EXPERT REPORT OF TERRAPIN CONSULTING GROUP

[18 May 2023]

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I. Introduction and Summary of Findings

A. Purpose of Our Report

The automatic door industry plays a crucial role in providing efficient and practical access options for various sectors. However, allegations of anti-competitive practices, including price-fixing cartels, can harm healthy market competition and consumers.

Our report analyzes the available data to ascertain the compensation owed to our client resulting from This Way Corp's price-fixing cartel activities between 1983 and 1995. We concentrate on the relevant period to provide a comprehensive examination of the probable overcharge that the price-fixing cartel may have imposed.

B. Summary of Findings

Through our analysis, we aim to estimate the damages caused by This Way Corp to our clients. By inflating prices in the door manufacturing industry, our clients (who could be homeowners, in the construction industry, or other industries that utilize doors for their business) were harmed by the overcharge. Perfect compensatory damages for overcharging someone for a quantity of a good equals the prices that the client would have paid (i.e., the reference point) had the cartel not existed.[1]

To estimate the harm caused to the client we can calculate the difference between the prices but for the price-fixing cartel effect and the actual prices paid. We construct this by assigning treatment variables, and control variables and consequently performing a regression analysis. We used a statistical approach called Difference-in-Differences (DiD) regression analysis to to ascertain the overcharge that has been caused to the clients of This Way Corp. and the compensation of damages of $1,579,187 entitled to the clients.

As price fixing is illegal, 'This Way Corp' must compensate our clients with a minimum estimated damages amount of $1,579,187, which is the estimated overcharge determined through our regression analysis. The court and the concerns of 'This Way Corp's' clients will determine any additional compensation beyond this minimum amount.

[1] Cooter, R.,Ulen,T. Chapter 9: Topics in the Economics of Tort Liability. Law and Economics (Third edition)

II. Impact of the Price-Fixing Cartel

The FTC defines 'price fixing as an agreement (written, verbal, or inferred from conduct) among competitors to raise, lower, maintain, or stabilize prices or price levels.'[2] A price-fixing cartel is a group of firms or individuals who collude to coordinate prices for a particular product or service (FES, 2023)[3]. When competitors agree to restrict competition, the result is often higher prices.

The below points establish the harm caused when a price-fixing collusion is in place:

1. Consumers end up paying higher prices for goods and services, potentially leading them to either reduce their consumption. When a price-fixing cartel successfully establishes monopoly market power, it can exploit its dominant position by charging higher prices.
2. Price fixing limits competition by creating barriers to entry for new competitors. Colluding firms may collectively deter or exclude new entrants by maintaining high prices, limiting supply, or coordinating their actions to hinder market access.
3. Price fixing can harm economic growth by reducing competition, innovation, and productivity
4. Price fixing in one industry can have negative effects on other industries that rely on that industry's suppliers, potentially resulting in increased costs and prices for consumers.

Therefore, it is crucial for competition authorities to investigate and take action against anti-competitive behavior to protect consumers, promote competition, and foster economic growth.

As mentioned previously, we have been asked to assess the impact of the price-fixing cartel formed by This Way Corp on our client.

A. The Economics of Effects of Price-Fixing Cartel on the Customer Base

The allegations against the defendant suggest that This Way Corp colluded via a price-fixing cartel case. As we have established in the previous section a price-fixing cartel has led to an increase in prices. We can estimate that the damages are measured by the difference between prices paid by the plaintiff purchasers and the prices they would have paid in the absence of the defendant's conspiracy.[4]

The goal is to determine the reference point, also known as the "but-for" point, which represents what would have occurred if there had been no price-fixing. This reference point includes both the price at which the product would have been sold and the corresponding

[2] FTC. (2022, April 1). *Price fixing*. Federal Trade Commission. https://www.ftc.gov/advice-guidance/competition-guidance/guide-antitrust-laws/dealings-competitors/price-fixing

[3] *What is a price-fixing cartel? how to detect one? how to report a price-fixing cartel?*. Forensic Economic Services. (2023, February 2). https://rule703.com/blog/how-to-report-a-price-fixing-cartel/

[4] Finkelstein, M. O., & Levenbach, H. (1983). Regression estimates of damages in price-fixing cases. *Law and Contemporary Problems*, *46*(4), 145. https://doi.org/10.2307/1191596

quantity. We can visualize this reference point as a point on an economic diagram, with price on the vertical axis and quantity on the horizontal axis (see Figure 1 below). The difference between the actual price (pa) and the reference price (pr) i.e., the shaded area is referred to as the "overcharge" or "per-unit overcharge."[5]

The increase in purchase costs to buyers due to an effective sellers' cartel is customarily called an *overcharge* by economists. When multiplied by the quantity sold by a cartel, it becomes the major portion of the key legal concept of *damages*.[6]

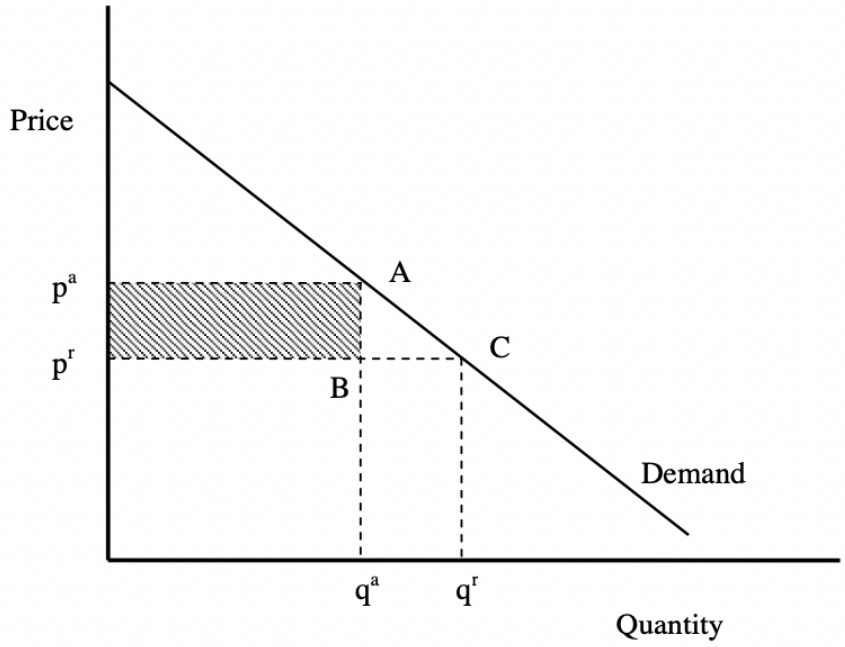

FIGURE 1

Thus the difference between the prices paid during the cartel and the actual prices from other periods measures the *overcharge* i.e., the shaded area in Figure 1.

In a price-fixing cartel case, determining the economic damages can be complicated due to various factors that influence the amount of compensation plaintiffs can receive like the duration and size of the cartel, the market influence of its members, and the effect of the cartel on prices.

The economic theory of damages in a price-fixing cartel case is an important tool that can be used to hold defendants accountable for their actions and to compensate plaintiffs for the harm they have suffered.

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[5] Hüschelrath, K., Müller, K., & Veith, T. (2013). Estimating damages from price-fixing: The value of Transaction Data. *European Journal of Law and Economics*, *41*(3), 509–535. https://doi.org/10.1007/s10657-013-9407-y

[6] Connor, J. M. (2014). Price-fixing overcharges: Revised 3rd edition. *SSRN Electronic Journal*. https://doi.org/10.2139/ssrn.2400780

B. Impact of the Price-Fixing Cartel on the Customer base

The price-fixing cartel activity conducted by the defendant whom we define as This Way Corp has had the following impact on the potential stakeholders involved in this industry whom we define as the plaintiffs:

- **Consumers/Homeowners:** If doors had artificially inflated prices, people's purchasing power would be reduced, and doors could become less affordable. As a result, people's choices might be limited, and costs for construction projects or home renovations could increase, negatively impacting their overall welfare.

- **Competing Door Manufacturers:** If door manufacturers aren't part of the price-fixing cartel, they could be at a disadvantage due to unfair competition. This could result in a loss of market share as customers are forced to pay higher prices for doors controlled by the cartel. Additionally, it might impede their ability to compete on factors such as quality, innovation, and other important aspects.

- **Retailers and Distributors:** The price-fixing cartel would have a direct impact on retailers and door distributors. They would need to pay higher costs to purchase doors from the cartel members, and this cost would have to be passed on to consumers. This could lead to reduced profit margins, difficulty in attracting customers, and legal consequences if they inadvertently participate in the price-fixing scheme.

- **Real Estate and Renovation Industry:** Those involved in construction and renovation, such as builders, contractors, and industry professionals, may face increased expenses for doors as a result of a price-fixing cartel. This could possibly result in higher project costs, lower profit margins, and difficulties in meeting budget targets. Furthermore, it may limit the ability to compete for project bids, which could negatively impact the industry as a whole.

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The summary of the affected transactions has been provided in the table below:

Installation Year	Installation Prices	Installation Costs	Profits	Price-Cost Margins
1980	3701.938	2868.343	833.5951	23.88%
1981	3466.876	2647.551	819.3258	23.60%
1982	3529.802	2718.74	811.0616	22.95%
1983	3567.462	2671.398	896.0643	25.30%
1984	3771.227	2683.876	1087.352	29.05%
1985	3723.59	2572.355	1151.235	30.85%
1986	3756.8	2619.192	1137.608	30.35%
1987	3694.86	2542.722	1152.138	31.32%
1988	3667.537	2507.906	1159.631	31.57%
1989	3698.841	2534.209	1164.632	31.60%
1990	3665.257	2514.839	1150.418	31.36%
1991	3700.895	2535.283	1165.612	31.54%
1992	3654.18	2515.667	1138.513	31.25%
1993	4141.813	2840.48	1301.333	31.63%
1994	4296.725	2924.645	1372.079	32.08%
1995	3945.809	2873.571	1072.238	27.44%
1996	3877.502	2899.863	977.6384	26.00%
1997	3191.863	2355.615	836.2482	27.64%
1998	3141.304	2294.652	846.6523	28.28%
1999	3219.235	2365.445	853.7897	27.87%
2000	3224.541	2360.419	864.1217	28.21%
2001	2685.029	1942.804	742.2253	28.52%
2002	2684.722	1926.251	758.4709	28.96%
2003	2662.289	1917.557	744.7319	28.60%
2004	2461.359	1738.188	723.171	29.69%
2005	2404.32	1697.562	706.757	30.05%
2006	2043.783	1412.878	630.9047	31.59%
2007	2041.719	1401.331	640.3882	32.23%
2008	2025.9	1390.442	635.4582	32.06%
2009	2039.552	1399.175	640.3771	32.08%
2010	2048.672	1408.934	639.7386	32.16%
2011	1497.523	966.7722	530.7509	35.39%
2012	1501.455	982.0572	519.3977	34.55%
2013	1503.764	980.347	523.4169	34.83%
2014	1500.06	982.7446	517.3154	34.55%
2015	1501.354	972.8826	528.4714	35.19%
Total	2978.877	2110.186	868.6906	30.12%

Table 1

Based on the table above, we can observe the averages for installation prices, installation costs, and price-cost margins. To calculate the price-cost margin, we determine the difference between installation prices and costs, and express it as a percentage of the installation price. This enables us to clearly convey the profit margins of the company. We can see that This Way Corp on average had consistently high price-cost margins between 1983 and 1995,

which was likely due to their participation in a price-fixing cartel. These margins were higher than in previous years.

From the graph provided below, it is clear that there was an unusual increase in profits over several years, which indicates the possibility of a cartel being in place. Looking at this graph gives us a clear illustration of the effects of a price-fixing cartel because it shows that it is not a cost effect. Specifically, there was a noticeable spike in price-cost margins in the year 1983, which persisted until 1995. Collusion can lead to higher profits for manufacturers if they work together to set a monopoly price and divide the profits. Monopoly prices are typically higher than competitive prices. However, we can see a dip in these margins in 1995, indicating that the cartel may have broken during this time. After 1995, we noticed a gradual increase in the price-cost margins, which may have been influenced by the introduction of new door types and other market factors.

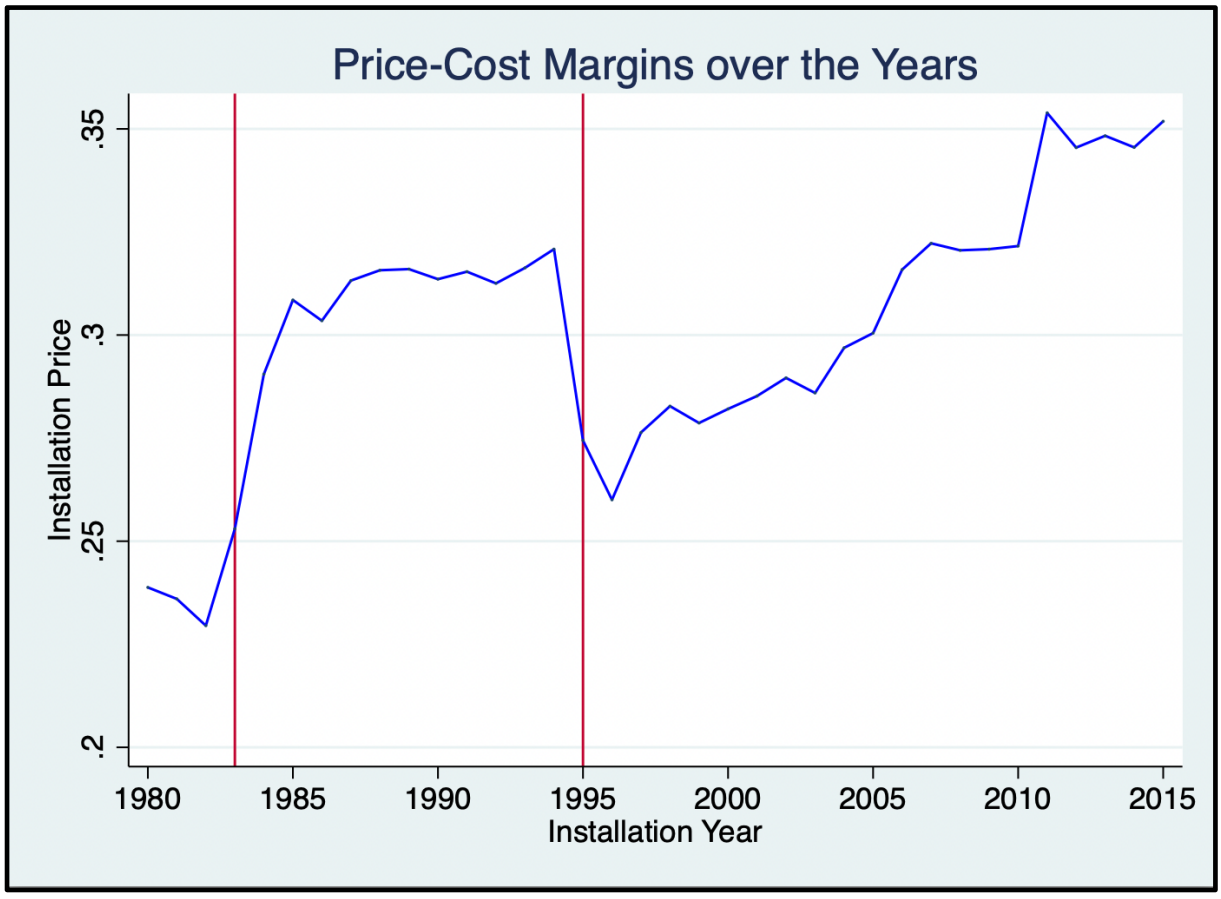

Figure 2

C. Our Approach to Quantifying Economic Damages

The Counsel has directed us to determine the amount of compensation owed to the plaintiffs who were impacted by the unlawful price-fixing cartel. We employ a difference-in-difference regression analysis to estimate the amount of overcharge by This Way Corp.

Difference-in-Difference (DiD) estimation has become an increasingly popular way to estimate causal relationships. DiD estimation consists of identifying a specific treatment (in our case, the effect of a price-fixing cartel). One then compares the difference in outcomes after and before the intervention for groups affected by it to this difference for unaffected groups. The great appeal of DiD estimation comes from its simplicity as well as its potential to circumvent many of the endogeneity problems that typically arise when making comparisons between heterogeneous individuals. [7]

In our opinion, we consider Difference-in-Difference regression analysis as the best way to estimate the damages in our scenario since we are able to capture the causal effect of the price-fixing cartel on the installation prices while controlling for the effects of other factors such as installation costs and the door types. We have the treatment group which is defined as the doors manufactured between the years 1983 and 1995 (cartel period) and the non-treatment group which is defined as the doors manufactured between the years 1980-1983 and 1995-2015. When we perform a regression analysis to see the effect of the treatment group on the installation prices while controlling for the installation costs and the door types, we get the estimated per-unit overcharge by This Way Corp's illegal price-fixing activity. To estimate the total amount of overcharge, multiply the per-unit overcharge estimate by the market quantity Q^8.

D. Data Sources

We analyzed the data provided by our client using robust regression analyses to estimate the damages owed by This Way Corp. The data included information such as installation prices and costs, which were necessary to determine the damages. Before conducting the analysis, we cleaned the data by addressing potential problems and abnormalities within the dataset to ensure accuracy and reliability.

The following steps were taken throughout the data-cleaning process:

- Negative prices and missing cost information: During our analysis, we came across observations with negative prices and no cost information. Considering the context, it is possible that these could be returns or data entry errors. To ensure accurate results, we have removed these observations from our analysis.

- Eliminating Duplicates: We ran a duplicate check on the dataset to find and remove any duplicate items.

- Analyzing unusual cost data: To ensure accuracy, we eliminated any observations where the installation costs were higher than the installation prices. This practice appeared unusual as it would be unlikely for a company to incur significant costs and offer lower prices.

[7] Bertrand, M., Duflo, E., & Mullainathan, S. (2002). *How Much Should We Trust Differences-in-Differences Estimates?*https://doi.org/10.3386/w8841

[8] Gilbert, S. (n.d.). *Testing for Price-Fixing Effects: A Difference-in-Difference Approach*. American Economic Association. https://www.aeaweb.org/conference/2021/preliminary

III. Damages Methodology

Counsel has instructed us to ascertain the damages caused by the defendant This Way Corp to our client, we employ the economic theory of damages using DiD regression analysis to quantify the compensation they are entitled to. Quantifying these damages and awarding compensation accomplish two things simultaneously: First, they put the victim back onto the utility level or indifference curve occupied before the harmful event and second, they are the "price" that the injurer (i.e., the defendant) must pay for having harmed the victim.

Generally, to calculate damages we require the following data:

- p_{col}: Price actually paid under the collusion (this is reality)
- $p_{but\ for}$: Price that would have been paid but-for the collusion i.e., in the absence of collusion (this is a counterfactual, i.e., it didn't happen)

The gap between these two prices tells us about the overcharge by the colluding firms.

$$\Delta_p = p_{col} - p_{but\ for}$$

Then multiply the total quantity bought, by the total amount of damages.

$$Damage = Q \times \Delta_p$$[9]

However, this methodology cannot be applied directly to our price-fixing case. To estimate the damages, we are required to control for the other variables in our dataset to capture the causal effect of price-fixing cartel on the installation prices. Therefore, we use a DiD regression analysis for a more robust result, which is elaborated in the following sections.

A. Implementation Details of Difference-in-Difference Regression Analysis

To perform the DiD regression analysis, we will need our variable of interest, a treatment group, a non-treatment group, and a set of control variables.

1. The effect of a price-fixing cartel is directly observed in the prices. Hence, our variable of interest is the installation prices.

2. We have defined the treatment and non-treatment groups as:

- The treatment here is the price-fixing cartel and we want to estimate the overcharge during the cartel period. Hence, we create a dummy variable "treatment" that is equal to 1 if the data lies in the cartel period i.e. between 1983 and 1995 (treatment group), and 0 if the data lies in the non-cartel period (non-treatment group).

[9] Paek,Y.,'Economics of Law'-Lecture slides (10), University of Maryland College Park

3. Controlling for a variable means estimating the difference in average outcome between a treatment group and a control group within a specific category/value of the controlled variable.[10] We have defined the set of control variables as:

- Installation Costs: We include "installation_cost" as a control variable, to control for its effect on the installation price. This coefficient estimate for the "installation_cost" variable indicates the average change in the installation price associated with a one-unit increase in the installation cost, assuming all other variables in the model are held constant
- Door type: We control for the effects of the door type on the installation prices by creating dummy variables for each type of door. While running the regression analysis, door type 1 is considered the base group.

Under the common trend assumption (also known as parallel trend assumption) this common trend would also hold in the cartel period in the absence of the cartel, the counterfactual price level can be obtained by adding the price difference to the price level in the comparator period. The difference between the counterfactual and factual prices in the cartel period yields the cartel overcharge. If the common trend assumption is indeed satisfied, i.e. the price difference observed in the post-cartel period would have been observed in the cartel period in the absence of the cartel, the estimated competitive price level corresponds to the "true" competitive price level. The cartel overcharge is correctly estimated.[11]

However, in our case, this assumption is not applicable since post the cartel period (i.e.) after 1995, two new door types were introduced (door types 4 and 5). Therefore, the parallel trend that was observed in the non-cartel period cannot be seen during the cartel period (between the years 1983 and 1995) as door types 4 and 5 were not being manufactured during the cartel period.

1. Regression Specification

For the purpose of our regression analysis, we have used the equations below:

$$\textbf{Installation\_Price} = \beta_0 + \beta_{treatment}(\text{Treatment}) + \beta_{costs}(\text{Installation\_Costs}) + \beta_{doortype}(\text{doortype\_dummy*}) + \varepsilon$$

Log-log model:

$$\textbf{Ln(price)} = \beta_0 + \beta_{treatment}(\text{Treatment}) + \beta_{costs}\,\text{Ln(costs)} + \beta_{doortype}(\text{doortype\_dummy*}) + \varepsilon$$

[10] Das, V. (2023, January 29). *What does it mean to control for a variable in regression?* Medium. https://towardsdatascience.com/what-does-it-mean-to-control-for-something-in-multiple-regression-744880620988

[11] Frank P. Maier-Rigaud, & Slobodan Sudaric. (n.d.). The difference-in-differences approach to the estimation of cartel damage. https://www.nera.com/content/dam/nera/publications/2019/PUB_Difference_in_Differences.pdf

Our variable of interest is the installation prices. We have also taken the installation prices and costs in log terms to capture any non-linear relationship between the variables. It also helps us undertake a robust analysis as a log transformation would improve the fit of the regression model by reducing the impact of outliers. β_treatment coefficient would estimate the causal effect of the price-fixing cartel on the installation prices. This coefficient estimates the overcharge by This Way Corp. We control for the effects of installation costs and door types on our variable of interest (installation prices) by including the variables "installation_costs" and dummy variables for "door_type" in our regression analysis. We've only included door-type dummies as control variables if the door types were 1, 2, or 3. Door types 4 and 5 were not manufactured during the cartel period and were only introduced after the breaking of the cartel. Therefore, we didn't consider them, as controlling for their effects would lead to a decrease in the estimated overcharge.

B. Results of the Difference-in-Difference Regression Analysis

Regression controlling for door type (in dollar terms)

```
. reg installation_price treatment installation_costs doortype_dummy* if door_type==1|do
> or_type==2|door_type==3
note: doortype_dummy1 omitted because of collinearity.
note: doortype_dummy4 omitted because of collinearity.
note: doortype_dummy5 omitted because of collinearity.

      Source |       SS           df       MS      Number of obs   =    17,881
-------------+----------------------------------   F(4, 17876)     =  13140.25
       Model |  1.4434e+10         4  3.6086e+09   Prob > F        =    0.0000
    Residual |  4.9091e+09    17,876  274622.153   R-squared       =    0.7462
-------------+----------------------------------   Adj R-squared   =    0.7462
       Total |  1.9344e+10    17,880  1081854.51   Root MSE        =    524.04

------------------------------------------------------------------------------------
installation_price | Coefficient  Std. err.      t    P>|t|     [95% conf. interval]
-------------------+----------------------------------------------------------------
         treatment |   175.1927   8.137823    21.53   0.000     159.2417    191.1436
installation_costs |   .8153228   .0048833   166.96   0.000      .805751    .8248945
   doortype_dummy1 |          0  (omitted)
   doortype_dummy2 |  -458.1711   12.59708   -36.37   0.000    -482.8626   -433.4796
   doortype_dummy3 |  -518.4419   13.06998   -39.67   0.000    -544.0603   -492.8235
   doortype_dummy4 |          0  (omitted)
   doortype_dummy5 |          0  (omitted)
             _cons |   1859.551   21.54517    86.31   0.000     1817.321    1901.782
------------------------------------------------------------------------------------
```

- Installation price is our outcome variable. By controlling for the variable door_type_dummy if the door types are 1, 2 and 3, We find that the coefficient of treatment which measures the overcharge is $175.19

- Installation_costs coefficient: This coefficient indicates that, on average, for every $1 increase in installation costs, the installation price increases by $0.815

- _cons coefficient: This coefficient is the intercept, which is the value of the installation price when all other variables are equal to 0

- The estimated damages will be the overcharge (coefficient of treatment) multiplied by the number of automatic doors manufactured by This Way Corp during the cartel period

- doortype_dummy1 is the basis for the other doortype dummies in the regression analysis so the doortype_dummy 2 is cheaper by $458.17 than doortype_dummy1 and similarily doortype_dummy3 is cheaper by $518.44 than doortype_dummy1.

Regression controlling for door type (log-log model)

```
. reg logprice treatment logcost doortype_dummy* if door_type==1|door_type==2|door_type=
> =3
note: doortype_dummy1 omitted because of collinearity.
note: doortype_dummy4 omitted because of collinearity.
note: doortype_dummy5 omitted because of collinearity.
```

Source	SS	df	MS	Number of obs	=	17,881
				F(4, 17876)	=	10768.63
Model	627.598027	4	156.899507	Prob > F	=	0.0000
Residual	260.454199	17,876	.014570049	R-squared	=	0.7067
				Adj R-squared	=	0.7066
Total	888.052226	17,880	.04966735	Root MSE	=	.12071

logprice	Coefficient	Std. err.	t	P>|t|	[95% conf.	interval]
treatment	.055715	.0018684	29.82	0.000	.0520528	.0593773
logcost	.5587624	.003728	149.88	0.000	.5514552	.5660697
doortype_dummy1	0	(omitted)				
doortype_dummy2	-.1038038	.002837	-36.59	0.000	-.1093645	-.098243
doortype_dummy3	-.1201671	.0029684	-40.48	0.000	-.1259855	-.1143488
doortype_dummy4	0	(omitted)				
doortype_dummy5	0	(omitted)				
_cons	3.874929	.0305502	126.84	0.000	3.815048	3.93481

- This regression is specified using log values of the treatment and control group: installation_cost and door_type dummies. We can interpret this as during the cartel period, the effect of price-fixing (treatment) increases the installation prices by 5.58%. This log-log model substantiates the analysis made in dollar terms

- Logcost coefficient: A one percent increase in the installation costs would lead to a 55.87% increase in the installation prices

- Doortype_dummy2 and Doortype_dummy3 variables show that in comparison to the base group of doortype_dummy1, the installation prices of door types 2 and 3 are 10.38% and 12.01% cheaper than door type 1, respectively.

For the purpose of our regression analysis, we have used the equations below:

Installation_Price = β_0 + β_treatment (Treatment) + β_costs (Installation_Costs) + ε

Log-log model:

Ln(price) = β_0 + β_treatment (Treatment) + β_costs Ln(costs) + ε

Regression without door dummy (in dollar terms)

```
. reg installation_price treatment installation_costs
```

Source	SS	df	MS	Number of obs	=	32,650
				F(2, 32647)	>	99999.00
Model	4.4125e+10	2	2.2063e+10	Prob > F	=	0.0000
Residual	7.0226e+09	32,647	215107.095	R-squared	=	0.8627
				Adj R-squared	=	0.8627
Total	5.1148e+10	32,649	1566600.47	Root MSE	=	463.8

installation_price	Coefficient	Std. err.	t	P>|t|	[95% conf.	interval]
treatment	432.7914	6.205726	69.74	0.000	420.628	444.9549
installation_costs	1.034767	.0026699	387.57	0.000	1.029534	1.04
_cons	651.4155	5.573647	116.87	0.000	640.4909	662.34

- This regression is specified without taking the door dummies, to see the effect of the price fixing on the installation prices without controlling for the variable door_type. In this table, we find that the coefficient of treatment which measures the overcharge is $432.791.

- Installation_costs coefficient: This coefficient indicates that, on average, for every $1 increase in installation costs, the installation price increases by $1.03.

- _cons coefficient: This coefficient is the intercept, which is the value of the installation price when all other variables are equal to 0.

- The difference between the previous regression analysis with controlling for door types and this one that does not control for the door type is that it takes into consideration the effects of door types 4 and 5 which were produced during the non-cartel period (after 1995). Therefore, in such a situation, the coefficient of treatment would not give us the right estimate of overcharge as it includes the effects of door types 4 and 5 as well. In this case, the coefficient of treatment does not accurately capture the effect of the price-fixing cartel (treatment) during the cartel period.

Regression without door dummy (log-log model)

```
. reg logprice treatment logcost
```

Source	SS	df	MS	Number of obs	=	32,650
				F(2, 32647)	>	99999.00
Model	4930.44092	2	2465.22046	Prob > F	=	0.0000
Residual	608.36453	32,647	.018634623	R-squared	=	0.8902
				Adj R-squared	=	0.8902
Total	5538.80545	32,649	.169647017	Root MSE	=	.13651

logprice	Coefficient	Std. err.	t	P>|t|	[95% conf.	interval]
treatment	.1297807	.0019044	68.15	0.000	.126048	.1335135
logcost	.7523986	.0017872	420.99	0.000	.7488956	.7559016
_cons	2.197568	.013164	166.94	0.000	2.171766	2.22337

- This regression is specified using log values of the treatment and control group: installation_cost. We can interpret this as during the cartel period, the effect of price-fixing (treatment) increases the prices by 12.9%.
- A 1% increase in installation costs causes a 75% increase in installation prices

IV. Conclusion

In conclusion, this report has presented a concise overview of the economic principles underlying damage measurement in the context of price-fixing cases. Our objective was to assess the compensation for the damage owed to our client by This Way Corp resulting from their involvement in the Price fixing cartel. To accomplish this, we employed a statistical approach known as Difference-in-Differences (DiD) regression analysis. By using established economic theories of damages, we were able to quantify the extent of the damages and provide an evidence-based estimation of the compensation owed. This analysis serves as a foundation for understanding the economic impact of the price-fixing cartel and facilitating a fair resolution for our client.

After conducting a thorough review, as outlined in this report, we have determined that 'This Way Corp' was involved in the price-fixing cartel from 1983 to 1995 and is therefore considered guilty.

To determine the damages, we follow the methodology outlined in Section III of this report. This involves taking the treatment variable coefficient and multiplying it by the number of doors sold. Based on this approach, we have estimated an overcharge of $175,192. By multiplying this figure with the number of doors sold during the cartel period of 1983-1995, which is 9014, we arrive at an approximate estimate of damages, amounting to $1,579,187.

The estimated treatment effect figure for damages can be a starting point for estimating damages and should be adjusted based on the specific facts and evidence of the case.

Since this is an illegal activity ‘This Way Corp’ is entitled to pay our clients the estimated damages amount of $1,579,187 as per our regression analysis at the minimum, the rest is at the discretion of the court and the individual issues raised by the clientele of ‘This Way Corp’.

We declare under penalty of perjury that the foregoing is true and correct, and if called as a witness would testify competently thereto.[12]

Dated: 18 May 2023 Name: Terrapin Consulting Group

- [12] For the understanding of the layout of the report we used: Van Liere, Kent, "Vol. IX, Tab 46 - Ex. 37 - Expert Report of Dr. Kent D. Van Liere" (2009). Rosetta Stone v. Google (Joint Appendix). Paper 99