UNITED STATES DISTRICT COURT
EASTERN DISTRICT OF NEW YORK
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IN RE AIR CARGO SHIPPING SERVICES ANTITRUST LITIGATION — Master File No. 06-MD-1175 (JG)(VVP)

MDL No. 1775 — ALL CASES
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REPORT AND RECOMMENDATION

Pohorelsky, M.J.

TABLE OF CONTENTS

Introduction 3
I. Background 4
A. Factual Background 4
B. Procedural Background 10
1. Case Consolidation, Preliminary Motions, and Settlement Agreements 10
2. The Plaintiffs' Motion for Class Certification 11
3. The Plaintiffs' *Daubert* Motions 12
II. *Daubert* Motions—Analysis 13
A. Summary of the Plaintiffs' Expert Testimony 17
B. Plaintiff's Motion to Exclude Mr. Kaplan's Testimony 19
1. Kaplan's Analysis of Weighted-Least-Squares 20
2. Kaplan's Assertion That McClave Combined Two Regressions In Order To Misrepresent The Explanatory Power Of His Model 24
3. Kaplan's Remark Regarding "Spurious Correlation" 26
4. Kaplan's Omitted Variables 27
5. Kaplan's Sub-Regressions 28
6. Kaplan's Critiques of McClave's Robustness Tests 31
7. Kaplan's Use of Country-Specific Variables 33
8. Kaplan's Calculations of Singapore Air's and Air New Zealand's Surcharges in 2002 and 2003 34
9. Kaplan's Analysis of McClave's Cost Variable 34
10. Kaplan's Critiques of McClave's Demand and Excess Capacity Variables 37
11. Kaplan's Analysis of Price Variability 37
C. The Plaintiffs' Motion to Exclude Dr. Burtis' Testimony 38
1. Burtis' Statements Regarding Omitted Variables 39
2. Burtis' Claim that McClave Presents Two Regressions Rather Than One 39
3. Burtis' Sub-Regressions for Individual Customers and Origin-Destination Pairs 40
4. Whether Burtis' Sub-Regressions Use "All the Data" 40

5. Burtis' Assertion That McClave Omitted Variables 41
6. Burtis' Analysis of McClave's Cost Variable 41
7. Burtis' Scatter Plots of Prices 43
8. Burtis' Charts of Prices Around a Purported Surcharge Announcement 44
D. Plaintiff's Motion to Exclude the Testimony of Dr. Warren-Boulton 44
1. Warren-Boulton's Discussion of the Relevant Market 45
2. Warren-Boulton's Sub-Regressions 46
E. Conclusion Regarding the *Daubert* Motions 46
III. The Class Certification Motion—Analysis 47
A. Rule 23(a)(1): Numerosity 49
B. Rule 23(a)(2): Commonality 49
C. Rule 23(a)(3): Typicality 52
D. Rule 23(a)(4): Adequacy of Representation 55
E. Rule 23(b)(3): Predominance & Superiority 58
1. Violation 60
2. Injury 66
a. Legal Injury 67
b. Injury-in-Fact 67
i. The Predominance Standard in the Context of Expert Testimony 67
ii. Record Evidence of a Conspiracy 71
iii. Record Evidence that Waivers and Offsetting Were Uncommon 76
iv. Dr. Tollison's Market Structure Analysis 79
v. Dr. McClave's Regression Models 89
3. Damages 98
4. Superiority 108
F. Appointment of Interim Co-Lead Counsel as Class Counsel 111

CONCLUSION 111

Appendix 113

INTRODUCTION[1]

This case, brought as a class action, concerns allegations of price-fixing within the air freight industry. The defendants are domestic and foreign airlines that provide airfreight-shipping services to and from the United States.[2] The representative plaintiffs are six freight forwarders that purchased air freight services from one or more of the defendants during the proposed class period of January 1, 2000 to September 30, 2006.[3]

The plaintiffs allege that during this period, the defendants conspired to develop and implement an industry-wide index for calculating fuel and security surcharges that were applied to thousands of routes flown worldwide by the defendants, including flights to and from the United States. By partially eliminating the threat of competition through fixed surcharges, the plaintiffs contend, the defendants were able to charge their customers supra-competitive rates and to collusively adjust these rates in lockstep 28 times during the class period. Such activity, the plaintiffs argue, violates Section 1 of the Sherman Antitrust Act, 15 U.S.C. § 1. Pl. Mem. 2.

On this basis, the plaintiffs now seek to certify as a class "[a]ll persons or entities. . . who purchased airfreight shipping services for shipments to or from the United States directly from any of the Defendants . . . at any time during the period January 1, 2000 up to and including September 30, 2006." *Id.* As the briefing concerning their class certification motion included opinions

[1] A list of the various motion papers cited in the opinion, including their ECF numbers and the short citation forms used in the opinion, is found in the Appendix at the end of this opinion.

[2] The defendants, including those that have settled, are Aerolinhas Brasileiras ("ABSA"); Air Canada; Air China; Air France; Air India; Air Mauritius; Air New Zealand; Alitalia; All Nippon Airways; American Airlines; Asiana; British Airways; Cargolux; Cathay Pacific; China Air; DAS; El Al; Emirates; Ethiopian Air; EVA; Japan Airlines; Kenya Airways; KLM; Korean Air; Lan; Lufthansa; Malaysia Airlines,; Martinair; Nippon Cargo Airlines; Polar; Qantas; Saudia Arabian Airlines; SAS; Singapore Air; South African Airways; Swiss; Thai Airways; and Viacao Aerea Rio-Grandense, as well as certain affiliated companies. Pl. Mem. 1, n.1.

[3] As a result of the dismissal of various claims in the Consolidated Amended Complaint, a number of the named plaintiffs dropped out of the litigation. The plaintiffs that remain are Benchmark Export Services, FTS International Express, Inc., Rim Rogistics, Ltd.; Olarte Transport Services, Inc., S.A.T. Sea & Air Transport, Inc., and Volvo Logistics AB. Pl. Mem. 2, n.6.

rendered by various experts, the plaintiffs have also moved to preclude, on *Daubert* grounds, portions of the expert opinions offered by the defendants in opposition to the motion.

For the reasons to be discussed, the court respectfully recommends that the plaintiffs' motion for class certification be granted, that the plaintiffs' interim co-lead counsel be appointed class counsel, and that the plaintiffs' *Daubert* motions be granted in part and denied in part, in accordance with the specific recommendations contained in this Report.

I. BACKGROUND

A. Factual Background

The following facts are drawn from the plaintiffs' class certification motion and are largely undisputed by the defendants, at least for the purposes of the motion. The court identifies where facts are disputed by noting that they are "alleged," and addresses those disputes where appropriate in the court's discussion section, *infra.*

Stated broadly, the plaintiffs allege that between January 1, 2000 and September 30, 2006, the defendants participated in a global conspiracy to fix fuel and security surcharges on their services at supra-competitive rates. They offer proof of the following facts to support that allegation.

In 1997, nearly all of the defendants were members of the International Air Transport Association ("IATA"), a trade group for airline companies. Landau Decl., Ex. 22. At an IATA meeting in Geneva, Switzerland in January 1997, members adopted a proposal designed to help cargo transporters recoup rising overhead fuel costs. Pl. Mem. 7. Known as Resolution 116ss, the proposal established an index by which IATA members could calculate their fuel surcharge rate based on that week's fuel prices. *Id.* By adhering to this single index, carriers throughout the industry would be able to implement and adjust this surcharge in unison, without being undercut by lower surcharges from competitors. Carriers following Resolution 116ss would continue to compete freely on base rates, of course, but not on fuel surcharge rates.

Resolution 116ss calculated fuel surcharge prices as follows. Aviation fuel prices in five spot markets were used to determine the average weekly price of aviation fuel. The IATA then assigned an index value of 100 to the average fuel price in June 1996, which was $0.535/gallon. When the index value reached 130 (30 percent higher than the June 1996 price), participants were advised to implement a $0.10/kg fuel surcharge. If the index then fell below 110 for two consecutive weeks, the surcharge would be suspended. If it rose above 150 for two consecutive weeks, the airlines would meet again to review the fuel surcharge amount. *Id.* at 7-8.

Fuel prices remained stable for most of 1999, so a surcharge was not immediately imposed. In December, however, prices rose to the "magic limit" contemplated by Resolution 116ss. Pl. Mem. 8 (quoting Landau Decl., Ex. 25). At that point, many of the defendants corresponded through email and at an in-person "coffee meeting" to exchange mutual assurances that they would impose the uniform fuel surcharge, as well as to stress the importance of ensuring industry-wide adherence to the initiative. *Id.* at 8-9.

Air France was first to implement the fuel surcharge, followed shortly by Lufthansa, Cargolux, Korean Air, Air Canada, and eventually all of the defendants. *Id.* at 9. In announcing their implementation of the fuel surcharge, some explicitly referenced Resolution 116ss as the basis for surcharge, while others cited the problem of rising fuel costs directly. *Id.*

Shortly thereafter, Lufthansa sought the IATA's permission to publish the index on Lufthansa's website. When the IATA refused to give permission, Lufthansa instead published an identical index but referred to it as its own independent index, rather than as the IATA's. In an internal memorandum, Lufthansa instructed its employees to "avoid in your external communication *any* link between our [fuel surcharge] and the IATA Reso 116." *Id.* at 10 (quoting Landau Decl., Ex. 37) (emphasis in original). From then on, according to the plaintiffs, Lufthansa's index became the basis by which the defendants coordinated their fuel surcharge rates. *Id.* at 12-13.

The defendants continued to communicate after their fuel surcharges were implemented, exchanging feedback and encouraging non-participants "to take [the] same measure immediately" since "not taking the same measure will jeopardize the success of this industrywide action." *Id.* at 10 (quoting Landau Decl., Ex. 39). Some defendants used their membership in the Cargo Subcommittees of regional associations known as Boards of Airline Representatives ("BAR-CSC's"), as well as other trade organizations, to shore up support for and coordinate the fuel surcharge conspiracy. *Id.* at 10, 15, 17, 22-23.

Despite this seemingly brazen conduct, participants were aware of the potential exposure their conspiracy created. For example, an executive at Singapore Air cautioned his colleague, "pls do not reference LH [Lufthansa] in your email as we do not want hard evidence of us coordinating with LH to be out in the market." Landau Decl., Ex. 86. Additionally, the IATA's attorneys had consistently counseled its members to obtain regulatory approval before implementing the Resolution, lest they face allegations of price-fixing. Pl. Mem. 7 (citing Landau Decl., Ex. 23). Nonetheless, an application for approval from the United States Department of Transportation ("DOT") was not sought until three years later, on January 28, 2000. *Id.* at 11 (citing Landau Decl., Ex. 47). Once it was submitted, the DOT quickly denied the defendants' application, noting that "[t]he uniform, industry-wide index mechanism proposed here appears fundamentally flawed and unfair to shippers and other users of cargo air transportation." *Id.* (quoting Landau Decl., Ex. 48).

The IATA reacted to the DOT's rejection by issuing a memorandum to its members, warning them:

> The Index has now become tainted by the DoT order finding Resolution 116ss, to which the index was linked, to be adverse to the public interest and in violation of the law. If the carriers were to coordinate pricing by reference to the Index, whether pursuant to this disapproved Resolution or simply through de facto parallel pricing actions, this could be regarded as an illegal conspiracy in violation of applicable Competition laws, whether the Index is published by IATA, PLATTS [a newsletter reporting on fuel prices], or indeed, simply calculated by each of the carriers independently. . . . Because any further pricing actions linked to the now tainted Index could expose the carriers engaging in such pricing

> actions to serious antitrust liability, we must advise that carriers not engage in any pricing actions tied to the Index.

Id. at 12 (quoting Landau Decl., Ex. 50).

Despite these warnings from the DOT and the IATA, the defendants continued to calculate fuel surcharges using Lufthansa's purportedly independent index. *Id*; Landau Decl., Ex. 37. Thus, when the fuel index exceeded 150 in September 2000, the defendants conferred just as Resolution 116ss suggested, and agreed upon a further increase to $0.15/kg. Pl. Mem. at 12. As fuel prices decreased throughout 2001, they coordinated fuel surcharge reductions, and ultimately suspended the surcharge at the end of 2001. *Id.* at 13.

But as fuel prices were declining, security and insurance costs were rising in the wake of the September 11 terrorist attacks. Drawing on their experience with the fuel surcharge index, the defendants coordinated and implemented a similar security surcharge methodology using the same channels. *Id.* at 32. By October, 2001, the defendants had implemented a conspiracy-wide security surcharge of around $0.10/kg. *Id.* at 33.

In early 2002, Lufthansa introduced a new, more detailed fuel surcharge methodology, operating essentially like the methodology initiated by Resolution 116ss but differing "in terms of the number of levels, the trigger points for each level, and the surcharge amounts." *Id.* The new methodology was discussed between the defendants prior to its introduction, with some suggestion that airlines take a similar "path" after a "slight delay," presumably to avoid generating evidence of their collusion. *Id.* at 14 (quoting Landau Decl., Ex. 63). As fuel prices continued to rise, a total of fourteen trigger points were built into the methodology, allowing fuel surcharges to go as high as €0.70/kg. *Id.* at 16-17. Some defendants used Lufthansa's publicly available index, while others developed their own indexes, "modelled after" Lufthansa's. *Id.* at 17-18 (quoting Landau Decl., Ex. 75). In either event, the defendants continued to coordinate implementation and adjustment of the fuel surcharges by e-mail, over the phone, and in person over the next four years. *See generally,* Pl.

Mem. 18-32. When changes in fuel prices reached the trigger points outlined in Lufthansa's methodology, the defendants traded mutual assurances that they would alter their surcharge rates accordingly, *see id.*, before announcing the change to the public, *see, e.g.,* Landau Decl., Exs. 33-36, 53-57, 124-128, 219; Landau Reply Decl., Exs. 239, 291.

For at least a few of the defendants, the fuel surcharge became a significant factor in maintaining their profitability. *See, e.g.,* Landau Reply Decl., Ex. 275 (surcharge 25% of British Airways' profitability); *id.,* Ex. 276 (fuel surcharge "key to profitability" for Emirates); *id.*, Ex. 278 (surcharge improved yields for Polar); *id.*, Ex. 311 (same for Quantas). The security surcharge was also maintained throughout portions of the class period with apparent success. *See* Pl. Mem. 34-35 (quoting Landau Decl., Ex. 201) (internal Lufthansa e-mail stressing the importance of "maintain[ing] close ties in this, and stick[ing] together as much as possible for uniformity on the surcharges. It is only with this unity that we can count on being globally successful in sustaining these returns."); *id.* at 35 (after Emirates dropped the security surcharge, Lufthansa promptly persuaded the carrier to reinstate it) (citing Landau Decl., Ex. 202).

Lufthansa reported the existence of the conspiracy to authorities at the end of 2005. *Id.* at 39. Soon after, American and European Union authorities raided the offices and personal homes of various defendants, and criminal antitrust proceedings commenced soon after. *Id.* But the fuel price index remained on Lufthansa's website, continuing to serve as the basis for defendants' additional fuel surcharge increases until it was taken down in May 2006. *Id.* at 39. Since then, Lufthansa has used a new surcharge methodology that is communicated to customers directly, rather than announced publicly. *Id.* at 39-40 (citing Landau Decl., Ex. 76).

In exchange for reporting the existence of the conspiracy and cooperating with government investigators, Lufthansa and Swiss International Air received immunity from prosecution under the Department of Justice's Corporate Leniency program. Pl. Mem. 1 (citing Settlement Agreement

Between Air Cargo Plaintiffs and Defendants Deutsche Lufthansa AG, Lufthansa Cargo AG, and Swiss International Air Lines, Ltd. ¶ 77 (ECF No. 419-3)).

Many other defendants were not so lucky. Between August 2007 and June 2011, 21 of the defendants in this case pleaded guilty, pursuant to federal plea agreements, to charges that they participated in a conspiracy to fix a component of their air freight prices.[4] Pl. Mem. 1; Landau Decl., Exs. 1-1S. Each of these criminal cases covers conduct that occurred during the proposed class period and on routes included within the scope of the class definition. And though a total of over $1.8 billion in criminal fines were assessed in connection with these guilty pleas, Landau Decl.., Ex. 1, no restitution for the victims was ordered in those cases, Pl. Reply 2. Instead, Judge Bates, who presided over each of these cases, found that restitution should be deferred to this pending civil action:

> [T]he government believes and the defendant agrees, and I have heard nothing to the contrary, that because of the pending civil actions, restitution should not be ordered here. And that is the course that I will continue to follow. That is basically a deferral, with the agreement of the United States and each of the defendants in these various cases, a deferral to that civil action and the restitution and indeed—well, the treble damages that may be recovered through that action.

Pl. Reply 44, n.170 (quoting Plea/Sentencing Tr., *United States v. Asiana Airlines*, No. 09-CR-099 (D.D.C. May 5, 2009), at 40:11-19, Landau Reply Decl., Ex. 296).

Additionally, a number of similar enforcement actions against certain defendants were successful in Australia, Canada, Europe, Korea, New Zealand, and South Africa. *Id.*, Exs. 3-3P.

[4] The defendants who have pleaded guilty to price-fixing charges include British Airways Plc., Korean Air Lines Ltd., Qantas Airways Ltd., Japan Airlines International Co., Ltd., SAS Cargo Group A/S, Cathay Pacific Airways Ltd., Martinair Holland NV, Societe Air France, KLM Royal Dutch Airlines, LAN Cargo S.A., Aerolinhas Brasileiras SA, El Al Israel Airlines, Asiana Airlines Inc., Nippon Cargo Airlines Co. Ltd., Cargolux Airlines International S.A., Northwest Airlines LLC, Polar Air Cargo LLC, China Airlines Ltd., All Nippon Airways Co. Ltd., Singapore Airlines Ltd., EVA Airways Corp. Landau Decl., Ex. 1.

B. Procedural Background

1. Case Consolidation, Preliminary Motions, and Settlement Agreements

This case combines 23 actions brought in the Eastern District of New York, the District of District of Columbia, the Northern District of Illinois, the Central District of California, the Southern District of Florida, and the District of New Jersey. These cases were transferred to the Eastern District of New York by the Multi-District Litigation Panel in June 2006, pursuant to 28 U.S.C. § 1407. Letter from Judicial Panel on Multidistrict Litigation (ECF No. 1). Subsequent to the transfer, an amended complaint was filed on February 8, 2007 consolidating all of the claims into a single action. Am. Compl. (ECF No. 271).

In July and August 2007, motions to dismiss the consolidated amended complaint were filed by Air France (ECF No. 500), Swiss International Air Lines, Ltd., Deutsche Lufthansa AG, and Lufthansa Cargo AG (ECF No. 506), Thai Airways International (ECF No. 535), South African Airways (ECF No. 536-37), and Saudi Arabian Airlines, Ltd. (ECF No. 543). I recommended that the plaintiffs' state law and European Union law claims be dismissed with prejudice, and that claims brought under the Sherman Antitrust Act, 15 U.S.C. § 1, be dismissed with leave to replead so that the plaintiffs could attempt to satisfy the heightened pleading requirements of *Bell Atlantic Corp. v. Twombly*, 550 U.S. 544 (2007). *See In re Air Cargo Shipping Services Antitrust Litigation*, No. 06-MDL-1775, 2008 WL 5958061, at * 8-11 (E.D.N.Y. Sept. 26, 2008) (ECF No. 787). In August 2009, Judge Gleeson adopted most of my recommendations, but did not dismiss the Sherman Act claims, instead finding that the complaint alleged a plausible conspiracy claim under that statute. *See In re Air Cargo Shipping Services Antitrust Litigation*, No. 06-MDL-1775, 2009 WL 3443405, at * 1 (E.D.N.Y. Aug. 21, 2009) (ECF No. 938).

In February 2010, several of the direct purchasers instituted separate actions in this court (now consolidated into the master MDL) alleging essentially the same conspiracy against an

additional four corporate airline defendants, as well as eight individuals who are corporate officers for the various airlines. Motions to dismiss this second complaint were filed by Air India (ECF No. 1148), Malaysia Airlines (ECF No. 1157), Eva Airways Corporation (ECF No. 1159), and China Airlines, Ltd. (ECF No. 1163). My recommendation to deny these motions was adopted in its entirety by Judge Gleeson in November of that year. Report & Recommendation, Sept. 22, 2010 (ECF No. 1270).

Deutsche Lufthansa AG, Lufthansa Cargo AG, and Swiss International Airlines Ltd. were the first defendants to settle, with a final settlement order entered in October 2009. ECF No. 974. Eight other defendants followed suit in March 2011,[5] followed by four more defendants in July and August of that year.[6] Twelve additional defendants settled in August 2012.[7] In total, at least 27 defendants have now settled the claims against them, agreeing to pay over $454 million to class members.[8] This case now proceeds against the remaining defendants.

2. The Plaintiffs' Motion for Class Certification

Briefing of the motion for class certification commenced in October 2011. Plaintiffs' Notice of Motion (ECF No. 1599). The evidence submitted in support of the motion included expert declarations from Drs. Robert Tollison, an economist who analyzed the structure of the air cargo industry and its susceptibility to collusion (ECF No. 1603), and James T. McClave, Ph.D., a

[5] Those parties included AMR Corporation and American Airlines, Inc. (ECF No. 1413), Societe Air France, Koninklijke Luchtvaart Maatschappij N.V., and Martinair Holland N.V. (ECF No. 1414), Scandinavian Airlines System and SAS Cargo Group A/S (ECF No. 1416), and Japan Airlines International Co. (ECF No. 1417).

[6] All Nippon Airways Co., Ltd., Cargolux Airlines International S.A., and Thai Airways International Public Company Limited settled in July, 2011 (ECF No. 1524), followed shortly thereafter by Qantas Airways Limited (ECF No. 1534).

[7] They include Lan Airlines, S.A., Lan Cargo, S.A., Aerolinhas Brasileiras, S.A., British Airways Plc., South African Airways Ltd., Malaysia Airlines, Saudi Arabian Airlines, Ltd., Emirates Airline, El Al Israel Airlines Ltd., Air Canada, AC Cargo LP, and Salvatore Sanfilippo. (ECF No. 1732).

[8] Additionally, the court has granted preliminary approval of proposed settlements with certain remaining defendants. On January 29, 2014, the court granted preliminary approval to the plaintiffs' settlements with Singapore Airlines Ltd, Singapore Airlines Cargo Pte Ltd. (ECF No. 1980) and Korean Air Lines Co., Ltd. (ECF No. 1979). On March 4, 2014, the court granted preliminary approval to the plaintiffs' settlement with Cathay Pacific Airways, Ltd. (ECF No. 1992). On May 16, 2014, the court granted preliminary approval to the plaintiffs' settlement with China Airlines, Ltd. (ECF No. 2017). On August 22, 2014, Judge Gleeson entered an order authorizing the dissemination of the class notice and claim form for these settlements, and scheduling a fairness hearing for January 16, 2015. (ECF No. 2047).

statistician who prepared a multiple regression analysis to examine whether the plaintiffs suffered classwide injuries and to estimate damages (ECF No. 1604).

In May 2012, the defendants filed three memoranda of law in opposition. A joint memorandum was filed by Asiana Airlines, Singapore, Cathay Pacific, EVA, Air India, Air China, Air New Zealand, China Air, and Korean Air. ECF No. 1689. It was accompanied by an expert declaration from Mr. David P. Kaplan. ECF No. 1691. Separate memoranda in opposition were filed by Nippon Cargo Airlines Co., Ltd. (ECF No. 1682) and Polar Air (ECF No. 1684), each also accompanied by expert declarations challenging the plaintiffs' experts' findings. Nippon proffers a declaration from Dr. Frederick R. Warren-Boulton. ECF No. 1683-1. Polar Air proffers that of Michelle Burtis, Ph.D. ECF No. 1687.

The plaintiffs filed a reply memorandum in support in October 2012 (ECF No. 1753), accompanied by reply declarations from their experts (ECF No. 1755-56). The defendants filed a joint sur-reply in April 2013 (ECF No. 1845), accompanied by reply declarations from Mr. Kaplan (ECF No. 1847) and Dr. Burtis (ECF No. 1848).

3. The Plaintiffs' *Daubert* Motions

Upon completion of the briefing of the class certification motion, the plaintiffs announced their intention to attack, on *Daubert* grounds, the opinions submitted by the defendants' experts in opposition to the class certification motion. Thus, in April 2013, the plaintiffs filed motions to strike portions of the defendants' experts' testimony, arguing that their statements lack an adequate scientific basis under *Daubert,* and will unduly confuse the jury under Federal Rule of Evidence 403. Dkt. Ents. 1838-40. Each of their three motions was accompanied by a separate declaration from a new expert, Dr. Gordon Rausser. ECF Nos. 1838-10, 1839-4, 1840-3. The defendants filed their oppositions to the respective *Daubert* motions in July, ECF Nos. 1882-1884, along with a joint expert declaration from Michael J. Moore, ECF No. 1884-1. The plaintiffs submitted their replies in

September (ECF Nos. 1902-1904), this time accompanied by expert declarations from both Dr. Rausser (ECF Nos. 1903-1, 1904-1) and Dr. McClave (ECF No. 1903-2). Kaplan was then permitted to file a sur-reply declaration (ECF No. 1912-1).[9]

Finally, in November 2012, the court conducted a three-day hearing at which the parties offered testimony by their experts and argument on the class certification motion.

II. *Daubert* Motions – Analysis

I turn first to the *Daubert* motions, since their resolution will inform my determination of the class certification motion as well.

As noted, the plaintiffs move to strike portions of the opinions offered by each of the defendants' three expert economists: Mr. David P. Kaplan, Dr. Michelle Burtis, and Dr. Frederick R. Warren-Boulton. Through their distinct but overlapping opinions, each of these experts cites ways in which the plaintiffs' evidence, and particularly the plaintiffs' own expert evidence, does not constitute common proof of their claim. Arguing that various sections of the defendants' experts' opinions are unreliable and/or irrelevant, the plaintiffs seek to strike these sections under Federal Rule of Evidence 702, or alternatively, under Rule 403.

Expert opinion testimony is permitted under Federal Rule of Evidence 702 if "the expert's scientific, technical, or other specialized knowledge will help the trier of fact to understand the evidence or to determine a fact in issue." Fed. R. Evid. 702(a). To meet this requirement, the testimony must be "based on sufficient facts or data" and be "the product of reliable principles and methods" that were "reliably applied" to the facts of the case. *Id.* at (b)-(d); *see also Daubert v. Merrell Dow Pharmaceuticals, Inc.,* 509 U.S. 579, 597 (1993) (evidence admissible if it "rests on a reliable

[9] After the *Daubert* motions were fully briefed, the defendants moved to strike the final McClave declaration, arguing that because it introduced a revised multiple regression analysis, it violated the scheduling order barring further briefing on the class certification issue. ECF No. 1911. Included with the defendants' motion was an additional declaration from Mr. Kaplan, refuting Dr. McClave's new findings. ECF No. 1912-1. Finding that the Court would benefit from as much information as possible, I denied the motion and agreed to consider McClave's additional declaration and Kaplan's sur-reply for both class certification and *Daubert* purposes. ECF No. 1946.

foundation and is relevant to the task at hand"). Thus, "[i]n assessing the reliability of a proffered expert's testimony, the court's inquiry under *Daubert* focuses not on the substance of the expert's conclusions, but on the principles and methodology used to generate the conclusions." *Clarke v. LR Sys.*, 219 F. Supp. 2d 323, 332 (E.D.N.Y. 2002).

Daubert sets forth a non-exhaustive list of factors the court may consider in assessing the reliability of expert testimony:

> (1) whether a theory or technique has been or can be tested; (2) "whether the theory or technique has been subjected to peer review and publication;" (3) the technique's "known or potential rate of error" and "the existence and maintenance of standards controlling the technique's operation;" and (4) whether a particular technique or theory has gained general acceptance in the relevant scientific community.

United States v. Williams. 506 F.3d 151, 160 (2d Cir. 2007) (quoting *Daubert,* 509 U.S. at 593–94); *see also In re Visa Check/Master Money Antitrust Litig.,* 192 F.R.D. 68, 76-77 (E.D.N.Y. 2000) (citing *Zuchowicz v. United States,* 140 F.3d 381, 386 (2d Cir. 1998). Nevertheless, the *Daubert* reliability inquiry is "a flexible one," and "*Daubert* makes clear that the factors it mentions do *not* constitute a definitive checklist or test." *Kumho Tire Co. v. Carmichael,* 526 U.S. 137, 150 (1999) (emphasis in original, quotation marks omitted).

The proponent of expert testimony bears the burden of "establishing by a preponderance of the evidence that the admissibility requirements of Rule 702 are satisfied," *Humphrey v. Diamant Boart, Inc.,* 556 F. Supp. 2d 167, 174 (E.D.N.Y 2008) (quotation marks omitted); *see also United States v. Williams,* 506 F.3d at 160 (citing *Daubert,* 509 U.S. at 593, n.10), but ultimately, "the district court functions as the gatekeeper for expert testimony," *Raskin v. Wyatt Co.,* 125 F.3d 55, 66 (2d Cir. 1997); *see also Kumho Tire,* 526 U.S. at 141. The court enjoys "broad discretion in determining what method is appropriate for evaluating reliability under the circumstances of each case." *Amorgianos v. Nat'l R.R. Passenger Corp.,* 303 F.3d 256, 265 (2d Cir. 2002). The Second Circuit has endorsed a "particularly broad standard for the admissibility of expert testimony," *Colon ex rel. Molina v. BIC*

USA, Inc., 199 F. Supp. 2d 53, 75 (S.D.N.Y. 2001) (citing *Boucher v. United States Suzuki Motor Corp.,* 73 F.3d 18, 21 (2d Cir.1996)), wherein "the rejection of expert testimony is the exception rather than the rule," *Clarke,* 219 F. Supp. 2d at 332. Under this liberal standard, expert testimony should only be excluded if it is "speculative or conjectural," if it is "based on assumptions that are 'so unrealistic and contradictory as to suggest bad faith,' or to be in essence an 'apples to oranges comparison,' " *Boucher,* 73 F.3d at 21 (quoting *Shatkin v. McDonnel Douglas Corp.*, 727 F.2d 202, 208 (2d Cir. 1984)); *see also Daubert*, 509 U.S. at 590 ("[T]he word 'knowledge' connotes more than subjective belief or unsupported speculation."). Additionally, courts must consider the degree to which the data actually supports the expert's conclusion. "[N]othing in either *Daubert* or the Federal Rules of Evidence requires a district court to admit opinion evidence which is connected to existing data only by the *ipse dixit* of the expert. A court may conclude that there is simply too great an analytical gap between the data and the opinion proffered." *Nimely v. City of New York*, 414 F.3d 381, 396 (2d Cir. 2005) (quoting *General Electric Co. v. Joiner,* 522 U.S. 136, 146 (1997)). "[W]hen an expert opinion is based on data, a methodology, or studies that are simply inadequate to support the conclusions reached, *Daubert* and Rule 702 mandate the exclusion of that unreliable opinion testimony." *Id.* at 396-97 (citing *Amorgianos,* 303 F.3d at 265); *see also Daubert,* 509 U.S. at 592-93 (expert testimony must be "relevant to the task at hand"); *Stagl v. Delta Air Lines, Inc.,* 117 F.3d 76, 81 (2d Cir. 1997). Otherwise, "other contentions that the assumptions are unfounded go to the weight, not the admissibility, of the testimony." *Grand River Enters. Six Nations, Ltd. v. King,* 783 F. Supp. 2d 516, 526 (S.D.N.Y. 2011) (quoting *Boucher,* 73 F.3d at 21).

Deference to experts is particularly appropriate when expert testimony concerns "soft sciences" like economics. Because these disciplines "require the use of professional judgment," expert testimony is less likely to be excluded because "challenges may ultimately be viewed as

matters in which reasonable experts may differ." *In re Vitamin C Antitrust Litig.*, No. 06-MD-1738, 2012 WL 6675117, at *5 (E.D.N.Y. Dec. 21, 2012) (quotation omitted). As this court has explained,

> [c]reating statistical models . . . depends upon judgment and art as well as the reasoned manipulation of numbers. Models are not the real world; rather, such models are a reasoned and educated attempt to describe reality by accepted methods of statistical analysis using available real world observations, data, and knowledge. The process is not like a Pythagorean demonstration of a mathematical truth that can be revealed indisputably. Neither is it simple 'numbers crunching.'

Falise v. Am. Tobacco Co., 258 F. Supp. 2d 63, 67 (E.D.N.Y. 2000).

Additionally, the exclusion of expert testimony is more likely to be inappropriate when the challenged testimony relates to minor details in the expert's methods. "A minor flaw in an expert's reasoning or a slight modification of an otherwise reliable method will not render an expert's opinion *per se* inadmissible." *Amorgianos*, 303 F.3d at 267. "To the extent that . . . there [are] gaps or inconsistencies in the [expert's] reasoning, . . . such arguments go to the weight of the evidence, not its admissibility," *Campbell v. Metro Prop. & Casualty Ins. Co.,* 239 F.3d 179, 186 (2d Cir. 2001) (citing *Daubert*, 509 U.S. at 595), and should be addressed using the established tools of "[v]igorous cross-examination, presentation of contrary evidence, and careful instruction on the burden of proof," *Daubert,* 509 U.S. at 596.

Finally, testimony that is admissible under Rule 702 may still be struck under Federal Rule of Evidence 403. Rule 403 authorizes the exclusion of relevant evidence when its "probative value is substantially outweighed by the danger of unfair prejudice, confusion of the issues, or misleading the jury, or by considerations of undue delay, waste of time, or needless presentation of cumulative evidence." Fed. R. Evid. 403; *see also Old Chief v. United States*, 519 U.S. 172, 180 (1997). These dangers are particularly pronounced in the context of expert testimony, given the unique weight that the factfinder may place on such testimony. *See Daubert,* 509 U.S. at 595 ("Expert evidence can be both powerful and quite misleading because of the difficulty in evaluating it. Because of this risk, the judge in weighing possible prejudice against probative force under Rule 403 of the present rules

exercises more control over experts than over lay witnesses.") (quotation omitted); *Nimely*, 414 F.3d at 397; *United States v. Young,* 745 F.2d 733, 766 (2d Cir. 1984).

A. Summary of the Plaintiffs' Expert Testimony

Before turning to an analysis of the plaintiffs' motions, it will be helpful for the reader to have some understanding of the issues on which the defendants' experts opine. Thus, although they are explored in greater detail in the class certification section of this Report, *see* Section III, *infra,* the court begins by summarizing the testimony of the plaintiffs' experts, Drs. Robert Tollison and James T. McClave.

Dr. Tollison is an expert economist who examined six aspects of the market structure of the airfreight industry, including (1) the defendants' collective control of the air freight market; (2) the substitutability of air freight services for other shipping services; (3) the fungibility of air freight service providers; (4) the extent of any barriers preventing new competitors from entering the air freight market; (5) the ratio of fixed to variable costs; and (6) the ease of fixing surcharges. Based on his analysis, he concludes that the defendants were substantially shielded from competition (including from both non-defendant airfreight carriers and other types of carriers), that they competed primarily on price, and that they had strong incentives to pursue a price-fixing scheme. Tollison Decl. 8-22, 29-33. According to the plaintiffs, this testimony supports a finding that the questions of whether the defendants' violated the antitrust law and whether the class members were impacted can be resolved by evidence predominately common to the class.

Dr. McClave is an expert statistician who performed a multiple regression analysis in order to determine the rate of impact and degree of damages for the class. In essence, the analysis sought to compare prices charged during the period when the conspiracy allegedly operated (the "class period") with prices charged after the conspiracy ended (the "benchmark period"). McClave used 25 defendants' data encompassing 30 million transactions—approximately 15 million that occurred

during the class period and 15 million that occurred during the benchmark period—to estimate what air freight prices would have been "but for" the conspiracy. McClave Decl. 3-5. In doing so, McClave included a number of explanatory variables to identify and control for normal influences on prices (including the defendants' overhead costs, consumer demand, and transaction weight) and estimated coefficients for each variable to reflect the relative influence that each variable plays. Additionally, due to differences in demand and excess capacity between shipments inbound to and outbound from the United States, McClave estimated separate models for each set of data, with each model including differently specified variables to account for these differences. *Id.* at 5-6. Finally, McClave included a variable to "test[ ] whether some part of the price, including surcharges, during the [conspiracy] is attributable to the alleged collusive behavior rather than to changes in factors like cost and demand that typically influence prices." *Id.* at 6. After utilizing a correction known as "Weighted Least Squares" to account for what he found to be additional variation caused by differences in shipment weights, McClave concluded that the class as a whole paid overcharges of between 6.3-7.5% for inbound shipments and 5.4-6.2% for outbound shipments during the class period. *Id.* at 11-12.

Then, after identifying this result, McClave conducted a series of "robustness tests" to determine whether the results of his regression analysis held true when "potentially influential observations" were controlled for. McClave Reply 2, 39. These robustness tests included running the model after trimming outliers in the data, running the model using monthly moving average prices for each carrier, country, and weight class, and combinations of these approaches. *Id.* at 35-36. He found that each test "provided a remarkably consistent estimate of the relationship between price and the explanatory variables, including most importantly the quantification of class-wide impact. The consistency of these results led me to conclude that the models were statistically reliable and robust." *Id.* at 36.

Finally, in response to the defendants' arguments that his model overlooks the possibility that some customers were not impacted, McClave conducted a final robustness test, which he describes in his Reply Declaration: he added "more than 70,000 customer indicator variables" representing individual customers, "a severe test of [the model's] robustness." *Id.* at 47. He found that his models

> passed this test with flying colors. In particular, all model coefficients remained statistically significant and economically sensible. Of particular importance, the overcharge estimates were within 0.5% of one another. The class-wide inbound overcharge estimate is 6.7% with the customer indicators included, compared to 6.4% without them. The class-wide outbound overcharge estimate is 5.5% with the customer indicators included, compared to 6.0% without them.

Id. He then used his model with the customer indicator variables included to compare each customer's "but-for" prices against actual prices to determine that "96% of customers with at least two transactions had at least one overcharged transaction during the damage period." *Id.* at 47-48.

In their responsive declarations, the defendants' experts have put forth a litany of concerns about the reliability of Drs. Tollison and McClave's findings. Though their arguments range from conceptual to technical, they are largely unified by a shared concern that the plaintiffs' experts have presumed a global conspiracy, and have employed analyses that overlook the importance of local and route-specific factors. The plaintiffs' *Daubert* motions address many of these arguments.

B. Plaintiff's Motion to Exclude Mr. Kaplan's Testimony

Mr. David P. Kaplan, an expert economist, is the joint defendants' expert. Though his testimony disputes a variety of plaintiffs' evidence, the instant *Daubert* motion only seeks to exclude portions of his testimony concerning Dr. McClave. Kaplan critiques many aspects of McClave's methodology, and also attempts to test the reliability of McClave's conclusion by running McClave's regressions using smaller subsets of the data. The plaintiffs now argue that various aspects of Kaplan's testimony are not sufficiently grounded in reliable economic practice and should be

excluded under Rule 702, or alternatively, under Rule 403. Each of the challenged opinions is addressed in turn.

1. Kaplan's Analysis of Weighted-Least-Squares

As briefly mentioned earlier, after initially constructing his model McClave identified an issue that he believed compromised its reliability. According to McClave, in any regression, the value (in this case, price) predicted for each observation (in this case, each transaction) will almost certainly differ from the real world price. This difference is called a "residual." For a model to be reliable, scatter plots of residuals should appear random rather than in a pattern. When the residuals do form a pattern, econometricians may attempt to correct the model using established techniques. "Weighted Least Squares" (hereinafter, "WLS") is a standard statistical correction used to correct this problem when the source of the pattern is known and the correction must address both the variables and the residuals themselves. Here, McClave found that the pattern was caused by greater variability in the residuals for low weights than for high weights, so he chose to use WLS, "with the chargeable weight of the shipment used as the regression weights." McClave Dep. Tr. at 224:6-7 (ECF No. 1690-3); Kaplan Mem. 6 (citing various academic literature).

Kaplan argues that McClave erred by doing so. He asserts that McClave's use of WLS was improper for several reasons that, taken together, lead the defendants to conclude that McClave's use of WLS amounted to a "statistical trick." Joint Opp. 57 (citing Kaplan Decl. ¶¶ 60-68). Three of these critiques are disputed by the plaintiffs in their *Daubert* motion. Specifically, they seek to exclude Kaplan's assertions (i) that WLS may have been the wrong correction to apply; (ii) that it failed to change the residuals in the model; and (iii) that McClave should have used a "coefficient of variation" to determine which correction to apply. For the following reasons, the first assertion should be permitted. The latter two assertions appear to exceed the bounds of Rule 702, however, and should be struck.

First, Kaplan notes that McClave's model would not have shown an overcharge if he had applied a correction different from WLS. Kaplan Decl. ¶¶ 68-69. The plaintiffs' only objection to this argument is that, while technically true, it ignores the reasons why McClave chose to apply WLS—specifically, his conclusion that the pattern in residuals was traceable to differences between low weights and high weights. Kaplan Mem. 7. But Kaplan does not ignore the reason why McClave chose to apply WLS; he disputes it. Kaplan, now bolstered by Dr. Michael Moore, contends that due to a lack of testing, "McClave does not actually know the source of the [variability] and thus cannot conclude without further testing that WLS is the preferred method to adopt." Kaplan Opp. 14 (citing Moore Decl. ¶¶ 44, 48). Given McClave's testimony that the residuals become random once WLS is applied, it appears to the court that McClave was most likely correct in his decision to apply WLS based on the variability attributable to chargeable weights, but this is not a basis for excluding Kaplan's testimony under Rule 702. Kaplan advances a perfectly plausible argument that there are some grounds to doubt the use of WLS in this case, and that, but for the application of WLS, McClave's model would not show an overcharge. The factfinder is entitled to know that alternatives to WLS exist and to decide whether WLS was properly applied. Accordingly, this debate goes to the weight of Kaplan's testimony, not to its admissibility, and should be permitted at trial. *See Clarke v. LR Sys.*, 219 F. Supp. 2d at 333 ("Disputes about . . . faults in an expert's decision to use a particular methodology . . . 'go to the weight, not the admissibility, of his testimony.' ") (quoting *McCullock v. H.B. Fuller Co.*, 61 F.3d 1038, 1044 (2d Cir. 1995)).

Next, Kaplan asserts that the regression had the same pattern of residuals with or without WLS, and that McClave purportedly admitted as much during his deposition. Kaplan Decl. ¶ 65 (citing McClave Dep. Tr. at 420-24). But McClave has consistently testified to the contrary, noting that when WLS is applied, the residuals go from being a pattern to being random. *See, e.g.,* McClave Reply Decl. 26-35. The purported admission to which Kaplan refers only occurred when McClave

was presented with the defendants' own residual plots indicating that the residuals remained equally random regardless of whether WLS or not was applied. There, McClave skeptically conceded that the residuals shown in both plots looked identical, but insisted that this had to be the result of some error. *See* McClave Dep. Tr. at 420-424. Sure enough, upon *post hoc* examination, McClave found that Kaplan made a "simple, but devastating, miscalculation" in the plot they presented him with during his deposition, since Kaplan failed to "multiply the [WLS] results by the square root of the weighting factor." Kaplan Mem. 6. "When the square roots are included," McClave found, "the residuals for the weighted-least-squares regression become random." *Id.* at 7.

The defendants do not dispute this calculation error; instead, they seek to obfuscate it by presenting another set of charts that purport to challenge McClave's use of WLS. *See* Kaplan Opp. 14, n.11 (citing Kaplan Reply Decl. ¶ 49, n.114). Because Kaplan's testimony regarding the similarity between uncorrected and corrected residuals appears to have been premised on a miscalculation, it should be excluded under Rule 702. *See Raskin v. Wyatt Co.,* 125 F.3d 55, 67 (2d Cir. 1997) (affirming exclusion of expert report "premised on an elementary statistical error").

Finally, Kaplan has stated that McClave should have used a statistical test called the "coefficient of variation" to determine whether applying WLS was proper. Kaplan Decl. ¶ 67. The plaintiffs contend that this is an "invented test" that is "not recognized in the econometric literature as used for this purpose." Kaplan Mem. 7. It appears to the court that they are correct. The burden is of course on the proponent to show by a preponderance of the evidence that their testimony meets Rule 702's requirements. *See, e.g., Humphrey,* 556 F. Supp. 2d at 174; *Williams,* 506 F.3d at 160; *Daubert,* 509 U.S. at 593, n.10. Yet Kaplan does not contend that his chosen technique has been tested, that it has been published and subject to peer review, that it has a known error rate, that it is generally accepted in the econometric community, or that there is any other basis for believing it to be a reliable method for doing what he suggests it does. *See Williams*, 506 F.3d at 160

(quoting *Daubert*, 509 U.S. at 593-94). The short explanation offered by Dr. Moore, the defendants' new expert, is insufficient to establish admissibility by the preponderance standard. *See* Kaplan Opp. 15, n.11. (citing Moore Decl. ¶ 55). As Dr. Moore testifies,

> certain variables will, by the nature of their underlying distributions, have heteroskedasticity 'built in.' Prices have this property. In particular, prices can often be described by a 'lognormal' distribution. The variance of a lognormal variable will be proportional to the square of its mean. This is what Dr. McClave's price plots show: the variance of price is higher at higher price levels. This is how the heteroskedasticity is 'built into' the price variable. Most researches transform prices to natural logarithms, as Dr. McClave has done, to remove this heteroskedasticity, and then test for remaining problems using the residuals from the log price regression. The coefficient of variation is a statistic that, by dividing by the mean squared of a lognormal variable, does not exhibit this proportionality. Thus, when examining dispersion in *prices* as a diagnostic for heteroskedasticity, a comparison of the coefficients of variation can reveal whether heteroskedasticity due to other factors exists. Since this is what Dr. McClave did, examination of coefficients of variation makes sense.

Moore Decl. ¶ 55. Whatever this technical argle bargle means, it is beyond the grasp of the court and likely many jurors as well. It may have even gone beyond the understanding of the defendants' counsel, who essentially parrot Moore's explanation verbatim in their brief. Kaplan Opp. 15, n.11. More importantly, it does not establish that the "coefficient of variation" is an established or otherwise reliable method for doing what Kaplan purports. In the absence of any reliable basis for crediting Kaplan's discussion of the coefficient of variation test, the court recommends that this testimony be struck under Rule 702. *See Wills v. Amerada Hess Corp.*, 379 F.3d 32, 49 (2d Cir. 2004) (striking testimony that does not meet any of the enumerated *Daubert* factors). Additionally, this testimony may be struck under Rule 403 because its "probative value is substantially outweighed by the danger of unfair prejudice, confusion of the issues, or misleading the jury, or by considerations of undue delay, waste of time, or needless presentation of cumulative evidence." Fed. R. Evid. 403.

2. Kaplan's Assertion That McClave Combined Two Regressions In Order To Misrepresent The Explanatory Power Of His Model

Kaplan notes that McClave used more than one regression model in his analyses, Kaplan Decl. ¶¶ 4.vi, 4.vii, 51, 54-58, a fact that no one seriously disputes, *see* McClave Decl. 6 ("I therefore estimated separate models for inbound and outbound airfreight services . . .. Both models include [the] relevant factors . . . .."); Rausser Decl. ¶ 10, n.8 ("Throughout this Declaration, I use the phrase 'Dr. McClave's regression model' to refer to both Dr. McClave's regression model for shipments into the United States (the 'inbound model') and Dr. McClave's regression model for shipments out of the United States ('the outbound model').)." Though the plaintiffs may disagree with the legal conclusions that the defendants' counsel draw from this fact, *see* Joint Opp. 48 ("McClave concedes that no single model common to all or virtually all class members can show classwide impact."), the plaintiffs offer no argument as to why this may be a basis for striking expert testimony. In any event, the question of "[w]hether those two runs involve two 'regressions' or 'two procedures' is a matter of semantics," Kaplan Opp. 16, and has no bearing on the actual issues in this case.

Instead, the important question here is whether Kaplan should be permitted to testify that one of these models was unreliable and that a more "reliable measure of the variability of the whole model (called an R-squared) may be based on only one of these procedures." Kaplan Mem. 8.

In addition to estimating separate regressions for inbound and outbound transactions, McClave used a two-step procedure to run these models, which is an apparently common practice in econometrics. Rausser Decl. ¶ 33. The first step involves running the model "with all of the explanatory variables—demand, cost, seasonality, country-carrier fixed effects—included" in order to estimate the model's coefficient values, their statistical significance, and the amount of variation in prices explained by them (the R-squared). *Id.* at ¶ 35; Kaplan Decl. ¶ 52. This step generates an R-squared value of .6667, suggesting that 67% of the variability in prices is accounted for by the variables in the model, a figure that is "satisfactory by professional standards." Rausser Decl. ¶ 34.

The second step involved eliminating many of the variables and "us[ing] the remaining variation in prices as the dependent variable in a regression on the residuals of the remaining explanatory variables," *id.* at ¶ 36, in order to "estimate standard errors based on the residuals from the first step with the clustering control," *id.* at ¶ 34. This second model, which does not include the vast majority of McClave's variables, generates an R-squared value of .25, meaning that it explains only 25% of the variation in prices.

Kaplan argues that this second model is a reliable estimation of the R-squared value because it includes a process called "demeaning" to account for the effects of carrier-country pairs. Citing accepted econometric literature, he argues that by adding over 1,000 dummy variables to account for these same effects in his first model, McClave may have artificially boosted his R-Squared value in order to misleadingly suggest that his regression has significant explanatory power. Kaplan Decl. ¶¶ 56-58 (" '[C]are must be taken in evaluating models containing dummy variables designed to capture structural shifts [here country and carrier pairs] or seasonal factors, since these dummies could play a major role in generating a high R[-squared], hiding the fact that the independent variables have little explanatory power.' ") (quoting Kennedy, A Guide To Econometrics 237 (Blackwell Publishing 6th Ed. 2008)); *id.* ("McClave has written that the value of R-Square 'increases as more and more variables are added to the model' and a researcher 'could force' the value to 'take a value very close to 1 even though the model contributes no information' to the prediction of the dependent value, here total price.") (citing McClave, Benson, & Sincich, Statistics For Business and Economics 637 (Prentice Hall 11th Ed. 2010)).

The plaintiffs and their latest expert, Dr. Gordon Rausser, respond with a compelling explanation as to why the 25% figure is far too conservative. *See* Rausser Decl. ¶ 36 ("This second regression had an R-squared (all regressions do) and this one reports an R-squared of 25%. However, this R-squared is correctly interpreted as the amount of residual variation in prices (after

the influence of the fixed-effects variables has been accounted for) that is explained only by the remaining explanatory variables. It is not, as Mr. Kaplan seems to interpret it, and it could not be an estimate of the amount of variation in prices that Dr. McClave's full model explains."). They do not, however, conclusively rebut the defendants' suggestion that adding over a thousand dummy variables in the first model may have artificially inflated the R-squared value. Accordingly, there is room for debate on this issue. And because the defendants must necessarily explain that the model operates in two steps in order to explain why one of the steps may be misleading, none of this testimony should be struck.

3. Kaplan's Remark Regarding "Spurious Correlation"

The plaintiffs seek to exclude Kaplan's testimony that McClave's models "may" exhibit a "spurious correlation" by indicating a relationship between the independent and dependent variables where none actually exists. Kaplan Mem. 9 (citing Kaplan Decl. ¶ 71). In his discussion of WLS, Kaplan cites accepted professional literature relied on by both parties to suggest that regressions using WLS *might* be prone to spurious correlation. Kaplan Decl. ¶ 71 (citing Gujarati & Porter, Basic Econometrics 395 (McGraw-Hill 5th Ed. 2009)). The plaintiffs argue that because Kaplan did not affirmatively identify any spurious correlation in McClave's models through empirical testing, this testimony should be excluded as unduly speculative. Kaplan Mem. 9 (citing Kaplan Tr. 83:19-23; *Donnelly v. Ford Motor Co.,* 80 F. Supp. 2d 45, 50 (E.D.N.Y. 1999) (excluding expert's testimony "offer[ing] conclusions without explaining the reasoning or methodology."). Exclusion on this basis might be appropriate if Kaplan had asserted that the model is in fact tainted by spurious correlation, but this is not what he has stated. Instead, he simply notes that there is some basis, including that found in the accepted professional literature, for doubting the reliability of WLS in general due to its perceived tendency to exhibit spurious correlation. That is an appropriate subject for expert testimony, and ought not be struck under Rules 702 or 403.

4. Kaplan's Omitted Variables

Similarly, the plaintiffs seek to exclude Kaplan's opinion that McClave omitted some variables from his model that may have also affected prices. Kaplan speculates that such additional factors might include countries' regulatory schemes, the type of product being shipped, the size, volume, and frequency of the shipment, each class member's negotiating ability, and competition from non-defendant carriers and other modes of transportation. Kaplan Decl. ¶¶ 19-20, 83, 85-86, 100-01, 107, 109-15. Again, the plaintiffs argue that Kaplan should not be permitted to speculate as to what might be possible, and must instead proffer empirical testing to support his claim. Kaplan Mem. 20. Yet the plaintiffs' single citation to the Florida district court is insufficient to convince the court that Rule 702 imposes such a burdensome requirement for all expert opinions. Kaplan Mem. 21 (citing *Eberli v. Cirrus Design Corp.*, 615 F. Supp. 2d 1357, 1365 (S.D. Fla. 2009) (excluding expert opinion that "merely lists potential causes instead of drawing any conclusions"). In this Circuit, most "contentions that the assumptions are unfounded 'go to the weight, not the admissibility, of the testimony,' " *Boucher,* 73 F.3d at 21 (quoting *Tyler v. Bethlehem Steel Corp.,* 958 F.2d 1176, 1188 (2d Cir.), *cert. denied,* 506 U.S. 826 (1992)), and "a district court has discretion . . . 'to determine whether the expert acted reasonably in making assumptions of fact upon which he would base his testimony,' " *id.* (quoting *Shatkin,* 727 F.2d at 208). Here, the plaintiffs concede that McClave's model does not perfectly account for all influences on price, *see, e.g.,* Pl. Reply Mem. 57 ("it would be very unlikely for any regression model to account for every possible factor"), so Kaplan's analysis of what these factors might be is clearly not so speculative. Kaplan's testimony is relevant and requires the exercise of specialized knowledge. The fact that it is unaccompanied by empirical support goes solely to its weight, and should not be struck under Rules 702 or 403.[10]

[10] In anticipation of the court's Rule 23 discussion, later in this opinion, the court notes that although Kaplan's testimony regarding potentially omitted factors is admissible, its significance on the question of class certification is not great. *Bazemore v. Friday*, 478 U.S. 385, 400 (1986) ("While the omission of variables from a regression may render the

5. Kaplan's Sub-Regressions

In order to test the reliability of McClave's conclusion of classwide impact, Kaplan ran an enormous amount of what may be called "sub-regressions" on the model, using only the data for specific subsets of the class (such as individual customers, weight classes, origin-destination ("OD") pairs, years, and carriers) to test whether the conspiracy had the same effect on each of these subsets as it did on the putative class as a whole. Taken together, Kaplan ran a total of 21,304 regressions in all. Kaplan Mem. 12 (citing Kaplan Tr. 210:2-12).

In one instance, Kaplan re-ran the model using data exclusively from the benchmark period, leading him to conclude that the model showed overcharges on some transactions during that period despite the fact that no conspiracy is alleged to have existed at that time. Kaplan Decl. ¶ 48. In another test, Kaplan ran the data for individual plaintiffs, concluding that four of the six named plaintiffs and 26 of 34 other putative class members for which he ran regressions showed no statistically significant net overcharge. *See* Kaplan Decl. ¶¶ 43-45. He similarly found that two-thirds of OD pairs had no statistically significant overcharge. *Id.* at ¶¶ 32-35.

Evidence of such a large volume of un-impacted class members, as well as the "false positives" found in the benchmark period sub-regression, would certainly tend to suggest that class certification is inappropriate, at least if Kaplan's models were purported to be accurate. But the defendants concede that, because the models pair globally-specified coefficients with specific or local subsets of data, these regressions are fundamentally mis-specified, Kaplan Opp. 11 (properly

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analysis less probative than it otherwise might be, it can hardly be said, absent some other infirmity, that an analysis which accounts for the major factors must be considered unacceptable.") (quotation marks omitted). Because McClave has accounted for the "major factors," any omitted factors identified by Kaplan will go to its weight on the merits, and will not preclude its use as common proof under Rule 23(a)(2) and (b)(3). McClave has also put forth some bases to believe that many of Kaplan's purportedly omitted factors are in fact accounted for in McClave's model, Kaplan Mem. 20-21 (citing McClave Reply Decl. § 10.1 at 69-70; Rausser Decl. ¶ 77-78), and that the explanatory variables in his models accounted for most of the price variability in the industry. McClave Reply Decl. §§ 10.0-10.4. These issues go solely to the merits, and would be inappropriate to resolve at this stage of litigation. *Amgen, Inc. v. Connecticut Retirement Plans and Trust Funds,* 133 S.Ct. 1184, 1194-95 (2013) ("Merits questions may be considered to the extent—but only to the extent—that they are relevant to determining whether the Rule 23 prerequisites for class certification are satisfied.").

specifying his regressions was "not his assignment"); Moore Decl. ¶¶ 30, 35 ("McClave's global variables do not work for proving impact at disaggregated levels"); *see also* Kaplan Mem. 9-10, and are not to be relied on as actual proof of whether or not class members were impacted, Kaplan Opp. 10 (citing Kaplan Decl. ¶ 32, n.72, Moore Decl. ¶¶ 27-28). Instead, the defendants simply contend that the very fact that these global coefficients fail to accurately estimate local effects *itself* suggests that McClave's global model overlooks impermissible intra-class variability. Kaplan Opp. 12.

Accordingly, the plaintiffs' first argument—that Kaplan ignored the scientific method by running subsets of data "with no economic rationale," instead of forming and testing a hypothesis, Kaplan Mem. 12-14—is without merit. Kaplan was testing McClave's own hypothesis using a finer lens in order to determine whether his results held true across the class. Kaplan Opp. 7-8. Nothing in Rule 702 precludes a respondent's expert from testing or critiquing the reliability of the movant's expert's work.

The true question is whether Kaplan observed reliable principles and methods to estimate these sub-regressions. As already discussed, the defendants and their experts admit that these sub-regressions cannot be relied upon to accurately estimate which class members were and were not impacted. Their testimony is therefore somewhat misleading, since it appears to suggest otherwise to all but the most careful reader. Absent any substantial probative value, this would be appropriate grounds for striking this confusing and prejudicial testimony under Rule 403.

But the defendants' experts convincingly argue that these sub-regressions do have *some* probative value. They contend that these sub-regressions test whether a regression uses data that has been inappropriately "pooled," Kaplan Decl. ¶ 36 (citing Pindyck & Rubenfeld, Econometric Models And Economic Forecasts 254 (2nd Ed. 1981)); *see also* Moore Decl. ¶ 25 (further citing academic authority), which are "scientifically acceptable," Moore Decl. ¶ 34, and a "standard statistical process" for detecting variability within the data, Kaplan Sur-Reply Decl. ¶ 14 (ECF No.

1912-1). As such, these sub-regressions provide a way for the defendants to illustrate their central argument that the plaintiffs' case-in-chief overlooks significant intra-class variation.

The plaintiffs respond that Kaplan should have instead tested the model the way McClave did, using "slightly smaller *random* samples of the data on which a regression model is run." Kaplan Mem. 9-10; McClave Reply Decl. 57-58 (citing Anthony C. Davison and David V. Hinkley, *Bootstrap Methods and Their Application*, at 293-301 (1997)) (emphasis in original). But the mere fact that the parties' experts disagree on the best way to test the model is no basis for excluding one expert's approach. *See In re Vitamin C Antitrust Litig.*, 2012 WL 6675117, at *8 (declining to "take sides in a dispute between experts about the intricacies of econometric modeling" where neither approach is "patently flawed or unreasonable").

Though the court is not persuaded that Kaplan's sub-regressions are particularly compelling (first, because they are fundamentally mis-specified, and second, because some degree of intra-class variability is permitted under both the antitrust laws and Rule 23),[11] it nonetheless finds that striking this testimony would be draconian. The plaintiffs may dispute this testimony using the ordinary tools of litigation, including "[v]igorous cross-examination, presentation of contrary evidence, and careful instruction on the burden of proof," *Daubert v. Merrell Dow Pharmaceuticals, Inc.*, 509 U.S. at 596, and need not resort to a gag order on Mr. Kaplan and the defendants' other experts.

[11] The court is aware that in other cases where the defendants' experts have testified, courts not only permitted but were actually swayed by their similar use of sub-regressions. *See* Oral Arg. Trans. 136:10-13. But those cases are easily distinguishable. In *In re Graphics Processing Units Antitrust Litig.*, the plaintiffs simply did not contest the accuracy of Dr. Burtis's sub-regressions. 253 F.R.D. 478, 495 (N.D. Cal. 2008). Similarly, although the plaintiffs in *In re Plastics Additives Antitrust Litig.*, attacked the reliability of some of Mr. Kaplan's sub-regressions, the ones they did not attack were found by the court to be sufficient to demonstrate the absence of antitrust impact on a number of class members. No. 03-CV-2038, 2010 WL 3431837, at *17 (E.D. Pa. Aug. 31, 2010). Here, the defendants and their experts have unequivocally admitted that this is not what their sub-regressions show, Kaplan Opp. 10 (citing Kaplan Decl. ¶ 32, n.72, Moore Decl. ¶¶ 27-28), so the probative value of this testimony is substantially diminished. Put another way, the defendants concede that their experts' sub-regressions do not actually demonstrate that one or more class members did *not* suffer antitrust impact. Rather, they offer the sub-regressions merely in an effort to demonstrate that McClave's regressions are not a reliable method of proving that all class members *did* suffer antitrust impact.

6. Kaplan's Critiques of McClave's Robustness Tests

McClave "used two different data views in order to test the robustness of the methodology." McClave Decl. 9. In addition to running the model using each individual transaction, he also ran the regression using the weighted monthly average price for "each carrier/country of origin/weight category combination." *Id.* at 10. "This approach," he contends, "has the advantage of moderating the effects of anomalous transaction data that are certain to occur in a database of this size." *Id.* Additionally, McClave estimated the models using both the full data set and average monthly prices before and after trimming outliers in the data, a "widely accepted statistical methodology." *Id.*

Invoking a familiar refrain, Kaplan asserts that "[t]he monthly results generated by McClave are based on averaging a significant amount of different price information across individual customers and collapsing these observations into a single number." Kaplan Decl. ¶ 81. And while Kaplan does not dispute that data trimming is an accepted methodology, he asserts that the methodology was applied arbitrarily by McClave, who he says did not take appropriate steps to explain outliers and trimmed some prices perceived as outliers while leaving similar prices in. Kaplan Decl. ¶ 78.

In their *Daubert* motion, the plaintiffs contend that Kaplan's criticism of McClave's use of monthly averages "had no economic or econometric rationale." Kaplan Mem. 10. They assert that McClave's "robustness test was specifically designed to test whether the results were similar if the variability in the underlying transaction data was reduced by using monthly average prices, . . . and the results showed little difference. . .." *Id.* "It is not valid econometrics or even common sense," the plaintiffs conclude, "to argue that data is being 'obscured' when the purpose of the standard sensitivity check is to determine whether there is a difference in results when using monthly average prices compared to individual transaction prices, and the difference turns out not to exist." *Id.*

The plaintiffs are not critiquing the professional rigor of Kaplan's analysis, but rather the relevance of his conclusion about what McClave's monthly average test does and does not show. These are no grounds for exclusion under *Daubert*. *See Clarke v. LR Sys.*, 219 F. Supp. 2d at 333 ("[T]he court's inquiry under *Daubert* focuses not on the substance of the expert's conclusions, but on the principles and methodology used to generate the conclusions."). McClave and Kaplan are not debating whether or not the monthly model view is an acceptable robustness test for McClave's global model and its conclusion of a classwide overcharge. Rather, they are debating how probative it is on the issue of impact. That is a merits debate that the factfinder should be allowed to hear. Accordingly, this testimony should not be struck under Rule 702.

As for McClave's use of trimmed data, Kaplan does not dispute that this is an accepted econometric methodology. Instead, he argues that McClave failed to adequately determine whether there was an explanation for the outliers before deciding to trim them. Kaplan Decl. ¶¶ 76-79. Additionally, he accuses McClave of arbitrarily trimming some perceived outliers, while keeping comparable prices in the data. *Id.* at ¶ 78.

First, Kaplan asserts that outliers should only be trimmed after making "a concerted effort to find the cause of the outliers." Kaplan Decl. ¶ 76 (quoting McClave, Benson, & Sincich, Statistics For Business and Economics 83 (Prentice Hall 11th Ed. 2010)). The plaintiffs assert that this opinion represents Kaplan's "unilateral" belief and has "no econometric support." Pl. Mem. 11. But Kaplan cites three authorities that appear to support his opinion, including one relied on by McClave and another authored by him. Kaplan Decl. ¶ 76 (citing Belsley, Kuh and Welsh, Regression Diagnostics: Identifying Influential Data and Sources of Collinearity, John Wiley and Sons, Inc. 1998, at 15-16; Kennedy, A Guide To Econometrics, Sixth Edition, Blackwell Publishing, 2008, at 347; McClave, Benson & Sincich, at 83). It therefore appears that Kaplan's opinion is not so baseless as to merit exclusion under Rule 702.

Second, Kaplan argues that McClave trimmed outliers in an arbitrary manner, removing some data points while retaining others that appear comparable. The plaintiffs respond that McClave had a valid basis for trimming some prices while retaining other, apparently comparable prices: "the eliminated transactions were in higher weight classes than transactions with similar prices that were retained." Kaplan Mem. 11. Because these higher weight classes were more influential on the regression than similar prices in lower weight classes, the plaintiffs believe it was reasonable for McClave to trim the former and not the latter. While this may be so, the mere fact that the plaintiffs have a response to Kaplan's critique is no reason for precluding his testimony altogether. Accordingly, Kaplan's testimony regarding McClave's robustness tests should not be struck.

7. Kaplan's Use of Country-Specific Variables

Another of Kaplan's robustness tests involved adding additional variables for specific origin and destination countries. The plaintiffs assert that this approach is "statistically suspect." Kaplan Mem. 14. Because McClave's model already contained a similar variable, they contend, Kaplan's additional variables introduced a certain amount of redundancy, or in technical parlance, "multicollinearity," which might compromise the model's accuracy. *Id.* at 14-15 (citing *Sobel v. Yeshiva Univ.*, 839 F.2d 18, 35 (2d Cir. 1988) (In disparate treatment case, variables added to a regression "must be shown not to be multicollinear with those variables already included"). However, this is no basis for exclusion under *Daubert,* as the Second Circuit case relied on by the plaintiffs' expressly notes. *See Sobel*, 839 F.2d at 36 ("The failure, by either side, to include a relevant variable (or the inclusion of an irrelevant or multicollinear variable) will go to the probative value of the analysis, not its admissibility."). The fact that Kaplan's model may be tainted by multicollinearity goes purely to its weight, and is not a reason to strike it. The jury is entitled to hear both sides' arguments on the issue and decide whom to credit and to what degree.

8. Kaplan's Calculations of Singapore Air's and Air New Zealand's Surcharges in 2002 and 2003

Kaplan argues that McClave's overcharge estimates cannot be reliable because they estimate overcharges that would exceed the total fuel and security surcharges levied by Singapore Air and Air New Zealand for 2002 and 2003. Kaplan Decl. ¶ 49. The plaintiffs assert that these statements should be struck because the data Kaplan relied on to calculate Singapore Air's surcharges was "spotty," Kaplan Mem. 15 (citing Arenson Dec. Ex. 5), and because Air New Zealand included surcharges in the base rates on its shipments out of New Zealand, *id.* at 16 (citing Arenson Dec. Exs. 6, 7). Accordingly, the plaintiffs contend that this argument should be excluded because "Kaplan's analysis was not based on the facts of this case." *Id.* (citing *MTX Communs. Corp. v. LDDS/WorldCom, Inc.*, 132 F. Supp. 2d 289, 292 (S.D.N.Y. 2001). But the plaintiffs are wrong. The questions presented—whether there is sufficient data to calculate Singapore Air's surcharges and whether Air New Zealand subsumed surcharges in its base rates—go precisely to the facts of this case, and ought to be determined based on record evidence by the factfinder. Accordingly, discussion of these questions should not be excluded under Rules 702 or 403.

9. Kaplan's Analysis of McClave's Cost Variable

As discussed, McClave's model includes a number of variables to account for normal influences on price other than a price-fixing conspiracy. One of these variables represents the defendants' fluctuating overhead costs, including fuel, labor, maintenance, and airport-related fees. McClave Decl. 6-7. In his initial declaration, Kaplan offers several critiques of McClave's cost variable. He asserts (1) that it draws from an insufficient data pool for only three carriers, when in fact costs vary throughout the industry; (2) that his cost variable fails to take into account the weight of each shipment; and (3) that it was improper for McClave to include a quadratic (or squared) term in addition to a linear (or normal) term. Kaplan Decl. ¶¶ 87-91. Keeping in mind that disputes about variables in regression models generally "will go to the probative value of the analysis, not its,

admissibility," *Sobel*, 839 F.2d at 36, the court finds that the plaintiffs have offered no grounds for this testimony to be struck.

First, the plaintiffs take issue with Kaplan's suggestion that the cost variable is compromised by its failure to draw from a wider pool of data. Kaplan Mem. 16 (citing Kaplan Decl. ¶¶ 88-89). Specifically, McClave excluded data from carriers who commingle their cost data for cargo services with similar data for passenger services "[i]n order to isolate the variable costs associated with airfreight services." McClave Decl. 7. This left him with data from only three carriers, which he used as a proxy for the industry as a whole. Kaplan Decl. ¶ 88. Kaplan asserts that it was improper for McClave to extrapolate this data to the defendants as a whole because "carriers 'differed in their use and efficacy of fuel hedging, their fuel consumption, and their fuel efficiency," and because carriers' " '[s]ecurity costs varied depending on the type of product shipped, its size, and the locales serviced, as well as by the actions taken by each carrier.' " *Id.* (quoting Tollison Decl. ¶ 51).

The plaintiffs' response is that it was impossible for McClave to utilize a wider dataset because the "defendants who operated both passenger and cargo operations together and used passenger planes to transport cargo in their bellies reported that costs were either not allocated to cargo operations or were arbitrarily allocated between passenger and cargo operations." Kaplan Mem. 16 (citing McClave Decl. 7, n.12). "In no event could such joint data be used to construct a cost index for cargo operations," they argue. *Id.* Accordingly, they assert that Kaplan's critique is "wholly inconsistent with the facts of this case." *Id.*

The defendants do not appear to address this issue in their reply brief. Nonetheless, it appears obvious to the court that even if McClave had a valid reason for using such a small set of data, Kaplan should still be permitted to note the ways in which such a limited pool might compromise the variable's reliability. Accordingly, this testimony should also not be struck.

Second, the plaintiffs contest Kaplan's allegation that McClave's cost variable failed to account for weight. Kaplan argues that because "fuel, for example, is consumed based not only on the distance the plane traveled but also on the weight of the cargo," McClave was wrong to calculate a cost index based solely on "dollar costs divided by air hours travelled." Kaplan Decl. ¶ 67. The plaintiffs respond that "[w]eight is already accounted for in Dr. McClave's model through weight category variables and weighting the regression by chargeable weight," the plaintiffs argue. Kaplan Mem. 18. "Therefore, to include weight in the cost variable may lead to endogeneity, an inability of the regression to determine if movements in price are explained by changes in weight or vice versa, causing spurious correlation." *Id.* Again, although the defendants do not appear to address this argument in their response briefs, the plaintiffs have cited no basis for believing that this disagreement between experts goes to anything other than the weight of the evidence. Accordingly, it should not be struck.

Finally, the plaintiffs seek to exclude Kaplan's testimony that McClave improperly included two terms for his cost variables—one "linear" term, and one "quadratic" term. According to Kaplan, McClave initially specified his model using only a linear term for his cost variable, meaning that costs and prices rose together at a fixed rate. Kaplan Decl. ¶ 91 (citing McClave Dep. Tr. at 180-182). Upon further testing, however, McClave found it appropriate to include a second, quadratic (or squared) term to account for what he understood to be an exponential relationship between costs and prices. He found that this quadratic cost term was "strongly correlated with price, and it proved to be a statistically significant and important variable in both the inbound and outbound models." McClave Decl. 7. In fact, the model exhibited a "confidence level" of 99%. *Id.* at 10, n.21. Because the quadratic variable was found to be so significant, McClave concluded that the "defendants' profitability increased as their variable costs increased during the class period. Since fuel represents a significant portion of variable cost, this increase in elasticity, and resulting

increase in profitability, is attributable to the allegedly collusive increases in fuel surcharges." *Id.* at 10. Kaplan asserts, however, that the inclusion of this second term did not substantially improve the explanatory power of McClave's model, but did effectively double his overcharge estimates. Kaplan Decl. ¶¶ 91-92.

The plaintiffs contend that Kaplan engaged in "improper data mining" by ignoring McClave's reasons for including a quadratic term and suggesting that a straight-line cost term would be more appropriate. Kaplan Mem. 17. Again, however, the plaintiffs provide no basis for the extreme remedy of striking Kaplan's testimony. Kaplan should be permitted to investigate McClave's rationale for applying a quadratic term in his cost variable, and McClave should seek to justify his decision to the factfinder, rather than having it assumed. *See* Kaplan Opp. 22 (citing Moore Decl. ¶ 87). Accordingly, the court should not strike Kaplan's testimony concerning McClave's cost variable.

10. Kaplan's Critiques of McClave's Demand and Excess Capacity Variables

McClave included variables in his model to account for consumer demand and for excess capacity on outbound flights. McClave Decl. 7-8. Kaplan argues that these factors were improperly based on 12-month moving averages that conceal variation within the data. Kaplan Decl. ¶¶ 100-101, 103-105. The plaintiffs respond that this was exactly the point of using moving averages—to control for "seasonal and other short-term effects." McClave Decl. 7. McClave's decision to use 12-month moving averages appears to be a reasonable approach for such a large data pool. Nonetheless, the court finds no grounds to strike Kaplan's discussion of this approach's shortcomings.

11. Kaplan's Analysis of Price Variability

In his testimony, Kaplan notes that base rates for air cargo shipments vary according to the type of product shipped. Kaplan Decl. ¶¶ 27-28, 85. The plaintiffs do not dispute this. *See*

McClave Decl. 9; McClave Dep. Tr. at 212-213 and 215; Rausser Decl. ¶¶ 27, 91. Instead, they seek to strike Kaplan's testimony regarding price variability on the grounds that it is irrelevant to the question of whether the plaintiffs have proposed a reliable multiple regression model for demonstrating classwide impact at the class certification stage. Kaplan Mem. 22; McClave Reply Decl. 76.

The court disagrees. First, even if this testimony was irrelevant to the instant class certification motion, it does not follow that it will be so for the entire remaining case. In any event, the testimony certainly is relevant to the class certification motion since it goes directly to the reliability of McClave's model. The plaintiffs' expert concedes that variable pricing creates additional hurdles in constructing a multiple regression model, and asserts that these hurdles have been appropriately identified and addressed. Rausser Decl. at ¶ 92-3. It is of course relevant and appropriate for Kaplan to raise the concern of variable pricing, and it will be the plaintiff's burden to assure the factfinder that the model is either able to account for that issue or is not substantially affected by it. The defendants are entitled to argue that underlying pricing variability makes it difficult to determine what "but for" prices might have been, and the plaintiffs are entitled to provide reasons why this should not preclude a finding of common impact. Accordingly, the court should not strike this testimony under Rules 702 or 403.

C. The Plaintiffs' Motion to Exclude Dr. Burtis' Testimony

Dr. Michelle Burtis, an expert economist, was retained by the defendant Polar to address "whether common proof can be used to demonstrate that members of the proposed class who purchased air freight shipping services from Polar suffered antitrust impact (or injury) from the alleged conspiracy, and whether damages from such claims to those proposed class members can be proven in a common or formulaic manner." Burtis Decl. ¶ 4. She was also "asked to review and

opine on the expert reports filed on behalf of the Plaintiffs by Dr. Robert Tollison and Dr. James McClave, particularly insofar as the reports and opinions relate to Polar." *Id.*

The plaintiffs challenge several aspects of her testimony, including some aspects that are substantially similar to portions of Kaplan's testimony discussed above. Each of the plaintiffs' challenges is addressed in turn.

1. Burtis' Statements Regarding Omitted Variables

The plaintiffs seek to strike Burtis' testimony that McClave's model failed to account for local conditions that affect prices including individual negotiations. Burtis Mem. 5-6 (citing Burtis Tr. 118:11-120:3). The plaintiffs characterize Burtis' argument as a general objection to the use of reduced-form regression models in antitrust economics and litigation, and rightly note that such models are commonly accepted in these contexts, even where there is some degree of variation in actual prices. Burtis Mem. 5 (citing scholarly articles).

But as the defendant Polar convincingly explains, "Dr. Burtis critiques Dr. McClave's regression models, not because she rejects all regressions, but because Dr. McClave's models [allegedly] fail to address the central question at issue and lack[ ] crucial explanatory power." Burtis Opp. 2. Like Kaplan, the gravamen of Burtis' concern is that a reduced-form model impermissibly computes the rate of impact and degree of damages for Polar's shipments based on a global average, despite the defendant's own unique supply and demand factors. Burtis Decl. ¶¶ 92-98. Of course, while some intra-class variability is permissible, too much variation will make class certification inappropriate. *See, e.g.,* Section III.E.3, *infra.* Thus, this testimony is relevant, reliable, and should be permitted.

2. Burtis' Claim that McClave Presents Two Regressions Rather Than One

Dr. Burtis briefly argues that the results of McClave's global model are "not coming from any one regression," and that McClave fails to report the lower R-squared value generated by one of

those regressions in isolation. Burtis' Decl. p.73, n.165. The court has already recommended permitting an identical argument put forth by Mr. Kaplan and justified on similar grounds. *See* Section II.B.2, *supra*; *cf.* Burtis Opp. 13. For the same reasons, the Dr. Burtis' testimony on this issue should not be struck.

3. Burtis' Sub-Regressions for Individual Customers and Origin-Destination Pairs

Dr. Burtis contends that when sub-regressions of McClave's models are run using the data for individual class members' Polar shipments on specific origin-destination pairs, roughly half of these sub-regressions do not show an overcharge. Burtis Decl. ¶ 99. The court has already recommended permitting substantially similar testimony put forth by Mr. Kaplan and justified on similar grounds. *See* Section II.B.5, *supra*; *cf.* Burtis' Decl. 73, n.165; Burtis Opp. 13-15. For the same reasons, the court recommends permitting Dr. Burtis' testimony on this issue.

4. Whether Burtis' Sub-Regressions Use "All the Data"

Dr. Burton states in her initial declaration that she used "all of the transaction data used by Dr. McClave" in her sub-regressions for individual Polar customers on particular routes, and found that including this data did not change her results. Burtis Decl. 66, n.155. She specifically notes that she "performed the test in this way to address Dr. McClave's contention that unless 'all' of the data is used, the model and its results are not valid or not comparable to his model and his results." *Id.* (citing McClave Dep. Tr. 66-68, 308-309). In their *Daubert* motion, the plaintiffs contend that this claim is based on a "mathematical trick": "Dr. Burtis creates an indicator variable equal to ***one*** for all Polar transactions for [a specific customer's shipments on an origin-destination pair], and equal to ***zero*** for all other transactions." Burtis Mem. 9 (emphasis in original); *see also* Burtis Reply Mem. 4-5. When each transaction is multiplied by that variable, 99% of the data is effectively discarded.

The defendants do not appear to address this concern in their *Daubert* reply. If the plaintiffs have accurately characterized Dr. Burtis' methodology, it does seem highly misleading to suggest

that Dr. Burtis' models used "all the data" in any meaningful sense. Because it has no probative value and carries the potential to confuse or mislead the jury, her testimony to this effect should be struck under Rule 403. *United States v. Quattrone,* 441 F.3d 153, 186 (2d Cir. 2006) (Under Rule 403, evidence is unfairly prejudicial "when it tends to have some adverse effect upon a defendant beyond tending to prove the fact or issue that justified its admission into evidence.") (quoting *United States v. Figueroa,* 618 F.2d 934, 943 (2d Cir. 1980)).

5. Burtis' Assertion that McClave Omitted Variables

> Dr. Burtis contends that McClave's models might overlook a range of variables, including
>
> the September 11, 2001 terrorist attacks, competition from other modes of transporting goods (such as ocean shipping), changes in competition from non-Defendant suppliers (including entry and exit of competitors from particular origin-destination pairs), the availability of space on a given flight, the type of product being shipped, the negotiating ability of particular customers, the varying relationships between the proposed class members and Defendants, and the impact of the so-called 'Great Recession' during the benchmark period.

Burtis Decl. ¶ 103, *see also* ¶ 18 (listing other factors). The plaintiffs contend that Burtis failed to affirmatively test whether these factors influenced price, and that her testimony is therefore unduly speculative. Burtis Mem. 11-12. Additionally, they contend that many of these factors are actually accounted for in McClave's model by proxy. *Id.* Finally, they note that all regressions inevitably have some variables unaccounted for. *Id.* at 13.

The court has already recommended permitting a similar argument put forth by Mr. Kaplan and justified on similar grounds. *See* Section II.B.4, *supra*; *cf.* Burtis Opp. 15-16. For the same reasons, the court recommends permitting Dr. Burtis' testimony on this issue.

6. Burtis' Analysis of McClave's Cost Variable

As previously discussed, Dr. McClave included two terms in his model to account for the effect on price attributable to fluctuations in the defendants' overhead costs. McClave Decl. 10. One of these terms was linear, the other quadratic (or squared). *Id.* McClave says that the high

statistical significance of including the second, quadratic term demonstrates that prices rose exponentially as costs rose. In other words, the "defendants' profitability increased as their variable costs increased during the class period." *Id.* He concludes that "[s]ince fuel represents a significant portion of variable cost, this increase in elasticity, and resulting increase in profitability, is attributable to the allegedly collusive increases in fuel surcharges." *Id.*

It appears that, like Kaplan, Burtis disagrees with McClave's decision to include the quadratic cost term in his equation. Burtis Opp. 16 (citing Burtis Reply Decl. ¶ 41, n.54). According to the defendants, this is why, in her initial declaration, she omitted the quadratic term when doing her own analysis of the relationship between costs and prices, an omission she did not disclose at the time. Instead, Burtis simply asserted that "Dr. McClave's model assumes that when the cost variable increases by one percent, inbound rates fall by 10.37 percent, all else equal." Burtis Decl. ¶ 94.[12] Presumably, if Burtis had included the quadratic term in addition to the linear one, she would have reached a different result.

Accordingly, the plaintiffs contend that one "cannot hold 'all else equal' by changing only the linear cost term," since "the squared cost term must change as well." Burtis Mem. 14. Burtis appears to concede this point. At her deposition, she agreed that if one was being faithful to McClave's model, "holding everything else constant you would have to . . . include some formula that included both [a linear and quadratic cost term], unless you were for some reason interested in only one." Burtis Tr. 151:16-152:5, Salzman Decl., Ex. 5 (ECF No. 1839-2). The plaintiffs therefore ask the court to strike "Dr. Burtis's concededly flawed opinion about the cost variable." Burtis Mem. 14.

[12] She then compares this expected result to one of her sub-regressions in which, according to her calculations, rates *increased* by 22 percent when the cost variable increased by one percent. Burtis Decl. ¶ 94. To Burtis, this discrepancy illustrates how McClave's global coefficients may be wildly un-predictive of actual prices. *Id.*

The court has already recommended that debate over whether McClave was correct to include a second, quadratic cost variable be permitted. *See* Section II.B.9, *supra*. Of course, the defendants' experts should therefore be permitted to explain how the inclusion of this second cost term might have improperly altered his results. In doing so, however, Burtis should not be permitted to misrepresent the work of her rival. The court agrees that Burtis' statement misleadingly suggests that McClave's own calculations lead to a certain result, when in fact only Burtis' independent calculations omitting his quadratic term do so. She has offered, in effect, an "apples to oranges comparison" *Boucher*, 73 F.d at 21 (citing *Shatkin*, 727 F.d at 208), where "there is simply too great an analytical gap between the data and the opinion proffered," *Nimely,* 414 F.3d at 396. Such misleading testimony should not be permitted. If Burtis plans to further testify about what McClave's models do and do not show, she should be required to note where she deviated from McClave's own methods in analyzing the cost variable, and not to misrepresent her analysis concerning the effect of changes in the cost variable in McClave's model.[13]

7. Burtis' Scatter Plots of Prices

Dr. Burtis's initial declaration presents three scatter plots of prices that demonstrate how all-in pricing varied. Burtis Decl. 43 at Fig. 5; *id.* Exs. 12, 13. From these scatter plots, Burtis concludes that "any determination of impact . . . must involve analyzing individualized factors including the product shipped, the weight of the particular shipment, the availability of space on a flight, and the negotiations between Polar and the customer." Burtis Decl. ¶ 68. The plaintiffs argue that random variation in base rates is ubiquitous to most industries and does not preclude class certification. Burtis Mem. 14. Accordingly, they assert that Burtis' conclusion is a "*non sequitur* and is irrelevant" to the question of common impact. *Id.*

[13] In particular, Burtis should not be permitted to offer the opinion that "Dr. McClave's model assumes that when the cost variable increases by one percent, inbound rates fall by 10.37 percent, all else equal." Burtis Decl. ¶ 94.

The court has already recommended permitting substantially similar testimony put forth by Mr. Kaplan and justified on similar grounds. *See* Section II.B.11, *supra*; *cf.* Burtis' Decl. ¶ 67-68.; Burtis Opp. 13-15. For the same reasons, the court recommends permitting Dr. Burtis' testimony on this issue.

8. Burtis' Charts of Prices Around a Purported Surcharge Announcement

Dr. Burtis presents two charts in her initial declaration which tend to demonstrate that in some cases, Polar customers paid all-in rates immediately after surcharges were announced that were comparable to or even less than the rates they paid prior to the surcharge's announcement. The plaintiffs contend that this testimony should be struck as unreliable. First, they note that Rule 23 does not require the plaintiffs to prove that every transaction was subject to an overcharge. Burtis Mem. 15. Second, they note that her charts fail to control for other influences on price, as McClave's model does. *Id.* While these may both be true, neither are grounds for striking her testimony on this issue. Burtis' testimony is both relevant and based on reliable principles and methods. The question of its weight is for the factfinder.

D. Plaintiff's Motion to Exclude the Testimony of Dr. Warren-Boulton

Dr. Warren-Boulton, an expert economist, was retained by the defendant Nippon to "examine whether the plaintiffs' experts, Dr. Tollison and Dr. McClave, have provided a method for establishing that the claims of 'all or virtually all' members of the class can be established by evidence common to the class." Warren-Boulton Decl. ¶ 3. He concludes that they have not, and that "a determination of actual impact or damages, if any, will require proof at the individual customer level taking into account numerous factors specific to each air cargo sale transaction." *Id.* The plaintiffs challenge several aspects of his testimony, which again include some aspects that are substantially similar to portions of Kaplan's and Dr. Burtis' testimony discussed above. Each of the plaintiffs' challenges is addressed in turn.

1. Warren-Boulton's Discussion of the Relevant Market

In keeping with the testimony of Mr. Kaplan and Dr. Burtis, the basic thrust of Dr. Warren-Boulton's testimony is that the putative class is too large and varied to prove each class members' claim using common evidence. It is "axiomatic that the relevant market for antitrust purposes is the set of transactions over which competition occurs," he contends, and "common sense, economic theory, and application of the Merger Guidelines of the DOJ/FTC confirm [that] the relevant markets here are origin-destination ('OD') pairs because supply and demand conditions specific to each OD pair determine prices." Warren-Boulton Decl. ¶ 10. Because there are not "essentially identical supply and demand conditions across OD pairs," Warren-Boulton concludes that the plaintiffs' experts' global market analyses were inappropriate.

In essence, the plaintiffs seek to strike this entire testimony because it overlooks and contradicts the plaintiffs' own evidence of a global market. Warren-Boulton Mem. 4-17. While that evidence may be substantial, *see id.*, there is also relevant evidence suggesting that using OD pairs as the relevant market is preferable, *see* Warren-Boulton Decl. ¶¶ 10-12; Warren-Boulton Opp. 8-9.

Relevant markets may be defined by reliance at least in part "on qualitative evidence," *Park West Radiology v. CareCore Nat. LLC,* 675 F. Supp. 2d 314, 327 (S.D.N.Y. 2009), and the determination of a relevant market requires a "pragmatic, factual approach" and "not a formal, legalistic one," *Brown Shoe Co. v. United States*, 370 U.S. 294, 337 (1962). In light of this, the court agrees that "[a]t the end of the day, Plaintiffs have merely demonstrated a disagreement among experts." Warren-Boulton Opp. 2; *see also In re Vitamin C,* 2012 WL 6675117, at *20 (qualified expert testimony that "require[s] the use of professional judgment" generally admissible because "challenges may ultimately be viewed as matters in which reasonable experts may differ"); *Falise,* 258 F. Supp. 2d at 67 ("Creating statistical models . . . depend upon judgment and art as well as the reasoned manipulation of numbers."). Here, the definition of a relevant market is a subjective and

largely pragmatic determination, and the plaintiffs offer no basis for precluding the defendants from citing competing facts supporting their own position at trial. Accordingly, Warren-Boulton's testimony on this subject should be permitted and left to the factfinder to decide. *Amorgianos*, 303 F.3d at 267 ("[O]ur adversary system provides the necessary tools [e.g. "[v]igorous cross-examination, presentation of contrary evidence, and careful instruction on the burden of proof"] for challenging reliable, albeit debatable, expert testimony.") (quoting *Daubert v. Merrell Dow Pharmaceuticals, Inc.*, 509 U.S. at 596). The plaintiffs' motion to exclude Warren-Boulton's testimony on the relevant market and market power should be denied in its entirety.

2. Warren-Boulton's Sub-Regressions

Like Mr. Kaplan and Dr. Burtis, Dr. Warren-Boulton conducts sub-regressions using McClave's model and his globally-specified coefficients, in this case using only the transaction data for Nippon on specific OD pairs. The plaintiffs seek to exclude this testimony on the grounds that Warren-Boutlon assumes that OD pairs are the relevant market, because his models are poorly specified and use mismatched variables, because the addition of OD pairs potentially creates multicollinearity, and because Warren-Boulton ignored evidence that surcharges were included in base rates. Similar arguments were raised in the plaintiff's other *Daubert* motions. As the court has already explained, concerns about the relevant market, multicollinearity, the inclusion of surcharges in the base rates, and the probative value of sub-regressions are merits issues that do not render Warren-Boulton's testimony inadmissible. *See, respectively,* Sections II.D.1, II.B.7, II.B.8, II.B.5, *supra.*

E. Conclusion Regarding the *Daubert* Motions

In light of the foregoing, the court recommends striking the following sections of the expert's testimony as inadmissible under Rule 403 and/or Rule 702:

- Mr. Kaplan's assertion that McClave's model reveals the same pattern of residuals whether or not WLS is applied.

- ❖ Mr. Kaplan's assertion that McClave should have used a "coefficient of variation" test to determine whether applying WLS was proper.
- ❖ Dr. Burtis' claim that by including dummy variables for each customer, her sub-regressions use "all of the data."
- ❖ Dr. Burtis' testimony regarding the results of Dr. McClave's cost variable that misleadingly omits his quadratic cost variable.

Recognizing the "balance that is struck by the Rules of Evidence" between the court's "gatekeeping" obligation and the "liberal thrust" of Rule 702, *Daubert,* 509 U.S. at 579, 597, the court considers striking these limited sections of the defendants' experts' testimony, while retaining the vast majority of it, as an affirmation of that balance.

III. The Class Certification Motion—Analysis

Having addressed the plaintiffs' *Daubert* motions, the court now turns to the main event. Rule 23 presents two sets of considerations when addressing the question of class certification. First, the plaintiffs must first demonstrate conformity with Rule 23(a)'s four prerequisites of numerosity ("the class is so numerous that joinder of all members is impracticable"), commonality ("there are questions of law or fact common to the class"), typicality (the representative parties' claims or defenses "are typical . . . of the class"), and adequacy (the representative plaintiffs "will fairly and adequately protect the interests of the class"). *Amchem Products, Inc. v. Windsor,* 521 U.S. 591, 613 (1997); Fed. R. Civ. P. 23(a). Second, the plaintiffs must also satisfy Rule 23(b)(3)'s questions of predominance ("questions of law or fact common to class members predominate over any questions affecting only individual members") and superiority ("class action is superior to other available methods for fairly and efficiently adjudicating the controversy"). Fed. R. Civ. P. 23(b)(3). For the reasons to follow, the court finds that the plaintiff has met each of these requirements.

Class certification will allow hundreds of thousands of claims to be resolved adequately, efficiently, and fairly, and should be granted accordingly.

The Supreme Court has emphasized that the class action is "an exception to the usual rule that litigation is conducted by and on behalf of the individual named parties only." *Caliano v. Yamasaki,* 442 U.S. 682, 700–01 (1979); *see also Comcast Corp. v. Behrend,* 133 S.Ct. 1426, 1432 (2013); *Wal–Mart Stores, Inc. v. Dukes,* 131 S.Ct. 2541, 2550 (2011). The plaintiff seeking class certification bears the burden of satisfying Rule 23's requirements by a preponderance of the evidence. *See Myers v. Hertz Corp.*, 624 F.3d 537, 547 (2d Cir. 2010); *Brown v. Kelly,* 609 F.3d 467, 476 (2d Cir. 2010); *In re Initial Public Offerings Securities Litig.,* 471 F.3d 24, 37 (2d. Cir. 2006) ("*In re IPO*"), *decision clarified on other grounds on denial of reh'g,* 483 F.3d 70 (2d Cir. 2007).

"In determining the propriety of a class action, the question is not whether the plaintiff or plaintiffs . . . will prevail on the merits, but rather whether the requirements of Rule 23 are met." *Eisen v. Carlisle and Jacquelin,* 417 U.S. 156, 178 (1974) (quoting *Miller v. Mackey Int'l*, 452 F.2d 424, 427 (5th Cir. 1971) (Wisdom, J.)). Courts in this circuit employ a "'liberal rather than restrictive construction' of Rule 23, 'adopt[ing] a standard of flexibility' in deciding whether to grant certification." *Reade-Alvarez v. Eltman, Eltman, & Cooper, P.C.,* 237 F.R.D. 26, 31 (E.D.N.Y. 2006) (quoting *Marisol A. v. Giuliani,* 126 F. 3d 372, 377 (2d Cir. 1997)). But Rule 23 presents plaintiffs with more than "a mere pleading standard. A party seeking class certification must affirmatively demonstrate his compliance with the Rule." *Dukes,* 131 S.Ct. at 2551. Courts, therefore, must conduct a "rigorous analysis" to ensure that a party seeking class certification has met this burden with respect to each requirement. *Id.* "Frequently that 'rigorous analysis' will entail some overlap with the merits of the plaintiff's underlying claim. That cannot be helped." *Id; see also Behrend*, 133 S.Ct. at 1432; *In re IPO,* 471 F.3d at 41.

Nonetheless, "Rule 23 grants courts no license to engage in free-ranging merits inquiries at the certification stage. Merits questions may be considered to the extent – but *only* to the extent – that they are relevant to determining whether the Rule 23 prerequisites for class certification are satisfied." *Amgen, Inc. v. Connecticut Retirement Plans and Trust Funds,* 133 S.Ct. 1184, 1194-95 (2013) (emphasis supplied). This is because the underlying purpose of our "rigorous analysis" is "not to adjudicate the case; rather, it is to select the method best suited to adjudication of the controversy fairly and efficiently." *Id; see also Amchen Prods, Inc. v. Windsor*, 521 U.S. 591, 623 (1997) (noting that the purpose of a Rule 23 inquiry is to ascertain "whether proposed classes are sufficiently cohesive to warrant adjudication by representation.").

A. Rule 23(a)(1): Numerosity

There is no dispute that the plaintiffs have satisfied Rule 23(a)(1)'s first prerequisite of numerosity. Under this requirement, the plaintiffs must demonstrate that their proposed "class is so numerous that joinder of all members is impracticable." Fed. R. Civ. P. 23(a)(1). In the Second Circuit, the numerosity requirement is presumptively satisfied when the putative class consists of at least 40 individuals. *Consol. Rail Corp. v. Town of Hyde Park,* 47 F.3d 473, 483 (2d Cir. 1995). Here, the putative class is comprised of at least tens of thousands of individuals and entities that purchased air freight services from the defendants during the class period. *See* Pl. Mem. 46 ("Defendants' transaction data includes tens of thousands of customers.") (citing McClave Decl. 3-4); *see also* McClave Reply 46, n.107 (noting that McClave's model included data for "[m]ore than 100,000 customers). Numerosity is therefore easily satisfied in this case.

B. Rule 23(a)(2): Commonality

The plaintiffs have also satisfied Rule 23(a)(2)'s "commonality" requirement by showing that "there are questions of law or fact common to the class." Fed. R. Civ. P. 23(a)(2). A question is "common to the class" if it is "capable of classwide resolution—which means that determinations of

its truth or falsity will resolve an issue that is central to the validity of each one of the claims in one stroke." *Dukes,* 131 S.Ct. at 2551; *see also Butto v. Collecto Inc.*, No. 10-CV-2906, 2013 WL 1285577, at *20 (E.D.N.Y. Mar. 29, 2013) (commonality satisfied where there is a "common nucleus of operative facts or an issue that affects all members of the class"). Such common questions must serve to establish that the plaintiffs "have suffered the same injury," *Dukes,* 131 S.Ct. at 2551, and are often present where there are legal or factual disputes pertaining to the defendants' "unitary course of conduct," since such questions tend to give rise to answers that are broadly applicable to the entire class. *Dodge v. County of Orange,* 208 F.R.D. 79, 88 (S.D.N.Y. 2002) (quoting *Marisol A.,* 126 F.3d at 377); *see also Dukes,* 131 S. Ct at 2551 ("What matters to class certification . . . is not the raising of common 'questions'—even in droves—but, rather the capacity of a classwide proceeding to generate common *answers* apt to drive the resolution of the litigation.") (emphasis in original) (citation and quotation marks omitted). By contrast, where disputes pertain to the conduct or circumstances of the plaintiffs, it is more likely that individualized inquiries will be required to resolve them.

Unlike the related inquiry into "predominance" posed by Rule 23(b)(3), commonality does not present plaintiffs with a particularly exacting standard. To satisfy commonality, "[e]ven a single [common] question will do." *Dukes*, 131 S.Ct. at 2556 (2011) (citation and quotation marks omitted); *see also Amchem,* 521 U.S. at 609 (1997) (noting that "Rule 23(a)(3)'s 'commonality' requirement is subsumed under, or superseded by, the more stringent Rule 23(b)(3) requirement that questions common to the class 'predominate over' other questions").

Here, commonality is satisfied because several essential questions of law and fact are common to the class. As the plaintiffs correctly note, these questions include, but are not limited to, "[w]hether Defendants conspired to fix. . . prices," what "the effect of Defendants' alleged conspiracy [was] on the price of airfreight shipping services," "[w]hether the conspiracy caused

injury to the. . . Plaintiffs;" what constitutes an "appropriate measure of damages"; and most importantly, "[w]hether the alleged conspiracy violated antitrust laws." Pl. Mem. 47.[14]

The defendants argue that none of these are common questions because each presumes the existence of a global conspiracy, and does not account for regional and route-specific factors that would make such a conspiracy impracticable or impossible. Joint Opp 69. While the defendants raise important concerns about the allegations put forth by the plaintiffs, they do not conclusively rebuke them. To the contrary, their argument cogently illustrates that there are in fact important and fundamentally common questions about the existence, scope, and impact of the alleged global conspiracy, questions that are each well-suited to collective treatment in a class action. The plaintiffs have put forth compelling evidence to believe that the defendants competed on a global basis, including Dr. Tollison's testimony about industry characteristics,[15] the defendants own internal communications,[16] and various government findings to this effect.[17]

The defendants are of course entitled to contest the plaintiff's allegations that there was a successful global conspiracy, but resolving these questions is a job reserved for the factfinder at the merits stage of this litigation. For the purposes of the instant motion, the court is satisfied that the plaintiffs have met the commonality requirement by demonstrating that a class action is likely to

[14] See Section III.E, *infra*, for a more in-depth discussion of the common questions this case presents.

[15] *See* Section III.E.2.b.iv, *infra*.

[16] *See, e.g.,* Coolidge Decl., Ex. 18 at 3rd page (internal Lufthansa e-mail detailing meeting of eight defendants and stressing the importance of allowing "no exceptions [to the fuel surcharge] in origin markets, . . . destination areas, . . . [or] forwarders and shippers. Allowing one exception will defeat the whole industrial movement."); *id.* Ex. 19 at 3rd page (letter from Y. Shimono, Nippon Cargo Airlines, to S. Sugimoto, All Nippon Airways, characterizing fuel surcharge implementation as an "industrywide action").

[17] *See, e.g.,* Coolidge Decl., Ex. 6 at 7th page (Australian Competition and Consumer Commission's judgment against British Airways, finding that "the most appropriate market for analyzing the conduct the subject of these proceedings is and has been at all material times a worldwide market for air cargo services, hereinafter referred to as the Air Cargo Market, and international air cargo carriers, including British Airways and Lufthansa, are, and at all material times have been, actual or potential competitors in the supply of international air cargo services in the Air Cargo Market"); Landau Decl., Ex. 224 at ¶ 15 (European Commission's finding that in the air cargo market "any indirect route is generally substitutable to any direct routes. The vast majority of the respondents to the market investigation agreed upon this approach."); *id.* Ex. 229 at ¶ 44 (Australian federal court's finding that "[a] customer would never accept the transport of his or her goods from Melbourne to Tokyo as a substitute for transporting them from Melbourne to Boston. But, if there were suppliers who would, given a sufficient price signal, devote their resources to the former in preference to the latter, those suppliers should be regarded as doing business in the same market").

"generate common *answers* apt to drive the resolution of the litigation," even if those answers are not favorable to the plaintiffs. *Dukes,* 131 S.Ct. at 2551 (emphasis in original).

C. Rule 23(a)(3): Typicality

The plaintiffs have also satisfied Rule 23(a)(3)'s "typicality" prerequisite by demonstrating that "the claims or defenses of the representative parties are typical of the claims or defenses of the class" they seek to represent. *Brown v. Kelly*, 609 F.3d 467, 475 (2d Cir. 2010) (citing Fed. R. Civ. P. 23(a)(3). The typicality requirement is satisfied when a representative plaintiff can show that "each class member's claim arises from the same course of events and each class member makes similar legal arguments to prove the defendant's liability." *In re Flag Telecom Holdings, Ltd. Sec. Litig.,* 574 F.3d 29, 35 (2d Cir. 2009) (quoting *Robidoux v. Celani*, 987 F.2d 931, 936 (2d Cir. 1993)). "The purpose of typicality is to ensure that class representatives have the incentive to prove all the elements of the cause of action which would be presented by the individual members of the class were they initiating individualized actions." *Floyd v. City of New York,* 283 F.R.D. 153, 175 (S.D.N.Y. 2012) (quotation marks and citation omitted); *see also In re NASDAQ Mkt.-Makers Antitrust Litig.,* 172 F.R.D. 119, 126 (S.D.N.Y. 1996). Accordingly, "typicality does not require that the representatives' claims be identical to those of the class members." *Keller v. AXA Equitable Life Ins. Co.,* No. 12 Civ. 4565, 2013 WL 6506259, at *6 (S.D.N.Y. Dec. 12, 2013) (quotation marks and citation omitted). "[F]actual differences in the amount of damages, date, size or manner of purchase, the type of purchaser . . . and other such concerns will not defeat class certification when plaintiffs allege that the same unlawful course of conduct affected all members of the proposed class." *In re Sumitomo Copper Litig.,* 182 F.R.D. 85, 92 (S.D.N.Y. 1998).

Here, the plaintiffs allege that the defendants engaged in a global conspiracy to fix prices, so it is nearly tautological that the class representatives will rely on the same factual and legal arguments to establish the defendants' liability. *See In re NASDAQ Mkt.-Makers Antitrust Litig.,* 169 F.R.D. 493,

511 (S.D.N.Y. 1996) ("In antitrust disputes, [s]ince the representative parties need prove a conspiracy, its effectuation, and damages therefrom—precisely what the absentees must prove to recover—the representative claims can hardly be considered atypical.") (quoting *In re Sugar Indus. Antitrust Litig.,* 73 F.R.D. 322, 336 (E.D. Pa. Oct. 21, 1976)). Because the representative plaintiffs will seek to prove that they were harmed by the same overall course of conduct and in the same way as the remainder of the class, their claims are by all appearances typical of the class.

The defendants argue that a finding of typicality is precluded, however, by the fact that each putative class member, including the representative plaintiffs, was capable of individually negotiating the base rate for their transactions. To the defendants, this means that the defendants' liability does not spring from the "same course of events," since putative class members were theoretically able to "negotiate[ ] away" the impact of the unlawful surcharges on each transaction by obtaining a corresponding reduction in the base rate. Joint Opp. 70. The defendants do not suggest that any particular subsets of the proposed class be excluded based on their higher propensity to have avoided damages through individual negotiations or by other factors. Instead, they contend that this determination requires looking to a variety of factors, such as the negotiating ability of the customer and the supply and demand characteristics for their specific routes.

However, these are precisely the type of "factual differences in the amount of damages, date, size or manner of purchase, the type of purchaser . . . and other such concerns [that] will not defeat class certification when plaintiffs allege that the same unlawful course of conduct affected all members of the proposed class." *Sumitomo Copper Litig.,* 182 F.R.D. at 92. Though the defendants cite two cases to argue that the potential for oral negotiations preclude a finding of typicality, *see* Joint Opp. 70, both cases are readily distinguishable. *Haynes v. Planet Automall, Inc.* involved allegations of consumer fraud under the Truth in Lending Act, 15 U.S.C. § 1601 *et seq.*, based on an auto dealer's failure to disclose hidden fees in its financing agreements. 276 F.R.D. 65, 69 (E.D.N.Y.

2011). The court found that the plaintiffs could not show typicality because, in the absence of any showing of a uniform approach with respect to the disclosures made to class members, the plaintiffs could not demonstrate that a given class member was the victim of a violation of the Act without exploring the specific contents of each class members' oral discussions with the defendant. *Id.*, 276 F.R.D. at 80. Here, by contrast, there is substantial proof of a uniform approach to surcharge pricing applied by agreement among the defendants. And in *Deiter v. Microsoft Corp.*, an antitrust case, typicality was lacking because the proposed class was effectively divided into two completely different sets of claims. 436 F.3d 461, 467-68 (4th Cir. 2006). One of the many differences between these sets was that some plaintiffs could negotiate rates, while others could not. In addition, the two groups had purchased different products, through different means, and under materially different contractual terms. *Id.* Thus, the Fourth Circuit found that "the variation in claims strikes at the heart of the respective causes of actions," and merited denial of class certification. Here, the entire class purchased essentially the same service and shared the opportunity to negotiate, so the representative plaintiffs will have to prove the same "course of events" and "make[ ] similar legal arguments" as the remaining class in order to prove the defendants' liability. *In re Flag Telecom Holdings, Ltd. Sec. Litig.,* 574 F.3d 29, 35 (2d Cir. 2009) (quoting *Robidoux v. Celani*, 987 F.2d 931, 936 (2d Cir. 1993)); *see also Floyd v City of New York,* 283 F.R.D. at 175; *In re NASDAQ Mkt.-Makers Antitrust Litig.,* 172 F.R.D. at 126. Here, the "heart of the cause of action" is the defendants' alleged fixing of surcharge prices, not any subsequent negotiations on base rates. Accordingly, typicality should not be denied on these grounds.

The defendants also contest typicality on another basis. They contend that the representative plaintiffs are atypical because most of them only purchased airfreight services on shipments out of, and not into, the U.S., and the only representative plaintiff who did purchase inbound shipments purchased these shipments from Europe exclusively. Joint Opp. 71. According

to the defendants, the fact that "no named plaintiff purchases shipments from Asia, Africa, Australia, or South America to the U.S." is "alone . . . fatal to class certification." *Id.* Why this is so, the defendants do not explain. I see nothing about these facts that renders the representative plaintiffs' claims atypical in nature from the claims asserted by putative class members who were allegedly overcharged on outbound shipments or inbound shipments from non-European countries. As best as the court can surmise, these trivial differences pertain to the "type of purchaser," *In re Sumitomo Copper Litig.,* 182 F.R.D. at 92, and should also be disregarded for class certification purposes.

Accordingly, the representative plaintiffs have satisfied their burden of demonstrating that their claims are typical of the entire class.

D. Rule 23(a)(4): Adequacy of Representation

The plaintiffs have also satisfied the fourth and final prerequisite under Rule 23(a), which requires that "the representative parties will fairly and adequately protect the interests of the class." Fed. R. Civ. P. 23(a)(4). The purpose of this requirement is to "uncover conflicts of interest between named parties and the class they seek to represent." *Amchem,* 521 U.S. at 625. "Determination of adequacy typically entails inquiry as to whether: 1) plaintiff's interests are antagonistic to the interest of other members of the class and 2) plaintiff's attorneys are qualified, experienced and able to conduct the litigation." *Cordes & Co. Fin. Servs., Inc. v. A.G. Edwards & Sons, Inc.,* 502 F.3d 91, 99 (2d Cir. 2007). Of course, some minor conflicts are likely to occur in any large class, but "[a] conflict or potential conflict alone will not . . . necessarily defeat class certification – the conflict must be *fundamental*." *Denny v. Deutsche Bank AG.*, 443 F.3d 253, 268 (2d Cir. 2008) (emphasis added). "[C]onflicts which are merely speculative . . . should be disregarded at the class certification stage." *In re Vitamin C Antitrust Litig.*, 279 F.R.D. 90, 102 (E.D.N.Y. 2011) (quotation marks and citations omitted).

Here, the representative plaintiffs contend that they will provide adequate representation to the class, first because they share the common goals of establishing defendants' liability and securing the maximum possible recovery, and second because, as the court has already noted on several occasions, the proposed class counsel is undoubtedly qualified to maintain this action. Pl. Mem. 49-50.

The defendants make two arguments against a finding that the named plaintiffs will provide adequate representation. First, they contend that the named plaintiffs will not sufficiently represent class members who procured shipments to and from the handful of countries that regulate air cargo surcharge prices. They contend that these putative class members will be disadvantaged by the representative plaintiffs' theory of a uniform, non-negotiable surcharge, since this case theory will potentially enable certain defendants to raise defenses under the *Keogh, Noerr-Pennington,* foreign sovereign compulsion, and international comity doctrines. Joint Opp. 71-72. Much is wanting with this line of defense. The defendants make no effort to explain how these defenses would apply, and instead expect the court to accept their position on faith. This is particularly problematic because the defendants do not indicate that any proposed class member has actually raised these objections, nor do they explain why such a class member could not simply opt out of the class, or alternatively, move to amend or decertify the class once this speculative conflict actually arises. Perhaps most troubling, the defendants assertion—that this subset of plaintiffs would be better-served by a theory that surcharges were negotiable—is completely at odds with the record, which uniformly supports a finding that the surcharges were non-negotiable, and does not explain how this subset would retain a viable antitrust claim after conceding that they were. In sum, the defendants' first argument is both too speculative, and does not go to the representative plaintiffs' adequacy, but rather to the possible existence of specific defenses against some plaintiffs' claims. This possibility does not mean that the representative plaintiffs are inadequate.

The defendants also argue that the representative plaintiffs will not adequately represent the class because some putative class members "have no incentive to maximize recovery." Joint Opp. 73. In a separate but related case, some putative class members settled claims made against them by assigning to the plaintiffs in that case an interest in their future recovery in this case. Joint Opp. 72-73; *see Precision Associates, Inc. v. Panalpina World Transp. (Holding) Ltd.*, No. 08-CV-42 (E.D.N.Y.). This reduced incentive to maximize recovery, the defendants argue, means that they will not be adequately represented by the representative plaintiffs.

This argument lacks common sense. Of the putative class members in this case who have assigned any of their recovery here in settlement of claims made against them in *Precision*, all but one assigned only a portion of their recovery here, and thus they still have an interest in maximizing recovery in this case. *See* Pl. Reply Mem. 65 (noting that these putative class members will either keep a fixed percentage of their recovery or will keep any recovery over a certain amount). As for the sole putative class member that has assigned the entirety of its interest in this case to the *Precision* plaintiffs, even this class member will not affirmatively *benefit* from the abandonment of the case, so its interest can in no way be considered "antagonistic" to that of the remaining class. *Cordes,* 502 F.3d at 104; *see also* Joint Opp. 73 ("[A] class cannot be certified when its members have opposing interests or when it consists of members who benefit from the same acts alleged to be harmful to other members of the class.") (quoting *Pickett v. Iowa Beef Processors*, 209 F.3d 1276, 1280 (11th Cir. 2000)). Even if there was a conflict here (and there is not), it would under no conceivable circumstances be so "fundamental" as to preclude certification of the entire class. *See Denny*, 443 F.3d at 268.

The only remaining issue, then, is whether the plaintiffs' proposed class counsel is "qualified, experienced and able to conduct the litigation." *Cordes,* 502 F.3d at 104. The defendants do not dispute that the interim co-lead counsel is qualified, nor could they. Each counselor brings to this

case ample experience in complex class action litigation, and they have consistently proven their competence and expertise throughout the life of this extended litigation. Accordingly, the "adequacy" requirement is met, and the plaintiffs have satisfied all four threshold requirements of Rule 23(a). The court now turns to its analysis under Rule 23(b).

E. Rule 23(b)(3): Predominance & Superiority

In addition to satisfying the four prerequisites of Rule 23(a), the plaintiffs must also demonstrate that the proposed class action satisfies one of the three requirements of Rule 23(b). *Cordes*, 502 F.3d at 104. The plaintiffs in this case seek certification under Rule 23(b)(3), which requires the court to find that "questions of law or fact common to class members predominate over any questions affecting only individual class members" ("predominance"), and that "a class action is superior to other available methods for fairly and efficiently adjudicating the controversy" ("superiority"). Fed. R. Civ. P. 23(b)(3). The central issue in this motion is whether the plaintiffs have satisfied the requirement of predominance.

Predominance differs from commonality under Rule 23(a)(2) in that it does not merely test whether there are *any* common questions, but rather, whether these common questions are so substantial as to make litigating the claims as a class action desirable. *Amchem,* 521 U.S. at 624 (predominance a "far more demanding" criterion than commonality). The predominance requirement therefore complements Rule 23(b)(3)'s other requirement of "superiority" by underscoring Rule 23's function as a case management device. *See* Fed. R. Civ. P. 23(b)(3)(D) (counseling courts to consider "the likely difficulties in managing a class action" to determine whether both requirements are met). Predominance is satisfied where a class action would not entail "a multitude of mini-trials" on individualized issues, *Kiobel v. Royal Dutch Petroleum Co.,* No. 02-CV-7618, 2004 WL 5719589, at *11 (S.D.N.Y. Mar. 31, 2004) (collecting cases), and would instead "achieve economies of time, effort and expense, and promote . . . uniformity of decision as to the

persons similarly situated, without sacrificing procedural fairness or bringing about other undesirable results," *Amchem*, 521 U.S. at 615. Thus, predominance does not simply require a mathematical accounting of whether common or individualized questions are more *numerous*. Instead, it "requires a qualitative assessment . . .; it is not bean counting." *Butler v. Sears, Roebuck and Co.*, 727 F.3d 796 801 (7th Cir. 2013) (Posner, J.), *cert. denied,* 134 S.Ct. 1277 (2014). And while "[c]onsidering whether questions of law or fact common to class members predominate begins, of course, with the elements of the underlying causes of action," *Erica P. John Fund, Inc. v. Halliburton Co.*, 131 S.Ct. 2179, 2184 (2011), Rule 23(b)(3) "does *not* require a plaintiff. . . to prove that each elemen[t] of [her] claim [is] susceptible to classwide proof," *Amgen*, 133 S.Ct. at 1196 (emphasis in original) (citation omitted). Instead, "[t]he predominance requirement is satisfied 'if resolution of some of the legal or factual questions that qualify each class member's case as a genuine controversy can be achieved through generalized proof, and if these particular issues are more *substantial* than the issues subject only to individualized proof.' " *In re U.S. Foodservice Inc. Pricing Litig.*, 729 F.3d 108, 118 (2d Cir. 2013) (quoting *Eli Lilly & Co.*, 620 F.3d 121, 131 (2d Cir. 2010)) (emphasis added). If the most substantial issues in controversy will be resolved by reliance primarily upon common proof, class certification will generally achieve the economies of litigation that Rule 23(b)(3) envisions. If not, the parties are better served by individualized trials.

With this standard in mind, the court now considers which elements of the plaintiffs' antitrust claim have been shown to be amenable to common proof. To establish a claim under the antitrust laws, the plaintiffs must prove "(1) a violation of antitrust law; (2) injury and causation; and (3) damages." *Cordes,* 502 F.3d at 104-05 (quoting *In re Visa Check/Master Money Antitrust Litig.*, 280 F.3d 124, 136-37 (2d Cir. 2001)).

1. Violation

By any reasonable accounting, the plaintiffs have produced substantial common evidence supporting their argument that the defendants conspired to violate the antitrust laws by fixing prices. Horizontal price-fixing is a *per se* violation of § 1 of the Sherman Antitrust Act. *See, e.g., Catalano, Inc. v. Target Sales, Inc.,* 446 U.S. 643, 647 (1980); *United States v. Socony-Vacuum Oil Co.,* 310 U.S. 150, 218 (1940). To prove a horizontal price-fixing scheme, a plaintiff must demonstrate "(1) the existence of an agreement, combination or conspiracy, (2) among actual competitors, (3) with the purpose or effect of 'raising, depressing, fixing, pegging, or stabilizing the price of a commodity,' (4) in interstate or foreign commerce." *In re Ethylene Propylene Diene Monomer (EPDM) Antitrust Litig.*, 681 F. Supp. 2d 141, 165-66 (D. Conn. 2009) ("*In re EPDM*") (quoting *In re Medical X–Ray Film Antitrust Litig.,* 946 F. Supp. 209, 215-16 (E.D.N.Y. 1996)); *see also Socony–Vacuum Oil Co.,* 310 U.S. at 223-24. Because "[t]he essence of any violation of § 1 is the illegal agreement itself," it is not necessary for a plaintiff to prove that "overt acts [were] performed in furtherance of it," *Summit Health, Ltd. v. Pinhas*, 500 U.S. 322, 330 (1991) (citing *United States v. Kissel,* 218 U.S. 601 (1910)); *see also, Socony–Vacuum Oil Co.,* 310 U.S. at 224, n.59 ("[C]onspiracies under the Sherman Act are not dependent on any overt act other than the act of conspiring."), nor is it necessary to prove that the conspiracy was actually successful in raising prices, *see id.* ("It is the contract, combination . . . or conspiracy, in restraint of trade or commerce which § 1 of the Act strikes down, whether the concerted activity be wholly nascent or abortive on the one hand, or successful on the other.") (quotation marks omitted). Instead, a "proper analysis focuses, not upon actual consequences, but rather upon the potential harm that would ensue if the conspiracy were successful." *Pinhas*, 500 U.S. at 330.

In determining whether a conspiracy existed, courts may look to both direct evidence, such as an express agreement, as well as circumstantial evidence, such as the defendants' parallel conduct and course of dealing. *See, e.g., In re EPDM,* 681 F. Supp. 2d at 166 ("To prove the existence of an

express, manifested agreement, the antitrust plaintiff should present 'direct or circumstantial evidence that reasonably tends to prove that the manufacturer and others had a conscious commitment to a common scheme designed to achieve an unlawful objective.' ") (quoting *Monsanto Co. v. Spray–Rite Serv. Corp.,* 465 U.S. 752, 764 (1984)); *Apex Oil Co. v. DiMauro,* 822 F.2d 246, 252 (2d Cir. 1987) ("[A]t a minimum," a jury must be able to conclude that "the conspirators had a unity of purpose or a common design and understanding, or a meeting of minds in an unlawful arrangement" (quotation omitted)); *United States v. Paramount Pictures*, 334 U.S. 131, 142 (1948); *Am. Tobacco Co. v. United States*, 328 U.S. 781, 800 (1946).

Finally, in the class action context, it is generally accepted that "allegations of the existence of a price-fixing conspiracy are susceptible to common proof and, if proven true, would satisfy the first element of . . . [an] antitrust cause of action." *Cordes,* 502 F.3d at 105; *also In re Am. Int'l Grp., Inc. Sec. Litig.*, 689 F.3d 229, 240 (2d Cir. 2012) (predominance a "test readily met in certain cases alleging consumer or securities fraud or violations of the antitrust laws") (quoting *Amchem,* 521 U.S. at 625).

Such is the case here. The plaintiffs have submitted a trove of direct and circumstantial evidence that strongly suggests the existence of an agreement among the defendants to fix prices. Through information obtained in discovery and through other investigative efforts, the plaintiffs have been able to effectively trace the entire life of the alleged conspiracy: its inception as a fuel surcharge under IATA Resolution 116ss; its industry-wide implementation, maintenance and adjustment under the guise of Lufthansa's "independent" index; the DOT's refusal to approve of the index on unfair competition grounds; the defendants' decision to ignore the DOT's decision and not only continue but expand the conspiracy to include a security surcharge; and ultimately, the conspiracy's unravelling amidst raids by the Department of Justice and other international

enforcement bodies, followed by subsequent plea agreements entered into by a number of the defendants.

The evidence establishing these events are undoubtedly common to the class. They include:

- Candid internal and intra-defendant email, minutes, memorandums, and voicemails in which the defendants coordinate implementation, adjustment, enforcement, cover-up and dismantling of the conspiracy. *See, e.g.,* Landau Decl., Exs. 21, 25-32, 38-40, 42, 44, 51-52, 58-75, 77-78, 81-110, 112, 115, 118-123, 129-33, 136-43, 146-48, 150-155, 157-60, 162-175, 177-218, 220-21; Landau Reply Decl., Exs. 222-23, 234-38, 241-44; 254, 276-79, 311-12.

- Similar communications in which the defendants' stress the importance of applying the surcharge unilaterally and without negotiations. Landau Decl., Exs. 9-13, 17-18, 43, 155; Landau Reply Decl., Exs. 222, 253-260, 264-65, 267, 269.

- Depositions of the defendants' executives. *See* Landau Decl., Exs. 4-8, 20, 79, 134, 144-45, 156, 161, 176; Landau Reply Decl., Exs. 226, 233, 266-67, 272-73.

- The Department of Transportation's decision to disapprove of Resolution 116ss on the grounds that it is anti-competitive. Landau Decl., Ex. 48.

- The IATA's own statements concerning the fuel index, including those imploring the defendants not to utilize it for fear of antitrust liability. *Id.*, Exs. 22-24, 50.

- The defendants' subsequent decision to pursue the conspiracy without the IATA's involvement. *Id.*, Ex. 37.

- Public surcharge price announcements that appear to demonstrate a high level of coordination between the defendants. Landau Decl., Exs. 33-36, 53-57, 124-128, 219; Landau Reply Decl., Exs. 239-40, 291.

- Dozens of domestic and international plea agreements, regulatory findings, and other enforcement decisions in which certain defendants admitted their role in an unlawful price-fixing conspiracy. Landau Decl., Exs. 1-3P, 46, 113-14; Landau Reply Decl., Exs. 229, 263, 288-90, 298-301, 304, 307-309, 313.

- The expert testimony of Dr. Robert Tollison, which convincingly explains how a successful conspiracy would be likely under the market conditions of the air freight industry, Tollison Decl. 8-22, and how the highly synchronized correlation between each defendant's surcharge rate announcements suggests collusion. *Id.* at 25-27.

All of this evidence is indisputably "common" because it focuses on the allegedly unlawful actions of the defendants, not the actions of individual plaintiffs. *In re Rail Freight Fuel Surcharge Antitrust Litig.*, 287 F.R.D. 1, 36 (D.D.C. 2012) ("[P]laintiffs' allegations of price fixing indisputably 'will focus

on the actions of the defendants, and, as such, proof for these issues will not vary among class members.' ") (quoting *In re Vitamins Antitrust Litig.,* 209 F.R.D. 251, 264 (D.D.C. 2002)), *vac'd on other grounds,* 725 F.3d 244 (D.C. Cir. 2013); *see Meijer, Inc. v. Warner Chilcott Holdings Co. III,* 246 F.R.D. 293, 308 (D.D.C. 2007) (alleged violation of the antitrust laws "relates solely to Defendants' conduct [so] proof for [this] issue will not vary among class members") (quotations omitted). In light of both the volume of this evidence and its substance, the plaintiffs' proof is also quite compelling.

Nonetheless, the defendants have a different view of the case, believing it to involve, at best, a collection of individual route-specific conspiracies. Joint Opp. 63-64. They cite some facts favorable to their position, such as the plaintiffs' use of regional organizations like the Board of Airline Representatives to shore up support for the conspiracy, as well as evidence of regional differences in supply and demand. *Id.* But the mere fact that the defendants have a different case theory should not deprive the plaintiffs of the opportunity to prove theirs. *See, e.g., In re TFT-LCD (Flat Panel) Antitrust Litig.*, 267 F.R.D. 583, 607 (N.D. Cal. 2010) ("[D]efendants may not recast plaintiffs' allegations, and plaintiffs have consistently alleged a single, overriding conspiracy spanning the entire class period."); *Vitamins*, 209 F.R.D. at 265 ("[The defendants] claim there were multiple conspiracies, if any existed at all. The defendants improperly recharacterize the plaintiffs' allegations. The plaintiffs have not alleged multiple conspiracies—they have alleged a single price fixing conspiracy . . .."). The plaintiffs have supplied compelling common evidence of a global conspiracy. Whether the plaintiffs' proof of such a conspiracy is more or less compelling than the defendants' alternative theory is a question of fact for the jury.

The defendants' more specific arguments are equally unpersuasive. First, they argue that the plaintiffs cannot ultimately prove a violation because they have not identified a central mechanism for monitoring and enforcing the conspiracy. *Id.* at 64-65. But nothing in our jurisprudence creates such a requirement. The history of Resolution 116ss and its aftermath, along with Dr. Tollison's

analysis of the airfreight market, provides a sufficiently plausible basis for the jury to believe that the conspiracy was generally effective, even without a specific enforcement mechanism.

Second, the defendants contest the sufficiency of the numerous plea agreements and other international enforcement actions in seven countries, in which the defendants have pled guilty to nearly identical conduct. *See* Landau Decl., Exs. 1-3P, 46, 113-14; Landau Reply Decl., Exs. 229, 263, 288-90, 298-301, 304, 307-309, 313. Because each individual action only pertained to misconduct involving a specific route, region and/or time period smaller than the six-year, global conspiracy alleged by the plaintiffs, the defendants contend that these pleas cannot be common proof for the class as a whole. Joint Opp. 65-66; Polar Opp. 12; Nippon Opp. 6. This position simply misunderstands how the criminal justice system works. As Judge Bates noted at Polar's sentencing hearing,

> I think it's fair to say that, in my assessment, this plea is not perfect. I do think that it, perhaps, didn't take fully into account how things would play out and the absence of any civil damages recovery against Polar . . . [F]rom a punishment perspective, something seems to be missing . . .. But that doesn't lead me ultimately to conclude that I should reject the agreed-upon sentence in the plea agreement. The civil plaintiffs are not constrained by the plea agreement itself or, indeed, by the charging document, the information in this case, from attempting to prove Polar's liability even beyond the temporal scope of the criminal case or from recovering from Polar's pre-2004 conduct from the other defendants through joint and several liability.

Sentencing Hearing Tr., *United States v. Polar Air Cargo LLC,* No. 10-CR-242, at 20:09-24 (D.D.C. Nov. 15, 2010) (Landau Reply Decl., Ex. 263).

Similarly, at Asiana's sentencing hearing, the Government noted that

> the conduct that you're considering today and the conduct that is being investigated by the Justice Department is part of a single global conspiracy to fix cargo prices. This is a conspiracy that is almost unprecedented in scope, scale and coordination from anything the Justice Department has ever seen or investigated. Evidence ties together conduct not only in the United States—what happened in the United States is not only isolated conduct or conduct involving small groups of carriers, but it ties directly and is coordinated with conduct that took place around the world in places

> like Frankfurt, Dubai, Tokyo, Hong Kong, and other places. It was a pervasive scheme, it was a systematic scheme and it was a common scheme.

Plea/Sentencing Tr., *United States v. Asiana Airlines,* No. 09-CR-099, at 37:03-16 (D.D.C. May 5, 2009) (Landau Reply Decl., Ex. 296). There, the government agreed that "because of the pending civil actions, restitution should not be ordered here." *Id.*, at 49:12-13.[18] As with any criminal case, the plea agreements, charges, and allocutions may not necessarily reflect the entire scope of possible misconduct, but rather only that for which the government was willing to accept a plea. Though the plea agreements and resulting pleas are not dispositive proof of a global conspiracy, their sheer number and scope – involving price-fixing on numerous routes in numerous regions throughout the world – certainly permit some inference of global misconduct.

Finally, the defendant Nippon argues that the defendants' price announcements, explaining changes to their surcharge rates, should not be considered common evidence of a violation because some price announcements did not apply to a handful of countries, and because they are not sufficiently correlated to one another to permit an inference of collusion. Nippon Opp. 7. The court remains unpersuaded. Once again, with such a large alleged conspiracy, it is flatly unreasonable to expect every piece of evidence to apply to every single transaction involving each defendant. Nippon is entitled to argue that there was no violation of the antitrust laws in certain transactions covered by the class period, but this is not enough to thwart the propriety of a class action for litigating these claims as a whole. Similarly, Nippon is entitled to argue that the price announcements were not sufficiently in lockstep to permit an inference of collusion, but that is a question to be answered by the factfinder. At this stage, Tollison's charts and testimony, as well as his rebuttal to the defendants' expert's critiques, provide sufficient assurances that the price

[18] Similarly, during Polar's sentencing hearing, Judge Bates noted that "because of joint and several liability under the Sherman Act . . . [the victims] potential recovery [in a civil action against Polar] is the same as it is . . . with respect to the other airlines. And it's the reason here, as in other cases, why at the outset the Government decided not to insist upon restitution and the parties, the Government and Polar, agreed to that as part of their plea agreement." Landau Reply Decl., Ex. 263.

announcements are sufficiently correlated to permit an inference of collusion. *See* Tollison Decl. ¶¶ 45-50; Tollison Reply Decl. ¶¶ 53-60**.**

In conclusion, the defendants have not rebutted the plaintiffs' showing of common proof of a violation. Instead, they have primarily offered alternative, individualized evidence of their own. This does not change the fact that the plaintiffs will rely primarily on powerful common evidence to show that the defendants violated the antitrust laws. Generally, the plaintiffs' successful showing of common evidence of a violation is a compelling reason to find that predominance is satisfied overall. *See In re Vitamin C Antitrust Litig.*, 279 F.R.D. at 109 (In price-fixing conspiracy cases, "courts have frequently held that the predominance requirement is satisfied because the existence and effect of the conspiracy are the prime issues in the case and are common across the class.") (citing cases); *In re NASDAQ Mkt.–Makers Antitrust Litig.,* 169 F.R.D. at 518 (collecting cases). In this case, however, the attendant issues of injury and damages present significant disputes that merit close consideration as well.

2. Injury

The next question is whether the plaintiffs have shown that classwide injury or "impact" can be proven using primarily common evidence. This requirement of the antitrust laws has been analogized to the "causation" requirement in tort. *See, e.g., Cordes*, 502 F.3d at 105. Like causation, proof of antitrust impact "poses two distinct questions." *Id.* at 106. The first is the "legal question whether any such injury is 'injury of the type the antitrust laws were intended to prevent and that flows from that which makes defendants' acts unlawful.' " *Id.* (quoting *Brunswick Corp. v. Pueblo Bowl-O-Mat, Inc.*, 429 U.S. 477, 489 (1977)). The other is the "factual question whether the plaintiff has indeed suffered harm, or 'injury-in-fact,' " as a result of the defendants' violation. *Id.* Here, both questions can be fairly and efficiently resolved with predominately common proof.

a. Legal Injury

The question of whether the plaintiffs have asserted an "injury of the type the antitrust laws were intended to prevent" is undoubtedly a common one. Plaintiffs in this case assert that they "'have alleged only one type of injury . . . namely that they paid supracompetitive prices . . . due to an illegal conspiracy to raise, maintain, and/or stabilize. . . prices.' " Pl. Mem. 53 (quoting *In re EPDM,* 256 F.R.D. at 88).

The Second Circuit has ruled directly on this issue, noting that where plaintiffs complain only of "overcharges paid to a horizontal price-fixing conspiracy," the legal question of whether such an injury is of the type the antitrust laws were intended to prevent is a common one. *Cordes*, 502 F.3d at 107 (citation and quotation marks omitted). The defendants also do not dispute that the legal question of injury is common to the class. Accordingly, this prong weighs, however slightly, in favor of a finding of predominance.

b. Injury-in-Fact

In addition to proving legal injury, the plaintiffs will also ultimately have to show that each class member was actually injured by the alleged conspiracy. The central dispute raised by the instant motion is whether the plaintiffs have shown that they can do so using common proof. Before entering the fray, it is appropriate for the court to clarify its role in adjudicating this dispute, particularly in light of the voluminous and contentious expert testimony that has been submitted on this issue.

i. The Predominance Standard in the Context of Expert Testimony

At the class certification stage, the plaintiffs need not definitively prove that each class member has suffered an injury-in-fact. Instead, they must only demonstrate that any such "impact is capable of proof at trial through evidence that is common to the class rather than individual to its members." *In re Hydrogen Peroxide Antitrust Litig.*, 552 F.3d 305, 311-12 (3d Cir. 2009). In other

words, the question is "whether the method by which plaintiffs propose to prove class-wide impact *could* prove such impact, not whether plaintiffs in fact *can* prove class-wide impact." *In re Magnetic Audiotape Antitrust Litig.,* No. 99-CV-1580, 2001 WL 619305, at *4 (S.D.N.Y. June 6, 2001) (emphasis added); *see also Amgen*, 133 S.Ct. at 1191 (The Court's inquiry is limited to a determination of whether "*questions* common to the class predominate [over questions pertaining to individual members], not that those questions will be answered, on the merits, in favor of the class.") (emphasis in original). Often, however, this inquiry will still require some overlap with the merits.[19] "This cannot be helped." *Dukes,* 131 S.Ct. at 2551 (2011).

The issue becomes more complicated in cases where, as here, the question of classwide impact is to be resolved largely by recourse to expert testimony. The purpose of expert testimony, of course, is to help the layperson factfinder understand complicated or technical issues by explaining them in plain, understandable language. Occasionally, however, expert testimony will have the opposite effect, such as when contested issues lead to "statistical dueling" between experts. *Caridad v. Metro-North Commuter R.R.,* 191 F.3d 283, 292 (2d. Cir. 1999).

Until recently, courts in this Circuit were generally content to find that if the plaintiffs' expert testimony was admissible under *Daubert*, the testimony was enough to meet the low "some showing" standard needed to meet Rule 23's requirements, while reserving any lingering factual disputes for the factfinder at the merits stage. *See Caridad*, 191 F.3d at 291 (2d. Cir. 1999); *Freeland v. AT&T Corp.*, 238 F.R.D. 130, 140 (S.D.N.Y. 2006) (citing *In re Visa Check*, 280 F.3d 124, 135 (2d Cir. 2001)). Under more recent case law, however, it is clear that courts must now hold expert

[19] Such is the case in many antitrust class actions where plaintiffs rely on expert testimony to establish a common method for proving the elements of injury and damages on a classwide basis. *See, e.g., Comcast v. Behrend*, 133 S.Ct. 1426 (2013); *Cordes*, 502 F.3d at 106-09; *In re IPO,* 471 F.3d at 41; *Caridad v. Metro-North Commuter R.R.,* 191 F.3d 283, 291-92 (2d. Cir. 1999); *In re Hydrogen Peroxide Antitrust Litig.*, 552 F.3d at 321-22); *Blades v. Monsanto Co.,* 400 F.3d 562, 570, 575 (8th Cir. 2005); *West v. Prudential Sec., Inc.*, 282 F.3d 935, 938 (7th Cir. 2002); *In re High-Tech Employee Antitrust Litig.*, 985 F. Supp. 2d 1167, 1205-16 (N.D. Cal. 2013); *In re Titanium Dioxide Antitrust Litig.*, 284 F.R.D. 328, 346-49 (D. Md. 2012); *In re Flash Memory Antitrust Litig.*, No. C 07-0086, 2010 WL 2332081, at *8-12 (N.D. Cal. June 9, 2010); *Reed v. Advocate Health Care*, 268 F.R.D. 573, 582-95 (N.D. Ill. 2009); *In re EPDM*, 256 F.R.D. 82, 91-102 (D. Conn. 2009).

testimony to a higher standard at the class certification stage. In *Dukes*, the Court confirmed that parties seeking class certification must "affirmatively demonstrate . . . compliance" with Rule 23's requirements. 131 S.Ct. at 2551. And in *In re IPO*, the Second Circuit held that courts must resolve factual disputes in order to make this determination. 471 F.3d at 41. Accordingly, courts may not categorically defer expert disputes to the merits, and must instead take a "hard look" at the probative value of expert testimony before relying on it to certify a class. *In re Rail Freight Fuel Surcharge Antitrust Litig.*, 725 F.3d 244, 255 (D.C. Cir. 2013).

To manage this often burdensome task, some courts in this Circuit and others have identified a distinction between challenges to an expert witness's *methodology*, which could defeat class certification, and their *results*, which should be reserved for the merits stage. *See, e.g., In re EPDM*, 256 F.R.D. at 100 (holding that at the class certification stage, plaintiffs need not show that their expert's model "actually works," so long as it is "workable"). Others courts have noted that while this distinction has some value, it may also allow courts to improperly dodge disputes that, although pertaining to the results of the expert's methodology, nonetheless bear on the plaintiffs' ability to satisfy Rule 23's requirements. Avoiding this dilemma simply by declaring it a merits issue may preclude a court from undertaking the "rigorous analysis" required by law. *See Reed v. Advocate Health Care*, 268 F.R.D. 573, 593 (N.D. Ill. 2009); *West v. Prudential Sec., Inc.*, 282 F.3d 935, 938 (7th Cir. 2002) ("A district judge may not duck hard questions by observing that each side has some support, or that considerations relevant to class certification also may affect the decision on the merits. Tough questions must be faced and squarely decided . . .."); *In re High-Tech Employee Antitrust Litig.*, 985 F. Supp. 2d 1167, 1184 (N.D. Cal. 2013) ("[W]hen there is a battle of the experts on class certification, 'rigorous analysis' requires district courts to determine not only admissibility of the experts' statements, but also the 'persuasiveness of the evidence presented.'") (quoting *Ellis v. Costco*

Wholesale Corp., 657 F.3d 970, 982 (9th Cir. 2011)); *see also In re Cathode Ray Tube Antitrust Litig.,* MDL No. 1917, 2013 WL 5428139, at *3 (N.D. Cal., June 20, 2013).

In summation, it appears that the task presented by a "battle of the experts" in the Rule 23(b)(3) context is one of determining whether the plaintiff's expert testimony is evidence that is (1) common to the class; (2) methodologically capable of addressing the question it seeks to answer; and (3) substantially probative of the issue, enough so that a reasonable factfinder could rely on it in part to resolve the case on the merits. The testimony need not be flawless or impenetrable—indeed, almost no testimony ever is—and the factfinder will ultimately weight the testimony accordingly. At the class certification stage, however, the expert testimony must simply provide a reliable basis upon which to determine that the putative class's claims are best served by class treatment. If this requires the Court to acquaint itself with complex and unfamiliar disciplines, so be it; otherwise, by what right could it expect a jury to do so?

Finally, expert testimony need not shoulder the plaintiffs' burden alone. Instead, this testimony should be viewed in conjunction with the plaintiff's other evidence. *In re Titanium Dioxide Antitrust Litig.*, 284 F.R.D. 328, 345-48 (D. Md. 2012) (Plaintiff's "plausible" expert testimony, taken together with evidence of simultaneous price increase announcements, structural industry analysis, and plaintiff's argument that increased price announcements bolstered defendants' bargaining position was enough to show common impact); *In re EPDM*, 256 F.R.D. at 90.

Of course, these specific considerations echo the general thrust of the predominance inquiry, which requires a "holistic" and "qualitative" analysis rather than the application of rigid categorical rules. *In re High-Tech Employee Antitrust Litig.*, 985 F. Supp. 2d at 1184; *Butler v. Sears, Roebuck and Co.*, 727 F.3d 796 (7th Cir. 2013) (noting that the predominance inquiry is not a matter of simply "counting noses" to "determin[e] whether there are more common issues or more individual issues, regardless of relative importance"), *cert. denied,* 134 S.Ct. 1277 (2014); *Amgen,* 133 S.Ct. at 1197 (Rule

23(b)(3) "does *not* require a plaintiff seeking class certification to prove that each element of her claim is susceptible to classwide proof," but rather that "*questions* common to the class predominate" overall.) (emphasis in original) (citations and quotation marks omitted); *Cordes*, 502 F.3d at 108 ("Even if the district court concludes that the issue of injury-in-fact presents individual questions, . . . it does not necessarily follow that they predominate over common ones and that class action treatment is therefore unwarranted."). With this standard in mind, the court turns to its analysis of the plaintiffs' common evidence of impact, beginning with the evidence in the record before scrutinizing the testimony of the plaintiffs' experts.

ii. Record Evidence of a Conspiracy

The plaintiffs in this case have submitted various items of evidence that they contend suffice as common proof of impact. Much of this evidence is the same as or similar to that upon which they rely to prove the defendants' violation. This evidence includes documents and testimony tending to establish that the defendants implemented parallel, non-negotiable fuel and security surcharge increases and that these defendants agreed not to pay commissions or other remuneration to customers with regard to these surcharges. Pl. Mem. 54-55. Armed with this evidence, the plaintiffs ask the factfinder to make what might seem to be an obvious inference: that if the defendants routinely included a supracompetitive surcharge in their invoices to the plaintiffs, the plaintiffs must have been impacted by paying this overcharge. Courts have previously certified antitrust classes based on exactly this kind of common evidence of impact. *See, e.g.*, *In re Ethylene Propylene Diene Monomer Antitrust Litig.*, 256 F.R.D. 82, 103 (D. Conn. 2009).

Here, however, the plaintiffs concede a series of points that greatly undermine the weight of this evidence as proof of impact. First, the plaintiffs concede that the proper inquiry in determining impact is not whether a plaintiff was overcharged on the fuel and security surcharges in isolation, but rather whether the plaintiff was overcharged on the total or "all-in" price of a given transaction.

See, e.g., Pl. Mem. 57-58 ("Dr. McClave's statistical analysis demonstrates that, after taking into account appropriate supply and demand factors and the varying characteristics of each transaction, prices (that is, rates and surcharges together) for all or virtually all class members were higher than they should have been . . .."); Pl. Reply 19 ("Plaintiffs' experts determined that it was appropriate to examine total prices, rather than surcharges alone, to analyze impact and damages. This was to account for any 'possible' reduction in base rates to 'attempt' to offset the surcharges—whether or not such offsets actually happened . . .."). Second, the plaintiffs concede that while the fuel and security surcharges were generally non-negotiable, the defendant's base rates often *were* negotiable. Pl. Reply 21 ("[T]he airlines could continue to compete on lower base rates, better service, or anything else, but they would not compete on the surcharges . . .."). Thus, it is entirely possible that in any given transaction, a customer could have escaped the impact of the defendants' conspiracy by negotiating down the base rate so far as to offset the unlawful overcharge on fuel and security surcharges. *See* Joint Opp. 27 (citing *Piggly Wiggly Clarksville, Inc. v. Interstate Brands Corp.,* 100 F.App'x. 296 (5th Cir. 2004)[20]; *Robinson v. Tex. Auto. Dealers Ass'n*, 387 F.3d 416, 424 (5th Cir. 2004); *Exhaust Unlimited, Inc. v. Cintas Corp.*, 223 F.R.D. 506, 513 (S.D. Ill. 2004); *In re Indus. Diamonds,* 167 F.R.D. at 384; *In re Flash Memory Antitrust Litig.*, No. C 07-0086, 2010 WL 2332081, at *8 (N.D.Cal. June 9, 2010)).[21]

[20] Notably, however, *Piggly Wiggly* is only a *damages* case, and does not actually support the proposition that impact can be completely offset by negotiations. To the contrary, the court found that "[a]lthough proof of antitrust *injury* can be shown by the common proof that each was in fact injured by the alleged conspiracy, the amount of *damages* resulting from that injury will require some degree of investigation into facts specific to each Plaintiff and potentially facts specific to each Plaintiff's numerous negotiations and transactions over the course of many years." 100 F.App'x. at 298 (quotation marks omitted).

[21] Because the plaintiffs do not advance the argument that the defendants have conferred injury on its customers merely by "fixing" the starting point for negotiations, the court does not consider this argument. However, the court does note that such an argument may have some basis under existing law. *See, e.g., In re EPDM,* 256 F.R.D. at 88-89 ("[I]t is possible for a plaintiff to suffer antitrust injury-in-fact and yet have no damages because it has taken steps to mitigate the actual price paid through rebates, discounts, and other non-price factors . . .. By expending resources to negotiate down from the supracompetitive prices established by the cartel, plaintiffs who have suffered no damages may still have suffered an injury-in-fact from the antitrust conspiracy. The fact that a plaintiff may have successfully employed bargaining power to fend off the *effect* of the conspiratorial practice does not mean that it has not been put in a worse position but-for the conspiracy." (emphasis in original)); *see also In re NASDAQ Market-Makers Antitrust Litig.*, 169 F.R.D.

The defendants contend that such offsetting did in fact occur, though they do not venture to estimate how frequently. *See, e.g.,* Landau Reply Decl., Ex. 226 – R. Lane Dep. Tr. 266:9-10 (Polar executive "couldn't put a percentage on it")). They also suggest that surcharges were waived on some transactions, but again, give no indication as to how many. This is not their burden, they correctly note. *See, e.g.,* Kaplan Opp. 11; Moore Decl. ¶ 35. Rather, it is the plaintiffs' burden to show that the conspiracy impacted "all or virtually all" class members, and was not rendered ineffective in many instances due to local and route-specific factors.[22] Because the plaintiffs cannot "eliminate the possibility" that some plaintiffs were not impacted by the defendants' alleged violation, the defendants believe that predominance has not been met. They are almost right.

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at 523 ("Neither a variety of prices nor negotiated prices is an impediment to class certification if it appears that plaintiffs may be able to prove at trial that . . . the price range was affected generally."); *id.* ("The proof necessary to demonstrate that the defendants conspired to maintain an inflated 'base' from which all pricing negotiations began and that this 'base' price was higher than the 'base' price which would have been established by competitive conditions would be common to all members of the class. . . Accordingly . . . the fact of damage is predominantly, if not exclusively, a common question." (quoting *Hedges Enterprise, Inc. v. Continental Group, Inc.*, 81 F.R.D. 461, 475 (E.D. Pa. 1979)); *In re Urethane Antitrust Litig.*, 251 F.R.D. 629, 638 (D. Kan. 2008) ("[E]vidence of a standardized pricing structure, which (in light of the alleged conspiracy) presumably establishes an artificially inflated baseline from which any individualized negotiations would proceed, provides generalized proof of class-wide impact."); *In re Industrial Diamonds Antitrust Litig.*, 167 F.R.D. 374, 383 (S.D.N.Y. 1996) ("The theory that underlies these decisions is, of course, that the negotiated transaction prices would have been lower if the starting point for negotiations had been list prices set in a competitive market. Hence, if a plaintiff proves that the alleged conspiracy resulted in artificially inflated list prices, a jury could reasonably conclude that each purchaser who negotiated an individual price suffered some injury."); *Fears v. Wilhelmina Model Agency, Inc.*, No. 02-CV-4911, 2003 WL 21659373, at *6 (S.D.N.Y. July 15, 2003).

[22] The court recognizes that the plaintiffs have the burden of demonstrating antitrust impact, and has analyzed the evidence to determine whether the plaintiffs have met that burden. Nevertheless, securities law jurisprudence suggests that a burden-shifting approach might be a fairer way to address that issue in a case such as this one where plaintiffs produce substantial evidence of price-fixing as to one of the components of price. Under such an approach, upon adequate proof of the existence of a conspiracy to fix a component of price, a presumption would arise that the conspiracy had the effect of raising the overall price of the product or service at issue. It would then fall to defendants to affirmatively demonstrate that their price-fixing did not produce that result. That approach mirrors the approach in so-called "fraud on the market" cases which was recently reaffirmed by the Supreme Court in *Halliburton Co. v. Erica P. John Fund, Inc.*, --- U.S. ---, 134 S. Ct. 2398, 2409-13 (2014). In such cases, once the plaintiffs establish that a defendant has made materially false misrepresentations concerning a stock traded in an efficient market, they need not show that the misrepresentations had an actual impact on price; rather it becomes the defendant's burden to show that they did not. *Id.* at 2413-14. Such burden-shifting in the securities context is grounded in the Supreme Court's appreciation of the substantial public interest served by ensuring effective private remedies for violations of the securities laws. *See Basic Inc. v. Levinson*, 485 U.S. 224, 245 (1988). There is, of course, a similar public interest in ensuring effective private remedies for antitrust plaintiffs. S*ee, e.g. Hawaii v. Standard Oil Co.,* 405 U.S. 251, 262 (1972) ("Every violation of the antitrust laws is a blow to the free-enterprise system envisaged by Congress."); *Zenith Radio Corp. v. Hazeltine Research, Inc.,* 395 U.S. 100, 130-31 (1969) ("The purpose of giving private parties treble-damage and injunctive remedies was not merely to provide private relief, but was to serve as well the high purpose of enforcing the antitrust laws.").

Nothing in our class certification jurisprudence requires that every single class member suffer an impact or damages, regardless of the size of the class. To the contrary, courts have routinely recognized what an unrealistic burden this would put on plaintiffs.

> [A] class will often include persons who have not been injured by the defendant's conduct; indeed this is almost inevitable because at the outset of the case many of the members of the class may be unknown, or if they are known still the facts bearing on their claims may be unknown. Such a possibility or indeed inevitability does not preclude class certification[.]

Kohen v. Pacific Inv. Mgmt. Co., 571 F.3d 672, 677 (7th Cir. 2009); *see also Mims v. Stewart Title Guar. Co.,* 590 F.3d 298, 308 (5th Cir. 2009) ("Class certification is not precluded simply because a class may include persons who have not been injured by the defendants' conduct."); *Messner v. Northshore Univ. HealthSystem,* 669 F.3d 802, 823 (7th Cir. 2012); *Walters v. Reno*, 145 F.3d 1032, 1047 (9th Cir. 1998); *In re Rail Freight*, 287 F.R.D. at 40 ("The 'inability to show injury as to a few does not defeat class certification where the plaintiffs can show widespread injury to the class.") (quoting *Meijer, Inc. v. Warner Chilcott Holdings Co. III,* 246 F.R.D. 293, 310 (D.D.C. Oct. 22, 2007). Instead, "[o]nly when it is apparent that 'a great many persons' have not been impacted should a court deny class certification. . . . There is no precise measure for 'a great many.' Such determinations are a matter of degree, and will turn on the facts as they appear from case to case." *Id.* (citations omitted)

Courts presiding over class actions are certainly capable of dealing with the fact that a class may have a few outliers that went undamaged. And where such outliers are so prevalent as to present intractable case management problems for an otherwise appropriate class, this problem "should be solved by refining the class definition rather than by flatly denying class certification on that basis." *Messner*, 669 F.3d at 825 (citing *Campbell v. First Am. Title Ins. Co.*, 269 F.R.D. 68, 73-74 (D. Me. 2010)); *see also Lewis v. First Am. Title Ins. Co.*, 265 F.R.D. 536, 551 (D. Idaho 2010); *Carson P. ex rel. Foreman v. Heineman*, 240 F.R.D. 456, 492 (D. Neb. 2007); *Flanagan v. Allstate Ins. Co.*, 228 F.R.D. 617, 618-19 (N.D. Ill. 2005). Accordingly, it is not fatal to the plaintiffs' motion that a few

putative class members may have managed to escape the effects of the defendants' alleged conspiracy, provided that these class members can legitimately be considered the exceptions that prove the rule.

However, evidence that merely suggests that a conspiracy was attempted does not meet that standard, since it gives no indication of whether those attempts actually resulted in higher total prices for at least one transaction per class member, or alternatively, whether the market corrected itself in many instances through waivers, base rate reductions, and other measures. With roughly 300,000 potential class members who purchased air cargo services during the class period, the task of proving with common evidence that all or virtually all of them suffered an overcharge is not a simple one. It is important to remember, however, that the plaintiffs do not have to show that each class member suffered an overcharge on each and every purchase they made. Rather, it is enough if they provide sufficient evidence to demonstrate that substantially all class members were overcharged at least once. Thus, even if many class members were able to avoid an overcharge on some, or even many, transactions through negotiations or because of other factors, they are still victims of the alleged price-fixing conspiracy and proper class members if they paid a supra-competitive price on a single transaction. The plaintiffs have met the burden of demonstrating that common evidence is capable of establishing that all or virtually all potential class members indeed suffered that fate.

As the court will now discuss, the plaintiffs have submitted significant record evidence suggesting that waivers, offsets, and the other corrective measures identified by the defendants did not commonly occur. *See* Section III.E.2.b.iii, *infra.* In addition, they submit the testimony of two experts. One expert explains why the structure of the airfreight market during the class period would have permitted a successful conspiracy and would not have led to self-correcting tendencies. *See* Section III.E.2.b.iv, *infra.* Finally, the plaintiffs' second expert, Dr. James T. McClave, offers a

multiple regression analysis in which he looked at total prices (thereby accounting for the possibility that overcharges were negotiated, hidden in the base rates, or otherwise masked) to determine the actual extent of impact and damages. *See* Section III.E.2.b.v, *infra.* None of this evidence conclusively establishes that "all or virtually all" of the class members were impacted, but it does not need to. It is enough that a reasonable juror could rely on the inferences permitted by this evidence to find common impact by a preponderance standard.

iii. Record Evidence that Waivers and Offsetting Were Uncommon

The defendants cite some anecdotal evidence to suggest that "[a]irlines charged no [fuel surcharges] in hundreds of thousands of transactions," that even where surcharges were levied, the rates varied across carriers, and that carriers would sometimes lower or offset surcharges by reducing the base rate "in an effort to retain or capture new business." Joint Opp. 17-20, 29; *see also* Kaplan Decl. ¶ 125.

The plaintiffs concede that these situations occurred, but argue that they did not occur with nearly the regularity that the defendants' suggest. They support their argument with a substantial amount of evidence. These include numerous e-mails between the defendants' executives making clear that, pursuant to an explicit policy, the surcharge was routinely applied without negotiations or offsets. *See, e.g.,* Landau Decl., Ex. 10 (Lufthansa executive noting that "[o]ne of the key success factors in recent years was to hold firmly to the policy to apply the respective surcharge level without any negotiation or discount. We all should be clear on this and not open up possible fields of discussion with our customers. . . . Surcharges should also not be used as a competitive edge over another company."); Landau Reply Decl., Ex. 264 (directive to Qantas managers that "at no time should you compensate [for fuel surcharge implementation] by reducing your market rate. This will not be accepted at all."); Landau Decl., Ex. 9 (Nippon executive informing customer that "we absolutely are not willing to negotiate these two surcharges" and providing reasons); *id.*, Ex. 43 (at

BAR-CSC meeting, Singapore president "urged member carriers not to quote or offer lower ad hoc rates to cargo agents after they have adopted a fuel surcharge policy"); *id.*, Ex. 155 (agreement amongst eight defendants to "introduce FSC with no exceptions in origin markets . . ., destination areas . . ., forwarders and shippers. Allowing one exception will defeat the whole industrial movement. This means, of course, no adjustments in net/net rates, either whole or partial"); Landau Reply Decl., Ex. 222 ("[B]ecause the fuel surcharge is an essential component for [Lufthansa], we cannot permit any exceptions to the worldwide rule.").

The plaintiffs also persuasively show that, while the defendants' transaction data does not always show itemized fuel and security surcharges on each transaction, this is largely explainable by the fact that defendants sometimes preferred to subsume the surcharge in the base rate or include it under a different name. *See, e.g.,* Landau Decl., Ex. 39 (Nippon executive advising that "[i]f [Nippon] cannot use the term 'Fuel Surcharge' [due to Japanese regulations], [Nippon] can express it just as [Japan Airlines] does—that is 'Price Adjustment for Higher Operating Cost due to fuel price increases.' "); Landau Reply Decl., Ex. 243 (Polar did the same when faced with regulatory hurdles); *id.*, Ex. 235 (same for Lufthansa); *id.*, Ex. 232 (Air China "does not apply any fuel surcharge separately on all export shipments ex USA, for reason of pricing simplicity. Nevertheless, the fuel cost surcharge is always taken into consideration in all of our selling rates."); *id.*, Ex. 239 (same for certain American Airlines shipments from Argentina, Paraguay and Uruguay); *id.*, Ex. 241 (same for some Air New Zealand shipments). Thus, the defendants' evidence of zero surcharges is not as persuasive as it might initially seem.

Additionally, the plaintiffs present evidence that it was not in fact common practice for customers to negotiate corresponding base reductions to offset the surcharges. *See, e.g.,* Landau Reply Decl., Ex. 267 – M. Osborne Dep. Tr. 226:22-25, 227:11-14 ("Q: 'Have you ever requested a decrease in the base rate to offset an increase in the surcharge level?' [Named plaintiff Benchmark's

executive]: 'No. No.' . . . Q: 'Have you ever tried to negotiate the surcharge amount with the carrier?' A: 'No.'). They also persuasively note that the defendants' own evidence of negotiations consist primarily of testimony that customers only *attempted* to negotiate rates. *See* Simmons Decl., Ex. 9. This testimony generally does not suggest that these attempts were successful, much less that they were tied or related in any way to the fuel and security surcharges. *See, e.g.,* Landau Reply Decl., Ex. 269 – E. Hernandez Dep. Tr. 131:9-20 (Polar executive "stress[ing] again that if coincidentally the fuel surcharge was 5 cents and the rebate was 5 cents, the connection between the two is irrelevant, because the fuel surcharge was applied on the airway bill on an accounting basis, but the underlying rate, which affected the overall rate, is what the rebate was based on. So if it coincidentally happened to be 5 cents, that was coincidence."). As such, the testimony of the parties' executives tends to suggest that negotiations did not have a substantial impact in offsetting impact and damages.

Certainly, the class will contain some variation in impact and damages. This, absent more, does not offend Rule 23. *See Kohen v. Pacific Inv. Mgmt. Co.*, 571 F.3d at 677 ("Such a possibility or indeed inevitability does not preclude class certification[.]"); *Mims v. Stewart Title Guar. Co.,* 590 F.3d at 308 (5th Cir. 2009) ("Class certification is not precluded simply because a class may include persons who have not been injured by the defendants' conduct."); *In re Rail Freight*, 287 F.R.D. at 40 ("The 'inability to show injury as to a few does not defeat class certification where the plaintiffs can show widespread injury to the class.") (quotation omitted); *Butler*, 727 F.3d at 801 (Posner, J.) ("It would drive a stake through the heart of the class action device . . . to require that every member of the class have identical damages."). Of course, to the extent that this problem can be avoided, it should be. Here, the evidence suggests that offsetting occurred more often for discrete subsets of the class rather than for random individual customers, so the solution is not to decline certification for the entire class, but to manage the class in a way that identifies and accounts for these variations,

such as by creating subclasses.[23] In any event, such minor variation is no basis for the substantial injustice that would result from denying class certification.

iv. Dr. Tollison's Market Structure Analysis

Next, the plaintiffs offer the testimony of their first expert, Dr. Robert Tollison. A qualified expert economist, Dr. Tollison analyzed the market structure of the airfreight industry to determine whether it provides any common evidence of classwide impact.[24] He concludes that the airfreight industry had all the relevant characteristics of an industry that could engage in a successful price-fixing conspiracy. Accordingly, this testimony supports the plaintiffs' other evidence by suggesting the defendants would have faced few pressures to waive or offset the illegal increment of the surcharge price. The defendants argue that Tollison's testimony is not relevant to the question of impact, and also that his analysis of each industry characteristic was unreliable. For the reasons to follow, none of these arguments are sufficient to preclude the court's reliance on Tollison's testimony for a finding of predominance.

The central question addressed by Dr. Tollison is a modest one. He merely asks whether the alleged conspiracy *could* have been successful, given the structure of the airfreight market. Tollison Decl. 3. According to classical economic theory, an efficient, self-correcting market will naturally thwart a business's attempts to charge supracompetitive prices, since the business will lose market share to competitors who charge less. When a cartel has enough market power, however, the market may become distorted, and the cartel may face strong incentives to compete unfairly since its customers would have no choice but to acquiesce to the cartel's artificially inflated prices. Based on

[23] For example, Polar cites some shipments of salmon from Chile for which surcharges were explicitly capped. Polar Opp. 9 (citing Lane Decl. ¶ 20 (ECF No. 1686)). By the same token, the defendants may seek to argue there were no overcharges on particular OD pairs, in certain regions, or in other discrete subsections of the total pool of transactions. This argument should be distinguished from the defendants' current argument, which appears to be that impact was random and cannot be determined by anything other than purely individual inquiries.

[24] Tollison also examines some actual evidence of the defendants' anti-competitive behavior. Tollison Decl. 23-29. Because that section of his testimony goes to the question of a violation rather than impact, it is not considered at this juncture.

his analysis of six industry characteristics, Tollison has concluded that such was the case for the airfreight industry.

For Tollison's conclusion to aid in satisfying the plaintiffs' predominance burden, his methodology must be theoretically capable of evidencing a common impact, and his factual analysis must actually do so. *See In re Plastics Additives Antitrust Litig.*, No 03-CV-2038, 2010 WL 343187, at *7 (E.D. Pa. Aug. 31, 2010) ("While a market with the characteristics described by Dr. Beyer may in theory be vulnerable to a price-fixing conspiracy, we find that the markets at issue in this case do not actually possess those characteristics.").

Dr. Tollison's methodology is certainly capable of evidencing a common impact. Similar market analyses have been accepted by courts as a source of common evidence of impact in the past, even without the supplemental evidence offered by plaintiffs in this case. *See In re Rail Freight,* 287 F.R.D. at 64-65; *In re EPDM,* 256 F.R.D. at 92; *In re Puerto Rican Cabotage Antitrust Litig.*, 269 F.R.D. 125, 139 (D.P.R. 2010); *In re Blood Reagents Antitrust Litig.*, 283 F.R.D. 222, 237-38 (E.D. Pa. 2012) (citing cases); *Titanium Dioxide,* 284 F.R.D. at 340-44. If correct, Tollison's analysis tends to establish that *if* the defendants attempted to fix prices, customers would not be likely to avoid this impact through negotiation. This is sufficient to permit an inference of classwide impact. *See In re EPDM,* 256 F.R.D. at 92 (market analysis "lay[s] the groundwork for plaintiffs' argument that, if collusive behavior did occur, it would have been effective in raising prices across the class, thus demonstrating class-wide injury-in-fact); *Puerto Rican Cabotage Antitrust Litig.*, 269 F.R.D. at 139 ("Plaintiffs and other class members have . . . shown through circumstantial evidence that, because they had no economically viable substitute for the . . . services provided by Defendants, they paid supra-competitive prices for the services purchased.").

Because it only permits a debatable inference, however, the court agrees with the defendants that Tollison's market analysis does not establish the fact of each plaintiff's impact "on its own."

Joint Opp. 40 (citing *In re Plastics Additives,* 2010 U.S. Dist. LEXIS 90135, at *26-47). It does not need to, however. Tollison's analysis will have to be considered in tandem with the plaintiffs' other evidence, as perhaps one weight on the scale favoring predominance. Analogizing to a murder trial, the plaintiffs' evidence of a violation tends to establish the weapon used, while Tollison's market analysis provides a motive and an opportunity. The court should not be deprived of such evidence simply because it does not include a smoking gun.

Turning to the details of Tollison's methodology, Tollison analyzed six factors to determine the industry's susceptibility to price-fixing: (1) the defendants' collective control of the air freight market; (2) the substitutability of air freight services for other shipping services; (3) the fungibility of air freight service providers; (4) the extent of any barriers preventing new competitors from entering the air freight market; (5) the ratio of fixed to variable costs; and (6) the ease of fixing surcharges. The defendants do not dispute that Tollison identified the relevant factors. *See In re EPDM,* 256 F.R.D. at 92 (examining the same factors). Instead, they dispute Tollison's factual analysis of each one.

The first factor Tollison analyzed was the defendants' collective control of the air freight market. Tollison found that the defendants and their alleged co-conspirator Northwest controlled a significant portion of the global airfreight market. Specifically, he asserts that the defendants controlled approximately 87% of global market by volume. Tollison Decl. 11. For shipments to and from the United States, he asserts that the defendants controlled 79% by weight and 80% by revenue of the outbound business, and 72% by weight and 64% by revenue of the inbound business. *Id.* at 12. This market power was further strengthened, Tollison contends, by a web of regional and global trade associations that enabled the defendants to cooperate and form alliances. *Id.* at 13-14; Tollison Reply Decl., Ex. 81.

Both parties concede that control of 64% or more of the airfreight industry would be enough to enable the defendants to maintain a price-fixing conspiracy, but the defendants dispute the accuracy of those statistics. According to Mr. Kaplan, the defendants only control approximately 40 percent of the global airfreight industry.[25] Kaplan Decl. ¶ 175. Kaplan contends that Tollison's higher statistics fail to factor in competition from the smallest airfreight service providers, from non-scheduled charter services, and from shipping integrators like FedEx and UPS.

This argument is without merit for several reasons. First, as the defendants concede, Tollison's omission of these entities stems from his reliance on the IATA's own data. *See* Tollison Decl. 11-12; Joint Opp. 41-42. Incredibly, the defendants believe that Tollison's findings should be disregarded because he relied on data produced by the same organization that originated the conspiracy, data that presumably informed the actual design of the surcharge methodology. They suggest that he should have instead used a data source identified by Dr. McClave, since this time and this time only, they believe Dr. McClave got it right. Joint Opp. 41-42. The determination of which dataset is most reliable is a merits question and does not preclude Tollison's preference of one over the other.

Second, even if Tollison *had* used Kaplan's preferred dataset, Kaplan's own graphs using this data indicate that the defendants control roughly 60 percent of the market, not 40. Kaplan Decl., Ex. 50 (ECF No. 1691-5). In light of Kaplan's conflicting testimony, then, it appears that there may not even be a dispute here at all.

Third, it appears that Tollison *did* factor in competition from integrators and found it to be insubstantial, since these entities do not typically trade in large volume air freight shipments. Tollison Reply ¶ 134 (international cargo shipments less than 1.5% of revenue for UPS, less than 6%

[25] The defendant Polar contends that Tollison "admits that the Defendants consist of only, at most, forty percent or fewer of the total air cargo carriers." Polar Mem. 20 (citing Tollison Dep., 47:7-48:25, ECF No. 1685-12). However, a review of the cited deposition transcript provides absolutely no basis for this assertion.

for FedEx). This position appears to conform with the defendants' own testimony. *See* Landau Reply Decl., Ex. 279 (Polar executive notes that "we don't really view [integrators] as a competitor"); *id.,* Ex. 287 (Singapore Airlines noting that because Integrators specialize in small, high-yield shipments and lack the capacity to accommodate a significant amount of high-volume shipments, "forsaking general cargo carriers for Integrators is not a prudent option for shippers today"). Tollison also persuasively disputes the defendants' assertion that non-scheduled charter services meaningfully compete with the defendants, and notes that the smallest airfreight companies, which were omitted from Tollison's data, occupy an insubstantial share of the market. Tollison Reply ¶¶ 136-37.

The defendants are of course free to tell the jury which data source they believe is more reliable and to explain the degree to which a conspiracy may be thwarted by external competition. For the purposes of this motion, the court finds that Tollison was within his rights to rely on the IATA's data and to find that control of upwards of 60% of the market was sufficient to effectuate a successful conspiracy. This is particularly so because Tollison's testimony is supported by the plaintiffs' other evidence. *See, e.g.,* Landau Reply Decl., Ex. 223 (e-mail from Air New Zealand executive explaining that the fuel surcharge "is an industry driven exercise. Collectively the airlines had more strength and agents/shippers just had to accept"). Absent compelling evidence otherwise, the court finds that Tollison has a more than sufficient basis for concluding that the defendants' maintained substantial control over the airfreight market.

The second factor Tollison analyzed was the substitutability of air freight services for other shipping services. Tollison found that demand for airfreight services is inelastic, particularly since the industry does not meaningfully compete with other modes of freight transport. According to Tollison, boat, truck, and rail freight services are insufficient substitutes for high-value-to-weight, time-sensitive, temperature-sensitive, and security-sensitive products. Tollison Decl. 15. With

inelastic demand and a limited range of substitutes, higher prices in the airfreight industry would leave many customers with no choice but to accede to their charges. *Id.* at 16.

The defendants contend that Tollison is wrong—that airfreight does compete meaningfully with other forms of cargo transport. In support of their positions, each side relies primarily on conflicting admissions made by witnesses during depositions and elsewhere. *See* Joint Opp. 44; Pl. Reply Mem. 35. The defendants also cite a single conclusory, throw-away line from a 42-page industry report. Joint Opp. 44 ("[A]ir cargo 'faces strong competition from substitutes such as rail and truck transportation.") (quoting IBISWorld Industry Report – Global Logistics: Air Freight 8, Simmons Decl., Ex. 39 ("IBISWorld Report")). However, this report otherwise supports Tollison's conclusion, noting that "[a]ir cargo usually needs to be transported quickly." IBISWorld Report 14, Simmons Decl., Ex. 39. At best, then, the record suggests that this is an issue of "professional judgment," in which "reasonable experts may differ" as to whether the airfreight industry meaningfully competes with other cargo services. *In re Vitamin C Antitrust Litig.*, 06-MD-1738, 2012 WL 6675117, at *5 (E.D.N.Y. Dec. 21, 2012) (quotation omitted).

Ultimately, however, the court finds that the plaintiffs' position here is more likely to be correct than the defendants, since the balance of the evidence leans strongly in favor of a finding that other forms of transportation are *not* readily substitutable. The defendants' own executives have testified to this effect. For example, when asked in an e-mail whether "higher levels of fuel surcharge and prices have shifted some freight from air to ocean," a Polar executive replied, "NO…and I would not suspect to feel this potential pinch unless global growth slowed and/or shipping vessels got faster." Landau Reply Decl., Ex. 279. But the most persuasive reason for finding that ocean freight does not meaningfully compete with air freight is the dramatic difference in price. The defendants do not dispute that air cargo is 14 to 16 times as expensive as ocean shipping. Pl. Reply Mem. 35 (citing Landau Reply Decl., Ex. 294). If air cargo customers are

compelled to pay such a high premium for air cargo, it is unlikely that an additional 6% surcharge would lead them to consider other options. Finally, even if other forms of transportation could be substituted in some cases, this would not discredit Dr. Tollison's overall conclusion. "[A]lthough some shippers may have been able to find viable transport alternatives . . . (all price-fixing cartels lose some customers), the vast majority would have been unable to do so and, thus, defendants could profitably elevate their prices in a coordinated manner without risk of losing substantial business." *In re Rail Freight,* 287 F.R.D. at 63. Accordingly, Tollison has satisfied this court that airfreight demand is inelastic enough that a price-fixing conspiracy would not likely be undermined by other modes of carriers.

The third factor Tollison analyzed was the fungibility of air freight services. Tollison contends that airfreight services are "fungible," "interchangeable," or "commodity-like," meaning that each defendant's service is essentially similar and they compete primarily on price. Tollison Decl. 16; Pl. Mem. 42-43. This, he argues, makes collusion both more desirable, since a fungible service makes it harder for the defendants to raise prices independently, and more feasible, since "collusive agreements [would be] easier to reach, as each firm is selling essentially the same product or service" and "cheating on the cartel [would be] easier to monitor, detect, and correct." Tollison Decl. ¶ 30.

The defendants once again quibble with Dr. Tollison's finding, noting that some plaintiffs' representatives testified during deposition that they also consider non-price factors like speed, reliability, and scheduling. Joint Opp. 45 (citing Simmons Decl., Ex. 4 at Tabs U-AA). But a review of this testimony suggests that these individual customers were, at best, only marginally concerned about these other factors. *See, e.g.,* Simmons Decl., Ex. 4 at Tab U – R. Haack Dep. Tr. 116:24-117:21, (in some cases, plaintiff will pay a premium for expedited service at their client's request); *Id.*, Ex. 4 at Tab Y – Osborne Dep. Tr. 86:19-22 (plaintiff would go with a more reliable carrier if it

costs only "pennies" more). Seemingly without exception, these and other plaintiffs have testified that price was their primary concern. Landau Reply Decl., Ex. 227 – P. Beckett Dep. Tr. 76:10-11 (For SAT, "prices were probably the number one item"); *id.*, Ex. 230 – R. Haack Dep. Tr. 66:6-7 (RIM chose airlines "primarily on rates and schedule"). It therefore appears that the defendants have emphasized the exceptions that prove the rule. *See In re Blood Reagents,* 283 F.R.D. at 237 (rejecting "anecdotal evidence that a few purchasers preferred one defendant[ ] . . . for non-price reasons"). Of course, most commodities are not *perfectly* fungible, but it is still fair to describe them as generally substitutable. The mere fact that the defendants' had some limited opportunities to compete on non-price bases does not overwhelm Dr. Tollison's reasons for finding that air freight is essentially fungible. The defendants' argument goes solely to the weight of Tollison's testimony, and is not enough to prevent the court or the jury from relying on his analysis altogether.

The fourth factor Tollison analyzed was the extent of any barriers preventing new competitors from entering the air freight market. Tollison asserts that a price-fixing conspiracy in the airfreight industry would not likely be undermined by the entrance of new competitors into the market who could undercut these supra-competitive rates. According to Tollison, the industry poses significant barriers to entry, including high startup and operational costs, the need for specialized equipment and personnel, and complex regulatory hurdles. Tollison Decl. ¶¶ 31-36. These barriers, he contends, effectively prevented any new competitors from entering the market during the class period. The defendants do not dispute that barriers to entry exist, a fact that has been recognized by the industry literature. *See* IBISWorld Report 16, Simmons Decl., Ex. 39 (listing factors that place a "significant barrier to industry entry"). They do argue, however, that despite Tollison's claim of no new market entrants, "ten major cargo carriers . . . entered the U.S. market during the class period." Joint Opp. 45 (citing Kaplan Decl. ¶¶ 180-181). Tollison persuasively rebukes this statement, noting that each of these supposedly new entrants were already in the airfreight business prior to the class

period, and therefore did not face any of barriers to *entry* that would be relevant to this factor. Tollison Reply Decl. 93. Additionally, while some of these competitors increased the volume of cargo they shipped during the class period, Tollison contends that a significant portion of these increases can be explained by these competitors' affiliations with larger competitors through mergers and other arrangements. And in either event, these competitors still collectively comprised less than 5% of the air cargo market. *Id.* at 93-94. Thus, Tollison has persuasively established that the airfreight industry faces barriers to entry high enough to support a price-fixing conspiracy.

The fifth factor Tollison analyzed was the defendants' ratio of fixed to variable costs. When a large proportion of the defendants' costs are "fixed," meaning that they remain the same regardless of demand, Tollison contends that this adds an extra incentive for market participants to recoup these costs during periods of economic uncertainty, such as by fixing prices. Here, Tollison notes, roughly 42% of the airfreight industry's overhead costs are fixed, and a number of carriers have recently filed for bankruptcy, both of which tend to suggest an incentive to maximize short-term revenue. Tollison Decl. 19-20, n.61. In disputing this factor, the defendants first assert that Tollison's finding is unreliable since he only used five carriers' data as a sample. This argument is unpersuasive. Though the actual industry-wide average may stray from the precise figure of 42%, there is no reason to doubt that Dr. Tollison's sample suggests a high ratio of fixed costs throughout the industry as a whole. Next, the defendants assert that, even if Dr. Tollison's claim were true, this would suggest that conspirators would be more likely to "cheat" on the conspiracy in order to maximize short-term revenue. Joint Opp. 46. That concern is addressed by Dr. Tollison's final factor, the conspicuousness of surcharge pricing.

The sixth and final factor Tollison analyzed was the ease of fixing surcharges. Tollison argues that because surcharge pricing was well-defined and understood, it would have been relatively easy for the defendants to coordinate and monitor a price-fixing system. Tollison Decl. 20-22. The

defendants concede that "[s]urcharge announcements are highly transparent," Joint Opp. 20, but respond that Dr. Tollison "did nothing to show that carriers' surcharge announcements had any connection to the total prices actually paid," *id.* at 46. This argument strains common sense. Why would the defendants post surcharge announcements if they did not have "any connection" to actual prices? In any event, the defendants' argument goes not to the issue of whether surcharge pricing was conspicuous, which is what is relevant to Dr. Tollison's testimony, but to whether or not it evidences actual damages. That issue is discussed elsewhere in this Report, but need not be decided for the court to find that Tollison's testimony at issue is sufficiently reliable.

In view of the fact that Tollison has used an accepted methodology to appropriately analyze the factors relevant to this case, the court finds that Tollison's testimony permits a reasonable inference of classwide impact. Effectively, this section of Dr. Tollison's declaration tends to establish that *if* the defendants implemented an unlawful price-fixing conspiracy, such a conspiracy would likely be successful. According to Tollison, the defendants would face little incentive to abandon the conspiracy or to waive surcharges in individual instances, since they effectively controlled the market and did not face normal market pressures to keep prices low. Coupled with the plaintiffs' direct evidence that the defendants did in fact pursue a price-fixing conspiracy and had policies not to waive surcharges or offset them by lowering the base rates, such a showing could lead a reasonable factfinder to conclude that the class as a whole was impacted, and that any offsets were anomalies. Again, because predominance is a holistic inquiry that permits consideration of various forms of evidence, the mere fact that Tollison's analysis does not "on its own" establish classwide impact is irrelevant. Joint Opp. 40. Additional evidence—both common and individualized—may still be presented to resolve the issue of the impact of the defendants' price-fixing on each class member. This does not diminish the fact that Tollison's testimony is one piece of evidence that militates towards a finding of predominance.

v. Dr. McClave's Regression Models

The plaintiffs also submit the testimony of Dr. McClave, an expert statistician. McClave was retained by the plaintiffs to determine "whether a class-wide methodology exists to measure the impact on the proposed class of the [defendants'] alleged anti-competitive behavior" and "the amount, if any, by which the Plaintiffs and class members were damaged . . .." McClave Decl. 1. He approached this task by collecting the defendants' data for over 30 million transactions, as well as other data concerning the air cargo industry, and using the data to construct a multiple regression model measuring defendants' conspiracy's effect on prices for all shipments to and from the United Sates (the "global model"). The global model analyzed the "all-in" prices, rather than the surcharge increment in isolation, and therefore accounts for the possibility that damages were mitigated or precluded by price negotiations or other means. Essentially, the model compares prices charged during the conspiracy to prices charged during a "benchmark period" after the conspiracy concluded, to see whether the comparison evidences an overcharge. To increase the reliability of this comparison, McClave attempted to identify and control for all other sources of price variability, such as fluctuations in fuel and labor costs, supply and demand, and various other factors. He did so by including variables for each of these factors and calculating appropriately specified coefficients for each variable to reflect their relative influence on ultimate prices. After applying other corrections that McClave says are standard and accepted practice for such analyses, McClave concludes that the class as a whole paid overcharges of between 6.3-7.5% for inbound shipments and 5.4-6.2% for outbound shipments during the class period. He and the plaintiffs suggest that this showing permits an inference of classwide impact. *See* Pl. Mem. 57-58 ("Courts routinely certify classes in antitrust cases based on exactly this type of statistical analysis showing common evidence of impact." (citing *In re TFT-LCD (Flat Panel) Antitrust Litig.*, 267 F.R.D. 291, 313 (N.D. Cal. 2010); *In re Static Random Access Memory (SRAM) Antitrust Litig.*, 264 F.R.D. 603, 614 (N.D. Cal. 2009); *In re*

Polyester Staple Antitrust Litig., No. 3:03-CV-1516, 2007 WL 2111380, at *26-27 (W.D.N.C. July 19, 2007); *In re Bulk [Extruded] Graphite*, No. 02-CV-6030, 2006 WL 891362, *13 (D.N.J. Apr. 4, 2006))).

On this occasion, the court disagrees. Whatever inference the model permits, it is too tenuous to serve as common proof of impact in the light of the enormous scope of the class and the potential variability within the class. Recent precedent makes clear that in an antitrust class action, common proof of impact must be tied directly to the plaintiff's theory of liability. *See Comcast Corp. v. Behrend*, 133 S.Ct. 1426, 1433 (2013). Here, the defendants' liability stems from the plaintiffs' allegation that each class member was overcharged due to the price-fixing conspiracy. This is not what the global model shows.

Instead of demonstrating classwide impact, the global model establishes an estimate of aggregate classwide damages. If accurate, it would suggest that the conspiracy as a whole was successful, with the defendants collectively netting an additional 6.3-7.4% in revenue during the class period as a result.[26] While this may have some evidentiary value, *see* Section III.E.3, *infra*, it does not go to impact. All parties concede that to show impact, the model must serve to establish that "all or virtually all" of the class members paid an overcharge on at least one transaction. Pl. Mem. 3; Joint Opp. 3; Nippon Opp. 2. Though Rule 23 permits the possibility that *some* class members went un-impacted, the court still needs some assurance that these putative class members are relatively few in number. As the district court noted in *Rail Freight*,

> the inability to show injury as to a few does not defeat class certification where the plaintiffs can show widespread injury to the class . . .. Only when it is apparent that a great many persons have not been impacted should a court deny class certification. . . . There is no precise measure for 'a great many.' Such determinations are a matter of degree, and will turn on the facts as they appear from case to case."

[26] The defendants' e-mails appear to confirm that the conspiracy was successful. *See, e.g.,* Landau Reply Decl., Ex. 275 (surcharge constituted 25% of British Airways' profitability); *id.,* Ex. 276 (fuel surcharge "key to profitability" for Emirates); *id.*, Ex. 278 (surcharge improved yields for Polar); *id.*, Ex. 311 (same for Quantas).

In re Rail Freight, 287 F.R.D. at 40 (quotation marks and citations omitted)). Under McClave's global model, it may still be that certain kinds of shipments suffered much higher overcharges, while other kinds paid none at all. Yet to be common evidence of impact, it must at least attempt to segregate these two groups in order to permit an appropriately tailored class. *See In re New Motor Vehicles*, 522 F.3d 6, 28 (1st Cir. 2008) ("The ability to calculate the aggregate amount of damages . . . does not absolve plaintiffs from the duty to prove each [class member] was harmed by the defendants' practice.") (quoting *Newton v. Merrill Lynch, Pierce, Fenner & Smith Inc.,* 259 F.3d 154, 188 (3d Cir. 2001)); *see also Reed v. Advocate Health Care,* 268 F.R.D. 573, 590-91 (N.D. Ill. 2009); *In re Plastic Additives Antitrust Litig.*, 2010 WL 343187, at *16.

McClave fixes this problem in his Reply declaration. By adding approximately 70,000 indicator variables for each customer with more than two transactions, McClave reran the regression and was able to conclude that 96% of these class members were impacted on at least one transaction (and further, that the 4 percent that were not impacted accounted for just one-hundredth of one percent of total sales). *See* McClave Reply Decl. 46-48. When he ran the regression again, this time without retransforming prices in the model from their logarithms back into actual prices,[27] the results buttressed that conclusion as an accurate if not conservative one. McClave Sur-Reply Decl. 13.

The defendants do not dispute that McClave's "customer model" is methodologically capable of showing the percentage of class members impacted, nor do they dispute that 96% would be sufficiently "classwide" for purposes of common proof. Instead, they suggest that the model is both under-inclusive and technically flawed, and that a proper accounting would show that, at best, only 70% of the class was impacted. The defendants' arguments may have some merit. They are, however, insufficient to defeat the plaintiff's showing of predominantly common proof of impact.

[27] Specifying values in their logarithmic form is an apparently common practice in econometrics. *See* McClave Decl. 8 (citing Gujarati & Porter, *Basic Econometrics* 159-62 (McGraw Hill 5th Ed. 2009)).

First, the defendants argue that the customer model fails to show classwide impact because it does not include data from over 100,000 putative class members—specifically, those that only had one transaction with the defendants during the class period. Joint Sur-Reply Opp. 14. Due to modeling constraints, McClave was unable to include these customers in his customer model. McClave Reply Decl. 46, n.107 ("Customers with only a single transaction do not have the necessary degrees of freedom to estimate both a customer indicator variable and an overcharge calculation for the single transaction."). These approximately 100,000 single-transaction plaintiffs undoubtedly comprise a significant portion of the total class,[28] even though their transactions constitute only 0.2% of the total revenue at issue in this case. *Id.* Accordingly, if this omission precluded the customer model's use as common proof, the plaintiffs could simply amend the class definition to customers with more than two transactions, and still seek 99.8% of the current amount at issue. But even this is not necessary. Though these omissions mean that the model it is not *direct* proof for these plaintiffs, the model may still sustain a strong inference that they were impacted, based on the results from a substantial sample group.[29] This is particularly true because these smaller purchasers likely had significantly *less* bargaining power than larger, repeat customers, and would therefore be

[28] The plaintiffs contend that these single-transaction customers constitute approximately one-third of the total putative class. *See* McClave Dep. Tr. 167:13-169:10, Simmons Decl., Ex. 51 (customer model only includes "roughly 200,000" customers, and does not "directly address impact to roughly one-third of the potential proposed class members.") The defendants in turn believe the single-transaction customers constitute two-thirds of the putative class. *See, e.g.,* Oral Arg. Tr. 66:23-24 (Plaintiffs "admitted [the customer model] didn't apply to two-thirds of the class.").

[29] Although the defendants do not make this argument, the court is aware that the Supreme Court in *Dukes* rejected the idea of using a sample set to determine liability and damages for an entire class. The circumstances in that case are readily distinguishable from this one, however. The Court in *Dukes* declined the Ninth Circuit's suggestion of conducting a "Trial by Formula," in which a special master would review claims from a small sample of putative class members in order to determine the class's average rate of liability and damages. *See* 131 S.Ct. at 2561. In that disparate-impact case, the Court was informed by the plaintiffs' overall failure to demonstrate any common questions that would "tie[ ] all their 1.5 million claims together." *Id.* at 2555-56. Here, by contrast, the plaintiffs share a single theory of liability—that they were overcharged on their airfreight purchases due to a price-fixing conspiracy. Recourse to a sample set will therefore not obscure meaningful differences between purchasers, as it would have in *Dukes*. Instead, the use of this "sample" has been proposed only to accommodate the limited availability of data for the smallest purchasers. Additionally, sampling is only being used for one of the plaintiffs' many forms of evidence, and the sample set here is substantially larger than the sample set contemplated in *Dukes*. *See id.* at 2541 (noting that the appellate court had suggested using a "similar procedure" as in *Hilao v. Estate of Marcos,* 103 F.3d 767, 782–787 (9th Cir. 1996), where only one percent of roughly nine thousand claims were reviewed). For these reasons, the court finds that nothing in *Dukes* precludes reliance on the customer model as a form of common proof.

those least likely to have avoided impact by negotiating down the base rate as the defendants suggest. *See* Oral Arg. Tr. 41:08-20. Accordingly, this technical limitation on McClave's customer model is not enough to defeat its use as common proof supporting a reasonable inference of classwide impact. To the contrary, permitting such an inference furthers the "policy at the very core of the class action mechanism," which is to ensure that parties facing small recoveries are still able to vindicate their rights in an efficient manner. *Amchem*, 521 U.S. at 617 (quoting *Mace v. Van Ru Credit Corp.,* 109 F.3d 338, 344 (7th Cir. 1997)).

Second, the defendants argue that McClave's customer model is unreliable because its data is drawn from the defendants' raw databases, which are at times inconsistent in how they include customer names. For example, some customers are listed with identical names but sometimes end in "International" and "Incorporated," and other times in "Int'l" and "Inc." When left uncorrected, these discrepancies result in some data not being attributed to the proper customer. McClave acknowledged this issue when detailing his methodology in his reply declaration, and notes that he and his staff made a considerable effort to identify these inconsistencies and account for them by grouping the data under the same customer. With over 30 million transactions, however, they were not always able to do so. The defendants argue that this inconsistency renders the regressions "meaningless," but they provide no basis for such hyperbole. Most importantly, the defendants give no indication of how commonly this oversight occurred. Without such an indication, the court has no grounds for assuming that these errors materially affected the results of McClave's customer model. Even if they did, unless they did so enough to make the model completely unreliable, this issue would go purely to the weight the factfinder should credit McClave's customer model, and not to its status as persuasive common evidence of impact for class certification purposes. Finally, as a purely equitable matter, these inconsistencies are virtually inevitable when experts draw from such large data pools. The customer model should not be thrown out based on such a common and

minor limitation, particularly not when the inconsistencies are drawn from the defendants' own records.

Third, the defendants argue that McClave's customer model used the wrong explanatory variable to control for the influence of each transaction's weight on the ultimate price. The defendants suggest that McClave should have used "chargeable weight" as the explanatory variable, rather than "normalized chargeable weight." According to the defendants, when the proper variable is applied to McClave's customer model, "***not one customer in any of these regressions experienced any overcharge.***" Joint Sur-Reply Opp. 15 (citing Kaplan Reply ¶ 60) (emphasis in original). McClave convincingly responds that normalizing chargeable weights is a routine and innocuous econometric practice. McClave Sur-Reply Decl. 8. Moreover, McClave points out something Kaplan failed to acknowledge: his suggested replacement variable consistently produces the absurd result of generating 6 to 18-figure but-for prices. McClave Sur-Reply Decl. 8-11. Thus, the defendants are able to suggest that "not one customer . . . experienced any overcharge" because, under Kaplan's model, customers were not only un-impacted, but were apparently undercharged to the tune of anywhere from *millions to hundreds of quadrillions of dollars per transaction*. *Id.* Kaplan's only defense for his omission is that these absurd results follow from McClave's use of WLS, Kaplan Sur-Reply Decl. 14, but WLS is an undoubtedly accepted econometric practice, and Kaplan's rebuttal is therefore entirely unconvincing. Indeed, the court agrees with McClave that Kaplan's proposed variable simply does not pass the "laugh test." McClave Sur-Reply Decl. 11.

Fourth, the defendants argue that McClave failed to adjust the "variance term" when converting his overcharge estimates from "log" form to actual "but-for" prices. If the proper adjustment had been made, they argue, the model would not have shown impact for an additional 30% of the putative plaintiffs. Joint Sur-Reply Opp. 15. McClave's customer model employed what both parties agree is a standard methodology to correct for skewed data and to account for price

elasticity: he specified the model in "log-log" form, meaning that the dependent and explanatory variables have been converted from their original unit of measurement (dollars) into their logarithms. But to interpret the results of the model as actual prices, these results then have to be "re-transformed." McClave chose to do this by converting the logarithms into their actual value (a method known as "exponentiation") and then multiplying the re-transformed prices by a constant number (1.035 for inbound transactions, 1.056 for outbound). McClave arrived at these multipliers by using a formula found in what he refers to as "an accepted statistical source."[30] The defendants' expert, Mr. Kaplan, argues that McClave applied the wrong formula. He argues that "accepted economic literature" suggests that he should have used the "Woodridge formula" instead. Kaplan Sur-Reply Decl. ¶¶ 22-23. Kaplan does not cite any literature or provide any other basis to justify his opinion that this is the correct formula, however.

Ultimately, this debate appears to be settled by a different approach that McClave takes in his Sur-Reply. There, he explains that when one compares the logarithm of the prices without first retransforming them into actual prices, the results are nearly identical to the results in his retransformed model. McClave Sur-Reply Decl. 13. While Kaplan correctly notes that this model does not tell us what the actual but-for prices would have been, Kaplan Sur-Reply 17, it nonetheless circumvents any debate about the proper retransformation method and allows an unbiased comparison of the but-for and actual prices. This comparison indicates that 97% of the covered transactions were subject to an overcharge, while also appearing to support the conclusion that McClave applied the correct retransformation method.

[30] *See* McClave Reply Decl. 47, n.108; McClave Sur-Reply Decl. 7, n.18 (each citing Johnson, Normal L.; Kotz, Samuel, Balakrishnan, N., Chapter 14, "Lognormal Distributions," Continuous Univariate Distributions, Vol. 1 (John Wiley & Sons 2nd Ed. 1994)).

Fifth, the defendants suggest that because McClave did not test some of the results produced by his customer model for statistical significance,[31] the overcharges they show could simply be the result of random variability. Joint Sur-Reply Opp. 15. McClave acknowledged that he did not test for statistical significance at the individual transaction level, but testified that such testing is neither necessary nor appropriate. *See* McClave Dep. Tr. 213:3–219:22 (Simmons Decl. Ex. 51). He himself noted that because some of the results at the customer level are drawn from substantially smaller datasets they may in fact exhibit some random variability, McClave Reply Decl. 48, but he provides sound reasons for trusting the reliability of the customer model. He points out that his customer model is itself a severe test of the robustness of the global model, *id.*, which displayed strong statistical significance with respect to all of its explanatory variables, McClave Decl. 9-13. McClave's assertions concerning the model's statistical significance were not challenged by the defendants' experts. *See* Kaplan Decl. 3-6; Burtis Decl. ¶¶ 88-105; Warren-Boulton Decl. ¶¶ 7, 12-17, 20, 24, 26.[32] Moreover, all of the model's coefficients remained statistically significant even after the customer indicator variables were added to produce the customer model. McClave Reply Decl. 47. Finally, since the customer model estimates that an overwhelming majority of the class was impacted, the model would still support a strong inference of classwide impact even if it included a modest margin of error or other non-fatal flaws.

Finally, the court addresses the remaining criticisms leveled at McClave's global model, which ostensibly apply to his customer model as well. In short, the court is not persuaded that any of these criticisms are particularly relevant to the question of class certification. Many of these criticisms, which are addressed in detail in the court's *Daubert* discussion, *supra,* deal in a level of minutiae that would be inappropriate for the court to resolve at this early stage. For example, the

[31] McClave defines "statistical significance" in his declaration. *See* McClave Decl. 10 n.21.

[32] Although the defendants' experts offered multiple opinions attacking the reliability of McClave's global model as proof of classwide impact, none of the attacks rested on a lack of statistical significance of the results it produced.

court is unconcerned at this juncture whether McClave's model is comprised of two regressions or one, whether he appropriately trimmed outliers in his data, whether he correctly utilized "monthly model views" that aggregate data for each month (also for the purposes of correcting for outliers), whether he has omitted any minor variables and whether the variables he has included are perfectly specified, or whether he should have applied "weighted least squares" or some correction to control for heteroskedasticity. The court appreciates that expert statisticians may differ on these issues, and finds that Dr. McClave's chosen approaches have a firm basis in contemporary econometrics and cannot simply be dismissed as objectively wrong. *See In re Vitamin C Antitrust Litig.*, 2012 WL 6675117, at *5 (challenges to "disciplines that require the use of professional judgment . . . may ultimately be viewed as matters in which reasonable experts may differ." (quotation marks and citation omitted)); *Falise v. Am. Tobacco Co.,* 258 F. Supp. 2d 63, 67 (E.D.N.Y. 2000) ("Creating statistical models . . . depends upon judgment and art as well as the reasoned manipulation of numbers.").

Moreover, none of these issues affect the question of whether McClave's report is fundamentally probative of classwide impact. Instead, they bear on the question of whether McClave's report is *dispositive* proof. That is not a determination for the court to make at this stage. McClave's testimony need not be flawless in order to be sufficiently reliable to merit the court's consideration of it as proof common to the class. Once a certain threshold of reliability has been established, determinations of how much weight to afford an expert's opinions are and always have been for the jury alone. Accordingly, the defendant is free to attack McClave's findings on the merits by employing these arguments. At this stage, however, the court merely inquires as to whether McClave's testimony is sufficient to help put the relevant issues in controversy. By all appearances, it is.

By the same token, though the court has recommended that the defendants' experts not be prohibited from testifying about their "sub-regressions" of McClave's model (where they ran small subsets of McClave's data through his globally-specified models), the court considers this testimony to be of rather limited probative value. As previously discussed, the defendants do not contend that their results are reliable or accurate demonstrations of actual impact or lack thereof. *See* Kaplan Opp. 10 (citing Kaplan Decl. ¶ 30, n.72; Moore Decl. ¶¶ 27-28). Instead, they merely suggest that these sub-regressions illustrate the defendants' overarching (and uncontested) theory that McClave's model overlooks some degree of intra-class variability. The plaintiffs do not dispute that McClave's conclusions regarding impact and damages are approximations, nor do they dispute that there is some degree of intra-class variability. The mere fact that the defendants' experts' have found a way to exaggerate this variability by using questionable econometric practices to manipulate McClave's model is not a compelling reason to deny class certification. For reasons discussed throughout this Report, the court is sufficiently assured that McClave's approximations are acceptable and do not mask an impermissible degree of variability.

In conclusion, the court finds that the plaintiffs' voluminous record evidence, taken together with the testimony of their two experts, provides a more-than-sufficient basis for the court to find that the question of impact may be resolved by predominately common proof.

3. Damages

The final question in our predominance analysis is that of damages. It has long been settled that Rule 23(b)(3) does not require common proof of damages in order for class certification to be appropriate. 2 William B. Rubenstein, Newberg on Class Actions § 4:54 (5th Ed. 2013) ("[P]redominance requirement is satisfied despite the need to make individualized damage determinations."); *Behrend*, 133 S.Ct. at 1437 (Ginsburg & Breyer, JJ., dissenting) (calling this principle "well nigh universal" and citing cases); *see also In re Visa Check/MasterMoney Antitrust Litig.*,

280 F.3d 124, 139 (2d Cir. 2001) ("[I]t has been commonly recognized that the necessity for calculation of damages on an individual basis should not preclude class determination [sic] when the common issues which determine liability predominate.") (quoting *Bogosian,* 561 F.2d at 456); *McLaughlin v. Am. Tobacco Co.,* 522 F.3d 215, 231 (2d Cir. 2008); *In re Scrap Metal Antitrust Litig.,* 527 F.3d 517, 535 (6th Cir. 2008); *Urethane II, Polyether Polyol,* 251 F.R.D. 629, 639 (D. Kan. July 28, 2009); *In re EPDM*, 256 F.R.D. at 103. Courts recognize that the need for individualized damage inquiries is a common feature of class actions, and that it does not offend Rule 23(b)(3), which "calls only for predominance, not exclusivity, of common questions." *In re Visa Check/MasterMoney Antitrust Litig.,* 280 F.3d at 140; *see also Butler v. Sears, Roebuck & Co.*, 727 F.3d at 801 ("It would drive a stake through the heart of the class action device . . . to require that every member of the class have identical damages.").

Presumably in light of this consensus, the defendants barely addressed the question of damages in their various opposition briefs.[33] Once briefing was completed, however, the Supreme Court reversed a grant of class certification in *Comcast Corp. v. Behrend* due to problems with the plaintiffs' damages model. 133 S.Ct. 1426 (2013). At oral argument, the defendants in this case asserted that *Behrend* and other cases now require a closer look at the sufficiency of the plaintiffs' damages model at this stage.

The defendants do not contend, as some have, that *Behrend* requires common proof of damages as a necessary prerequisite to class certification.[34] Instead, the defendants seem to suggest

[33] Indeed, out of 171 pages of briefing submitted on this motion, the defendants collectively devoted only one page to the issue of damages. *See* Polar Mem. 25.

[34] *See, e.g., Roach v. T.L. Cannon Corp.*, No. 10-CV-0591, 2013 WL 1316452, at *3 (N.D.N.Y. Mar. 29, 2013) ("Plaintiffs contend that damages need not be considered for Rule 23 certification even if such damages might be highly individualized. . . . This position is in contravention of the holding of *Behrend*."); *but see, e.g., In re Deepwater Horizon*, 739 F.3d 790, 815-17 (5th Cir. 2014) ("[N]othing in *Comcast* mandates a formula for classwide measurement of damages in all cases."); *In re Whirlpool Corp. Front-Loading Washer Products Liab. Litig.*, 722 F.3d 838, 860-61 (6th Cir. 2013) ("[I]t remains the 'black letter rule' that a class may obtain certification under Rule 23(b)(3) when liability questions common to the class predominate over damages questions unique to class members." (quoting *Behrend,* 133 S.Ct. at 1437)), *cert. denied,* 134 S.Ct. 1277 (2014); *Butler*, 727 F.3d at 801; *Leyva v. Medline Indus. Inc.*, 716 F.3d 510, 514 (9th Cir. 2013); *Wallace B.*

that damages should simply be considered as one factor in the total analysis of whether common questions predominate over the case as a whole. Nov. 25 Oral Arg. Trans. 97:7-12, 101:9-13, 131:9-19. The plaintiffs appear to agree with this formulation. *Id.* at 57:7-10, 161:4. The court also agrees that this is what is required by *Behrend*, as well as applicable Second Circuit precedent. *Behrend*, 133 S.Ct. at 1432-33 (certification inappropriate where individual damage issues will require "labyrinthine individual calculations" that will "inevitably overwhelm questions common to the class"); *McLaughlin v. Am. Tobacco Co.*, 522 F.3d 215, 231 (2d Cir. 2008) ("[W]hile the fact of damages may have to be ascertained on an individual basis is not, standing alone, sufficient to defeat class certification, . . . it is nonetheless *a factor* that we must consider in deciding whether issues susceptible to generalized proof 'outweigh' individual issues.") (emphasis added).

Accordingly, the question presented is whether trying this case as a class action will require such intractably complex damages proceedings that it will overwhelm the predominately common questions presented by the other elements of the plaintiffs' case, and thereby make the case unmanageable. It does not, and it will not. The plaintiffs have presented a viable damages model for the class, and in any event, the court has tools at its disposal to accommodate any individualized damages inquiries this case may require.

To demonstrate antitrust damages in a price-fixing case, "each plaintiff must estimate the overcharge that it paid as a result of the alleged conspiracy: that is, the difference between the prices it actually paid . . . and the prices it would have paid in the absence of a price-fixing conspiracy ('but-for prices.')." *In re Blood Reagents Antitrust Litig.*, 283 F.R.D. at 241.

Roderick Revocable Living Trust v. XTO Energy, Inc., 725 F.3d 1213, 1220 (10th Cir. 2013); *Houser v. Pritzker*, No. 10-CV-3105, 2014 WL 2967446, at *27-28 (S.D.N.Y. July 1, 2014); *Jacob v. Duane Reade, Inc.*, 293 F.R.D. 578, 589 (S.D.N.Y. 2013); *In re High-Tech Employee Antitrust Litig.*, 289 F.R.D. at 582-83; *Munoz v. PHH Corp.*, No. 08-CV-0759, 2013 WL 2146925, at *23-24 (E.D. Cal. May 15, 2013); *In re Nexium (Esomeprazole) Antitrust Litig.*, 297 F.R.D. 168, 183 (D. Mass. 2013).

"Given the inherent difficulty of identifying 'but-for world,' we do not require that damages be measured with certainty, but rather that they be demonstrated as 'a matter of just and reasonable inference.' " *Behrend v. Comcast Corp.*, 655 F.3d 182, 203 (3d Cir. 2011) (quoting *Story Parchment Co. v. Paterson Parchment Paper Co.*, 282 U.S. 555, 563 (1931), *rev'd on other grounds*, 133 S.Ct. 1426 (2013). Thus, in this Circuit, "the burden of proving antitrust damages is not as rigorous as in other types of cases." *New York v. Julius Nasso Concrete Corp.*, 202 F.3d 82, 88 (2d Cir. 2000). "[O]nce proof of injury causation has been established, courts have allowed antitrust plaintiffs considerable latitude in proving the amount of damages." *U.S. Football League v. Nat'l Football League*, 842 F.2d 1335, 1378 (2d Cir. 1988). Courts must "observe the practical limits of the burden of proof which may be demanded of a treble-damage plaintiff who seeks recovery for injuries." *Julius Nasso Concrete Corp.*, 202 F.3d at 88 (quoting *Zenith Radio Corp. v. Hazeltine Research, Inc.,* 395 U.S. 100, 123 (1969)). And where exact damages cannot realistically be proven with precision, "[t]he most elementary conceptions of justice and public policy require that the wrongdoer shall bear the risk of the uncertainty which his own wrong has created." *Bigelow v. RKO Radio Pictures, Inc.*, 327 U.S. 251, 265 (1946); *see also Story Parchment Co. v. Paterson Parchment Paper Co.*, 282 U.S. at 563 ("The wrongdoer is not entitled to complain that [damages] cannot be measured with the exactness and precision that would be possible if the case, which he alone is responsible for making, were otherwise.").

This leniency is further extended in the class certification context. Due to the realities of complex class actions, calculation of damages at the class certification stage "need not be exact." *Behrend,* 133 S.Ct. at 1433 (citing *Story Parchment Co. v. Paterson Parchment Paper Co.,* 282 U.S. at 563); *In re Scrap Metal Antitrust Litig.,* 527 F.3d 517, 535 (6th Cir. 2008) ("[E]ven where there are individual variations in damages, the requirements of Rule 23(b)(3) are satisfied if the plaintiffs can establish that the defendants conspired to interfere with the free-market pricing structure.").

In sum, the plaintiffs' burden at trial will be to establish a just and reasonable inference of each class member's approximate damages by more than mere speculation or guess, and not to prove the precise damages for each plaintiff. At the class certification stage, they need only assure the court that this burden could be carried using predominately common proof, or if it cannot, that the need for individualized proof will not overwhelm the rest of the case.

Here, the plaintiffs plan to establish damages by multiplying the prices charged for each class member's inbound and outbound shipments by the corresponding average overcharge calculated by McClave's global model. Pl. Mem. 59. To the plaintiffs, the fact that the conspiracy "operated through non-negotiable surcharges imposed worldwide" establishes a "just and reasonable inference that the percentage overcharge throughout the class period is an appropriate measure of each customer's damages." *Id.* at 59-60 (quotation marks omitted).

The defendants once again argue that these averages conceal too much potential variability within the class. Because it averages out the price effects of supply and demand factors on particular routes as well as other idiosyncratic factors, they assert that Dr. McClave's model impermissibly "underestimates alleged damages to some while overestimating the existence and amount of alleged damages to others." Polar Opp. 25; *see* Burtis Decl. ¶ 96. This is not only an insufficient showing, they argue; it also constitutes a form of "fluid recovery" that has been found in this Circuit to offend both the Rules Enabling Act and Due Process clause. Oral Arg. Trans. 98:25-100:06 (citing *McLaughlin v. Am. Tobacco Co.*, 522 F.3d at 232, *abrogated on other grounds by Bridge v. Phoenix & Indem. Co.,* 553 U.S. 639 (2008); *see also Eisen v. Carlisle & Jacquelin*, 479 F.2d 1005, 1018 (2d Cir. 1973), *vacated on other grounds*, 417 U.S. 156 (1974)). The court disagrees. A review of the applicable case law suggests that this case more closely resembles those cases in which courts have permitted the use of averages to calculate overcharges, as compared to those that have not.

Courts have commonly accepted the calculation of average damages in antitrust cases, at least in certain circumstances. *See In re Nexium (Esomeprazole) Antitrust Litig.,* 297 F.R.D. 168, 182 (D. Mass. 2013) ("The use of aggregate damages calculations is well established in federal court and implied by the very existence of the class action mechanism itself.") (quoting *In re Pharm. Indus. Average Wholesale Price Litig.,* 582 F.3d 156, 197 (1st Cir. 2009)); *Schwab v. Philip Morris USA, Inc.*, No. 04-CV-1945, 2005 WL 3032556, *7-10 (E.D.N.Y. Nov. 14, 2005) (citing cases); *In re NASDAQ Market-Makers Antitrust Litig.,* 169 F.R.D. at 524-25 (further citing cases).

A comparable method was permitted under the substantially similar facts in *Rail Freight*.

> "The Court rejects defendants' argument that Dr. Rausser's damages model cannot be applied on a classwide-basis to calculate damages because such damages vary on particular shipments. Even if that were true, it would not preclude a finding of predominance. In any event, the Court agrees with Dr. Rausser that the reported variation among shipments is to be expected and does not prevent a common damage methodology from applying in this case.

In re Rail Freight Antitrust Litig., 278 F.R.D. at 73, *vacated on other grounds*, 725 F.3d 244 (D.C. Cir. 2013). In overturning the district court's grant of certification, the D.C. Circuit took issue not with the fact that the damages model was approximate, but that it was methodologically unreliable.[35] "That is not to say the plaintiffs must be prepared at the certification stage to demonstrate through common evidence the precise amount of damages incurred by each class member," the court was careful to note. "But we do expect the common evidence to show all class members suffered *some* injury." *In re Rail Freight Fuel Surcharge Antitrust Litig.*, 725 F.3d at 252 (citing *Messner v. Northshore Univ. HealthSystem,* 669 F.3d 802, 815–16 (7th Cir. 2012)); *Dukes,* 131 S.Ct. at 2558). The plaintiffs have made that showing here.

[35] The problem for the D.C. Circuit was that the "methodology also detects injury where none could exist. When applied to shippers who were subject to legacy contracts—*i.e.,* those shippers who, during the Class Period, were bound by rates negotiated before any conspiratorial behavior was alleged to have occurred—the damages model yields similar results." *In re Rail Freight Fuel Surcharge Antitrust Litig.*, 725 F.3d 244, 252 (D.C. Cir. 2013). This led the court to question whether "the overcharges the damages model calculates for class members is any more accurate than the obviously false estimates it produces for legacy shippers." *Id.* at 254. To the D.C. Circuit, this invalidated a model that was "essential" to the district court's finding of common impact *and* damages, and therefore merited decertification. *Id* at 253.

In *Blood Reagents*, a federal district court in Pennsylvania also embraced the use of average damages in a similar price-fixing case. The defendants in that case argued that damages were not subject to classwide computation because some defendants may have cheated on the cartel, such as by offsetting the higher charges on price-fixed products with lower charges on other products. *In re Blood Reagents Antitrust Litig.*, 283 F.R.D. at 239-40. The court was unpersuaded.

> [The defendant] may be correct that, if feasible, it would be more accurate to estimate but-for prices for each individual transaction separately. However, estimating a single but-for price for each product in each year is sufficient to estimate damages 'as a matter of just and reasonable inference.' *Behrend,* 655 F.3d at 203 (quoting *Story Parchment,* 282 U.S. at 563, 51 S.Ct. 248). What [defendant] proposes would exponentially complicate the calculation of damages in this type of case. As [plaintiffs' expert] testified, it would require plaintiffs to estimate "almost a million" different but-for prices . . .. [Defendant] has cited no case—and the Court has found none—in which plaintiffs were required to do this. In contrast, the Court has found cases that featured variable pricing in the real world but in which courts accepted the calculation of only one price for all customers in the but-for world.

In re Blood Reagents Antitrust Litig., 283 F.R.D. at 243 (citing *McDonough v. Toys R Us, Inc.,* 638 F. Supp. 2d 461, 490-91 (E.D. Pa. July 15, 2009)).[36]

Where aggregate damages have not been permitted, it has been for reasons other than the mere use of averages. *McLaughlin* and *Eisen* each speak to the use of fluid recovery based on *cy pres* principles, which is not at issue in this case. *See McLaughlin*, 522 F.3d at 232 (citing *Eisen*, 479 F.2d at 1018); *see also NASDAQ*, 169 F.R.D. at 525 ("Fluid recovery refers to the distribution of unclaimed or unclaimable funds to persons not found to be injured but who have interests similar to those of the class."); *In re Scrap Metal Antitrust Litig.*, 527 F.3d at 534 (distinguishing aggregate proof of damages from fluid recovery); *Schwab v. Philip Morris USA, Inc.*, 2005 WL 3032556, at *14 ("[W]hile

[36] Notably, even courts that have refused to endorse the use of an aggregate damages formula have still found class certification appropriate regardless. For example, the same week that *Blood Reagents* was decided, a federal district court in Maryland took a much different approach in addressing a plaintiffs' aggregate damages model. The court in that case rejected use of an aggregate damages model because "some level of individual negotiation took place . . . regarding rebates, price, non-price items and the like. If a price-fixing conspiracy existed, it is clear that such a conspiracy would necessarily have damaged the individual class members differently." *In re Titanium Dioxide Antitrust Litig.*, 284 F.R.D. 328, 348-49 (D. Md. Aug. 28, 2012). The court nonetheless certified the class, noting that common issues predominated regarding the other elements, and that individualized damages inquiries could be handled using established case management tools. *Id.* at 349.

the *Eisen* decision may have foreclosed the use of at least some fluid distribution schemes, it did not necessarily bar classwide calculation of damages.) (citing *Developments in the Law—Class Action,* 89 Harv. L. Rev. 1454, 1535 (1976)). The plaintiffs in this case do not propose creating a total fund for the defendants' net liability to be distributed based on *cy pres* principles. Instead, they plan to use an average overcharge percentage to calculate damages for each individual class member who comes forward to collect, and to do so within a reasonable but realistic degree of certainty. Accordingly, there will be no unclaimed funds that may go as a windfall to certain plaintiffs or be passed on to a third party. Nor are there grounds to believe that the plaintiffs' damages model will result in "an astronomical damages figure that . . . bears little or no relationship to the amount of economic harm actually caused by defendants." *McLaughlin*, 522 F.3d at 231. To the contrary, Dr. McClave's model appears to be a reasonable approach to carrying its damages burden, one that is not subject to the same concerns as in *McLaughlin* and *Eisen*. *See NASDAQ,* 169 F.R.D. at 526 ("Damages in an antitrust class action may be determined on a classwide, or aggregate, basis, without resorting to fluid recovery where [there are] means to distribute damages to injured class members in the amount of their respective damages."). In light of the various evidence suggesting that damages were not routinely offset to any significant degree, *see, e.g.,* Section III.E.2.b.iii, *supra,* the court agrees that an average overcharge will likely be an acceptable approximation of each class member's damages.[37]

In any event, to the extent that damages can or should be determined for each class member with greater precision, even this will require reliance on predominately common proof. *See* Oral Arg. Trans. 30:6-9 ("[T]his is the same model that would be used by an individual plaintiff if we had

[37] This is particularly true for single transaction and other smaller plaintiffs, for whom damages will largely be nominal and thus not vary greatly if the calculation is inexact. *See Amchem*, 521 U.S. at 617 ("The policy at the very core of the class action mechanism is to overcome the problem that small recoveries do not provide the incentive for any individual to bring a solo action prosecuting his or her rights. A class action solves this problem by aggregating the relatively paltry potential recoveries into something worth someone's (usually an attorney's) labor.") (quoting *Mace v. Van Ru Credit Corp.,* 109 F.3d 338, 344 (7th Cir. 1997)); *Butler*, 727 F.3d at 801 (Posner, J.) (Class action device should not be construed to let defendants "escape liability for tortious harms of enormous aggregate magnitude but so widely distributed as not to be remediable in individual suits.").

separate lawsuits brought by each member of the class. Everyone would have to look at all the data globally to prove their case."). If damages are calculated on an individual basis, at the least, the determination of what factors should be considered to establish the "but for" price for each transaction will be a substantial common question.

More likely, however, the court will not have to resort to individualized calculations, since subsets of the class may be accounted for using the established tools at the court's disposal, such as

> (1) bifurcating liability and damage trials with the same or different juries; (2) appointing a magistrate judge or special master to preside over individual damages proceedings; (3) decertifying the class after the liability trial and providing notice to class members concerning how they may proceed to prove damages; (4) creating subclasses; or (5) altering or amending the class.

In re EPDM, 256 F.R.D. at 103 (citing *In re Visa Check,* 280 F.3d at 141); *see also* Fed. R. Civ. P. 23(c)(4)-(5). For example, the defendants cite an isolated instance in which surcharges were capped for certain shipments of salmon from Chile. Polar Opp. 9 (citing Lane Decl. ¶ 20 (ECF No. 1686)). If it is worth the effort, a subclass or some other accommodation could be made to reflect the mitigated damages for that group.[38] Similar solutions could be found for those transactions to which the defendants contend that the *Keogh, Noerr-Pennington,* foreign sovereign compulsion, and international comity doctrines might apply. *See* Joint Opp. 71-72; *also In re Visa Check*, 280 F.3d at 138 ("[T]he fact that a defense 'may arise and may affect different class members differently does not compel a finding that individual issues predominate over common ones.' ") (quoting *Waste Mgmt. Holdings, Inc. v. Mowbray,* 208 F.3d 288, 296 (1st Cir. 2000)). In any event, it's likely that these separate calculations will merely require some modification of McClave's current regression, just as it is already separately specified to reflect the difference between inbound and outbound shipments.

[38] The dissent in *Behrend* noted that the availability of these devices was unaffected by the majorities' decision in that case. 133 S.Ct. at 1437, n.* (Ginsburg & Breyer, JJ., dissenting). Accordingly, they have been widely adopted by post-*Behrend* courts. *See, e.g., Deepwater Horizon*, 739 F.3d at 817; *Whirlpool Corp.*, 722 F.3d at 860; *Butler*, 727 F.3d at 801; *XTO Energy, Inc.*, 725 F.3d at 1220; *Pritzker*, 2014 WL 2967446, at *27; *Duane Reade*, 293 F.R.D. at 589; *Munoz.*, 2013 WL 2146925, at *23-24.

Thus, while some individualized inquiries may still need to be addressed, they will almost certainly be collateral to common ones, and will not qualitatively outweigh the plaintiffs' reliance on common proof.

Finally, the defendants' arguments against the accuracy of McClave's average overcharge figures are addressed earlier in the court's discussion of impact, but in essence, these arguments go purely to the merits, and present no overlap with the predominance requirement. *Amgen Inc. v. Connecticut Ret. Plans & Trust Funds*, 133 S.Ct. at 1191 ("Rule 23(b)(3) requires a showing that *questions* common to the class predominate, not that those questions will be answered, on the merits, in favor of the class."); *In re High-Tech Employee Antitrust Litig.*, 985 F. Supp. 2d at 1184 ("[T]he office of a Rule 23(b)(3) certification ruling is not to adjudicate the case; rather, it is to select the metho[d] best suited to adjudication of the controversy fairly and efficiently.") (quotation marks omitted). The jury may consider these arguments as a basis for either reducing or withholding any damage award. At this stage, they do not affect the model's status as acceptable common proof.

In light of the foregoing, the court is not concerned that individualized damage inquiries will "inevitably overwhelm" other issues in the case. "[W]hen adjudication of questions of liability common to the class will achieve economies of time and expense, the predominance standard is generally satisfied even if damages are not provable in the aggregate." *Behrend*, 133 S.Ct. at 1437 (Ginsburg & Breyer, JJ., dissenting). Here, not only do the more substantial elements going to the defendants' liability weigh heavily in favor of predominance, the issue of damages is also substantially amenable to common proof, and will not require "labyrinthine individual calculations." *Behrend*, 133 S.Ct. at 1432-33. Accordingly, the predominance standard is satisfied, since "questions of law or fact common to class members predominate over any questions affecting only individual members." Fed. R. Civ. P. 23(b)(3).

4. Superiority

In addition to the requirement that "common questions predominate," Rule 23(b)(3) requires a finding that "a class action is superior to other available methods for fairly and efficiently adjudicating the controversy." Fed. R. Civ. P. 23(b)(3). In other words, class actions are superior to individual trials "when the main objectives of Rule 23 are served," including "the efficient resolution of the claims or liabilities of many individuals in a single action, as well as the elimination of repetitious litigation and possibly inconsistent adjudications." *D'Alauro v. GC Servs. Ltd. P'ship,* 168 F.R.D. 451, 458 (E.D.N.Y. 1996) (citing *Califano v. Yamasaki,* 442 U.S. 682, 700-01 (1979)). Rule 23(b)(3) provides four factors relevant to this determination, including: "(1) the class members' interests in individually controlling the prosecution or defense of separate actions; (2) the extent and nature of any litigation concerning the controversy already begun by or against class members; (3) the desirability or undesirability of concentrating the litigation in a particular forum; and (4) the likely difficulties in managing a class action." Fed. R. Civ. P. 23(b)(3)(A)-(D).

Here, a class action is undoubtedly the superior vehicle for resolving these claims. As the preceding one hundred pages attest, this case presents many challenging questions of both law and fact. Consolidating the plaintiffs' claims into a single action will therefore promote their efficient adjudication, since it will spare all parties and the court itself the substantial costs and effort of repetitive litigation, while also ensuring the consistent adjudication of each plaintiffs' claim. *In re: Nexium (Esomeprazole) Antitrust Litig.*, MDL 2409, 908 F. Supp. 2d 1360, 1361 (J.P.M.L. 2012) ("Centralization will eliminate duplicative discovery; prevent inconsistent pretrial rulings, including with respect to class certification; and conserve the resources of the parties, their counsel and the judiciary."). This is particularly true because of the enormous size of the putative class. *Butler*, 727 F.3d at 801 ("[T]he more claimants there are, the more likely a class action is to yield substantial economies in litigation.") (quoting *Carnegie v. Household Int'l, Inc.,* 376 F.3d 656, 661 (7th Cir. 2004).

Of course, the advantage of concentrating these claims in one forum has already been established by their consolidation into this multidistrict litigation. *See In re Polyester Staple Antitrust Litig.,* No. 3:03-CV-1516, 2007 WL 2111380, at *31 (W.D.N.C. July 19, 2007) ("Desirability of the forum is likewise demonstrated by the consolidation of these pretrial proceedings and subsequent assignment to this Court . . .").

A class action is also superior because, due to the diffuse nature of the harm at issue, many of the putative class members have likely suffered relatively small damages that could not be remedied efficiently in an individual action. *See Butler*, 727 F.3d at 801 ("[O]nly a lunatic or a fanatic sues for $30.") (quoting *Carnegie,* 376 F.3d at 661). Certification of the proposed class will therefore further the "policy at the very core of the class action mechanism," which is to "overcome the problem that small recoveries do not provide the incentive for any individual to bring a solo action prosecuting his or her rights." *Amchem,* 521 U.S. at 617 (quoting *Mace v. Van Ru Credit Corp.*, 109 F.3d 338, 344 (7th Cir. 1997); *see also, id.* (key purpose of class action mechanism is to promote the "vindication of 'the rights of groups of people who individually would be without effective strength to bring their opponents into court at all."); *Korn v. Franchard Corp.,* 456 F.2d 1206, 1214 (2d Cir. 1972) ("[O]ne of the chief goals of Rule 23 [is] to protect claimants whose 'individual claims would be too small to justify separate litigation,'") (quoting 3 B Moore, Federal Practice 23.45 [3] at 23-802); *In re NASDAQ*, 169 F.R.D. at 527 ("Multiple lawsuits would be costly and inefficient, and the exclusion of class members who cannot afford separate representation would be neither 'fair' nor an 'adjudication' of their claims.").

Enabling the vindication of these smaller plaintiffs' rights is a particularly compelling goal in the antitrust context because of the public interest at stake. *See, e.g., Hawaii v. Standard Oil Co.,* 405 U.S. 251, 262 (1972) ("Every violation of the antitrust laws is a blow to the free-enterprise system envisaged by Congress. This system depends on strong competition for its health and vigor, and

strong competition depends, in turn, on compliance with antitrust legislation."); *Zenith Radio Corp. v. Hazeltine Research, Inc.,* 395 U.S. 100, 130-31 (1969) ("The purpose of giving private parties treble-damage and injunctive remedies was not merely to provide private relief, but was to serve as well the high purpose of enforcing the antitrust laws."); *Reiter v. Sonotone Corp.,* 442 U.S. 330, 344 (1979) ("These private suits provide a significant supplement to the limited resources available to the Department of Justice for enforcing the antitrust laws and deterring violations."). If this putative class is not certified, it is likely that the defendants would retain a substantial share of the gains obtained from the alleged conspiracy.

Finally, to the extent that this case will prove difficult to manage as a class action, these difficulties are certainly manageable, as the court has explained in its "predominance" discussion, *supra*; moreover, these difficulties will pale in comparison to the difficulties that would be presented by requiring each claim to proceed individually. *In re Dynamic Random Access Memory (DRAM) Antitrust Litig.*, No. 02-M-1486, 2006 WL 1530166 (N.D. Cal. June 5, 2006) ("[T]he only difficulties likely to be encountered in this case would result from not certifying the class, given the incredible expenditure of time and resources that would result—from both the court's and the parties' perspectives—in requiring each class member's action to proceed independently."). In any event, "failure to certify an action under Rule 23(b)(3) on the sole ground that it would be unmanageable is disfavored and should be the exception rather than the rule." *Visa Check*, 280 F.3d at 140 (citing cases) (internal quotations omitted). Accordingly, a class action is superior to the alternatives for adjudicating the putative class's claims.

For the reasons discussed, the plaintiffs have satisfied each of the requirements of Rule 23(a) and (b)(3). Accordingly, the court recommends that the plaintiffs' class certification motion be granted.

F. **Appointment of Interim Co-Lead Counsel as Class Counsel**

A court that certifies a class must appoint class counsel. Fed. R. Civ. P. 23(g). Factors to be considered in determining whether the proposed class counsel is qualified include "(i) the work counsel has done in identifying or investigating potential claims in the action; (ii) counsel's experience in handling class actions, other complex litigation, and the types of claims asserted in the action; (iii) counsel's knowledge of the applicable law; and (iv) the resources that counsel will commit to representing the class." *Id.* Additionally, the court must be assured that the class counsel will "fairly and adequately represent the interests of the class." Fed. R. Civ. P. 23(g)(2), (4).

Here, the defendants do not dispute that the plaintiffs' interim co-lead counsel satisfies these requirements. Based on the extensive and competent work that the interim counsel have already put into this case over the years, coupled with their ample experience in the relevant fields, the court recommends that they be appointed counsel for the class.

CONCLUSION

For the foregoing reasons, I recommend

1. that the plaintiffs' motion to preclude certain testimony by David P. Kaplan be granted in part and denied in part in accordance with the rulings found in Section II.E. above;
2. that the plaintiffs' motion to preclude certain testimony by Michelle T. Burtis, Ph.D. be granted in part and denied in part in accordance with the rulings found in Section II.E. above;
3. that the plaintiffs' motion to preclude certain testimony by Dr. Frederick R. Warren-Boulton be denied.
4. that the court enter an order certifying the following class for adjudicating the claims in this action:

   All persons or entities (but excluding Defendants, their parents, predecessors, successors, subsidiaries, affiliates, as well as government entities) who purchased

airfreight shipping services for shipments to or from the United States directly from any of the Defendants or from any of their parents, predecessors, successors, subsidiaries, or affiliates, at any time during the period from January 1, 2000 up to and including September 30, 2006.

5. that the court enter an order appointing Michael D. Hausfeld of Hausfeld LLP, Hollis Salzman of Labaton Sucharow LLP, Robert N. Kaplan of Kaplan Fox & Kilsheimer LLP, and Howard JH. Sedran of Levin, Fishbein, Sedran & Berman as Class Counsel.

* * * * * *

Any objections to the Report and Recommendation above must be filed with the Clerk of the Court within 14 days of receipt of this report. Failure to file objections within the specified time waives the right to appeal any judgment or order entered by the District Court in reliance on this Report and Recommendation. 28 U.S.C. § 636(b)(1); Fed. R. Civ. P. 72(b); *see, e.g.*, *Mario v. P & C Food Markets, Inc.*, 313 F.3d 758, 766 (2d Cir. 2002); *Thomas v. Arn*, 474 U.S. 140, 155 (1985); *IUE AFL-CIO Pension Fund v. Herrmann*, 9 F.3d 1049, 1054 (2d Cir. 1993); *Frank v. Johnson*, 968 F.2d 298 (2d Cir. 1992); *Small v. Secretary of Health and Human Serv.*, 892 F.2d 15, 16 (2d Cir. 1989) (per curiam).

Respectfully Submitted:

Viktor V. Pohorelsky

VIKTOR V. POHORELSKY
United States Magistrate Judge

Dated: Brooklyn, New York
October 15, 2014

APPENDIX

1. Plaintiffs' Memorandum of Law in Support of Motion for Class Certification, ECF No. 1600 (Pl. Mem.)
2. Declaration of Brent W. Landau in Support of Motion for Class Certification, ECF No. 1601 (Landau Decl.)
3. Nippon Cargo Airlines Memorandum in Opposition to Plaintiffs' Motion for Class Certification, ECF No. 1682 (Nippon Opp.)
4. Polar Memorandum in Opposition to Plaintiffs' Motion for Class Certification, ECF No. 1684 (Polar Opp.)
5. Joint Memorandum in Opposition to Plaintiffs' Motion for Class Certification, ECF No. 1689 (Joint Opp.)
6. Plaintiffs' Reply Memorandum in Further Support of Motion for Class Certification, ECF No. 1753 (Pl. Reply Mem.)
7. Declaration of Brent W. Landau in Further Support, ECF No. 1754 (Landau Reply Decl.)
8. Declaration of Robert Tollison, ECF No. 1603 (Tollison Decl.)
9. Declaration of James T. McClave, Ph.D., ECF No. 1604 (McClave Decl.)
10. Declaration of Dr. Frederick R. Warren-Boulton, ECF No. 1683-1 (Warren-Boulton Decl.)
11. Declaration of Michelle Burtis, Ph.D., ECF No. 1687 (Burtis Decl.)
12. Declaration of Ian Simmons in Support of Joint Memorandum in Opposition to Plaintiffs' Motion for Class Certification, ECF No. 1690 (Simmons Decl.)
13. Declaration of David P. Kaplan, ECF No. 1691 (Kaplan Decl.)
14. Transcript of Deposition Testimony of James T. McClave, Ex. 14 in ECF No. 1690-3 (McClave Dep. Tr.)
15. Reply Declaration of Dr. Robert Tollison, ECF No. 1755 (Tollison Reply Decl.)
16. Reply Declaration of James T. McClave, Ph.D., ECF No. 1756 (McClave Reply Decl.)
17. Plaintiffs' Memorandum in Support of Motion to Exclude Testimony of David P. Kaplan, ECF No. 1838-9 (Kaplan Mem.)
18. Plaintiffs' Memorandum in Support of Motion to Exclude Testimony of Michelle Burtis, Ph.D., ECF No. 1839-3 (Burtis Mem.)
19. Transcript of Deposition Testimony of Michelle Burtis, Ph.D., Ex. 5 in ECF No. 1839-2 (Burtis Dep. Tr.)
20. Declaration of Melinda R. Coolidge, ECF No. 1840-1 (Coolidge Decl.)
21. Plaintiffs' Memorandum in Support of Motion to Exclude Testimony of Dr. Frederick R. Warren-Boulton, ECF No. 1840-2 (Warren-Boulton Mem.)
22. Defendants' Joint Sur-Reply in Opposition to Plaintiffs' Motion for Class Certification, ECF No. 1845 (Joint Sur-Reply Opp.)
23. Reply Declaration of Michelle Burtis, Ph.D., ECF No. 1848 (Burtis Reply Decl.)
24. Polar Opposition to Plaintiffs' Motion to Exclude Testimony of Michelle Burtis, Ph.D., ECF No. 1882 (Burtis Opp.)
25. Nippon Cargo Airlines Co. Memorandum in Opposition to Plaintiffs; Motion to Exclude Testimony of Dr. Frederick Warren-Boulton, ECF No. 1883 (Warren-Boulton Opp.)
26. Plaintiffs' Reply Memorandum in Support of Motion to Exclude Testimony of Michelle Burtis, Ph.D., ECF No. 1903 (Burtis Reply Mem.)

27. Certain Defendants' Opposition to Plaintiffs' Motion to Exclude Testimony of David P. Kaplan, ECF No. 1884 (Kaplan Opp.)
28. Declaration of Michael J. Moore, ECF No. 1884-1 (Moore Decl.)
29. Sur-Reply Declaration of James T. McClave, Ph.D., ECF 1903-2 (McClave Sur-Reply Decl.)
30. Sur-Reply Declaration of David P. Kaplan, ECF No. 1912-1 (Kaplan Sur-Reply Decl.)