

Inflation: The Whole Truth

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Abstract

This article examines the growing gap between official inflation figures and consumer experience by identifying three structural blind spots in the Consumer Price Index. Firstly, hedonic quality adjustment, which overstates the value consumers receive. Secondly, there is shrinkflation, which masks price increases by keeping sticker prices unchanged while reducing the quality and quantity of an item. Lastly, there is the post-1983 exclusion of borrowing costs, which omits the single largest recurring household expense. Finally, this paper concludes by proposing targeted reforms to close the measurement gap, such as a companion index stripped of quality adjustments, mandatory unit-price labelling for downsized products, and the reintroduction of mortgage and vehicle loan costs into the CPI.

Introduction

Do you ever wonder why the Kinder Joy you bought as a kid feels lighter than it used to? The company claims, that you've simply grown older, but the same Kinder Egg that you've been holding onto since you were 6, has lied to you, leaving you with only a shell of its former self.

If that makes you feel cheated, you are not alone as every day millions of families are forced to endure this humiliation across the world, while prices are rising and quantities are shrinking, then why we must ask does the official inflation rate so often fail to capture what consumers actually experience?

The answer to all this lies in the reasoning behind choices that overestimate the value consumers receive relative to the value they think they ought to receive. This underpins one of the most misunderstood assumptions about changes in the price of goods.

I. The Measurement Gap: Hedonic Adjustment and the CPI

The Consumer Price Index (CPI), published monthly by the Bureau of Labor Statistics (BLS), tracks price changes across a weighted basket of goods and services intended to represent the purchases of a typical urban household (Bureau of Labor Statistics [BLS], 2026). It is a robust and widely respected tool, but it is designed to measure something subtly different from what most consumers perceive. The BLS describes the CPI as tracking ‘the average change over time in the prices paid by consumers for a specified basket of goods and services,’ the word ‘average’ matters a great deal here. The methodology incorporates what is known as hedonic quality adjustment, a technique that has significant consequences for how price changes are recorded (BLS, 2026).

Hedonic adjustment allows statisticians to separate price increases caused by genuine inflation from those that are attributable to improved product quality, which is that statisticians may attribute part of the increase to enhanced quality rather than to inflation. In some cases, the adjustment can even suggest that prices have effectively fallen, on the logic that consumers are receiving more value for their money. For example, even if the price of a laptop increases when compared to a model that was released 4 years ago. It’s change in price gets overshadowed by the newer version leading to a dilution or deletion of its price differential due to the supposed increase in its efficiency. Although this reasoning is defensible in the abstract sense, it collides with consumer reality in an obvious manner, as even when the quality improves and the price increases, the consumer still pays more at the till. This is particularly acute in sectors such as technology, where older and more affordable product lines are routinely discontinued, leaving consumers with no option but to purchase the newer, more expensive version regardless of whether they value the improvements.

This problem has been researched upon greatly by Steve Reed, an economist at the Bureau of Labor Statistics, who acknowledged this tension in an interview with NPR. He notes that many consumers may prefer lower-quality, lower-priced options and that when quality and price both increase, the index may not ‘fully capture the impact of price change on lower income consumers’ (Reed, as cited in NPR, 2022). Reed added that the Bureau is actively researching the issue, which is itself an acknowledgement that the gap between what the CPI measures and what consumers feel is not merely a matter of perception. The core distinction here is that CPI measures prices, not

consumers' experiences with those prices, and these are fundamentally different things whose divergence has been widening for years.

II. The Product Gap: Shrinkflation

If hedonic adjustment represents an invisible overestimation of value, shrinkflation produces the opposite problem in plain sight. Consumers receive less product for the same or higher price, and CPI often fails to register the change in real time. Research confirms that brands routinely reduce package sizes rather than raise sticker prices, exploiting the well-documented behavioural finding that consumers are significantly less likely to notice a smaller package than they are to notice a higher price tag (Janssen & Kasinger, 2026). This strategy deliberately holds the price constant while quietly reducing the quantity, effectively raising the unit cost without triggering the psychological alarm that a visible price increase would.

A study by the University of Massachusetts Amherst found that packaged food product sizes decreased by an average of 14.6 per cent between 2012 and 2019, which had the effect of understating food inflation by 3.7 percentage points over that period, a gap large enough to meaningfully distort household budgeting and policy decisions alike (Rojas et al., 2026). This has also been flagged as a policy concern warranting further statistical attention by the US Government Accountability Office (U.S. Government Accountability Office [GAO], 2025), since consumers, for their part, are fully aware of what is happening and resent it. As has been shown by the Capgemini Research Institute, their survey of consumers in 32 countries has found that 64 per cent considered shrinkflation 'unfair' or 'very unfair,' yet brand-switching intent actually declined from 50 per cent in 2023 to 36 per cent in 2025, a pattern that researchers have termed the 'resignation effect' (Capgemini Research Institute, 2026).

Another parallel phenomenon has also led consumers to witness a steady erosion of service quality at unchanged prices in sectors such as hotels, airlines, and restaurants, where staffing reductions and smaller portions deliver less value for the same cost, though this is considerably harder to quantify and lies beyond the scope of this paper. This 'skimpflation', however, has a common root with shrinkflation, in the sense that each exploits a gap in measurement that allows real cost increases to go unrecorded. But the true question that arises is whether those gaps exist only on the product side or run deeper into the index's architecture itself.

III. The Borrowing Gap: What the CPI Leaves Out

Perhaps the most consequential structural gap in the CPI was identified in a 2024 working paper by Lawrence Summers, Marijn Bolhuis, Judd Cramer, and Karl Oskar Schulz, published by the National Bureau of Economic Research. The paper, titled ‘The Cost of Money Is Part of the Cost of Living,’ observed that prior to 1983 the CPI included mortgage interest costs as a component of housing expenditure, and that before 1998 it also included car loan payments as part of transportation costs (Bolhuis et al., 2024). Both were subsequently removed during methodological revisions, on the grounds that they represented financing decisions rather than consumption, but the practical effect was to strip from the index the two categories of borrowing that most directly shape household budgets.

When Summers and his co-authors recalculated inflation using the pre-1983 methodology, the results were striking, inflation would have peaked at approximately 18 per cent in mid-2022, which was double the official figure reported at the time. At the end of 2023, their alternative index stood at around 8 per cent, compared with the official CPI’s 3 per cent, a gap of five full percentage points that corresponds closely to the scale of public dissatisfaction with the economy during that period. As Summers told NPR, “The simple idea is part of the cost of living is the cost of money” (Bolhuis et al., 2024, pp. 12–15). The co-authors further noted that the monthly interest payment on a new 30-year fixed-rate mortgage for the average American house had more than tripled since 2021, a burden that the current CPI simply does not register. The Harvard Gazette reported that the alternative model closed ‘more than 70 per cent’ of the gap between official inflation measures and the University of Michigan’s consumer sentiment index, which had been puzzling economists who could not understand why consumers remained so negative despite moderating headline inflation (as cited in Bolhuis et al., 2024).

This particular finding matters because it translates a subjective and widely dismissed complaint, that things feel more expensive than the numbers say, into a measurable and methodologically grounded cause. The CPI structurally excludes the single largest recurring cost that most American households face, which is the cost of borrowing to buy a home, and in doing so it creates an index that is internally consistent but increasingly disconnected from the financial reality of the people it purports to represent.

IV. Closing the Gap: Toward Better Measurement

If the preceding sections have identified three structural blind spots in the CPI, the natural question is what can be done about them. Several proposals deserve consideration, even though none is entirely without trade-offs. To reduce the effect of hedonic adjustment, the BLS could publish a companion index that strips out quality adjustments entirely, showing what consumers actually pay at the point of sale. This would not replace the existing CPI but would give policymakers and the public a second reference point that better reflects out-of-pocket costs, much as the European Union's Harmonised Index of Consumer Prices, which already uses a more conservative approach to quality adjustment with measurably different results (Eurostat, 2024).

In order to combat the effect of shrinkflation, countries such as France have already introduced a mandatory label requiring retailers to prominently display unit-price changes whenever package sizes decrease, ensuring that consumers can see at a glance whether they are getting less for the same price (Loi n° 2024-344, 2024; see also GAO, 2025). A similar recommendation has been made by the US GAO to the Bureau of Labor Statistics to develop better methods for tracking quantity changes alongside price changes, and both approaches treat shrinkflation not as a consumer grievance but as a measurement problem that statistical agencies can and should address systematically.

The Summers paper itself points toward the simplest fix for the issue arising out of borrowing cost: reintroducing mortgage interest and vehicle loan costs into the CPI, or at a minimum publish an alternative index that includes them alongside the existing measure. Reintroducing the pre-1983 methodology makes clear sense when it simply fell out of use when interest rates were low and stable, and the omission made little practical difference. Given that the exclusion of borrowing costs now accounts for most of the gap between official inflation and consumer sentiment, restoring these components would bring the index meaningfully closer to what households spend each month.

Although none of these reforms would be costless, a dual-index system would add complexity, and shrinkflation labelling would impose compliance costs on retailers. Even the reintroduction of mortgage costs into the CPI would raise the headline inflation figure, with downstream consequences for interest rate policy, wage negotiations, and the indexation of government

benefits. But the alternative of a widening gap between what the index reports and what consumers experience carries its own costs in public trust and policy credibility.

Conclusion

The Consumer Price Index is not dishonest, in fact, it does what it was designed to do. Only what it is designed to do has diverged from what consumers expect, and their experience shows that this is now too large to dismiss as a problem of perception. As Hedonic adjustment assumes consumers value quality improvements they may not have wanted or requested, while shrinkflation hides effective price increases behind unchanged sticker prices and familiar packaging. All while excluding borrowing costs from the index ignores the single expense that dominates most household budgets in a high-interest-rate environment.

Even where the CPI accurately tracks annual price changes, consumers experience cumulative price levels rather than year-on-year rates, and this distinction matters enormously. As it's the price level that feels like a burden and that consumers do not impose any arbitrary time period when thinking about rising prices (Federal Reserve Bank of Minneapolis, 2025).

Return, then, to that Kinder Joy. It's lighter, it costs more, and the CPI says inflation is under control. That dissonance is not a failure of perception. It is a failure of measurement to match lived experience, and until the tools catch up with reality, the gap will persist.

References

- Bolhuis, M. A., Cramer, J. N. F., Schulz, K. O., & Summers, L. H. (2024). The cost of money is part of the cost of living: New evidence on the consumer sentiment anomaly (NBER Working Paper No. 32163). National Bureau of Economic Research.
- Bureau of Labor Statistics. (2026, March). *Consumer price index summary — March 2026* (News Release USDL-26-0599). U.S. Department of Labor.

Bureau of Labor Statistics. (n.d.). *Frequently asked questions about hedonic quality adjustment in the CPI*. U.S. Department of Labor. Retrieved April 2026.

Capgemini Research Institute. (2026, January). *Consumer sentiment on shrinkflation* [32-country survey].

Eurostat. (2024). *Harmonised index of consumer prices (HICP): Methodological manual* (2024 ed.). Publications Office of the European Union.

Federal Reserve Bank of Minneapolis. (2025, March). More than a feeling? Making sense of elevated inflation expectations.

Janssen, A., & Kasinger, J. (2026). Shrinkflation and consumer demand. *Marketing Science*, 45(1), 1–248.

Loi n° 2024-344 du 15 avril 2024, art. 3 (France).

NPR. (2022). Economists use hedonic adjustment to account for changing quality of CPI items. *The Indicator from Planet Money*.

Rojas, C., Jaenicke, E., & Page, E. T. (2026). How package size changes affect food inflation: Evidence from scanner data. *International Journal of Industrial Organization*.
<https://doi.org/10.1016/j.ijindorg.2026.103261>

U.S. Government Accountability Office. (2025). *Consumer prices: Trends and policy options related to shrinking product sizes* (GAO-25-107451).