Zijin Ding

Professor Felipe Valencia Caicedo

ECON 490: Applied Economics

20 December 2024

The Financial Impacts of Shooting Incidents: Evidence from the U.S.

Introduction:

In October 2024, the United States Bureau of Labor Statistics updated the average price data for a basket of selected items. (See Figure 1) Within that figure, the price of normal house grocery items like beef, eggs, and chicken has shown an upward trend of increase. Meanwhile, a similar trend can also be witnessed from the United States monthly consumer price index for all urban consumers posted by Statista, a German data analysis firm. (See Figure 2) As the figure shows, the CPI has increased from 296.8 in December 2022 to 315.66 in October 2024, which demonstrates an increasing financial burden for families in the United States for their regular expenditures.

This recent trend can be partially explained by the cut of interest rates announced by the United States Federal Reserve on September 18, 2024, when the interest rate was decreased from 5.5% to 5%. (Trading Economics, 2024) Two months later, the interest rate decreased again on November 7, 2024, to the lowest level of 4.75% since February 1, 2023. It is justifiable for the Federal Reserve to cut the interest rates step by step to stimulate the economy after restricting inflation by maintaining the interest rates at a high level since Covid in 2022. However, with the further step of cutting

interest rates, the reoccurrence of inflation should be given sufficient consideration. Another explanation for the increase in price would be the ongoing trade ward between the U.S. and some countries like China and the tariffs that were applied. The correlation between tariffs and inflation has been studied by so many scholars like Tatiana Gutium, a researcher at Moldova National Institute for Economic Research, who stated that the increase in energy tariffs leads to inflation and reduces the profitability of enterprises, and one of the ways to ease the profitability suffering of firms is the government to shift the burden of paying electricity from industrial enterprises to the population. (Gutium 2019) Additionally, Alessandro Barattieri found in 2021 that four months after the antidumping initiations, the annualized inflation rate in Canada displayed a statistically significant increase, which was consistent with the time profile of TTB tariffs following the end of investigations. (See Figure 3)

However, this paper connected this price-changing trend with mass shooting incidents, another popular discussion topic in Western society. Based on the research conducted by Megan Donnelly and other researchers in 2023, the increasing trend can be observed from the number of injured people from mass shootings, the number of deaths from mass shootings, and also the number of mass shooting incidents from the time range from 2012 to 2022. (See Figure 4) Besides, a similar trend was also observable in Canada based on the data released by Statistics Canada in 2022. As Figure 5 shows, the rate of firearm-related violent crime reaches a 14-year high.

The research question of this paper then focused on the correlation between the number of shooting incidents and living expenses for local residents, which is an

interesting question to think about because two different channels will lead to opposite directions of this correlation. On one hand, as the number of shooting incidents increases, the business that supports daily life will move away from the community due to concerns about safety, which induces a shortage of supply, and whichever business stays in the region will be likely to enjoy the benefits of decreasing competitions and obtain the pricing level to a certain extent, and have incentives to increase the price. On the other hand, however, as shooting incidents and other types of crimes become more frequent, local residents would choose to move away to steer away from the threat to life and health, particularly those families with children. As a result, the demand in the local market will decrease, leading to a decrease in regional prices. However, this paper agrees with the former argument and hypothesizes that increasing shooting incidents correlates with higher living expenses.

Literature review:

Since people with lower income tend to live in neighborhoods with relatively fewer security facilities compared with people in the higher social class with more wealth who will live in well-guarded apartments or communities with more patrol forces, the major argument of this paper is the inequality of the society is deteriorating because poorer people live in unsafe neighborhoods like slums pay more in daily living expenses which are caused by shooting incidents that happened in the places they live at.

Regarding this topic, the study of Chanjin Chung and Samuel Myers showed that poor people tend to spend more on groceries because of the absence of access to chain

stores, which are located at places with lower poverty rates and provide cheaper products in Minneapolis and St. Paul metropolitan areas. Besides, fatal school shootings decrease grocery purchases by 1.35% in affected communities, lasting up to 6 months (Shaik et al. 2023); and for the targeted residents of mass shootings, they will not only develop pessimistic views of financial and local business conditions but also are more likely to report poor mental health, which hinders usual activities such as work and decreases their productivity. (Brodeur and Yousaf, 2022) Therefore, the negative economic consequences of mass shootings for both individuals and society are no longer arguable, the relationship between shootings and pricing remains unanswered, and there is a research gap on how poor people would suffer from shootings through the channel of price changing.

Data Source:

To measure the living expenses across different states in the United States, the list of shooting incidents that happened in the past 30 years, and the value of other control variables, this research used datasets from prestigious media companies, the American government, and private think tanks. To begin with, the dependent variable of living expenses in different states and the control variable of the average income of residents are collected from the Forbes Advisor. In 2024, Forbes initiated an investigation about the Cost of Living by State, in which it analyzed publicly available data to study the essential expenditures including housing costs, transportation, health care, food, and income taxes. This research revealed huge discrepancies in living expenses across different states, for instance, West Virginia residents spend an average of $752 on

median monthly housing costs, which is only about one-third compared with California ($2111) which is the highest-ranked state in this category; and Alaska's healthcare costs ($13,188 on average) was two times than it in Utah, which is the most cost-effective state with only an average expenditure of $7,241.

The number of shooting incidents, which is the major independent variable of this study, comes from the Mother Jones' Investigation in 2024 which covered cases from 1982 to 2012 originally and has been updated periodically so that all recent incidents in 2024 are included. In this dataset, most details of the shooting incidents are covered including the name of the case, the location, the time and date, and even detailed information about the shooters like their age and ethnicity. In this research, since the expense data for 2024 is analyzed, only shooting incidents after 2000 are used in the regression analysis since the events before 2000 are unlikely to impact the pricing level after more than 24 years.

In terms of control variables, firstly, the population data of each U.S. state is gathered from the US Census Bureau which published a report called *State Population Totals and Components of Change: 2020-2023* on June 25, 2024, in which it shown the national demographic structure and the changing trend of population. As this is the official statistical result, it is extremely trustworthy. Secondly, the data on sales tax, which is directly related to the local pricing, comes from the Tax Foundation website, an international think tank based in Washington D.C. As one of the most significant sources of tax revenue, most state governments tend to set additional sales tax in addition to federal-level tax. It is notable to point out that the Tax Foundation

used the population-weighted average to calculate the sales taxes in states where there are multiple tax levels like Alaska (some cities like Fairbanks have zero sales tax but the state capital, Juneau, has a 5 percent sales tax rate). After this adjustment, each state shows a dramatical difference in sales tax, for instance, the five states with the highest sales tax rate are Louisiana (9.56 percent), Tennessee (9.55 percent), Arkansas (9.45 percent), Washington (9.38 percent), and Alabama (9.29 percent). In contrast, the bottom five states only have about half of sales tax compared with the top, which includes Alaska (1.82 percent), Hawaii (4.50 percent), Wyoming (5.44 percent), Maine (5.50 percent), and Wisconsin (5.70 percent). The last control variable is a dummy of political preference in each state. In order to obtain the latest information regarding this frequently shifting factor, this paper used the 2024 presidential election result, which is the best representation of public awareness because of the large number of voters and counting accuracy. Therefore, I chose the news report from Reuters on the election results of each state. In the linear regression, a dummy variable called DR is created with the value of one means the majority of voters voted for Kamala Harris and are pro-Democratic Party, and it means the majority of voters voted for Donald Trump and are pro-Republican Party if its value is equal to zero.

Based on the variables and data source, the data summary is shown below, and the value of total annual food cost, cost of living, median monthly housing cost, and annual healthcare cost are divided by 1000 to fit the regression model. For instance, the mean of total annual food costs is 4.316, which actually means that the average annual consumption in food is 4316.76 US dollars. The observation number for all

variables is 50 because these are state-level data and each observation matches a state in the United States.

Variable	Obs	Mean	Std. dev.	Min	Max
State	0				
TotalAnnua~t	50	4.31676	.5624104	3.683	5.97
CostofLiving	50	40.46666	5.910984	32.336	55.491
MedianMont~t	50	1.325959	.3385607	.75233	2.11118
AnnualHeal~t	50	9.90324	1.461277	7.241	13.18767
ShootingIn~O	50	2.88	3.884243	0	22
Population	50	6684.718	7488.403	584.057	38965.19
DR	50	.38	.4903144	0	1
Disposable~e	50	21.55984	3.68554	9.551	30.894
AnnualAver~e	50	62.02643	7.878089	47.5696	80.3296
SalesTax	50	.05077	.0198262	0	.0725

Figure 6

Equation:

With the variables mentioned above, this paper used the ordinary least squares (OLS) regression to study the correlation between independent variables and the dependent variable. In order to conduct a more comprehensive analysis of the impact of shooting incidents on living expenses in the United States, four linear regression models were studied, using the four different dependent variables mentioned above, while keeping the same control variables. Therefore, the main estimating equation takes the following form:

*(1) cost of living = constant + α*shooting incident N.O.*

*+ β*population + γ*D/R + δ*disposable income + η*annual average wage + θ*sales tax + ε*

Besides, by replacing the dependent variables with the Annual Food Cost, Median

Monthly Housing Cost, and Annual Healthcare Cost, three more estimating equations are:

*(2) annual food cost = constant + α*shooting incident N.O.*

*+ β*population + γ*D/R + δ*disposable income + η*annual average wage + θ*sales tax + ε*

*(3) median monthly housing cost = constant + α*shooting incident N.O.*

*+ β*population + γ*D/R + δ*disposable income + η*annual average wage + θ*sales tax + ε*

*(4) annual healthcare cost = constant + α*shooting incident N.O.*

*+ β*population + γ*D/R + δ*disposable income + η*annual average wage + θ*sales tax + ε*

Results:

To start with, this paper compares the average living cost index in cities with shooting incidents in other cities in the United States using the data from AdvisorSmith, a small business resource that provides expert research and advanced tools. In 2021, the researchers of AdvisorSmith measured the weighted average cost of living from six dimensions including food, housing, utilities, transportation, healthcare, and consumer discretionary spending, and the allocation of weight is determined by the U.S. Bureau of Labor Statistics. Based on this dataset, the living cost index varied significantly across the United States. For instance, the city with the lowest costs is Beckley, a city with 17,286 population in 2020 located in West Virginia, and the index is 80. On the other hand, the most costly city is San Francisco

in California with an index of 178.6, which is more than double compared with Beckley.

Using the shooting incidents from 2000 to 2021, the result of the comparison between cities with shooting incidents and others without shows that the average costs of former regions (103) are higher than the later areas (96), which can also be vividly observed through the bale below:

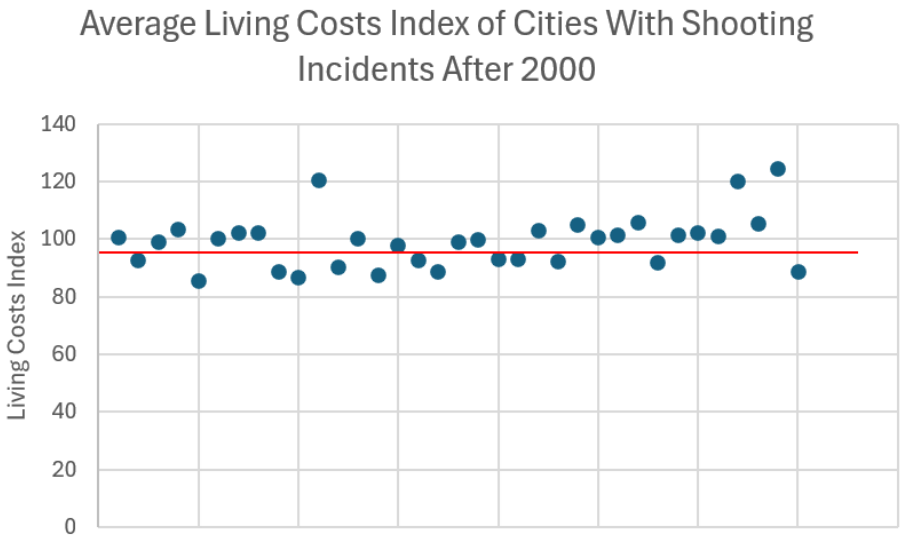

Figure 7

In the graph above, the red line is the average living cost index in United States cities without shooting incidents, and each blue point represents the living expenses of a specific city with shooting incidents between 2000 to 2021. It is obvious to point out that most of the blue points are higher than the average line, which labels the living costs index at 96.

Besides, by comparing the following two heatmaps, there are some overlaps of places with higher shooting frequencies and places with higher costs of living.

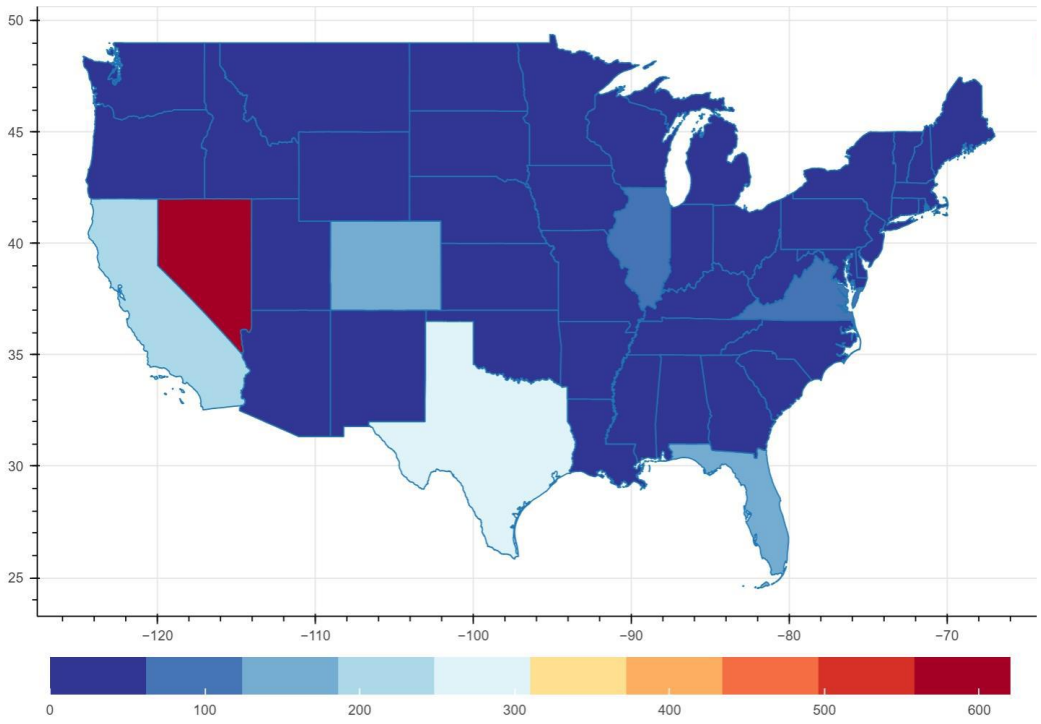

Figure 8

In the above map, the places with color on the right-hand side legend like light blue or red represent more shooting incidents and victims. From the map, it is observable that some states stand out as having a higher number of mass shooting victims, such as Nevada (616), Texas (262), California (223), Florida (175), and Colorado (140). Other states, such as New Mexico (0), Mississippi (0), and Iowa (0), have relatively few mass shooting victims. For most of the states, the number of victims is below 100.

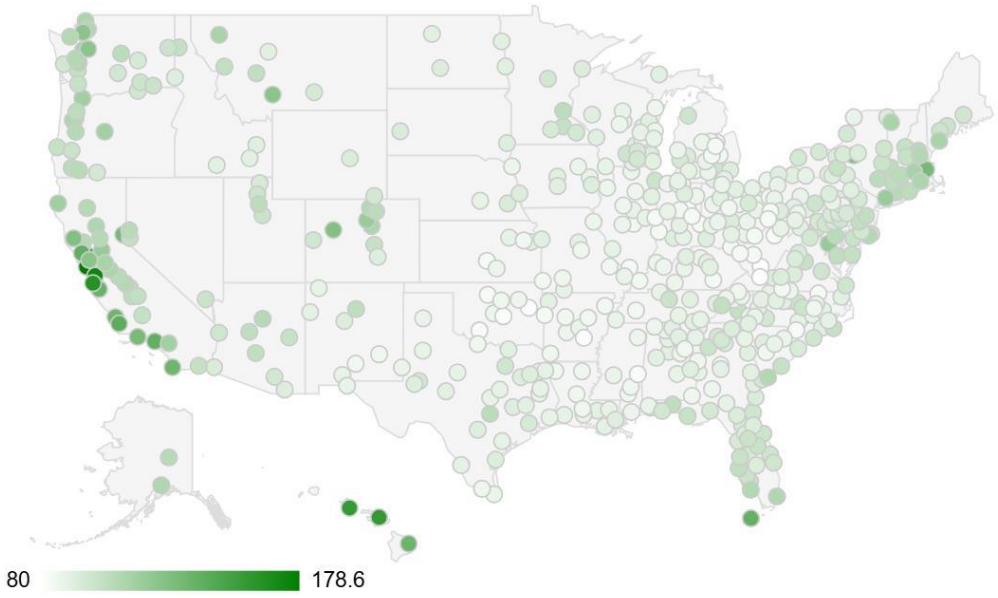

Figure 9

In the above figure that shows the living expenses of 500 U.S. metro areas that AdvisorSmith studied, there are some regions stand out because of the density of dark green dots which means higher living expenses. For instance, California on the West Coast, Florida on the south, and Virginia on the east, which have darker green dots on average, also have more shooting incidents and victims. Although this does not suggest a causal relationship since the demographic situations of these areas may contribute to the shooting, this suggests a correlation to a certain extent which can also be proved by the following empirical evidence.

The results of the regression analysis mentioned above are not consistent, which means the shooting incidents do not affect the price level in different dimensions in the same way. The results are as following:

Source	SS	df	MS	Number of obs	=	50
				F(6, 43)	>	99999.00
Model	1712.04699	6	285.341165	Prob > F	=	0.0000
Residual	.000014565	43	3.3873e-07	R-squared	=	1.0000
				Adj R-squared	=	1.0000
Total	1712.047	49	34.9397348	Root MSE	=	.00058

CostofLiving	Coefficient	Std. err.	t	P>|t|	[95% conf.	interval]
ShootingIncidentNO	.0001297	.0000509	2.55	0.014	.0000271	.0002323
Population	-7.14e-08	2.68e-08	-2.66	0.011	-1.25e-07	-1.73e-08
DR	-.0003877	.000282	-1.37	0.176	-.0009563	.000181
DisposableIncome	-1.000028	.0000335	-3.0e+04	0.000	-1.000095	-.99996
AnnualAverageWage	1.000048	.0000228	4.4e+04	0.000	1.000002	1.000094
SalesTax	.0025837	.0045547	0.57	0.573	-.0066017	.0117691
_cons	-.0022189	.0010889	-2.04	0.048	-.0044148	-.0000229

Figure 10

From the table of results of the main regression analysis, the number of shooting incidents in a specific American state is positively correlated with the cost of living with statistical significance at the 95% level of confidence since the P value is smaller than 0.05. Besides, the population, disposable income, and leaning toward to Democratic Party are negatively correlated with the costs of living while the annual average wage and sales tax are positively correlated with the dependent variable. It is also notable to point out that the political preferences and sales tax are not statically significant.

Source	SS	df	MS	Number of obs	=	50
				F(6, 43)	=	15.05
Model	10.5002742	6	1.75004569	Prob > F	=	0.0000
Residual	4.99869096	43	.116248627	R-squared	=	0.6775
				Adj R-squared	=	0.6325
Total	15.4989651	49	.316305411	Root MSE	=	.34095

TotalAnnualFoodC~t	Coefficient	Std. err.	t	P>|t|	[95% conf.	interval]
ShootingIncidentNO	.0372511	.0298063	1.25	0.218	-.0228591	.0973612
Population	-.0000288	.0000157	-1.83	0.074	-.0000605	2.90e-06
DR	-.2889596	.1651847	-1.75	0.087	-.6220864	.0441672
DisposableIncome	-.1139893	.0196226	-5.81	0.000	-.1535621	-.0744165
AnnualAverageWage	.0927529	.0133473	6.95	0.000	.0658354	.1196704
SalesTax	-3.265588	2.668256	-1.22	0.228	-8.646638	2.115462
_cons	1.381934	.6378953	2.17	0.036	.0954955	2.668373

Figure 11

Figure 11 shows that the dependent variable, total annual food cost is positively correlated with the shooting incident number and annual average wage, while negatively correlated with population, leaning toward the Democratic party, disposable income, and sales tax. However, it is important to be aware that only the disposable income and annual average wage are statically significant, which suggests that this estimation model did not explain the volatility of food costs very well.

Source	SS	df	MS		
Model	5.27598979	6	.879331632	Number of obs	= 50
Residual	.340553759	43	.007919855	F(6, 43)	= 111.03
				Prob > F	= 0.0000
Total	5.61654355	49	.114623338	R-squared	= 0.9394
				Adj R-squared	= 0.9309
				Root MSE	= .08899

MedianMonthlyHou~t	Coefficient	Std. err.	t	P>|t|	[95% conf.	interval]
ShootingIncidentNO	.0148586	.0077799	1.91	0.063	-.000831	.0305482
Population	-4.04e-06	4.10e-06	-0.99	0.330	-.0000123	4.23e-06
DR	-.0107763	.0431156	-0.25	0.804	-.0977273	.0761746
DisposableIncome	-.0477947	.0051218	-9.33	0.000	-.0581238	-.0374656
AnnualAverageWage	.0535201	.0034839	15.36	0.000	.0464942	.0605459
SalesTax	1.213029	.6964535	1.74	0.089	-.1915036	2.617561
_cons	-1.03652	.1664999	-6.23	0.000	-1.372299	-.7007406

Figure 12

Similar to Figure 11, the regression result in Figure 12 shows that only disposable income and annual average wage are negatively and positively correlated with median monthly housing cost with statistical significance, respectively. This suggests that the change in median monthly housing cost is poorly explained by this regression model and there might be some omitted variables that will impact the housing price.

Source	SS	df	MS	Number of obs	=	50
				F(6, 43)	=	3.98
Model	37.3782362	6	6.22970603	Prob > F	=	0.0030
Residual	67.2529385	43	1.56402183	R-squared	=	0.3572
				Adj R-squared	=	0.2676
Total	104.631175	49	2.1353301	Root MSE	=	1.2506

AnnualHealthcare~t	Coefficient	Std. err.	t	P>|t|	[95% conf.	interval]
ShootingIncidentNO	-.2703299	.1093291	-2.47	0.017	-.4908129	-.0498468
Population	.0000787	.0000576	1.37	0.179	-.0000375	.0001949
DR	.2420523	.605895	0.40	0.692	-.9798514	1.463956
DisposableIncome	-.0738656	.0719755	-1.03	0.311	-.219018	.0712869
AnnualAverageWage	.1068545	.0489579	2.18	0.035	.0081216	.2055875
SalesTax	-7.380621	9.78712	-0.75	0.455	-27.11823	12.35699
_cons	5.403453	2.33979	2.31	0.026	.684817	10.12209

Figure 13

The above Figure 13 shows an extremely interesting phenomenon, which is that the number of shooting incidents is negatively correlated with annual healthcare costs with statistical significance since the P value is lower than 0.05. This correlation suggests that in the states with more shooting incidents, residents are more likely to spend less money on annual health care. It is counterintuitive in the way that residents from a neighborhood with more shooting incidents and higher death and injury rates should spend more money on healthcare on average to heal themselves. However, one of the potential explanations is that although the medical spending caused by shooting incidents increases, residents who live under the threat of shooting incidents decrease their spending on non-emergent medical services for instance, chronic diseases like allergies, anemia, and chronic fatigue syndrome. These health problems are steady for a long period of time, and due to the concern of personal safety in the short run, people are less willing to spend incomes on curing them.

However, since the R-squared of this model is low (0.3572) and most of the variables in this regression are not statistically significant, this model did not predict

the change in annual healthcare costs very well using the independent variables included.

Discussion:

The four regression models in this paper indicate that an increase in shooting incidents correlates with a rise in the cost of living. In order to investigate the channels through which this effect occurs, the same regression model was run while the dependent variable of the total cost of living was substituted with its components, such as food costs, housing costs, and healthcare costs. The results reveal that while the total cost of living increases, the increase is primarily driven by healthcare costs since the number of shooting incidents has no statistically significant impact on food expenditures and housing costs.

The reason of the coefficients for shooting incidents are insignificant for the other cost component potentially lies in the nature of shooting incidents in rarity and unpredictability. While shooting incidents might have a short-term impact on the real estate market in specific areas, such effects are not widespread and may revert over time. Meanwhile, residents and the market might treat them as rare occurrences rather than factors that influence their everyday spending and cost decisions. As a result, the state-level food costs and housing costs are hard to be explained by shooting incidents in some small areas since there are many other factors that will mitigate the impacts.

Besides, the actual channel of the negative correlation between shooting incidents and annual healthcare costs is worth further study since it doesn’t align with some existing research in this area. For instance, previous research by Callcut et al. (2019)

has shown that an increase in shootings often leads to a surge in gun sales. The increase in gun sales, in turn, contributes to a higher incidence probability of gun-related injuries, which drives up the demand for healthcare services, thereby increasing healthcare costs. Additionally, areas with higher shooting rates tend to experience poorer mental health outcomes, as noted by Abel Brodeur (2022). Brodeur argues that these mental health challenges result in decreased productivity, particularly among healthcare workers, who become less efficient when providing medical services to patients, which then reduces the supply of healthcare services and further drives up healthcare costs. As a result, the relationship between shooting incidents and healthcare costs should be further studied as well as the channels.

In general, the major finding of the positive correlation between shooting incidents and costs of living implies the deterioration of social inequality, which aligns with the finding of the study of Chanjin Chung and Samuel Myers which showed that poor people tend to spend more on groceries because of the absence of access to chain stores. For poorer people who tend to live in neighborhoods with fewer safety guarantees, there is a higher likelihood of occurring shooting incidents and they suffer from higher living expenses.

Limitations:

Firstly, while the current model correlates shooting incidents with the increase in costs, it would be valuable to further explore the causal mechanisms. One potential approach is to use an instrumental variable (IV), like income levels in that area, for shooting incidences to isolate the effect more precisely. However, the chosen IV must

pass both the relevance and exogeneity tests before conducting the analysis.

Additionally, as mentioned above, the dataset used in this paper is not the ideal option because the impact of shooting incidents from one county is unlikely to proliferate to other cities across the state. Instead, comparing the microdata from counties with shootings and without shootings will lead to a more accurate comparison. However, with the existing dataset on the internet, it's hard to isolate the countries with shootings away from, and simply matching the name does not work because there are many countries that share the same name across the United States. For instance, in 2020, Springfield Missouri, Joaquin S. Roman, 31 years old, went on a rampage culminating at a Kum & Go, killing four people, including a police officer. However, there are 20 counties in the United States named Springfield, which requires manual extraction from the dataset of living expenses. Another approach is to use a unique region code like the postal code or latitude and longitude, to extract the county with shootings from the dataset of living expenses for cities across the country. Nevertheless, the data of postal code is not included in most of the datasets that this paper uses.

Lastly, the impact channels of shooting incidents remain unexplained, which could be significant for policy recommendations for the government when setting policies to maintain or decrease living expenses. As the government needs to allocate a limited amount of fiscal funding to the factors with economic efficiency, knowing the impact channel is one of the most significant reference for them. In order to study the channels, the models of difference in difference can be applied to study the impact

of one specific factor on the cost of living across different times.

Conclusion:

This research paper examines the relationship between the frequency of shooting incidents and the financial burden experienced by residents in the United States. Through a combination of empirical evidence and regression analysis, the findings reveal a statistically significant positive correlation between the number of shooting incidents and the overall cost of living. This correlation underscores the economic ripple effects of mass shootings, which manifest in heightened healthcare expenses. While the results affirm the hypothesis that a higher frequency of shootings contributes to increased costs, further studies can be conducted on the microlevel data and the channels of how shooting incidents impact living expenses.

The findings underscore the urgent need for policymakers to address not only the immediate social and psychological repercussions of mass shootings but also their longer-term economic consequences. Therefore, the government should focus on the implementation of targeted interventions in vulnerable communities, enhancement in public safety, and adoption of comprehensive measures to curb gun violence to mitigate these adverse financial impacts. Future research could expand on this foundation by exploring the causal pathways and examining the broader macroeconomic implications of gun violence on national and global scales.

Reference

AdvisorSmith. “AdvisorSmith City Cost of Living Index.” *AdvisorSmith*, 5 June 2020, advisorsmith.com/data/coli/.

Barattieri, Alessandro, et al. “Protectionism and the business cycle.” *Journal of International Economics*, vol. 129, Mar. 2021, p. 103417, https://doi.org/10.1016/j.jinteco.2020.103417.

Brodeur, Abel, and Hasin Yousaf. “On the economic consequences of mass shootings.” *The Review of Economics and Statistics*, 27 Sept. 2022, pp. 1–43, https://doi.org/10.1162/rest_a_01241.

Brodeur, Abel. “Thoughts and Prayers Are Not Enough: How Mass ...” *Congress.Gov*, July 2022, www.congress.gov/event/117th-congress/house-event/115032.

“Charts Related to the Latest ‘Consumer Price Index’ News Release | More Chart Packages.” *U.S. Bureau of Labor Statistics*, U.S. Bureau of Labor Statistics, www.bls.gov/charts/consumer-price-index/consumer-price-index-average-price-data.htm. Accessed 5 Dec. 2024.

CHUNG, CHANJIN, and SAMUEL L. MYERS. “Do the poor pay more for food? an analysis of grocery store availability and food price disparities.” *Journal of Consumer Affairs*, vol. 33, no. 2, Dec. 1999, pp. 276–296, https://doi.org/10.1111/j.1745-6606.1999.tb00071.x.

Donnelly, Megan, et al. “Trends in mass shootings in the United States (2013–2021): A worsening American epidemic of death.” *The American Journal of Surgery*, vol. 226, no. 2, Aug. 2023, pp. 197–201, https://doi.org/10.1016/j.amjsurg.2023.03.028.

Follman, Mark, et al. “US Mass Shootings, 1982–2024: Data from Mother Jones’ Investigation.” *Mother Jones*, 28 Dec. 2012, www.motherjones.com/politics/2012/12/mass-shootings-mother-jones-full-data/.

Gutium, Tatiana. “The correlation between energy resources tariffs, inflation and competitiveness.” *2019 International Conference on Electromechanical and Energy Systems (SIELMEN)*, Oct. 2019, pp. 1–6, https://doi.org/10.1109/sielmen.2019.8905860.

Perreault, Samuel. *This Juristat Article Examines the Nature and Prevalence of Firearm-Related Violent Crime in Canada. Recent Trends in Firearm-Related Violent Crime Are Presented at the National, Provincial/Territorial and Census Metropolitan Area Levels as Well as for Urban and Rural Regions.*,

Government of Canada, Statistics Canada, 30 Jan. 2022, www150.statcan.gc.ca/n1/pub/85-002-x/2024001/article/00001-eng.htm.

Rothstein, Robin. “Examining the Cost of Living by State in 2024.” *Forbes*, Forbes Magazine, 17 Sept. 2024, www.forbes.com/advisor/mortgages/cost-of-living-by-state/.

Shaik, Muzeeb, et al. “How fatal school shootings impact community economic activity.” *SSRN Electronic Journal*, 2023, https://doi.org/10.2139/ssrn.4611791.

“State and Local Sales Tax Rates, 2024.” *Tax Foundation*, 25 July 2024, taxfoundation.org/data/all/state/2024-sales-taxes/.

Statista Research Department. “Monthly Consumer Price Index U.S. 2024.” *Statista*, 19 Nov. 2024, www.statista.com/statistics/190981/monthly-unadjusted-consumer-price-index-in-the-us-since-april-2010/.

“United States Fed Funds Interest Rate.” *Trading Economics*, tradingeconomics.com/united-states/interest-rate. Accessed 5 Dec. 2024.

US Census Bureau. “State Population Totals and Components of Change: 2020-2023.” *Census.Gov*, 25 June 2024, www.census.gov/data/tables/time-series/demo/popest/2020s-state-total.html.

“US Election Results 2024.” *Reuters*, Thomson Reuters, www.reuters.com/graphics/USA-ELECTION/RESULTS/zjpqnemxwvx/. Accessed 10 Dec. 2024.

Appendix

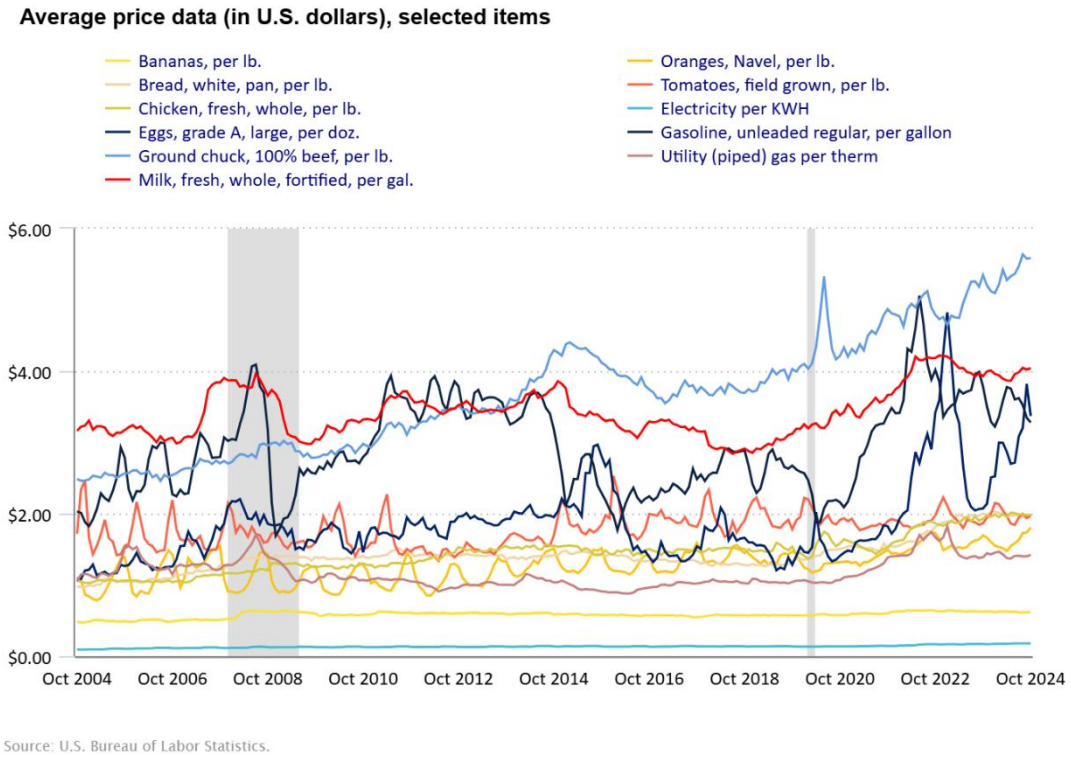

Figure 1

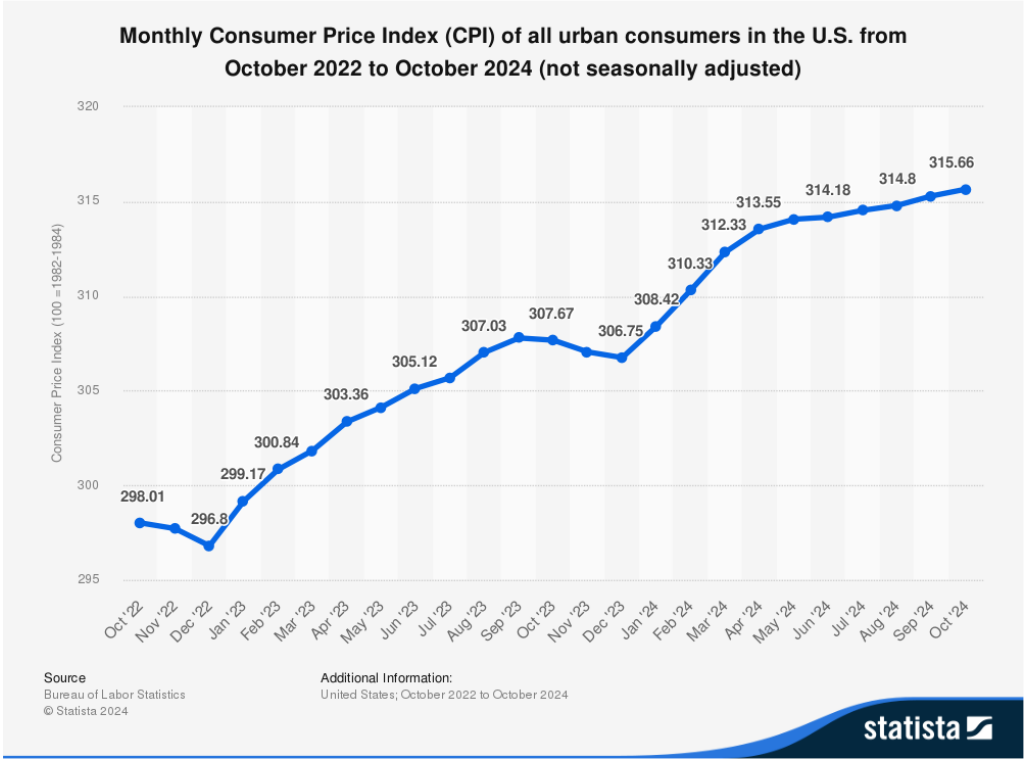

Figure 2

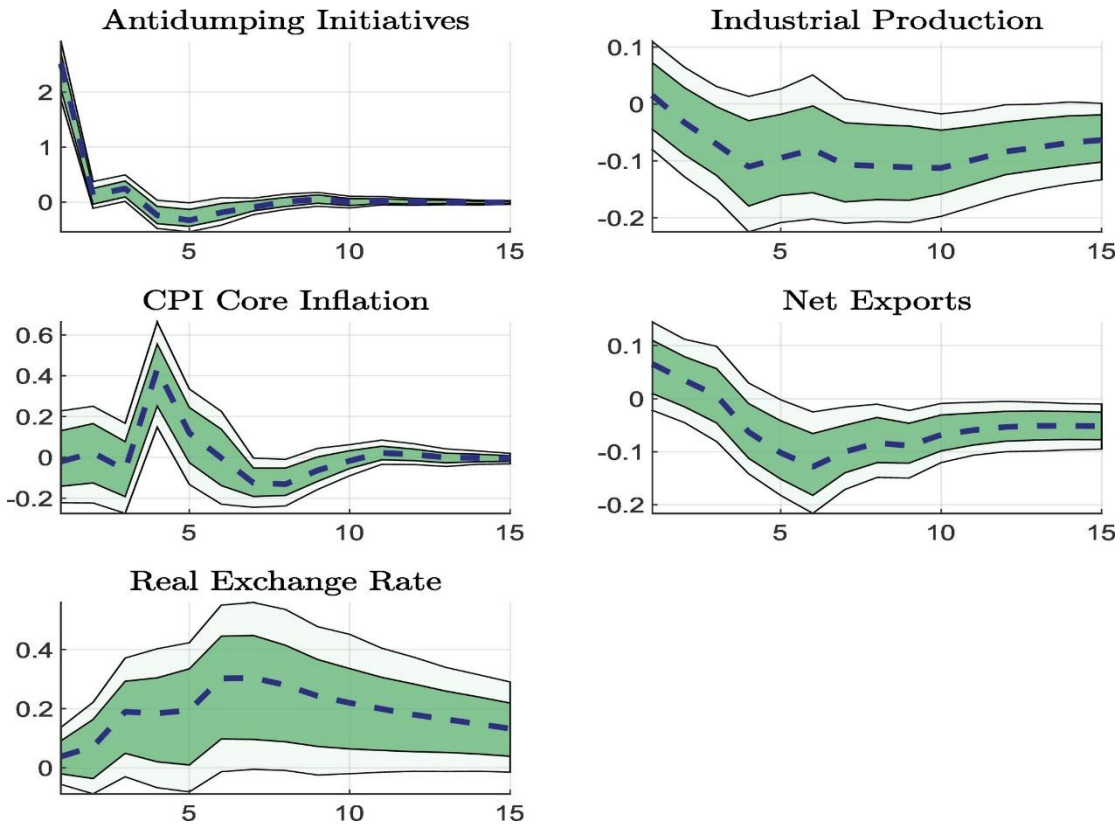
Antidumping Initiatives
Industrial Production
CPI Core Inflation
Net Exports
Real Exchange Rate

Figure 3

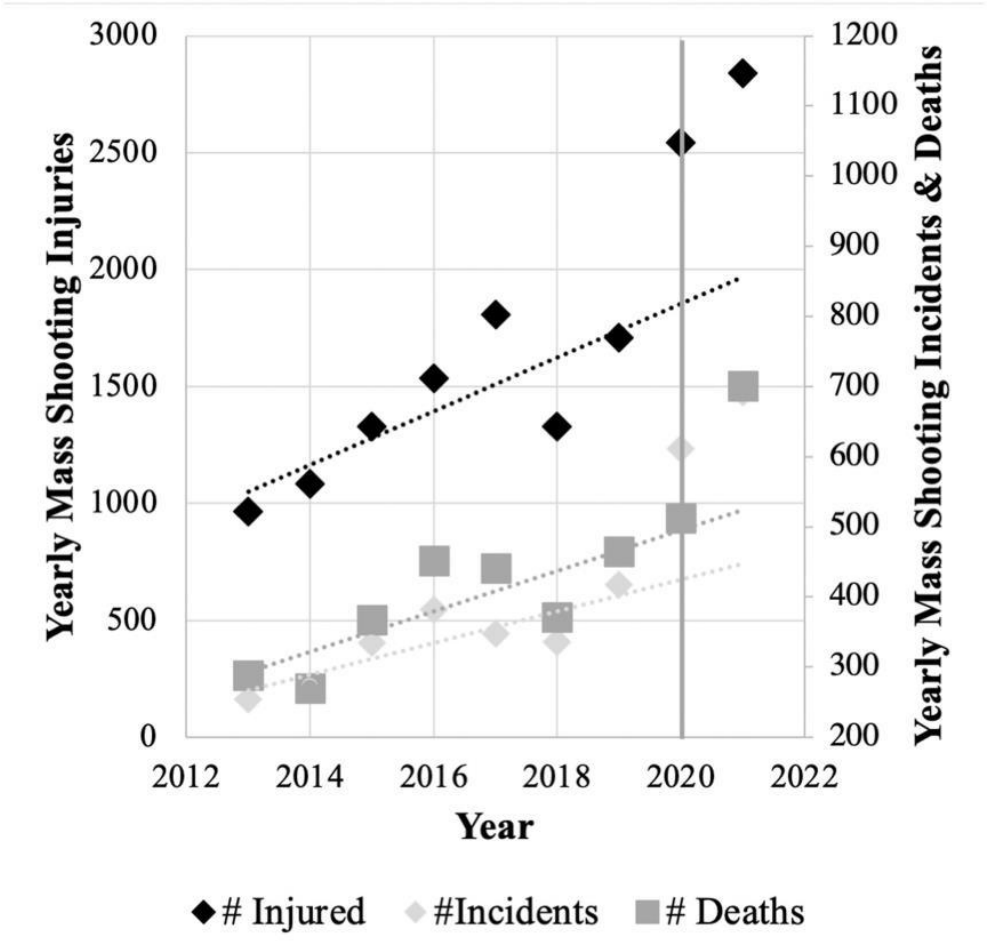

Figure 4

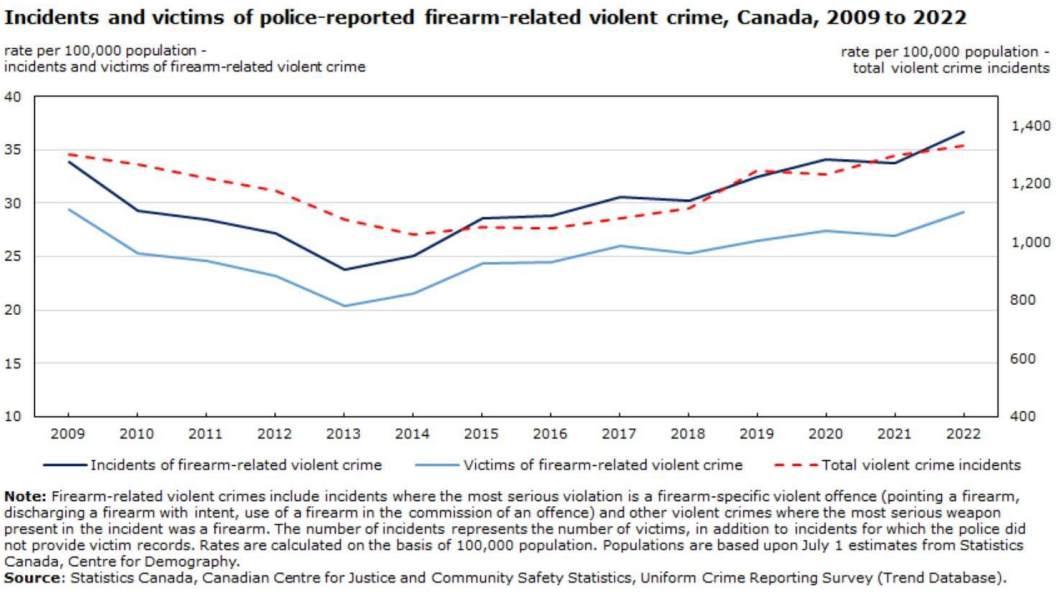

Figure 5