Online appendix for “Does Aggregated Returns Disclosure Increase Portfolio Risk-Taking?”

John Beshears, James J. Choi, David Laibson, and Brigitte C. Madrian

Appendix Figure 1. Initial Screen in Condition with Biannual Viewing of Asset by Asset Ongoing Returns and Single Asset Class Five-Year Historical Return Graphs

**Investment Study**

**Introduction**

In this study, you will allocate a portfolio of $325 among four real mutual funds: a U.S. stock index fund, an international stock index fund, a U.S. bond index fund, and a money market fund. You can ignore any minimum dollar investment amounts the funds impose.

At the end of one year, we’ll pay you whatever this $325 portfolio would actually be worth if you bought it on 07/01/2008 and sold it on 06/30/2009. For example, if it grows to $350, we’ll pay you $350.

We want you to check the return of each asset in your portfolio at least once every six months. To make that easy, we’ll send you an e-mail every six months. Click the link in that e-mail to see the return of each asset in your portfolio over the last six months.

If you click that link within one week of getting the e-mail, we’ll add $20 to your final payment. That means that if you click on all the links you got during the year, you’ll earn an additional $40.

You can also reallocate your portfolio any time you want over the next year by visiting this website and logging into your account.

But before you make your allocation, we want you to try a tool that will help you understand how the asset classes available to you have performed in the past. This tool will also be available to you on the next screen when you choose your portfolio.

Click on an asset class in the box below to see its historical returns.

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**How have these investment options performed in the past?**

This chart-making tool shows you the range of five-year (annualized) returns the available asset classes experienced in the past.

View these asset classes' historical returns:

- View International stock
- View U.S. stock
- View U.S. bond
- View U.S. money market

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Contact Us
Appendix Figure 2. Initial Portfolio Allocation Screen in Condition with Biannual Viewing of Asset Ongoing Returns and Single Asset Class Five-Year Historical Return Graphs

**Investment Study**

**Choose Your Portfolio**

At the bottom of this screen, enter the percent of your portfolio you want invested in each mutual fund. We will then ask you to come back to this website to check the return of each of your portfolio's assets every six months. You can reallocate your portfolio at any time.

Use the graphing tool below to see how the available asset classes have performed historically.

**How have these investment options performed in the past?**

- View international stock
- View U.S. stock
- View U.S. bond
- View U.S. money market

**Choose Your Allocations**

Enter your portfolio allocation below, making sure the four numbers add up to 100%. The sum is displayed below the input boxes. All dividends and interest paid by a fund will be reinvested back into the fund that paid them. You can see each fund's prospectus by clicking on the link below the fund's name.

<table>
<thead>
<tr>
<th>Investment Class</th>
<th>Percent Allocated</th>
<th>Prospectus Link</th>
</tr>
</thead>
<tbody>
<tr>
<td>Northern Funds</td>
<td></td>
<td></td>
</tr>
<tr>
<td>International Equity Index Fund (NQNX)</td>
<td>0%</td>
<td>See Fund's Prospectus</td>
</tr>
<tr>
<td>Northern Funds</td>
<td></td>
<td></td>
</tr>
<tr>
<td>U.S. Stock Index Fund (NO SIX)</td>
<td>0%</td>
<td>See Fund's Prospectus</td>
</tr>
<tr>
<td>Northern Funds</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bond Index Fund (NOBOX)</td>
<td>0%</td>
<td>See Fund's Prospectus</td>
</tr>
<tr>
<td>Northern Funds</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Money Market Fund (NORXX)</td>
<td>0%</td>
<td>See Fund's Prospectus</td>
</tr>
</tbody>
</table>

Total Percent Allocated: 0%

[Make This My Portfolio Allocation]

Note: The International Equity Index Fund charges a 2.00% redemption fee on the sale of shares held for less than 30 days.
# Appendix Figure 3. Portfolio Status Page

## Investment Study

### Current Portfolio Allocations

This screen will be shown each time you log into the site. It lists what percent of your portfolio is invested in each fund, as well as your total portfolio balance. This information reflects values as of the most recent market close.

<table>
<thead>
<tr>
<th>Mutual Fund</th>
<th>Allocation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Northern Funds</td>
<td></td>
</tr>
<tr>
<td>International Equity Index Fund</td>
<td>0.0%</td>
</tr>
<tr>
<td>Northern Funds U.S. Stock Index Fund</td>
<td>100.0%</td>
</tr>
<tr>
<td>Northern Funds Bond Index Fund</td>
<td>0.0%</td>
</tr>
<tr>
<td>Northern Funds Money Market Fund</td>
<td>0.0%</td>
</tr>
</tbody>
</table>

**Portfolio Balance**

$325.00

*Note: All dividends and interest paid by a fund will be reinvested back into the fund that paid them.*
Appendix Figure 4. Recent Returns Screen in Conditions with Biannual Viewing of Asset Ongoing Returns

Investment Study
Below is the return of each asset in your portfolio over the last six months:

- Northern Funds International Equity Index Fund: -35.73 %
- Northern Funds U.S. Stock Index Fund: -27.17 %
- Northern Funds Bond Index Fund: 2.39 %
- Northern Funds Money Market Fund: 0.38 %

Appendix Figure 5. Recent Return Screen in Conditions with Weekly Viewing of Ongoing Overall Portfolio Returns

Investment Study
Your portfolio return for the last week was:
0.33 %
Appendix Figure 6. Portfolio Reallocation Screen in Conditions with Historical Returns

Graphing Tool that Shows One-Year Returns of Arbitrary Portfolio Mixes

**Investment Study**

**Reallocate Your Portfolio**

At the bottom of this screen, enter the percent of your portfolio you want invested in each mutual fund.

<table>
<thead>
<tr>
<th>Portfolio Mix 1:</th>
</tr>
</thead>
<tbody>
<tr>
<td>International Stock</td>
</tr>
<tr>
<td>0 %</td>
</tr>
</tbody>
</table>

**Total Percent Allocated: 0%**

Create Graph

**How did different portfolio mixes perform in the past?**

This chart-making tool shows you the range of one-year returns the portfolio mix you choose experienced in the past.

Enter a portfolio mix in the blue boxes below, making sure the four numbers add up to 100%, and hit the button “Create graph.”

**Choose Your Actual Allocations**

Enter your new portfolio allocation below, making sure the four numbers add up to 100%. The sum is displayed below the input boxes. Your current allocations appear in red. All dividends and interest paid by a fund will be reinvested back into the fund that paid them. You can see each fund’s prospectus by clicking on the link below the fund’s name.

<table>
<thead>
<tr>
<th>Northern Funds International Equity Index Fund (NQINX)</th>
<th>Northern Funds U.S. Stock Index Fund (NOSIX)</th>
<th>Northern Funds Bond Index Fund (NOBIX)</th>
<th>Northern Funds Money Market Fund (NORXX)</th>
</tr>
</thead>
<tbody>
<tr>
<td>See Fund’s Prospectus</td>
<td>See Fund’s Prospectus</td>
<td>See Fund’s Prospectus</td>
<td>See Fund’s Prospectus</td>
</tr>
<tr>
<td>0 %</td>
<td>0 %</td>
<td>0 %</td>
<td>0 %</td>
</tr>
<tr>
<td>Currently: 0%</td>
<td>Currently: 25%</td>
<td>Currently: 50%</td>
<td>Currently: 25%</td>
</tr>
</tbody>
</table>

**Total Percent Allocated: 0%**

Make This My New Portfolio Allocation

Note: The International Equity Index charges a 2.00% redemption fee on the sale of shares held for less than 30 days.
In-lab Gneezy-Potters replication condition, high frequency treatment instructions

Part 1 instructions

This part of the study consists of nine successive rounds. You will use a computer program that will take you through these rounds. The program is currently open on your computer; if it is not open, please let us know. You may take as much time as you need to make your choices. Please let us know if you have any questions at any point during the study.

In each round, you will start with an amount of 200 cents ($2). You must decide which part of this amount (between 0 cents and 200 cents) you wish to bet in the following gamble whose outcome will be randomly determined by the computer in each round.

- You have a 2 out of 3 chance (67%) of losing the amount that you bet.
- You have a 1 out of 3 chance (33%) of getting the amount that you bet back, plus an additional two and a half times the amount that you bet.

The gamble’s outcomes in prior rounds do not affect the probability of its paying out in current or future rounds.

Your total earnings for the round are equal to 200 cents (your starting amount) plus your gains or losses in the gamble.

At the end of each round, you will learn how much money you gained or lost from the gamble and your total earnings for the round.

After that, you will make your choice for the next round. Again you start with 200 cents, a part of which (between 0 cents and 200 cents) you can bet in the gamble. You may not bet money from previous rounds in the gamble. The same procedure as described above determines your earnings for this round. All subsequent rounds will also proceed in the same manner.

After the last round has been completed, your earnings in all rounds will be totaled. This amount equals your total earnings for this part of the study.

Please raise your hand if you have any questions. Otherwise, enter your name, email address, and your subject number in the computer program and press the “Proceed” button on the screen to begin this part of the study.

PLEASE DO NOT READ BEYOND THIS POINT IN THE INSTRUCTIONS UNTIL YOU HAVE FINISHED THIS PART OF THE STUDY

6
**In-lab Gneezy-Potters replication condition, low frequency treatment instructions**

**Part 1 instructions**

This part of the study consists of nine successive rounds. You will use a computer program that will take you through these rounds. The program is currently open on your computer; if it is not open, please let us know. You may take as much time as you need to make your choices. Please let us know if you have any questions at any point during the study.

In each round, you will start with an amount of 200 cents ($2). You must decide which part of this amount (between 0 cents and 200 cents) you wish to bet in the following gamble whose outcome will be randomly determined by the computer in each round.

- You have a 2 out of 3 chance (67%) of losing the amount that you bet.
- You have a 1 out of 3 chance (33%) of getting the amount that you bet back, plus an additional two and a half times the amount that you bet.

The gamble’s outcomes in prior rounds do not affect the probability of its paying out in current or future rounds.

In round 1, you will decide how much to bet in the gamble for rounds 1, 2, and 3. You must bet the same amount in all three rounds. Thus, if you decide to bet $X$ cents in the gamble for round 1, then you will also bet $X$ cents in the gamble for rounds 2 and 3. Therefore, three consecutive rounds are joined together.

After making your bet choice, you will learn how much money you gained or lost from the three gambles simultaneously, as well as your total earnings for the three rounds. Your total earnings for the three rounds are equal to 600 cents (three times your starting amount of 200 cents per round) plus your gains and losses in the three gambles.

After that, you will make your choice for the next three rounds (4-6). For each of the three rounds you again start with 200 cents, a part of which (between 0 cents and 200 cents) you can bet in the gamble. You may not bet money from previous rounds in the gamble. The same procedure as described above determines your earnings for these three rounds, and you will again learn the outcomes of the three gambles simultaneously. The subsequent three rounds (7-9) will also proceed in the same manner.

After the last round has been completed, your earnings in all rounds will be totaled. This amount equals your total earnings for this part of the study.

Please raise your hand if you have any questions. Otherwise, enter your name, email address, and your subject number in the computer program and press the “Proceed” button on the screen to begin this part of the study.

**PLEASE DO NOT READ BEYOND THIS POINT IN THE INSTRUCTIONS UNTIL YOU HAVE FINISHED THIS PART OF THE STUDY**
In-lab scaled Gneezy-Potters condition, high frequency treatment instructions

Part 1 instructions

This part of the study consists of nine successive rounds. You will use a computer program that will take you through these rounds. The program is currently open on your computer; if it is not open, please let us know. You may take as much time as you need to make your choices. Please let us know if you have any questions at any point during the study.

You will start with a $20 balance. You must decide what percent of your balance (between 0% and 100%) you wish to bet in the following gamble whose outcome will be randomly determined by the computer in each round.

- You have a 2 out of 3 chance (67%) of losing 10% of the amount that you bet. That is, you will get back 90% of your bet.
- You have a 1 out of 3 chance (33%) of winning 25% of the amount that you bet. That is, you will get back the amount that you bet plus an additional 25% of that amount.

The gamble’s outcomes in prior rounds do not affect the probability of its outcomes in current or future rounds. Your balance at the end of a round is equal to your balance at the beginning of the round plus your gains or losses in the gamble.

At the end of each round, you will learn how much money you gained or lost from the gamble and your resulting balance.

After that, you will make your choice for the next round. Again you may choose to bet between 0% and 100% of your balance in the gamble. The same procedure as described above determines your gains or losses for this round. All subsequent rounds will also proceed in the same manner.

Your total earnings for this part of the study are equal to your balance at the end of the last round.

Please raise your hand if you have any questions. Otherwise, enter your name, email address, and your subject number in the computer program and press the “Proceed” button on the screen to begin this part of the study.

PLEASE DO NOT READ BEYOND THIS POINT IN THE INSTRUCTIONS UNTIL YOU HAVE FINISHED THIS PART OF THE STUDY
In-lab scaled Gneezy-Potters condition, low frequency treatment instructions

Part 1 instructions

This part of the study consists of nine successive rounds. You will use a computer program that will take you through these rounds. The program is currently open on your computer; if it is not open, please let us know. You may take as much time as you need to make your choices. Please let us know if you have any questions at any point during the study.

You will start with a $20 balance. You must decide what percent of your balance (between 0% and 100%) you wish to bet in the following gamble whose outcome will be randomly determined by the computer in each round.

- You have a 2 out of 3 chance (67%) of losing 10% of the amount that you bet. That is, you will get back 90% of your bet.
- You have a 1 out of 3 chance (33%) of winning 25% of the amount that you bet. That is, you will get back the amount that you bet plus an additional 25% of that amount.

The gamble’s outcomes in prior rounds do not affect the probability of its outcomes in current or future rounds. Your balance at the end of a round is equal to your balance at the beginning of the round plus your gains or losses in the gamble.

In round 1, you will decide what percent of your balance to bet in the gamble for rounds 1, 2, and 3. You must bet the same percent in all three rounds. Thus, if you decide to bet $X\%$ of your round 1 balance in the round 1 gamble, then you will also bet $X\%$ of your round 2 balance in the round 2 gamble and $X\%$ of your round 3 balance in the round 3 gamble. Therefore, three consecutive rounds are joined together.

After making your bet choice, you will learn how much money you gained or lost from the three gambles simultaneously, as well as your resulting balance at the end of the three rounds.

After that, you will make your choice for the next three rounds (4-6). The same procedure as described above determines your gains and losses for these three rounds, and you will again learn the outcomes of the three gambles simultaneously. The subsequent three rounds (7-9) will also proceed in the same manner.

Your total earnings for this part of the study are equal to your balance at the end of the last round.

Please raise your hand if you have any questions. Otherwise, enter your name, email address, and your subject number in the computer program and press the “Proceed” button on the screen to begin this part of the study.

PLEASE DO NOT READ BEYOND THIS POINT IN THE INSTRUCTIONS UNTIL YOU HAVE FINISHED THIS PART OF THE STUDY
In-lab stock condition with forced liquidation, high frequency treatment instructions

Part 1 instructions

This part of the study consists of 18 successive rounds. You will use a computer program that will take you through these rounds. The program is currently open on your computer; if it is not open, please let us know. You may take as much time as you need to make your choices. Please let us know if you have any questions at any point during the study.

You will start with a $20 balance. You must decide what percent of your balance (between 0% and 100% percent) you wish to invest in the stock market. The remainder of your balance will remain in a checking account and will neither gain nor lose value.

Each round corresponds to one month. Stock market returns will be determined as follows. The computer will randomly select a starting month between January 1923 and January 2010. Every month has an equal chance of being selected. Suppose the starting month selected is March 1954. Then the round 1 stock market return will be the actual March 1954 return of the U.S. stock market. The round 2 stock market return will be the actual April 1954 return of the U.S. stock market. And so on through round 18.

If you invest $X in the stock market at the beginning of the round and the stock market goes up by 1%, then your balance will increase by 1% of $X. Similarly, if the stock market goes down by 1%, then your balance will decrease by 1% of $X.

At the end of each round, you will learn how much money you gained or lost and your resulting balance. Your stock market investment will then be completely sold, and you must decide what percent of your total balance you wish to invest in the stock market for the next round. All subsequent rounds will also proceed in the same manner.

Your total earnings for this part of the study are equal to your balance at the end of the last round.

The below graph shows you how often the U.S. stock market has experienced monthly returns of various sizes between January 1923 and December 2012. The horizontal axis shows the return (rounded to the nearest integer), and the vertical axis shows the fraction of months that had this return. For example, the graph shows that in 10.2% of months from 1923 to 2012, the stock market had a return between 2.5% and 3.5%.

Continue reading on next page
In-lab stock condition with forced liquidation, high frequency treatment instructions

Please raise your hand if you have any questions. Otherwise, enter your name, email address, and your subject number in the computer program and press the “Proceed” button on the screen to begin this part of the study.

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In-lab stock condition with forced liquidation, low frequency treatment instructions

Part 1 instructions

This part of the study consists of 18 successive rounds. You will use a computer program that will take you through these rounds. The program is currently open on your computer; if it is not open, please let us know. You may take as much time as you need to make your choices. Please let us know if you have any questions at any point during the study.

You will start with a $20 balance. You must decide what percent of your balance (between 0% and 100% percent) you wish to invest in the stock market. The remainder of your balance will remain in a checking account and will neither gain nor lose value.

Each round corresponds to one month. Stock market returns will be determined as follows. The computer will randomly select a starting month between January 1923 and January 2010. Every month has an equal chance of being selected. Suppose the starting month selected is March 1954. Then the round 1 stock market return will be the actual March 1954 return of the U.S. stock market. The round 2 stock market return will be the actual April 1954 return of the U.S. stock market. And so on through round 18.

If you invest $X in the stock market at the beginning of the round and the stock market goes up by 1%, then your balance will increase by 1% of $X. Similarly, if the stock market goes down by 1%, then your balance will decrease by 1% of $X.

In round 1, you will decide what percent of your balance to invest in the stock market. This initial investment will be held until the end of round 6.

You will not learn about each round’s returns one by one. Instead, you will only see how much total money you gained or lost over the first six rounds and your resulting balance.

Your stock market investment will then be completely sold, and you must decide what percent of your total balance you wish to invest in the stock market in round 7. This investment will be held until the end of round 12. You will again only see the total money you gained or lost over these six rounds and your resulting balance. The subsequent six rounds (13-18) will also proceed in the same manner.

Your total earnings for this part of the study are equal to your balance at the end of the last round.

The below graph shows you how often the U.S. stock market has experienced monthly returns of various sizes between January 1923 and December 2012. The horizontal axis shows the return (rounded to the nearest integer), and the vertical axis shows the fraction of months that had this return. For example, the graph shows that in 10.2% of months from 1923 to 2012, the stock market had a return between 2.5% and 3.5%.

Continue reading on next page
In-lab stock condition with forced liquidation, low frequency treatment instructions

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Frequency of historical monthly stock returns

% of months with this return

Stock return during month

0% 2% 4% 6% 8% 10% 12%
<-10% -10% -9% -8% -7% -6% -5% -4% -3% -2% -1% 0% 1% 2% 3% 4% 5% 6% 7% 8% 9% 10% >10%
In-lab stock condition without forced liquidation, high frequency treatment instructions

Part 1 instructions

This part of the study consists of 18 successive rounds. You will use a computer program that will take you through these rounds. The program is currently open on your computer; if it is not open, please let us know. You may take as much time as you need to make your choices. Please let us know if you have any questions at any point during the study.

You will start with a $20 balance. You must decide what percent of your balance (between 0% and 100% percent) you wish to invest in the stock market. The remainder of your balance will remain in a checking account and will neither gain nor lose value.

Each round corresponds to one month. Stock market returns will be determined as follows. The computer will randomly select a starting month between January 1923 and January 2010. Every month has an equal chance of being selected. Suppose the starting month selected is March 1954. Then the round 1 stock market return will be the actual March 1954 return of the U.S. stock market. The round 2 stock market return will be the actual April 1954 return of the U.S. stock market. And so on through round 18.

If you invest $X in the stock market at the beginning of the round and the stock market goes up by 1%, then your balance will increase by 1% of $X. Similarly, if the stock market goes down by 1%, then your balance will decrease by 1% of $X.

At the end of each round, you will learn how much money you gained or lost, your resulting balance, and what fraction of your balance is now invested in the stock market. You will then proceed to the next round, where you will have the option of holding onto your stock market investment from the last round or changing the percent of your balance invested in the stock market. All subsequent rounds will also proceed in the same manner.

Your total earnings for this part of the study are equal to your balance at the end of the last round.

The below graph shows you how often the U.S. stock market has experienced monthly returns of various sizes between January 1923 and December 2012. The horizontal axis shows the return (rounded to the nearest integer), and the vertical axis shows the fraction of months that had this return. For example, the graph shows that in 10.2% of months from 1923 to 2012, the stock market had a return between 2.5% and 3.5%.

Continue reading on next page
In-lab stock condition without forced liquidation, high frequency treatment instructions

Please raise your hand if you have any questions. Otherwise, enter your name, email address, and your subject number in the computer program and press the “Proceed” button on the screen to begin this part of the study.

PLEASE DO NOT READ BEYOND THIS POINT IN THE INSTRUCTIONS UNTIL YOU HAVE FINISHED THIS PART OF THE STUDY
In-lab stock condition without forced liquidation, low frequency treatment instructions

Part 1 instructions

This part of the study consists of 18 successive rounds. You will use a computer program that will take you through these rounds. The program is currently open on your computer; if it is not open, please let us know. You may take as much time as you need to make your choices. Please let us know if you have any questions at any point during the study.

You will start with a $20 balance. You must decide what percent of your balance (between 0% and 100% percent) you wish to invest in the stock market. The remainder of your balance will remain in a checking account and will neither gain nor lose value.

Each round corresponds to one month. Stock market returns will be determined as follows. The computer will randomly select a starting month between January 1923 and January 2010. Every month has an equal chance of being selected. Suppose the starting month selected is March 1954. Then the round 1 stock market return will be the actual March 1954 return of the U.S. stock market. The round 2 stock market return will be the actual April 1954 return of the U.S. stock market. And so on through round 18.

If you invest $X in the stock market at the beginning of the round and the stock market goes up by 1%, then your balance will increase by 1% of $X. Similarly, if the stock market goes down by 1%, then your balance will decrease by 1% of $X.

In round 1, you will decide what percent of your balance to invest in the stock market. This initial investment will be held until the end of round 6.

You will not learn about each round’s returns one by one. Instead, you will only see how much total money you gained or lost over the first six rounds, your resulting balance, and what fraction of your balance is now invested in the stock market at the end of round 6.

At the beginning of round 7, you will decide whether to hold onto your stock market investment from round 6 or to change the percent of your balance invested in the stock market. Your stock market investment in round 7 will be held until the end of round 12. You will again only see the total money you gained or lost over these six rounds, your resulting balance, and what fraction of your balance is invested in the stock market at the end of these six rounds. The subsequent six rounds (13-18) will also proceed in the same manner.

Your total earnings for this part of the study are equal to your balance at the end of the last round.

The below graph shows you how often the U.S. stock market has experienced monthly returns of various sizes between January 1923 and December 2012. The horizontal axis shows the return (rounded to the nearest integer), and the vertical axis shows the fraction of months that had this return. For example, the graph shows that in 10.2% of months from 1923 to 2012, the stock market had a return between 2.5% and 3.5%.

Continue reading on next page
In-lab stock condition without forced liquidation, low frequency treatment instructions

Please raise your hand if you have any questions. Otherwise, enter your name, email address, and your subject number in the computer program and press the “Proceed” button on the screen to begin this part of the study.

PLEASE DO NOT READ BEYOND THIS POINT IN THE INSTRUCTIONS UNTIL YOU HAVE FINISHED THIS PART OF THE STUDY
Part 2 instructions

The last part of this study consists of three successive rounds.

The money you have earned so far (excluding your flat $5 participation fee) is your starting balance. In each round, you will be able to bet between 0 cents and 200 cents of your balance in the following gamble whose outcome will be randomly determined by a computer.

- You have a 2 out of 3 chance (67%) of losing the amount that you bet.
- You have a 1 out of 3 chance (33%) of getting the amount that you bet back, plus an additional two and a half times the amount that you bet.

(If you have earned less than $6 so far excluding your flat participation fee, then you will only be able to bet one-third of your starting balance in each round.) The gamble’s outcomes in prior rounds do not affect the probability of its paying out in current or future rounds.

Your balance at the end of a round is equal to your balance at the beginning of the round plus your gains or losses in the gamble.

You must decide today how much to bet in the first round gamble.

A computer will determine the outcome of the first round gamble **one week from now**. The outcome of the second round gamble will be determined **two weeks from now**. The outcome of the final round gamble will be determined **three weeks from now**.

At the end of each week, you will learn via email how much money you gained or lost from that week’s gamble and your resulting balance. The email will contain a link to a two-question online survey. The first question in the survey will ask you to enter the result of the gamble, so we can confirm that you saw the email. The second question, which will not be asked in the final survey, will ask how much you wish to bet in the next gamble.

If you fill out the survey within five days of the email being sent, we will add $1 to your final payment. Thus, if you fill out all three surveys in time, you will earn an additional $3. If we don’t hear from you within five days of the email being sent, your bet in the next round will be the same size as your bet in the prior round.

After the last survey, we will mail you a payment equal to your balance at the end of the final round plus any survey completion payments you earned.

Please raise your hand if you have any questions. Otherwise, enter the amount you wish to bet into the computer program.
Post-lab Gneezy-Potters replication condition, low frequency treatment instructions

Part 2 instructions

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The money you have earned so far (excluding your flat $5 participation fee) is your starting balance. In each round, you will be able to bet between 0 cents and 200 cents of your balance in the following gamble whose outcome will be randomly determined by a computer.

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- You have a 1 out of 3 chance (33%) of getting the amount that you bet back, plus an additional two and a half times the amount that you bet.

(If you have earned less than $6 so far excluding your flat participation fee, then you will only be able to bet one-third of your starting balance in each round.) The gamble’s outcomes in prior rounds do not affect the probability of its paying out in current or future rounds.

You must decide today how much to bet in the gamble for rounds 1, 2, and 3. You must bet the same amount in all three rounds. Thus, if you decide to bet $X$ cents in the gamble for round 1, then you will also bet $X$ cents in the gamble for rounds 2 and 3. Therefore, three consecutive rounds are joined together.

Your final balance is equal to your starting balance plus your gains and losses in the three gambles.

A computer will determine the outcome of the first round gamble one week from now. The outcome of the second round gamble will be determined two weeks from now. The outcome of the final round gamble will be determined three weeks from now.

You will not learn how much money you gained or lost from the three gambles and your resulting balance until three weeks from now, when we will send you a single email with the results. The email will contain a link to a one-question online survey, which will ask you to enter the result of the gambles so we can confirm that you saw the email.

If you fill out the survey within five days of the email being sent, we will add $3 to your final payment.

After the last survey, we will mail you a payment equal to your balance at the end of the final round plus any survey completion payment you earned.

Please raise your hand if you have any questions. Otherwise, enter the amount you wish to bet into the computer program.
Part 2 instructions

The last part of this study consists of three successive rounds.

The money you have earned so far (excluding your flat $5 participation fee) is your starting balance. You must decide what percent of your balance (between 0% and 100%) you wish to bet in the following gamble whose outcome will be randomly determined by a computer in each round.

- You have a 2 out of 3 chance (67%) of losing 10% of the amount that you bet. That is, you will get back 90% of your bet.
- You have a 1 out of 3 chance (33%) of winning 25% of the amount that you bet. That is, you will get back the amount that you bet plus an additional 25% of that amount.

The gamble’s outcomes in prior rounds do not affect the probability of its outcomes in current or future rounds. Your balance at the end of a round is equal to your balance at the beginning of the round plus your gains or losses in the gamble.

You must decide today what percent of your balance to bet in the first round gamble.

A computer will determine the outcome of the first round gamble one week from now. The outcome of the second round gamble will be determined two weeks from now. The outcome of the final round gamble will be determined three weeks from now.

At the end of each week, you will learn via email how much money you gained or lost from that week’s gamble and your resulting balance. The email will contain a link to a two-question online survey. The first question in the survey will ask you to enter the result of the gamble, so we can confirm that you saw the email. The second question, which will not be asked in the final survey, will ask what percent of your balance you wish to bet in the next gamble.

If you fill out the survey within five days of the email being sent, we will add $1 to your final payment. Thus, if you fill out all three surveys in time, you will earn an additional $3. If we don’t hear from you within five days of the email being sent, your bet in the next round will be the same percentage as your bet in the prior round.

After the last survey, we will mail you a payment equal to your balance at the end of the final round plus any survey completion payments you earned.

Please raise your hand if you have any questions. Otherwise, enter the percent of your balance you wish to bet into the computer program.
Post-lab scaled Gneezy-Potters condition, low frequency treatment instructions

Part 2 instructions

The last part of this study consists of three successive rounds.

The money you have earned so far (excluding your flat $5 participation fee) is your starting balance. You must decide what percent of your balance (between 0% and 100%) you wish to bet in the following gamble whose outcome will be randomly determined by a computer in each round.

- You have a 2 out of 3 chance (67%) of losing 10% of the amount that you bet. That is, you will get back 90% of your bet.
- You have a 1 out of 3 chance (33%) of winning 25% of the amount that you bet. That is, you will get back the amount that you bet plus an additional 25% of that amount.

The gamble’s outcomes in prior rounds do not affect the probability of its outcomes in current or future rounds. Your balance at the end of a round is equal to your balance at the beginning of the round plus your gains or losses in the gamble.

You must decide today what percent of your balance to bet in the gamble for rounds 1, 2, and 3. You must bet the same percent in all three rounds. Thus, if you decide to bet \( X \)\% of your round 1 balance in the round 1 gamble, then you will also bet \( X \)\% of your round 2 balance in the round 2 gamble and \( X \)\% of your round 3 balance in the round 3 gamble. Therefore, three consecutive rounds are joined together.

A computer will determine the outcome of the first round gamble one week from now. The outcome of the second round gamble will be determined two weeks from now. The outcome of the final round gamble will be determined three weeks from now.

You will not learn how much money you gained or lost from the three gambles and your resulting balance until three weeks from now, when we will send you a single email with the results. The email will contain a link to a one-question online survey, which will ask you to enter the result of the gambles so we can confirm that you saw the email.

If you fill out the survey within five days of the email being sent, we will add $3 to your final payment.

After the last survey, we will mail you a payment equal to your balance at the end of the final round plus any survey completion payment you earned.

Please raise your hand if you have any questions. Otherwise, enter the percent of your balance you wish to bet into the computer program.
Part 2 instructions

The last part of this study consists of six successive rounds.

The money you have earned so far (excluding your flat $5 participation fee) is your starting balance. You must decide what percent of your balance (between 0% and 100%) you wish to invest in the stock market. The remainder of your balance will remain in a checking account and will neither gain nor lose value.

Each round corresponds to one month. Stock market returns will be determined as follows. The computer will randomly select a starting month between January 1923 and January 2010. Every month has an equal chance of being selected. Suppose the starting month selected is March 1954. Then the round 1 stock market return will be the actual March 1954 return of the U.S. stock market. The round 2 stock market return will be the actual April 1954 return of the U.S. stock market. And so on through round 6.

If you invest $X in the stock market at the beginning of the round and the stock market goes up by 1%, then your balance will increase by 1% of $X. Similarly, if the stock market goes down by 1%, then your balance will decrease by 1% of $X.

You must decide today what percent of your balance to invest in the stock market in the first round.

At the end of each round, you will learn how much money you gained or lost and your resulting balance. Your stock market investment will then be completely sold, and you must decide what percent of your total balance you wish to invest in the stock market for the next round. All subsequent rounds will also proceed in the same manner.

You will learn the outcome of the first round via email one week from now. You will learn the outcome of the second round two weeks from now. And so on through the final round six weeks from now.

Each email will contain a link to a two-question online survey. The first question in the survey will ask you to enter the stock market return in that round, so we can confirm that you saw the email. The second question, which will not be asked in the final survey, will ask what percent of your balance you wish to invest in the stock market for the next round.

If you fill out the survey within five days of the email being sent, we will add $1 to your final payment. Thus, if you fill out all six surveys in time, you will earn an additional $6. If we don’t hear from you within five days of the email being sent, the percent of your balance invested in the stock market in the next round will be the same percent as in the prior round.

After the last survey, we will mail you a payment equal to your balance at the end of the final round plus any survey completion payments you earned.

Continue reading on next page
Post-lab stock condition with forced liquidation, high frequency treatment instructions

The below graph shows you how often the U.S. stock market has experienced monthly returns of various sizes between January 1923 and December 2012. The horizontal axis shows the return (rounded to the nearest integer), and the vertical axis shows the fraction of months that had this return. For example, the graph shows that in 10.2% of months from 1923 to 2012, the stock market had a return between 2.5% and 3.5%.

Please raise your hand if you have any questions. Otherwise, enter the percent of your balance you wish to invest in the stock market into the computer program.
Post-lab stock condition with forced liquidation, low frequency treatment instructions

Part 2 instructions

The last part of this study consists of six successive rounds.

The money you have earned so far (excluding your flat $5 participation fee) is your starting balance. You must decide what percent of your balance (between 0% and 100%) you wish to invest in the stock market. The remainder of your balance will remain in a checking account and will neither gain nor lose value.

Each round corresponds to one month. Stock market returns will be determined as follows. The computer will randomly select a starting month between January 1923 and January 2010. Every month has an equal chance of being selected. Suppose the starting month selected is March 1954. Then the round 1 stock market return will be the actual March 1954 return of the U.S. stock market. The round 2 stock market return will be the actual April 1954 return of the U.S. stock market. And so on through round 6.

If you invest $X in the stock market at the beginning of the round and the stock market goes up by 1%, then your balance will increase by 1% of $X. Similarly, if the stock market goes down by 1%, then your balance will decrease by 1% of $X.

You must decide today what percent of your balance to invest in the stock market. This initial investment will be held until the end of round 6, which is the final round.

You will not learn about each round’s returns one by one. Instead, you will only see how much total money you gained or lost over the six rounds and your resulting balance in a single email sent six weeks from now.

The email will contain a link to a one-question online survey, which will ask you to enter the six-round stock market return so we can confirm that you saw the email.

If you fill out the survey within five days of the email being sent, we will add $6 to your final payment.

After the last survey, we will mail you a payment equal to your balance at the end of the final round plus any survey completion payment you earned.

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Post-lab stock condition with forced liquidation, low frequency treatment instructions

The below graph shows you how often the U.S. stock market has experienced monthly returns of various sizes between January 1923 and December 2012. The horizontal axis shows the return (rounded to the nearest integer), and the vertical axis shows the fraction of months that had this return. For example, the graph shows that in 10.2% of months from 1923 to 2012, the stock market had a return between 2.5% and 3.5%.

Please raise your hand if you have any questions. Otherwise, enter the percent of your balance you wish to invest in the stock market into the computer program.
Post-lab stock condition without forced liquidation, high frequency treatment instructions

Part 2 instructions

The last part of this study consists of six successive rounds.

The money you have earned so far (excluding your flat $5 participation fee) is your starting balance. You must decide what percent of your balance (between 0% and 100%) you wish to invest in the stock market. The remainder of your balance will remain in a checking account and will neither gain nor lose value.

Each round corresponds to one month. Stock market returns will be determined as follows. The computer will randomly select a starting month between January 1923 and January 2010. Every month has an equal chance of being selected. Suppose the starting month selected is March 1954. Then the round 1 stock market return will be the actual March 1954 return of the U.S. stock market. The round 2 stock market return will be the actual April 1954 return of the U.S. stock market. And so on through round 6.

If you invest $X in the stock market at the beginning of the round and the stock market goes up by 1%, then your balance will increase by 1% of $X. Similarly, if the stock market goes down by 1%, then your balance will decrease by 1% of $X.

You must decide today what percent of your balance to invest in the stock market in the first round.

At the end of each round, you will learn how much money you gained or lost, your resulting balance, and what fraction of your balance is now invested in the stock market. You will then proceed to the next round, where you will have the option of holding onto your stock market investment from the last round or changing the percent of your balance invested in the stock market. All subsequent rounds will also proceed in the same manner.

You will learn the outcome of the first round via email **one week from now**. You will learn the outcome of the second round **two weeks from now**. And so on through the final round six weeks from now.

Each email will contain a link to a two-question online survey. The first question in the survey will ask you to enter the stock market return in that round, so we can confirm that you saw the email. The second question, which will not be asked in the final survey, will ask whether you want to hold onto your stock market investment from the last round or change the percent of your balance invested in the stock market for the next round.

If you fill out the survey within five days of the email being sent, we will add $1 to your final payment. Thus, if you fill out all six surveys in time, you will earn an additional $6. If we don’t hear from you within five days of the email being sent, you will simply hold onto your stock market investment from the last round for the next round.

After the last survey, we will mail you a payment equal to your balance at the end of the final round plus any survey completion payments you earned.

Continue reading on next page
Post-lab stock condition without forced liquidation, high frequency treatment instructions

The below graph shows you how often the U.S. stock market has experienced monthly returns of various sizes between January 1923 and December 2012. The horizontal axis shows the return (rounded to the nearest integer), and the vertical axis shows the fraction of months that had this return. For example, the graph shows that in 10.2% of months from 1923 to 2012, the stock market had a return between 2.5% and 3.5%.

Please raise your hand if you have any questions. Otherwise, enter the percent of your balance you wish to invest in the stock market into the computer program.
Part 2 instructions

The last part of this study consists of six successive rounds.

The money you have earned so far (excluding your flat $5 participation fee) is your starting balance. You must decide what percent of your balance (between 0% and 100%) you wish to invest in the stock market. The remainder of your balance will remain in a checking account and will neither gain nor lose value.

Each round corresponds to one month. Stock market returns will be determined as follows. The computer will randomly select a starting month between January 1923 and January 2010. Every month has an equal chance of being selected. Suppose the starting month selected is March 1954. Then the round 1 stock market return will be the actual March 1954 return of the U.S. stock market. The round 2 stock market return will be the actual April 1954 return of the U.S. stock market. And so on through round 6.

If you invest $X in the stock market at the beginning of the round and the stock market goes up by 1%, then your balance will increase by 1% of $X. Similarly, if the stock market goes down by 1%, then your balance will decrease by 1% of $X.

You must decide today what percent of your balance to invest in the stock market. This initial investment will be held until the end of round 6, which is the final round.

You will not learn about each round’s returns one by one. Instead, you will only see how much total money you gained or lost over the six rounds and your resulting balance in a single email sent six weeks from now.

The email will contain a link to a one-question online survey, which will ask you to enter the six-round stock market return so we can confirm that you saw the email.

If you fill out the survey within five days of the email being sent, we will add $6 to your final payment.

After the last survey, we will mail you a payment equal to your balance at the end of the final round plus any survey completion payment you earned.

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The below graph shows you how often the U.S. stock market has experienced monthly returns of various sizes between January 1923 and December 2012. The horizontal axis shows the return (rounded to the nearest integer), and the vertical axis shows the fraction of months that had this return. For example, the graph shows that in 10.2% of months from 1923 to 2012, the stock market had a return between 2.5% and 3.5%.

Please raise your hand if you have any questions. Otherwise, enter the percent of your balance you wish to invest in the stock market into the computer program.