Online Appendix to:

The Impact of Consulting Services on Audit Quality:
An Experimental Approach

This online supplement presents experiment materials and results of a pilot study used to inform the registered report proposal.

Section I. Instructions.

This section presents Baseline instructions from pages 2–7; NAS-same instructions from pages 8–13; NAS-separate from pages 14-20. The project-market first session instructions are not included as they simply flip the order and numbering to present the subsection entitled Project Market before the Asset Market subsection. Red font indicating condition is not presented to participants and is used solely for appendix presentation.

Section II. Pre-Experiment Quiz

On pages 21-33, this section presents screenshots showing questions, answers, and feedback from the z-tree administered pre-experiment quiz. Questions 11 and 12 are only asked of NAS condition participants. Depending on the NAS condition, question 12 presents different answers.

Section III. Pilot Study Results

On pages 34 and 35, this section presents pilot session results that we used to assess our ability to implement the high audit quality norm. These results were previously included in our submission to the Journal of Accounting Research registered report process.
Section I. Instructions:

Participant ID Number: __________________

[BASELINE] INSTRUCTIONS

Market Overview

You can earn money in this market based on your decisions and the procedures described in these instructions. This market includes decision makers, service providers (providers), and bidders.

Each period, decision makers choose an investment that produces an asset they will sell to the highest bidder. Decision makers choose an asset value to report to bidders and hire a provider to provide verification services over the reported asset value. Providers hired to provide verification service choose a high- or low-level verification of the asset’s value. Following their verification, providers issue a report that they either Agree or Disagree with the decision maker’s reported asset value. Bidders observe the decision maker’s reported value and the provider’s verification report for each asset. Bidders submit bids for each asset. The highest bidder pays the decision maker their bid and receives the true value of the asset.

Experimental dollars (E$) are used throughout the experiment. The experimental dollars will be converted to US dollars at the end of the experiment. The following is a detailed description of the steps in each period:

Steps in Each Period:

1. **Decision Makers hire Providers**: Each decision maker hires a provider to provide verification services. The provider charges the decision maker E$100 for verification services. Hired providers choose a verification level and issue a verification report for each asset they are hired to verify.
2. **Decision Makers invest**: Each decision maker makes an investment choice between Investment A and Investment B. Investment A costs E$225 and 60% of the time produces a high-valued asset (E$800, E$1000, or E$1200 with equal likelihood); 40% of the time it produces a low-valued asset (E$200, E$400, or E$600 with equal likelihood). Investment B costs E$50 and will always result in a low-valued asset (E$200, E$400, or E$600 with equal likelihood).

3. **Decision Makers report asset value**: Each decision maker learns the true value of the asset produced from their previous investment decision (i.e., Investment A or Investment B). Decision makers then choose what asset value to report to bidders. Decision makers can report any value that is equal to or greater than the true value of their asset.
4. **Providers choose verification level**: Each hired provider decides whether to perform a High-level or Low-level verification. High-level verification costs the provider E$50 and the provider learns the true value of the asset 95% of the time. The other 5% of the time the provider simply sees the decision maker’s reported amount. Low-level verification costs the provider E$10, the provider learns no new information about the asset’s value, and is required to issue an Agree report.

For each asset the provider is hired to verify, there is a 25% chance their verification decision will be checked. If checked and found to have chosen a Low-level verification, the provider will incur an incremental cost of E$90. If checked and found to have chosen a High-level verification, the provider will incur no incremental cost.

Providers can serve more than one decision maker. This means that not all providers must be hired each period and the same provider can serve more than one decision maker.
5. **Providers issue verification report**: Each provider who selects a High-level verification learns the verified value of the decision maker’s asset. If the results of the High-level verification match the decision maker’s reported value, the provider issues an Agree Report. If the results do not match, the provider issues a Disagree Report. Each provider who selects Low-level verification must issue an Agree Report.

6. **Bidders bid on assets**: All bidders receive each decision maker’s reported asset value and the provider’s verification report indicating they Agree or Disagree with the reported asset value. Bidders bid on each asset. Bidders can bid any value up to E$1,200. Remember, an asset’s true value will always be E$200, E$400, E$600, E$800, E$1000, or E$1200 and will always be less than or equal to the reported asset value. The highest bidder pays their bid and receives the true asset value. In the case of a tie, a random number generator will determine the high bidder.
7. **All Participants learn their earnings:** Participant earnings are updated based on the results of the steps above. Each participant learns their own earnings.

Market histories are updated and presented on the bottom of the screen after the first period. The market history includes each decision maker’s true and reported asset value, the provider they hired, the verification report that provider issued, and the winning bidder’s bid and earnings. Each provider’s overall number of times hired, number of accurate verification reports, and number of failed checks is also presented.

**Note:** The steps discussed above happen in order. This means decisions in each step must be made before the next step occurs. There will be times you will be waiting while other participants make their choices.

Decision Maker identities are known to the Providers, but are hidden and scrambled to the Bidders. Provider and Bidder identities remain the same each period (e.g., Provider 1 will always be Provider 1).
**Participant Earnings**

You will receive payment in United States dollars based on the experimental dollars (E$) you earn in the experiment and a conversion factor. Each type of participant (i.e., decision maker, provider, or bidder) will have a different conversion factor. Different factors are used to ensure that average potential participant earnings are similar across the different types of participants. The conversion for all participants follows the same principle that the more you earn in E$ the more you earn in U.S. dollars. A brief summary of the earnings process for each player is outlined below.

- **Decision Makers:** Each decision maker receives an initial endowment of E$1,000 at the start of the market. Each market period a decision maker receives the high bid for their asset from the high bidder. The decision maker pays their hired provider E$100 for verification services and pays the cost of their chosen investment (Investment A or B).

  \[
  \text{Decision Maker Earnings} = \text{E$1000 Endowment} + \text{each period’s earnings} \\
  \text{Period Earnings} = \text{High bid for asset} - \text{E$100 verification services} - \text{investment strategy cost (E$225 for Invest High or E$50 for Invest Low)}
  \]

- **Providers:** Each provider receives an endowment of E$1,500 at the start of the market. Each period, a provider receives E$100 from each decision maker that hired them. The provider pays the cost of high or low verification as well as the incremental cost imposed by the random verification-level check, if applicable.

  \[
  \text{Provider Earnings} = \text{E$1500 Endowment} + \text{each period’s earnings} \\
  \text{Period Earnings} = \text{E$100 fee for verification services*} - \text{verification cost (E$50 for High-Level verification or E$10 for Low-Level verification)*} - \text{incremental cost (E$90 for low-level verification, if randomly selected)} \\
  *\text{for each time hired, may be more than once per period or not at all}
  \]

- **Bidders:** Each bidder receives an endowment of E$8,000 at the start of the market. Each period, bidders purchase only the assets for which they are the high bidder. The bidder receives the true value of each purchased asset and pays their bid. This means the bidder will earn positive earnings if the true value is greater than their high bid, a loss if the true value is less than their high bid, or zero if they are not the high bidder. Remember, the true asset value is always less than or equal to the reported asset value. After the last period, each bidder will receive a small return (e.g. 2-10%) on the assets they purchased during all periods. The return will be calculated based on the total true value of all assets purchased by the bidder in all periods. The purpose of this small payment is to increase buyer earnings in the overall market to promote potential earnings that are similar to the amount earned by decision makers and providers.

  \[
  \text{Bidder Earnings} = \text{E$8,000 Endowment} + \text{each period’s earnings} + \text{end of market return on assets} \\
  \text{Period Earnings} = \text{True Value of all assets purchased} - \text{bid for each asset purchased}
  \]
Market Overview

You can earn money in this market based on your decisions and the procedures described in these instructions. This market includes decision makers, service providers (providers), and bidders. Each period consists of an asset market and a project market.

Each period during the asset market, decision makers choose an investment that produces an asset they will sell to the highest bidder. Decision makers choose an asset value to report to bidders and hire a provider to provide verification services over the reported asset value. Providers hired to provide verification service choose a high- or low-level verification of the asset’s value. Following their verification, providers issue a report that they either Agree or Disagree with the decision maker’s reported asset value. Bidders observe the decision maker’s reported value and the provider’s verification report for each asset. Bidders submit bids for each asset. The highest bidder pays the decision maker their bid and receives the true value of the asset.

Each period during the project market, decision makers hire a provider to provide project services. Providers hired to provide project services choose the level of service to provide. The provider’s chosen service affects the value of the project to the decision maker. Each decision maker participates in both the asset market and the project market, hiring one provider each period to provide both verification service and project service.

Experimental dollars (E$) are used throughout the experiment. The experimental dollars will be converted to US dollars at the end of the experiment. The following is a detailed description of the steps in each period:

Steps in Each Period:

1. **Decision Makers hire Providers:** Each decision maker hires a provider to provide both verification and project services. The provider charges the decision maker E$100 for verification services. The provider also charges the decision maker an additional E$100 for project services. Hired providers choose a verification level and issue a verification report for each asset they are hired to verify. Hired providers also choose a project service, which affects the value of the project to the decision maker.
2. **Decision Makers invest:** Each decision maker makes an investment choice between Investment A and Investment B. Investment A costs E$225 and 60% of the time produces a high-valued asset (E$800, E$1000, or E$1200 with equal likelihood); 40% of the time it produces a low-valued asset (E$200, E$400, or E$600 with equal likelihood). Investment B costs E$50 and will always result in a low-valued asset (E$200, E$400, or E$600 with equal likelihood).

3. **Decision Makers report asset value:** Each decision maker learns the true value of the asset produced from their previous investment decision (i.e., Investment A or Investment B). Decision makers then choose what asset value to report to bidders. Decision makers can report any value that is equal to or greater than the true value of their asset.
4. **Providers choose verification level**: Each hired provider decides whether to perform a High-level or Low-level verification. High-level verification costs the provider €$50 and the provider learns the true value of the asset 95% of the time. The other 5% of the time the provider simply sees the decision maker’s reported amount. Low-level verification costs the provider €$10, the provider learns no new information about the asset’s value, and is required to issue an Agree report.

For each asset the provider is hired to verify, there is a 25% chance their verification decision will be checked. If checked and found to have chosen a Low-level verification, the provider will incur an incremental cost of €$90. If checked and found to have chosen a High-level verification, the provider will incur no incremental cost.

Providers can serve more than one decision maker. This means that not all providers must be hired each period and the same provider can serve more than one decision maker.
5. **Providers issue verification report:** Each provider who selects a High-level verification learns the verified value of the decision maker’s asset. If the results of the High-level verification match the decision maker’s reported value, the provider issues an Agree Report. If the results do not match, the provider issues a Disagree Report. Each provider who selects Low-level verification must issue an Agree Report.

6. **Bidders bid on assets:** All bidders receive each decision maker’s reported asset value and the provider’s verification report indicating they Agree or Disagree with the reported asset value. Bidders bid on each asset. Bidders can bid any value up to E$1,200. Remember, an asset’s true value will always be E$200, E$400, E$600, E$800, E$1000, or E$1200 and will always be *less than or equal to* the reported asset value. The highest bidder pays their bid and receives the true asset value. In the case of a tie, a random number generator will determine the high bidder.
Project Market

7. **Providers choose project service:** Each hired provider chooses whether to provide Service X or Service Y. Service X costs the provider E$50 and results in a project valued at E$150, earning both the provider and the decision maker a E$50 profit. Service Y costs the provider E$10 and results in a project valued at E$100, earning the provider E$90 and the decision maker E$0.

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8. **All Participants learn their earnings:** Participant earnings are updated based on the results of the steps above. Each participant learns their own earnings.

Market histories are updated and presented on the bottom of the screen after the first period. The asset market history includes each decision maker’s true and reported asset value, the provider they hired, the verification report that provider issued, and the winning bidder’s bid and earnings. The project market history includes the provider each decision maker hired, the service that each provider chose to provide, and the resulting project value. Each provider’s overall number of times hired, number of accurate verification reports, number of failed checks, and number of high-value projects is also presented.

**Note:** The steps discussed above happen in order. This means decisions in each step must be made before the next step occurs. There will be times you will be waiting while other participants make their choices.

Decision Maker identities are known to the Providers, but are hidden and scrambled to the Bidders. Provider and Bidder identities remain the same each period (e.g., Provider 1 will always be Provider 1).
Participant Earnings

You will receive payment in United States dollars based on the experimental dollars (E$) you earn in the experiment and a conversion factor. Each type of participant (i.e., decision maker, provider, or bidder) will have a different conversion factor. Different factors are used to ensure that average potential participant earnings are similar across the different types of participants. The conversion for all participants follows the same principle that the more you earn in E$ the more you earn in U.S. dollars. A brief summary of the earnings process for each player is outlined below.

- **Decision Makers**: Each decision maker receives an initial endowment of E$1,000 at the start of the market. Each period, decision makers earn from both the asset market and the project market. Each asset market period a decision maker receives the high bid for their asset from the high bidder. The decision maker pays their hired provider E$100 for verification services and pays the cost of their chosen investment (Investment A or B). Each project market period a decision maker earns the value of their project and pays the provider E$100 for their service.

  \[ \text{Decision Maker Earnings} = \text{E$1000 Endowment} + \text{each period's earnings} \]

  \[ \text{Asset Period Earnings} = \text{High bid for asset} - \text{E$100 verification services} - \text{investment strategy cost} \]
  \[ \text{(E$225 for Invest High or E$50 for Invest Low)} \]

  \[ \text{Project Period Earnings} = \text{Project value (E$150 or E$100)} - \text{E$100 project services} \]

  \[ \text{Total Period Earnings} = \text{Asset period earnings} + \text{Project period earnings} \]

  \[ \text{Asset Period Earnings} = \text{High bid for asset} - \text{E$100 verification services} - \text{investments cost (E$225 for Invest High or E$50 for Invest Low)} \]

  \[ \text{Project Period Earnings} = \text{Project value (E$150 or E$100)} - \text{E$100 project services} \]

  \[ \text{Total Period Earnings} = \text{Asset period earnings} + \text{Project period earnings} \]

- **Providers**: Each provider receives an endowment of E$1,500 at the start of the market. Each period, a provider receives E$100 from each decision maker that hired them in the asset market and the project market. In the asset market, the provider pays the cost of high or low verification as well as the incremental cost imposed by the random verification-level check, if applicable. In the project market, the provider pays the cost of service X or Y.

  \[ \text{Provider Earnings} = \text{E$1500 Endowment} + \text{each period's earnings} \]

  \[ \text{Asset Period Earnings} = \text{E$100 fee for verification services} - \text{verification cost (E$50 for High-Level verification or E$10 for Low-Level verification)} - \text{incremental cost (E$90 for low-level verification, if randomly selected)} \]

  \[ \text{Project Period Earnings} = \text{E$100 fee for project services} - \text{service cost (E$50 for service X or E$10 for service Y)} \]

  \[ \text{Total Period Earnings} = \text{Asset period earnings} + \text{project period earnings} \]

  \[ \text{Asset Period Earnings} = \text{E$100 fee for verification services} - \text{verification cost (E$50 for High-Level verification or E$10 for Low-Level verification)} - \text{incremental cost (E$90 for low-level verification, if randomly selected)} \]

  \[ \text{Project Period Earnings} = \text{E$100 fee for project services} - \text{service cost (E$50 for service X or E$10 for service Y)} \]

  \[ \text{Total Period Earnings} = \text{Asset period earnings} + \text{project period earnings} \]

  \[ \text{Total Period Earnings} = \text{Asset period earnings} + \text{project period earnings} \]

  \[ \text{Total Period Earnings} = \text{Asset period earnings} + \text{project period earnings} \]

- **Bidders**: Each bidder receives an endowment of E$8,000 at the start of the market. Each period, bidders purchase only the assets for which they are the high bidder. The bidder receives the true value of each purchased asset and pays their bid. This means the bidder will earn positive earnings if the true value is greater than their high bid, a loss if the true value is less than their high bid, or zero if they are not the high bidder. Remember, the true asset value is always less than or equal to the reported asset value. After the last period, each bidder will receive a small return (e.g. 2-10%) on the assets they purchased during all periods. The return will be calculated based on the total true value of all assets purchased by the bidder in all periods. The purpose of this small payment is to increase buyer earnings in the overall market to promote potential earnings that are similar to the amount earned by decision makers and providers.

  \[ \text{Bidder Earnings} = \text{E$8,000 Endowment} + \text{each period’s earnings} + \text{end of market return on assets} \]

  \[ \text{Asset Period Earnings} = \text{True Value of all assets purchased} - \text{bid for each asset purchased} \]
Market Overview

You can earn money in this market based on your decisions and the procedures described in these instructions. This market includes decision makers, service providers (providers), and bidders. Each period consists of an asset market and a project market.

Each period during the asset market, decision makers choose an investment that produces an asset they will sell to the highest bidder. Decision makers choose an asset value to report to bidders and hire a provider to provide verification services over the reported asset value. Providers hired to provide verification service choose a high- or low-level verification of the asset’s value. Following their verification, providers issue a report that they either Agree or Disagree with the decision maker’s reported asset value. Bidders observe the decision maker’s reported value and the provider’s verification report for each asset. Bidders submit bids for each asset. The highest bidder pays the decision maker their bid and receives the true value of the asset.

Each period during the project market, decision makers hire a provider to provide project services. Providers hired to provide project services choose the level of service to provide. The provider’s chosen service affects the value of the project to the decision maker. Each decision maker participates in either the asset market or the project market for the entirety of the experiment. Decision makers in the asset market never participate in the project market, and decision makers in the project market never participate in the asset market.

Experimental dollars (E$) are used throughout the experiment. The experimental dollars will be converted to US dollars at the end of the experiment. The following is a detailed description of the steps in each period:

Steps in Each Period:

Asset Market

1. **Decision Makers hire Providers:** Each asset market decision maker (i.e. decision makers 1-3) hires a provider to provide verification services. The provider charges the decision maker E$100 for verification services. Hired providers choose a verification level and issue a verification report for each asset they are hired to verify.
2. **Decision Makers invest:** Each decision maker makes an investment choice between Investment A and Investment B. Investment A costs E$225 and 60% of the time produces a high-valued asset (E$800, E$1000, or E$1200 with equal likelihood); 40% of the time it produces a low-valued asset (E$200, E$400, or E$600 with equal likelihood). Investment B costs E$50 and will always result in a low-valued asset (E$200, E$400, or E$600 with equal likelihood).

3. **Decision Makers report asset value:** Each decision maker learns the true value of the asset produced from their previous investment decision (i.e., Investment A or Investment B). Decision makers then choose what asset value to report to bidders. Decision makers can report any value that is equal to or greater than the true value of their asset.
4. **Providers choose verification level:** Each hired provider decides whether to perform a High-level or Low-level verification. High-level verification costs the provider E$50 and the provider learns the true value of the asset 95% of the time. The other 5% of the time the provider simply sees the decision maker’s reported amount. Low-level verification costs the provider E$10, the provider learns no new information about the asset’s value, and is required to issue an Agree report.

For each asset the provider is hired to verify, there is a 25% chance their verification decision will be checked. If checked and found to have chosen a Low-level verification, the provider will incur an incremental cost of E$90. If checked and found to have chosen a High-level verification, the provider will incur no incremental cost.

Providers can serve more than one decision maker. This means that not all providers must be hired each period and the same provider can serve more than one decision maker.
5. **Providers issue verification report**: Each provider who selects a High-level verification learns the verified value of the decision maker’s asset. If the results of the High-level verification match the decision maker’s reported value, the provider issues an Agree Report. If the results do not match, the provider issues a Disagree Report. Each provider who selects Low-level verification must issue an Agree Report.

6. **Bidders bid on assets**: All bidders receive each decision maker’s reported asset value and the provider’s verification report indicating they Agree or Disagree with the reported asset value. Bidders bid on each asset. Bidders can bid any value up to E$1,200. Remember, an asset’s true value will always be E$200, E$400, E$600, E$800, E$1000, or E$1200 and will always be less than or equal to the reported asset value. The highest bidder pays their bid and receives the true asset value. In the case of a tie, a random number generator will determine the high bidder.
7. **Decision Makers hire Providers:** Each project market decision maker (i.e. decision makers 4-6) hires a provider to provide project services. The provider charges the decision maker ES$100 for project services. Hired providers choose a project service, which affects the value of the project to the decision maker.

8. **Providers choose project service:** Each hired provider chooses whether to provide Service X or Service Y. Service X costs the provider ES$50 and results in a project valued at ES$150, earning both the provider and the decision maker a ES$50 profit. Service Y costs the provider ES$10 and results in a project valued at ES$100, earning the provider ES$90 and the decision maker ES$0.
9. **All Participants learn their earnings:** Participant earnings are updated based on the results of the steps above. Each participant learns their own earnings.

Market histories are updated and presented on the bottom of the screen after the first period. The asset market history includes each decision maker’s true and reported asset value, the provider they hired, the verification report that provider issued, and the winning bidder’s bid and earnings. The project market history includes the provider each decision maker hired, the service that each provider chose to provide, and the resulting project value. Each provider’s overall number of times hired, number of accurate verification reports, number of failed checks, and number of high-value projects is also presented.

**Note:** The steps discussed above happen in order. This means decisions in each step must be made before the next step occurs. There will be times you will be waiting while other participants make their choices.

Decision Maker identities are known to the Providers, but are hidden and scrambled to the Bidders.

Provider and Bidder identities remain the same each period (e.g., Provider 1 will always be Provider 1).
Participant Earnings

You will receive payment in United States dollars based on the experimental dollars (E$) you earn in the experiment and a conversion factor. Each type of participant (i.e., decision maker, provider, or bidder) will have a different conversion factor. Different factors are used to ensure that average potential participant earnings are similar across the different types of participants. The conversion for all participants follows the same principle that the more you earn in E$ the more you earn in U.S. dollars. A brief summary of the earnings process for each player is outlined below.

- **Decision Makers**: Each decision maker receives an initial endowment of E$1,000 at the start of the market. Each decision maker earns from either the asset market or the project market. Each asset market period a decision maker receives the high bid for their asset from the high bidder. The decision maker pays their hired provider E$100 for verification services and pays the cost of their chosen investment (Investment A or B). Each project market period a decision maker earns the value of their project and pays the provider E$100 for their service.

\[
\text{Decision Maker Earnings} = \text{E$1000 Endowment} + \text{each period's earnings}
\]

\[
\text{Asset Period Earnings} = \text{High bid for asset - E$100 verification services} - \text{investment strategy cost (E$225 for Invest High or E$50 for Invest Low)}
\]

\[
\text{Project Period Earnings} = \text{Project value (E$150 or E$100) - E$100 project services}
\]

\[
\text{Total Period Earnings} = \text{Asset period earnings or Project period earnings}
\]

- **Providers**: Each provider receives an endowment of E$1,500 at the start of the market. Each period, a provider receives E$100 from each decision maker that hired them in the asset market and the project market. In the asset market, the provider pays the cost of high or low verification as well as the incremental cost imposed by the random verification-level check, if applicable. In the project market, the provider pays the cost of service X or Y.

\[
\text{Provider Earnings} = \text{E$1500 Endowment} + \text{each period's earnings}
\]

\[
\text{Asset Period Earnings} = \text{E$100 fee for verification services} - \text{verification cost} (E$50 for High-Level verification or E$10 for Low-Level verification) - \text{incremental cost (E$90 for low-level verification, if randomly selected)}
\]

\[
\text{Project Period Earnings} = \text{E$100 fee for project services} - \text{service cost} (E$50 for service X or E$10 for service Y)
\]

\[
\text{Total Period Earnings} = \text{Asset period earnings + project period earnings}
\]

*= for each time hired, may be more than once per period or not at all

- **Bidders**: Each bidder receives an endowment of E$8,000 at the start of the market. Each period, bidders purchase only the assets for which they are the high bidder. The bidder receives the true value of each purchased asset and pays their bid. This means the bidder will earn positive earnings if the true value is greater than their high bid, a loss if the true value is less than their high bid, or zero if they are not the high bidder. Remember, the true asset value is always less than or equal to the reported asset value. After the last period, each bidder will receive a small return (e.g. 2-10%) on the assets they purchased during all periods. The return will be calculated based on the total true value of all assets purchased by the bidder in all periods. The purpose of this small payment is to increase buyer earnings in the overall market to promote potential earnings that are similar to the amount earned by decision makers and providers.

\[
\text{Bidder Earnings} = \text{E$8,000 Endowment} + \text{each period's earnings} + \text{end of market return on assets}
\]

\[
\text{Asset Period Earnings} = \text{True Value of all assets purchased} - \text{bid for each asset purchased}
\]
Section II. Pre-Experiment Quiz:
All conditions [Baseline, NAS-same, NAS-separate]

Pre-Experiment Questions

Question 1
If a decision maker selects Investment A, there is a 60% chance it will result in a high-valued asset (200, 1000, 1200) and a 40% chance it will result in a low-valued asset (250, 500, 600).

- True
- False

Your answer is correct.

True
Selecting Investment A gives the decision maker a 60% chance of producing a high-valued asset and a 40% chance of producing a low-valued asset. Selecting Investment B always results in a low-valued asset.
Pre-Experiment Questions

Question 2
If a decision maker has an asset with a true value of 1030, they can report it as 0 if they choose.

- True
- False

Your answer is correct.
False
A decision maker may report any value that is equal to or greater than the true value of the asset. A decision maker may not report a value less than the true value of the asset.
As such, the true value of an asset received by a bidder is always equal to or less than the reported value they view.
Pre-Experiment Questions

Question 3
A provider who chooses to perform a low-level verification of the decision maker's reported asset value could issue either an Agree or Disagree report.

- True
- False

Your answer is incorrect.
False.
A provider who chooses to perform a low-level verification of the decision maker's reported asset value must issue an Agree report. A provider who chooses to perform a high-level verification of the decision maker's reported asset value must issue an Agree report if the results of their verification match the decision maker's reported asset value, or a Disagree report if the results do not match.
Pre-Experiment Questions

Question 4

Provider 1 will always be Provider 1 during all periods in the market.

☐ True
☐ False

Your answer is correct.

True
Providers retain their unique identity (e.g., Provider 1) during all periods of the market. Decision maker identities are scrambled to the Bidders each period.
Pre-Experiment Questions

Question 5
Consider the following scenario:
An asset has a reported value of 1000. Bidders 1 bids 810, Bidders 2 bids 550, Bidders 3 bids 800, and Bidders 4 bids 905.
If the asset's true value is 1000, how much profit or loss does the winning bidder earn?

90

Your answer is incorrect.

95
Bidder 4 won the asset because they made the largest bid. Bidder 4 earns 95, while the other bidders earn 0 on this asset.
1000 (asset's true value) - 905 (high bid) = 95
Pre-Experiment Questions

Question 6
Consider the following scenario:
An asset has a reported value of $100. Bidders 1 bids $10, Bidders 2 bids $50, Bidders 3 bids $200, and Bidders 4 bids $905.
If the asset's true value is $50, how much profit or loss does the winning bidder earn?

300

Your answer is incorrect.

-305
Bidders 4 won the asset because they made the largest bid. Bidders 4 lost 305, while the other bidders earn 0 on this asset.
50 (asset's true value) - 905 (high bid) = -305

Continue
Pre-Experiment Questions

Question 7
Consider the following scenario:
An asset has a reported value of 600 and a Disagree report.
(What is the largest possible true value for the asset?)

Your answer is incorrect!

An asset has a reported value of 600. Decision makers can report any value equal to or greater than the actual value, which means the asset's actual value is equal to or less than 600. The Disagree report indicates the Provider investigated at a high level and found the asset is not worth 600. Therefore, it must be worth 200, 400, or 600.
Pre-Experiment Questions

Question 8
Consider the following scenario:
Provider 3 was hired by two decision makers. Provider 3 verified one asset at a high level and one asset at a low level. Provider 3 was not subjected to a verification check. What is Provider 3’s current period earnings?

100

Your answer is incorrect!
140
100 (verification fee) + 50 (high verification cost) + 100 (verification fee) - 10 (low verification cost) = 140.

Continue
Pre-Experiment Questions

Question 9
Consider the following scenario:
Provider 3 was hired by two decision makers. Provider 3 investigated one asset at a high level and one asset at a low level. Provider 3 was subject to a verification check.
What is Provider 3’s current period earnings?

50

Your answer is correct.

50
100 (verification fee) - 50 (high verification cost) + 100 (verification fee) - 10 (low verification cost) - 80 (incremental cost from failed check) =
50

Continue
Pre-Experiment Questions

Question 10
Consider the following scenario: A decision maker chose investment A, produced an asset with a value of 800, and reported an asset value of 800. Bidders 1 bid 700, Bidders 2 bid 450, Bidders 3 bid 575, and Bidders 4 bid 575. What is the decision maker's current period earnings?

200

Your answer is incorrect.

375
700 (high bid) - 225 (investment A cost) - 150 (verification fee) = 375

Continue
Question 11

In the project market, consider the following scenario:
Decision maker 1 hires Provider 2.
Provider 2 chooses Service X.
What is the decision maker's current period profit?

Your answer is correct.

50

100 (project value) - 100 (project fee) = 0.
Provider 2 also earns 50. 100 (project fee) - 50 (Service X cost) = 50.
If Provider 2 had chosen Service Y, the decision maker would have earned 0 and the provider would have earned 50.
100 (project value) - 100 (project fee) = 0
100 (project fee) - 50 (Service Y cost) = 50.
Pre-Experiment Questions

Question 12
A decision maker hires Provider 2 in the project market for project services. Can the same decision maker hire Provider 3 in the asset market for verification services?

- Yes
- No

Your answer is correct.

No
The decision maker hires one provider for both the project market and the asset market within each period.

Continue
Answer only applies to NAS-separate condition.

Pre-Experiment Questions

Question 12
A decision maker hires Provider 2 in the project market for project services.
Can the same decision maker hire Provider 3 in the asset market for verification services?

- Yes
- No

Your answer is correct.

No
There are different decision makers in the project market and the asset market. The decision makers in the project market (decision makers 4, 5, and 6) only hire providers for project services. The decision makers in the asset market (decision makers 1, 2, and 3) only hire providers for verification services.

Continue
Section III. Pilot-Study Results:

We ran pilot sessions of different versions of a baseline asset market to assess our ability to implement the high audit quality norm. By establishing relatively high audit quality in the Baseline condition, we allow room for a meaningful difference from the consulting-based treatments. We ran four sessions each of two markets similar to the baseline asset market described in the paper. Both markets included the investigation check that serves as a cue that high-quality audits are the injunctive norm and will provide competition for the consulting cooperation norm in the NAS treatments.

Pilot A provided auditors a reporting choice when they investigated high. These auditors performed high-quality audits 41% to 85% of the time (see following table). Pilot B restricted the auditors reporting choice to be consistent with the results of their investigation. These auditors performed high-quality audits 30% to 71% of the time (see following table). We selected Pilot B because the simpler design prevents irrational decisions in which auditors investigate high and issue inaccurate agree reports that are inconsistent with their investigation evidence. The probability that high investigation reveals the true asset value was 90% in the pilot sessions; our asset market design increases the probability to 95% to increase the ability of auditors to form reputations for high quality.
Descriptive Statistics of Asset Market Pilot sessions

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<th>3 (n=10)</th>
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Pilot B: with investigation checks, no report choice

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Appendix C Table 1 describes the mean by variable for each pilot session. Asset market pilot sessions A1 and B1 were conducted in October 2015 with subjects from our general laboratory pool. All other sessions conducted in February 2016 with students from one author’s audit course.

Variable Definitions: AuditQuality = 1 auditor chooses high-effort and reports honestly, 0 otherwise; AuditorInvestigation = 0 auditor chooses low-effort investigation, 1 high-effort investigation; AuditorAccuracy = 1 correct agree or disagree report, 0 inaccurate agree report; MgrInvestment = 0 manager chooses low-investment, 1 high-investment; MgrMisreporting = 0 manager reports true value, 1 lies; HighBid = Highest bid that was made by an investor for the manager's asset.

We also ran pilot sessions of a standalone consulting market to corroborate our predicted cooperation levels. We find consultants cooperate 90% of the time (see following table).

Cooperation in Consulting Market Pilot Sessions
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<th>6</th>
<th>7</th>
<th>8</th>
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Average by period: 0.79 0.75 0.83 0.88 0.92 1.00 0.88 0.92 1.00 1.00 1.00 0.83 0.90

*Appendix C Table 2 describes the mean consultant cooperation (1 for high effort, 0 for low effort) by period across eight sessions of a standalone consulting market. Participants were students in one author's audit course. The consulting market was conducted after pilot asset markets.*