

Evaluation of Public Policies and Social Programs

Session 7: Stated Preference & Behavioral Considerations

Andrés Barrios Fernández

Wednesday, August 26, 2026

MA in Economics, Universidad de los Andes, Chile — Second Semester 2026

Today

1. Stated preference and its biases
2. Behavioral departures: when choices don't reveal welfare
3. Exercise: bias identification and a behavioral welfare calculation
4. What we learned — wrapping up Module B
5. Paper presentation (closes today's session)

Learning Objectives

By the end of today's session, you will be able to:

- State when stated preference is necessary, and name its five classic biases
- Explain the scope-insensitivity finding and why it is the single most damaging critique of contingent valuation
- Distinguish present bias and inattention from “just” having different preferences, using the quasi-hyperbolic discounting model
- Evaluate whether a nudge increases welfare, using the internalized-adjusted welfare calculation

Stated Preference and Its Biases

Recall: what if there is no market at all?

Sessions 4 and 6 recovered WTP from markets — consumer surplus, hedonic prices. Both need *some* market to observe.

What about existence value? Option value? A species you will never see, a wilderness you will never visit?

There is no market, no price, no quantity to observe. The only way to learn WTP is to ask.

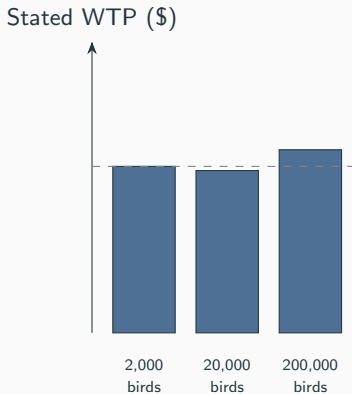
Use values vs. non-use values

- **Use value:** WTP tied to actually using the good (visiting a park)
- **Non-use value:** existence value, option value, bequest value — WTP for a good you may never directly consume
- Contingent valuation (CV): survey respondents about a hypothetical scenario and payment
- Elicitation formats: open-ended, dichotomous choice (referendum), payment card, iterative bidding

Diamond, P. & Hausman, J. (1994), “Contingent Valuation: Is Some Number Better than No Number?” JEP

Stated WTP routinely fails basic consistency tests that any real preference should satisfy — most damagingly, it often does not scale with the size of the good being valued.

Scope insensitivity, illustrated



A 100-fold increase in the scope of the good — and stated WTP barely moves. Illustrative, following the classic scope-insensitivity (“embedding”) pattern discussed in Diamond & Hausman (1994).

The five classic biases

- **Hypothetical bias:** stated WTP $>$ actual WTP
- **Scope insensitivity:** WTP doesn't scale with the size of the good (previous slide)
- **Warm glow:** paying to feel good about giving, not for the good itself
- **Anchoring / starting-point bias:** the first number offered shapes the answer
- **Strategic and payment-vehicle bias:** free-riding incentives; WTP varies with how payment is framed (tax vs. donation)

If a donor surveys parents “would you send your child to this school,” which of these five should worry you most?

Behavioral Departures

When choices don't reveal welfare

Everything so far assumes: observed choice $\Rightarrow$ revealed preference $\Rightarrow$ WTP.

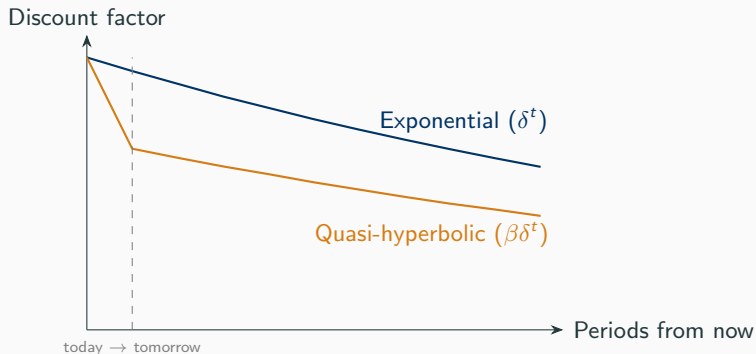
Four behavioral failures break that chain:

- **Present bias:** hyperbolic discounting; undersave, under-exercise
- **Inattention / salience:** shrouded attributes (fees, fine print)
- **Default effects:** status quo bias
- **Internalities:** costs people impose on their *future selves*

Laibson, D. (1997), “Golden Eggs and Hyperbolic Discounting,” QJE

Replace exponential discounting δ^t with $\beta\delta^t$ for $t \geq 1$ (and 1 at $t = 0$). The extra factor $\beta < 1$ captures a disproportionate preference for *today* over any future date — not just a high overall discount rate.

Present bias, visually



The sharp drop between “now” and “one period from now” is present bias; the parallel decline afterward is ordinary discounting. Standard β - δ diagram, following Laibson (1997).

Case study: retirement savings defaults (Madrian & Shea, 2001)

- Auto-enrollment in 401(k): participation jumps from 37% to 86%
- Does higher enrollment automatically mean higher welfare? **No** — depends on who the compliers are
- Three groups: always-savers (unaffected), compliers (gain *if* present-biased), never-savers (unaffected)
- Welfare calculation requires estimating the **internality** — the gap between what people would choose with full self-control and what they actually choose

Might parents be present-biased or inattentive when choosing — or failing to choose — a school for their child?

If so, what does that imply for how you interpret *enrollment* as a revealed-preference measure of the Astoreca school's benefit?

Exercise: Bias Identification & a Behavioral Welfare Calculation

Part 1: Bias identification (15 minutes)

For each of the three questions on the next slide, identify:

- Which of the five classic biases is most likely at work
- One concrete change to the question that would reduce it

Three poorly designed CV questions

Question 1

“Would you be willing to contribute an extra \$50 per month to keep Colegio Astoreca’s new tutoring program running?”

Question 2

“How much would you be willing to pay, per year, so that Colegio Astoreca can keep offering high-quality free education to children in the neighborhood?”

Question 3

“Wouldn’t you like to help give disadvantaged children in your community a brighter future by supporting Colegio Astoreca?”

Answer key

- **Q1 — Anchoring / starting-point bias:** naming \$50 turns it into a reference point respondents anchor to, rather than an independent valuation. *Fix:* elicit an open-ended amount, or if using dichotomous choice, randomize the bid across the sample instead of naming one figure to everyone.
- **Q2 — Scope insensitivity:** the question never says how many students, classrooms, or years are being funded — respondents can't value a good whose size they don't know. *Fix:* state a specific, verifiable scope (e.g., “so that 50 additional students can enroll next year”) and test WTP at two different scope levels to confirm it actually scales.
- **Q3 — Warm glow:** the emotionally loaded framing invites people to pay for the good feeling of helping, not for their valuation of the program's actual benefits. *Fix:* describe the program and its outcomes in neutral, factual language and remove language that frames one answer as the generous or correct one.

Part 2: An energy-nudge welfare calculation

Setup

- Households receive a personalized energy comparison report; energy use falls 2%
- Electricity price: \$0.12/kWh; average use: 10,000 kWh/yr
- Estimated internality (from an incentivized experiment): \$0.01/kWh
- Program cost: \$5/household/yr

Task and solution

1. Household bill reduction: $0.02 \times 10,000 \times \$0.12 = \$24/\text{yr}$
2. Welfare gain *accounting for the internality*:
 $0.02 \times 10,000 \times (\$0.12 + \$0.01) = \$26/\text{yr}$
(the internality means the true marginal cost of each kWh was \$0.01 higher than the price paid — so the welfare gain per unit reduced is *larger* than the bill saving alone)
3. Welfare gain / program cost = $26/5 \approx 5.2$

If the response were entirely social pressure (no internality), the welfare gain would be exactly the bill saving, \$24 — the internality is doing real work here.

What We Learned Today

- Stated preference is sometimes the only option (non-use values), but it comes with five well-documented biases — scope insensitivity is the most damaging
- Quasi-hyperbolic discounting formalizes present bias as a distinct parameter (β) from ordinary impatience (δ)
- A nudge increases welfare only to the extent it corrects a genuine externality — higher take-up alone tells you nothing
- You now have the complete non-market valuation toolkit (Sessions 6–7); Module A/B are done

- Problem Set 2 (self-study checkpoint: by Session 12)
- **Prepare the First Presentation**, due Monday, September 14 (30 min total for both teams)

Paper Presentation (75–90 min)

M. Emilia Neut & Victoria Rauseo

Black, S.E. (1999), “Do Better Schools Matter? Parental Valuation of Elementary Education,” *QJE*