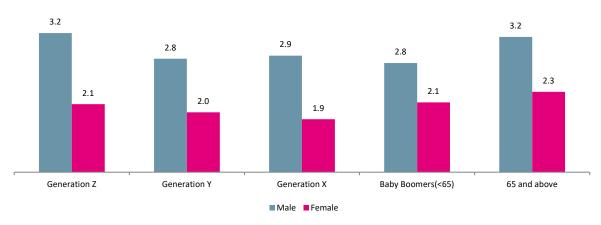


Figure 9: How interested are you in financial markets?

-

 $^{^{\}rm 5}$ See Figure 1 in the Appendix.

The participants were also asked whether they had ever held securities or are currently still invested in securities (see Figure 10). 41% of the participants state that they have never invested in securities, whereby the share of "non-investors" is significantly higher among women (52%) than among men (31%). The remaining 59% of the respondents, whom we refer to as "investors", have either invested in the past (17%) or currently hold securities (42%). The decision not to invest was predominantly explained by the respondents as being due to a lack of capital (47%) and/or lack of interest (44%). In line with these statements, the share of investors in our random sample who have or are currently invested in securities increases significantly as the level of education, income, financial wealth and age increases. Women in our random sample have a lower average income and financial wealth, and overall, their interest in financial markets tends to be low. Also of note is the fact that the majority of the younger generation of women has not yet had any experience with financial market investments. Furthermore, people in German-speaking Switzerland or Ticino.

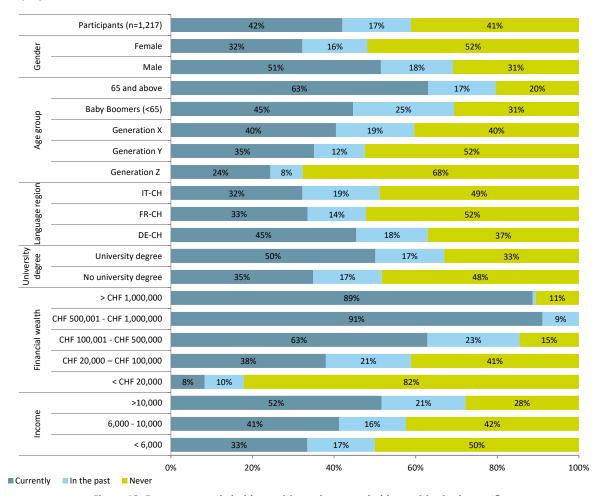


Figure 10: Do you currently hold securities or have you held securities in the past?

To gain a deeper understanding of the large group of "investors", different types of investors were subsequently identified. Based on the LGT Private Banking Report (Cocca, 2014), a distinction is typically made between three types of investor: Soloists (investment decision is made autonomously), Validators (investment decision is made together with the client advisor) and Delegators (investment decision is fully delegated). Consistent with existing studies, the majority of investors are Validators (56%), while 34% make investment decisions autonomously (Soloists) and 10% leave the investment decisions entirely to the client advisor (Delegators) (see Figure 11). The share of Soloists is significantly higher among men. Interestingly, the individual types of investors differ only slightly across age groups or educational levels. The picture is

similar with regard to the regions. In German-speaking Switzerland, however, there are comparatively more Soloists, while there are slightly more Delegators in French-speaking Switzerland.

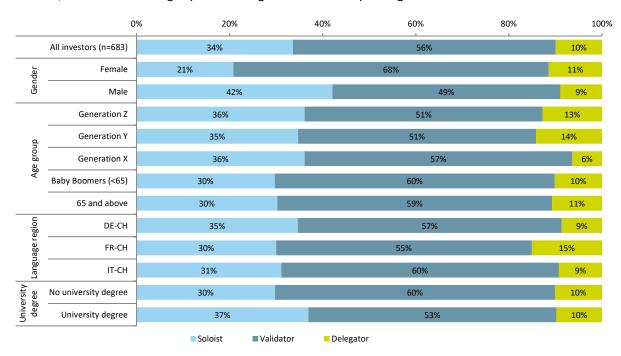


Figure 11: Which of the following investor types best applies to you?

The respondent's self-assessment of their ability to make investment decisions independently is consistent with the investor type. While around 50% of Soloists rank their ability in this regard as "high" or even "very high", these figures are significantly lower for Validators (less than 25%) and Delegators (less than 10%). When it comes to investment decisions, Validators mainly consult spouses (53%) and client advisors (50%) (see Figure 12). In the case of Delegators, advice is most likely to come from the client advisor (57%). The Soloists' approach to decision-making is very different. They reach their decisions based primarily on information from websites (37%), newspapers/magazines (34%) and by consulting spouses (32%). In contrast, the client advisor (17%) is not very relevant in the decision-making process.

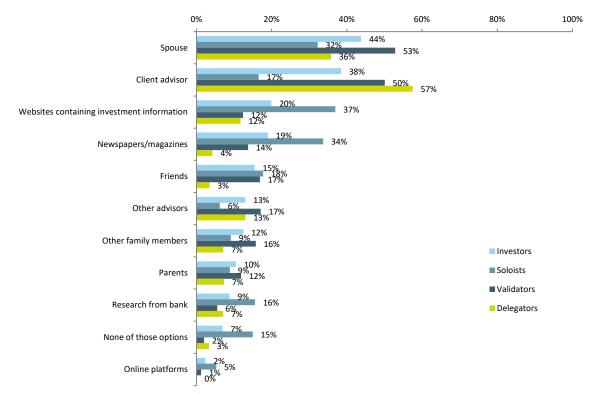


Figure 12: Whom/what do you consult when making investment decisions?

The "investors" cite wealth creation (52%) and wealth preservation (36%) as well as retirement provisions (46%) as the most important goals when investing. In contrast, fun (11%) and speculation (10%) play only a minor role (see Figure 13). If the figures relating to goals are broken down by investor type, it can be seen that Delegators consider retirement provisions to be by far the most important (53%) goal, while the goals wealth creation (41%) and wealth preservation (36%) are prioritized similarly. Conversely, Soloists place an above average focus on wealth creation (59%), while wealth preservation (31%) is ranked only slightly above fun (22%) and speculation (21%). Validators, which are the largest group, have very similar goals as Delegators.

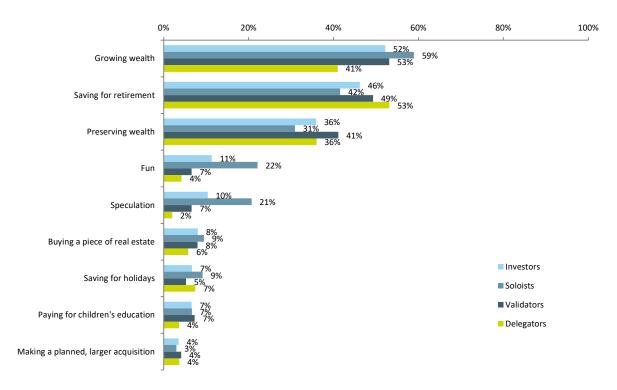


Figure 13: Which goals do you pursue with your investments?

The different goals are also reflected in investment horizons: while 58% of Delegators and 51% of Validators have an investment horizon of over five years, this is only the case for 36% of Soloists (see Figure 14). If investment horizons are analyzed by age, it can be seen that the investment horizon for Generation X is on average longer than for younger and older age groups. Although young people have a long life expectancy, their investment horizon still tends to be rather short, and saving for old age is (even) less of a focus. The Baby Boomers and the 65 and above generation, on the other hand, have a somewhat shorter investment horizon and are primarily interested in wealth preservation. There are no significant differences between the regions.

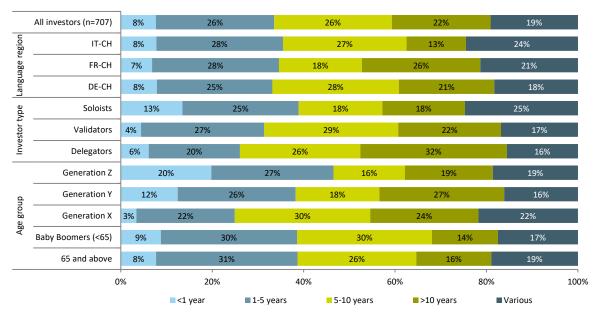


Figure 14: According to which time horizon do you usually invest?

Differences between investor types are also apparent in the self-assessment of risk appetite (see Figure 15). While 59% of the investors in the Validators group classify themselves as conservative and only 9% as aggressive, these figures are 37% (conservative) and 25% (aggressive) for Soloists. Delegators see themselves more as conservative (44%) to balanced (50%) investors.

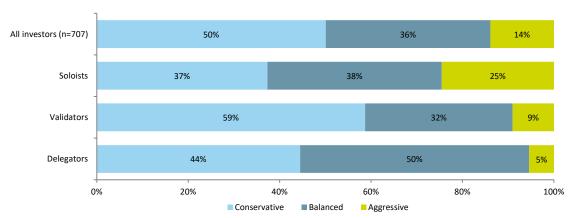


Figure 15: How do you classify your risk appetite when investing?

In terms of investment products that have been used in the past, equities rank first among all investor types, with an average of 61%. Bonds (35%), as well as active (33%) and passive (20%) investment funds have also been used by many investors across all investor types (see Figure 16). Differences between the investor types are particularly apparent with regard to alternative investments such as commodities, derivatives and cryptocurrencies. Soloists invest significantly more often in these asset classes than Validators or Delegators.

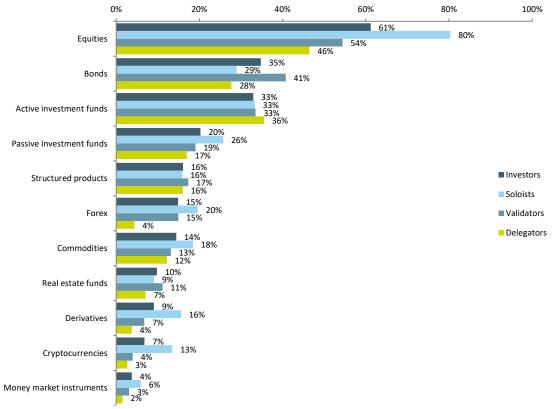
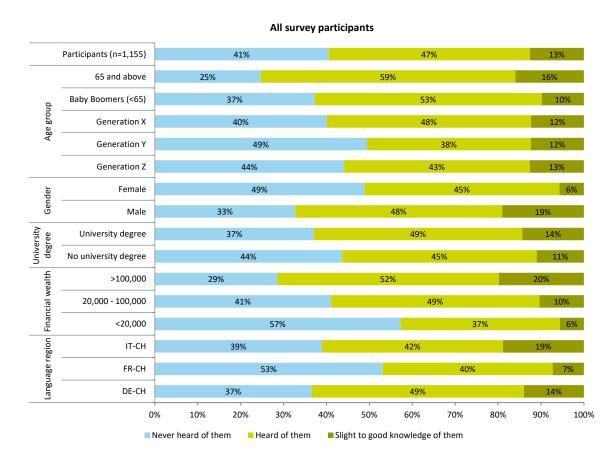


Figure 16: Which of the following investment products have you invested in?

3.3. Digital investing

In a next step, it was determined how well-informed the respondents are about existing digital investing offerings (see Figure 17). This revealed that many Swiss people still know little about digital investing solutions. 41% of participants and 29% of "investors" have never heard of digital investing solutions. 47% of all those who took part in the survey have heard of such solutions, but do not know very much about them. This corroborates the results of the international survey conducted by Legg Masson (2018), which finds that Swiss investors have little knowledge of robo-advisory, also compared to other countries. Our results also show that women are less informed about digital investing offerings than men. Among the different investor types, Soloists are most acquainted with digital investing solutions: 79% have heard of or are even familiar with them. Among the Validators and Delegators, the corresponding shares are smaller at 71% and 56%, respectively. Furthermore, people in French-speaking Switzerland are less well-acquainted with these products than people in German-speaking Switzerland or Ticino. It is interesting to note that older people – contrary to expectations – have a better knowledge of these products than the younger generations. However, wealth is a more important factor with regard to the level of knowledge than education or age.⁶



⁶ This is shown in the figure used for descriptive analysis purposes and was confirmed using a multivariate logistic regression.

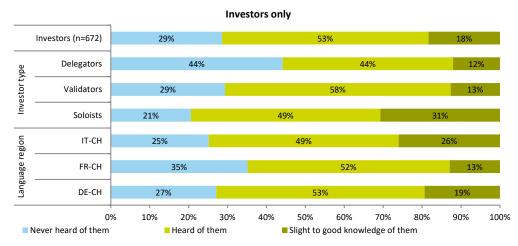


Figure 13: How familiar are you with digital investing solutions?⁷

Those participants and investors who have at least heard of digital investing solutions were presented with a list of existing providers and asked which thereof they are familiar with (see Figure 18). Of the existing offerings, those of established financial services providers such as Swissquote ePrivate Banking (22% and 29%, respectively), Zürcher Kantonalbank's Pillar 3a solution Frankly (16% and 11%, respectively) and VZ Finanzportal (11% and 16%, respectively) are the most well-known. There is some doubt as to whether the participants are truly familiar with Swissquote's ePrivate Banking product, as Swissquote might have been considered a "digital investing offering". The level of awareness for the Frankly product, which was launched in March 2020, is worth noting. Less well known, however, are fintech start-ups such as Selma, True Wealth and VIAC. 19% of those surveyed or 18% of investors are not familiar with any of these offerings, but have at least heard of digital investing.

⁷ The answers "don't know/prefer not to say" were omitted here.

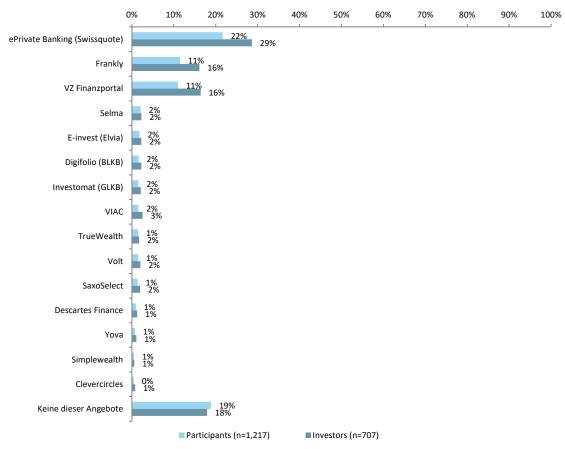


Figure 18: Which digital investing offerings are you familiar with?

In a next step, we divided the investors (people who hold or have held securities in the past) into four digital investor types. 8% of all investors (or about 5% of all survey participants) already use digital investing products. We refer to these as "users". A further 16%, who can in principle see themselves making use of such offerings, are classified as "potential users". This type of offering is out of the question for around one-quarter of all investors (see Figure 19). The remaining almost two-thirds of all investors (55%) are not familiar with any concrete "digital investing products" and therefore cannot (yet) imagine investing in such products.

First, we analyzed the profile of the typical (potential) user⁸. According to our findings, the typical user of digital investing solutions is a well-educated⁹, higher-earning and wealthy man from the German-speaking part of Switzerland with a balanced risk profile and a Validator or Soloist investor type. The average age of a digital investing products user is roughly 50. This profile of the typical user in our random sample is consistent with the data of a number of robo-advisory providers. For example, True Wealth reports that 84% of clients are male and 62% of clients earn over CHF 100,000 per year. At Volt, 82% of clients are male and 74% earn over CHF 100,000 a year.

The typical potential user in our random sample has a similar profile, but is somewhat less wealthy and also less risk averse.

When characterizing the current (potential) digital investor, the breakdown of the individual characteristics in the investor population also plays an important role. Although users and potential users are represented in both genders as well as across each age, income, wealth, risk and investor type group, differences can be

⁸ See Figure 2 in the Appendix.

⁹ Defined as a person with a university degree.

identified between these various groups. In relative terms, there are more (potential) digital investors in Generation Z & Y and X than among the Baby Boomers. At the same time, however, many pensioners are also (potential) users of digital investing solutions. In terms of gender, the share of users of digital solutions is significantly higher among men (11% of all investors) than among women (3% of all investors). Also, substantially more men than women and people who tend to have a higher level of education can see themselves using digital investing opportunities in the future. People in German-speaking Switzerland are currently somewhat more interested in these products than people living in French-speaking Switzerland or Ticino. Unsurprisingly, higher earners and people with greater wealth tend to invest in such products. The share of potential users is particularly high among people with a medium level of wealth. In terms of investor type, there are more (potential) users among Soloists (35%), than among Validators (19%) or Delegators (17%). Based on risk profile, people with a higher risk appetite are also more willing to invest in digital investing products than balanced or conservative investors. In terms of income, the share of (potential) digital investors also rises from 16% (< 6,000) to 30% (> 10,000) as monthly income increases.

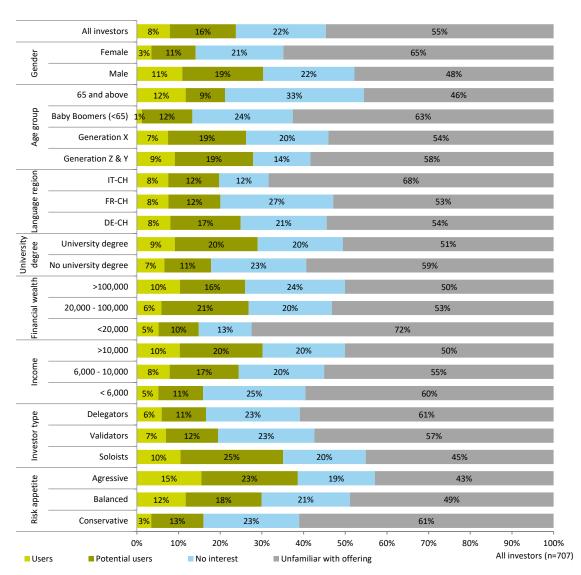


Figure 19: Investors by interest and use of digital investing products

Figure 20 below substantiates the relationship between autonomy in investment decision-making, risk appetite and (potential) users of digital investing opportunities. We created a scoring model based on the

survey results to classify the autonomy and risk appetite or propensity of investors for this purpose. These scores (from 1-5) take into account not only the respondents' own assessments, but also indirectly surveyed preferences that influence an investor's risk appetite and autonomy. This once again shows that digital investors tend to be more autonomous and are somewhat less risk-adverse than people who have no interest in such products or are unfamiliar with them. In addition, it is also more likely to be the Soloists and Validators who can see themselves using digital investing products or have already done so. This is particularly interesting in view of the fact that many digital solutions are designed as portfolio management solutions and therefore also target the Delegators group.

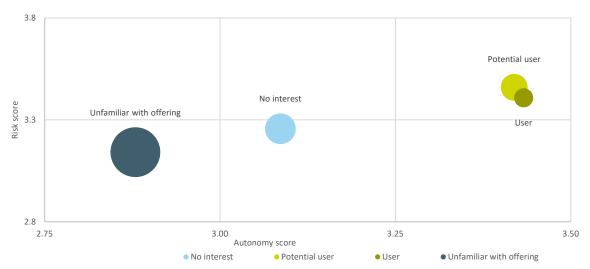


Figure 20: Digital investing types by risk and autonomy score

If a person has a risk score of 5 and is male, the (modeled) probability that he is a user of digital investing products is 20% (see Figure 21). Women with a similar risk profile are less than half as likely to be users of digital investing products (8%). We see a decreasing probability of use for both genders in the case of lower risk scores. We can therefore conclude that risk appetite has a significant influence on the decision of whether or not a person invests using digital investing solutions. At the same time, however, there are also important gender-specific differences within these "risk groups". This is similar for the "autonomy score". Investors who make their investment decisions autonomously and are well informed tend to be more inclined to use digital investing solutions.

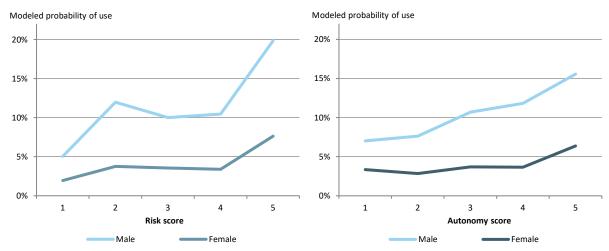


Figure 21: Modeled probability of use by risk and autonomy score

In a next step, the (potential) users' requirements of a digital investing solution were determined. As shown in Figure 22, the three most important reasons for using a digital investing tool are transparency (54%), low cost (49%) and ease of use (43%). Interestingly, these three criteria are also the most relevant internationally (Legg Masson, 2018). However, the relative importance of the reasons is distributed differently among the investor types: while transparency is roughly equally important for all three, price appears to be much more important for Soloists than for the other investor types. For Delegators, on the other hand, what is most important is that the offering is provided by their house bank. This is even more important than pricing or the product's ease of use. The relative importance of the reasons for use also differs between the sexes. For women, transparency is by far the most important factor, while for men, costs are the decisive element.

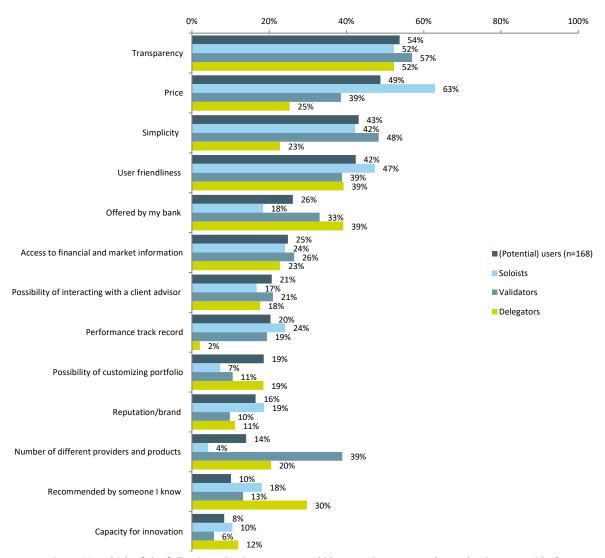


Figure 22: Which of the following criteria were or would be most important when selecting a provider?

The group of people who do not want to use a digital offering were asked why they felt this way (see Figure 23). A number of surveys show that investors have little interest/trust in a purely digital relationship, a finding that is consistent across all regions and over time. Our findings also confirm that Swiss investors prefer a personal exchange with a client advisor over a digital solution (44%). In addition, many thereof are satisfied with their current investing solution (41%) and are not familiar enough with digital offerings (37%). A personal exchange tends to be more important for women, while men are satisfied with the existing

solution. The differences between the three investor types are also striking in this area. While most Validators and Delegators do not want to dispense with a client advisor (59% and 53%, respectively), this is something that would least bother Soloists (12%). However, Soloists (54%) are more satisfied with their current investing situation than Validators (36%) and Delegators (40%).

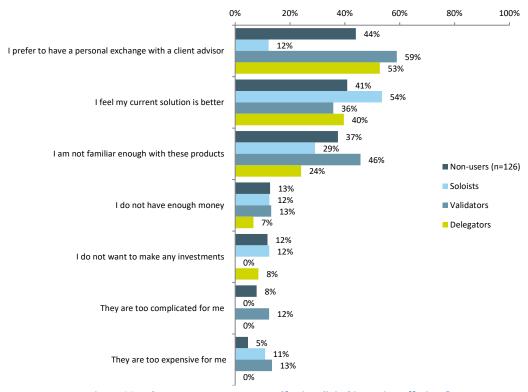


Figure 23: Why can you not see yourself using digital investing offerings?

In a next step, the "users" and "potential users" were asked about the investment volume they have already invested or plan to invest digitally (see Figure 24). The majority of "users" (71%) and "potential users" (87%) have invested or would invest a maximum of one-quarter of their assets via digital technology.

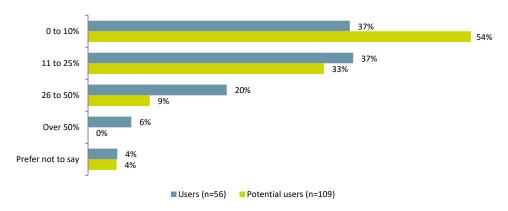


Figure 24: What percentage of your assets have you invested in such products/would you invest in such a product?

The "potential users" of digital investing products also indicated on a scale of 1-5 whether they would in future invest digitally with one of the established banks, with a fintech start-up or with leading technology companies such as Amazon, Apple or Google. The findings show that the participants currently favor an established bank over other partners (see Figure 25). BigTech companies such as Amazon, Apple or Google

are entering the financial sector with some force. However, at least in Switzerland and with regard to digital investing, they do not yet appear to be considered a potential alternative to established banks.

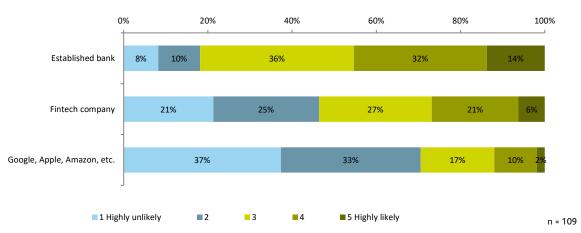


Figure 25: How likely is it that you will "invest digitally" with the following partners in the future?

If we compare the preferred asset classes of potential digital investors with those of all 707 investors in our random sample, the overall picture is similar (see Figure 26). Equities are currently strongly favored by investors. Bonds and active investment funds are also popular. In contrast, potential digital investors are more interested in alternative forms of investments such as commodities or cryptocurrencies.

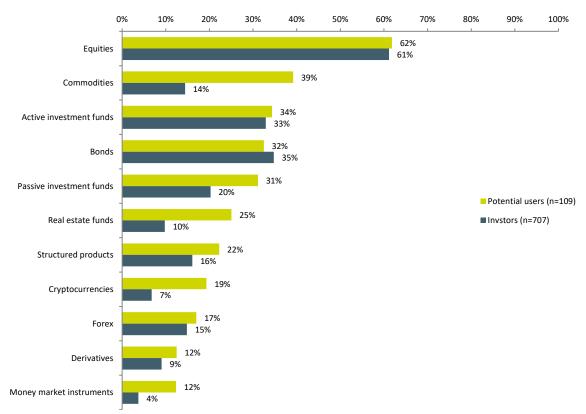


Figure 26: Which investment products could you see yourself investing in as part of a digital portfolio management solution?

3.4. Pillar 3a

Investing pension assets is not only the task of the state and pension funds. The voluntary, individual, private Third Pillar of the Swiss pension system offers savers tax benefits and is becoming increasingly important due to cutbacks in occupational pension plans. However, it is still utilized (too) little. It can be assumed that Pillar 3a will take on an even more important role in the future, if, for example, filling pension gaps becomes permitted by law (as is already the case for the First and Second Pillar). According to this survey, a total of around 72% of those under the age of 65 currently have a Pillar 3a solution (see Figure 27), whereof half of the 3a account holders are paying the maximum possible amount. Men use Pillar 3a more often (77%) than women (67%), and this applies across all income brackets. Unsurprisingly, higher earners make greater use of this opportunity to save money than people who earn less than CHF 6,000 per month. A clear difference exists in terms of education levels: 82% of people with a university degree make use of the Pillar 3a option, while the share for those with a lower level of education is almost 20 percentage points lower (63%). It is also interesting to note that people in German-speaking Switzerland take greater advantage of these opportunities than people living in French-speaking Switzerland or Ticino.

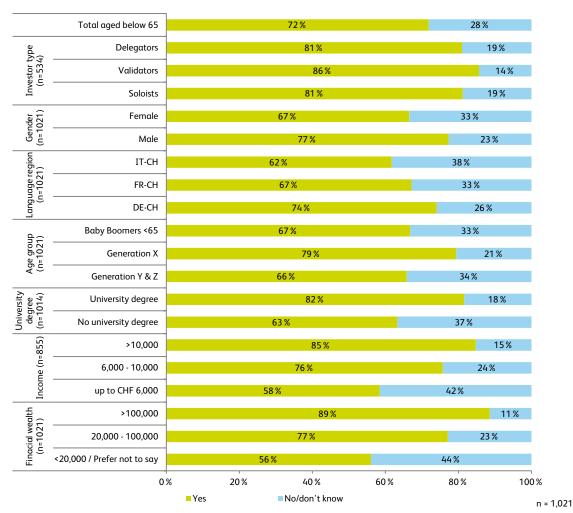


Figure 27: Do you have a Pillar 3a account?

As of December 31, 2018, the total amount of assets tied to Pillar 3a at banks was CHF 59 billion (in retirement savings accounts) and CHF 18.5 billion (in 3a investment funds), and at insurance companies,

the amount was CHF 45.7 billion (total: CHF 123 billion; Schüpbach/Müller (2019) based on data from the SNB, FTA, FSO, SBA).

In addition to the "traditional Pillar 3a accounts", for which a (currently very low) "preferential interest rate" exists, there are also a large number of 3rd Pillar products on the market that are tied to securities investments. The corresponding accounts usually contain mixed funds, which are diversified across various asset classes such as equities and bonds. Historically, the returns for securities solutions have been higher than for traditional savings accounts.

According to our survey, however, around half of 3a bank clients save (almost) exclusively in "cash" form (see Figure 27). Women appear to be somewhat more risk-averse than men, and account for a slightly higher average share of cash. Interestingly, investor type also appears to have an influence on the share in securities of Pillar 3a accounts. Delegators, or in other words, investors who leave investment decisions entirely up to the client advisor, are more risk-averse with regard to Pillar 3a and hold a much larger share in cash than Soloists. In principle, it would make sense for younger people with a longer investment horizon in particular to save a higher share in securities. However, our study findings do not show any clear trends in this respect. Furthermore, people in German-speaking Switzerland on average have a higher share of securities in their portfolio than people in French-speaking Switzerland and Ticino.

A large share of 25% of those with a Pillar 3a account do not know what their share of securities is. This indicates that many people still know too little about their retirement provisions.

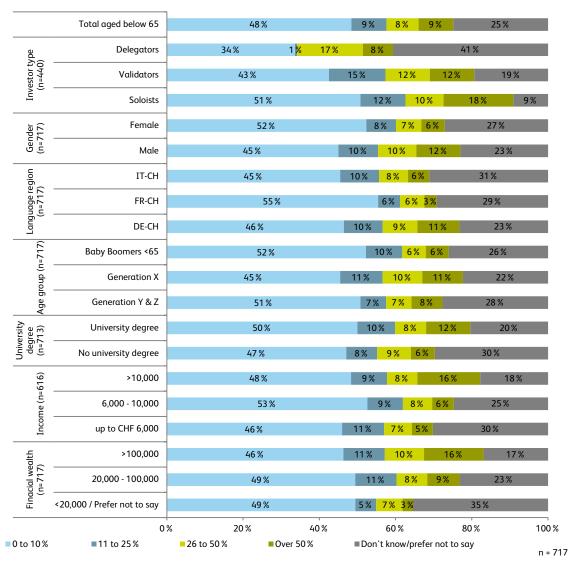


Figure 28: What percentage of your Pillar 3a savings have you invested in securities?

A number of Digital Pillar 3a solutions have recently also come onto the Swiss market. These include the fintech start-ups VIAC, Sparbatze, Selma and Descartes Vorsorge, as well as the offerings of Zürcher Kantonalbank (Frankly), Vontobel (Volt 3a) and the VZ solution. The start-up VIAC, for example, has already exceeded the CHF 500 million mark for managed pension assets. Due to these developments, the survey was also used to determine how many more people will use Pillar 3a as a digital solution in the future.

As shown in Figure 29, 22% of the people surveyed can see themselves investing a certain percentage of their Pillar 3a assets digitally in the next 12 months. Men, people with an above-average income, people living in German-speaking Switzerland and younger people can in particular see themselves taking advantage of a corresponding digital solution.

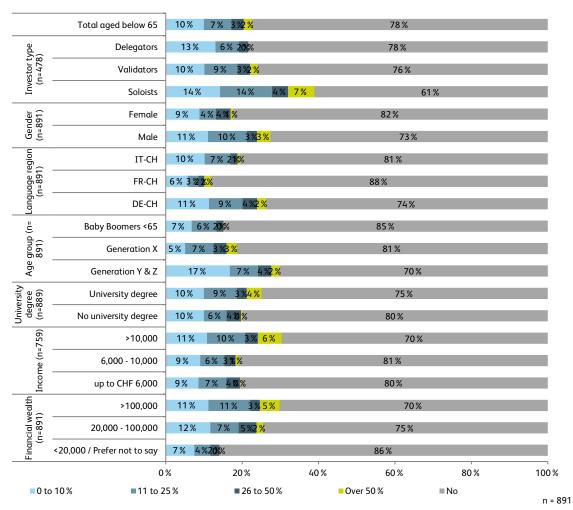


Figure 29: Can you see yourself investing part of your Pillar 3a assets digitally in the next 12 months?

According to the respondents, the most important prerequisites for using such solutions (see Figure 30) are low costs, good performance, the possibility of having a say in what is invested in, flexible options for switching between securities-based savings and the Pillar 3a savings account, and at the same time receiving individual and personal support (see Figure 30). However, the last aspect in particular is not provided for in the purely digital products that have been on the market to date. In addition, regular background information and flexible options for switching between securities-based savings and a Pillar 3a savings account are found by many people to be quite important.

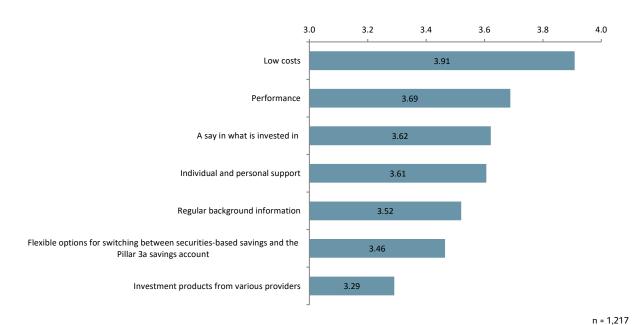


Figure 30: In your opinion, how important are the following features for a digital 3a account? (scale from 1-5, with 5 being very important and 1 not important)

Overall, it can be expected that private provisions will be a growth market that is likely to gain even greater momentum with the help of digital solutions. A highly standardized, digitalized and at the same time customizable solution could therefore be an interesting way to move forward in this (on average) small-volume market for securities-based Pillar 3a savings — especially since a significant share of the Swiss population can already see itself investing its money digitally in the near future.

4. Conclusion

With the development of new technologies and changing client behavior, processes, products and advisory approaches are also undergoing a transformation in the area of investment advisory. For example, the number of offerings in the digital investing segment has further increased in Switzerland in recent years – despite some providers exiting the market. This growth is attributable on the one hand to the fact that various fintech start-ups have entered this market with new business models. On the other hand, it is the result of established banks increasingly reacting to developments and launching their own digital investing solutions. The 18 offerings that are currently available on the market differ quite significantly in certain cases. In addition, the line between "true" robo-advisory solutions and digitally-supported, traditional portfolio management is becoming increasingly blurry.

Which client segments use digital investing solutions?

Our survey shows that 8% of all investors (or around 5% of all respondents) already use digital investing products in various forms. A further 16% can be classified as "potential users", who can in principle see themselves using such offerings. Around two-thirds of all investors (55%) are not familiar with any specific "digital investing products" and cannot therefore (yet) see themselves investing in such products. According to this study, the typical user of digital investing solutions is a well-educated, high-earning and wealthy man from German-speaking Switzerland. The average age of a user of digital investing products is roughly 50. The typical potential user in our random sample has a similar profile, but tends to be somewhat less wealthy. In addition, the majority of (potential) "users" would invest a maximum of one-quarter of their assets digitally.

Which investor types invest in digital portfolio management products?

The question regarding investor types is also interesting. Our study finds that the majority of Swiss investors are Validators (56%), while 34% make investment decisions autonomously (Soloists) and 10% leave the investment decisions entirely to their client advisor (Delegators). The share of Soloists is significantly higher among men. Most digital investing solutions come in the form of discretionary mandates. One would therefore expect that Delegators in particular would find these offerings attractive. However, our results show that there are more (potential) users among Soloists than among Validators or Delegators. One reason for this finding could be that Soloists are more interested in financial markets than the other investor types and are possibly also somewhat more price sensitive. Furthermore, the analyses show that people with a higher risk appetite — and Soloists belong to this group — are more willing to invest in digital investing products than balanced or conservative investors. Explaining and offering such products to Delegators would, therefore, be worthwhile, as at present, almost half of this group has never heard of such digital investing solutions.

Volumes in digital investing solutions have not developed satisfyingly for all market participants in recent years. Why is that?

In general, it can be said that few Swiss citizens tend to be truly financially savvy. For example, more than half of the respondents in our survey stated that they had little or no interest in financial markets. Only one in four people – and a disproportionately high number of men and women who live in German-speaking Switzerland, have a university degree and are wealthy – has a strong to very strong interest in financial markets. Nevertheless, a good 60% of those surveyed have invested in securities at some time.

Furthermore, many Swiss people are still not very familiar with digital investing solutions — also in comparison to other countries. Only 13% of all respondents (and 18% of investors) state that they have a basic to good knowledge of these products. Men, people with a certain amount of wealth and the Soloist investor type are most likely to be familiar with these new digital offerings. Older people — contrary to popular belief — actually have more knowledge of these products than younger generations. However, when it comes to the level of knowledge about these products, the decisive factor is not so much age as wealth.

Trust also plays an important role in the area of digital investing solutions. For example, the majority of potential users can see themselves investing digitally with an established provider rather than with a fintech start-up in the future. According to our findings, it is especially important for the Delegators investor group that the offering is provided by their house bank. This is even more important than the price or the simplicity of the product. When it comes to awareness of existing offerings, those of the established financial services providers also score better.

2025 Outlook for digital investing

Developments in terms of volume have to date lagged somewhat behind the expectations of many market participants. However, due to the increasing variety of offerings and, above all, the entry or expected entry of large market participants with a substantial client base, we believe this market will develop faster in the coming years than in the past. We expect this on the one hand because the market entry of large banks (e.g. Raiffeisen or Credit Suisse) will increase awareness of these products. On the other hand, the survey has shown that there is interest in such products and that many investors would like their house bank to have a corresponding offering.

Overall, we expect that these products will increasingly establish themselves as standard offerings at many banks in the coming years and that volumes will increase accordingly. At the same time, however, such solutions will remain niche products in Switzerland over the next five years in terms of the total investment volume.

Pillar 3a - current situation

Our analysis with regard to Pillar 3a has found that it is not yet being used optimally. Women in particular, including those with higher incomes, currently make comparatively little use of this tax-efficient option. Our findings also show that around half of 3a bank clients (almost) exclusively save "cash". Women appear to be somewhat more risk-averse than men, and have a slightly higher average share of cash. It would make sense for younger people with a longer investment horizon in particular to hold a certain share of these savings in securities. However, the results of our study do not provide any clear insights in this regard. By contrast, our results indicate that (too) many people still do not know enough about their pension options and in some cases do not even know the share of securities they hold in their pension account. This suggests that providers of such solutions should not only focus on their products, but also invest in "educating" their (potential) clients.

Digital Pillar 3a – outlook

In principle, we expect that private pension solutions will be a growth market, the development of which should continue to gain momentum with the help of digital solutions. Digital solutions in particular make it possible to offer highly standardized and at the same time customizable solutions at lower prices. Our results show that almost one in four Swiss citizens can already see themselves investing part of their

pension assets digitally in the next 12 months. Corresponding digital offerings are particularly popular with men, younger people, people with above-average incomes and wealth as well as people living in German-speaking Switzerland. We therefore expect digital Pillar 3a solutions to take on an increasingly important role over the next five years.

List of sources

Cocca, T. (2014): LGT Private Banking Report 2014: Eine Untersuchung des Anlageverhaltens von vermögenden Privat Personen in Österreich und der Schweiz.* Downloaded at:

https://www.jku.at/fileadmin/gruppen/103/Asset_Management/Sonstiges/Kolumnen_Beitraege_un_d_Artikel/LGTPrivateBankingReport2014.pdf

IFZ/AMP Asset Management Study (2019). An Overview of Swiss Asset Management. Downloaded at: https://sfama-cms.cdn.prismic.io/sfama-cms%2Fc02845c9-8c18-4f8c-9e1f-c6e32de7c935 ifz+amp+studie+2019 final hohe+aufl%C3%B6sung.pdf

Legg Mason (2018): Legg Mason Global Investment Survey 2018. Downloaded at: https://www.leggmason.com/en-au/campaigns/global-investment-survey-2018.html

moneyland.ch. *Swiss Robo Advisors Compared*. Downloaded at: https://www.moneyland.ch/en/swiss-robo-advisors-comparison

Pew Research Center (2019). *Defining generations: Where Millennials end and Generation Z begins*. Downloaded at:

https://www.pewresearch.org/fact-tank/2019/01/17/where-millennials-end-and-generation-z-begins/

Schüpbach, Salome; Müller, Stefan, (2019). Vorsorge: Wie viel Kapital steckt in der Säule 3a?* in: Soziale Sicherheit/CHSS/4|2019.

Swissquote (2020). Financial Report. Downloaded at:

https://library.swissquote.com/shared-images/h1-2020-reporten? ga=2.262918536.549944864.1599469038-444533032.1548412892

Swisscom & IFZ (2015). *Digitales Anlegen: Momentaufnahme 2015 und Ausblick 2020.** Downloaded at: https://blog.hslu.ch/retailbanking/files/2015/04/DigitalesAnlegen Kurzversion DE def.pdf

Swisscom & IFZ (2019). Digitales Anlegen: Update 2019.* Downloaded at:

https://blog.hslu.ch/retailbanking/2020/01/20/wie-entwickelt-sich-der-markt-fuer-digitales-anlegen-in-der-schweiz-zusammenfassung-der-studienresultate/

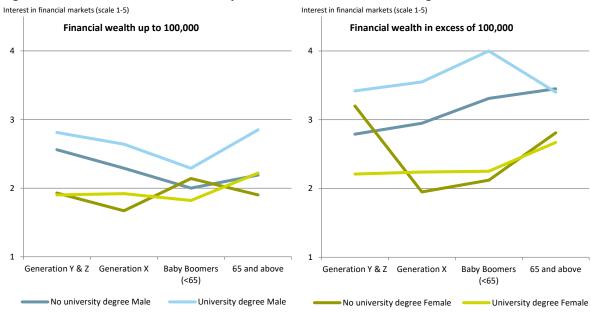
^{*} published in German only

Appendix

Table 1: Shares per sub-category in random sample, in population and weighting factors

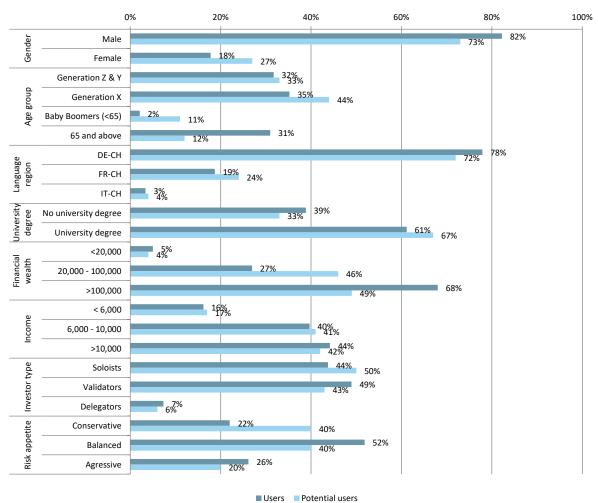
Region	Men		Women		All			
Age	Population	Random sample	Factor	Population	Random sample	Factor	Population	Random sample
DE-speaking Switzerland	36.8%	32.0%		35.0%	30.3%		71.8%	62.3%
18-34	11.1%	9.7%	1.15	10.6%	9.2%	1.15	21.8%	18.9%
35-54	14.8%	12.7%	1.16	14.3%	12.2%	1.17	29.1%	25.0%
55-79	10.9%	9.5%	1.14	10.1%	8.9%	1.14	21.0%	18.4%
FR-speaking Switzerland	12.0%	10.4%		12.1%	10.4%		24.1%	20.8%
18-34	3.9%	3.4%	1.15	3.7%	3.3%	1.14	7.6%	6.7%
35-54	4.9%	4.3%	1.14	4.7%	3.9%	1.20	9.6%	8.2%
55-79	3.2%	2.8%	1.16	3.6%	3.1%	1.15	6.8%	5.9%
IT-speaking Switzerland	2.1%	8.5%		2.0%	8.4%		4.1%	16.9%
18-34	0.6%	2.3%	0.25	0.6%	2.4%	0.24	1.1%	4.7%
35-54	0.9%	3.9%	0.24	0.9%	3.7%	0.24	1.8%	7.6%
55-79	0.6%	2.3%	0.25	0.6%	2.3%	0.25	1.1%	4.6%
Total	50.9%	50.9%		49.1%	49.1%		100.0%	100.0%

Figure 1: Interest in financial markets by education, financial wealth and gender



^{*}Generation Z and Y were combined due to low number of respondents

Figure 2: Breakdown of (potential) users of digital investing solutions



Glossary

Robo-advisors Social trading	All forms of investing (discretionary mandates, investment advisory or social trading) for which an individualized and usually algorithm-based investment strategy is proposed, implemented or replicated either exclusively, or as an additional tool, online, and made available to the client in a B2C context for autonomous use online. Automated investment process without any personal interaction, generally provided at a low cost. Social network for sharing and investing in user-generated trading
-	strategies.
Hybrid model	Robo-advisors with the ability to provide selected support in the form of advice.
Digital advisory	Online wealth management with comprehensive advisory services and multi-asset investment strategies, therefore generally entailing higher costs.
Sophistication	Measures the scope of the process for determining the risk profile and the conclusiveness of the resulting risk profile, the intuitive operation and the information content of the website, the number of asset classes as well as the sophistication of the investment process.
Personalization & support	Measures the degree of customization of the investment recommendation, the breadth of the investment recommendations as well as the possibility of receiving support in the form of advice.
Generation Z	Born 1997-2012
Generation Y (Millennials)	Born 1981-1996
Generation X	Born 1965 - 1980
Baby Boomers	Born 1955-1964
65 and above	Born 1954 or earlier
Investors	Survey respondents who have either invested in the past or currently hold securities – 59% of survey respondents
Soloists investor type	Investors who make investment decisions autonomously – 34% of investors
Validators investor type	Investors who make investment decisions together with the client advisor – 56% of investors
Delegators investor type	Investors who fully delegate investment decisions – 10% of investors
Users	Investors who already use digital investing products – 8% of investors
Potential users	Investors who can in principle see themselves making use of digital investing offerings – 16% of investors

Lucerne School of Business

Institute of Financial Services Zug IFZ

Campus Zug-Rotkreuz Suurstoffi 1 CH-6343 Rotkreuz

ifz@hslu.ch www.hslu.ch/ifz