FINAL REPORT

Project number: 274774

Project title: Fair Advice

Project manager: Kvaløy, Ola

Activity / Programme: FINANSMARK

Project owner: HANDELSHØGSKOLEN VED UIS

1. **Progress report:** Update progress report up to project completion date. Completed

2. Final accounts: Give a summary of the financial status of the project Completed

Outcomes and impacts: I understand that the information entered

3. into the field for Outcomes and impacts will be made publicly Completed

accessible*

4. **Results report:** Attach results report Completed

5. Other results: List information about other results (publication in the Completed

media, organised events, newly established companies)

6. Special reports: Any requests for special reports must be fulfilled. Not

Have special reports been submitted? applicable

7. **Data management plan:** Has the final data management plan been Not

uploaded? applicable

Final accounts

Actual costs (in NOK 1000)

| Account | 2018 | 2019 | 2020 | Total |
|-------------------------------|------|------|------|-------|
| Payroll and indirect expenses | 99 | 120 | 116 | 335 |
| Procurement of R&D services | | | | 0 |
| Equipment | | | | 0 |
| Other operating expenses | 133 | 130 | 88 | 351 |
| Sum | 232 | 250 | 204 | 686 |

Actual cost code (in NOK 1000)

| Account | 2018 | 2019 | 2020 | Total |
|--------------------------------------|------|------|------|-------|
| Trade and industry | | | | 0 |
| Research institutes | | | | 0 |
| Universities and university colleges | 232 | 250 | 204 | 686 |
| Other sectors | | | | 0 |
| Abroad | | | | 0 |
| Sum | 232 | 250 | 204 | 686 |

Actual funding (in NOK 1000 kr)

| Account | 2018 | 2019 | 2020 | Total |
|-------------------------|------|------|------|-------|
| The Research Council | 300 | 200 | | 500 |
| Own financing | 99 | 99 | | 198 |
| Public funding | | | | 0 |
| Private funding | | | | 0 |
| International funding | | | | 0 |
| Deviations | 167 | 49 | -204 | 12 |
| Sum | 232 | 250 | 204 | 686 |

Comments

1. Give a summary of the financial status of the project

Completed

Outcomes and impacts

Anticipated outcomes and impacts - from the grant application form

Achieved and potential outcomes and impacts - based on the project results*

We believe that the main goals formulated in the research project have been accomplished. The research project has resulted in five papers and a master thesis (that will become a scientific paper). One paper is published and two have got favourable invitations to revise and resubmit from prestigious journals with high impact factor. The research results have also been disseminated in newspaper articles, scientific conferences and public talks. The research results have also been presented to practitioners in public organizations and private firms. The project has provided careful empirical investigation of the motivation, fairness concerns and risk preferences to people who are put in a situation to give advice or take risk on behalf of others. The project has been well implemented, and we gratefully acknowledge the Norwegian Research Council for funding.

| Final report | 274774 - | Fair Advice | . Reporting deadline: | 20201030 | Received: |
|--------------|----------|-------------|-----------------------|----------|-----------|
| 20201102 | | | | | |

Page: 3

5. I understand that the information entered into the field for Outcomes and impacts will Completed be made publicly accessible*

Results report

Message to the Research Council of Norway

Original file: Sluttrapport fair advice 2020.pdf

File reference: Resultat_rapport11799543.pdf

2. Attach results report

Completed

Other results

Please provide information about other results (Events, Publication in the media, Companies.

3. List information about other results (publication in the media, organised events, newly established companies)

Completed

Special reports

Alternative 1:

Alternative 2:

Original file:

File reference:

4. Any requests for special reports must be fulfilled. Have special reports been submitted?

Not applicable

Final data management plan

Original file:

File reference:

6. Has the final data management plan been uploaded?

Not applicable

PROGRESS REPORT

Project number: 274774

Project title: Fair Advice

Project manager: Kvaløy, Ola

Activity / Programme: FINANSMARK

Project owner: HANDELSHØGSKOLEN VED UIS

Project period: 01.01.2018 - 30.09.2020

Report period: 01.10.2019 - 30.06.2020

1. **Popular science presentation:** I understand that the text of the popular science presentation will be made publicly available*

2. **Results:** Has information on publications been provided? Yes

3. **Performance indicators:** All results data that have emerged from the project are to be reported. Has this been done?

Fellowship grants: Information regarding all fellowship grants must

4. be complete and correct. Have you updated the man-months and other No information for each fellowship-holder?

International: The extent of international cooperation is to be

5. indicated. Has any international cooperation taken place during the report period?

Special reports: If any requests for special reports have been put forth

6. by the case officer at the Research Council, these must be fulfilled. No Have special reports been submitted?

Popular science presentation

Popular science presentation (Norwegian)

Vi mennesker har ikke alltid den nødvendige kunnskap til å gjøre gode valg for oss selv, og må derfor ofte stole på eksperters råd for å treffe bedre beslutninger. Dette er særlig fremtredende innen finansiell beslutningstaking. Finansrådgiveren utgjør bindeleddet mellom små investorer med begrenset kunnskap og komplekse finansmarkeder, og de spiller en viktig rolle for millioner av mennesker som plasserer sine formuer i ulike investeringsprodukter. Mange investorer anser finansrådgiveren som den viktigste kilden til informasjon, og finansrådgiveren tjener ofte som den reelle beslutningstakeren bak investeringer i aktivt forvaltede fond.

Det er derfor krevende når finansrådgivere og deres klienter har motstridende interesser. Det som er bra for rådgiveren kan være dårlig for klienten og omvendt. Forskning har også vist at finansrådgivere kan bli fristet til å gi råd som er basert på egeninteresse i stedet for klientens beste.

Imidlertid gir rådgivere antagelig også gode råd, til tross for insentiver til å gjøre noe annet. I dette forskningsprosjektet bruker vi kontrollerte eksperimenter for å undersøke under hvilke forhold rådgiverne oppfører seg rettferdig, og gir gode råd, og under hvilke forhold de handler egoistisk og

tilbyr råd som er ugunstige for sine klienter. Vi varierer både risikoen i prospektene som rådgiverne gir råd om, og ansvaret som rådgiverne har for valget deres klienter gjør.

Vi undersøker også i hvilken grad klientene faktisk vil følge rådgiverens råd. Spesielt utforsker vi betydningen av robotisering. Et økende antall finansielle tjenesteleverandører bruker robo-rådgivere; online plattformer som gir råd via komplekse datamaskiner. Et viktig spørsmål er således om klienter stoler på robotbasert rådgivning. Vi undersøker eksperimentelt hvordan klienter responderer på informasjon om at rådgiveren er en algoritme som er programmert for å gi ulike typer råd.

Vi har nå kjørt flere eksperimenter. De viser at folk er villige til å påta seg en kostnad for å unngå å gi dårlige råd. Deltakere er i mindre grad villige til å ta valg som tjener dem selv best hvis de er i en rådgivningssituasjon. Vi finner også at det er mer (moralsk) krevende å gi dårlige råd hvis klient selv må ta det endelige valget, enn hvis rådgiver mer eller mindre instruere klienten.

Vi har også, i samarbeid med to masterstudenter, studert i hvilken grad klienter stoler på råd, spesielt hvis de kommer fra roboter. I et standard tillitspill har folk en tendens til å stole mer på råd fra algoritmer ('roboter'), enn råd fra mennesker. Men når man gjør rådgivningssituasjonen mer realistisk, dvs lager en situasjon som minner mer om faktisk finansrådgivning, stoler man like mye på mennesker som på algoritmer.

Vi har også gjennomført workshop i adferdsøkonomi ved UiS (juni 2018 og 2019) hvor deler av resultatene ble presentet. Her deltok europeiske toppforskere på feltet og presenterte prosjektrelatert forskning.

Popular science presentation (English)

People do not always have the necessary knowledge to make optimal choices for themselves, and may therefore rely on expert advice in order to make better choices. This is particularly salient in finance. Financial advisors constitute the connection between small investors with limited knowledge and complex financial markets, and they play an important role for millions of people who allocate their savings between different investment products. Many investors consider financial advisors as the most important information source, and financial advisors often serve as the true decision makers behind investments into actively managed mutual funds.

It is thus challenging that financial advisors and their clients often have conflicting interests. What is good for the advisor may be bad for the client and vice versa. Indeed, research has demonstrated that financial advisors may be tempted to give advice that are based on self-interest rather than the interests of their clients.

However, advisors (presumably) also give good advice, despite incentives to do otherwise. In this research project we use controlled experiments to investigate under which conditions advisors behave fairly, offering good advice, and under which conditions they act selfishly, offering advice that are unfavorable to their clients. We vary both the riskiness of the prospects that the advisors advice, and the responsibility that the advisors have for the choice their clients make.

We also investigate to what extent the clients actually will follow the advisors' advice. In particular, we explore the role of robotization. An increasing number of financial service providers are using robo-advisors; online platforms that provide advice by complex computers. An important question is thus whether clients trust robot-based advice. Hence, we investigate experimentally how clients will respond to information that the advisor is an algorithm programmed to make particular advices.

Our experimental results show that there are indeed personal costs associated with giving bad advice. We present results from a large-scale online experiment studying advisors' behavior under conflicting interests. We use a dictator game as a baseline and transform the game into a situation in which the dictator gives a binding advice and a free non-binding advice, respectively. We also vary the payoffs to include both certain and risky outcomes. Our results show that people are averse to giving bad advice. When subjects are given the role as advisors, they behave less selfishly, even when the economic and strategical considerations remain unchanged. Moreover, we find that the moral costs of giving a bad advice is larger when the advisors cannot dictate the clients' decision, but rather have to induce the clients to make bad choices for themselves.

With respect to robotization, our intention was to examine if people trust algorithms more than their human counterparts. In collaboration with two master students, we conducted two experiments. The first experiment suggest that people trust algorithms more than people. However, this does not seem to translate to the context of financial advisory (second experiment), where the participants relied equally on an advice given by a financial advisor and a robo-advisor.

We have also organized workshops in June 2018 and 2019 where we discussed some of the results. Top european researchers within the field presented their work.

Popular science presentation - Updated (Norwegian)

investeringsprodukter. Mange investorer anser finansrådgiveren som den viktigste kilden til informasjon, og finansrådgiveren tjener ofte som den reelle beslutningstakeren bak investeringer i aktivt forvaltede fond.

Det er derfor krevende når finansrådgivere og deres klienter har motstridende interesser. Det som er bra for rådgiveren kan være dårlig for klienten og omvendt. Forskning har også vist at finansrådgivere kan bli fristet til å gi råd som er basert på egeninteresse i stedet for klientens beste.

Imidlertid gir rådgivere antagelig også gode råd, til tross for insentiver til å gjøre noe annet. I dette forskningsprosjektet bruker vi kontrollerte eksperimenter for å undersøke under hvilke forhold rådgiverne oppfører seg rettferdig, og gir gode råd, og under hvilke forhold de handler egoistisk og tilbyr råd som er ugunstige for sine klienter. Vi varierer både risikoen i prospektene som rådgiverne gir råd om, og ansvaret som rådgiverne har for valget deres klienter gjør.

Vi undersøker også i hvilken grad klientene faktisk vil følge rådgiverens råd. Spesielt utforsker vi betydningen av robotisering. Et økende antall finansielle tjenesteleverandører bruker robo-rådgivere; online plattformer som gir råd via komplekse datamaskiner. Et viktig spørsmål er således om klienter stoler på robotbasert rådgivning. Vi undersøker eksperimentelt hvordan klienter responderer på informasjon om at rådgiveren er en algoritme som er programmert for å gi ulike typer råd.

Våre eksperimenter viser at folk er villige til å påta seg en kostnad for å unngå å gi dårlige råd. Deltakere er i mindre grad villige til å ta valg som tjener dem selv best hvis de er i en rådgivningssituasjon. Vi finner også at det er mer (moralsk) krevende å gi dårlige råd hvis klient selv må ta det endelige valget, enn hvis rådgiver mer eller mindre instruere klienten.

Vi har også, i samarbeid med to masterstudenter, studert i hvilken grad klienter stoler på råd, spesielt hvis de kommer fra roboter. I et standard tillitspill har folk en tendens til å stole mer på råd fra algoritmer ('roboter'), enn råd fra mennesker. Men når man gjør rådgivningssituasjonen mer

realistisk, dvs lager en situasjon som minner mer om faktisk finansrådgivning, stoler man like mye på mennesker som på algoritmer.

All den tid klientene følger rådene til sine finansielle rådgivere, så tar rådgiverne også risiko på vegne av klientene. I en serie eksperimenter finner vi at folk er litt mindre tilbøyelige til å ta risiko på vegne av andre enn på vegne av seg selv.

Vi ser også på folks vurdering og aksept av andres risikotakning, og finner blant annet noe mindre aksept for kvinners risikotakning.

Tilslutt har vi en studie som ser på motivasjonen til eksperiment deltakere på MTurk. Vi finner at de motiveres av prestasjonslønn, og at andre former for motivasjon har mindre effekt.

Popular science presentation - Updated (English)

his is particularly salient in finance. Financial advisors constitute the connection between small investors with limited knowledge and complex financial markets, and they play an important role for millions of people who allocate their savings between different investment products. Many investors consider financial advisors as the most important information source, and financial advisors often serve as the true decision makers behind investments into actively managed mutual funds.

It is thus challenging that financial advisors and their clients often have conflicting interests. What is good for the advisor may be bad for the client and vice versa. Indeed, research has demonstrated that financial advisors may be tempted to give advice that are based on self-interest rather than the interests of their clients.

However, advisors (presumably) also give good advice, despite incentives to do otherwise. In this research project we use controlled experiments to investigate under which conditions advisors behave fairly, offering good advice, and under which conditions they act selfishly, offering advice that are unfavorable to their clients. We vary both the riskiness of the prospects that the advisors advice, and the responsibility that the advisors have for the choice their clients make.

We also investigate to what extent the clients actually will follow the advisors' advice. In particular, we explore the role of robotization. An increasing number of financial service providers are using robo-advisors; online platforms that provide advice by complex computers. An important question is thus whether clients trust robot-based advice. Hence, we investigate experimentally how clients will respond to information that the advisor is an algorithm programmed to make particular advices.

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seem to translate to the context of financial advisory (second experiment), where the participants relied equally on an advice given by a financial advisor and a robo-advisor.

A financial advisor who believes that the client will follow his advice, also to some extent take risk on behalf of the client. We present an experimental study on how people take risk on behalf of others. We use three different elicitation methods, and study how each subject makes decisions both on behalf of own money and on behalf of another individual?s money. We find a weak tendency of lower risk-taking with others? money compared to own money.

We also consider gender differences on acceptance for risk-taking and and find the people have a slightly lower accept for risk-taking among females.

We used Amazon Mechanical Turk as our laboratory when investigating advisors? behavior. Understanding what motivates MTurk workers is thus also important. We thus also investigated the motivation of online workers, and found that performance pay is the most effective motivational instrument.

6. I understand that the text of the popular science presentation will be made publicly available*

Completed

Message to the Research Council of Norway

Results

Please provide information about scientific publications, other publications and lectures/presentations, either by retrieving this information from CRIStin or by selecting "Type" to register this information manually.

| Туре | | | | | |
|--|------------------------|-------------------------|---------------|-----------|-----|
| Other publication | | | | | |
| Author(s)* | Title* | Data Archive/Repository | Year* | ISSN/ISBN | DOI |
| Eriksen, Kristoffer Wigestrand; Tonning, Håvard; Underhaug, Martin | In robo we (dis)trust? | | 2020 | | |
| Туре | ı | | | | |
| Dissemination | | | | | |
| Dissemination | | | | | |
| | | | | 1 | |
| Author(s)* | Title* | Journal/newspaper | Year* | ISSN/ISBN | DOI |
| Author(s)* Dijk, Oege; Eriksen, Kristoffer Wigestrand; Fest, Sebastian; Kvaløy, Ola | Title* Fair Advice | Journal/newspaper | Year* 2019 | ISSN/ISBN | DOI |
| Dijk, Oege; Eriksen, Kristoffer Wigestrand; Fest, Sebastian; Kvaløy, Ola | | Journal/newspaper | | ISSN/ISBN | DOI |
| Dijk, Oege; Eriksen, Kristoffer Wigestrand; Fest, Sebastian; Kvaløy, | | Journal/newspaper | | ISSN/ISBN | DOI |
| Dijk, Oege; Eriksen, Kristoffer Wigestrand; Fest, Sebastian; Kvaløy, Ola | | Journal/newspaper | | ISSN/ISBN | DOI |

| Dijk, Oege; Eriksen, Kristoffer Wigestrand; Fest, Sebastian; Kvaløy, Ola | | | 2019 | | | |
|--|--|--|------|--|--|--|
|--|--|--|------|--|--|--|

Туре

Dissemination

| Author(s)* | Title* | Journal/newspaper | Year* | ISSN/ISBN | DOI |
|--|-------------|-------------------|-------|-----------|-----|
| Fest, Sebastian; Kvaløy, Ola; Eriksen, Kristoffer Wigestrand; Dijk, Oege | Fair Advice | | 2018 | | |

Туре

Dissemination

| Author(s)* | Title* | Journal/newspaper | Year* | ISSN/ISBN | DOI |
|------------|---|-------------------|-------|-----------|-----|
| , , , | Motivation and incentives in an online labor market | | 2018 | | |

Туре

Dissemination

| Author(s)* | Title* | Journal/newspaper | Year* | ISSN/ISBN | DOI |
|---|------------------------------------|-------------------|-------|-----------|-----|
| Fest, Sebastian; Kvaløy, Ola; Yaldiz, Nur | Gender, Inequality and Risk-taking | | 2019 | | |

Туре

Dissemination

| Author(s)* | Title* | Journal/newspaper | Year* | ISSN/ISBN | DOI |
|-------------|----------------------------|-------------------|-------|-----------|-----|
| Kvaløy, Ola | Farvel profittmaksimering? | Dagens næringsliv | 2019 | | |

Туре

Dissemination

| Author(s)* | Title* | Journal/newspaper | Year* | ISSN/ISBN | DOI |
|-------------|---------------------|-------------------|-------|-----------|-----|
| Kvaløy, Ola | Meningsfull profitt | Dagens næringsliv | 2018 | | |

Туре

Popular science publication

| Author(s)* | Title* | Place | Year* | ISSN/ISBN | DOI |
|-------------|---|-------|-------|-----------|-----|
| Kvaløy, Ola | Frykt og grådighet: En introduksjon til adferdsfinans | | 2018 | | |

Туре

Academic article

| Author(s)* | Title* | Publication title* | Year* | ISSN/ISBN | DOI | Pages from - to | Volume |
|---|---------------------------------|--|-------|-----------|-----------------------------|--------------------|--------|
| Eriksen, Kristoffer Wigestrand; Kvaløy, Ola; Luzuriaga, Miguel | Risk-taking on behalf of others | Journal of Behavioral and Experimental Finance | 2020 | | 10.1016/ j.jbef.2020.100 | 283 | 26 |

5. Has information on publications been provided?

Yes

Performance indicators

| Results 2018 2019 2020 2021 2022 2023 2024 2025 2026 2027 Cumulative number |
|---|
|---|

Dissemination measures for the general public

Popular science publications (articles/books, books/articles in the public debate, documents formally circulated for review, exhibitions, fiction, etc..)

| | 0 | 0 | | | | | 0 |
|--|---|---|--|--|--|--|---|
| | | | | | | | |

Dissemination measures for users

Reports, memoranda, articles, presentations held at meetings/conferences for project target groups (public sector, trade and industry, organisations)

| | 0 | 3 | | | | | | | 3 |
|--|---|---|--|--|--|--|--|--|---|
|--|---|---|--|--|--|--|--|--|---|

Scientific/scholarly publications

Article

|--|

2. All results data that have emerged from the project are to be reported. Has this been Yes done?

Fellowship grants

Fellowship grants funded under the project

1. Information regarding all fellowship grants must be complete and correct. Have you updated the man-months and other information for each fellowship-holder?

International cooperation

International cooperation funded under the project (in NOK 1000)

Amount in NOK 1000

| Country | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 |
|----------------|-------|-------|------|------|------|------|------|------|------|------|
| Switzerland | | 15000 | | | | | | | | |
| Czech Republic | | 20000 | | | | | | | | |
| Germany | 40000 | 60000 | | | | | | | | |
| Italy | | 15000 | | | | | | | | |

| Final report | 274774 - Fair Advice | Reporting deadline: 20201030 | Received: | 000111 |
|--------------|----------------------|------------------------------|-----------|---------|
| 20201102 | | | r | age: 14 |

| Netherlands | 20000 3000 | 0 |
|-------------|------------|---|
| Sweden | 20000 2000 | 0 |

3. The extent of international cooperation is to be indicated. Has any international cooperation taken place during the report period?

No

Special reports

Alternative 1:

Alternative 2: Original file :

File reference:

4. If any requests for special reports have been put forth by the case officer at the Research Council, these must be fulfilled. Have special reports been submitted?

Not applicable

Report: Fair Advice

1. Objectives and background:

The primary objective of the research project "Fair Advice", is to investigate, by the use of controlled experiments, under which conditions financial advisors behave fairly, offering good advice, and under which conditions they act selfishly, offering advice that are unfavourable to their clients. We will also investigate to what extent clients actually will follow the advisors' advice, and under which conditions advices are neglected.

The secondary objective is to provide new insights into how one can induce financial advisors to give good advice, despite incentives to otherwise. In particular, we will explore the role of risk and responsibility and investigate to what extent clients should be made responsible for his or her own decisions. Our aim is to answer questions relevant for policy makers, like the financial supervisory authority..

2. Results and contributions

The project has resulted in 5 papers that are either published or in the process of being published, plus a master thesis that will eventually be published as a paper. We will here present the main results from each of the papers. Three of the papers (including thesis) are at the core of the project's main objective and fully funded by the Research Council. Three are at the border area of the main objective, and have thus partly benefited from the funding. The presentation of the results also shows who have contributed to each of the papers.

Fair Advice, Revise & resubmit Journal of Banking and Finance. Oege Dijk, Kristoffer Eriksen, Sebastian Fest and Ola Kvaløy.

It is well established that financial advisors in many situations have incentives to give advice that is unfavorable to their clients. Still, millions of investors consider financial advisors as the most important information source, and financial advisors often serve as the true decision makers behind their clients' investment decisions [9]. This is puzzling, and in this paper we ask: Do advisors behave more fairly than standard theory predicts? Does the advice situation put bounds to people's self-interest? In order to answer these questions, we conducted a controlled experiment with 3600 participants investigating to what extent - and under which conditions - people give advice that is favorable to their advisees, despite incentives to do otherwise. We varied both the responsibility that the advisors have for the choice their advisees make and the riskiness of the prospects that the advisors advise.

We find that people are indeed averse to giving bad advice. The chance that a subject behaves selfishly is reduced by over 17 percentage points when a pure game of conflict (the dictator game) is transformed into an advisor game. We identify two sources to fair behavior: advisor identity and delegation of responsibility. The identity effect is identified by simple framing: Once participants are given the role as advisors, they behave less selfish, even if the economic and strategical considerations remain unchanged. The delegation effect is identified by comparing a binding and non-binding advice. We find that the advisors behave less selfish when the advice is non-binding, i.e. when the final decision is delegated to the advisee. This indicates that the moral costs of giving a bad advice is larger when the advisors cannot dictate the clients' decision, but rather have to induce the clients to make bad choices for themselves.

The latter effect is particularly salient when outcomes are risky. While introducing a risky payoff generally increases the probability that the advisor will behave selfishly, the delegation effect, i.e, the moral costs of inducing the clients to make bad choices for themselves, is greater in risky environments. This finding suggests that if one wants to induce advisors to make fair advice, it may beneficial to give their clients real choices.

In Bots We (dis)Trust? Master thesis University of Stavange). Håvard Tonning and Martin Underhaug. With Kristoffer Eriksen as supervisor.

As algorithms have evolved to become alternatives to human decision-makers in several domains, trust in algorithms becomes a crucial research topic. Indeed, research have shown that higher levels of trust lead to more reliance and faster adoption of technological artifacts. The intention of this paper is to examine if people trust algorithms more than their human counterparts. This is done by constructing two experiments which each explore different manifestations of trust. First, we replicate the well-known trust game by Berg, Dickhaut and McCabe (1995) to investigate if people trust unknown individuals more than algorithms ('Study 1', n=1,600). Next, we employ the 'Judge-Advisor System'—a paradigm used to study the impact of advice on human judgements—and examine if people rely more on a financial advice emanating from a financial advisor compared to a robo-advisor ('Study 2', n=350). All participants were recruited through the online crowdsourcing platform 'Amazon Mechanical Turk.'

The results from 'Study 1' suggest that people trust algorithms more than people. However, this does not seem to translate to the context of financial advisory ('Study 2'), where the participants relied equally on an advice given by a financial advisor and a robo-advisor. Moreover, age does not seem to affect the level of trust in algorithms nor robo-advisors and trust in algorithms seems to be independent of the information revealed about the algorithm.

Risk-taking on behalf of others, Journal of Behavioral and Experimental Finance, vol. 26, 2020,100283 Kristoffer W. Eriksen, Ola Kvaløy and Miguel Luzuriaga

A financial advisor who believes that the client will follow his advice, also to some extent take risk on behalf of the client. In this paper, we present an experimental study on how people take risk on behalf of others. We use three different elicitation methods, and study how each subject makes decisions both on behalf of own money and on behalf of another individual's money. We find a weak tendency of lower risk-taking with others' money compared to own money. However, subjects believe that other participants take more risk with other people's money than with their own. At the same time, subjects on average think that others are more risk averse than themselves. The data also reveals that subjects are quite inconsistent when making risk decisions on behalf of others. A large majority of subjects alternates between taking more risk, less risk or the same amount of risk with other people's money compared to own money.

Feedback and Risk-Taking with Own and Other People's Money. Working paper. Kristoffer Eriksen, William Gjedrem and Jon Kristian Heimdal

In this paper we investigate how manipulating feedback frequency on investment outcomes affects risk-taking in an investment game, when subjects make investment decisions for both themselves and others. We use a standard investment game, and apply a within-between experimental design. Subjects invest both their own money and other people's money (within), while the frequency of feedback varies between subjects. Our main result shows that feedback frequency affects relative investment that subjects make for themselves and others: When feedback frequency is high, subjects invest on average the same amount in the risky lottery for both themselves and others. However, when feedback frequency

is low, subjects invest significantly less in the risky lottery on behalf of others compared to what they do for themselves.

Gender, inequality and risk taking. Working paper. Sebastian Fest, Ola Kvaløy and Nur Yaldiz

We study experimentally whether people find economic inequalities that result from risk taking equally acceptable when males rather than females are taking risks. In the experiment, participants that act as third-party spectators make redistributive decisions involving a pair of workers who chose to be compensated for their work effort through a risky prospect. We randomly vary the gender composition of the worker pair while keeping opportunities, choices and the resulting inequalities between workers constant. We find that relative to female participants, male participants are less inclined to redistribute earnings from lucky workers to unlucky workers if the lucky worker is male rather than female. Specifically, males are fourteen percent more likely to leave unlucky workers with no earnings if they are male rather than female. We further investigate whether this behavior can be attributed to differences in explicit and implicit attitudes towards gender roles in our sample. We find no indication that males' discriminatory behavior towards male winners is driven by either measure.

Motivation and incentives in an online labor market. Sebastian Fest, Ola Kvaløy, Petra Nieken and Anja Schottner. Revise and resubmit Leadership Quaterly

We used Amazon Mechanical Turk as our laboratory when investigating advisors' behavior. Understanding what motivates MTurk workers is thus also important. This paper investigates the motivation of online workers, and the abstract of the first study goes as follows:

An increasing number of workers do simple work in online labor markets. In contrast to employees within firms, online workers usually work from home and do not have any personal contract with employers or colleagues. This makes motivation more challenging. In this paper we present the results from a large scale experiment on Amazon Mechanical Turk, testing the effect of performance pay and non-monetary motivation on 3600 workers whose job were to type latin fragments. We study two types of non-monetary motivation: Praise and goal-setting. We find that praise had a significant negative effect on quantity – and no effect on quality – irrespective of how the workers were paid. Goal-setting had no significant effect, neither on quantity or quality. Performance pay, however, had a strong positive affect on quantify, although we find no difference between high and low piece rate. We find no evidence of a multitask problem. Rather we find a positive relationship between quantity and quality in all treatments, including the performance pay treatments. In sum, the most efficient way to motivate the workers in our study was to pay them a low piece rate, and not provide them with any non-monetary motivation.

3. Evaluation

We believe that the main goals formulated in the research project have been accomplished. The research project has resulted in five papers and a master thesis (that will become a scientific paper). One paper is published and two have got favourable invitations to revise and resubmit from prestigious journals with high impact factor. We will run some more experiments in order to turn the thesis into a paper, but do to sickness we had to postpone. Therefore we have also used a bit less of the funding we received from the Research Council.

The research results have also been disseminated in newspaper articles, scientific conferences and public talks. The research results have also been presented to practitioners in public organizations and private firms.

The project has provided careful empirical investigation of the motivation, fairness concerns and risk preferences to people who are put in a situation to give advice or take risk on behalf of others. The project has been well implemented, and we gratefully acknowledge the Norwegian Research Council for funding.