Does antitrust policy improve consumer welfare? A revaluation of the evidence.

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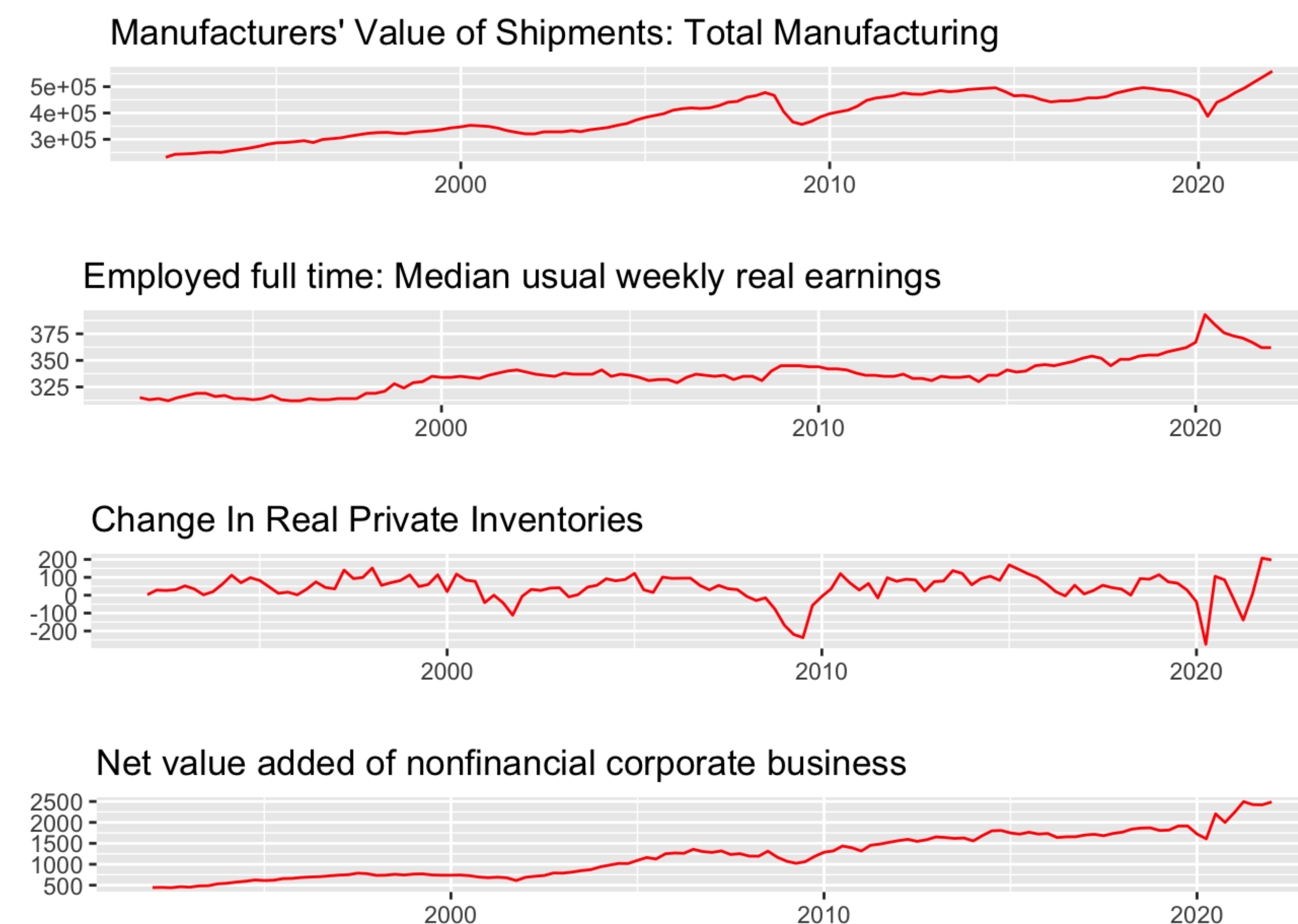
Question

- My research question asks a very important question regarding antitrust policy and specifically how these policies, which are meant to break up monopolies and provide financial benefits for the consumer, may or may not be actually beneficial for the consumer in the first place.

- This question, as well as the topic as a whole regarding antitrust and consumer welfare, has been around for a long time and is much deeper (as far as the literature goes) than what might initially be assumed. Much of the literature surrounding this topic does a significant job better at asking questions on how effective antitrust laws are compared to providing significant results with empirical data as to why or why not antitrust policy works, with some outliers.

- My research seeks to follow up on these papers, specifically "Crandall, R. W., & Winston, C. (2003). Does Antitrust Policy Improve Consumer Welfare? Assessing the Evidence." By using time series techniques, we can determine if aggregate merger activity is important at all to price-cost even before a time series regression, giving us our answer to the question; Does Antitrust policy improve consumer welfare?
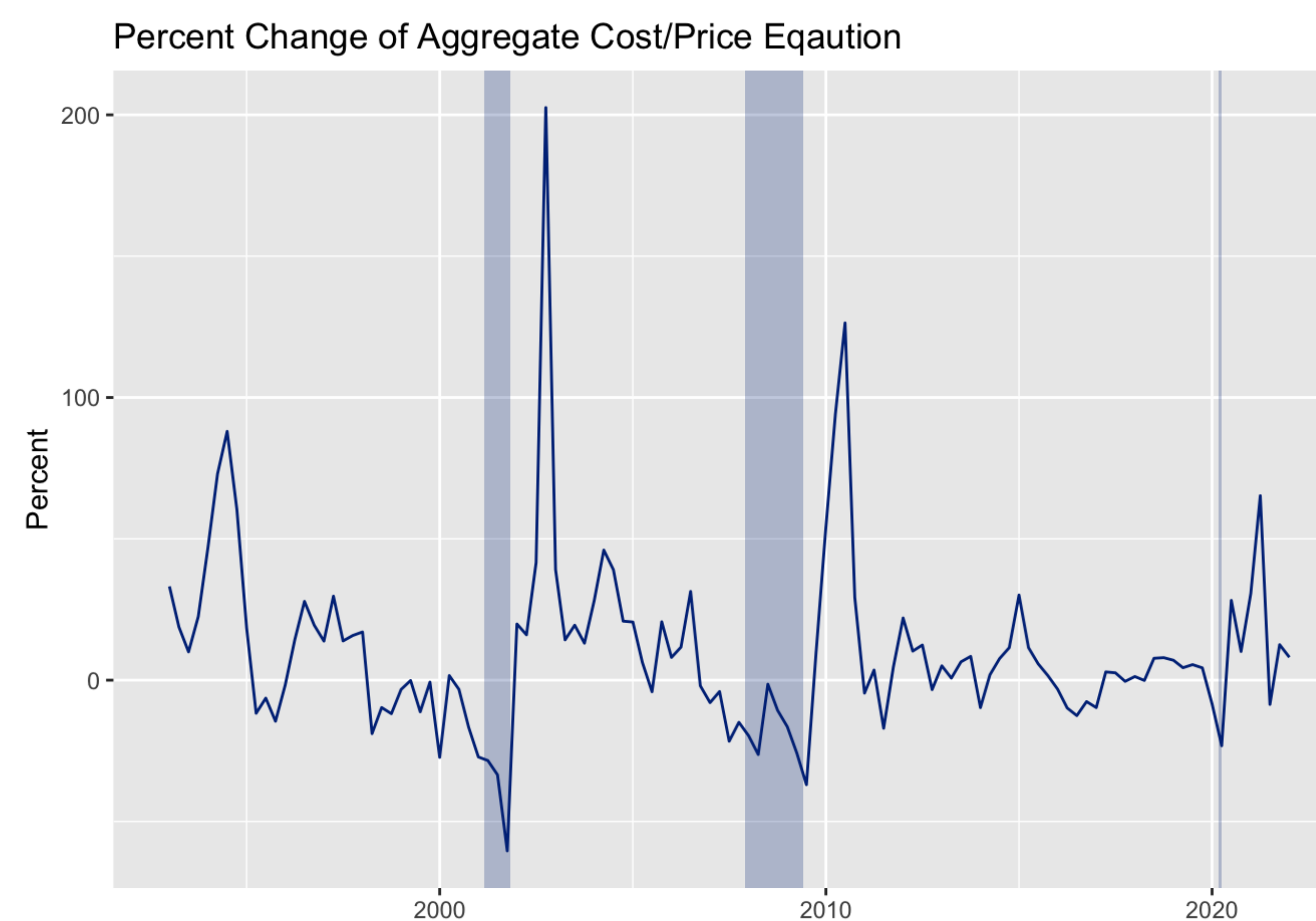
Methods

- As mentioned above, I will be using a price-cost model as well as a time series analysis to find my information. As seen in Crandall & Winston's paper, The price-cost variable that is calculated from individual observations of firms can also be calculated as a time series variable at the national level. Because merger data isn't information that is publicly available for me to use, I tested each variable of my price-cost formula for stationarity after finding real data from FRED regarding each of my variables. Those variables are as follows:

1. Payroll
2. Change in Inventories
3. Value Added
4. Value of Shipments

- If this time series is stationary then mergers do not change it in systematic ways, thus implying that mergers are not driving the cost price variable.

- If the time series data is non-stationary, then its possible that the cost price variable is increasing due to merger activity.

- Below are my time series graphs after finding the variable data from FRED. Although I change these variables later on in my time series, it is still interesting to view the plotted economic variables over my designated time period. Not only that, but also being able to see the movement of each variable throughout various recessionary periods can give us an initial idea regarding the effectiveness of mergers and how they affect consumer welfare.

$$(Value\ added + \Delta Inventories - payroll)/(Value\ of\ shipments + \Delta Inventories)$$

Manufacturers' Value of Shipments: Total Manufacturing

Employed full time: Median usual weekly real earnings

Change In Real Private Inventories

Net value added of nonfinancial corporate business

Data

Percent Change of Aggregate Cost/Price Eqaution

Results

- Our cost-price equation is used as a measure of economic well being since it would increase if mergers were harmful for consumers. Based on the results gathered from our time series estimate as well as the ADF test, we can see that given the following P values, our estimates exceeded critical values at 99% confidence, allowing us to conclude that our data is stationary. This implies that our aggregate cost-price equation is stable over the long-run. On average, aggregate merger activity is not driving long-run dynamics of this measure of societal benefit. Below is a small list of large mergers (20 Billion USD or more). When evaluated against our results, we can see that these mergers line up well with large spikes on our cost-price graph, giving further insight into the significance, or lack thereof, that these mergers play regarding our societal benefit measure.

1. 1995 Lockheed-Martin merger
2. 2013 Verizon merger
3. 2004 Royal Dutch Petroleum merger

Augmented DF Test		
lag	ADF	p.value
0	-5.589	0.010
1	-4.938	0.010
2	-4.529	0.010
3	-5.515	0.010
4	-3.801	0.010

Conclusion

- In conclusion, the findings of my paper cast doubt on the traditional assumption that antitrust policy inherently benefits consumer welfare. By testing our national cost-price data using our time series variables we discovered that merger activity is irrelevant for this specific cost-price measure. With our findings revealing a stationary cost-price formula unaffected by merger activity in the long run, it becomes clear that the conventional beliefs surrounding the consumer benefits of mergers may lack empirical support. Moving forward, it's crucial to reevaluate and enhance our understanding of antitrust policy and mergers, ensuring regulatory decisions are evidence-based and aligned with market competition dynamics.

References

Crandall, R. W., & Winston, C. (2003). Does Antitrust Policy Improve Consumer Welfare? Assessing the Evidence. Journal of Economic Perspectives, 17(4), 3–26. https://pubs.aeaweb.org/doi/pdfplus/10.1257/089533003772034871 Federal Reserve Bank of St. Louis. "Real GDP per Capita in the United States (W326RC1Q027SBEA)." n.d. FRED, https://fred.stlouisfed.org/series/W326RC1Q027SBEA. Federal Reserve Bank of St. Louis. "Change in Business Inventories (CBIC1)." FRED, Federal Reserve Bank of St. Louis, https://fred.stlouisfed.org/series/CBIC1. Accessed 10 February 2024. Federal Reserve Bank of St. Louis. "Employed full time: Median usual weekly real earnings (LES1252881600Q)." FRED, Federal Reserve Bank of St. Louis, https://fred.stlouisfed.org/series/LES1252881600Q. Accessed 10 February 2024. Federal Reserve Bank of St. Louis. "Manufacturers' Value of Shipments (AMTMVS)." FRED, Federal Reserve Bank of St. Louis, https://fred.stlouisfed.org/series/AMTMVS. Accessed 10 February 2024. Lockheed Martin, Verizon, Shell plc

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