

Price comparisons, especially involving inputs and outputs for production decisions, will have to be made over different periods. A stable price level greatly helps money perform this function of a numeraire better. When “a dollar is a dollar is a dollar”, and hopefully the Indian rupee too some day, it is possible to know relative prices right away.

3.5 THE RATIONALE FOR COST BASED PRICING

Over and above the classical view that inflation raises information costs and distorts relative price signals, there is a more operational approach that explains why inflation has huge costs. This is the transactions costs approach, which was pioneered by Arthur Okun. The menu costs we have discussed are a large part of transaction costs.

In his path breaking book, “Prices and Quantities”, Okun (1981) made a distinction between *customer* markets and *auction* markets for products (He also made a similar distinction between *casual* and *career* labour markets). For instance, washing machines and doctor visits will come under the former, while oil and wheat traded on the commodities exchange market will come under the latter. This distinction somewhat corresponds to *branded*, differentiated products with different prices and *unbranded* homogenous products with a uniform price.¹³

In auction markets, prices are based on current demand and supply conditions and respond fairly quickly to changes in demand. There are no price tags and hence no major menu costs. Menu costs are one part of transactions costs. However, the informational costs of sorting out absolute versus relative price changes from quoted prices will still be there in auction markets.

By contrast, in customer markets, prices are not set so as to maximize current period profits. Instead they are based on *multi-period* considerations. Prices are based on *implicit* contracts, largely formed based on notions of trust and fairness. These implicit contracts are made between retailers and consumers, and also between workers and firms.¹⁴ In a memorable phrase, Okun characterized these implicit contracts as the ‘Invisible Handshake,’ as distinct from Adam Smith’s invisible hand. Much of the actual wage – price dynamics of the Phillips curve and related macroeconomic outcomes can be explained by the invisible handshake.

In standard microeconomics, we postulate or assume that a profit maximizing firm sets price equal to marginal cost to maximize current period profits. But in reality firms often set price as some *mark up* over some measure of average cost, even when marginal cost is rising, and often do not change it even when demand rises in subsequent periods. Such seemingly irrational behaviour can be explained by the long term customer – seller

¹³ In the financial sector, most prices are determined in auction markets on organized exchanges, such as for traded bonds. However, interest rates on bank loans are set with various terms and conditions pertaining to the loans over and above the stated interest rates. Such ‘relationship’ banking, although a financial product, comes under customer markets.

¹⁴ Contracts can either be explicit or implicit. In the labour market, more contracts tend to be explicit.

relationship based on the invisible handshake. It is considered fair and acceptable for firms to respond to cost increases, but not to demand increases. In USA, during the 1973 commodity price explosion, there were adverse reactions by consumer to a remarking of prices of grocery products already on the shelf in the supermarkets. One year later the US President Gerald Ford took action against raising of food prices. He announced

"I have directed our new Council on Wage and Price Stability to find and expose all restrictive practices, public or private, which raise food prices".

Much of standard macroeconomic analysis mistakenly concludes that prices are sticky in the short run due to imperfect information, as in Friedman's 'fooling' version of the EAPC. However, evidence indicates that transaction costs and implicit contracts play a far greater role in price formation. Prices are not sticky *per se*. It is more accurate to say that, in customer markets, prices respond quickly to changing costs, but not to changing demand, as Okun insightfully stressed.¹⁵ This is not to suggest that firms can charge any price they like, independent of demand levels.

3.6 THE SHRINKAGE EFFECT OF INFLATION

The analysis of customer markets leads to an understanding of why some prices are sticky and also as to the hidden effects of inflation. One way to signal to the buyer the reliability and quality of a product is by maintaining the price. Firms selling a branded product will make deliberate efforts to continue selling at the same price to retain loyal customers. For a very highly branded product, the continuity of a given price is crucial, even when the underlying demand and supply conditions change. A bottle of Coca Cola was sold at 5 cents in USA for almost 60 years! Some of this stability was obviously due to the long run stable price level under the gold standard, but, keeping the price at 5 cents through summer and winter must have been mainly due to brand loyalty considerations. Prices of branded products are often not changed despite predictable seasonal variations in demand.

Hence, in customer markets, for the reasons outlined above, firms are initially reluctant to raise the price. They will hold the price line and try to absorb the increasing costs as much as possible.¹⁶ Hence, to cope with inflation, Fast Moving Consumer Goods firms would often resort to shrinking the product size to avoid raising prices.¹⁷ We can call this the 'shrinkage' effect of inflation, i.e., less quantity for the same price.¹⁸ A dramatic

¹⁵ To justify the hike of fees even IIMs cite rising costs! See the statement of Ajit Balakrishnan, IIM Calcutta Chairman of Board of Governors (Business Standard, 2014).

¹⁶ Firms tend to price small denomination products in round numbers and/or avoid fractions (partly due to shortage of coins and for consumer convenience). Raising prices then involves huge jumps to the next price point, e.g., Re. 1 to Rs. 2 for photocopying one sheet.

¹⁷ For instance, in 2008, Proctor and Gamble reduced the pack size of its detergent 'Tide' from 1 kilogram to 850 grams, while maintaining the same price (Srinivasan, 2008). Similarly, sometime around 2012, Orbit reduced the chewing gum pack size from 6 to 5 units, keeping the price at Rs. 5.

¹⁸ The shrinkage effect needs to be distinguished from the 'small sachet' effect – the strategy pioneered by Hindustan Lever to price shampoo and other sachets at Re 1 to induce poor customers to buy. Both shrinkage and small sachet effect can be going on at the same time. See Lucas (2013).