

The Impact of Inflation on Consumer Purchasing Power: A Sectoral Analysis

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ABSTRACT

Inflation erodes real income and consumption as a function of price elasticity of demand and change in real income plus change in demand and supply of relative prices. This paper describes the interrelationship of changes in demand for necessities, luxuries, services, and technology as costs of the goods increase as a result of the inflationary process. The results of the empirical analysis will show that increasing inflation reduces real income and consumer demand. Inflation has a smaller effect on the demand for basic goods than for other, more discretionary goods, creating sectoral imbalances. Potential policy options to retain consumer purchasing power and combat inflation are suggested.

Keywords: Inflation, Consumer Purchasing Power, Sectoral Analysis, Price Elasticity, Economic Stability, Consumer Behavior, Spending Patterns

INTRODUCTION

Inflation is one of the most important aspects of consumption and expenditure, demand and the economy. Inflation is a measure of how much dearer goods and services have become over a period, compared with a previous period, affecting the value of money. In economics, inflation is a fall in the purchasing power of an economy's currency. Low inflation is a sign of a growing economy with strong financial performance. But, too great inflation can destabilize financial markets and create price distortions in the economy.

Different types of goods are affected differently by inflation. Inelastic commodities (food, fuel, medical care) whose demand does not vary considerably based on price will be affected relatively little by inflation, and elastic commodities (luxury items, entertainment), which are more responsive to their price, will be affected more. The services sector and the technology sector may be affected differently by inflation, based on service costs, service and technology demand, and global supply chain bottlenecks. Policymakers, businesses, and consumers may also take this into account when making responses.

This paper examines the effect of inflation on the purchasing power of different sectors and the impact of inflation on these sectors on the consumers' expenditure, to achieve a better understanding of the impact of inflation on different sectors of the economy. Policy recommendations that would reduce the negative aspects and increase the financial resilience of certain sectors are also discussed.

1.1 Inflation and consumer purchasing power

Inflation is the decline of purchasing power of a given currency over time, meaning that, given a set of money, the goods and services that can be purchased with that money will be fewer. It is generally defined as a sustained increase in the general price level of goods and services in a given economy over a given period. The impact of inflation depends on wages, government policy, and the overall economy. Moderate inflation is a byproduct of economic growth. Higher levels of inflation can erode the value of savings, raise consumer prices across the economy, and destabilize an economy towards boom and bust cycles.

Inflation reduces consumer purchasing power because, as people pay more for luxury goods, less money is left for luxury purchases. Inflation also reduces real income and purchasing power by raising prices on essential goods, including food, health care, and housing, increasing prices for goods that are inelastic but people will buy anyway. Demand contracts also appear to exist in other markets, for example luxury goods markets, or travel and entertainment. Demand contracts are more likely when consumers focus on basic consumption. Inflation positively correlates with wage growth. If wages do not increase with inflation, the worker's purchasing power will decline, and he will become less and less able to maintain his standard of living.

Because inflation hurts commodity industries such as manufacturing and construction (which have a higher production cost and, thus, higher prices), whereas industries such as information technology (IT) have lower inflation (with a time lag), thanks to economies of scale, technological advance and innovation, governments and central banks can control or reduce inflation through monetary and fiscal policy. These include higher interest rates, restrictions on the money

supply and subsidies (financial aid) to products whose prices have inflated. Fiscal policies may take a long time to implement, and they can depress growth and also discourage business investment.

Consumers might react to inflation by reducing their consumption, switching to a less expensive good or service, or saving more to prepare for the next occurrence of inflation. Producers might respond to inflation by raising prices, changing the supply chain, or providing sales to stimulate demand. The net long-run effect of inflation on real purchasing power will depend on what measures are taken to control inflation, how quickly wages tend to adjust, and how quickly markets adjust.

1.2 Essentials vs Discretionary (non-essential)

Consumer goods are differentiated into basic and luxury goods. Basic consumer goods are the prerequisites of human existence, for example food, medicines, energy, and the most basic of clothes. Luxury consumer goods are goods that consumers voluntarily purchase. Since luxury consumer goods have inelastic demands, when inflation drives up price, the demand in the market is not affected because they are essential goods that are necessary for survival. Basic goods and services are generally fairly inelastic to economic changes. In the long term, inflation may affect household economics by switching to cheaper substitutes, reducing consumption or purchasing with less regularity, or focusing more on basic necessities.

Discretionary goods are generally described as nonessential items that consumers choose to spend their money on when they have sufficient discretionary funds, such as luxury goods, electronics, entertainment, holidays and restaurants. Discretionary goods have elastic demand, where income changes or business cycles have a meaningful impact on demand. When inflation and negative growth occur, demand for discretionary goods and services decreases. For these companies' discretionary goods, inflation and growth rates have a greater effect. Companies with discretionary goods respond to falling sales with staff cuts, production cuts and product discounts.

The optimal differences across types have many useful economic consequences, for instance, in pricing policies and consumer's choice. Governments often use subsidies and price regulation for basic goods during inflationary periods to protect the economic position of the poorest households. In discretionary industries, firms might reduce prices or offer cheaper alternatives, or they might undertake efforts to improve the product or service quality, if demand begins to decrease. Analyzing consumer spending can help firms and policymakers weather potentially adverse changes.

1.3 Business response to inflationary pressures

Inflation influences business profitability, since firms need to accurately factor in the inflation into production costs and selling prices, including the costs of raw materials, components, labor, transport, consumer demand, and profit with regard to inflation. When inflation occurs, business typically attempts to raise prices, reduce expenses, increase production efficiency and alter financial budgets and expectations.

The most common response to inflation is price adjustment. It is usually achieved by passing on the increased cost to customers through higher prices. Price cuts may also be employed when demand is weak. Other pricing strategies may take note of this effect and consist of gradual price adjustment; shrinkflation (reducing the weight or volume of a product while maintaining the same price); dynamic pricing (using market-economics tools such as algorithms to make efficient pricing decisions); or addition of cheaper products.

Another response can be to minimize waste in the supply chain or labor-intensiveness in the production process through automation. In case of rising transport costs, potential responses are renegotiating contracts, regionalizing the value chain or implementing a just-in-time production program to minimize inventory and thus avoid holding costs. They may also use lower-cost production methods or alternative materials for production.

In addition to maintaining market stability, these firms may induce demand through price incentives such as discounts, coupons, rebate and reward programs, payment plans, and subscriptions, such as discounts during periods of inflation. One response to competition has been value-based marketing that stresses quality, durability, and overall long-term savings for higher priced products.

Likewise, firms may change their capital structure to reduce their exposure to inflation hedges such as hedging their currency risk exposures, de-levering or diversifying their revenues, or investing in real assets that are typically considered to be less sensitive to inflation shocks such as real estate and commodities. Potential remedies include reducing costs, obtaining better terms of loan agreements, and trying to manage working capital better.

For businesses, inflation is a serious threat through increasing costs and reducing spending as well as an opportunity to act on prices, manage costs and improve the financial resilience of a company. This flexibility allows firms to fully absorb the effects of inflation as well as to maintain growth and a sustainable profit.

1.4 Supply Chain Disruptions and Pricing Strategies

Inflationary pressures may impact supply chains on the production of goods, inventory and markets as inputs become costlier. The supply chain may be affected by restricted labor and higher shipping costs, demand changes, and geopolitical uncertainty, leading to an inefficient functional supply chain system globally. A business may need to adapt its operational flows as it is unable to acquire inputs in a timely and cost-effective manner while maintaining profit margins and demand. These changes, in turn, may force the firm to contend with late shipments, inventory shortages, production delays, or increased costs.

Pricing policies can be used to combat the threat of loss of market share following a shock. These may include cost-plus pricing and dynamic pricing, the latter of which may correlate to consumer demand, competitor prices and input prices. Cost-plus pricing is used by firms to determine the selling price of their product based on cost of production and a profit margin. If demand is very elastic, it may be preferable to use shrinkflation, where, instead of increasing the price, the same price is maintained and the amount of the good or service is reduced. Firms may offer budget price products, moderate price products and premium price products as different product items.

In addition to price adjustment, supply chain flexibility can also be obtained through supplier diversity, local production and local source, which reduces reliance on foreign supply chains and transportation costs. Companies may also invest in technology such as inventory trackers and forecasting tools. Companies that have flexibility in their supply chains and pricing can reduce the effect of inflation. Flexible pricing strategies and more efficient operating structures can allow firms to have a longer-duration growth trajectory even as macroeconomic uncertainty increases from inflationary pressure or other shocks to the economic system.

2. STUDY OBJECTIVES

1. To ascertain whether there is a correlation between inflation and consumer purchasing power across economic sectors including determining whether there is a correlation between inflation and consumer spending on basic and luxury goods and services, and the technology sector.
2. Compare consumer demand and the price elasticity of demand across several sectors during inflation events, where such as essential sectors with inelastic demand, and luxury and entertainment sectors with elastic demand.
3. To investigate business strategies and policy responses to changes in purchasing power because of inflation: to obtain insights into pricing behavior, supply chain adjustments, marketing tactics, and government policy in response to consumer purchasing behavior in the context of inflation.
4. To recommend measures to reduce the effects of inflation on the purchasing power of consumers, including the financial planning and budgeting practices of consumers and businesses and the public policies of government.

RESEARCH METHODOLOGY

The methodology adopted in the study is quantitative in nature. The study tries to find out the effects of inflation on the purchasing power of consumers in all sectors of the economy. This includes the collection, analysis and interpretation of data in tabular and graphic format, used to study inflation, demand elasticity, pricing, consumer spending activities and supply chain disruptions.

Data Collection

The data has been collected through secondary sources like industry reports, economic research papers, business case studies, etc., and five types of data have been researched in this paper to better understand the working of the inflationary process.

Inflation Rate vs. Purchasing Power Across Sectors - Table 4.1 shows the inflation rates of selected sectors and how they affect consumer purchasing power. This information is used to analyze how different sectors are being impacted by the inflationary pressure and consumer demand.

Sectoral Demand Elasticity During Inflationary Periods, 4.2, shows price elasticity of demand in various sectors of the economy. The study found that for some industries demand for the goods was relatively inelastic with respect to the price, while in others, demand was considerably elastic.

Table 4.3 shows the effect of cost-plus pricing, dynamic pricing, shrinkflation, tiered pricing and discounting for businesses in different inflationary scenarios, and the costs and benefits of each approach.

Effects on Consumer Expenditure Patterns. Table 4.4 shows changes in consumer spending patterns before and after inflation. The share of spending on needs versus wants (e.g., entertainment and electronics, healthcare, travel) is a leading indicator of consumer preferences in inflationary environments.

Supply Disruptions and Price Increases. Disruptions in supply also affect price elasticity. The effects of fluctuations in the price of raw materials, delays in logistics and labor shortages, regulatory updates, and currency fluctuations, on inflationary price increases are shown in Table 4.5.

4. Data Analysis

Through tabular and graphical presentation, it discusses the various influence of inflation on consumer purchasing power across all sectors with respect to inflation rate, sectoral demand elasticities, price adjustment of businesses, consumer expenditure and supply chain disruption. It discusses the influence of inflation on the business environment and business in general. Inflation may vary by industry. Demand is less sensitive for essential goods. Demand declines most for discretionary goods. Businesses may respond via cost-plus pricing and shrinkflation, or use pricing mechanisms such as dynamic pricing depending upon the level of demand and other market forces. Consumers and households adjust spending from discretionary items to necessities, impacting demand in those sectors. They also increase the effect of inflation. It may be possible, with this knowledge, to implement policies and procedures to reduce some of the negative effects of inflation.

Table 4.1 Inflation Rate vs. Purchasing Power Across Sectors

Sector	Inflation Rate (%)	Purchasing Power Change (%)
Essential Goods	6.2	-3.5
Discretionary Goods	8.5	-7.8
Technology	5.3	-2.1
Services	7.1	-6
Luxury Goods	10.2	-9.5

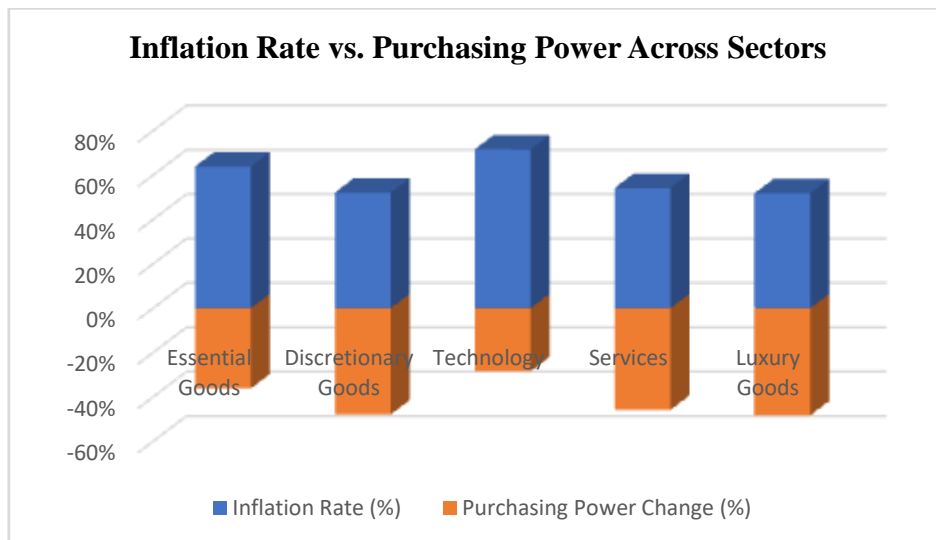


Figure 4.1 : Inflation Rate vs. Purchasing Power Across Sectors

The table shows the relationship between the inflation rate and the change in purchasing power for various sectors. For example, in the essential goods sector the inflation rate is 6.2% when the purchasing power falls by 3.5%, which implies consumers keep buying essential goods as prices go up. While discretionary and luxury items have inflation rates of 8.5% and 10.2%, their purchasing power has diminished by only -7.8% and -9.5%. In the technology sector, inflation is only 5.3% and purchasing power declines by -2.1% due to innovations and due to aggressive price reductions of competition. In industries with 7.1% service inflation, consumption falls by 6%. This is more than real consumption falls in response to the cash decline. This suggests that households reduce discretionary service consumption when they do not have cash. The finding that inflation affects industries differently suggests that necessities are least affected.

Table 4.2: Sectoral Demands Elasticity During Inflationary Periods

Sector	Price Elasticity of Demand	Demand Change (%)
Essential Goods	0.2	-1
Discretionary Goods	1.4	-10.5
Technology	0.8	-5.2
Services	1.1	-8
Luxury Goods	1.6	-12.4

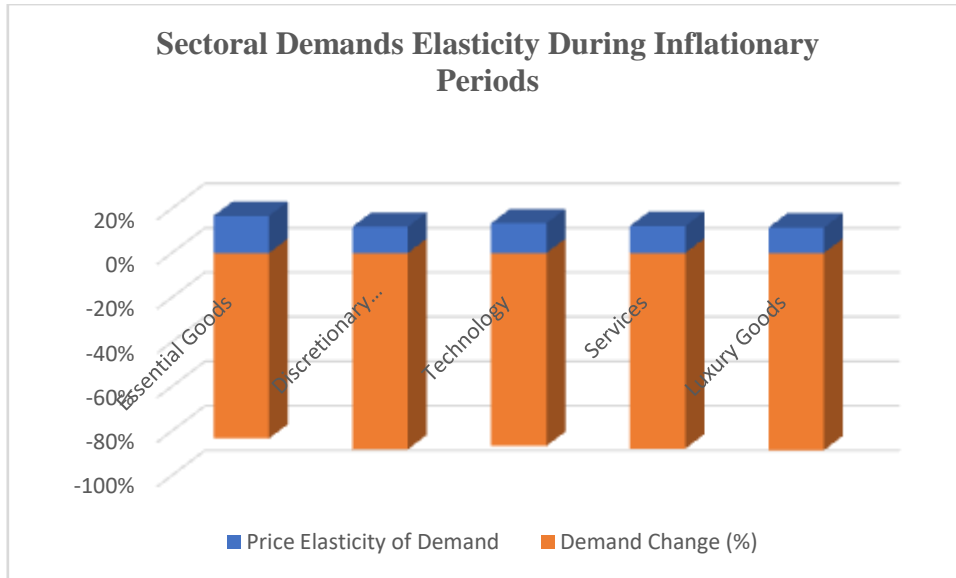


Figure 4.2: Sectoral Demands Elasticity During Inflationary Periods

The table shows how price changes during an inflationary period affect demand in each sector. Necessities are least elastic, with a price elasticity of only 0.2 and a less than 1% reduction in demand. Consumers will still buy necessities, albeit at a higher price. Discretionary (1.4 and -10.5% demand) and luxury goods, with elasticities of 1.6 and -12.4% demand, have high elasticity and demand falls considerably as prices rise. Other relatively elastic categories include technology, with an elasticity of 0.8 and a -5.2% demand drop, and services, with an elasticity of 1.1 and a -8% drop. Here, consumers with non-elastic preferences tend to decrease their spending in response, while others treat technology and services as basic needs. Consumers are likely to spend less on non-essential and luxury items.

Table 4.3: Business Pricing Strategies During Inflation

Pricing Strategy	Adoption Rate (%)	Effectiveness Score (1-10)
Cost-Plus Pricing	30	8
Dynamic Pricing	25	7
Shrinkflation	20	6
Tiered Pricing	15	7
Discounting	10	5

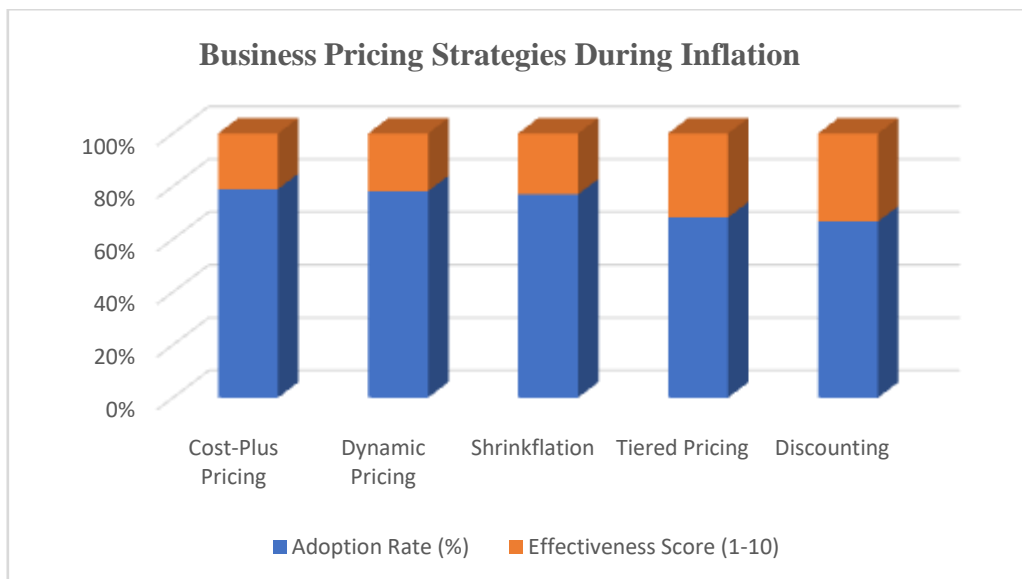


Figure 4.3: Business Pricing Strategies During Inflation

The table below gives an overview of business pricing strategies that can be applied in inflationary circumstances, ordered by frequency of use and effectiveness. Cost-plus pricing is the most widely used (30% adoption, 8/10 effectiveness). It then allows companies to maintain profits by raising prices in response to the increased costs. Dynamic pricing (25%, 7/10) is also commonplace in micro-economies, where companies flexibly alter prices according to real-time demand levels. Shrinking the product while maintaining its price, or shrinkflation (20%, 6/10), is a common practice. The second most common form is tiered pricing (15%, 7/10), where different price points are available to meet various customer needs. Discounting (10%, 5/10) was the least popular and least effective, as price cuts tend to reduce businesses' profit margins during inflation. It is likely that businesses will choose the alternative strategies that minimize demand loss while keeping their revenue stable.

Table 4.4: Consumer Spending Behavior Shifts

Category	Pre-Inflation Spend (%)	During Inflation Spend (%)
Groceries	30	35
Entertainment	20	10
Electronics	15	12
Healthcare	20	25
Travel	15	8

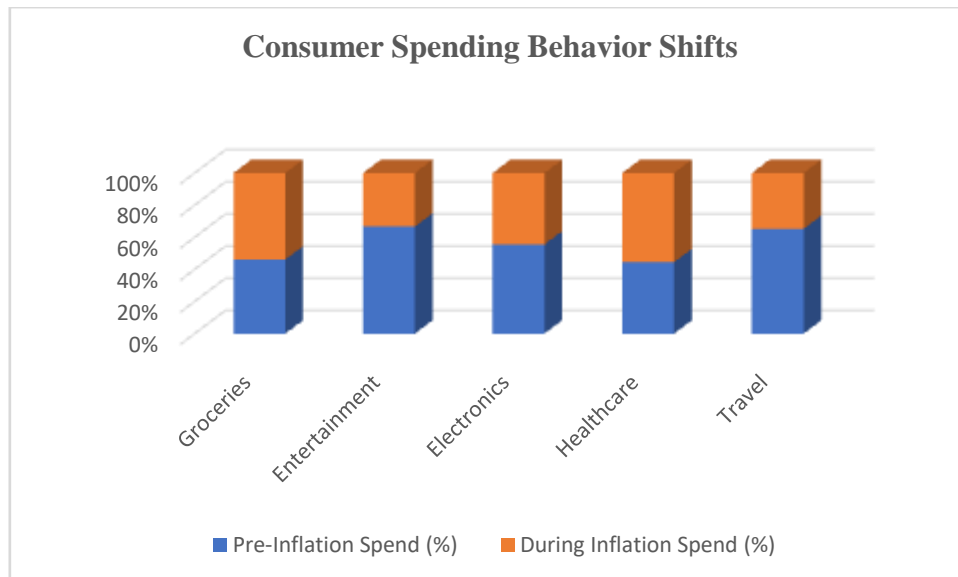


Figure 4.4: Consumer Spending Behavior Shifts

The table below compares the share of consumer spending on various items before and during the inflation. A meaningful increase in the proportion of spending on groceries (30-35%) and healthcare (20-25%) is observed. The unexpectedly large cutbacks in spending, from 20% to 10% in entertainment spending, from 15% to 8% in travel, and from 15% to 12% in electronics purchases, show that consumers cut back on non-essentials in times of inflation while spending more on essentials.

Table 4.5: Supply Chain Disruptions and Price Increases

Disruption Type	Impact on Price Increase (%)
Raw Material Cost	5.4
Logistics Delay	3.8
Labor Shortage	4.2
Regulatory Changes	2.9
Currency Fluctuation	3.5

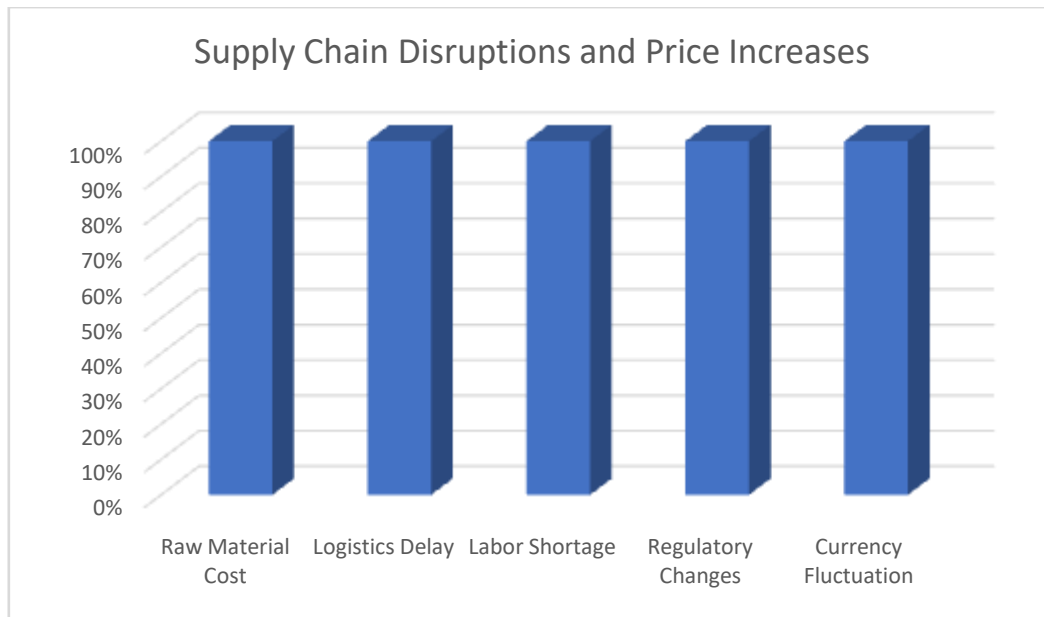


Figure 4.5 : Supply Chain Disruptions and Price Increases

In the ranking of the most important supply chain factors behind inflation, the absolute most important is raw material cost (5.4%), since higher cost of production usually leads to higher selling prices. Labor shortages (4.2%), logistics delays (3.8%), currency fluctuations (3.5%) and changes in regulations (2.9%) all contribute to increased costs and uncertainty in the supply chain, including supply availability and delivery, and costs to import/export and comply with regulations. The results suggest that inflationary pressures are exacerbated by supply chain inefficiencies that firms seek to reduce.

FINDINGS

Inflation Rate vs. Purchasing Power Across Sectors

The relative speed at which prices rise, Table 4.1, differs among goods and services. Price of necessities has an inflation rate of 6.2% but a power of purchase of only -3.5%. A relatively high price increase of a necessity illustrates the relatively constant demand for such goods. However, discretionary and luxury goods have much larger price increases of 8.5% and 10.2% and their purchasing power reduces by 7.8% and 9.5% respectively.

The technology sector has a 5.3% inflation rate and a -2.1% purchasing power shrinkage. This sector is the least inflation-sensitive sector as a process of innovation and price competition throughout the entire industry. The services industry's 7.1% inflation rate and -6% purchasing power shrinkage make it moderately sensitive to inflation, as consumers choose to buy desired services based on their price system.

Sectoral Demand Elasticity During Inflationary Periods

However, own-price demand elasticities (Table 4.2) differ widely across sectoral categories, with a highly inelastic price elasticity of demand of only 0.2 for essentials resulting in only a -1% response in demand during inflation. Luxury goods have the highest elasticity (1.6), meaning that a change in price will change the quantity sold by -12.4%, and are sensitive to disposable income.

Elasticities of 1.1 and an 8% demand decrease for services, and of 0.8 and a 5.2% demand reduction for the technology sector, indicate that although the services and technology industries are affected by inflation, a consumer demand base exists and consumers tend to cut back on non-essential spending when faced with inflationary pressures.

Business Pricing Strategies During Inflation

Table 4.3, therefore, shows cost-plus pricing (30%, 8/10) as the most common pricing strategy in inflation, because it allows the seller to pass on the higher costs in the selling price and still make a profit. Dynamic pricing, utilized by 25% of users with a 7/10 effectiveness score, is more common in industries that can vary their prices dynamically.

Shrinkflation (20% adoption, 6/10 effectiveness): Businesses reduce the size of the product while keeping prices constant. Tiered pricing (15% adoption, 7/10 effectiveness): Businesses sell multiple versions of the product at different price points to capture customers at different price points. Discounting (10% adoption rate, 5/10 effectiveness) does not appear to reduce lender repayment and may be associated with reduced profit margins.

Companies preferred charging higher prices and passing on the most costs to consumers while losing the least demand, however. Consumer Spending Behavior Shifts

According to Table 4.4, during inflation the share of consumer expenditures spent on groceries rises from 30% to 35%, the share of consumer expenditures spent on healthcare rises from 20% to 25%, the share of consumer expenditures spent on entertainment drops from 20% to 10%, the share of consumer expenditures spent on travel drops from 15% to 8%, and the share of consumer expenditures spent on electronics drops from 15% to 12%.

This shows that as expenditure on necessary goods increases, there is a corresponding decrease in expenditure on luxury goods. It can be inferred that consumers are more likely to focus on obtaining necessities over luxuries when faced with economic uncertainty.

Supply Chain Problems and Price Inflation

The major single drivers of the inflation in the supply chain (see table 4.5) are raw material costs (5.4%) and supply chain labor shortages (4.2%). Logistics delays (3.8%), currency fluctuations (3.5%) and regulatory changes (2.9%) are other major components of the inflation of the supply chain.

The results suggest that supply chain inefficiencies are costly for firms and that supply chain disruptions due to inflation will cause firms to explore new sources, automate more, and undertake price restructuring to maintain profitability.

CONCLUSION

This paper analyzes the effect of inflation on consumer purchasing behavior across the essential goods, discretionary goods, technology, and luxury goods sectors and find support that inflation impacts consumer purchasing behavior in these sectors differently, with varying demand elasticities across sectors. The demand for essential goods is relatively inelastic, while the demand for discretionary or luxury goods is very elastic as demand falls. Cost-plus pricing, dynamic pricing, shrinkflation, and tiered pricing are different pricing strategies often used to respond to inflationary pressures while enabling businesses to remain profitable and retain customers. Other monetary measures, such as discounting, would be ineffective: it is difficult for businesses to balance their degree of cost inflation with consumers' degree of price sensitivity. Also, consumers tend to consume more food, gasoline, and other necessities, and less travel, recreation, entertainment, and electronics, during inflation compared to during deflation.

Disruptions in supply chains can also drive inflation. Inputs to production may become more expensive, while availability may be obstructed by labor shortages, logistics delays, currency valuation fluctuations, regulatory changes, and the downturn of supply chains. Companies may need to find new suppliers, improve their supply chain, and alter their pricing strategy. In summary, successful public policy, corporate, and individual actions to reduce the effects of inflation require attention to the financial needs of consumers through prioritization and budgeting for purchases. In their struggles for survival, businesses will need to be flexible in their pricing strategies, streamline their supply chains, and find opportunities for cost control. Policymakers may consider measures such as raising the interest rate, price stabilization measures, or supporting industries that could be negatively impacted by inflation as an incentive for consumer purchasing power. Thus, knowing what sectors are affected by inflation can help businesses, consumers and policymakers to prepare in advance for any inflationary pressures to help maintain long-term financial stability.

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