ALT/FNDATA ACADEMY · STUDENT STUDY SHEET

Study sheet: Module 3, consumer and luxury economics

This session uses auction and resale transaction data to teach two of the central metrics in luxury goods economics: pricing power and sell-through. Rather than relying on stated survey preference or brand-tracking indices, students work directly with what collectors and buyers actually paid at auction, across watches, jewelry, handbags, fine art, and other categories, drawn from over 100 auction houses with history to the late 1990s. The session builds toward a single question that runs through the field: when demand for a brand strengthens, does it show up first in what people are willing to pay over the pre-sale estimate, in how reliably lots find a buyer, or both.

What you should be able to do

1. Define pricing power in the context of auction markets and compute it as a ratio of realized price to pre-sale high estimate.
2. Define sell-through (clearance rate) as the share of offered lots that find a buyer, and explain why unsold lots must be counted, not discarded.
3. Compare pricing power and sell-through across two or more brands and articulate what each metric captures that the other does not.
4. Explain why auction data reflects revealed preference (what buyers actually paid) rather than stated preference (what buyers say they value).
5. Identify a limitation of using auction data alone to characterize a brand's overall consumer demand.

Key terms

- **Pricing power:** the ratio of median realized price to median pre-sale high estimate for a brand's sold lots; a value above 1.0 means buyers paid over the auction house's forecast.
- **Sell-through (clearance rate):** the share of offered lots, sold and unsold combined, that found a buyer.
- **Revealed preference:** what a buyer's actual purchase demonstrates about willingness to pay, as opposed to a stated preference expressed in a survey or interview.
- **Pre-sale estimate:** the auction house's forecast of a lot's likely price range, captured in sale_estimates_high_usd_price, set before bidding begins.
- **Secondary market:** the resale and auction market where a good changes hands after its original retail sale, as distinct from a brand's primary retail channel.
- **Collector base:** the group of buyers actively competing for a brand's lots at auction, whose behavior pricing power and sell-through both attempt to describe from different angles.
- **Clearance:** informal shorthand some auction professionals use for sell-through, worth knowing since students may encounter it in outside reading.

Core sandbox query

The query the module is built around. Run it, then change the brand or category and compare.

```
SELECT
  designer,
  APPROX_PERCENTILE(usd_price_decimal, 0.5) AS median_realized,
  APPROX_PERCENTILE(sale_estimates_high_usd_price, 0.5) AS median_high_estimate,
  APPROX_PERCENTILE(usd_price_decimal, 0.5) / APPROX_PERCENTILE(sale_estimates_high_usd_price, 0.5) AS pr
FROM all_jewels_gems_data
WHERE designer LIKE '%Van Cleef%'
  AND status = 'sold'
GROUP BY designer;
```

Common mistakes to avoid

1. Filtering the sell-through query to status = 'sold', which removes the unsold lots from the denominator and produces a clearance rate of 100 percent regardless of the brand's real performance.
2. Treating one exceptional sale, a single record price, as proof that a brand's overall demand has shifted, rather than as one data point within a much larger set of lots.
3. Comparing pricing power for a brand in one category against a different brand in another category, say a watch brand against a handbag brand, as though the ratio means the same thing across categories with very different estimate-setting conventions.
4. Under-specifying the designer filter and quietly working with a small, unrepresentative slice of a brand's lots without checking the row count first.
5. Reading the last one or two quarters of a brand's activity as a demand trend, when recent periods are still having records added and are not yet stable enough to compare period over period.
6. Assuming pricing power and sell-through must move together. A brand can have strong pricing power, buyers pay well over estimate when they do buy, while still clearing only a modest share of what is offered, and the two metrics should be read side by side, not collapsed into one.

Full lesson, more queries, and the homework are in Module 3 at academy.altfndata.com. Questions: info@altfndata.com.