PERSPECTIVES

PHOENIX CENTER FOR ADVANCED LEGAL & ECONOMIC PUBLIC POLICY STUDIES

Explaining Higher Prices in the Covid and Post-Covid Era

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When prices and profits rise, policymakers and ideological advocates tend to point to seller market power or collusion as the cause.

For example, in his 2024 State of the Union Address, President Biden complained about how corporations "raise their prices to pad their profits [by] charging [consumers] more and more for less and less," arguing, as an example, that "snack companies think you won't notice when they charge you just as much for the same size bag but with fewer chips in it."[1]

Similarly, a recent report by the Federal Trade Commission ("FTC") claims, without any meaningful empirical analysis, that grocery stores "used rising costs as an opportunity to further raise prices to increase their profits, which remain elevated today."[2]

And Senators Bob Casey and Elizabeth Warren have introduced legislation that would empower the FTC to take aggressive action against sellers that raise prices or shrink packages to keep prices stable.[3]

Many of these claims are rooted in ignorance about the cause of inflation and how markets work. Inflation is a general increase in prices caused by excessive growth in the money supply that diminishes the value of currency, which has occurred in the United States from the extraordinary spending by the federal government in response to the Covid Pandemic (a long-term, inflationary concern). Also, Covid brought severe supply-chain disruptions and labor shortages, both of which linger to varying extents today in certain industries.

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As shown in this PERSPECTIVE, highly competitive industries respond to positive demand-side and negative supply-side shocks in predictable ways. Prices will rise and, under some conditions, margins (profits) along with them, but they do so in competitive markets without collusion among producers or otherwise violating the antitrust laws. Also, under supply constraints, competitive and monopoly prices are difficult to distinguish and may be identical, though economic theory provides some guidance on distinguishing between the two. Finally, this analysis shows why a focus on retail margins is misplaced under supply constraints. The key issue is whether sales are below the competitive, supply-constrained level.

This analysis should help conscientious policymakers and advocates better understand

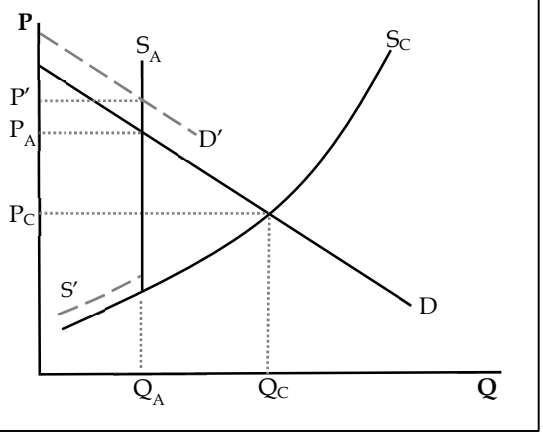
the economic fundamentals underlying the present climate of high prices and profits and to avoid fallacious arguments rooted in economic ignorance and political theatrics.

Theoretical Argument

After the onset of the Covid Pandemic, industries faced two shocks: (1) a *positive* demand shock from government-funded economic stimulus; and (2) a *negative* supply shock from supply-chain disruptions and labor shortages, both of which persist in some industries for varied reasons.

Does this finding suggest there is a competitive problem? No. Following the analysis in Kaserman and Beard (2000), say you have a competitive market in equilibrium that faces a supply constraint (the negative supply shock).[4] Figure 1 illustrates the outcome using a simple supply-demand graph. Absent a supply constraint, the supply curve is S_C and demand is D, with an equilibrium price-quantity pair P_C, Q_C.

Figure 1. Competitive Equilibrium

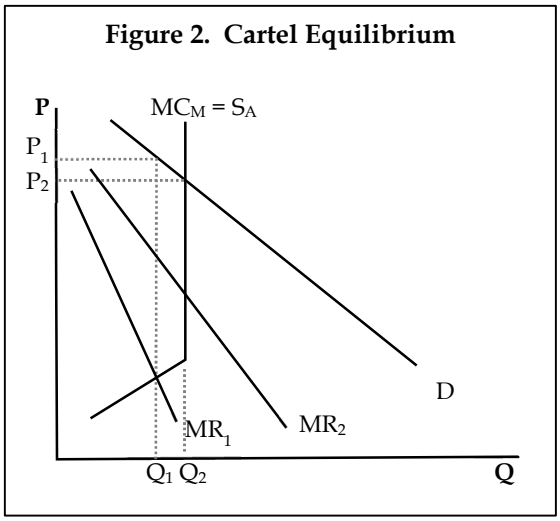


This simple scenario is not the reality of the present day, where many industries face severe supply and labor shortages. Consider a supply constraint on the market, indicated by the supply curve labeled $\mathbf{S_A}$. Now, the price-quantity pair is P_A, Q_A, where $Q_A < Q_C$. The price P_A, which exceeds P_C, clears the market under the constraint. Downstream firms may earn a larger profit than in the unconstrained case. Higher prices and profits are not an indicator of a lack of competition, however, but a consequence of the supply constraint. All the available products are sold at P_A, so there is no deadweight loss.

Under a supply constraint, it may be that input prices may rise along with the constraint, which is indicated by the dashed supply curve labeled S′. Note, however, that the input price increase does not affect the price P_A or quantity Q_A (unless the input price increase is quite large), though it may reduce seller profits. The price P_A is the result of the quantity constraint. Thus, whether manufacturers increased prices to retailers may not have affected prices, though such increases would have affected margins.

Adding to the higher prices was the government's massive Covid-related spending. A higher demand for goods and services, illustrated by the demand curve D′ in Figure 1, increases prices to P′ under the supply constraint, though the quantity is unaffected. *It was government spending and Covid avoidance that contributed to rising prices*—higher prices are merely a symptom of supply-chain issues and Covid-related demand shocks. With continued supply constraints in some markets, the same analysis remains relevant today.

Figure 2. Cartel Equilibrium



In Figure 2 the cartel equilibrium is illustrated with demand curve D and industry marginal cost

curve $MC_M = S_A$. Here, firms act in concert to behave like a monopolist. When the marginal revenue curve intersects the marginal cost curve in its vertical portion (MR_2), the equilibrium is price-quantity pair P_2, Q_2. Note that this equilibrium under cartel behavior is identical to that of the competitive equilibrium (P_2 , $Q_2 = P_A$, Q_A); price and quantity are determined by the intersection of the demand and the supply curves. Thus, the claim that high prices and profits in the current environment must be "collusive" is misguided. High prices and profits under a supply-constraint are entirely consistent with competitive behavior where firms have no special pricing power.

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Alternately, if the marginal revenue curve intersects the marginal cost curve in its increasing segment (MC_1), then the price-quantity pair is P_1, Q_1. Price now exceeds the competitive price (P_A or P_2) and the quantity is below the competitive quantity. Consequently, the difference between the competitive and collusive outcome may be determined by a comparison of the quantity sold in relation to the quantity constraint. The question regarding "collusive" behavior may be answered by determining whether all available supply is sold, which is the non-collusive outcome.

Concentration and Prices

A common trope in a high price environment is that the source of the price increases is market concentration. If so, then the expectation is the prices will rise more in more concentrated markets. This is an empirical question, and the question has been answered.

In my earlier paper *Does High Market Concentration Contribute to Inflation?*, I examined the question of market power and inflation by analyzing trends in the Producer Price Index ("PPI") for several hundred industries.[5] These data spanned from 2015 through February 2022. The PPI data are linked to the four-firm concentration ratio ("CR4") for each industry from the 2017 Economic Census, the latest data available at the time. The analysis compares the change in prices during the Covid shutdowns and after President Biden's inauguration when inflation rose rapidly.

This data-rich analysis found no evidence that prices rose more in highly concentrated industries during either the heat of the pandemic or Biden's tenure as president. In fact, prices in concentrated industries rose less, in general. I am aware of no credible evidence that links price increases to market concentration, so arguments linking the two have no empirical support.

Conclusion

When a competitive market sees a positive demand shock and negative supply shock, prices rise, and firms may realize higher profits. This result is expected even when firms act independently and competitively; it is not an indictment against the actions of competitive firms nor an indicator of collusion. To date, there is no compelling evidence of collusion or coordination among sellers that cannot be explained by supply constraints.

NOTES:

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1 Remarks of President Joe Biden — State of the Union Address As Prepared for Delivery (March 07, 2024) (available at: https://www.whitehouse.gov/briefing-room/speeches-remarks/2024/03/07/remarks-of-president-joe-biden-state-of-the-union-address-as-prepared-for-delivery-2).

2 *Feeding America in a Time of Crisis: The United States Grocery Supply Chain and the COVID-19 Pandemic,* Federal Trade Commission (March 21, 2024) (available at: https://www.ftc.gov/system/files/ftc_gov/pdf/p162318supplychainreport2024.pdf); J. Boggs, *Supermarkets Profited Off Pandemic and Supply Chain Problems, FTC Says*, SCRIPPS NEWS (March 25, 2024) (available at: https://scrippsnews.com/stories/supermarkets-profited-off-pandemic-and-supply-chain-problems-ftc-says).

3 *Warren, Senators Introduce Bill to Crack Down on Shrinkflation*, Press Release: Elizabeth Warren (February 28, 2024) (available at: https://www.warren.senate.gov/newsroom/press-releases/warren-senators-introduce-bill-to-crack-down-on-shrinkflation#:~:text=In%20February%202022%2C%20at%20a,to%20hike%20prices%20for%20consumers).

4 T.R. Beard and D.L. Kaserman, *Testing for Collusion During Periods of Input Supply Disruptions: The Case of Allocations*, 45 ANTITRUST BULLETIN 213-226 (2000).

5 G.S. Ford, *Does High Market Concentration Contribute to Inflation?*, The Center for Growth and Opportunity at Utah State University (March 9, 2023) (available at: https://www.thecgo.org/wp-content/uploads/2023/03/Does-market-concentration-contribute-to-inflation-v3.pdf).