# Perceived returns to different assets and investment options

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**Abstract**

This research study examines perceived returns to various investment options and their correlation with individual characteristics. Data is collected through a survey of a representative sample of over 7,000 US respondents aged 25-54. Results reveal that men generally perceive higher returns for all investments, with significant differences for self-picked stocks and cryptocurrencies. Perceived returns are highly correlated across different investment options. Personality traits play a big role, with risk-loving individuals foreseeing higher returns overall, and certain traits like conscientiousness, agreeableness, and neuroticism being strongly associated with specific options. Perceived returns strongly predict investment choices for self-picked stocks and cryptocurrencies, two options which women are very unlikely to choose. The study emphasizes the significance of perceived returns and individual traits in investment decision-making.

## 1    Introduction

Investing has become more accessible than ever before, thanks to advancements in technology and the proliferation of investment options. Today, investors have a plethora of choices, including selecting stocks themselves, using a robo-advisor, investing in mutual funds, or cryptocurrencies. Each of these investment avenues comes with unique advantages and disadvantages, and the perceived returns on investment can vary widely between them. This research aims to compare the perceived returns to investment of choosing stocks oneself, using a robo-advisor, investing in a mutual fund, or cryptocurrencies.

Investing in individual stocks can offer investors a sense of control and the potential for higher returns if they can identify undervalued or high-growth companies. However, this approach requires a considerable amount of time, effort, and expertise in analyzing financial

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statements, assessing market trends, and making informed investment decisions. On the other hand, a robo-advisor can offer a more passive investing approach, where an algorithm-driven platform makes investment decisions based on an investor's risk tolerance, investment goals, and financial situation. Robo-advisors are typically more affordable than human advisors, and they offer a diversified portfolio of investments, helping investors mitigate the risks associated with investing in individual stocks. Mutual funds provide a diversified portfolio of stocks or other assets managed by professional fund managers, which can provide investors with exposure to a broader range of investment opportunities than investing in individual stocks. Additionally, mutual funds typically require less time and expertise to manage than selecting stocks oneself, making them an attractive option for investors who want to take a more hands-off approach to their investments. Cryptocurrencies, such as Bitcoin, have become increasingly popular as an investment option due to their potential for high returns and their decentralized nature. However, investing in cryptocurrencies can be highly speculative and volatile, which may not be suitable for all investors.

Overall, why do investors choose different investment options? It is essential to evaluate the potential risks and rewards associated with each investment option before making an investment decision. Since individuals are exposed to very different information sources and life events, they might hold very different beliefs about how different asset classes will evolve in the future.

In order to shed light on these questions, I design a survey to elicit perceived returns to investments in different asset classes through a professional survey company. I collect responses from more than 7,000 respondents of the US representative of the labor force aged 25-54. Summary statistics are presented in Table 1. Respondents are asked about their perceived returns to difference forms of investments within the next twelve months. The survey was conducted in 2022 using a professional survey company.

I find that, on average, men perceive returns to be higher for all investment options. The differences between perceived returns of men and women are particular pronounced for self-picked stocks and cryptocurrencies. For all investment options besides cryptocurrencies,

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respondents that have completed university perceive returns to be higher. Within respondents, perceived returns are correlated highly across investment options. Older respondents tend to perceive returns to roboadvisors to be higher and much lower for cryptocurrencies. Both women and older respondents expect cryptocurrencies to provide negative returns.

Further I find that personality traits are systematically related to perceived returns. Risk loving respondents perceive returns to be higher across all options, while patient, extrovert as well as open respondents perceive returns to be higher for stock picking and cryptocurrencies. Conscientious respondents perceive lower returns to fund managers and cryptocurrencies. Agreeable respondents perceive returns to be higher for all but self-picked stocks and neurotic respondents perceive higher returns for managed funds and roboadvisors. These strong associations between personality traits are largely robust across sex and education groups.

Finally, I look at who invests into which asset and how perceived returns relate to whether the respondent invests. For self-picked stocks and cryptocurrencies perceived returns are highly predictive of this option is chosen. A one percentage point higher perceived return is associated with an about one percentage point higher likelihood of choosing the respective investment option. For fund managers and robo-advisors the associations are highly significant, but much smaller. Women are much less likely to pick stocks themselves or to hold cryptocurrencies. Despite an exhaustive set of controls, including perceived returns, personality traits remain predictive of certain investment options. In general, risk loving and open respondents tend to be more likely to engage in either of the investment options.

Table 1: Summary statistics

|  | Mean | Standard deviation |
| --- | --- | --- |
| University degree | 0.52 | 0.50 |
| Woman | 0.50 | 0.50 |
| Age | 39.89 | 8.28 |

| | | |
|---|---|---|
| Log earnings | 7.70 | 1.15 |
| Chooses stocks | 0.32 | 0.47 |
| Invests in mutual fund | 0.14 | 0.34 |
| Uses robo-advisor | 0.06 | 0.41 |
| Invests in crypto | 0.26 | 0.44 |
| Perceived returns to stocks | 2.16 | 11.84 |
| Perceived returns to mutual fund | 3.23 | 11.41 |
| Perceived returns to robo-advisor | 5.40 | 11.41 |
| Perceived returns to crypto | 0.71 | 13.73 |

## 2 Perceived returns

Table 2: Cross-correlation table

| Variables | Stocks | fund | robo-advisor | crypto |
|---|---|---|---|---|
| Perceived returns to stocks | 1.000 | | | |
| Perceived returns to mutual fund | 0.490 | 1.000 | | |
| Perceived returns to robo-advisor | 0.479 | 0.654 | 1.000 | |
| Perceived returns to crypto | 0.436 | 0.433 | 0.391 | 1.000 |

Figure 1: Average perceived returns
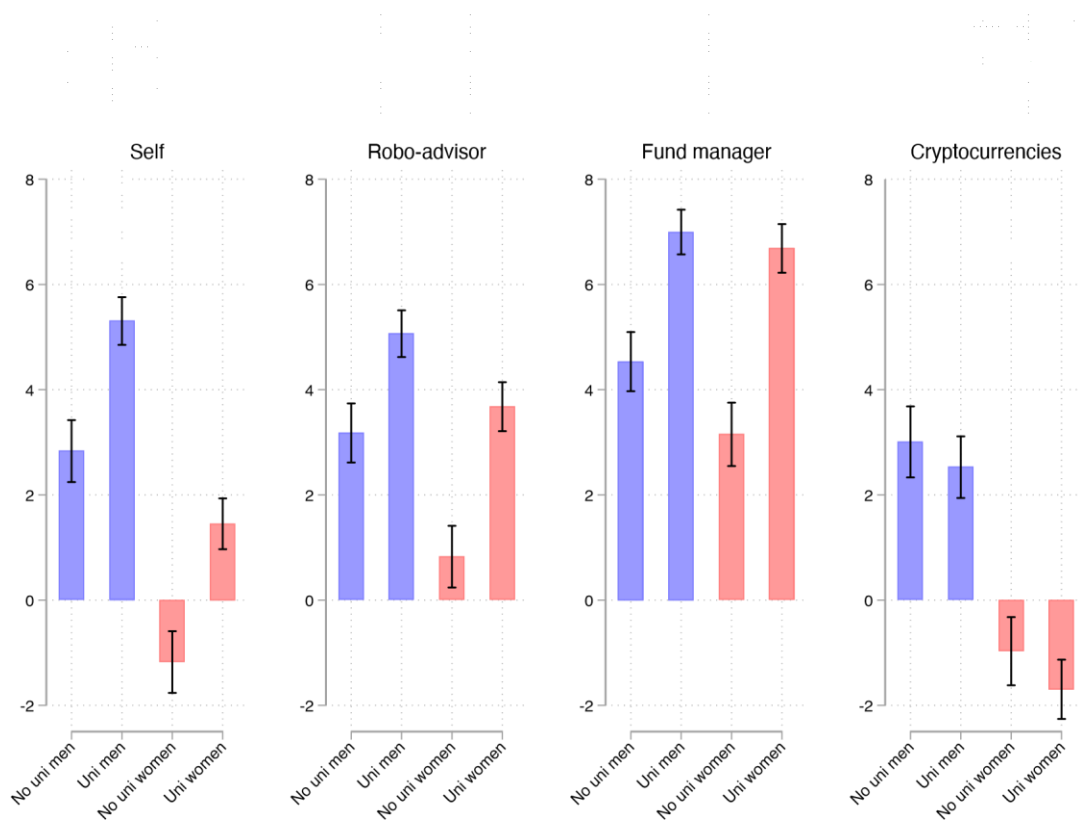
Notes: Perceived returns are in percentage points.

Figure 2: Distributions of perceived returns

Probability density function          Cumulative density function

Perceived return

——— Self   ■ ▪▪▪ Robo-advisor   — — Fund manager   — ▪ — Cryptocurrencies
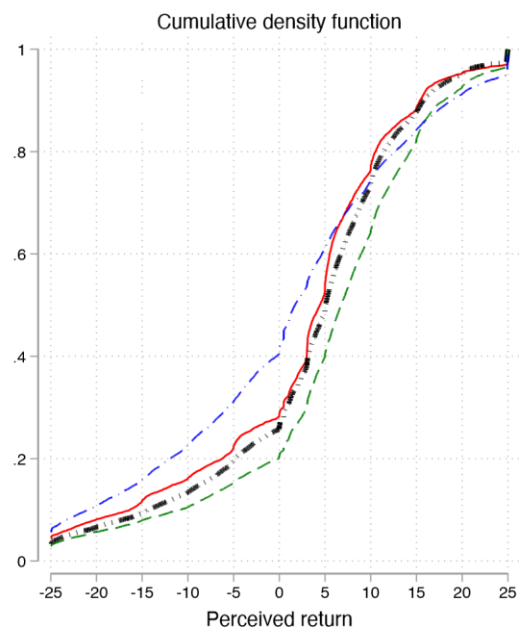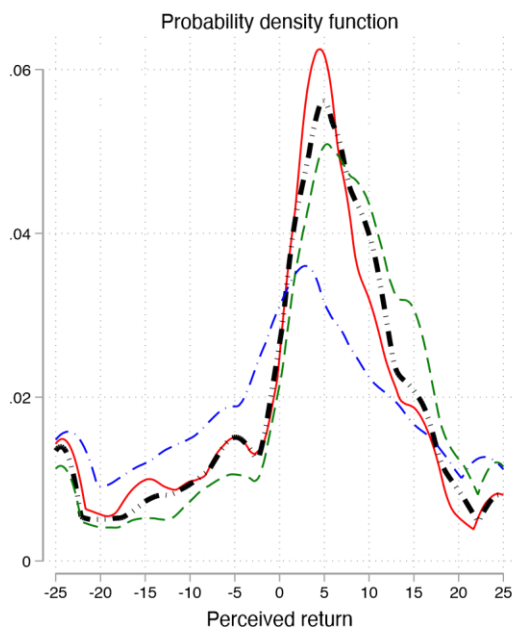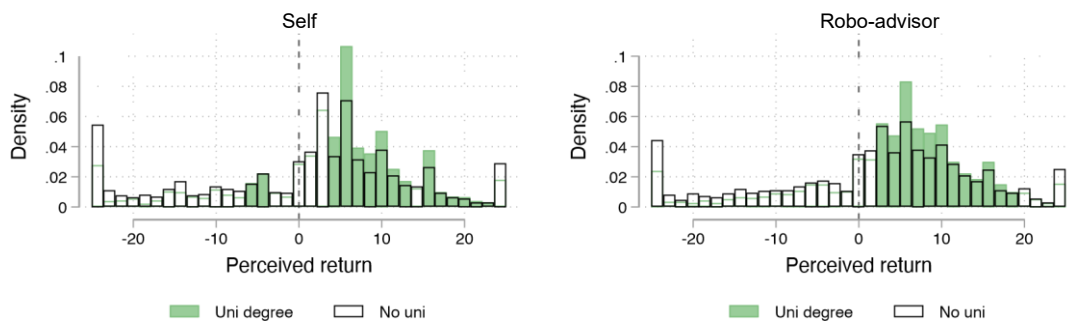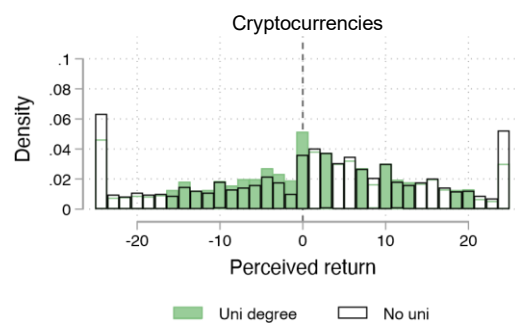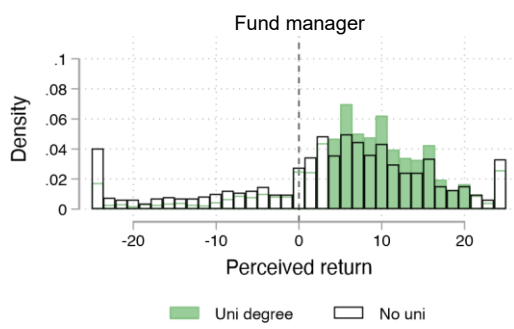
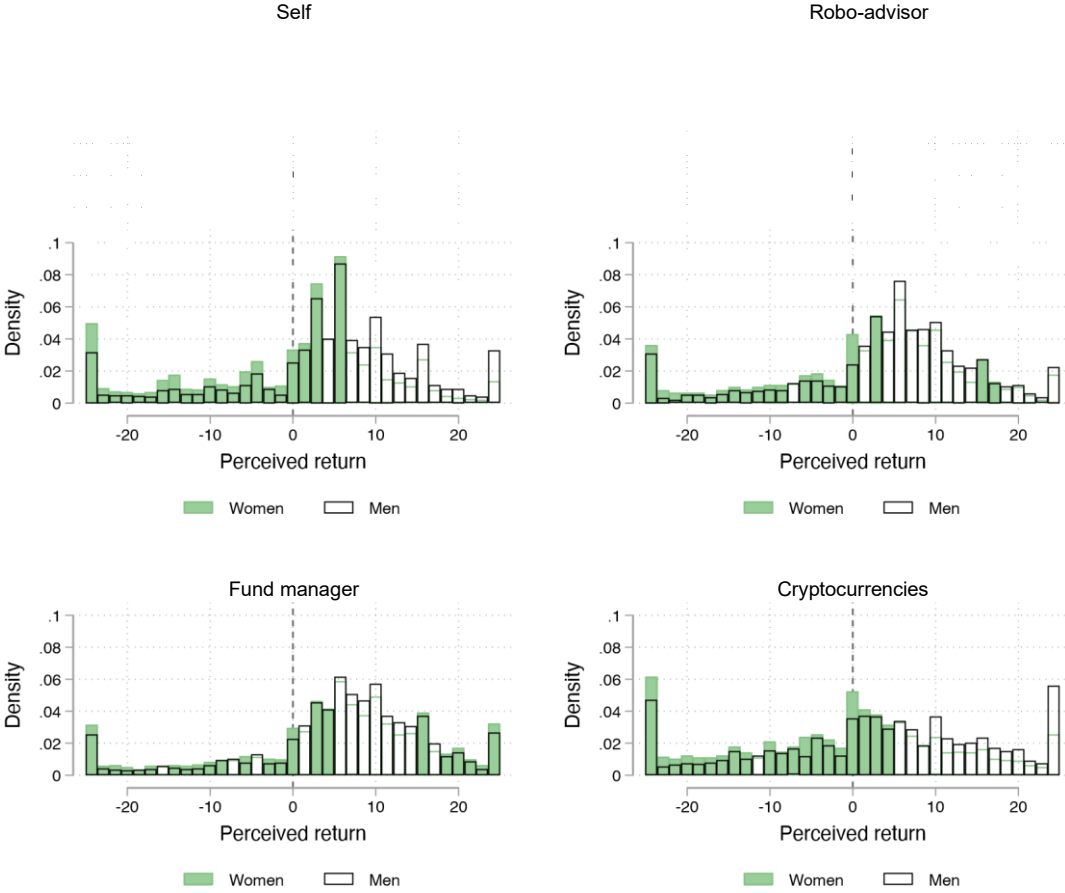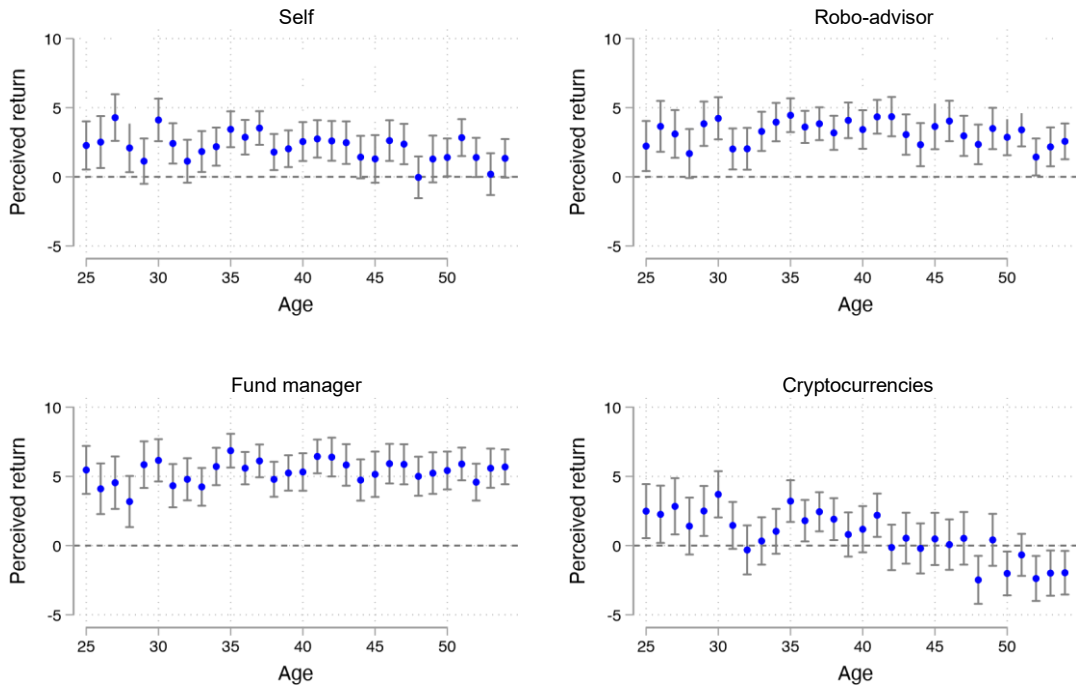Notes: Perceived returns are in percentage points.

Figure 3: Distributions of perceived returns by education

Notes: Perceived returns are in percentage points.

# Figure 4: Distributions of perceived returns by sex

Figure 5: Distributions of perceived returns by age

Self          Fund          Robo          Crypto

|  | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) |
|---|---|---|---|---|---|---|---|---|
| University degree | 1.8452*** | 1.5233*** | 1.9190*** | 1.3717*** | 2.4300*** | 1.7895*** | -0.9863*** | -0.6435* |
|  | (0.2879) | (0.3419) | (0.2809) | (0.3347) | (0.2812) | (0.3309) | (0.3281) | (0.3909) |
| Woman | -2.6786*** | -2.7961*** | -1.4317*** | -1.8476*** | -0.3453 | -0.6504** | -2.7333*** | -2.5547*** |
|  | (0.2817) | (0.3280) | (0.2781) | (0.3202) | (0.2769) | (0.3208) | (0.3235) | (0.3767) |
| Age | -0.0176 | -0.0127 | 0.0002 | 0.0002 | 0.0398** | 0.0321* | -0.1072*** | -0.1056*** |
|  | (0.0165) | (0.0178) | (0.0163) | (0.0175) | (0.0164) | (0.0177) | (0.0190) | (0.0205) |
| Log earnings | 0.6751*** | 0.5875*** | 0.6693*** | 0.5791*** | 0.7715*** | 0.6503*** | 0.3817*** | 0.3669** |
|  | (0.1360) | (0.1480) | (0.1299) | (0.1432) | (0.1348) | (0.1466) | (0.1415) | (0.1545) |
| Married | 0.2782 | 0.2115 | 0.1892 | 0.1160 | 0.4060 | 0.2574 | -0.0116 | -0.0305 |
|  | (0.2744) | (0.2914) | (0.2685) | (0.2877) | (0.2684) | (0.2857) | (0.3168) | (0.3393) |
| Risk loving | 1.5869*** | 1.6072*** | 0.9675*** | 0.9386*** | 1.0811*** | 1.0895*** | 2.1641*** | 2.1324*** |
|  | (0.1691) | (0.1783) | (0.1692) | (0.1772) | (0.1743) | (0.1808) | (0.1925) | (0.2012) |
| Patience | 0.3306** | 0.2839* | 0.0878 | 0.0900 | 0.1591 | 0.1578 | 0.5485*** | 0.5767*** |
|  | (0.1470) | (0.1559) | (0.1481) | (0.1558) | (0.1472) | (0.1550) | (0.1686) | (0.1778) |
| Openness | 0.8043*** | 0.8318*** | 0.0748 | 0.0805 | 0.0650 | 0.0169 | 0.9083*** | 0.8378*** |
|  | (0.1731) | (0.1834) | (0.1687) | (0.1792) | (0.1708) | (0.1794) | (0.1970) | (0.2073) |
| Conscientiousness | 0.2368 | 0.0746 | -0.2587* | -0.2792* | -0.0725 | -0.0883 | -0.4587*** | -0.5970*** |
|  | (0.1476) | (0.1557) | (0.1446) | (0.1540) | (0.1426) | (0.1523) | (0.1674) | (0.1771) |
| Extroversion | 0.3902** | 0.3409** | 0.1496 | 0.0942 | 0.1370 | 0.0715 | 0.5377*** | 0.4378** |
|  | (0.1553) | (0.1628) | (0.1531) | (0.1599) | (0.1557) | (0.1620) | (0.1776) | (0.1871) |
| Agreeableness | -0.1165 | -0.0214 | 0.5149*** | 0.4925*** | 0.6897*** | 0.7663*** | 0.4864*** | 0.6096*** |

|  | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) |
|---|---|---|---|---|---|---|---|---|
|  | (0.1489) | (0.1590) | (0.1452) | (0.1531) | (0.1447) | (0.1537) | (0.1699) | (0.1794) |
| Neuroticism | 0.0780 | 0.1347 | 0.5005*** | 0.5463*** | 0.5027*** | 0.4194*** | 0.2048 | 0.2102 |
|  | (0.1478) | (0.1546) | (0.1458) | (0.1533) | (0.1445) | (0.1500) | (0.1674) | (0.1758) |
| Observations | 7448 | 7250 | 7440 | 7244 | 7442 | 7245 | 7429 | 7232 |
| $R_2$ | 0.0875 | 0.1588 | 0.0374 | 0.1129 | 0.0448 | 0.1213 | 0.0876 | 0.1643 |

Table 3: Perceived returns explained by covariates

| | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) |
|---|---|---|---|---|---|---|---|---|
| Region FE | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| Occupation FE | | ✓ | | ✓ | | ✓ | | ✓ |

*Notes*: OLS regressions. Robust standard errors in parenthesis. * p<0.1, ** p<0.05, *** p<0.01.

Table 4: Difference in perceived returns to crypto minus other categories explained by covariates

|  | (1) | (2) | (3) |
| --- | --- | --- | --- |
| University degree | -3.1621*** | -3.0380*** | -2.1775*** |
|  | (0.2958) | (0.2960) | (0.3528) |
| Woman | -2.0181*** | -1.2463*** | -0.7870** |
|  | (0.2803) | (0.2932) | (0.3416) |
| Age | -0.1451*** | -0.1136*** | -0.1106*** |
|  | (0.0169) | (0.0173) | (0.0186) |
| Log earnings | -0.1784 | -0.3379*** | -0.2518* |
|  | (0.1187) | (0.1181) | (0.1289) |
| Married | -0.1456 | -0.3048 | -0.2187 |
|  | (0.2898) | (0.2882) | (0.3099) |
| Risk loving |  | 0.9398*** | 0.9079*** |
|  |  | (0.1736) | (0.1843) |
| Patience |  | 0.3547** | 0.3978** |
|  |  | (0.1526) | (0.1621) |
| Openness |  | 0.5928*** | 0.5280*** |
|  |  | (0.1751) | (0.1877) |
| Conscientiousness |  | -0.4312*** | -0.5019*** |
|  |  | (0.1550) | (0.1635) |
| Extroversion |  | 0.3270** | 0.2879* |
|  |  | (0.1614) | (0.1693) |
| Agreeableness |  | 0.1209 | 0.1935 |

|  | | |
|---|---|---|
|  | (0.1502) | (0.1584) |
| Neuroticism | -0.1589 | -0.1614 |
|  | (0.1501) | (0.1578) |
| Observations | 7413 | 7411 | 7215 |
| $R^2$ | 0.0350 | 0.0515 | 0.1298 |
| Region FE | ✓ | ✓ | ✓ |
| Occupation FE |  |  | ✓ |

Notes: OLS regressions. Robust standard errors in parenthesis.
* p<0.1, ** p<0.05, *** p<0.01.

Table 5: Perceived returns including individual fixed effects

|  | (1) |
|---|---|
| Robo-advisor | 1.0665*** |
|  | (0.1446) |
| Fund manager | 3.2358*** |
|  | (0.1446) |
| Crypto | -1.4437*** |
|  | (0.1447) |
| Observations | 29805 |
| $R^2$ | 0.6109 |
| Individual FE | ✓ |

Notes: OLS regressions. Robust standard errors in parenthesis. * p<0.1, ** p<0.05, *** p<0.01.

Table 6: Explaining individual perceived returns with covariates

|  | (1) | (2) |
|---|---|---|
| University degree | 1.3418*** | 1.0151*** |
|  | (0.1138) | (0.1322) |
| Woman | -1.7845*** | -1.9629*** |
|  | (0.1112) | (0.1265) |
| Age | -0.0215*** | -0.0217*** |
|  | (0.0066) | (0.0069) |
| Log earnings | 0.6344*** | 0.5469*** |
|  | (0.0546) | (0.0579) |

|                    |              |              |
|--------------------|-------------:|-------------:|
| Married            | 0.2018*      | 0.1360       |
|                    | (0.1087)     | (0.1126)     |
| Risk loving        | 1.4588***    | 1.4423***    |
|                    | (0.0682)     | (0.0688)     |
| Patience           | 0.2953***    | 0.2765***    |
|                    | (0.0588)     | (0.0604)     |
| Openness           | 0.4430***    | 0.4443***    |
|                    | (0.0683)     | (0.0696)     |
| Conscientiousness  | -0.1435**    | -0.2236***   |
|                    | (0.0575)     | (0.0596)     |
| Extroversion       | 0.3150***    | 0.2337***    |
|                    | (0.0616)     | (0.0628)     |
| Agreeableness      | 0.3788***    | 0.4614***    |
|                    | (0.0587)     | (0.0608)     |
| Neuroticism        | 0.3223***    | 0.3300***    |
|                    | (0.0586)     | (0.0597)     |
| Observations       | 29753        | 29753        |
| $R_2$              | 0.0837       | 0.1801       |
| Region FE          |              | ✓            |
| Occupation FE      |              | ✓            |

*Notes*: OLS regressions. The dependent variable are the fixed effects from Table 9. Robust standard errors in parenthesis. * $p<0.1$, ** $p<0.05$, *** $p<0.01$.
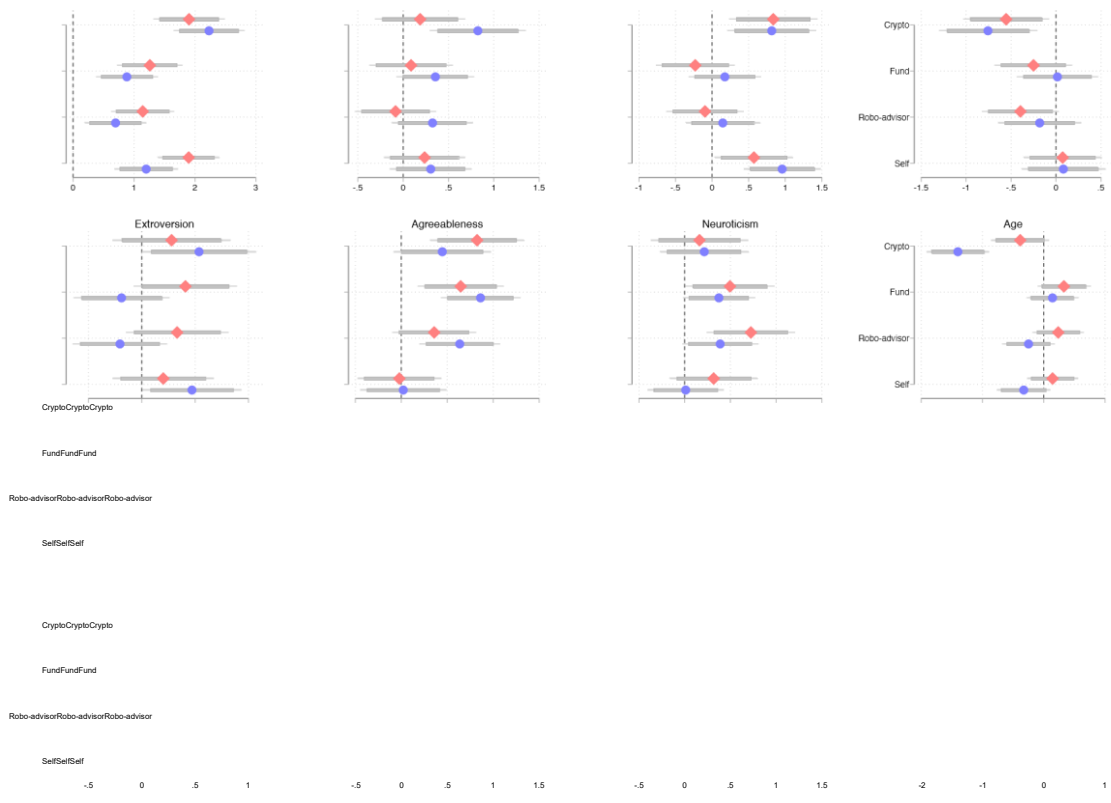
Figure 6: Coefficients by sex

| Risk loving | Patient | Openness | Conscientiousness |
|---|---|---|---|

Notes: The coefficients are estimated using the same regression equation as in columns (2), (4), (6), and (8) of Table 3 but with the models estimated separately by sex. For the sake of comparability age is standardized to have mean zero and a standard deviation of one, as do all other explanatory variables in the plots.

Figure 7: Coefficients by education
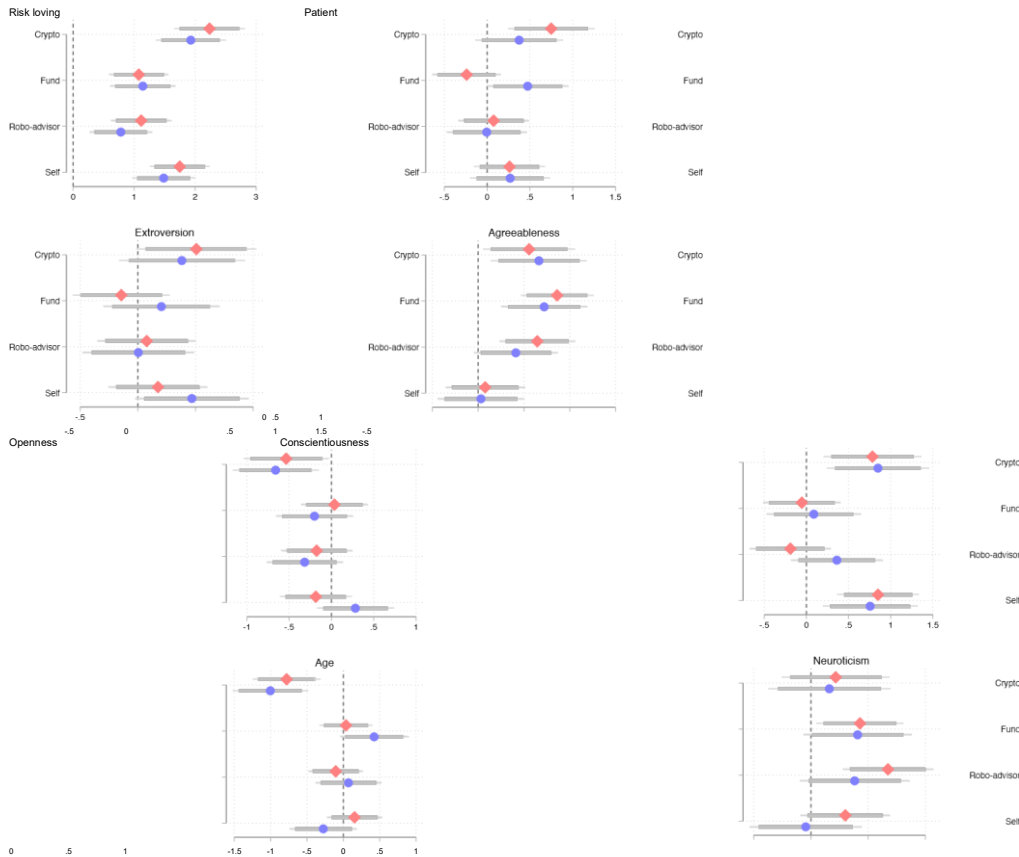
Notes: The coefficients are estimated using the same regression equation as in columns (2), (4), (6), and (8) of Table 3 but with the models estimated separately by education. For the sake of comparability age is standardized to have mean zero and a standard deviation of one, as do all other explanatory variables in the plots.
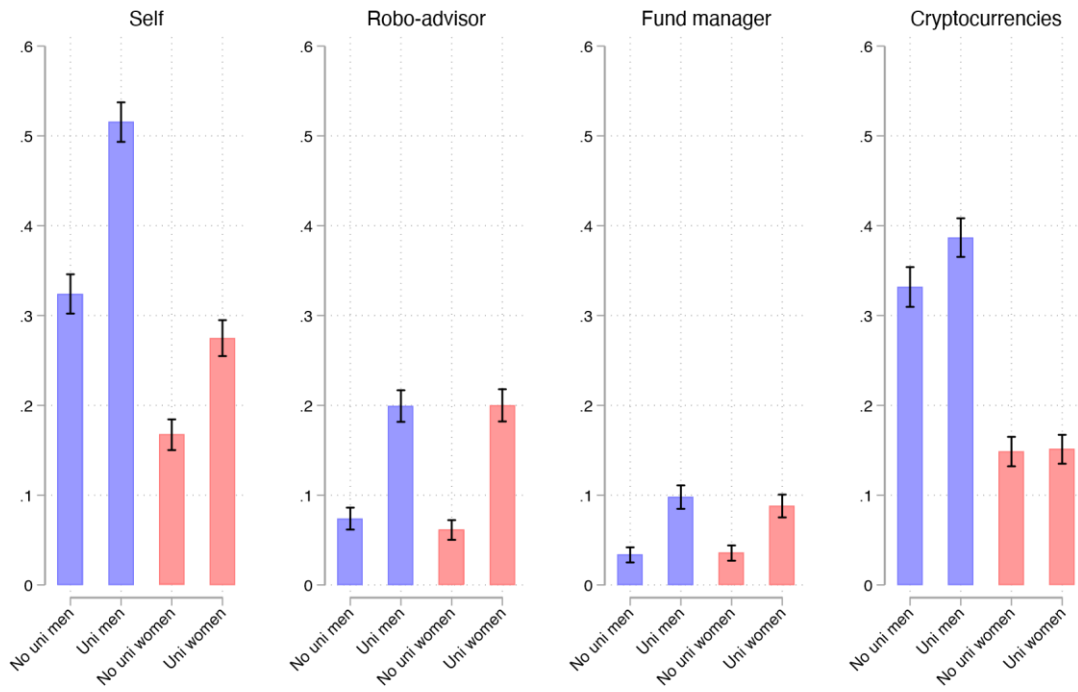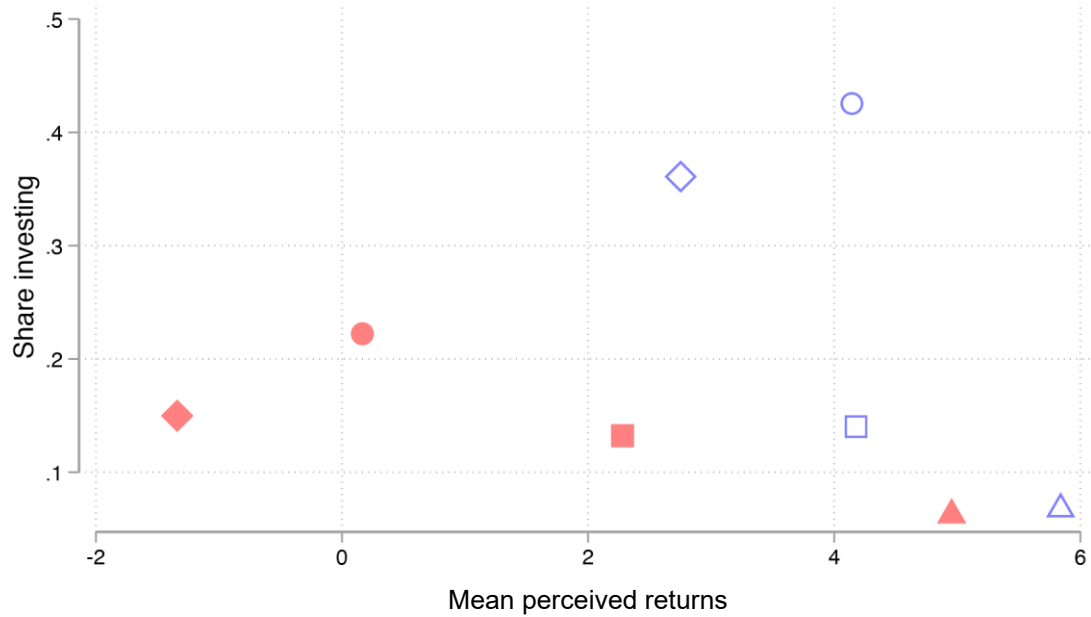
# 3    Who invests in what?

Figure 8: Share of respondents investing

Notes: Respondents can choose multiple options.

Figure 9: Mean perceived returns vs share of respondents investing

Notes: Each symbol represents the mean perceived returns on the x-axis and the share of those investing in the respective option on the y-axis of a specified demographic group.

Figure 10: Mean perceived returns vs share of respondents investing for each category
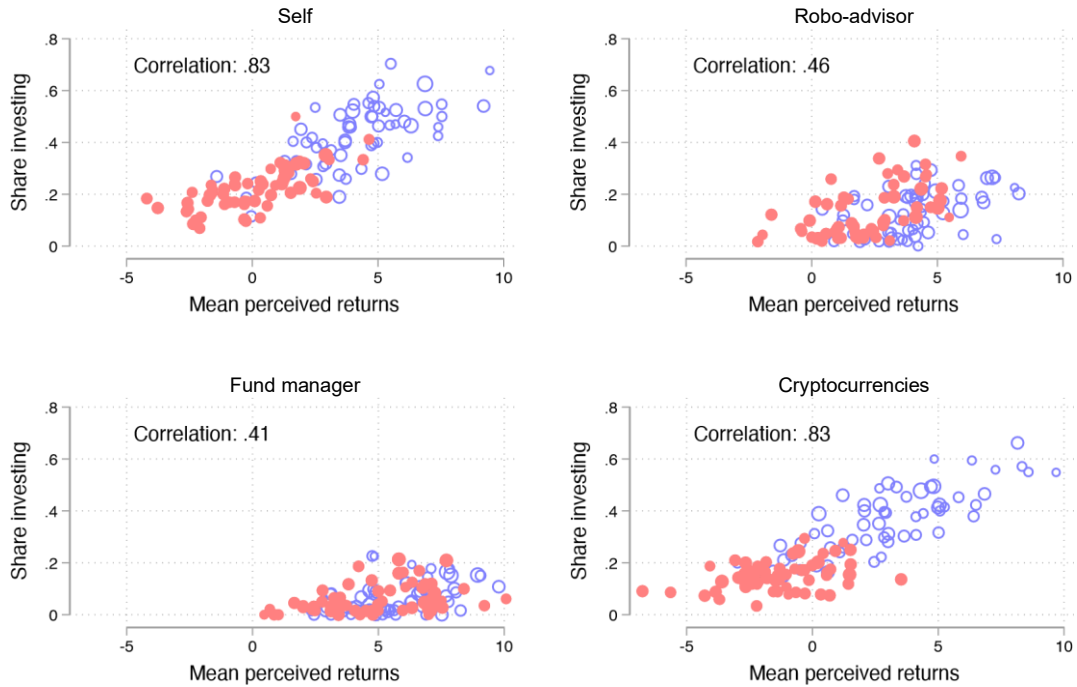


Notes: Each symbol represents the mean perceived returns on the x-axis and the share of those investing in the respective option on the y-axis of the respondents of a certain level of education, sex, and age. Women are marked as red and men as blue circles. The size of dots is proportional to the number of observations within the segmented demographic group.

|  | Self | | Fund | | Robo | | Crypto | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) |
| Returns stocks | 0.0131*** | 0.0099*** | | | | | | |
|  | (0.0004) | (0.0004) | | | | | | |

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| | (1) | (2) | (3) | (4) |
|---|---|---|---|---|
| Returns mutual fund | 0.0016*** | 0.0009*** | | |
| | (0.0003) | (0.0003) | | |
| Returns robo-advisor | | 0.0021*** | 0.0018*** | |
| | | (0.0003) | (0.0004) | |
| Returns crypto | | | 0.0121*** | 0.0093*** |
| | | | (0.0003) | (0.0004) |
| University degree | 0.0806*** | 0.0824*** | 0.0371*** | 0.0246** |
| | (0.0125) | (0.0097) | (0.0127) | (0.0114) |
| Woman | -0.1101*** | 0.0144 | -0.0015 | -0.1208*** |
| | (0.0123) | (0.0093) | (0.0118) | (0.0111) |
| Age | -0.0020*** | 0.0044*** | -0.0014*** | -0.0048*** |
| | (0.0006) | (0.0005) | (0.0005) | (0.0006) |
| Log earnings | 0.0251*** | 0.0212*** | 0.0068 | 0.0141*** |
| | (0.0048) | (0.0035) | (0.0048) | (0.0044) |
| Married | 0.0219** | 0.0497*** | 0.0385*** | 0.0071 |
| | (0.0109) | (0.0087) | (0.0104) | (0.0098) |
| Risk loving | 0.0286*** | 0.0106** | 0.0072 | 0.0394*** |
| | (0.0059) | (0.0043) | (0.0046) | (0.0056) |
| Patience | -0.0113** | -0.0095** | 0.0022 | 0.0079 |
| | (0.0055) | (0.0042) | (0.0053) | (0.0050) |
| Openness | 0.0161** | 0.0012 | 0.0049 | 0.0307*** |
| | (0.0064) | (0.0049) | (0.0057) | (0.0059) |
| Conscientiousness | -0.0133** | 0.0138*** | 0.0082* | -0.0132*** |

|  | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) |
|---|---|---|---|---|---|---|---|---|
|  |  | (0.0055) |  | (0.0041) |  | (0.0045) |  | (0.0051) |
| Extroversion |  | 0.0071 |  | -0.0027 |  | 0.0051 |  | 0.0144*** |
|  |  | (0.0058) |  | (0.0044) |  | (0.0053) |  | (0.0054) |
| Agreeableness |  | 0.0016 |  | 0.0031 |  | 0.0030 |  | 0.0029 |
|  |  | (0.0055) |  | (0.0041) |  | (0.0043) |  | (0.0050) |
| Neuroticism |  | -0.0116** |  | -0.0069 |  | 0.0102* |  | 0.0073 |
|  |  | (0.0056) |  | (0.0043) |  | (0.0060) |  | (0.0051) |
| Observations | 7461 | 7250 | 7453 | 7244 | 7455 | 7245 | 7373 | 7164 |
| $R_2$ | 0.1099 | 0.2489 | 0.0028 | 0.1554 | 0.0035 | 0.0885 | 0.1450 | 0.2932 |

Table 7: Whether respondent invests explained by covariates

| Region FE | ✓ |  | ✓ |  | ✓ |  | ✓ |
| Occupation FE | ✓ |  | ✓ |  | ✓ |  | ✓ |

*Notes*: OLS regressions.Robust standard errors in parenthesis. * p<0.1, ** p<0.05, *** p<0.01.

|  | (1) | (2) | (3) | (4) | (5) | (6) |
|---|---|---|---|---|---|---|
| University degree | -0.0841*** | -0.0566*** | -0.0723*** | -0.0494*** | -0.0579*** | -0.0384*** |
|  | (0.0097) | (0.0115) | (0.0092) | (0.0111) | (0.0093) | (0.0111) |
| Woman | -0.1453*** | -0.1035*** | -0.1099*** | -0.0825*** | -0.1131*** | -0.0877*** |
|  | (0.0094) | (0.0115) | (0.0091) | (0.0110) | (0.0091) | (0.0110) |
| Age | -0.0082*** | -0.0062*** | -0.0066*** | -0.0052*** | -0.0063*** | -0.0049*** |
|  | (0.0005) | (0.0006) | (0.0005) | (0.0006) | (0.0005) | (0.0006) |
| Log earnings | 0.0002 | -0.0025 | -0.0064 | -0.0058 | -0.0029 | -0.0031 |
|  | (0.0042) | (0.0046) | (0.0039) | (0.0044) | (0.0039) | (0.0043) |
| Married | -0.0181* | -0.0304*** | -0.0207** | -0.0305*** | -0.0182** | -0.0292*** |
|  | (0.0096) | (0.0101) | (0.0091) | (0.0098) | (0.0091) | (0.0097) |
| Risk loving |  | 0.0368*** |  | 0.0200*** |  | 0.0235*** |
|  |  | (0.0055) |  | (0.0054) |  | (0.0054) |

| | | | | | | |
|---|---|---|---|---|---|---|
| Patience | 0.0187*** | | 0.0143*** | | 0.0137*** | |
| | (0.0052) | | (0.0050) | | (0.0049) | |
| Openness | 0.0295*** | | 0.0221*** | | 0.0219*** | |
| | (0.0060) | | (0.0059) | | (0.0058) | |
| Conscientiousness | -0.0217*** | | -0.0171*** | | -0.0161*** | |
| | (0.0050) | | (0.0049) | | (0.0048) | |
| Extroversion | 0.0136** | | 0.0107** | | 0.0107** | |
| | (0.0055) | | (0.0053) | | (0.0053) | |
| Agreeableness | 0.0049 | | 0.0002 | | 0.0015 | |
| | (0.0050) | | (0.0049) | | (0.0048) | |
| Neuroticism | 0.0109** | | 0.0097* | | 0.0113** | |
| | (0.0053) | | (0.0051) | | (0.0050) | |
| Returns crypto | | 0.0091*** | 0.0081*** | 0.0112*** | 0.0102*** | |
| | | (0.0003) | (0.0004) | (0.0004) | (0.0004) | |
| Mean perceived returns other strategies | | | | -0.0060*** | -0.0061*** | |
| | | | | (0.0005) | (0.0006) | |
| Observations | 7398 | 7199 | 7362 | 7164 | 7344 | 7147 |
| $R^2$ | 0.0707 | 0.1773 | 0.1574 | 0.2376 | 0.1704 | 0.2498 |

Table 8: Whether respondent invests in crypto relative to other categroies explained by covariates

| | | | | | | |
|---|---|---|---|---|---|---|
| Region FE | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| Occupation FE | | ✓ | | ✓ | | ✓ |

*Notes*: OLS regressions.Robust standard errors in parenthesis. * p<0.1, ** p<0.05, *** p<0.01.

Table 9: Whether respondent invests including individual fixed effects

| | (1) |
|---|---|
| Perceived returns | 0.0087*** |
| | (0.0003) |

| | |
|---|---|
| Robo-advisor | -0.1979*** |
| | (0.0065) |
| Fund manager | -0.2873*** |
| | (0.0066) |
| Crypto | -0.0554*** |
| | (0.0066) |
| Observations | 29736 |
| $R^2$ | 0.3527 |
| Individual FE | ✓ |

*Notes*: OLS regressions. Robust standard errors in parenthesis. Self-picked stocks are the baseline category. * p<0.1, ** p<0.05, *** p<0.01.

Table 10: Explaining individual propensity to invest with covariates

| | (1) | (2) |
|---|---|---|
| University degree | 0.0565*** | 0.0507*** |
| | (0.0025) | (0.0030) |
| Woman | -0.0606*** | -0.0508*** |
| | (0.0025) | (0.0028) |
| Age | -0.0011*** | -0.0011*** |
| | (0.0001) | (0.0001) |
| Log earnings | 0.0175*** | 0.0149*** |
| | (0.0011) | (0.0012) |
| Married | 0.0313*** | 0.0289*** |
| | (0.0024) | (0.0025) |
| Risk loving | 0.0202*** | 0.0185*** |
| | (0.0013) | (0.0013) |
| Patience | -0.0016 | -0.0030** |
| | (0.0012) | (0.0013) |
| Openness | 0.0142*** | 0.0134*** |
| | (0.0014) | (0.0015) |
| Conscientiousness | 0.0016 | -0.0005 |
| | (0.0012) | (0.0013) |
| Extroversion | 0.0083*** | 0.0058*** |
| | (0.0013) | (0.0013) |

| | | |
|---|---|---|
| Agreeableness | -0.0021* | 0.0004 |
| | (0.0012) | (0.0012) |
| | | |
| Neuroticism | -0.0031** | -0.0020 |
| | (0.0013) | (0.0013) |
| | | |
| Observations | 29684 | 29684 |
| $R_2$ | 0.1149 | 0.2151 |
| Region FE | | ✓ |
| Occupation FE | | ✓ |

*Notes*: OLS regressions.Robust standard errors in parenthesis. * p<0.1, ** p<0.05, *** p<0.01.