Information about PRICE Lab

Many thanks for your interest in being a participant for PRICE Lab. This information sheet explains what PRICE Lab is and what you can expect from being a participant.

What is PRICE Lab?
"PRICE" stands for **P**rogramme of **R**esearch **I**nvestigating **C**onsumer **E**valuations. It is a unique project that uses experiments to find out how easy or difficult Irish consumers find it to value different kinds of products. The research is being carried out by the ESRI and is funded by the Central Bank, the National Consumer Agency, the Commission for Energy Regulation and the Communications Regulator (ComReg). The findings are important. They will be used to inform policies designed to protect consumers and to make it easier for all of us to make better choices.

What is expected of me?
You will first be asked to sign a consent form confirming that you are willing to participate. This form will also explain the steps we take to ensure that your data remain confidential. You can ask us questions at any time prior to or during the research.

The experiment itself is a simple computer game. You sit in front of a screen, which displays a product and a price. The product is not real, but is an image that we have invented for the study. You will first be shown some examples together with their prices, to help you learn what makes some worth more than others. Then you will be shown lots of pairs of products and prices, one after the other. For each pair, you must guess whether the product is worth more or less than the price. You respond by pressing one of two buttons. You will then be shown the right answer.

How difficult will it be?
These computer games are designed to measure the limits of performance – how accurately it is possible to value these invented products. They do this in a similar way to an eye-testing chart, with large letters that are easy to read at the top and letters that gradually get smaller as you move down the chart, until right at the bottom they are just too small to read. The games work the same way. They have some easy decisions, where the product is worth much more or much less than the price, and some that are nearly impossible, where the product is worth almost the same as the price.

While you may find some decisions easy, you will often feel like you are guessing. There is no time limit for your response, but you do have quite a lot of decisions to get through. So try not to spend too long on each decision and don't worry too much about getting some answers wrong – you are bound to. The important thing is to try to concentrate and to make your best guess.

The task is quite repetitive and we will appreciate your efforts to concentrate. If you perform well, you may win a prize: the most consistently good performer out of every 10 participants will receive a "One for All" shopping voucher worth €50.

How long will it take?
After some initial examples and practice with the response buttons, you will play six games, lasting around 8 minutes each, depending on how quickly you respond. We will also give you a short tea break in the middle (we will provide refreshments). The total session should last about an hour.

Experimenter Script (Experiment 1 and 2)

"Welcome to the PRICE lab. First, could you please read and, if you consent, sign this form."

Check: That the subject has read the leaflet. Do they have any questions about it?

Check: That the participant is sitting at the correct viewing distance. Can they still see the images ok?

Explain what they have to do.

"The point of the experiment is to see how accurately people value products. To find this out, we are going to ask you to compare products and prices. Your job will be to decide whether you think the product is worth more or less than the price displayed. "

"You will be playing six short games, lasting around 8-10 minutes each. This is your response pad *[hand them the response pad]*. On each trial can select the item by pressing the top left button and the price by pressing the top right button. Pressing "Next" will progress you to the next trial."

"You will be asked to value three products. In each game, what matters for the price will be different. However, I will tell you what that is before each trail begins. You will also have a learning phase in which you are shown examples and practice trials so that you can learn the relationship between the product and the price."

"Now I will take you through some examples of the items you will encounter *[Initiate sample screens]*. The first (second/third) is a Golden Egg (Victorian Lantern/Mayan Pyramid). You will see a price displayed on the tag and your task is decided whether you think the Egg (Lantern/Pyramid) is worth more or less than the price displayed. Suppose you think the Egg (Lantern/Pyramid) is worth more, you would select "More". *[Instruct them to select "More"].* If you were correct you will see a green tick and if you were incorrect you will see a red cross and hear a beep. In addition, regardless of whether you were correct or incorrect, you will get feedback on the actual price of that item on every trial."

Stress: "There is no deception involved in this experiment. The value of the products is determined by a consistent formula and we are interested in how accurately you can value them. It is as simple as that. There are no tricks."

Describe Incentive

"We want you to try as hard as you can and if you do well you could win some money. The best performer in every 10 wins an extra €50 voucher. "

Learning Phase

"If you hit the next button you will begin the learning phase. Here the value of the Egg (Lantern/Pyramid) will be based on the Size (Pattern/Ratio/Number of Sparks/Interval/Mould). *[Elaborate on how the directional relationship between the attribute and price (see below)].*

[Talk participant through example screens.]

"If you hit "next" you will begin 8 short practice trials to get you accustomed to the task. These answers will not count towards your overall performance. After that you will proceed to the main experiment. If you have any questions or are unclear of the task at any stage, don't hesitate to contact me."

***[Check:** that the participant has fully understood the task. (Ask after 1st trial what value they would put on the item and talk them through decision).]*

Descriptions of Value Functions (Experiment 2)

(1) **Linear Value Function:** In this game, more is better. Both attributes contribute to the overall value and are independent of each other: The higher *[attribute 1]* is, the more valuable the product is and the lower *[attribute 1]* is, the less valuable the product is. Similarly, the higher *[attribute 2]* is, the more valuable the product is and the lower *[attribute 2]* is, the less valuable the product is.

(2) Cobb-Douglas (DRS): In this game, more is better: The higher *[attribute 1]* is, the more valuable the product is and the lower *[attribute 1]* is, the less valuable the product is. Similarly, the higher *[attribute 2]* is, the more valuable the product is and the lower *[attribute 2]* is, the less valuable the product is. However, the balance between *[attribute 1]* and *[attribute 2]* is also important. Large trade-offs are valued less. For example, if you have a very high *[attribute 1]* and very low *[attribute 2]*, it would not be valued as highly as an average *[attribute 1]* and an average *[attribute 2]*.

(3) Cobb-Douglas (IRS): In this game, more is better: The higher *[attribute 1]* is, the more valuable the product is and the lower *[attribute 1]* is, the less valuable the product is. Similarly, the higher *[attribute 2]* is, the more valuable the product is and the lower *[attribute 2]* is, the less valuable the product is. However, the balance between *[attribute 1]* and *[attribute 2]* is also important. Large trade-offs are valued less. For example, if you have a very high *[attribute 1]* and very low *[attribute 2]*, it would not be valued as highly as an average *[attribute 1]* and an average *[attribute 2]*. Finally, when *[attribute 1]* and *[attribute 2]* are both low, changes do not have much of an impact on the price. However, when *[attribute 1]* and *[attribute 2]* are high, changes have a large impact.

(4) Perfect Complements: In this game you need to consider both attributes. More is better: Both attributes contribute to the overall value: The higher *[attribute 1]* is, the more valuable the product is and the lower *[attribute 1]* is, the less valuable the product is. However, only the weakest contribution of *[attribute 1]* and *[attribute 2]* will matter for the overall value of the product. Think of the phase "a chain is only as strong as its weakest link"; for this product, its value is only determined by its weakest contribution from *[attribute 1]* or *[attribute 2]*.

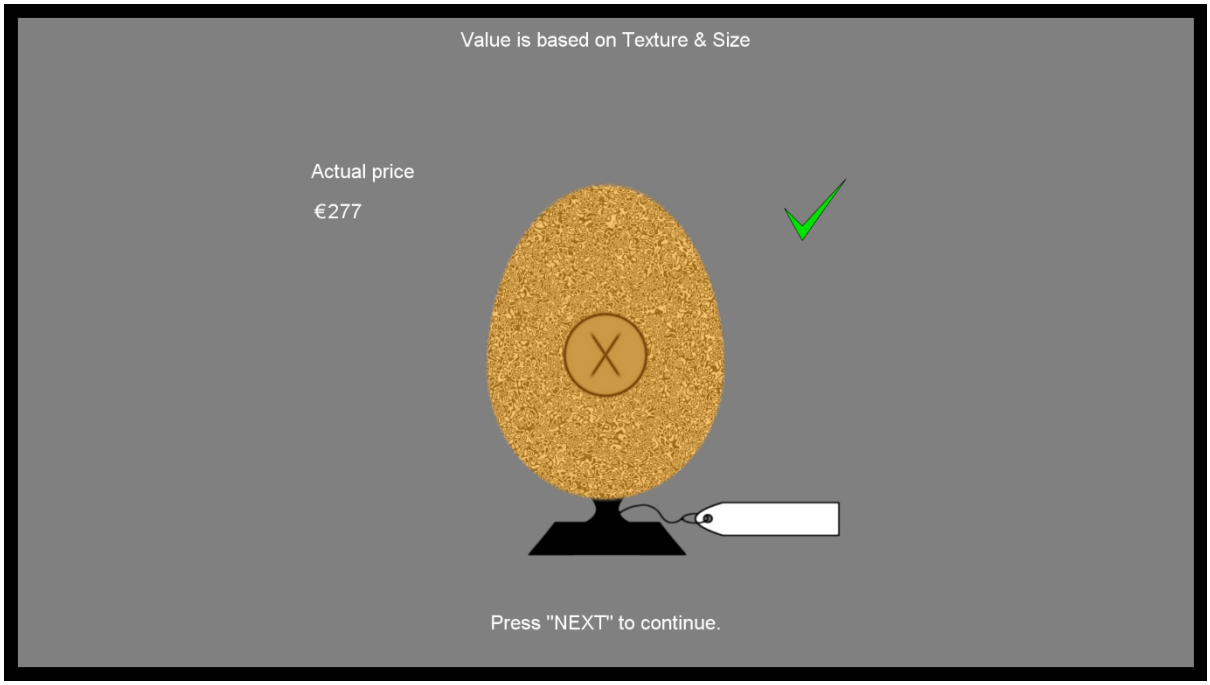
(5) Sine Wave: In this game both *[attribute 1]* and *[attribute 2]* will contribute to the overall value in a different way. For *[attribute 1]* – more is simply better. The higher *[attribute 1]* is, the more valuable the product is and the lower *[attribute 1]* is, the less valuable the product is. However, for *[attribute 2]*, the relationship is more complex. At its minimum value, *[attribute 2]* contributes an average amount to the price. However, as it begins to improve, it's contribution to the overall value increases. However, beyond this point, as *[attribute 2]* increases, its contribution to the overall values starts to decline. Finally, once it gets to this point in the range, increases in *[attribute 2]* have a positive impact on the overall value once more.

(6) Circular: In this game, the product is most valuable when *[attribute 1]* and *[attribute 2]* are about average. As they deviate from these middle values, the value of the product declines. Think of this like "Goldilocks and the three bears". Products are valued more if they are not too big and not too small - somewhere in the middle is just right.

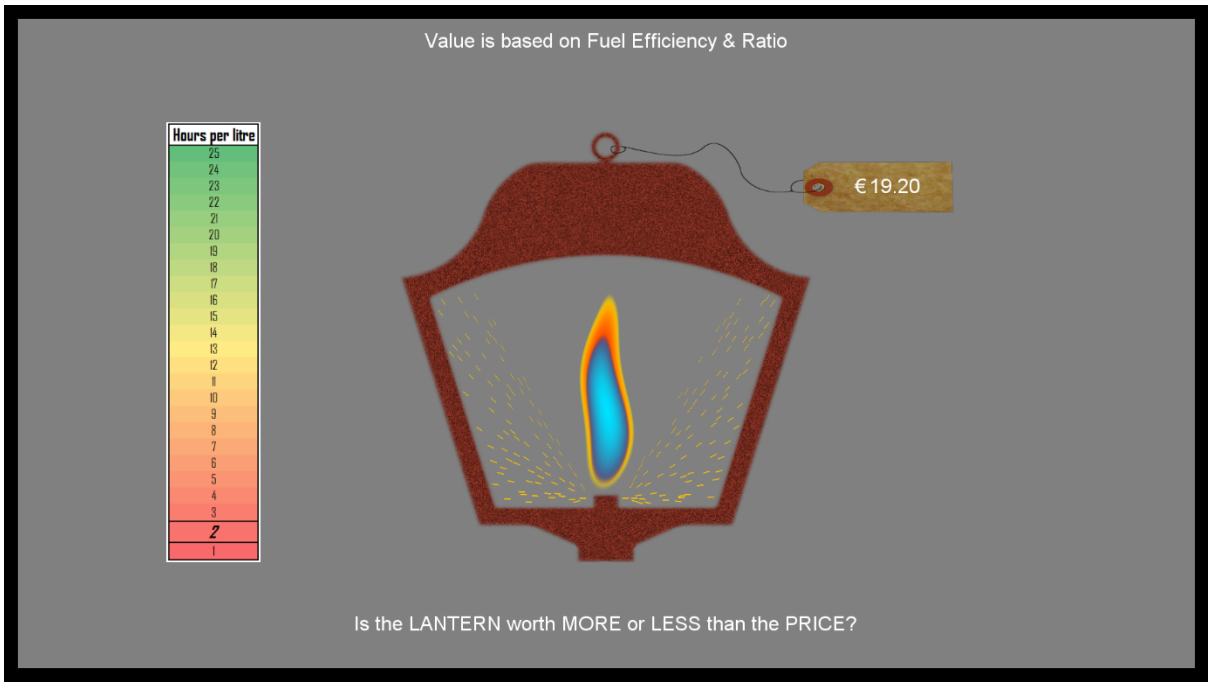
***** USE EXAMPLES TO ILLUSTRATE THE ATTRIBUTE-PRICE RELATIONSHIP THROUGHOUT THE DESCRIPTIONS*****

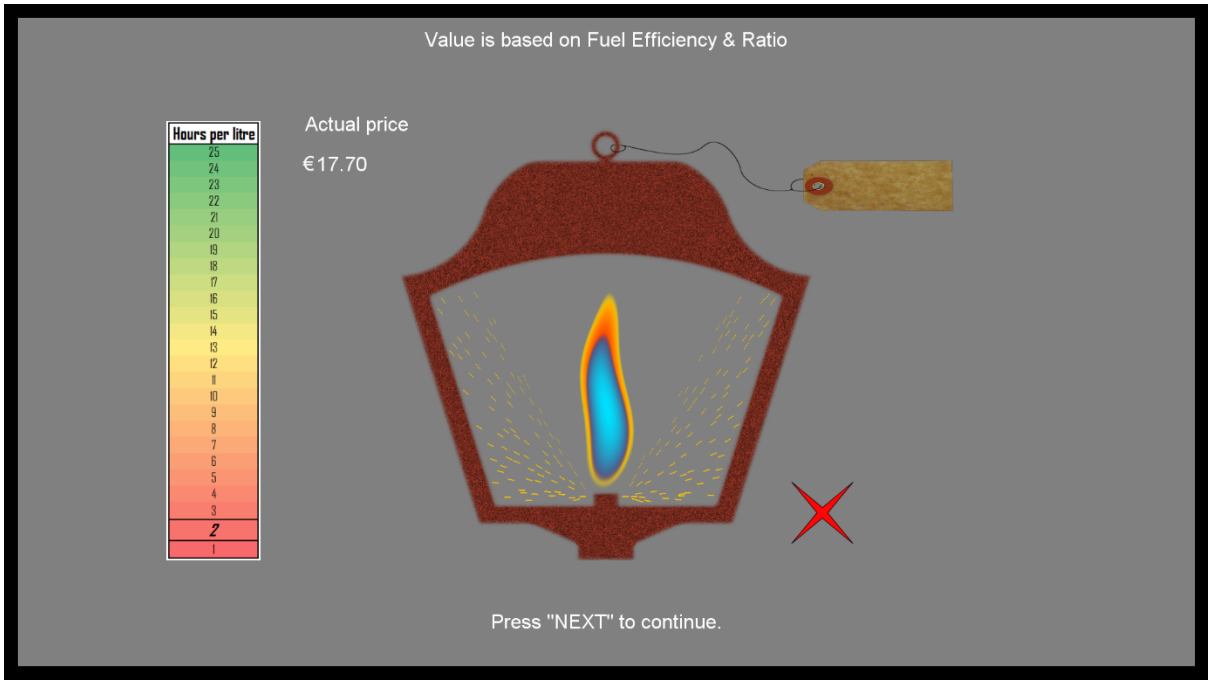
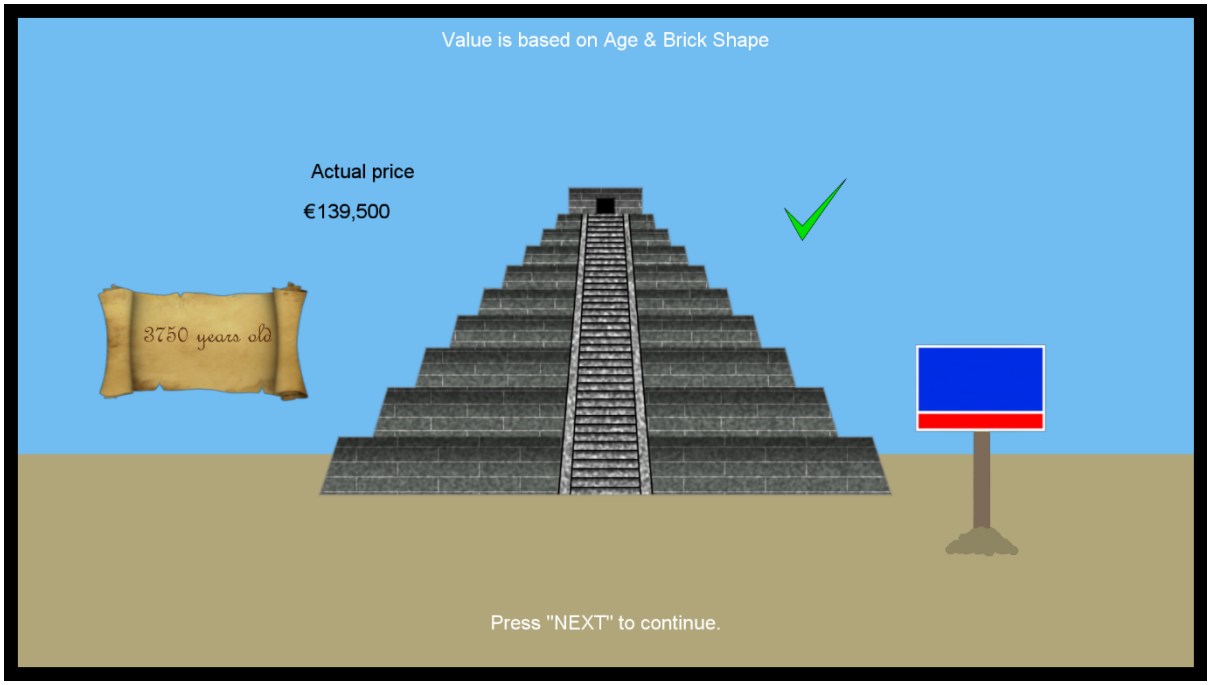
Screenshots of the experimental task

Sample screenshot of trial involving a Golden Egg (correct response).



Sample screenshot of trial involving a Victorian Lantern (incorrect response).





Sample screenshot of trial involving a Mayan Pyramid (correct response).