UNITED STATES DISTRICT COURT
SOUTHERN DISTRICT OF NEW YORK

IN RE ALUMINUM WAREHOUSING ANTITRUST LITIGATION

This Document Relates To:

In re Aluminum Warehousing Antitrust Litigation (Direct Purchaser Plaintiffs), No. 14-cv-3116-PAE (S.D.N.Y.)

13-md-2481 (PAE)
14-cv-3116 (PAE)

OPINION & ORDER

PAUL A. ENGELMAYER, District Judge:

This putative class action involves an alleged violation of Section 1 of the Sherman Act, 15 U.S.C. § 1, in the form of a conspiracy to inflate prices in the primary aluminum market.[1] Specifically, plaintiffs (the "First Level Purchasers" or "FLPs")[2] contend that defendants engaged in anticompetitive conduct that increased regional premiums which in turn, by industry convention, form one component of the price for primary physical aluminum.

Before the Court is the First Level Purchasers' motion to certify a class pursuant to Federal Rule of Civil Procedure 23(b)(3). Also before the Court is the FLPs' motion to exclude the declaration of defendants' expert David P. Kaplan.

[1] As the Second Circuit recently explained, "[t]he term 'primary aluminum' is used in the industry to describe aluminum in the form produced at a smelter or primary aluminum plant, by original producers, as distinguished from 'secondary aluminum,' which is reconstituted aluminum scrap." *Eastman Kodak Co. v. Henry Bath LLC*, 936 F.3d 86, 88 (2d Cir. 2019) ("*Aluminum VI*").

[2] The named plaintiffs are: Ampal, Inc.; Custom Aluminum Products, Inc.; Claridge Products and Equipment, Inc.; and Extruded Aluminum Corporation. *See* Dkt. 738. Unless otherwise specified by reference to a specific docket number, all docket citations refer to the main docket in this multi-district litigation ("MDL"), No. 13 MD 2481 (PAE).

For the following reasons, the Court denies the FLPs' class certification and *Daubert* motions.

I. Background[3]

A. The Parties

The First Level Purchasers are Ampal, Inc.; Custom Aluminum Products, Inc. ("Custom Aluminum"); Claridge Products and Equipment, Inc.; and Extruded Aluminum Corporation ("Extruded Aluminum"). TAC ¶¶ 44, 53, 60, 67. During the relevant period, each named plaintiff purchased primary aluminum from smelters for physical delivery within the United States. *Id.* ¶¶ 33–34, 48, 57, 64, 71.

The FLPs bring claims against six sets of defendants, three of which traded in primary aluminum and primary aluminum derivatives on the London Metals Exchange ("LME") during the relevant period (the "Financial Defendants"), and three of which owned and operated

[3] The Court assumes familiarity with the underlying facts and procedural history of this litigation. *See, e.g.*, *In re Aluminum Warehousing Antitrust Litig.*, No. 13 MD 2481 (KBF), 2014 WL 4277510 (S.D.N.Y. Aug 29, 2014) ("*Aluminum I*"); *In re Aluminum Warehousing Antitrust Litig.*, 95 F. Supp. 3d 419 (S.D.N.Y. 2015) ("*Aluminum II*"); *In re Aluminum Warehousing Antitrust Litig.*, 833 F.3d 151 (2d Cir. 2015) ("*Aluminum III*"); *Aluminum VI*, 935 F.3d 86. The Court's account of the facts here is drawn primarily from the FLPs' Third Amended Complaint, Dkt. 738 ("TAC"), and the parties' submissions in connection with the FLPs' motions. The Court has considered the following submissions by the FLPs in support of their motions: the declaration of Susan R. Schwaiger, Esq., Dkt. 920 (refiled as Dkt. 1237) ("Schwaiger Decl."), and exhibits attached thereto; the declaration of Steven M. Jodlowski, Esq., Dkt. 1041 (refiled as Dkt. 1239) ("Jodlowski Decl."), and exhibits attached thereto; and two declarations of Carmen A. Medici, Esq., Dkt. 1039 (refiled as Dkt. 1241) ("First Medici Decl."); Dkt. 1195 (refiled as Dkt. 1240) ("Second Medici Decl."), and exhibits attached thereto. The Court has also considered the following submissions by defendants in opposition to the motions: the declaration of Henry Liu, Esq., Dkt. 1014 ("Liu Decl."), and exhibits attached thereto; two declarations of John S. Playforth, Esq., Dkt. 1164 ("First Playforth Decl."); Dkt. 1199 ("Second Playforth Decl."), and exhibits attached thereto; and the declaration of William H. Wagener, Esq., Dkt. 1167 ("Wagener Decl."), and exhibits attached thereto. And the Court has considered the exhibits attached to three joint letters solicited by the Court and submitted by the parties, Dkt. 1253 ("First Joint Ltr."); Dkt. 1256 ("Second Joint Ltr."); Dkt. 1258 ("Third Joint Ltr."), which the Court discusses further *infra*.

LME-certified warehouses for the storage of metal (the "Warehousing Defendants"). *Id.* ¶¶ 85–127; *see Aluminum VI*, 936 F.3d at 89.

The Financial Defendants are each affiliated with either Goldman Sachs & Co. LLC, J.P. Morgan Securities plc, or Glencore Ltd. Each group of Financial Defendants directly or indirectly acquired one of the Warehousing Defendants in 2010, during a glut in the aluminum market following the 2008 financial crisis. *See* TAC ¶¶ 86, 104, 125, 464.

Defendant Goldman Sachs & Co. is an international financial company headquartered in New York, New York. *See id.* ¶¶ 86–87. Defendant J. Aron & Company, a commodities trading firm, is a New York corporation with the same headquarters as Goldman Sachs & Co. *Id.* ¶ 88. Defendant Goldman Sachs International is an international financial services provider headquartered in London, United Kingdom. *Id.* ¶ 89. Each of these entities (collectively, the "Goldman Sachs defendants") is a subsidiary of The Goldman Sachs Group, Inc. (together with the Goldman Sachs defendants, "Goldman Sachs"). *Id.* ¶¶ 85–89.[4]

Defendant J.P. Morgan Securities plc ("J.P. Morgan Securities") is a provider of securities brokerage services headquartered in London, in the United Kingdom. *Id.* ¶ 97. J.P. Morgan Securities is a wholly-owned subsidiary of J.P. Morgan Chase Bank, N.A. ("JPMCB"). *Id.*[5]

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[4] Judge Forrest previously dismissed all claims against The Goldman Sachs Group, Inc. *In re Aluminum Warehousing Antitrust Litig.*, No. 13 MD 2481 (KBF), 2015 WL 1344429, at *3 (S.D.N.Y. Mar. 23, 2015).

[5] Judge Forrest previously denied the FLPs' motion to add JPMCB as a defendant, *In re Aluminum Warehousing Antitrust Litig.*, No. 13 MD 2481 (KBF), 2016 WL 1629350, at *7–9 (S.D.N.Y. Apr. 25, 2016), and dismissed all claims against J.P. Morgan Chase & Co., *In re Aluminum Warehousing Antitrust Litig.*, 2015 WL 1344429, at *3. The parties' submissions frequently refer to J.P. Morgan Securities and its affiliates collectively as "J.P. Morgan," and, where appropriate, the Court does so as well.

Defendant Glencore Ltd., which is headquartered in Stamford, Connecticut, trades aluminum and other metals, as well as financial derivatives tied to underlying asset prices of such metals. *Id.* ¶ 121; *see id.* ¶ 113.[6]

The Warehousing Defendants are Metro International Trade Services LLC ("Metro"), Mitsi Holdings LLC ("Mitsi"), Henry Bath LLC ("Henry Bath"), and Pacorini Metals USA LLC ("Pacorini USA").[7] *Id.* ¶¶ 92–93, 107, 122. Each of the Warehousing Defendants "owns and operates aluminum warehouses certified by the LME, and each of them was owned [directly or indirectly] during the relevant time by one of the Financial Defendants—Henry Bath by J.P. Morgan, Metro [and Mitsi] by Goldman Sachs, and Pacorini by Glencore." *Aluminum VI*, 936 F.3d at 89.

Defendant Metro is a Michigan limited liability company headquartered in Romulus, Michigan. TAC ¶ 92. Metro owns and operates numerous LME-certified warehouses in the United States, including several metal-storage warehouses in or around Detroit, Chicago, New Orleans, and other cities. *Id.* Defendant Mitsi is a Delaware limited liability company and the parent holding company of, with 100% interest in, Metro. *Id.* ¶ 93. Beginning in 2010, The Goldman Sachs Group, Inc., owned Mitsi and Metro. *Id.* ¶¶ 86, 93.

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[6] The TAC named several additional entities as "Glencore Defendants." TAC ¶ 110. Judge Forrest dismissed Glencore plc for lack of personal jurisdiction, *In re Aluminum Warehousing Litig.*, 90 F. Supp. 3d 219, 223 (S.D.N.Y. 2015), and denied leave to amend to add Glencore International AG ("GIAG") and Glencore UK Ltd., *see In re Aluminum Warehousing Litig.*, 2016 WL 1629350, at *7–9; *In re Aluminum Warehousing Antitrust Litig.*, 2015 WL 1344429, at *3. The FLPs also listed Glencore AG as a separate defendant, TAC ¶ 116, but Glencore AG and Glencore Ltd. are different names used by the same company, *see* Dkt. 896 at 2 n.1. The parties' submissions frequently refer to Glencore Ltd. and its affiliates collectively as "Glencore," and, where appropriate, the Court does so as well.

[7] Pacorini USA is now known as Access World (USA) LLC. *See, e.g.*, Dkt. 1146 at 23. The Court uses the entity's former name for clarity and continuity.

Defendant Henry Bath is a Delaware limited liability company headquartered in Baltimore, Maryland. *Id.* ¶ 107. Henry Bath owns and operates numerous LME-certified warehouses in the United States—including in Chicago, Baltimore, and New Orleans—that store, among other metals, aluminum. *Id.* From February 2010 through October 2014, J.P. Morgan entities owned Henry Bath's parent corporation, Henry Bath & Son, Ltd.[8] *See id.* ¶¶ 104, 108.

Defendant Pacorini USA is a Louisiana limited liability company with headquarters in New Orleans, Louisiana. *Id.* ¶ 122. Pacorini USA owns and operates LME-certified warehouses in the United States—including in Detroit, Baltimore, Chicago, Los Angeles, Mobile, and New Orleans—that store, among other metals, aluminum. *Id.* Pacorini Metals Vlissingen B.V. ("Pacorini Vlissingen"), a "[n]on-defendant co-conspirator," owns and operates LME-certified warehouses in the Dutch cities of Rotterdam and Vlissingen that store, among other metals, aluminum. *Id.* ¶ 124.[9] One or more of the Glencore entities owned and operated the Pacorini entities beginning, at latest, in September 2010. *Id.* ¶ 125.

B. Factual Background

In the wake of the 2008 financial crisis, a sharp drop in demand for aluminum led to a massive global surplus, depressed prices, and a large supply of physical aluminum stored in warehouses. Anticipating that the market for aluminum would improve over time, traders and financial institutions purchased some of this surplus—betting that it would be profitable to buy

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[8] Judge Forrest dismissed Henry Bath & Son, Ltd., for lack of personal jurisdiction. *In re Aluminum Warehousing Litig.*, 90 F. Supp. 3d at 223.

[9] Judge Forrest dismissed the claims against an additional Pacorini entity, Pacorini Metals AG, *see In re Aluminum Warehousing Antitrust Litig.*, 2015 WL 1344429, at *3, and denied the FLPs' motion to amend the TAC to add Pacorini Vlissingen as a defendant, *see In re Aluminum Warehousing Litig.*, 2016 WL 1629350, at *7–9.

aluminum, pay to store it in LME warehouses, and then sell it, via a futures contract or other means. In this environment, the Financial Defendants, "seeing opportunities to purchase primary aluminum at low prices in anticipation of future resale at higher prices, acquired substantial aluminum holdings." *Aluminum VI*, 936 F.3d at 92.

In 2010, when the quantity of aluminum stored in LME warehouses—including aluminum owned by Financial Defendants—was extremely high, each of the Financial Defendants purchased one of the Warehousing Defendants. *Id.* During the period that followed, delays in the loading out of aluminum from key LME warehouses operated by the Warehousing Defendants increased considerably. The FLPs allege that defendants conspired to lengthen these load-out "queues," which—by driving up a regional premium often used as a price component in aluminum supply contracts—increased the all-in price the FLPs paid when purchasing primary aluminum from smelters. *Id.*

The Court first provides background regarding the production and sale of primary aluminum; then describes the LME system in which aluminum is stored in LME-certified warehouses and traded through financial contracts on the LME's exchange platform; and then, finally, describes the growth and impact of queues at LME warehouses, including defendants' alleged conspiracy to engage in anticompetitive activity aimed at lengthening such queues.

1. Primary Aluminum Producers and the Pricing of Physical Aluminum

Primary aluminum is created by large integrated producers (smelters), such as Alcoa, Inc. ("Alcoa"), UC Rusal ("Rusal"), and Rio Tinto Alcan, Inc. ("Rio Tinto"). TAC ¶¶ 158, 166. These producers smelt alumina refined from mined bauxite ore to extract new molten aluminum. *Id.* ¶¶ 164–65. The molten aluminum can then be cast into various shapes, depending on how it is to be further processed. *Id.* Because producers face "very high costs associated with re-starting idled capacity"—*i.e.*, the cost of re-starting a shut-down smelting facility—they tend

to operate either at full capacity or not at all. *Id.* ¶ 162. About 44 million tons of aluminum were produced worldwide in 2011. *Id.* ¶ 172.

Producers generally sell physical primary aluminum to two broad categories of customers: (1) manufacturers and processors that use aluminum either in industrial processes or to fabricate finished products ("industrial users" or "fabricators"); and (2) traders and financial institutions, who hold and resell aluminum through various methods. *Id.* ¶ 158. The vast majority of primary aluminum is purchased by industrial users, such as the FLPs. *Id.* ¶ 166. Smelters either sell such aluminum directly to fabricators, who process or fabricate the aluminum into other shapes before reselling it further, or fabricate the primary aluminum themselves before selling it to an additional group of industrial users. In this regard, the large integrated producers are both suppliers to and competitors with fabricators. *Id.*

Industrial users often purchase primary aluminum from producers pursuant to long-term contracts, which typically include annual supply arrangements. *Id.* Such users also may purchase aluminum on the spot market. Liu Decl., Ex. 1 (declaration of Professor Jerry A. Hausman) ("Hausman Decl.") ¶ 19. Many purchase contracts for the physical delivery of primary aluminum—*i.e.*, contracts for the sale of physical aluminum, generally from a smelter directly to an industrial user—provide for a purchase price consisting of two main components: (i) the LME Settlement Price for aluminum, and (ii) a premium associated with the costs of delivery. *Id.*; TAC ¶ 176. Such contracts generally also specify an additional price component reflecting the specifics of the product being purchased—*e.g.*, metal grade or shape. Hausman Decl. ¶ 19; Schwaiger Decl., Ex. D (expert report of Dr. J. Douglas Zona) ("Zona Rpt.") ¶ 10; TAC ¶ 176.

The LME Settlement Price represents the current value of the metal. It fluctuates in accordance with the daily intersection of supply and demand in LME trading. TAC ¶ 177. The LME Settlement Price is a global price based on commodities trading. It does not include the costs of delivery from a seller to a purchaser. *See id.*

The inclusion of a regional premium in primary aluminum purchase contracts helps bridge the gap between the abstract financial trading of aluminum on the LME and the tangible costs associated with delivering physical aluminum from a smelter to a customer. Contracts for the purchase of primary aluminum may incorporate a premium associated with the costs of delivery in one of several ways, or not at all. *See* First Joint Ltr. (describing 47 exemplar contracts used by 3 different smelters); Liu Decl., Ex. 2 (declaration of David P. Kaplan) ("Kaplan Decl.") ¶¶ 78–83; First Playforth Decl., Ex. 2 (declaration of David P. Kaplan in response to Dr. Gilbert's reply report) ("Kaplan Reply Decl.") ¶¶ 51–60.

In the United States, the preeminent benchmark regional premium is the Midwest Premium reported by the Platts publishing company ("Midwest Premium" or "MWP"). *See* Hausman Decl. ¶ 19; TAC ¶ 179.[10] To calculate the MWP, Platts first surveys the all-in prices paid in physical transactions in the spot market for aluminum for delivery in the midwestern United States on a given day. *See* TAC ¶¶ 176, 178; Hausman Decl. ¶ 20; Zona Rpt. ¶ 10 & n.8. This surveyed all-in price reported by Platts, known as the Midwest Transaction Price ("MWTP"), "is a measure of actual spot transaction prices for aluminum delivered to plants in the Midwest," which "reflects the spot physical value of 99.7% P1020 high-grade aluminum, in ingots, sows or T-bars." Zona Rpt. ¶ 10 & n.8; *see* First Joint Ltr. at 8; Hausman Decl. ¶ 20. The MWP, in turn, represents the mathematical difference between the MWTP and the LME

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[10] Other regional premia include the Rotterdam Premium and the CIF Japan Premium. TAC ¶ 185.

Settlement Price for aluminum on any given day. Hausman Decl. ¶ 20; Second Medici Decl., Ex. 1A (expert report of Dr. Christopher L. Gilbert) ("Gilbert Rpt.")[11] ¶ 60 n.33 ("In the North American aluminum market, the spread between the exchange and physical markets is precisely the Midwest Premium.").

Many, but by no means all, primary aluminum purchase contracts between smelters and U.S. customers explicitly refer to some measure of the MWTP or MWP. Hausman Decl. ¶ 19 (reference to some form of MWTP or MWP is "common, but not ubiquitous"); *see generally* First Joint Ltr. The parties refer to such purchase contracts that explicitly reference the Midwest Premium as Platts Midwest Transaction Price contracts ("MWTP contracts" or "explicit MWTP contracts"). *See* First Joint Ltr. at 1.

However, many purchase contracts do not reference the MWTP or MWP at all, and those that do reference the MWTP or MWP do so in a variety of ways. *See* Kaplan Decl. ¶¶ 78–83; Kaplan Reply Decl. ¶¶ 51–60; *see generally* First Joint Ltr. Some contracts specify a single fixed price, which does not vary with changes in the LME Settlement Price or the MWP. *See, e.g.*, Kaplan Decl. ¶¶ 79, 81 & n.253; Kaplan Reply Decl. ¶ 57; First Joint Ltr., Exs. 13, 29, 45–47. Another category of contracts contains a base price that varies with changes in the LME Settlement Price, as well as a fixed premium, which does not vary. *See, e.g.*, Kaplan Decl. ¶ 80; Kaplan Reply Decl. ¶¶ 53–54; First Joint Ltr., Exs. 12, 24–27, 39–42; *see also* Second Joint Ltr., Ex. 9 (industrial user's internal emails explaining that, because they purchase aluminum pursuant to a fixed premium contract, as opposed to an MWTP contract, "[i]f Midwest goes up, it helps us. If Midwest goes down, it hurts"). Other contracts grant the purchaser an option to pay a

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[11] The Gilbert Report was initially filed as Exhibit A to the Schwaiger Declaration, but a corrected version, with minimal changes, was later filed. The Court refers throughout to the corrected Gilbert Report.

price based on the MWTP or a fixed price, or contain a cap or collar on the regional premium component of the MWTP. *See, e.g.*, First Joint Ltr., Exs. 8–10 (options), 36–37 (caps and collars). Further, many purchases of aluminum occur on a spot basis. Hausman Decl. ¶ 19; Kaplan Decl. ¶¶ 54–56.

2. The LME System

a. In General

The LME is the world's leading exchange for non-ferrous industrial metals, including aluminum. Hausman Decl. ¶ 8; TAC ¶ 76. The LME offers a variety of traded contracts, including futures and options contracts. Schwaiger Decl., Ex. 25 at 18.[12] The LME's trading and clearing platform allows buyers and sellers to trade standardized futures contracts that provide for the physical delivery of metal on specified maturity dates. Hausman Decl. ¶ 8.[13]

The LME also certifies warehouses located in various cities throughout the world, including Detroit, Baltimore, and New Orleans in the United States and Vlissingen in the Netherlands. Hausman Decl. ¶ 9. The LME warehouse system consists of more than 700 warehouses, operated by more than 60 different companies, including the Warehousing

[12] The first 10 exhibits to the Schwaiger Declaration are labeled A through J, after which the exhibits are numbered, beginning at 1, and occasionally stretch across multiple docket entries. For example, Exhibit 25 to the Schwaiger Declaration is at docket 1237-35 and 1237-36.

[13] Each futures contract represents an agreement to buy or sell high-grade primary aluminum in 25 metric ton lots, in the future, at a fixed price. Kaplan Decl. ¶ 32. For a given batch of aluminum to be eligible to back an LME futures contract, it must meet LME specifications as to the level of purity of the metal and be produced, by an LME-approved brand, in the shape of an ingot, t-bar, or sow. *Id.*

Defendants, in about 40 different locations on at least four continents. TAC ¶ 188; Kaplan Decl. ¶ 34.[14]

Futures contracts traded on the LME can be settled either through an offsetting trade or through the delivery of "warrants"[15] issued by LME-certified warehouses. Hausman Decl. ¶¶ 9–10. An LME warrant entitles the bearer to a specified lot of metal stored at one of the LME warehouses located around the world. *Id.* The vast majority of aluminum trading activity on the LME takes place among traders and financial institutions, such as the Financial Defendants, who speculate on price movements and have no expectation of ever taking delivery of the metal—as opposed to industrial users of aluminum. TAC ¶ 76; *see Aluminum VI*, 936 F.3d at 91. Further, the overwhelming majority of physical primary aluminum never passes through an LME warehouse (and thus plays no role in trading on the LME); instead, industrial users generally purchase physical aluminum directly from smelters, rather than through the LME. Hausman Decl. ¶ 19; TAC ¶¶ 166, 176.[16] Accordingly, delivery occurs in only a very small percentage of LME trades. TAC ¶ 195.

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[14] As the Second Circuit has explained: "In general, there are two types of warehouses that stockpile aluminum: those that are affiliated with the [LME] and those that are not. Warehouses that are not affiliated with the LME typically store aluminum for users of physical aluminum, *e.g.*, producers, fabricators, and manufacturers, and are located near those users of physical aluminum. LME-warehouses typically store aluminum for derivatives traders and are located all over the world." *Aluminum III*, 833 F.3d at 154.

[15] "[A]n LME warrant is a standardized document issued by the [LME] warehouse upon delivery of a [25 metric ton] lot of aluminum into the warehouse to indicate who has the right of possession of that [particular] lot of aluminum." TAC ¶ 195. To issue a warrant means that "aluminum has been checked into such a warehouse for storage," and to cancel a warrant means that "the aluminum has been earmarked for delivery from the warehouse." *Id.*

[16] Industrial users of aluminum do, however, engage in some trading on the LME—generally to hedge their exposure to changes in aluminum prices and, occasionally, as a supply of last resort, to purchase limited amounts of their aluminum requirements. TAC ¶ 196.

Still, a buyer of an LME futures contract may choose to settle the contract through delivery, in which case the buyer receives a warrant for physical metal stored in an LME warehouse. Hausman Decl. ¶ 10. The LME employs a "seller's choice" model, which means that the seller of a futures contract chooses which warrants to deliver to settle the contract. *Id.*; *see also* Kaplan Decl. ¶ 35. Because the seller gets to choose which warrants to deliver under this model, the warrants used to settle LME futures contracts are generally the least valuable warrants in the LME system. Warehouse queues reduce the value of warrants by increasing the time and expense—*i.e.*, additional rent paid to the warehouse while waiting in the queue—required to move aluminum from an LME warehouse into the spot market, rendering LME aluminum less valuable than spot market aluminum. *See* Hausman Decl. ¶¶ 28–34. During the proposed class period, sellers almost always chose to deliver Metro Detroit and Pacorini Vlissingen warrants, whose value was encumbered by long delivery queues at those locations. *Id.* ¶¶ 10, 15; *see* Gilbert Rpt. at 94; Zona Rpt. ¶ 84; Dkt. 640-1 (U.S. Senate Permanent Subcomm. on Investigations, 113th Cong., *Wall Street Bank Involvement with Physical Commodities* (Nov. 20 and 21, 2014)) ("Senate Report")[17] at 210 & n.1277.[18]

b. LME Warehouses

Numerous independent companies own and operate LME warehouses. The Warehousing Defendants account for a significant portion of the LME-certified warehouses in the United States. TAC ¶ 188; Kaplan Decl. ¶ 34.

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[17] The FLPs also provide relevant excerpts from the Senate Report in their declarations in support of class certification. *See, e.g.*, Second Medici Decl., Ex. 5.

[18] According to defendants, the fact that Metro Detroit and Pacorini Vlissingen warrants were used to specify almost all LME futures contracts during the class period also meant that the value of those warrants determined the price at which the LME futures contracts traded. *See* Hausman Decl. ¶ 15. The Court reviews this theory in greater detail *infra*.

Holders of LME warrants are responsible for paying rent to the LME warehouse at which the warranted metal is located; LME-certified warehouses are in the business of charging rent for warehouse storage space. Hausman Decl. ¶ 11; *see Aluminum III*, 833 F.3d at 155 ("LME-warehouses make money by charging rent while the aluminum is stored, and exit penalties when the aluminum leaves; therefore, they have an incentive to store the greatest quantity for as long as possible."). A warrant holder may retrieve its metal from an LME warehouse by "cancelling" its warrant. *Id.* ¶ 12. The warrant holder might do so for several reasons, including: to sell the aluminum to an industrial user, to arbitrage a differential between LME price and physical spot market price, or to move the aluminum to a location with cheaper storage—either a different LME warehouse (a different "on-warrant" location) or a non-LME location ("off-warrant" storage). *Id.* ¶ 11. A party that cancels warrants, however, must continue to pay rent to the relevant LME warehouse until the warehouse finishes loading out the cancelled metal. *Id.* ¶¶ 11–12.

As a result, when warrants are cancelled, LME warehouses generally load out metal no faster than required by the LME's minimum load-out rules. *Id.* ¶¶ 12–13. In November 2003, the LME first adopted a minimum load-out rule, requiring that each warehousing company be able to load out a minimum of 1,500 tons per day per location. TAC ¶ 523. Notably, if a company owned multiple warehouses in one city—*e.g.*, Metro's several warehouses in Detroit—all of those warehouse buildings (known as "sheds") together would need to load out only 1,500 tons per day. *Id.* ¶ 525; *see* Senate Report at 192. In April 2012, the LME increased the required minimum to 3,000 tons per day for companies with more than 900,000 tons of metal stored. *Id.* ¶¶ 524, 586. In February 2015, the LME instituted a "Load-In/Load-Out" rule, which linked a warehouse's minimum load-out rate to the value of the aluminum it loaded into storage.

Hausman Decl. ¶¶ 100–01. Under each set of rules, the minimum rate generally operated as a *de facto* maximum rate, because warehouse operators loaded out no more metal than required. *See* TAC ¶¶ 524, 588.

The LME publishes on its website the maximum rental rate that each LME warehouse charges for the storage of warranted metal. Liu Decl., Ex. 36 (Summary Public Report of the LME Warehousing Consultation) at 9. However, LME warehouses may choose to offer discounts from their published rates. Many do so in order to retain their customers—*i.e.*, to convince rent-paying warrant holders to continue to store their aluminum at that LME warehouse. *Id.*

c. Supply of Last Resort, Arbitrage, and Regional Premiums

The LME warehousing system—in addition to facilitating the financial trading described above—serves as a market of last resort for physical primary aluminum, which helps to ensure price convergence between LME aluminum prices and prices in the physical market. *See* TAC ¶¶ 6, 196, 198; Schwaiger Decl., Ex. 25 at 16–18; *see also* First Playforth Decl., Ex. 3 ("The underlying threat of the delivery of physical material—made possible by the network of LME-approved warehouses—is what keeps the LME price in line with the physical price."). In times of excess supply, LME warehouses absorbed metal and served as destinations of last resort for smelters—who, as reviewed above, cannot easily reduce production levels—to deliver aluminum and obtain immediate liquidity. *See* TAC ¶ 198; Schwaiger Decl., Ex. 25 at 18. Conversely, during times of excess demand, LME warehouses serve as suppliers of last resort, providing additional volume of aluminum that can be delivered into consumption. TAC ¶ 198; Schwaiger Decl., Ex. 25 at 18.

Before 2010, customers generally could load out their aluminum from LME warehouses within a few days or weeks. Senate Report at 176. Under such conditions, regional premiums

remain relatively small due to the potential for arbitrage between LME warehouses and the spot market. Hausman Decl. ¶ 29; *see also* Jodlowski Decl., Ex. 1 (expert reply report of Dr. Gilbert) ("Gilbert Reply Rpt.") ¶ 15 ("[A]ny divergence between the cost of taking delivery from an exchange and purchasing aluminum in the physical market will be arbitraged by market actors, who will buy at the lowest cost until prices reach equilibrium."). If regional premiums grow large—*i.e.*, if the difference between LME prices and spot market prices grows large—warrant holders will arbitrage the difference by cancelling warrants and selling the formerly-warranted aluminum in the spot market. Hausman Decl. ¶ 29; Zona Rpt. ¶ 81; *see also* TAC ¶ 196 ("[W]henever the LME price was significantly less than the all-in physical price, industrial consumers could economically purchase some limited portion of their primary aluminum requirements by taking delivery on an LME forward contract."). Such cancellations will continue until the difference between LME prices and spot market prices—*i.e.*, the regional premium—narrows to the point that arbitrage is no longer profitable. Hausman Decl. ¶ 29.

Queues for the loading out of aluminum from LME warehouses impose an extra cost to obtaining aluminum from the LME, making this type of arbitrage less profitable by causing warrant holders to incur the costs of waiting in the queue (and paying rent) before they can take delivery of the aluminum. *Id.* ¶ 30.[19] As a result, as queues increase, arbitrage activity will no longer hold LME prices as close to spot market prices. *Id.* Queues thus cause aluminum in LME warehouses to trade at a greater discount to the price of aluminum available for immediate delivery in the spot market. *Id.* ¶¶ 31–32.

[19] For this reason, queues are beneficial to warehouses. *See, e.g.*, Schwaiger Decl., Ex. 2 ("If there is a long queue of outbound metal, inflows will have a known minimum stay in the warehouse and generate a minimum known rent income.").

Experts for both the defendants and the FLPs agree that the discount reflects the increased costs associated with owning aluminum encumbered by a queue. *See id.*; Zona Rpt. ¶¶ 73–74, 84. Moreover, experts for both sides agree that a "queue decreases the value" of aluminum stored at LME warehouses with queues, and "if the location with the queue represents the worst value of all [LME] warehouse locations, then the impact of the queue will ultimately be reflected in the global LME price" due to the LME's seller's choice model. Zona Rpt. ¶ 84; *see* Hausman Decl. ¶ 31. However, as reviewed further below, the experts disagree as to the impact of queues on the all-in price paid for physical aluminum. *Compare* Zona Rpt. ¶ 84, *and* Gilbert Rpt. ¶ 67, *with* Hausman Decl. ¶¶ 28–34.

3. Great Recession, Aluminum Surplus, and "Contango" Conditions

Between 2004 and 2008, demand for aluminum in the U.S. was robust. During that time, the Midwest Premium fluctuated between four and eight cents per pound ($90–$180 per metric ton). Schwaiger Decl., Ex. 24 at 41.

When the Great Recession began in early 2008, however, global demand for aluminum plummeted by 20 percent, but aluminum producers—who have limited ability to reduce the output of their plants without incurring substantial restart costs—did not make comparable cuts in production. Hausman Decl. ¶ 16; Kaplan Decl. ¶¶ 39–40. Global stockpiles of aluminum increased sharply at the outset of the Recession and continued increasing thereafter, with production outstripping demand each year from 2008 onward and a "massive" surplus that persists to this day. *See* Gilbert Rpt. at 86; TAC ¶ 174. As a result, millions of tons of surplus aluminum flowed into LME and non-LME warehouses around the world. Kaplan Decl. ¶¶ 40, 42 & tbl.1. In the U.S. alone, the volume of aluminum stored in LME warehouses soared from 400,000 metric tons in July 2008 to more than 2.1 million metric tons in February 2010. Schwaiger Decl., Ex. 33 at ECF p. 14; *see id.*, Ex. 25 at 28–29. Of that 2.1 million metric tons

stored in U.S. LME warehouses, Metro's Detroit warehouses had accumulated more than 915,000 metric tons. *Id.*; Senate Report at 187. During the same period, the spot price for aluminum sank. Schwaiger Decl., Ex. 24 at 41; Senate Report at 173.

The worldwide aluminum surplus combined with the expectation that prices would recover over time created a "contango" on the LME—*i.e.*, a market structure in which near-term prices of aluminum futures contracts were significantly lower than further-forward prices. Gilbert Rpt. ¶ 13. The contango made it profitable for traders and financial institutions to engage in "cash-and-carry" trades, in which they bought and stored aluminum, with the expectation of selling it at higher future prices, in order to "earn the contango." Liu Decl., Ex. 3 (deposition of Dr. Christopher L. Gilbert) ("Gilbert Dep.") at 94–96; *see* Gilbert Rpt. ¶ 55; Hausman Decl. ¶ 50 (contango "makes it attractive to hold aluminum in storage").[20] Some traders, looking to reduce their storage costs, cancelled their warrants to move their aluminum off-warrant into lower-cost non-LME warehouses. Hausman Decl. ¶¶ 17, 33; Liu Decl., Ex. 40 (declaration of Jonathan King, metal trader for non-party, Koch Supply & Trading, L.P.) ("King Decl.") ¶ 7. The Financial Defendants acquired LME warehouses, and stored aluminum in those warehouses.

4. The Alleged Conspiracy

The Second Circuit recently summarized the TAC's conspiracy allegations as follows:

> Because of the convention to use the Midwest Premium as a price element in sales of primary aluminum, the Financial Defendants allegedly devised a conspiratorial plan to artificially inflate the Midwest Premium, thereby artificially inflating the prices they could realize in later selling off their large aluminum holdings.

[20] *See also* Dkt. 1272 ("OA Tr.") at 88 ("The contango is making it profitable to store [aluminum] in a warehouse. . . . [I]f [a trader or financial institution is] storing aluminum and holding it in a cash-and-carry trade," then industrial users or arbitrageurs who wish to acquire that aluminum out of storage "have to be willing to outbid the contango.").

> Working together with the Warehousing Defendants they had recently acquired, the Financial Defendants undertook to inflate the Midwest Premium by artificially lengthening the delays involved in taking delivery from LME warehouses. Their strategies to accomplish this included offering incentives to producers to move even more aluminum into their warehouses; agreeing to treat the minimum load-out rate set by the LME as the maximum rate of load-outs (effectively capping the number of lots that would be loaded out of their warehouses each day); and, most importantly, needlessly canceling their warrants for aluminum they had purchased, causing aluminum to be shuttled back and forth among the Defendant Warehouses. The consequence was to cause long delays between cancellation of a warrant and actual load-out of a covered lot. The plaintiffs allege that in this fashion, the defendants increased delivery delays from about six weeks pre-2011 to nearly two years (approximately 625 days) by 2014. This caused the Midwest Premium to triple, from about 6.45 cents per pound in 2011 to 20 cents per pound by 2014.

Aluminum VI, 936 F.3d at 92.

The TAC thus alleges a conspiracy in two parts: (i) the Financial Defendants' acquisition of LME warehouses, *see* TAC ¶¶ 464–72; and (ii) defendants' and co-conspirators' aggregation of LME-warranted aluminum, primarily in Metro's LME warehouses in Detroit, *see id.* ¶¶ 14, 15(a), 207, 295, 393, followed by their large-scale execution of warrant cancellations, which lengthened warehouse queues for the load-out of aluminum, which in turn increased the Midwest Premium, *id.* ¶¶ 9(b), 251–86.

a. Acquisition of Warehouses

In August 2009, Metro—which owned numerous LME-certified warehouses and had accumulated massive stores of aluminum in its Detroit warehouses—began courting potential acquirers for its business. *See* Schwaiger Decl., Ex. 25. Goldman Sachs and J.P. Morgan quickly expressed interest and held follow-up meetings with Metro to explore a sale. *Id.*, Ex. 28 at ECF p. 2 (noting interest of both J.P. Morgan, which had "paid more than $50M in LME rent this year," and Goldman Sachs). In an email to the Deutsche Bank investment bankers who were running Metro's sale process, Metro CEO Chris Wibbelman laid out "overly candid" talking points about "the strategic advantages for someone like Goldman Sachs" of owning Metro, the

largest LME warehouse company. *Id.* at ECF pp. 3–4. Wibbelman listed 12 such strategic advantages. These included that "[v]ertical integration with a warehouse company" would allow a financial institution, *inter alia*: (i) "to compete on a more level playing field with Glencore"; (ii) "to launch its own look-alike LME contract [*i.e.*, a competitor to the contracts traded on the LME] which would create a huge amount of value"; (iii) to gain "a huge advantage to affect of [sic] metal forward pricing" because "[o]wning the warehouse reduces the third party cost of carrying a large amount of LME warrants"; (iv) "to move metal stocks on and off LME warrant to benefit their market positions"; (v) "to move market positions to influence value of metal stocks held"; and (vi) to obtain "a view on the real physical market [which] has bigger implication to their own economic view and research around which they base a lot of their trading decisions." *Id.* at ECF p. 4; *see also* Schwaiger Decl., Ex. 32 at ECF p.3 ("Owning the Largest LME warehouse company effectively provides the ability to control the LME metal markets.").

By the end of 2010, Goldman Sachs had acquired Metro, J.P. Morgan had acquired Henry Bath, and Glencore had acquired Pacorini, through deals worth a cumulative total of nearly $1 billion. *See* Zona Rpt. ¶ 43. Collectively, they controlled more than 80% of LME warehouses in the United States. *See* Schwaiger Decl., Ex. 24 at 8; Zona Rpt. ¶ 31 & tbl.1.

b. Increasing Warehouse Stockpiles and Lengthening Queues

Between the start of the financial crisis and Metro's acquisition by Goldman Sachs—*i.e.*, before the alleged conspiracy began—large quantities of the global surplus of aluminum flowed into Metro's Detroit warehouses, in part due to convenient rail connections to aluminum smelters in Canada. Hausman Decl. ¶ 17; Kaplan Decl. ¶ 40. By February 2010, more than 900,000 metric tons of aluminum already were stored in Metro's Detroit warehouses—far more than existed at any other LME warehouse location. Gilbert Rpt., Ex. 1; *see* Liu Decl., Ex. 27.

Metro's unparalleled size allowed it to offer "high incentive payments" to customers for new deposits of aluminum "that other LME warehouses could not match." TAC ¶ 9(b). Metro could afford these high "freight" incentives because its large Detroit inventory—combined with its industry-standard practice of loading out only the minimum quantity of aluminum mandated by LME rules each day—guaranteed that, on average, any additional metal deposited in its Detroit warehouses would stay there long enough and generate enough rent to justify the incentive payment. *See id.*; Liu Decl., Ex. 4 (deposition of J. Douglas Zona) ("Zona Dep.") at 233–40; *see also* Schwaiger Decl., Ex. 2 (internal Goldman Sachs document explaining that because "acquiring customers to place metal with Metro warehouses results in the acquisition of an extended revenue stream [*i.e.*, rent and load-out related fees]," Metro "frequently pays incentives (called freight incentives) to inbound customers to bring metal into its warehouses"). According to the TAC, Metro thereby achieved a "critical mass" and a "self-perpetuating market power" in Detroit: Its large inventories justified large incentive payments that other LME and non-LME warehouses could not afford to offer, and these large incentives in turn attracted more inventory to Metro Detroit. *See* TAC ¶¶ 8, 9(b), 287, 313; *see also id.* ¶ 467 (defendants "offer[ed] substantial incentives to store aluminum in their warehouses in order to create a critical mass of aluminum at the key chokepoints").[21]

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[21] As early as May 2010, a J.P. Morgan trader worried that this "self-perpetuating" dynamic would make it impossible for any other warehouse to catch up to Metro: "I therefore can't see what is going to stop Metro getting further and further ahead with being able to bid [large incentives] and tie all the [aluminum] up in Detroit." Liu Decl., Ex. 28. Having failed to purchase Metro, J.P. Morgan began "gunning for Metro Detroit," encouraging regulatory action by the LME to slow Metro's rise. *Id.*, Ex. 31 at ECF p. 2. In particular, J.P. Morgan's Henry Bath subsidiary lobbied the LME to cap the amount of aluminum that could be stored in Metro Detroit and to ban Metro's practice of paying large incentives for new deposits of aluminum. *See, e.g.*, *id.*, Ex. 27 (Henry Bath submission to LME stating that Metro had "reached a critical mass" in Detroit and arguing that, absent a cap, "the Detroit trend will continue unchecked").

According to the FLPs, the Financial Defendants and the Warehousing Defendants together conspired "to hoard and continually concentrate aluminum in Metro's Detroit operations and took a series of specific steps to ensure that the metal was trapped for as long as possible." Dkts. 932, 1236 ("Pl. Mem.") at 6 (citing Schwaiger Decl., Ex. 13 at ECF p. 2 (email from Metro's CEO Chris Wibbelman noting "issue[]" that "physical traders in conjunction with banks and producers hold stock and withhold metal sales to consumers in order to squeeze up the premiums")). In early 2010, before the start of defendants' alleged conspiracy, the load-out queue at Metro's Detroit warehouse had been 40 days. By December 2012, the queue had lengthened to more than 500 days, peaking at nearly 650 days in late 2014. *See* Senate Report at 179, 209. The FLPs centrally allege that this dramatic increase stemmed from concerted multi-pronged efforts of the defendants.

First, the FLPs allege, the Warehousing Defendants agreed not to de-stock each other's warehouses or to compete for new metal. In March 2010, soon after J.P. Morgan took over Henry Bath, Metro's Board held a meeting at which Metro's Wibbelman described the "competitive landscape" in the metals warehousing industry. Schwaiger Decl., Ex. 5 at 4. Wibbelman explained to the Board that Peter Sellars—a Henry Bath executive slated to become J.P. Morgan's Global Head of Metals—"had not taken a predatory view of the warehouse businesses in the past and hopefully this would continue." *Id.* at 5.[22]

According to the FLPs, on July 7, 2010, Sellars, in resolving a warehouse dispute that had arisen the prior day, proved Wibbelman's assessment correct. *See generally* Schwaiger

[22] In the same conversation, when asked about his "key concerns for the business," Wibbelman responded that "a white hot economy" and "financing banks taking all the metal and storing them in off-warrant facilities"—*i.e.*, outside of Metro's LME warehouses—were "what kept him awake at night." Schwaiger Decl., Ex. 5 at 5.

Decl., Ex. 18. One of Sellars' subordinates had reported that Metro personnel had refused to load aluminum out of their warehouse and onto two trucks because the trucks had arrived after their allocated time slot. *Id.* While acknowledging that Metro technically did not have to load aluminum onto tardy trucks, Sellars' subordinate described the incident as "a typical Metro tactic in which they use their rules (LME approved and stated in advance to shippers) to their advantage." *Id.* at ECF p. 2. Sellars forwarded the complaint to Metro's Wibbelman, expressing his dismay that Henry Bath could not "at least get our trucks loaded in reasonable fashion" and stating that he did not "want to make a formal challenge" to the LME. *Id.* Sellars added: "As you are well aware this is material sold to the fabrication industry by my traders . . . we do NOT take material for re-warehousing." *Id.* (ellipsis in original).

The FLPs also point to several communications involving Metro's VP of Business Development, Michael Whelan, and Pacorini USA's Commercial Director, Mario Casciano. In an August 2010 email thread, Whelan and Casciano complained to each other about the financial institutions—Goldman Sachs and Glencore, respectively—that had acquired their warehouses. Schwaiger Decl., Ex. 23. Casciano expressed concern that Metro and Pacorini were "both exposed and going into a bloody war." *Id.* at ECF p. 3. Whelan replied that he was "fine with [Casciano] taking a stab at convincing Glencore to stop de-stocking us," explaining that Metro had "already approach[ed] [Glencore] with offers of varying degrees to try and come to an agreement to make things stop." *Id.* Pacorini's Casciano replied, "I regard you as a friend before as a competitor," and bemoaned that, after acquiring Pacorini, Glencore had "bought some material in our warehouse from another client of ours [that had been] paying us []12 cents per [metric ton] per day . . . . [A]s soon as [Glencore] bought it, I got a call [from Glencore] that said, either you charge us 6 [cents] or we move it. . . . [J]ust to give you an idea of what we are

facing." *Id.* Sympathizing with Casciano's plight, Metro's Whelan concluded: "Let's just hope that you and I and . . . whoever else can keep those that bought our companies from destroying a great business." *Id.*; *see also* Second Medici Decl., Ex. 17 at PUSA-E00046016 (Whelan reporting to other Metro employees that Casciano had texted: "we would not destock you, u [sic] know that"). The FLPs also cite a January 2012 email thread, in which Metro personnel speculated as to which warehouse operator had recently leased a "huge building" in Detroit. Schwaiger Decl., Ex. 7 at ECF p. 5. In the thread, Metro's Whelan suggested that Pacorini was an unlikely candidate to be "taking on additional space" and had "no desire to nitpick us in Detroit otherwise Glencore would have done this long ago." *Id.* at ECF p. 4.

Second, the FLPs contend that the warehousing companies' treatment of the LME minimum load-out rule as a *de facto* maximum, discussed above, resulted not from independent profit-seeking, but from an anticompetitive agreement among defendants. And, according to the FLPs, Goldman Sachs and Metro deliberately fought to forestall action that might increase the load-out rule, through their membership on the LME warehousing committee. *See* Schwaiger Decl., Ex. 4 (Goldman-Metro email noting effort to have LME committee to "study" the needs of consumers before taking action, which would "delay, frame the debate, [and] define the process"). *But see supra* note 21 (J.P. Morgan and Henry Bath lobbying efforts at the LME to impose rules that would curb Metro Detroit and keep its queue in check). As Metro's Wibbelman wrote in a March 2011 email: "Warehouse companies view the 1500 [metric ton per day load-out rule] as a contract [with the LME] and not a rule that can be changed unilaterally [by the LME]." Schwaiger Decl., Ex. 14 at ECF p. 3. In any event, according to Wibbelman, the people seeking to increase the load-out minimum "will not benefit from a change as GS, Glencore and a couple others take market actions to shape the landscape." *Id.*

Third, according to the FLPs, the Financial Defendants' commodities trading operations coordinated the timing of large warrant cancellations for metal held in LME warehouses, particularly in Detroit, to maximize the impact of those cancellations on queues.[23] For example, in September 2010, non-defendant co-conspirator Deutsche Bank executed a large cancellation of Detroit Metro warrants. Schwaiger Decl., Ex. 19. Later that month, J.P. Morgan also cancelled warrants for aluminum in Metro's Detroit warehouses. *Id.*, Ex. 12.

Similarly, in December 2011, GIAG and JPMCB entered into a massive aluminum swap involving warrants for metal stored at Pacorini Vlissingen's and Metro's warehouses. *See id.*, Ex. 38. Beginning in 2009, GIAG had purchased large quantities of surplus aluminum from Russian aluminum smelter Rusal. Hausman Decl. ¶ 18. GIAG stored much of that aluminum at Pacorini Vlissingen's warehouses in the Netherlands. *Id.* At the time of the swap, GIAG had an LME short position that required it to deliver warrants for approximately 860,000 metric tons of aluminum. *See* Liu Decl., Ex. 29. Although GIAG could have delivered its Pacorini Vlissingen warrants to satisfy its short position, those warrants at the time were more valuable than Metro Detroit warrants due to the lengthy queue that had formed at Metro Detroit. *See id.* Instead, GIAG and JPMCB entered into an agreement whereby GIAG swapped warrants for 860,000 metric tons of its aluminum located in Pacorini Vlissingen for 860,000 metric tons of JPMCB's aluminum located in Metro Detroit, plus $10 million in cash. *See* Schwaiger Decl., Ex. 38; Liu Decl., Ex. 29. GIAG then delivered the Detroit warrants—which it did not cancel—in satisfaction of its short. *See* Liu Decl., Ex. 29. This swap transaction resulted in the formation

[23] At argument, the FLPs referred to these events as "proprietary cancellations." *See* Dkt. 1270 (FLPs' oral argument presentation) at 15–16.

of a load-out queue in Vlissingen after JPMCB cancelled the Vlissingen warrants so as to move the aluminum to its own nearby Henry Bath warehouses in Rotterdam. Hausman Decl. ¶ 18.

Finally, in early 2012—shortly before the LME doubled its minimum load-out rule in an effort to reduce queues—Goldman Sachs acquired more than 1 million metric tons of aluminum, Schwaiger Decl., Ex. 26 at ECF p. 14, and J.P. Morgan acquired nearly 200,000 metric tons, Senate Report at 209. During 2012, Goldman Sachs and J.P. Morgan each engaged in warrant cancellations involving a combined 500,000 metric tons of aluminum stored in Metro Detroit, with the effect of further lengthening the Detroit queue. *See* Senate Report at 208–10; Schwaiger Decl., Ex. 26 at ECF p. 12.

Fourth, Metro entered into six of what the FLPs refer to as "merry-go-round" transactions with three different warehouse customers: alleged co-conspirators Deutsche Bank and Red Kite Master Fund Ltd., and co-defendant Glencore. Although the transactions were individually negotiated and had terms that varied to a degree, they generally involved: (i) the cancellation of LME warrants for aluminum stored in a Metro LME warehouse, which caused the aluminum to be added to the warehouse's queue and eventually loaded out; (ii) off-warrant (*i.e.*, non-LME) storage of the aluminum in Metro's warehouse facilities for a period of time; and (iii) an option for the customer either to (a) re-warrant the aluminum (*i.e.*, place the aluminum back into the LME system, where warehouses tend to charge higher rent) in exchange for an agreed-upon incentive payment, or (b) ship the aluminum to a non-Metro facility or elsewhere and pay Metro an agreed-upon "break fee." Second Playforth Decl., Ex. 2 (declaration of Leo Prichard, president of Metro) ("Prichard Decl.") ¶ 3; *see* Gilbert Rpt. ¶ 25; Senate Report at 194–95; *see also* Schwaiger Decl., Ex. 11 at ECF p. 2 (Metro executive's August 2010 internal email proposing the framework for such transactions and dubbing it his "Smart Ass Plan"). According

to the FLPs' expert, Dr. Gilbert, the purpose of these large warrant cancellations at Metro's Detroit LME warehouses was to lengthen the load-out queue at that location; once the aluminum reached the head of the queue, it was loaded out from one Metro Detroit warehouse shed, transported a short distance to another Metro Detroit warehouse shed, and eventually re-warranted there. Gilbert Rpt. ¶ 25; *see* Senate Report at 194–95; Schwaiger Decl., Ex. 11 at ECF p. 2. The FLPs allege that these load-outs were counted against and used up Metro's daily LME minimum load-out requirement "per location," even though Metro knew that the aluminum would remain within Metro's system of Detroit warehouses. TAC ¶ 559.

In total, the six "merry-go-round" transactions—or, in defendants' parlance, "off-warrant" transactions—involved the cancellation of warrants for 673,400 tons of aluminum between 2010 and 2013. Prichard Decl. ¶ 4. Of the 673,400 tons cancelled, 596,050 tons were eventually loaded back into Metro's LME warehouses and/or re-warranted. *Id.*[24]

C. Pertinent History of this Litigation

1. Relevant MDL History

In December 2013, this MDL was transferred to the Southern District of New York for consolidated or coordinated pretrial proceedings and assigned to Judge Forrest. Dkt. 1. The Court assumes knowledge of the complex ensuing history of this matter, which was reassigned to this Court on September 24, 2019, after the Second Circuit, on August 27, 2019, reversed Judge Forrest's grant of summary judgment to defendants. *See* Dkt. 1142. The Court here highlights several decisions of particular relevance to the pending motion for class certification.

[24] Glencore accounted for 91,400 tons' worth of these warrant cancellations; the balance involved non-parties Deutsche Bank or Red Kite. Prichard Decl. ¶ 6.

a. March 26, 2015 Order – First Level Purchases

In March 2015, Judge Forrest issued four decisions resolving the second round of motions to dismiss filed by MDL defendants. *See* Dkts. 728–29, 731, 733. Relevant here, a March 26, 2015 Opinion and Order—which dismissed the FLPs' then-operative complaint but granted leave to file the TAC—held that first-level purchases gave rise to antitrust standing to the extent they were made "*directly* from a producer" or with "no buyer of aluminum other than defendants . . . higher up or more direct in their respective distribution chains." *Aluminum II*, 95 F. Supp. 3d at 444; *see also Aluminum I*, 2014 WL 4277510, at *23 (where FLPs "purchased aluminum from others who themselves purchased the aluminum from a trader or broker," such FLPs "may be . . . one or more levels below a true first level").

b. April 25, 2016 Order – Vlissingen Queue and Spot Purchases

The TAC mentions, but does not focus on, the queues at Pacorini's LME warehouses in Vlissingen. It alleges that "queues exist in two places—Detroit Metro and Pacorini Vlissingen," TAC ¶ 323; *see id.* ¶¶ 572–73; that Metro and Pacorini had an "understanding . . . to allocate the key aluminum warehousing cities of Detroit and Vlissingen between themselves," *id.* ¶¶ 510–11; and that, like Metro in Detroit, "Pacorini [was] paying big incentives to get metal [into its warehouses] in Vlissingen," *id.* ¶ 552. Significant for purposes of the pending class certification motion, the TAC unequivocally states that "increases in the Midwest premium caused and explained much more of the increase in the Rotterdam premium than do the . . . increases in the supply of aluminum in Glencore/Pacorini's LME warehouses in Vlissingen. The *increases in aluminum stored in Vlissingen have virtually no explanatory power for the increases in the Midwest Premium*." *Id.* ¶ 187 (emphasis added); *see id.* ¶ 13 ("The length of the queues in the Vlissingen warehouses held by Glencore/Pacorini does not Granger-cause the Midwest premium.").

Following Judge Forrest's March 2015 opinions, discussed above, the parties entered into a stipulation, endorsed by Judge Forrest. It stated: "The First, Second, Fourth, Seventh and Eighth causes of action in the [TAC] . . . are no longer claims in that action, but the underlying factual allegations remain in the complaint." Dkt. 776 (stipulation and order concerning dismissed parties and claims). Thus, as of April 2015, the TAC's claims and parties had been pruned in these respects, but the TAC's factual allegations remained operative.

On February 23, 2016, the FLPs moved for leave to file an amended complaint that would have added (1) new foreign defendants, (2) a broader class definition that included spot purchases, and (3) new allegations about the existence and impact of a conspiracy to manipulate the Rotterdam Premium by lengthening queues at Pacorini's warehouses in Vlissingen. *See* Dkt. 891. On April 25, 2016, Judge Forrest denied the motion. She held that the FLPs had failed to show good cause for their delay in seeking an amendment that "effectively changes their claims and proposed class definition in the midst of class certification briefing in ways that could necessitate substantial new fact and expert discovery . . . that defendants could not have anticipated . . . based on the claims that survived in the TAC." *In re Aluminum Warehousing Antitrust Litig.*, 2016 WL 1629350, at *6; *see generally id.* at *5–8.

In particular, Judge Forrest noted, with regard to the newly alleged Vlissingen conspiracy:

> [W]hereas in the TAC the FLPs alleged a conspiracy to inflate the Midwest Premium by creating a queue for aluminum at Metro's Detroit warehouses, the proposed FAC broadens the scope of the conspiracy to also include alleged manipulation of the Rotterdam Premium by creating a queue at Pacorini Vlissingen B.V.'s warehouse in the Netherlands. Although the allegations in the TAC (and prior complaints) show that the FLPs have long been aware of the significance of the Rotterdam Premium and Vlissingen warehouses, the FLPs have not until this late date sought to expand their claims to include a fundamentally distinct conspiracy based on activity at those locations. . . [or] to further substantially alter their claims by expanding the relevant geographic market beyond North America to include, in the alternative, a potential global market or a global market less China.

Id. at *6 (internal citations omitted). Additionally, Judge Forrest explained, with regard to spot purchases, "[t]he proposed FAC also seeks to expand the proposed class definition to include spot purchases of aluminum, rather than aluminum purchased pursuant to a contract." *Id.*; *see also Aluminum VI*, 936 F.3d at 89 (FLPs allegedly paid "artificially inflated prices in their purchases *pursuant to their supply contracts* with aluminum producers" (emphasis added)).[25] Judge Forrest thus rejected the FLPs' effort to expand the scope of the case, finding that the FLPs had "had information that would have allowed them . . . long ago" to amend the TAC to include a Vlissingen conspiracy and spot purchases, "but tactically chose not to do so." *Id.* at *8.

c. Aluminum VI – Antitrust Injury

On August 27, 2019, the Second Circuit issued its decision in *Aluminum VI*, 936 F.3d 86. The FLPs today depict the Circuit as having already held, with regard to antitrust injury—the principal area in which the parties spar with respect to whether class certification is appropriate—that the MDL plaintiffs "suffered antitrust injury based on [a] well-developed summary-judgment record." Dkt. 1194 (FLPs' response to defendants' class certification sur-reply) ("Pl. Sur-Reply") at 1. That characterization is wrong, because the Circuit's decision in *Aluminum VI* assessed the sufficiency of plaintiffs' pleadings, not their proof. Indeed, the Circuit expressly cautioned that its analysis "focus[ed] on the sufficiency of the plaintiffs' legal theory, rather than on their evidence." *Aluminum VI*, 936 F.3d at 93 n.3. It held only that the *named plaintiffs* had adequately *alleged* antitrust injury through "allegations . . . that the defendants restrained the market for sales of primary aluminum by artificial manipulation of a

[25] Judge Forrest also denied the motion to amend to the extent it sought to "expand[] the case beyond primary aluminum to also include secondary aluminum." *In re Aluminum Warehousing Antitrust Litig.*, 2016 WL 1629350, at *6; *see also Aluminum VI*, 936 F.3d at 88 (FLPs allege "a conspiracy to inflate prices in the primary aluminum market . . . as distinguished from the 'secondary aluminum'").

number (the Midwest Premium) that serves as a price component for sales of the metal." *Id.* at 95. The issue, pivotal here, of whether the FLPs have adduced common proof to reliably establish classwide antitrust injury is a matter of first impression for this Court to resolve.

2. Class Certification and *Daubert* Submissions

On March 25, 2016, the FLPs filed their motion for class certification, Dkts. 916–17, a memorandum of law in support, Pl. Mem., the declaration of Susan R. Schwaiger, Esq., Schwaiger Decl., and exhibits attached thereto, including, *inter alia*, the initial expert report of Dr. Christopher Gilbert, Gilbert Rpt. Dr. Gilbert developed a chain of statistical models, on which the FLPs rely as their principal classwide proof that the alleged conspiracy raised the Midwest Premium and thereby injured all or nearly all proposed class members. *See* Gilbert Rpt. ¶ 10 (analyses together demonstrate that "as a consequence of Defendants' challenged conduct, all or nearly all [proposed class members] paid higher than competitive prices"). In particular, according to Dr. Gilbert, his analyses show that: (1) defendants loaded "excess" amounts of aluminum out of Metro Detroit and Pacorini Vlissingen, causing queues to lengthen at those warehouses, *id.*, Ex. G3; *see generally id.*, App'x G; (2) longer queues increased the Midwest Premium, *id.* ¶ 10(b) & App'x F, without affecting LME settlement prices, *id.* ¶ 10(c) & App'x D–E; and (3) higher Midwest Premiums were passed through to purchasers in the form of higher all-in purchase prices for physical primary aluminum, *id.* ¶ 10(a) & App'x C. Although Dr. Gilbert's inputs and analyses shifted over the course of the parties' briefing during which he supplemented his expert opinions, as reviewed *infra*, the above outline of his chain of reasoning applied throughout.

On July 8, 2016, defendants filed their opposition, Dkt. 1013 ("Def. Opp'n"), as well the declaration of Henry Liu, Esq., Liu Decl., and exhibits attached thereto, including the expert declarations of Professor Jerry A. Hausman, Hausman Decl., and David P. Kaplan, Kaplan Decl.

The defense experts' analyses, reviewed *infra*, found that "each step of Dr. Gilbert's analysis is unreliable." Hausman Decl. ¶ 21. Defendants contend that any break in Dr. Gilbert's chain of reasoning would preclude the FLPs from reliably demonstrating classwide antitrust impact. Def. Opp'n at 17.

On August 5, 2016, the FLPs filed a reply memorandum. Dkt. 1040 ("Pl. Reply"). In it, the FLPs modified their earlier proposed definition of the putative class, and articulated the definition operative today:

> All persons who from February 2010 to March 25, 2016 made a first level purchase of a primary aluminum product with a price term based, in any part, on the Midwest Transaction Price, the Platts Metals Week US Transaction Price or other "all in" price used in the United States, or the Midwest Premium, the Platts MW Premium or similar terminology or other regional premium used in the U.S., including, but not limited to, an averaging over a period of days of any such premium or adjusting for a grade or type of primary aluminum product. Excluded from the Class are Defendants, any parent, subsidiary, affiliate, agent or employee of any Defendant, and any co-conspirator. As used in this definition, "primary aluminum product" means T-bar, sow, standard ingot, foundry alloy T-bar or ingot, extrusion billet, slabs, sheet ingot, molten metal, or rod.

Id. at 6. The same day, the FLPs also filed the declaration of Steven M. Jodlowski, Esq., Jodlowski Decl., and exhibits attached thereto, including Dr. Gilbert's expert reply report, Gilbert Reply Rpt. In their initial reports, defendants' experts had criticized Gilbert's Appendix E model—which purported to show that queues do not reduce LME settlement prices—on the grounds that Gilbert's model had failed to control for contango conditions, even though Gilbert's other analyses had done so. In his reply report, Gilbert, among other revisions, submitted new versions of this econometric analysis, which added new variables that purportedly controlled for contango. *See* Gilbert Reply Rpt. ¶ 29 & App'x A. Also on August 5, 2016, the FLPs filed a motion to exclude the declaration of defense expert Kaplan, Dkt. 1037, a memorandum in support, Dkt. 1038 ("Pl. *Daubert* Mem."), and the first declaration of Carmen A. Medici, Esq., First Medici Decl.

On November 15, 2019, following remand from the Circuit and reassignment of the MDL to this Court, defendants filed a sur-reply, Dkt. 1157 ("Def. Sur-Reply"), as well as the first declaration of John S. Playforth, Esq., First Playforth Decl., and exhibits attached thereto, including the reply declaration of David P. Kaplan, Kaplan Reply Decl., and the reply declaration of Professor Jerry A. Hausman, First Playforth Decl., Ex. 1 ("Hausman Reply Decl."). Hausman concluded that Gilbert's revised analyses ignored and failed to correct several mistakes defendants had identified in Gilbert's original model, and erred to the extent they sought to correct for others. In particular, Hausman opined that: Gilbert's model of "excess" load-outs still failed to control for the doubling of the LME's minimum load-out rule in April 2012, Hausman Reply Decl. ¶¶ 100–01; *see* Hausman Decl. ¶ 100; Gilbert's attempt to control for contango treated the LME contango as entirely a function of LME warehouse stocks and queues, without taking into account the impact of interest rates, Hausman Reply Decl. ¶¶ 28 n.24, 39–40; Gilbert had improperly split his data into multiple time periods, *id.* ¶¶ 36–37, 106; and Gilbert's models improperly rely on the Vlissingen queue, not just the Detroit queue, to show purported impact to the class, *id.* ¶ 108. Also on November 15, 2019, defendants filed an opposition the FLPs' *Daubert* motion, Dkts. 1166, 1168 ("Def. *Daubert* Mem."), and the declaration of William H. Wagener, Esq., Wagener Decl.

On December 5, 2019, the FLPs filed a reply in support of their *Daubert* motion. Dkts. 1176, 1242 ("Pl. *Daubert* Reply"). On December 18, 2019, the FLPs filed a response to the defendants' class certification sur-reply, Pl. Sur-Reply, as well as the second declaration of Carmen Medici, Esq., Second Medici Decl., and exhibits attached thereto, including Dr.

Gilbert's sur-reply report, Second Medici Decl., Ex. 1 ("Gilbert Sur-Reply Rpt.").[26] In his sur-reply report, Dr. Gilbert articulated a new theory—that defendants' "[l]arge warrant cancellations resulting in excess load-outs were accompanied by excess load-ins." Gilbert Sur-Reply Rpt. ¶ 67; *see id.* ¶¶ 17–19, 66–73. Up to that point, Gilbert had assumed that load-ins would have stayed the same in the but-for world—*i.e.*, his model assumed constant levels of load-ins and showed increased levels of load-outs from the relevant LME warehouses as a result of the conspiracy. For that reason, defendants had argued that Dr. Gilbert had estimated that the net effect of the alleged conspiracy was to reduce warehouse stocks, not to hoard and trap aluminum, as alleged. *See, e.g.*, Def. Sur-Reply at 5. Gilbert's sur-reply revision supplied a new counter to this line of argument.

On December 20, 2019, on consent of the FLPs and the Court, *see* Dkt. 1184, defendants filed a response to plaintiffs' new "excess load-in" theory, Dkt. 1198 ("Def. Sur-Sur-Reply"), as well as the second declaration of John S. Playforth, Esq., Second Playforth Decl., and exhibits attached thereto.[27]

[26] The FLPs had initially submitted these documents on December 5, 2019. In that filing, the Second Medici Declaration attached the declaration of a previously undisclosed expert, Jorge Vazquez Serna. Second Medici Decl., Ex. 2. Defendants challenged the propriety of the 11th-hour expert declaration, and the FLPs agreed to withdraw it. *See* Dkt. 1184. On December 18, 2019, the FLPs submitted the operative versions of their sur-reply filings, discussed above. However, the parties agreed that removing references to the Vazquez Serna declaration would cause more confusion than leaving such references in place. Accordingly, the FLPs' sur-reply contains citations to the withdrawn declaration, which the Court has disregarded.

[27] On April 14, 2020, the Court requested that the parties either re-file or email courtesy copies of each of the above-described submissions in light of challenges presented by the COVID-19 pandemic and the District's upgraded technological capacity (and the Court's correspondingly updated Individual Rules) relating to the electronic filing of documents under seal. Dkt. 1234; *see* Dkt. 1235. On April 24, 2020, the FLPs re-filed their briefs and declarations, *see* Dkts. 1236–42, and the defendants emailed courtesy copies of theirs.

3. Supplemental Briefing and Oral Argument

On May 27, 2020, the Court issued an order requesting supplemental briefing in the form of joint letters from the parties regarding three topics: (i) whether it is possible, for each type of aluminum purchase agreement used by smelters Alcoa, Rusal, and Rio Tinto during the relevant period, to determine that the MWP was incorporated into the price, and, if so, how; (ii) why—and, in practice, how—purchases from producers other than Alcoa, Rusal, and Rio Tinto should remain part of the class, given that the FLPs did not obtain usable sales information from other smelters in discovery; and (iii) a brief summary of the types of purchasers who make up the proposed class, as well as the parties' views as to whether each group should or should not be included in any class the Court might certify. Dkt. 1248; *see also* Dkt. 1250 (transcript of May 22, 2020 conference at which these topics were discussed) ("Conf. Tr.").

On June 12, 2020, the parties submitted the three joint letters. *See* First Joint Ltr.; Second Joint Ltr.; Third Joint Ltr. In the first, which attached 47 exemplar contracts as exhibits, the FLPs stated that they "are no longer seeking recovery for purchases of primary aluminum based on Alcoa's North American Primary Metals ('NAPM') contracts, which as identified by Alcoa, account for nearly 30% (by volume) of Alcoa's sales." First Joint Ltr. at 1. The Court discusses the three letters further *infra.*

On June 25, 2020, the Court held argument. *See* OA Tr.[28]

II. Motion to Exclude the Declaration of David P. Kaplan

The Court first addresses the First Level Purchasers' motion to exclude the declaration of David P. Kaplan. Kaplan's report offers four principal opinions:

[28] The parties, with the Court's permission, used slide presentations in connection with their oral arguments. On June 30, 2020, at the request of the Court, the parties filed those presentations on ECF. *See* Dkts. 1264–65, 1270.

i. "only a fact-intensive examination of individual issues would allow one to ascertain reliably who the proposed class members . . . are" (the "Individual Issues Opinion"), Kaplan Decl. ¶ 11; *see id.* ¶¶ 59–104, 191–94; *see also* Kaplan Reply Decl. ¶¶ 2–44;

ii. "conflicts exist between the economic interests of proposed class representatives and the economic interests of [the proposed class members] they seek to represent, as well as among different [proposed class members]" (the "Conflicts Opinion"), Kaplan Decl. ¶ 11; *see id.* ¶¶ 105–24;

iii. "many [proposed class members] purportedly benefitted from the alleged conduct and any such benefits would have to be offset against any claimed overcharges when assessing the issue of impact" (the "Benefits Opinion"), *id.* ¶ 11; *see id.* ¶¶ 125–54; and

iv. "Dr. Gilbert's damages analysis is flawed for several reasons" (the "Flawed Model Opinion"), *id.* ¶ 17; *see id.* ¶¶ 155–90; *see also* Kaplan Reply Decl. ¶¶ 45–85.

The FLPs seek to exclude all four opinions on the grounds that Kaplan did not reliably apply economic expertise and that Kaplan offers improper legal opinions.

A. Kaplan's Qualifications

Kaplan has a master's degree in economics. He has consulted on antitrust and competition-related issues for 35 years, including for the Federal Trade Commission, the Department of Justice, and the Senate Judiciary Committee. Wagener Decl., Ex. 1 (declaration of David P. Kaplan responding to FLPs' motion to exclude) ("Kaplan *Daubert* Decl.") ¶¶ 1, 24–28 & Ex. F. Kaplan taught microeconomics and business statistics for roughly 10 years apiece at George Mason University and Johns Hopkins University, and has lectured at other universities, including Columbia University. *Id.* ¶ 1. Throughout his time at Johns Hopkins, Kaplan taught a course that involved lecturing on econometrics. *Id.* ¶ 30; *see id.* ¶¶ 29–31 (summarizing additional econometric qualifications). He has published in the field of economics, including co-authoring a book on competition economics and a chapter on the impact of a supply constraint on LME aluminum prices. *Id.* ¶¶ 1, 24–28, 90–92 & Ex. F.

Kaplan has submitted expert reports in more than 15 antitrust class actions, and courts have relied on his economic testimony, including on the question of class certification. Kaplan Decl. ¶ 1; Kaplan *Daubert* Decl. ¶¶ 28, 31; First Medici Decl., Ex. 2 (deposition of David P. Kaplan) ("Kaplan Dep.") at 10–11 (Kaplan estimated submitting between 25 and 50 expert reports, 21 or 22 of which related to class certification).[29] Courts have accepted his econometric analysis and other opinions relating to purported common impact in antitrust class actions. *See, e.g.*, Kaplan *Daubert* Decl. ¶ 28; *In re Plastics Additives Antitrust Litig.*, No. 03 Civ. 2038 (LDD), 2010 WL 3431837, at *15–19 (E.D. Pa. Aug. 31, 2010) (relying on Kaplan's re-running of plaintiffs' regression model to find that plaintiffs had not presented common proof of impact).

B. Applicable Legal Principles

1. Federal Rule of Evidence 702 and *Daubert*

Trial courts serve as "gatekeep[ers]," responsible for "ensuring that an expert's testimony both rests on a reliable foundation and is relevant to the task at hand." *Daubert v. Merrell Dow Pharms., Inc.*, 509 U.S. 579, 597 (1993); *see also Wills v. Amerada Hess Corp.*, 379 F.3d 32, 48 (2d Cir. 2004). Pursuant to Federal Rule of Evidence 702:

> A witness who is qualified as an expert by knowledge, skill, experience, training, or education may testify in the form of an opinion or otherwise if: (a) 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; (b) the testimony is based on sufficient facts or data; (c) the testimony is the product of reliable principles and methods; and (d) the expert has reliably applied the principles and methods to the facts of the case.

[29] *See, e.g.*, *In re Intel Corp. Microprocessor Antitrust Litigation*, No. 05 MD 1717 (LPS), 2014 WL 6601941, at *15–16 (D. Del. Aug. 6, 2014) ("*Intel*") ("The Court is persuaded by Defendant's expert, Mr. Kaplan . . . [that plaintiffs' expert] fails to account for many of the real-world facts surrounding this complicated market . . . . Consequently, as Mr. Kaplan testified . . . tracing [a] purported overcharge through the distribution chain . . . is going to require a highly individualized analysis.").

Fed. R. Evid. 702. "The district court has broad discretion to carry out [its] gatekeeping function. Its inquiry is necessarily a 'flexible one,' and the types of factors that are appropriate to consider will 'depend[] upon the particular circumstances of the particular case at issue.'" *In re Pfizer, Inc. Sec. Litig.*, 819 F.3d 642, 658 (2d Cir. 2016) (quoting *Daubert*, 509 U.S. at 594, and *Kumho Tire Co., Ltd. v. Carmichael*, 526 U.S. 137, 150 (1999)).

"The proponent of expert testimony has the burden of establishing by a preponderance of the evidence that the admissibility requirements of Rule 702 are satisfied." *United States v. Williams*, 506 F.3d 151, 160 (2d Cir. 2007). The Second Circuit has "distilled Rule 702's requirements into three broad criteria: (1) qualifications, (2) reliability, and (3) relevance and assistance to the trier of fact." *In re LIBOR-Based Fin. Instruments Antitrust Litig.*, 299 F. Supp. 3d 430, 466 (S.D.N.Y. 2018) ("*LIBOR VII*"); *see Nimely v. City of New York*, 414 F.3d 381, 396–97 (2d Cir. 2005); *see generally In re Mirena IUS Levonorgestrel-Related Prods. Liability Litig. (No. II)*, 341 F. Supp. 3d, 213, 239–42 (S.D.N.Y. 2018).

To testify as an expert under Rule 702, a witness must, as a threshold matter, be "qualified as an expert by knowledge, skill, experience, training, or education." Fed. R. Evid. 702. "[A]ny of [the] five forms of qualifications will satisfy the rule." *Tiffany (NJ) Inc. v. eBay, Inc.*, 576 F. Supp. 2d 457, 458 (S.D.N.Y. 2007). "To determine whether a proffered witness is qualified, a court must ascertain whether the proffered expert has the educational background or training in a relevant field by looking at the totality of the witness's background," *SEC v. Revelation Capital Mgmt., Ltd.*, 215 F. Supp. 3d 267, 273 (S.D.N.Y. 2016) (internal quotation marks omitted), and then "compare the area in which the witness has superior knowledge, education, experience, or skill with the subject matter of the proffered testimony," *United States v. Tin Yat Chin*, 371 F.3d 31, 40 (2d Cir. 2004); *see also Revelation Capital Mgmt.*,

215 F. Supp. 3d at 274 ("quibbles" with an expert's qualifications "are properly explored on cross-examination" and "go to the weight, not admissibility" of an expert's testimony).

A district court next must determine "whether the proffered testimony has a sufficiently 'reliable foundation' to permit it to be considered." *Campbell ex rel. Campbell v. Metro. Prop. & Cas. Ins. Co.*, 239 F.3d 179, 184 (2d Cir. 2001) (quoting *Daubert*, 509 U.S. at 597). "In this inquiry, the district court should consider the indicia of reliability identified in Rule 702, namely, (1) that the testimony is grounded on sufficient facts or data; (2) that the testimony 'is the product of reliable principles and methods'; and (3) that 'the witness has applied the principles and methods reliably to the facts of the case.'" *Amorgianos v. Nat'l R.R. Passenger Corp.*, 303 F.3d 256, 265 (2d Cir. 2002) (quoting Fed. R. Evid. 702).

In *Daubert*, the Supreme Court set out a list of non-exclusive factors that courts should consider in determining whether an expert's methodology is reliable. These are: (1) whether the expert's technique or theory can be or has been tested; (2) whether it has been subjected to peer review and publication; (3) whether there is a high error rate for the expert's technique, and whether there are "standards controlling the technique's operation"; and (4) whether the expert's technique or theory is generally accepted by the relevant scientific community. *Daubert*, 509 U.S. at 592–94; *accord Nimely*, 414 F.3d at 396. These factors "do not constitute a definitive checklist or test"; rather, "the trial judge must have considerable leeway in deciding in a particular case how to go about determining whether particular expert testimony is reliable." *Kumho Tire Co. v. Carmichael*, 526 U.S. 137, 150–52 (1999).

A "trial judge should exclude expert testimony if it is speculative or conjectural or based on assumptions that are 'so unrealistic and contradictory as to suggest bad faith.'" *Zerega Ave. Realty Corp. v. Hornbeck Offshore Transp., LLC*, 571 F.3d 206, 213–14 (2d Cir. 2009) (quoting

Boucher v. U.S. Suzuki Motor Corp., 73 F.3d 18, 21 (2d Cir. 1996)). Additionally, "[a]n expert opinion requires some explanation as to how the expert came to his conclusion and what methodologies or evidence substantiate that conclusion." *Riegel v. Medtronic, Inc.*, 451 F.3d 104, 127 (2d Cir. 2006), *aff'd on other grounds*, 552 U.S. 312 (2008).

However, "[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. "The judge should only exclude the evidence if the flaw is large enough that the expert lacks good grounds for his or her conclusions." *Id.* (citations omitted). "This limitation on when evidence should be excluded accords with the liberal admissibility standards of the federal rules and recognizes that our adversary system provides the necessary tools for challenging reliable, albeit debatable, expert testimony." *Id.*

"Even after determining that a witness is 'qualified as an expert' to testify as to a particular matter, and that the opinion is based upon reliable data and methodology, Rule 702 requires the district court to make a third inquiry: whether the expert's testimony (as to a particular matter) will 'assist the trier of fact.'" *Nimely*, 414 F.3d at 397 (quoting Fed. R. Evid. 702). "This condition goes primarily to relevance," *Daubert*, 509 U.S. at 591, as "[e]xpert testimony which does not relate to any issue in the case is not relevant and, ergo, non-helpful," *Raskin v. Wyatt Co.*, 125 F.3d 55, 66 (2d Cir. 1997) (alteration in original) (citing *Daubert*, 509 U.S. at 591).

2. ***Daubert* at the Class Certification Stage**

Although "[t]he Supreme Court has not definitively ruled on the extent to which a district court must undertake a *Daubert* analysis at the class certification stage," it has "offered limited dicta suggesting that a *Daubert* analysis may be required at least in some circumstances." *In re U.S. Foodservice Inc. Pricing Litig.*, 729 F.3d 108, 129 (2d Cir. 2013); *see also Royal Park Invs.*

SA/NV v. U.S. Bank Nat'l Ass'n, 324 F. Supp. 3d 387, 393 (S.D.N.Y. 2018) ("[T]he Second Circuit has not resolved whether and to what extent *Daubert* applies at the class certification stage."). "[C]ourts in the Second Circuit regularly 'subject expert testimony to *Daubert*'s rigorous standards insofar as that testimony is relevant to the Rule 23 class certification analysis.'" *Bowling v. Johnson & Johnson*, No. 17 Civ. 3982 (AJN), 2019 WL 1760162, at *7 (S.D.N.Y. Apr. 22, 2019) (quoting *Scott v. Chipotle Mexican Grill, Inc.*, 315 F.R.D. 33, 55 (S.D.N.Y. 2016)). *Compare, e.g.*, *In re Foreign Exch. Benchmark Rates Antitrust Litig.*, 407 F. Supp. 3d 422, 429 (S.D.N.Y. 2019) ("*In re FX*") (applying *Daubert* at class certification stage), *LIBOR VII*, 299 F. Supp. 3d at 470 (same), *and In re Digital Music Antitrust Litig.*, 321 F.R.D. 64, 74 (S.D.N.Y. 2017) ("*Digital Music*") (same), *with In re Scotts EZ Seed Litig.*, 304 F.R.D. 397, 412 n.8 (S.D.N.Y. 2015) (analyzing whether plaintiffs' expert's methodologies satisfied class certification standards, rather than applying *Daubert*).

Accordingly, the Court here applies a *Daubert* analysis to the extent that the FLPs seek to exclude testimony relevant to the pending class certification motion. However, "the 'scope of the *Daubert* analysis is cabined by its purpose at this stage: the inquiry is limited to whether or not the expert reports are admissible to establish the requirements of Rule 23.'" *Bowling*, 2019 WL 1760162, at *7 (quoting *Chen-Oster v. Goldman Sachs & Co.*, 114 F. Supp. 3d 110, 115 (S.D.N.Y. 2015) (internal citation and quotation marks omitted)); *see LIBOR VII*, 299 F. Supp. 3d at 471 ("The question is not whether a jury at trial should be permitted to rely on the expert's report to find facts as to liability, but rather whether the Court may utilize it in deciding whether the requisites of Rule 23 have been met." (quoting *Dandong v. Pinnacle Performance Ltd.*, No. 10 Civ. 8086 (JMF), 2013 WL 5658790, at *13 (S.D.N.Y. Oct. 17, 2013))); *cf. In re Zurn Pex Plumbing Prods. Liab. Litig.*, 644 F.3d 604, 613 (8th Cir. 2011) ("The main

purpose of *Daubert* exclusion is to protect juries from being swayed by dubious scientific testimony. That interest is not implicated at the class certification stage where the judge is the decision maker.").

C. Analysis

The FLPs move to exclude the declaration of David P. Kaplan, primarily on the grounds that Kaplan assertedly did not apply economic expertise in reaching his opinions and that Kaplan offers improper legal opinions.

At the outset, the Court notes that the onus is on the FLPs, not defendants, "to 'present a damages model that can be used on a class-wide basis based on common proof.'" *Digital Music*, 321 F.R.D. at 78 (quoting *In re Fresh Del Monte Pineapples Antitrust Litig.*, No. 04 MD 1628 (RMB), 2008 WL 5661873, at *9 (S.D.N.Y. Feb. 20, 2008)). Kaplan's challenged declaration here was submitted—alongside the report of another defense expert, Dr. Hausman—as a rebuttal to Dr. Gilbert's expert report attempting to articulate such a model (and to the FLPs' class certification arguments based thereon).

That context is important. The "task of a rebuttal expert is different from that of an affirmative expert." *Luitpold Pharms., Inc. v. ED. Geistlich Sohne A.G.*, No. 11 Civ. 681 (KBF), 2015 WL 5459662, at *12 (S.D.N.Y. Sept. 16, 2015). "A rebuttal expert, by nature, criticizes the methodology and/or opinions of another. There is no requirement that a rebuttal expert himself offer a competing analysis; his opinions may properly concern criticizing that presented by another party." *Id.*; *see also, e.g.*, *Joffe v. King & Spalding LLP*, No. 17 Civ. 3392 (VEC), 2019 WL 4673554, at *14 (S.D.N.Y. Sept. 24, 2019) ("[A] rebuttal expert need not identify alternative or better methodologies."). Rebuttal experts, therefore, "'have a less demanding task' because 'they have no burden to produce models or methods of their own; they need only attack those of plaintiffs' expert.'" *Digital Music*, 321 F.R.D. at 78 (quoting *In re Zyprexa Prods. Liab.*

Litig., 489 F. Supp. 2d 230, 285 (E.D.N.Y. 2007)); *see also, e.g.*, *Scott*, 315 F.R.D. at 51 ("As a rebuttal witness, [defendant's expert] was under no obligation to create models or methods of his own."); *Henkel v. Wagner*, No. 12 Civ. 4098 (AJN), 2016 WL 1271062, at *12 (S.D.N.Y. Mar. 29, 2016) ("[A rebuttal expert] does not need a 'model or theory' to identify purported flaws in [an opposing expert's] testimony. . . . Rather, she needs only her expertise and the 'method' identified at the beginning of her report—namely, reviewing the documents in this case, along with [the opposing expert's] report, and arriving at an opinion as to [the opposing expert's] analysis of the alleged economic damages.").

Further, "contradictory expert testimony does not control admissibility." *Digital Music*, 321 F.R.D. at 78. Rather, assuming the testimony of competing experts is reliable, it is for the factfinder to determine each expert's trustworthiness and credibility through the "conventional devices" of "cross-examination, presentation of contrary evidence, and careful instruction on the burden of proof." *Daubert*, 509 U.S. at 596; *see Digital Music*, 321 F.R.D. at 78.

1. Kaplan's Opinions Regarding the Need for Individualized Inquiries To Ascertain Class Membership and Conflicts Within the Proposed Class

The FLPs first move to exclude Kaplan's opinions that "only a fact-intensive examination of individual issues would allow one to ascertain reliably who the proposed class members . . . are" and that "conflicts exist between the economic interests of proposed class representatives and the economic interests of [proposed class members], as well as among different [proposed class members]." Kaplan Decl. ¶ 11. The FLPs contend that Kaplan's "[t]estimony" as to these two opinions "[i]s [i]nadmissible [b]ecause [i]t [i]s [n]ot [h]elpful." Pl. *Daubert* Mem. at 7. In particular, the FLPs argue that Kaplan's conclusions and supporting analyses are deficient because they either "attempt to provide legal opinion in the guise of expert opinion" or "are mere summaries of the evidence and issues of class certification to which [Kaplan] applies no

meaningful analysis"—and thus are not relevant. Pl. *Daubert* Mem. at 9; *see id.* at 10 ("To come up with his opinion, Mr. Kaplan failed to apply any economic methods to arrive at this point."); Pl. *Daubert* Reply at 3 ("[C]iting to various records produced in this litigation, . . . [Kaplan] leaps to the legal opinion that a 'fact-intensive individualized inquir[y] will be necessary.'").

It is well-established that "expert testimony that usurp[s] either the role of the trial judge [in determining] the applicable law or the role of the [trier of fact] in applying that law to the facts before it" should be excluded because it "by definition does not aid the [trier of fact] in making a decision." *Nimely*, 414 F.3d at 397 (internal quotation marks omitted) (quoting *United States v. Bilzerian*, 926 F.2d 1285, 1294 (2d Cir. 1991) and *United States v. Duncan*, 42 F.3d 97, 101 (2d Cir. 1994)). Similarly, "expert testimony that seeks to address 'lay matters which [the trier of fact] is capable of understanding and deciding without the expert's help' is not relevant and is therefore inadmissible." *United States v. Jiau*, 734 F.3d 147, 154 (2d Cir. 2013) (quoting *Andrews v. Metro N. Commuter R.R. Co.*, 882 F.2d 705, 708 (2d Cir. 1989)). Accordingly, an expert may not provide "merely a narrative of the case which a [trier of fact] is equally capable of constructing." *In re Rezulin Prods. Liab. Litig.*, 309 F. Supp. 2d 531, 551 (S.D.N.Y. 2004); *see SEC v. Tourre*, 950 F. Supp. 2d 666, 675 (S.D.N.Y. 2013) ("Mere narration [of facts] does not convey opinions based on an expert's knowledge and expertise; nor is such a narration traceable to a reliable methodology.").

Kaplan's proposed testimony does not, however, fall afoul of these principles.

First, contrary to the FLPs' critique, Kaplan does not provide a mere factual narrative. The FLPs advance a proposed class definition that requires, in part, that proposed class members "made a first level purchase of a primary aluminum product with a price term based, in any part, on the Midwest Transaction Price." Pl. Reply at 6. Kaplan, relying on his experience and his

economic expertise, analyzed the supply and distribution chains of the aluminum industry and the business documents produced in this litigation to understand by concrete means how it could be determined whether a proposed class member fit within the proposed class definition. *See* Kaplan *Daubert* Decl. ¶ 65. Kaplan reviewed the records of parties and non-parties to determine, based on his experience working with similar data, whether this data was reliable and accurate. *Id.* ¶ 14. Based on an extensive review of industry information and qualitative and quantitative evidence specific to this litigation, Kaplan then determined that "only by examining the books and records of suppliers and customers" on an individual basis could one determine whether an individual purchase or purchaser fit within the proposed class definition. *Id.* ¶ 70; *see id.* ¶ 60 (concluding that several aspects of proposed class definition—including whether proposed class members were first-level purchasers and whether their purchases were at prices based on the MWP—would require fact-intensive individualized inquiries).

This exercise went well beyond the mere recitation of facts. Kaplan engaged in empirical and economic analysis of, and discussed and presented calculations relating to, purchases and sales of aluminum, to analyze how one might identify a first-level purchase of aluminum. *See* Kaplan Decl. ¶¶ 61–77 & Exs. 8–13; *see also, e.g.*, *Louis Vuitton Malletier S.A. v. Sunny Merch. Corp.*, 97 F. Supp. 3d 485, 504 (S.D.N.Y. 2015) (economist's expert report properly "combed through [voluminous] sales reports, compiled and aggregated the data . . . and presented it in a more readily understandable format"); *Scott*, 315 F.R.D. at 45 (experts may "synthesize[] or summarize[] data in a manner that streamlines the presentation of that data"). This analysis formed the basis of Kaplan's conclusion that "[a]vailable evidence indicates . . . that smelters buy aluminum from other smelters, from traders, and from defendants and then resell that aluminum," but the available evidence does not allow one to distinguish such second-level sales

from first-level sales without individualized inquiry. *Id.* ¶ 61. Kaplan "identified sales between smelters[,] . . . between traders and smelters[, and between] defendants and smelters," and "quantified" and "prepared exhibits reflecting the sales," to determine whether and how one can "use economic evidence to identify who a first level purchaser is." Kaplan Dep. at 86–87; *see generally* Kaplan Decl. ¶¶ 59–104 (applying empirical analysis to support the balance of the Individual Issues Opinion).

Kaplan's Conflicts Opinion is similarly based on an empirical review and analysis of record evidence. From it, he concludes that various proposed class members received economic benefits from the challenged conduct; these included smelters, traders, and operators of LME warehouses. Kaplan Decl. ¶¶ 111–20. Kaplan "used [his] experience as an economist to assess the economic incentives and rationales of the participants in different positions in the aluminum industry," Kaplan *Daubert* Decl. ¶ 77, and "present[ed] empirical data related to this issue," *id.* ¶ 73.

Kaplan's analysis and opinions are, further, grounded in accepted economic principles and statistical analysis—methodology which Kaplan is qualified to deploy based on his extensive experience as an economist. *See id.* ¶¶ 7–9, 74, 76 (collecting economic authority). Kaplan "applied empirical analysis" and "[a]n understanding of market economics" to assess "the relationship of companies in a distribution chain, . . . which is heavily embedded in microeconomics." Kaplan Dep. at 86–87.

In short, Kaplan employed accepted and reliable economic methods, and his Individual Issues and Conflicts Opinions are highly relevant to this motion. *See, e.g.*, *Nimely*, 414 F.3d at 397 (quoting Fed. R. Evid. 702); *LIBOR VII*, 299 F. Supp. 3d at 518 ("[The challenged economic expert's] opinions are not speculative. [He] undertook a review of the work product

supporting [opposing expert's] report and of the data produced [in the litigation], and one can trace a direct analytical path from that review to the conclusions that [the expert] reaches: namely that [the opposing expert] made certain errors in analyzing the data."); *Intel*, 2014 WL 6601941, at *15–16 (relying on Kaplan's testimony about microprocessor industry's distribution chains in declining to certify class). That the FLPs "felt compelled to revise" their class definition in response to Kaplan's initial opinions "also suggests that [they are] reliable expert opinion[s]." *In re Rail Freight Fuel Surcharge Antitrust Litig.*, 292 F. Supp. 3d 14, 86 (D.D.C. 2017) ("*Rail Freight II*").

Second, to the extent that the FLPs fault Kaplan for offering legal opinions, this critique misses the mark. Neither Kaplan's Individual Issues Opinion nor his Conflicts Opinion "usurp[s] the role of the trial judge [in determining] the applicable law." *Nimely*, 414 F.3d at 397 (internal quotation marks and citations omitted).

As the Court reviews in detail below, "[putative] classes that require highly individualized determinations of member eligibility" may be unable to satisfy Rule 23(b)'s "predominance requirement." *In re Petrobras Sec.*, 862 F.3d 250, 268 (2d Cir. 2017). Further, the Second Circuit has interpreted Rule 23(a)(4)'s "adequacy requirement" to require district courts to "make sure that the members of the class possess the same interests, and that no fundamental conflicts exist among the members." *Charron v. Wiener*, 731 F.3d 241, 249 (2d Cir. 2013).

Kaplan's opinion usefully examined issues relevant to whether these requirements of Rule 23 were met. And, contrary to the FLPs' contentions, Kaplan's use of the terms "individualized inquiry" and "conflicts" in his report do not transform his empirical and economic analysis into "testimony stating ultimate legal conclusions," *Bilzerian*, 926 F.2d

at 1294. As noted, Kaplan reviewed, compiled, and analyzed public information, as well as extensive transaction data, contracts, and other evidence. His empirical analysis led him to reach the economic, not legal, conclusions that: fact-intensive inquiries would be needed to determine whether each proposed class member meets the factual criteria for class membership; and that potential class members from differing loci in the aluminum distribution chain face differing economic incentives. For example, Kaplan observed that "[a]scertaining which customers paid [a price based on the MWP] will require fact-intensive individualized inquiries because any number of contracts do not include a specific reference to [the] MWP." Kaplan Decl. ¶ 78; *see id.* ¶¶ 79–81, 84, 180, 184, 190 n.536 (describing fixed-price and fixed-premium contracts).

"[E]xperts may testify on questions of fact as well as mixed questions of fact and law." *Fiataruolo v. United States*, 8 F.3d 930, 941 (2d Cir. 1993). Such testimony is not objectionable merely "'because it embraces an ultimate issue' to be decided by the trier of fact." *Id.* (quoting Fed. R. Evid. 704). For example, in *Fiataruolo*, the Second Circuit held permissible—although "near the border, close to a prohibited invasion"—an expert's jury trial testimony as to a legal conclusion because it was accompanied by detailed factual background and explanation that "gave the jury helpful information beyond a simple statement on how its verdict should read." *Fiataruolo*, 8 F.3d at 942. Here, Kaplan's Individual Issues and Conflicts Opinions, which are directed to the Court for assistance in making a pretrial conclusion as to whether the requirements of Rule 23 are met, do not come close to the line. Kaplan does not conclusorily declare that class certification would be inappropriate, or provide an unadorned conclusion that the proposed class is inadequate or that questions relating to individual class members predominate over common questions.

Instead, Kaplan reaches factual conclusions accompanied by economic analysis on mixed questions of law and fact that bear on issues relevant to this motion. *Cf. In re Methyl Tertiary Butyl Ether (MTBE) Prod. Liab. Litig.*, 643 F. Supp. 2d 482, 505 (S.D.N.Y. 2009) ("The crucial distinction is that an expert may not draw the final inference between relevant evidence and the ultimate conclusion the jury will be asked to make. . . . Within the courts of the Second Circuit, an expert may lead a jury to the precipice of a verdict, but she may not instruct them to leap."). His is quintessential class certification rebuttal expert testimony. *See, e.g.*, *LIBOR VII*, 299 F. Supp. 3d at 519, 527 (rejecting challenge to expert opinion that "[c]ommon evidence cannot show [impact of alleged LIBOR suppression]" and explaining that "to the extent [the expert's] class certification opinions overlap with the merits question of whether LIBOR was in fact persistently suppressed, the 'rigorous analysis' to be undertaken at class certification often 'will entail some overlap with the merits of the plaintiff's underlying claim.'" (quoting *Wal-Mart Stores, Inc. v. Dukes*, 564 U.S. 338, 351 (2011)); *In re Wellbutrin XL Antitrust Litig.*, 308 F.R.D. 134, 139–41 & 144–46 (E.D. Pa. 2015) (denying *Daubert* challenge to economist opining that "identifying class members would require extensive individualized analysis"); *Vista Healthplan, Inc. v. Cephalon, Inc.*, No. 06 Civ. 1833 (MSG), 2015 WL 3623005, at *2–3 (E.D. Pa. June 10, 2015) (accepting expert testimony that "significant variations throughout the pharmaceutical industry prevent Plaintiffs from being able to identify class members or prove antitrust impact and damages without substantial individualized inquiry"); *In re Mushroom Direct Purchaser Antitrust Litig.*, No. 06 Civ. 620 (TNO), 2015 WL 5766930, at *2 (E.D. Pa. Aug. 20, 2015) (economist could not opine that "certification . . . is inappropriate" but could opine that "plaintiffs have failed to provide an analytical framework that can be used to demonstrate with common evidence . . . the proposed class suffered antitrust injury").

In sum, Kaplan's Individual Issues and Conflicts Opinions were neither a mere narration of the facts without meaningful analysis nor improper legal testimony. The FLPs' criticisms boil down to the assertion that Kaplan performed insufficient analysis and reached errant conclusions. *See, e.g.*, Pl. *Daubert* Mem. at 10 (Kaplan's analysis involved "at best . . . elementary school level math"). The FLPs criticize Kaplan for not "offer[ing] up a methodology to tear down Dr. Gilbert nor introduc[ing] a competing methodology of his own." Pl. *Daubert* Mem. at 13. But that was not Kaplan's charter as a rebuttal expert. "[A] rebuttal expert need not identify alternative or better methodologies," *Joffe*, 2019 WL 4673554, at *14, "to identify purported flaws" in an opposing expert's approach, *Henkel*, 2016 WL 1271062, at *12. The FLPs' critiques go, if anything, to the weight, not the admissibility in the Rule 23 inquiry, of Kaplan's report. *See Daubert*, 509 U.S. at 596; *Amorgianos*, 303 F.3d at 267; *Digital Music*, 321 F.R.D. at 78.

In sum, the Court finds that Kaplan applied reliable economic and empirical methods and, based on these, developed opinions that will assist the Court in resolving the motion at hand (and appear to have assisted the FLPs to better understand key issues in dispute on this motion and to have prompted them to adjust their litigation positions). *See, e.g.*, Pl. Reply at 6 (revising class definition in response to Kaplan's factual criticisms); First Joint Ltr. at 1 (FLPs "no longer seeking recovery for purchases of primary aluminum" based on categories of contracts first identified as requiring individualized inquiry by Kaplan). Both opinions are admissible.

2. Kaplan's Benefits Opinion

The FLPs also move to exclude Kaplan's opinion that "many [proposed class members] purportedly benefitted from the alleged conduct and any such benefits would have to be offset against any claimed overcharges when assessing the issue of impact." Kaplan Decl. ¶ 11; *see id.*

¶¶ 125–54. Again, the FLPs fault Kaplan for "eschew[ing] any methodology or analysis for observations relating to what are plainly legal standards." Pl. *Daubert* Mem. at 11.

At the outset, the Court notes that Kaplan "do[es] not propose to testify on the legal question of whether, when or to what extent economic benefits should be netted against economic losses to determine antitrust impact." Kaplan *Daubert* Decl. ¶ 83. Had he done so, the Court would have excluded such testimony. *See Bilzerian*, 926 F.2d at 1294. Rather, Kaplan's "focus is on whether, as an economic matter, Dr. Gilbert has presented a reliable common methodology to show that all or virtually all [proposed class members] were adversely affected economically." Kaplan *Daubert* Decl. ¶ 83. This area of expert testimony is unremarkable. Economists routinely testify about whether antitrust impact can be shown on a classwide basis using common proof. *See, e.g.*, *Intel*, 2014 WL 66019641, at *18–19; *In re Ready-Mixed Concrete Antitrust Litig.*, 261 F.R.D. 154, 163–64 (S.D. Ind. 2009); Paul E. Godek & Janusz A. Ordover, *Economic Analysis in Antitrust Class Certification: Hydrogen Peroxide*, 24 Antitrust ABA 62, 62 (Fall 2009) ("Economic analysis generally focuses on . . . lack of conflict within the class, class-wide impact demonstrable through common proof, and the existence of a feasible and formulaic approach to measuring damages."). Indeed, the FLPs' economist experts both have attested to the mirror-image proposition: that antitrust impact exists for all or substantially all class members in this case. *See* Zona Rpt. ¶¶ 88–91; Gilbert Reply Rpt. ¶ 20. Kaplan's contrary opinion—that if the TAC's allegations were true, many class members would have benefitted—is based on his review of business documents and deposition testimony and informed by his experience. Kaplan Decl. ¶¶ 111–22, 129–31 & n.381.

The FLPs' other criticism—that Kaplan "provides no data, formulas or matrices with which to calculate these proposed offset quantities," Pl. *Daubert* Mem. at 11—is similarly wide

of the mark. A rebuttal expert may critique an adverse expert's analysis without presenting a competing model or formula. *See, e.g.*, *Henkel*, 2016 WL 1271062, at *12; *Luitpold Pharms.*, 2015 WL 5459662, at *12; *Digital Music*, 321 F.R.D. at 78. Here, Kaplan reliably applied familiar economic principles, which he is qualified to apply, to conclude that several categories of proposed class members would have benefitted from defendants' alleged conduct. These include smelters who sold aluminum at an allegedly inflated price, and traders who may have received incentive payments from LME warehouses, participated in "merry-go-round" transactions, or generated trading profits as a result of warrant cancellations and cash-and-carry trades. *See, e.g.*, Kaplan Decl. ¶¶ 127–28; Kaplan Dep. at 107–21. Based on his review and analysis, Kaplan further opined that any analysis into such offsets would necessarily be individualized. Kaplan Decl. ¶¶ 126, 137. This was an appropriate critique of the conclusions of FLPs' experts regarding the impact of the alleged conspiracy.

As with Kaplan's first two opinions, the FLPs' critiques again reduce to the contention that their experts did better and more persuasive work. *See* Pl. *Daubert* Mem. at 12 ("Compare [Kaplan's work] to the empirical analysis that Dr. Gilbert did undertake."). That is a fair argument to make but it is not grounds for exclusion. Kaplan's Benefits Opinion is admissible for the purpose of the Court's resolution of FLPs' class certification motion.

3. Kaplan's Opinion that Dr. Gilbert's Damages Model Is Flawed

Finally, the FLPs move to exclude Kaplan's opinion that "Dr. Gilbert's damages analysis is flawed for several reasons." Kaplan Decl. ¶ 17; *see id.* ¶¶ 155–90. The FLPs argue first, that "Kaplan is not qualified to offer econometric or statistical modeling opinions," Pl. *Daubert* Mem. at 13; second, that Kaplan "does not offer up a methodology to tear down Dr. Gilbert nor introduce a competing methodology of his own," *id.*; and third, that Kaplan "does not sufficiently acknowledge that [defendants' warrant] cancellations . . . would not have happened

in the but-for world, thus accounting for the lowered quantities of aluminum loaded out in the but-for world," *id.* at 12.

The Court has already explained why Kaplan's lack of an alternative model does not prevent him, as a rebuttal expert, from "tear[ing] down" Dr. Gilbert's model. This is not grounds for excluding his critique of Dr. Gilbert. *See, e.g.*, *Henkel*, 2016 WL 1271062, at *12; *Luitpold Pharms.*, 2015 WL 5459662, at *12; *Digital Music*, 321 F.R.D. at 78. And the FLPs' third critique, although packaged in *Daubert* terms, is in substance a disagreement with Kaplan's conclusions. As such, it is undermined by Dr. Gilbert's late-stage reversal on the issue of load-ins in the but-for world. And the FLPs' substantive disagreement with Kaplan is legally irrelevant on a *Daubert* challenge. *See Amorgianos*, 303 F.3d at 267 ("[O]ur adversary system provides the necessary tools for challenging reliable, albeit debatable, expert testimony.").

Accordingly, the Court here focuses on the FLPs' remaining argument that Kaplan is not qualified to offer opinions regarding Dr. Gilbert's models.

The FLPs argue that Kaplan "lacks the training and qualifications" to offer opinions related to econometric analyses. Pl. *Daubert* Mem. at 13. "Courts in this circuit have noted that an expert should not be required to satisfy an overly narrow test of his own qualifications." *LIBOR VII*, 299 F. Supp. 3d at 466 (quoting *United States v. Tuzman*, No. 15 Cr. 536 (PGG), 2017 WL 6527261, at *9 (S.D.N.Y. Dec. 18, 2017) (collecting cases)). Indeed, "the Second Circuit [has] allowed an expert to testify as to matters within his general expertise even though he lacked qualifications as to certain technical matters within that field." *Pension Comm. of the Univ. of Montreal Pension Plan v. Banc of Am. Sec., LLC*, 691 F. Supp. 2d 448, 457 (S.D.N.Y. 2010) (citing *McCullock v. H.B. Fuller Co.*, 61 F.3d 1038, 1042–43 (2d Cir. 1995)).

Kaplan easily clears this bar. He is an extensively qualified economist, with ample training and experience in the field of econometrics.[30] Among other econometrics-specific experience, he taught business statistics in the MBA program at Johns Hopkins University for 10 years, which involved lecturing on econometrics. Kaplan *Daubert* Decl. ¶¶ 25, 30. He has published a book and articles that included econometric analysis, *id.* ¶ 30, including a 1998 paper that the FLPs concede "used standard econometric tools to measure the harm from a restraint in the aluminum market," Pl. *Daubert* Mem. at 5.[31] And courts have accepted and relied upon Kaplan's econometric analyses. *See, e.g.*, Kaplan *Daubert* Decl. ¶ 31 & Exs. D, G; *see also In re Plastics Additives Antitrust Litig.*, 2010 WL 3431837, at *15–19 (relying on Kaplan's re-running of plaintiffs' regression model to find lack of common proof of antitrust impact). Moreover, Kaplan's purported lack of expertise is belied by the impact his reports had on the FLPs and Dr. Gilbert. For example, in his initial declaration, Kaplan identified a mistake in Dr. Gilbert's Appendix G damage model—involving Gilbert's use of different assumptions in calculating excess load-outs at Vlissingen versus Detroit—which led Dr. Gilbert to reduce his damage estimate by $183 million. *See* Kaplan Decl. ¶ 186 & n.526; Kaplan *Daubert* Decl. ¶ 36.

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[30] Econometrics is a "branch of economics that expresses economic theory in mathematical terms." *In re Mushroom Direct Purchaser Antitrust Litig.*, No. 06 Civ. 620 (TNO), 2015 WL 5767415, at *4 (E.D. Pa. July 29, 2015).

[31] The FLPs assert that the paper's analysis is in tension with some of Kaplan's criticisms of Dr. Gilbert's model. The paper indeed contained different economic analysis—for a project of a different nature than his undertaking here. *See* Kaplan *Daubert* Decl. ¶¶ 93–100 (summarizing differences between the 1998 paper and Kaplan's opinions here). This critique, however, goes to weight, and is not a basis for exclusion under *Daubert*. *See, e.g.*, *Revelation Capital Mgmt.*, 215 F. Supp. 3d at 274; *In re Air Cargo Shipping Servs. Antitrust Litig.*, No. 06 MD 1175 (JG) (VVP), 2014 WL 7882100, at *18 (E.D.N.Y. Oct. 15, 2014), *report and recommendation adopted*, 2015 WL 5093503 (E.D.N.Y. July 10, 2015).

Accordingly, the Court finds Kaplan qualified to provide expert criticisms of Dr. Gilbert's model, that such criticisms are relevant and reliable, and that the FLPs' arguments in response are relevant to the weight and persuasiveness of Kaplan's assessments, rather than to admissibility. The Court therefore denies the FLPs' motion to exclude in full.[32]

III. Motion for Class Certification

The FLPs have moved for certification of a class defined as:

> All persons who from February 2010 to March 25, 2016 made a first level purchase of a primary aluminum product with a price term based, in any part, on the Midwest Transaction Price, the Platts Metals Week US Transaction Price or other "all in" price used in the United States, or the Midwest Premium, the Platts MW Premium or similar terminology or other regional premium used in the U.S., including, but not limited to, an averaging over a period of days of any such premium or adjusting for a grade or type of primary aluminum product. Excluded from the Class are Defendants, any parent, subsidiary, affiliate, agent or employee of any Defendant, and any co-conspirator. As used in this definition, "primary aluminum product" means T-bar, sow, standard ingot, foundry alloy T-bar or ingot, extrusion billet, slabs, sheet ingot, molten metal, or rod.

Pl. Reply at 6.[33] However, as of June 12, 2020, late in the briefing process and shortly before argument, the FLPs reported that they "are no longer seeking recovery for purchases of primary aluminum based on Alcoa's North American Primary Metals ('NAPM') contracts, which as identified by Alcoa, account for nearly 30% (by volume) of Alcoa's sales." First Joint Ltr. at 1.

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[32] Kaplan's is only one expert report offered by the defense in opposition to class certification. Had the Court excluded Kaplan's report under *Daubert*, the expert testimony of Dr. Hausman, which is not subject to a *Daubert* challenge, would remain, and would independently (indeed more fulsomely) support the critical propositions articulated by Kaplan, including as to the absence of classwide market impact. For avoidance of doubt, the Court's resolution of the FLPs' *Daubert* motion has not affected its resolution of the pending class-certification motion.

[33] *See In re FX*, 407 F. Supp. 3d at 428 n.5 ("As there has been at least one round of adversarial briefing on the class definitions set forth in plaintiffs' reply, those are the definitions that are analyzed here." (citation omitted)).

A. Applicable Legal Standards

"The class action is 'an exception to the usual rule that litigation is conducted by and on behalf of the individual named parties only.'" *Dukes*, 564 U.S. at 348 (quoting *Califano v. Yamasaki*, 442 U.S. 682, 700–01 (1979)). "To come within the exception, a party seeking to maintain a class action 'must affirmatively demonstrate his compliance' with Rule 23." *Comcast Corp. v. Behrend*, 569 U.S. 27, 33 (2013) ("*Comcast*") (quoting *Dukes*, 564 U.S. at 350). The requirements of Rule 23 fall into two main categories.

First, under Federal Rule of Civil Procedure 23(a), the moving party must show that:

> (1) the class is so numerous that joinder of all members is impracticable; (2) there are questions of law or fact common to the class; (3) the claims or defenses of the representative parties are typical of the claims or defenses of the class; and (4) the representative parties will fairly and adequately protect the interests of the class.

Fed. R. Civ. P. 23(a). These prerequisites are generally referred to as "numerosity, commonality, typicality, and adequacy of representation." *Sykes v. Mel. S. Harris and Assocs. LLC*, 780 F.3d 70, 80 (2d Cir. 2015) (citing *Dukes*, 564 U.S. at 349).

Second, if the Rule 23(a) criteria are satisfied, an action may be maintained as a class action only if the proposed suit falls within at least one of the three categories of cases set forth in Rule 23(b). *See* Fed. R. Civ. P. 23(b); *In re U.S. Foodservice*, 729 F.3d at 117. Plaintiffs here seek to proceed under Rule 23(b)(3), which permits a court to certify a class action if "questions of law or fact common to class members predominate over any questions affecting only individual members," and "a class action is superior to other available methods for fairly and efficiently adjudicating the controversy." Fed. R. Civ. P. 23(b)(3). Rule 23(b)(3) is designed to "achieve economies of time, effort, and expense, and promote . . . uniformity of decision as to persons similarly situated, without sacrificing procedural fairness or bringing about other undesirable results." *Amchem Prods. Inc. v. Windsor*, 521 U.S. 591, 615 (1997) (internal

quotation marks and citation omitted). The rule's two requirements—generally referred to as "predominance" and "superiority"—must each be satisfied. *See, e.g.*, *Sykes*, 780 F.3d at 81–82 (describing Rule 23(b)(3)'s "disjunctive inquiry," which requires separate determinations as to "predominance" and "superiority"); *see also Amchem*, 521 U.S. at 615.

"Where individualized questions permeate the litigation, those 'fatal dissimilarit[ies]' among putative class members 'make use of the class-action device inefficient or unfair.'" *In re Petrobras Sec.*, 862 F.3d at 270 (quoting *Amgen Inc. v. Conn. Ret. Plans & Tr. Funds*, 568 U.S. 455, 470 (2013)). The predominance inquiry mitigates this risk by "ask[ing] whether the common, aggregation-enabling, issues in the case are more prevalent or important than the non-common, aggregation-defeating, individual issues." *Tyson Foods, Inc. v. Bouaphakeo*, --- U.S. ---, 136 S. Ct. 1036, 1045 (2016) (quoting 2 William B. Rubenstein, *Newberg on Class Actions* § 4:49, at 195–96 (5th ed. 2012)); *see In re Petrobras Sec.*, 862 F.3d at 268 ("[P]redominance is a comparative standard . . . [requiring] that common questions *predominate* over any individual questions affecting only individual [class] members." (internal quotation marks and citation omitted)). This comparison is "'more . . . qualitative than quantitative, and must account for the nature and significance of the material common and individual issues in the case." *In re Petrobras Sec.*, 862 F.3d at 271 (internal quotation marks and citation omitted). "In short, the question for certifying a Rule 23(b)(3) class is whether '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 whether 'these particular issues are more substantial than the issues subject only to individualized proof.'" *Johnson v. Nextel Commc'ns, Inc.*, 780 F.3d 128, 139 (2d Cir. 2015).

In addition to the Rule's explicit requirements, the Second Circuit "has also 'recognized an implied requirement of ascertainability in Rule 23,' which demands that a class be 'sufficiently definite so that it is administratively feasible for the court to determine whether a particular individual is a member.'" *In re Petrobras Sec.*, 862 F.3d at 260 (quoting *Brecher v. Republic of Argentina*, 806 F.3d 22, 24 (2d Cir. 2015)). This "modest" ascertainability requirement is satisfied if a class is "defined using objective criteria that establish a membership with definite boundaries," and not "indeterminate in some fundamental way." *Id.* at 269.

"To certify a class, a district court must make a definitive assessment of Rule 23 requirements, notwithstanding their overlap with merits issues, . . . must resolve material factual disputes relevant to each Rule 23 requirement, and must find that each requirement is established by at least a preponderance of the evidence." *In re U.S. Foodservice*, 729 F.3d at 117 (internal quotation marks and citations omitted); *see also In re Initial Pub. Offerings Sec. Litig.*, 471 F.3d 24, 33 (2d Cir. 2006) ("*In re IPO*") ("[T]he important point is that the requirements of Rule 23 must be met, not just supported by some evidence."); *Teamsters Local 445 Freight Div. Pension Fund v. Bombardier Inc.*, 546 F.3d 196, 202 (2d Cir. 2008) ("[T]he preponderance of the evidence standard applies to evidence proffered to establish Rule 23's requirements."). Although factual disputes relevant to Rule 23's requirements must be resolved, a court "should not assess any aspect of the merits unrelated to a Rule 23 requirement." *In re IPO*, 471 F.3d at 41; *see Amgen*, 568 U.S. at 466. Ultimately, the district court has broad discretion in deciding how and whether to certify a class, arising from its "inherent power to manage and control pending litigation." *Myers v. Hertz Corp.*, 624 F.3d 537, 547 (2d Cir. 2010) (internal quotation marks omitted).

B. Compliance with Rule 23(a)

Under Rule 23(a), a proposed class must satisfy the requirements of numerosity, commonality, typicality, and adequacy of representation.

1. Numerosity

Rule 23(a)(1) requires that the class be "so numerous that joinder of all members is impracticable." Fed. R. Civ. P. 23(a)(1); *see generally Consol. Rail Corp. v. Town of Hyde Park*, 47 F.3d 473, 483 (2d Cir. 1995) (numerosity requirement presumed met if a class consists of at least 40 members).

That requirement is easily satisfied here. The FLPs and defendants have "agreed to a list of 285 . . . potential class members" whom the FLPs contend paid an inflated Midwest Premium for domestic purchases of primary aluminum from Alcoa, Rio Tinto, and Rusal. Third Joint Ltr. at 1; *see also* Schwaiger Decl., Ex. B (declaration of Thomas A. Krizanosky) ¶ 4; Gilbert Rpt. ¶ 48. On this basis alone, the numerosity requirement is met.

2. Commonality

The commonality requirement demands that there be "questions of law or fact common to the class." Fed. R. Civ. P. 23(a)(2). "Commonality requires the plaintiff to demonstrate that the class members have suffered the same injury," that their claims "depend upon a common contention," and that resolving that contention will "resolve an issue that is central to the validity" of each claim. *Dukes*, 564 U.S. at 349–50 (internal quotation marks and citation omitted). "Where the same conduct or practice by the same defendant gives rise to the same kind of claims from all class members, there is a common question." *Johnson*, 780 F.3d at 137 (quoting *Suchanek v. Sturm Foods, Inc.*, 764 F.3d 750, 756 (7th Cir. 2014)).

Here, there are plainly issues of law and fact common to the proposed class. Defendants do not contend otherwise. Most notably, the existence and scope of the alleged conspiracy to

inflate the Midwest Premium is common to the entire class. *See, e.g.*, *In re Auction Houses Antitrust Litig.*, 193 F.R.D. 162, 164 (S.D.N.Y. 2000) ("The existence of common questions of law or fact—not least of them the existence and scope of the alleged conspiracy—is obvious."); *In re NASDAQ Market-Makers Antitrust Litig.*, 169 F.R.D. 493, 509–10 (S.D.N.Y. 1996) ("[A]llegations concerning the existence, scope, and efficacy of an alleged antitrust conspiracy present important common questions sufficient to satisfy the commonality requirement of Rule 23(a)(2)."). Similarly, whether defendants' alleged (or proved) conduct qualifies as a *per se* violation under the antitrust laws—and, if not, how the relevant product and geographic markets would be defined—present common issues of law and fact applicable to the entire class.

To be sure, the parties dispute whether the other key issue on which liability will turn—whether proposed class members suffered antitrust injury—is a common question across the putative class. However, where common issues exist, the presence of even a material issue that is not common to the entire class, even if it potentially precludes a finding of predominance under Rule 23(b)(3), does not preclude a finding of commonality under Rule 23(a)(2). *See Sykes*, 780 F.3d at 86 ("While the resolution of this question will not address each element of each of these claims, that is not required for there to be a common question under Rule 23."). The Court therefore finds the commonality requirement satisfied.

3. Typicality

Rule 23(a)(3) requires that "the claims or defenses of the representative parties are typical of the claims or defenses of the class." Fed. R. Civ. P. 23(a)(3). This requirement is satisfied where each class member's claim "arises from the same course of events" and each class member must "make[ ] 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)). Where the same allegedly unlawful conduct "was directed at or affected both the named plaintiff[s] and the class" they seek to represent, "minor variations" will generally not prevent the typicality requirement from being satisfied. *Robidoux*, 987 F.2d at 936–37. However, typicality is not satisfied "where a putative class representative is subject to unique defenses which threaten to become the focus of the litigation." *Baffa v. Donaldson, Lufkin & Jenrette Sec. Corp.*, 222 F.3d 52, 59 (2d Cir. 2000) (quoting *Gary Plastic Packaging Corp. v. Merrill Lynch, Pierce, Fenner & Smith, Inc.*, 903 F.2d 176, 180 (2d Cir. 1990)). The typicality and commonality requirements "tend to merge." *Dukes*, 546 U.S. at 349 n.5 (quoting *Gen. Tel. Co. of Sw. v. Falcon,* 457 U.S. 147, 157–58 n.13 (1982)).

The defendants do not contest this element. The typicality requirement is met here, because the named plaintiffs' claims and those of the class they seek to represent arise from the same alleged conduct by defendants—conspiring to take actions tending to inflate the Midwest Premium—and because the named plaintiffs and proposed class members must prove similar facts, and make similar legal arguments, to prevail. The named plaintiffs allege that they, and all proposed class members, paid an inflated price for primary aluminum as a result of the same overarching conspiracy. To establish the existence of that conspiracy, all class members, including the FLPs, would offer the same proof—*e.g.*, communications purportedly reflecting an agreement not to compete and evidence of proprietary cancellations, "merry-go-round" transactions, and Metro's incentive payments. Each class member's claim arises from this course of events, and, to prove defendants' liability, each class member must make similar arguments that these actions constituted an unlawful agreement that increased the price they paid for aluminum. And there does not appear to be any "danger that absent class members will

suffer" as a result of defenses unique to the class representatives. *Gary Plastic*, 903 F.2d at 180.[34] Accordingly, the Court finds that the FLPs satisfy the typicality requirement.

4. Adequacy of Representation

Rule 23(a)(4) requires that "the representative parties will fairly and adequately protect the interests of the class." Fed. R. Civ. P. 23(a)(4). This "adequacy" requirement tests whether: (1) the representative parties' interests are antagonistic to the interests of other class members; and (2) plaintiffs' counsel are qualified, experienced, and capable of conducting the litigation. *In re Flag Telecom*, 574 F.3d at 35 (citing *Baffa*, 222 F.3d at 60). The adequacy inquiry serves to "uncover[ ] conflicts of interest between named parties and the class they seek to represent." *Id.* (quoting *Amchem*, 521 U.S. at 625). Accordingly, an analysis of adequacy of representation considers "whether the class representative has adequate incentive to pursue the class's claim, and whether some difference between the class representative and some class members might undermine that incentive." *In re Payment Card Interchange Fee & Merch. Disc. Antitrust Litig.*, 827 F.3d 223, 231 (2d Cir. 2016); *see Denney v. Deutsche Bank AG*, 443 F.3d 253, 268 (2d Cir. 2006) (court must determine whether class representatives "have an interest in vigorously pursuing the claims of the class").

At the same time, "[n]ot every conflict among subgroups of a class will prevent class certification." *In re Literary Works in Elec. Databases Copyright Litig.*, 654 F.3d 242, 249 (2d Cir. 2011). Rather, to defeat a motion for class certification, the conflict "must be fundamental." *In re Visa Check/MasterMoney Antitrust Litig.*, 280 F.3d 124, 145 (2d Cir. 2001) ("*Visa Check*") (citation omitted), *abrogated in part by In re IPO*, 471 F.3d 24.

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[34] Indeed, defendants have raised precisely the opposite concern in connection with their adequacy and predominance arguments, discussed *infra*.

Defendants here argue that fundamental conflicts among potential class members make class certification inappropriate.[35] In particular, defendants note that many proposed class members would have *benefitted* on the whole from—or themselves engaged in—the alleged conduct violating § 1 (artificial inflation of the Midwest Premium) for which the FLPs here seek to recover treble damages. Defendants argue, relying on an Eleventh Circuit decision, that these internal conflicts preclude class certification. *See, e.g.*, Third Joint Ltr. at 14 (citing *Valley Drug Co. v. Geneva Pharm., Inc.*, 350 F.3d 1181, 1189 (11th Cir. 2003) ("A fundamental conflict exists where some [class] members claim to have been harmed by the same conduct that benefitted other members of the class.")).[36]

Defendants draw upon these same facts to argue both that the proposed class is inadequate under Rule 23(a)(4) and that common issues do not predominate under Rule 23(b)(3)—although defendants' predominance argument, reviewed below, is principally based

[35] Defendants have not challenged the adequacy of the FLPs' counsel. The Court finds that estimable plaintiffs' counsel, who have played an energetic and leading role in this MDL for the better part of a decade, are well-qualified. They would more than adequately represent a class in this complex case—if such a class were otherwise properly certified. *See* OA Tr. at 60 (commending the FLPs' lead counsel for "responding effectively under considerable fire and in . . . to say the least, [a] complicated matter").

[36] Defendants relatedly suggest that two named plaintiffs, Custom Aluminum and Extruded Aluminum, themselves seek to recover for "second-level purchases from other potential class members," raising a fundamental conflict by "weaken[ing] the claims of the latter entities" and "raising the troubling specter of duplicative recovery." Def. Opp'n at 61; *see* Def. Sur-Reply at 29–30. However, these concerns are purely speculative at this stage. The FLPs seek to certify a class of persons who "made a *first level* purchase of a primary aluminum product," Pl. Reply at 6 (emphasis added), and only first-level purchases of aluminum give rise to antitrust standing in this litigation, *see Aluminum II*, 95 F. Supp. 3d at 444; *see also Aluminum I*, 2014 WL 4277510, at *23. It is thus far from clear that the second-level purchases on which defendants seize would play any role at trial, let alone be a basis for recovery. While these purchases do not raise a fundamental conflict, the need for individualized inquiries into whether various transactions were first- or second-level purchases is separately germane to the Rule 23(b)(3) predominance inquiry. It reinforces the Court's ruling, reviewed *infra*, that the FLPs cannot satisfy the predominance requirement.

on plaintiffs' inability to establish antitrust injury by common evidence. Defendants contend that the same potential "net economic benefit from the alleged anticompetitive conduct" that "creates a fundamental conflict of interest under Rule 23(a)(4)," also "raises individualized issues" regarding antitrust injury that would predominate over common issues. *See, e.g.*, *id.* at 14–15 (citing *Lavoho, LLC v. Apple, Inc.*, 232 F. Supp. 3d 513, 525 (S.D.N.Y. 2016) ("[A] plaintiff cannot establish antitrust injury where it 'actually tended to benefit' from the alleged conduct."), *and Matsuhita Elec. Indus. Co. v. Zenith Radio Corp.*, 475 U.S. 574, 586 (1986)); *see also In re FX*, 407 F. Supp. 3d at 439 ("[T]he fact that a class member benefitted from the defendants' conduct does not [necessarily] mean that there is an inherent conflict; it simply means that the class member has not suffered an injury.").[37]

Although the Court resolves the pending class certification motion on other grounds—finding under Rule 23(b)(3) that because plaintiffs cannot establish antitrust injury by common proof, common issues do not predominate over individualized ones—defendants' Rule 23(a)(4) challenge to certification on adequacy grounds is substantial. The Court need not definitively resolve this challenge to conclude that the question is complex and close. It is safe to say, at a minimum, that plaintiffs do not comfortably clear the Rule 23(a)(4) hurdle.

[37] Where the factual basis for a challenge to adequacy overlaps with a basis for a challenge to predominance, at least one court has been skeptical of a claim of "fundamental" conflicts. In *Freeland v. AT&T Corp.*, 238 F.R.D. 130 (S.D.N.Y. 2006), defendants asserted that "[t]he differences among the purported class members that make it impossible to satisfy the predominance inquiry likewise underlie the fundamental conflicts." *Id.* at 142. Judge Cote was not persuaded by this "repackaging" of a predominance challenge as also an adequacy problem. *Id.* But, while finding Rule 23(a)(4) satisfied, Judge Cote denied class certification under Rule 23(b)(3), finding that defendants had established that plaintiffs' claims "are not susceptible to generalized proof." *Id.* at 156. Ultimately, whether adequacy and predominance challenges to a proposed class can both be found meritorious based on the same factual circumstances turns on the specific circumstances. Notwithstanding the outcome in *Freeland*, no precedent precludes a court from denying class certification on both grounds based on overlapping facts.

The Court here briefly reviews the adequacy issue, which arises from the unusually eclectic nature of the putative class. It includes far more than industrial users of primary aluminum, such as the FLPs. It also includes trading firms, financial institutions, producers of primary aluminum and their affiliates, producers of secondary aluminum, and owners of LME warehouses. As defendants credibly demonstrate, these latter entities may have realized a net economic benefit from the alleged anticompetitive conduct. *See* Kaplan Decl. ¶¶ 105, 111–22, 125–44 & tbl.2; *see generally* Third Joint Ltr.; *id.*, Ex. 1.

As defendants demonstrate, in important aspects of their businesses, the trading firms and financial institutions in the putative class have more in common with the defendants than with the FLPs. As plaintiffs' final complaint itself alleges, "traders and banks . . . seized on the opportunity to purchase aluminum" and "sell it forward for a future profit." TAC ¶ 609; *see id.* ¶¶ 19, 602, 608–09 (alleging that defendants profited from "conspir[acy] to increase the regional premiums"). Trading firms engaged in the same types of cash-and-carry trades as defendants and sold vast quantities of primary aluminum during the class period. *See* Kaplan Decl. ¶¶ 114–19; Zona Dep. at 360–62. The economics of such trades and the trading profits they generated were no different for these proposed class members than they were for defendants. Notably, some industrials users in the putative class, too, may have similarly profited from the alleged anticompetitive conduct, insofar as a significant portion of the aluminum fabricators in the class had substantial trading operations. *See* Third Joint Ltr. at 4; *see also* Kaplan Decl. ¶¶ 118–19 (identifying examples of industrial users with trading operations).

As defendants further demonstrate, traders and financial institutions in the proposed class appear to have benefitted directly from the conduct that the FLPs challenge under § 1. For example, at least five traders each received tens of millions of dollars of incentive payments for

depositing aluminum at Metro's Detroit warehouse during the alleged class period. *See* Kaplan Decl. ¶ 115 & Ex. 20. The FLPs allege that such incentive payments were an anticompetitive restraint of trade that raised aluminum prices. TAC ¶¶ 130, 295–96. Other traders and banks were counterparties to "merry-go-round" transactions initiated by certain defendants and non-party co-conspirators. Although the FLPs attempt to downplay the significance of such involvement by putative class members, the FLPs' expert Dr. Gilbert urges the conclusion that defendant J.P. Morgan "participated" in "merry-go-round" transactions on that same basis. Gilbert Rpt. at 42 & Exs. A1, A3, A5, A7; Kaplan Decl. ¶ 123. Other traders and banks within the putative class engaged in cancellations of warrants for aluminum stored in Metro's Detroit warehouse—cancellations that Dr. Gilbert classified as "excessive" and as a means of the § 1 conspiracy. Kaplan Decl. ¶¶ 159–61 & Ex. 24; Kaplan Reply Decl. ¶ 80; *cf.* Gilbert Dep. at 184.

Aluminum producers and LME warehouse owners in the proposed class, too, were not only harmed by, but also benefitted from, the conduct plaintiffs challenge. Aluminum producers allegedly "benefitted tremendously" from any increase in the Midwest Premium because they were "owners of large stocks of primary aluminum." TAC ¶ 43. On that very basis, the FLPs argued earlier in this litigation that industrial users—not smelters—were "efficient enforcers" of the antitrust laws in this litigation "because the producers' self-interest would not motivate them to file suit." *Id.* To be sure, the FLPs correctly excluded from the class five of the six major smelters producing aluminum for North American consumption.[38] But even if all six were excluded, the proposed class would still contain firms that own stakes in or are owned by

[38] *Compare* Third Joint Ltr. at 6 & n.4 (excluding Alcoa, Rio Tinto, Rusal, Century, and Noranda from the proposed class, and arguing that a particular Hydro entity is not a smelter), *with* TAC ¶ 57 (alleging named plaintiff Custom paid "the Midwest Premium on purchases from primary aluminum producers," including a Hydro entity), *and* Pl. Reply at 62 (listing "Hydro" as one of "six major smelters producing aluminum for North American consumption").

aluminum smelters. *See* Third Joint Ltr. at 23 (listing firms that are owned by, or partially own, primary aluminum smelters). Moreover, the proposed class includes secondary aluminum producers, who typically buy scrap aluminum for a fixed price that does not include the MWP. They then sell the secondary aluminum they produce from that scrap at prices that do include the MWP. *See* Liu Decl., Ex. 5 (declaration of Mark Bodner) ("Bodner Dep.") at 256–58; Kaplan Decl. ¶¶ 129–40. It follows, as defendants credibly show, that these remaining putative class members would have benefitted from selling substantial quantities of aluminum at inflated prices as a result of defendants' alleged conspiracy. *See* Kaplan Decl. ¶¶ 129–40.

The proposed class, finally, includes trading firms that acquired LME warehouses during the class period. *Id.* ¶ 120 & n.364. Like the Warehousing Defendants, such firms, too, would have "benefit[ted] from the existence of queues in the system by being able to charge higher rents" and exit fees. TAC ¶¶ 598–602.

These contradictory impacts—*i.e.*, the mixed effects that the alleged anti-competitive conduct here stood to have on participants in this complex industry—thus are characteristic of numerous putative class members.

The experience of proposed class member Trafigura, one of the world's largest aluminum traders, supplies a useful illustration of an entity that both would have been harmed by, and benefitted from, the inflation of the Midwest premium. Trafigura holds itself out as "a world-leading participant in the global refined metals market" that "use[s] arbitrage to trade physical commodities without incurring price risk." Kaplan Decl. ¶ 117. Trafigura was one of the largest purchasers of primary aluminum from smelters in North America during the class period. *Id.*, Ex. 21. In that respect, Trafigura stood to be harmed by a successful conspiracy to inflate the Midwest Premium insofar as it was a component of Trafigura's purchase price. But separately,

in March 2010, Trafigura purchased a leading operator of LME warehouses, NEMS Ltd. *Id.* ¶ 120. Trafigura engaged in significant cash-and-carry trades to profit from market conditions. *Id.* ¶ 115. And Trafigura cancelled warrants associated with thousands of tons of aluminum stored in Metro's Detroit warehouse. *Id.* ¶ 123. In these respects, Trafigura's actions, incentives, and ability to profit from the elongation of queues at the Metro warehouse closely mirrored those of defendants. Its relevant experience deviated far from the experience of the class representatives, who were, purely, industrial users.[39]

Whether the alleged § 1 scheme's contradictory impacts on these various class members precludes class certification under Rule 23(a)(4) presents complex factual and legal questions. The FLPs argue that proposed class members' net benefits from the alleged conspiracy are irrelevant as a matter of law. They argue that the named class representatives are not conflicted in their ability and incentive to establish the conspiracy to injure direct purchasers. They note that because the defendants are excluded from the class definition, none of the class members who may have collaterally benefitted from the alleged conspiracy would face any adverse legal ramifications were a certified class to prevail in this litigation. They discount the Eleventh Circuit's *Valley Drug* decision, on which defendants rely, as inapposite, because it involved an entirely different market structure. *See* Third Joint Ltr. at 9–11 & nn.5–8 (also distinguishing *Valley Drug* progeny). They further argue that *Valley Drug* is inconsistent with the Supreme Court's teaching that an antitrust defendant cannot raise a pass-on defense, *see Hanover Shoe v.*

[39] *See* OA Tr. at 115 ("[I]f you are Trafigura in 2013, your concern is not that you might be excluded from the proposed class. Your concern is that you are going to be named as a defendant."). Notably, of the 10 named plaintiffs that have brought suit in this MDL—the four FLPs and the six individual plaintiffs who have opted out in favor of individual lawsuits—all are industrial users. No trader, smelter, or warehouse owner elected to pursue such an action—even though they were among the largest purchasers in the putative class.

United Shoe Mach. Corp., 392 U.S. 481 (1968), and with case authority in this District that such a defendant cannot "speculatively rais[e] potential offsets, even whose offsets are directly related to the goods at issue," *In re Elec. Books Antitrust Litig.*, No. 11 MD 2293 (DLC), 2014 WL 1282293, at *17 (S.D.N.Y. Mar. 28, 2014) ("*Electronic Books*").

There is a force to the FLPs' critiques. *Valley Drug* arguably sits uneasily alongside the Supreme Court's decisions in *Hanover Shoe* and *Illinois Brick Co. v. Illinois*, 431 U.S. 720 (1977), the latter of which limited monetary recovery under § 1 to direct, as opposed to indirect, purchasers, on the ground that, under *Hanover Shoe*, "direct purchasers are not only spared the burden of litigating the intricacies of pass-on but also are permitted to recover the full amount of the overcharge," *id.* at 740–41, 745–46. *See also Meijer, Inc. v. Warner Chilcott Holdings Co. III*, 246 F.R.D. 293, 303 (D.D.C. 2007) (rejecting *Valley Drug* as conflicting with *Hanover Shoe* and *Illinois Brick*).

On the other hand, *Hanover Shoe* primarily addresses a different paradigm, in which goods are passed along a vertical distribution chain. In that context, a defendant that unlawfully overcharged its customer may not defend on the ground that the victimized customer passed on the overcharge to the next purchaser in the distribution chain. *See, e.g.*, Phillip E. Areeda & Herbert Hovenkamp, *Antitrust Law* ¶ 346j (4th ed.). Defendants' adequacy argument here, however, is not that proposed class members passed on the alleged overcharge to the next purchaser in a vertical distribution chain. To the contrary, smelters in the proposed class were primarily *upstream* of the FLPs in the distribution chain, and traders acted at the same level in the chain as the FLPs. Rather, defendants argue that the challenged conduct—lengthening warehouse queues with the effect of increasing the MWP—directly benefitted many absent members of the putative class, thereby calling into question whether the differently situated class

representatives can adequately represent them and whether those absent members suffered injury at all.[40] Defendants further distinguish *Electronic Books*. The court there—in rejecting the argument that the benefits of the creation of the online iBookstore could be weighed against the damages caused by defendants' restraint of trade—explained that "[i]n simplest terms, Apple was not accused of nor found liable for violating the antitrust laws by the act of opening the iBookstore." *Electronic Books*, 2014 WL 1282293, at *15. Rather, "[w]hat was illegal was joining and facilitating a conspiracy to raise e-book prices." *Id.* In contrast here, defendants argue, the conduct the FLPs allege was illegal is the *same* conduct that benefitted numerous proposed class members.

Because the Court finds that the proposed class fails the predominance requirement of Rule 23(b)(3), it does not have occasion to resolve the hard questions as to whether the net economic benefit that some absent class members potentially realized from the scheme alleged here creates a sufficiently fundamental conflict within the class to bar certification under Rule 23(a)(4). And because the Court bases its Rule 23(b)(3) ruling on a separate ground—that the FLPs are unable by common proof to establish classwide antitrust injury—the Court has no occasion to consider whether the fact that individual class members may have benefited would separately preclude a finding of predominance. In the event that the Court's holding here—that Rule 23(b)(3) is not met on account of the lack of common proof of antitrust impact—were overturned, a searching inquiry into these issues would then become necessary.

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[40] To illustrate the point concretely: If a trader sold 10 units of aluminum during the class period and purchased five entirely different units, *Hanover Shoe* would bar defendants from defending on the ground that any overcharges on the five units had been passed along to the purchaser's downstream customers. But *Hanover Shoe* does not directly speak to whether any overcharges incurred on the five units could be netted against any gains on the 10 units that were sold, where, as here, defendants' challenged conduct—queue formation at warehouses—was not itself part of the distribution chain.

C. Compliance with Rule 23(b)(3) – Predominance

"A district court may only certify a class under Federal Rule of Civil Procedure 23(b)(3) if 'questions of law or fact common to class members predominate over any questions affecting only individual members.'" *In re Petrobras Sec.*, 862 F.3d at 270 (quoting Fed. R. Civ. P. 23(b)(3)). This "predominance" requirement of Rule 23(b)(3) "tests whether proposed classes are sufficiently cohesive to warrant adjudication by representation." *Amchem*, 521 U.S. at 623.

The predominance inquiry "is not satisfied simply by showing that the class claims are framed by the common harm suffered by potential plaintiffs." *In re Petrobras Sec.*, 862 F.3d at 270; *see Amchem*, 521 U.S. at 623–24 ("[T]he predominance criterion is far more demanding . . . [than] Rule 23(a)'s commonality requirement."). Rather, a district court has a "duty to take a 'close look' at whether common questions predominate over individual ones." *Comcast*, 569 U.S. at 34; *see Tyson Foods*, 136 S. Ct. at 1045 (predominance inquiry "calls upon courts to give careful scrutiny to the relation between common and individual questions in a case"). As the Supreme Court has explained:

> An individual question is one where members of a proposed class will need to present evidence that varies from member to member, while a common question is one where the same evidence will suffice for each member to make a prima facie showing [or] the issue is susceptible to generalized, class-wide proof.

Tyson Foods, 136 S. Ct. at 1045 (internal quotation marks and citation omitted).

Defendants' central argument in opposition to class certification is that the FLPs have failed to satisfy the predominance requirement. The Court's analysis of this issue proceeds as follows. The Court first explains the focus of the predominance inquiry in this case: whether the § 1 element of injury caused by defendants' alleged conspiracy can be reliably established across the class by the common proof of Dr. Gilbert's chain of statistical models. The Court rejects the

FLPs' claim that alternatively, classwide injury caused by the alleged conspiracy can be established by anecdotal evidence or statements of party employees.

The Court then closely examines the multi-step causal chain that plaintiffs posit led from defendants' conspiratorial actions with respect to the aluminum queues in Metro Detroit to the putative class members' purported price injury. Applying the rigorous standards for examining such proof articulated in the Supreme Court's decision in *Comcast*, 569 U.S. 27, and its progeny, the Court examines Dr. Gilbert's models claiming to establish that defendants' conduct caused direct purchasers of aluminum to pay artificially high prices throughout the more than six-year-long class period. The Court identifies a range of serious methodological flaws in Dr. Gilbert's reasoning and models. These, the Court concludes, prevent a finder of fact from reliably finding, on a classwide basis, injury and causation based on Dr. Gilbert's models. This precludes class certification under Rule 23(b)(3). Finally, the Court identifies additional individualized issues that bolster the conclusion that the FLPs have failed to satisfy Rule 23(b)(3).

1. The Predominance Inquiry Here and the Role of Dr. Gilbert's Models

The predominance inquiry "begins . . . with the elements of the underlying cause of action." *Erica P. John Fund, Inc. v. Halliburton Co.*, 563 U.S. 804, 809 (2001); *see Johnson*, 780 F.3d at 138 ("[A] court examining predominance must assess (1) the elements of the claims and defenses to be litigated; and (2) whether generalized evidence could be offered to prove those elements on a class-wide basis or whether individualized proof will be needed to establish each class member's entitlement to relief." (internal quotation marks and citation omitted)). Here, the FLPs allege that defendants "conspired to fix aluminum prices by entering into a contract, combination and conspiracy in restraint of trade in violation of Section 1 of the Sherman Act." Pl. Mem. at 25; *see* TAC ¶¶ 18–20, 444–627. To prevail on the merits of this claim at trial, the FLPs will have to prove three elements: (1) a violation of the antitrust laws—

here, § 1 of the Sherman Act; (2) individual injury resulting from that violation; and (3) measurable damages. *See, e.g.*, *Visa Check*, 280 F.3d at 136; *In re NASDAQ Market-Makers Antitrust Litig.*, 169 F.R.D. at 517. The second element has also been termed "antitrust injury," "impact," and "injury and causation." *See, e.g.*, *Cordes & Co. Fin. Servs., Inc. v. A.G. Edwards & Sons, Inc.*, 502 F.3d 91, 105 (2d Cir. 2007).

Defendants do not dispute that the first element presents a common question. *See, e.g.*, OA Tr. at 61 ("Whether a conspiracy existed, which we of course strenuously deny, is a common question. The answer to 'was there a conspiracy?' won't vary from class member to class member."). Nor can they. The Court easily finds, by a preponderance, that proof of the alleged conspiracy is a common issue, susceptible to classwide proof. Such proof may consist of evidence of written and oral communications among defendants and the actions taken by and at the behest of defendants in alleged furtherance of the scheme. *See supra* pp. 17–26 (reviewing FLPs' common evidence of the alleged conspiracy). And, as to the third element, the need for individualized damages determinations generally will not preclude certification under Rule 23(b)(3). *Johnson*, 780 F.3d at 138. Such determinations, however, are "factor[s] that [a court] must consider in deciding whether issues susceptible to generalized proof 'outweigh' individual issues,' even though 'standing alone, [they are not] sufficient to defeat class certification.'" *Id.* (quoting *McLaughlin v. Am. Tobacco Co.*, 522 F.3d 215, 231 (2d Cir. 2008), *abrogated on other grounds by Bridge v. Phx. Bond & Indem. Co.*, 553 U.S. 639 (2008)).

The parties vigorously dispute, however, whether the second element—individual injury resulting from the alleged conspiracy—is capable of common proof. Antitrust injury "poses two distinct questions": first, "whether the plaintiff has indeed suffered harm, or 'injury-in-fact'"; and second, "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.'" *Cordes & Co.*, 502 F.3d at 106 (quoting *Brunswick Corp. v. Pueblo Bowl-O-Mat, Inc.*, 429 U.S. 477, 489 (1977)).[41]

"Without common proof of injury and causation, [antitrust] plaintiffs cannot establish predominance." *In re Rail Freight Fuel Surcharge Antitrust Litig.*, 934 F.3d 619, 623 (D.C. Cir. 2019) ("*Rail Freight III*"); *see, e.g.*, *In re Asacol Antitrust Litig.*, 907 F.3d 42, 58 (1st Cir. 2018); *Digital Music*, 321 F.R.D. at 92–93; *In re Hydrogen Peroxide Antitrust Litig.*, 552 F.3d 305, 311 (3d Cir. 2008); *Messner v. Northshore Univ. HealthSystem*, 669 F.3d 802, 816–18 (7th Cir. 2012); *Blades v. Monsanto Co.*, 400 F.3d 562, 571–73 (8th Cir. 2005); *Bell Atl. Corp. v. AT&T Corp.*, 339 F.3d 294, 302 (5th Cir. 2003); 1 McLaughlin on Class Actions § 5:36 (16th ed.) ("The most fundamental prerequisite to certification of an antitrust class is the identification of a common methodology capable of allowing the trier of fact to determine that each member of the proposed class suffered antitrust injury and damages as a result of the challenged conduct."). Put differently, to satisfy Rule 23(b)(3)'s predominance requirement, the FLPs must "show that they can prove, through common evidence, that all class members were . . . injured by the alleged conspiracy." *Sykes*, 780 F.3d at 82 (quoting *In re Rail Freight Fuel Surcharge Antitrust Litig.*, 725 F.3d 244, 252 (D.C. Cir. 2013) ("*Rail Freight I*")). Without such common evidence, the "need to present evidence that varies from member to member" to establish antitrust injury will almost inevitably make individual questions "more prevalent or important" than common ones. *Tyson Foods*, 136 S. Ct. at 1045.

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[41] As reviewed above, the FLPs are incorrect that the Second Circuit held that plaintiffs in this MDL "suffered antitrust injury based on [a] well-developed summary judgment record," Pl. Sur-Reply at 1. Whether the FLPs have adduced common proof to reliably establish classwide antitrust injury is a matter of first impression for this Court to resolve. *See supra* pp. 29–30.

The FLPs contend that, where a plaintiff alleges a conspiracy to fix prices, the element of antitrust impact is generally susceptible to common proof. *See, e.g.*, Pl. Mem. at 28 (citing *In re Auction Houses Antitrust Litig.*, 193 F.R.D. at 166 ("Price fixing conspiracies, at least to the extent they succeed in fixing prices, almost invariably injure everyone who purchases the relevant goods or services."); Pl. Reply at 25–26 & n.25 (collecting cases). However often that may prove so, this case is decidedly idiosyncratic. The TAC's allegations, styled as price-fixing, are far afield from the paradigm in which competitors gather and secretly set a price (or price floor). Instead, plaintiffs' theory is that, at various points during the six-year class period, defendants took assorted actions with the intent to lengthen the queue at Metro Detroit, which in turn stood to increase the Midwest Premium price component of direct purchases. As Judge Forrest earlier put the point: "As cast, (and despite loose language to the contrary), this conspiracy was not a traditional 'price fix'—no price was fixed. Instead, the conspiracy involved complicated interactions between participants who are alleged to have gained benefits primarily from trading activity." *Aluminum II*, 95 F. Supp. 3d at 434.[42] At argument, the FLPs conceded as much. *See* OA Tr. at 31–32 ("The Court: [Y]ou are not saying . . . that the defendants literally got together and fixed, meaning they set the Midwest Premium, they said it will be X plus 10, or X plus 20, or it will be a particular number, that's not the allegation. The allegation is that they engaged in collusive conduct that had the effect of driving the price northward, but they didn't actually set the price, correct? Mr. Coughlin: That's correct.").

[42] *See also Aluminum II*, 95 F. Supp. 3d at 449 ("Moreover, despite the FLPs' allegations to the contrary, the conspiracy alleged is not a conspiracy to fix the price of physical aluminum—that is, 'x' amount per metric ton. The scheme is primarily aimed at increasing trading profits, which requires a necessary price impact—not a price fix. Variations in price may have as much or more benefit to participants in such a scheme as a price certain. A conspiracy to fix the price of aluminum would involve different players (for example, producers) in different markets.").

The *Auction Houses* case, which the FLPs cite as an analogy, in fact supplies a useful contrast to this case. It illustrates the considerable extent to which the causal mechanism alleged here departs from the paradigmatic or "traditional" price fixing conspiracy. There, the leaders of the two dominant auction houses, Sotheby's and Christie's, were alleged to have unlawfully conspired to charge inflated commissions for items sold at their auctions. The two competitors had secretly agreed upon the commission rate schedule. *See In re Auction Houses*, 193 F.R.D. at 163–64. Consistent with that agreement, the two auction houses then directly charged their customers the fixed commission rates during the relevant period. *See id*. at 163–64, 166. In that context, the causal mechanism consisted of a single step. And the injury (plaintiff customers' payment of a heightened fixed commission to defendants) was easily traced to the challenged conduct (the agreement to fix commission rates).

In contrast here, the FLPs posit a more elongated causal chain between the alleged agreement to take steps toward lengthening queues at certain LME-approved warehouses and the purported payment by direct purchasers of an inflated price for primary aluminum purchased from third-party smelters. The Court assumes *arguendo* that a conspiratorial agreement of this nature, if proven, is subject (as plaintiffs argue) to *per se* condemnation under the antitrust laws, insofar as its ultimate object was to heighten purchase prices. Regardless, while the FLPs need not make the additional showings necessitated by a rule of reason claim, to sustain a certified class, they must show by competent common proof each step in the causal chain leading from conspiratorial agreement to price impact on direct purchasers.

Towards that end—to establish classwide antitrust impact—the FLPs rely primarily on statistical models developed by their expert, Dr. Gilbert. Dr. Gilbert has offered a sequence of models that purports to show: (1) that defendants loaded "excess" amounts of aluminum out of

Metro Detroit and Pacorini Vlissingen, thus lengthening the queues at those warehouses, Gilbert Rpt., Ex. G3; *see generally id.*, App'x G; (2) that longer queues increased the Midwest Premium, *id.* ¶ 10(b) & App'x F, without in turn reducing LME settlement prices, *id.* ¶ 10(c) & App'x D–E; and (3) that higher Midwest Premiums were passed through to purchasers in the form of higher all-in purchase prices for physical primary aluminum, *id.* ¶ 10(a) & App'x C.

Before carefully evaluating the reliability of Dr. Gilbert's models, the Court addresses two threshold arguments raised by the FLPs—each to the effect that there is no charter or need for the Court to undertake this inquiry. First, the FLPs argue that any methodological errors in Dr. Gilbert's models are properly considered only at the merits stage, not on a motion for class certification, because such errors are "common" to the putative class. Second, the FLPs argue that even without Dr. Gilbert's modeling, the lay, largely documentary, evidence adduced in discovery could independently establish classwide injury.

a. *After* Comcast Corp. v. Behrend, *Expert Models of How Classwide Injury May Be Established by Common Proof Require Rigorous Review at the Class Certification Stage*

At the threshold, the FLPs argue that any flaws in Dr. Gilbert's econometric models would be "'common' to the entire Class," that these flaws therefore cannot bear on the Rule 23(b)(3) predominance inquiry, and that there is no legal charter for the Court to examine the reliability of Dr. Gilbert's modeling. Pl. Sur-Reply at 3; *see, e.g.*, *id.* ("[W]hether there exists an inverse relationship between regional premiums and the LME price [that Dr. Gilbert failed to account for] is a classwide issue.").

That argument is wrong as a matter of Rule 23 doctrine, as the line of cases beginning with *Comcast Corp. v. Behrend* squarely establishes. Quite the contrary, as a review of *Comcast* and its progeny reflect, where an expert's model is the basis for a plaintiff's claim of classwide impact and causation, a court is obliged to rigorously examine the soundness of that model at the

class certification stage. A court may certify a class under these circumstances only where the Court finds the model methodologically sound. That is so notwithstanding that, if the class is certified, the finder of fact, too, would be called upon at trial to evaluate the soundness and persuasiveness of the expert's model.

In *Comcast*, the district court had certified a class of more than two million current and former Comcast subscribers based on plaintiffs' expert's model that calculated the combined antitrust impact of four proposed theories of anticompetitive harm. *Comcast*, 569 U.S. at 30–32. The district court so ruled even though it had rejected three of the theories and the model did not isolate the impact of the surviving theory. *Id.* The court of appeals affirmed the certification order. It held that, despite the shortcomings with the expert's model, plaintiffs had met their burden because the expert's model "calculated supra-competitive prices regardless of the type of anticompetitive conduct." *Id.* at 32 (internal quotation marks and citation omitted).

The Supreme Court reversed. It held that "a model purporting to serve as evidence of damages . . . must measure only those damages attributable to [plaintiffs'] theory"—that is, the model "must be consistent with [plaintiffs'] liability case." *Id.* at 35 (citations omitted). The Court rejected the court of appeals' view that "simply . . . provid[ing] a method to measure and quantify damages on a classwide basis" was sufficient. *Id.* Rather, the Court held, district courts have a duty to "conduct a 'rigorous analysis'" of the validity of such models. *Id.* at 35 (quoting *Dukes*, 564 U.S. at 351). That analysis required denying class certification in the case at hand, because, as the Court explained:

> In light of the model's inability to bridge the differences between supra-competitive prices in general and supra-competitive prices attributable to the [plaintiffs' theory of anticompetitive impact and causation in particular], Rule 23(b)(3) cannot authorize treating subscribers . . . as members of a single class. Prices whose level above what an expert deems "competitive" has been caused by factors unrelated to an accepted theory of antitrust harm are not "anticompetitive" in any sense relevant

> here. The first step in a damages study is the translation of the *legal theory of the harmful event* into an analysis of the economic impact *of that event*.

Id. at 38 (emphasis in original) (internal quotation marks and citation omitted). Critically, the Court stated, a plaintiff seeking certification cannot rely on an expert whose "methodology . . . identifies damages that are not the result of the wrong." *Id.* at 37. The Court added: "Without presenting another methodology, [plaintiffs] cannot show Rule 23(b)(3) predominance: Questions of individual damage calculations will inevitably overwhelm questions common to the class." *Id.* at 34.

Following *Comcast*, circuit courts in antitrust cases have consistently, and correctly, read that decision to require that district courts carefully examine, at the class certification stages, the soundness of an expert's model relied upon to establish classwide impact. Decisions from the District of Columbia and Third Circuits usefully illustrate this approach.

Soon after *Comcast*, the D.C. Circuit applied *Comcast* to vacate a class certification order, via interlocutory appeal, in *Rail Freight I*, 725 F.3d 244. The *Rail Freight* multi-district litigation entailed lawsuits against the four major freight railroads. These alleged a price-fixing conspiracy resulting in inflated rate-based fuel surcharges that the railroads had applied with increasing frequency and intensity over a decade. *Rail Freight I*, 725 F.3d at 247–48; *see generally Rail Freight II*, 292 F. Supp. 3d at 35–38. Freight railroads charge shippers an "all-in" rate consisting of a base rate plus a fuel surcharge. *Rail Freight I*, 725 F.3d at 248. The *Rail Freight* plaintiffs alleged that, during the relevant period, the railroad defendants had conspired to switch from charging mileage-based fuel surcharges to rate-based fuel surcharges, and then increased those surcharges. *Id.* However, some shippers, who had entered long-term "legacy" contracts before the start of the alleged conspiracy, were undisputedly unaffected. *Id.* The model that the *Rail Freight* plaintiffs' expert offered in support of class certification purported to

quantify, on a classwide basis, the injury to all class members attributable to defendants' collusive conduct. But the methodology yielded false positives: When applied to shippers who had legacy contracts, the model showed similar impact. *See id.* at 253.

The D.C. Circuit vacated the district court's class certification order, finding the model unsatisfactorily rigorous under *Comcast*. *Comcast*, it explained:

> [S]harpens the defendants' critique of the damages model as prone to false positives. It is now indisputably the role of the district court to scrutinize the evidence before granting certification, even when doing so requires inquiry into the merits of the claim. If the damages model cannot withstand this scrutiny then, that is not just a merits issue. [Plaintiffs' expert's] models are essential to the plaintiffs' claim they can offer common evidence of classwide injury.

Rail Freight I, 725 F.3d at 253 (internal quotation marks and citation omitted). After *Comcast*, the D.C. Circuit emphasized, "[i]t is now clear . . . that Rule 23 not only authorizes a hard look at the soundness of statistical models that purport to show predominance—the rule commands it." *Id*. at 255. In sum: "No damages model, no predominance, no class certification." *Id.* at 253.

In 2019, the D.C. Circuit similarly applied *Comcast*, in an appeal arising from the same multi-district litigation. On remand from *Rail Freight I*, the district court denied class certification. The district court noted that plaintiffs' expert's supplemental report had found (contrary to plaintiffs' theory of a classwide injury) that 12.7% of proposed class members in fact had not suffered an injury; the expert's report had also over-estimated damages for certain types of shipments and continued to yield false positives when applied to legacy contracts. For these reasons, the district court held, the expert's report could not be used as reliable proof of classwide impact. *See generally Rail Freight II*, 292 F. Supp. 3d 122–41. The D.C. Circuit affirmed. It explained that—because "[u]ninjured class members cannot prevail on the merits" and because plaintiffs' expert's model showed that some shippers in the putative class had not been injured by the alleged conspiracy—"all of [those putative class members] would need

individualized adjudications of causation and injury." *Rail Freight III*, 934 F.3d at 624–25. Citing post-*Comcast* authority to similar effect from the First Circuit, the D.C. Circuit stated that the "need for individualized proof of injury and causation destroy[ed] predominance," and that plaintiffs' expert's model fatally lacked a "winnowing mechanism . . . truncated enough to ensure that common issues predominate, yet robust enough to preserve the defendants' Seventh Amendment and due process rights to contest every element of liability and to present every colorable defense." *Id.* (citing *In re Asacol*, 907 F.3d at 51–58).

Most recently, earlier this year, the Third Circuit, in *In re Lamictal Direct Purchaser Antitrust Litig.*, 957 F.3d 184 (3d Cir. 2020), vacated a class certification order because the district court failed to take a sufficiently close look at an expert's model purporting to show classwide injury. *Lamictal* involved "reverse payment agreements" between brand-name pharmaceutical manufacturers and generic manufacturers under the Hatch-Waxman Act. The Third Circuit vacated the class certification order because plaintiffs' model "impermissibly relies on averages, which in a market characterized by individual negotiations . . . masks the fact that many—up to one-third of the entire class—likely paid no more, or even less, for [the drug] than they would have [otherwise]." *Lamictal*, 957 F.3d at 192. In certifying the class, the Third Circuit held, the district court had "refused to address the multi-leveled microeconomic analysis of what each Defendant would or would not have possibly done in the but-for world," which made it "impossible to determine whether . . . individualized issues" had been raised. *Id.* at 193. The Third Circuit accordingly held that "the District Court abused its discretion when it assumed, absent a rigorous analysis, that averages are acceptable." *Id.* at 194.

There is no countervailing post-*Comcast* authority to these assembled precedents. And while the Second Circuit has not yet had occasion squarely to apply *Comcast* in the context of

reviewing a decision whether to certify a putative antitrust class, the Second Circuit has quoted the D.C. Circuit's *Rail Freight I* decision at length, with approval. *See, e.g.*, *Sykes*, 780 F.3d at 82 ("[T]he plaintiffs must . . . show that they can prove, through common evidence, that all class members were . . . injured by the alleged conspiracy. . . . 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. But we do expect the common evidence to show all class members suffered *some* injury." (quoting *Rail Freight I*, 725 F.3d at 252)); *see also, e.g.*, *In re Petrobras Sec.*, 862 F.3d at 273 ("Plaintiffs bear the burden of showing that, more often than not, they can provide common *answers*."); *In re U.S. Foodservice*, 729 F.3d at 117 ("[A] district court must make a definitive assessment of Rule 23 requirements, notwithstanding their overlap with merits issues . . . and must find that each requirement is established by at least a preponderance of the evidence." (internal quotation marks and citations omitted)). There is no reason to infer that the Second Circuit would disdain a similarly rigorous methodological review.

Consistent with this line of authority, district courts in this District (and in others) have repeatedly recognized, after *Comcast*, that methodological challenges to an expert's antitrust injury model are properly considered as part of a court's consideration of predominance at the class certification stage. These courts have further uniformly recognized that where an expert's model of classwide injury fails, absent alternative common proof of class impact, such deficiencies will preclude class certification under Rule 23(b)(3). *See, e.g.*, *Digital Music*, 321 F.R.D. at 93 ("Because [plaintiffs' expert's] model fails to account for price variability in the but-for world, Plaintiffs have failed to show that they can prove by common evidence that all class members were injured by the alleged price-fixing conspiracy. . . . Accordingly, Plaintiffs

have failed to satisfy Rule 23(b)(3)'s predominance requirement." (internal citations omitted)); *Laumann v. Nat'l Hockey League*, 105 F. Supp. 3d 384, 398–99 (S.D.N.Y. 2015) (certification denied where an unreliable expert model "*was* the common evidence" of antitrust impact offered by plaintiffs); *In re Lithium Ion Batteries Antitrust Litig.*, No. 13 MD 2420 (YGR), 2017 WL 1391491, at *17 (N.D. Cal. 2017) (certification denied for failure to establish predominance where expert analyzed data for one product within class but was "unable to complete an analysis based on the actual cost data for any [other] products"); *see also, e.g.*, *In re Photochromic Lens Antitrust Litig.*, No. 10 MD 2173 (JDW) (EAJ), 2014 WL 1338605, at *25 (M.D. Fla. 2014) ("[Plaintiffs' expert's] failure to account for . . . a critical factor in determining antitrust impact [] renders his regressions legally deficient.").

In sum, contrary to plaintiffs' assertion on this motion, the reliability of Dr. Gilbert's chain of models may not be deferred or deflected to a trial on the merits. Rather, because Dr. Gilbert's models themselves are the FLPs' central basis for establishing classwide injury and causation, these models instead must be shown, at this stage, to be suitably rigorous. A flawed model may result in denial of class certification for failure reliably to establish the preponderance of common issues, whether because the model measures harm not attributable to the conspiracy, *Comcast*, 569 U.S. at 35; yields false positives, *Rail Freight I*, 725 F.3d at 253; masks uninjured class members by using an "averaging" mechanism to allocate injury across the class, *Lamictal*, 957 F.3d at 192; or otherwise fails to demonstrate with scientific rigor that classwide impact can be established through common proof, *Rail Freight III*, 934 F.3d at 624–25 (uninjured class members required individualized proof).

b. Documentary Evidence Alone Does Not Suffice Here

The FLPs alternatively contend that, even if Dr. Gilbert's models were set aside, the lay evidence they have developed in discovery could serve as common proof of classwide impact. That, too, is wrong.

The FLPs rely on various statements from industry analysts and employees of defendants, smelters, and aluminum purchasers. As synopsized by the FLPs, these express the views that: (i) defendants' conspiratorial actions lengthened queues, *see supra* pp. 19–26; (ii) longer queues caused the MWP to rise, *see* Pl. Reply at 19–21; (iii) inflation of the MWP caused the all-in price of primary aluminum to rise, *see id.* at 21–25; and (iv) purchasers of primary aluminum paid prices reflecting the inflated MWP, *see id.* at 28, 35 (citing a Goldman Sachs document stating that the MWP is "the cornerstone of nearly all aluminum physical transactions").

This documentary evidence is important context for the Court's consideration of Dr. Gilbert's models. It is an important supplement to Dr. Gilbert's work. *See, e.g.*, *In re Air Cargo*, 2014 WL 7882100, at *43 ("[E]xpert testimony . . . should be viewed in conjunction with the plaintiff's other evidence."); *In re High-Tech Emp. Antitrust Litig.*, 985 F. Supp. 2d 1167, 1217 (N.D. Cal. 2013) ("In other contexts, courts have long noted that statistical and anecdotal evidence must be considered in tandem.").

However, broad generalizations by market participants—whether about queues at Metro or Vlissingen specifically or the aluminum market generally—cannot, in the absence of a proper chain of expert models, serve as common proof that all 250-plus members of the class suffered pricing injury during the six-year class period. Whatever the impressions of these persons, they were not—and do not claim to have been—percipient witnesses to the entirety of the conduct at issue. They simply are not competent to opine on the sweeping, economically complex propositions necessary to support class certification. *See, e.g.*, *LIBOR VII*, 299 F. Supp. 3d

at 514 ("[T]hese communications reflect only the beliefs of those [market participants], rather than the behavior of the market as a whole, and as [defendant] correctly notes, other [market participants] viewed [the issue] as irrelevant in their trading considerations."). Notably, too, the statements by market participants on which plaintiffs rely are anchored to particular industry circumstances and moments in time. They do not, in terms, profess to opine on the necessary proposition here: that defendants' conspiracy, as alleged in this litigation, unitarily worked antitrust pricing injury on all entities and persons now defined to fall within the putative class.

Further, as defendants note, market participants and observers were hardly uniform in their assessments of the impact of queues on all-in prices paid by aluminum purchasers. Some opined, for example, that increases in the Midwest Premium were offset by reductions in the LME price component. *See, e.g.*, First Playforth Decl., Ex. 5 (industry observer CRU Group concluding that "the impact of premium inflation is not to increase the free market price but rather to cause the LME price to trade at a discount to the exogenously-set free market price"); *see also, e.g.*, *id.*, Ex. 13 (study by consulting firm Europe Economics from 2007—*i.e.*, before the relevant period—concluding that reducing the costs of taking physical delivery from LME warehouses will increase the value of LME warrants, which in turn will be offset by reductions in regional premiums); *cf. id.*, Ex. 14 (Matt Levine, *The Goldman Sachs Aluminum Conspiracy Was Pretty Silly*, Bloomberg (Nov. 20, 2014)); *see generally id.*, Exs. 4–14; Def. Sur-Reply at 10–12. That lay members and observers of the industry expressed non-uniform contemporaneous views is good reason to hesitate before permitting either side of the lay divide to be treated as authoritative as to whether lengthening queues at the Metro Detroit warehouses unitarily worked price injury on first-level purchasers.

In the end, the broad generalizations that appear in select industry documents are far too imprecise, indiscriminate, and disconnected from reliable factual moorings to reliably establish the economically complex proposition necessary for class certification: that all purchasers at all times throughout the lengthy class period were injured by defendants' alleged queue-lengthening activities. At trial, defendants would have a right to present individualized evidence that these statements are untrue for large numbers of individual purchases and purchasers. *See, e.g.*, *Rail Freight III*, 934 F.3d at 624–25 (citing *In re Asacol*, 907 F.3d at 51–58). And, relying on the FLPs' anecdotal evidence that all or nearly all purchasers pay (presumably without offsetting deductions in the LME price) the Midwest Premium would assuredly yield false positives. To choose just one example, the lay statements on which plaintiffs rely imply that even the purchasers in the 32,000 Alcoa transactions that Dr. Gilbert concluded "do not include the Midwest Premium," Gilbert Reply Rpt. ¶ 48, were harmed.

For these reasons, courts in § 1 cases have consistently rejected attempts to establish classwide antitrust injury based on documentary or other lay evidence alone. *See, e.g.*, *Rail Freight III*, 934 F.3d at 626 (rejecting argument that "documentary evidence" was sufficient to prove classwide antitrust injury); *Asacol*, 907 F.3d at 54 (rejecting attempt to rely on "admissions" in defendants' documents as common proof of classwide injury); *see also, e.g.*, *Ward v. Apple Inc.*, No. 12 Civ. 5404 (YGR), 2018 WL 934544, at *3 (N.D. Cal. 2018) ("Absent a data-driven model, plaintiffs have failed to meet their burden under Rule 23."). Particularly given the complexity of the proposition that plaintiffs must establish here—that a scheme to lengthen queues in Metro Detroit warehouses uniformly caused net increases in the prices paid by all first-level purchasers of aluminum within the more-than-six-year-long class period—

reliable expert modeling substantiating this claim is unavoidably necessary to secure class certification.[43]

2. Dr. Gilbert's Models

Having established that Dr. Gilbert's analysis is essential to the FLPs' ability to show predominance, the Court now turns to his chain of econometric models. As reviewed above, Dr. Gilbert offers a chain of models purporting to show: (i) that defendants loaded "excess" amounts of aluminum out of Metro Detroit and Pacorini Vlissingen, thus lengthening the queues at those warehouses, Gilbert Rpt., Ex. G3; *see generally id.*, App'x G; (ii) that longer queues increased the Midwest Premium, *id.* ¶ 10(b) & App'x F, without reducing the LME price for aluminum, *id.* ¶ 10(c) & App'x D–E; and (iii) that during the entire class period, higher Midwest Premiums were passed through to all putative class members in the form of higher all-in purchase prices for physical primary aluminum, *id.* ¶ 10(a) & App'x C.

In fact, as developed below, each step in Dr. Gilbert's chain suffers from fatal flaws that, under *Comcast*, render his testimony insufficient as proof of classwide impact. The FLPs therefore lack classwide proof of injury and causation.

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[43] At argument, the FLPs' counsel cited the *High-Tech Employee* litigation, 985 F. Supp. 2d 1167, as the case that comes closest "to indicat[ing] that [documentary evidence] alone could get the plaintiff across the [predominance] goal line," while acknowledging that "these cases are never done alone" on lay evidence and that, in *High-Tech Employee*, "there is [also] expert testimony." OA Tr. at 25. For that reason, *High-Tech Employee* does not support the FLPs' bid to found class certification wholly on non-expert evidence. In any event, that case involved claims of a far simpler antitrust conspiracy. *See, e.g.*, *Intel*, 2014 WL 6601941, at *14 & n.11 (distinguishing *High-Tech Employee* as involving class allegations of a "conspiracy to suppress employee compensation through agreements to refrain from soliciting employees from co-defendants," for which the required expert analysis only "superficially resemble[d]" the more complicated "two-step analysis" undertaken by the *Intel* plaintiffs' expert to show classwide proof of impact and causation). Plaintiffs and their experts there thus had a far lighter lift in establishing classwide proof of impact than here. For these reasons, *High-Tech Employee*'s dicta regarding the theoretical possibility that documentary evidence alone could establish classwide impact is not instructive here.

a. "Excess" Load-Outs and Queue Length in the But-For World

The Court's examination begins with the first step in Dr. Gilbert's chain of analysis: his model purporting to show defendants loaded "excess" amounts of aluminum out of Metro Detroit and Pacorini Vlissingen, thereby lengthening the queues at those warehouses. *See id.*, App'x G. These "excess load-outs" are the only "conspiratorial conduct" that Dr. Gilbert attempted to model. Gilbert Reply Rpt. ¶ 55 & n.58; *see* Gilbert Rpt. ¶¶ 76–77. They are the starting point for his ensuing estimates of impact and damages. *See id.*

Dr. Gilbert sought to prove that the alleged conspiracy lengthened queues in Detroit and Vlissingen by comparing the volume of warrant cancellations made at those locations to his "estimate of the level that would have prevailed in a competitive [LME] warehouse market." Gilbert Rpt. ¶ 75. However, warrant cancellations ebb-and-flow: They are "occasional and lumpy," and this "makes them difficult to model." *Id.* ¶ 76. Dr. Gilbert "therefore [took] an indirect route," and instead modelled the "excess load-outs" that allegedly would not have occurred in the but-for world. *Id.* ¶¶ 76–77; *see id.*, App'x G. He then converted his estimate of excess load-outs into an estimate of excess warrant cancellations and longer queues. *Id.* ¶ 77 & App'x G at 112 ("I will then infer excess cancellation rates from these excess load-out figures.").

Defendants argue that Dr. Gilbert's crucial initial model suffers from three distinct *Comcast* problems: (i) it fails to take into account LME load-out rule changes during the relevant period; (ii) it relies on the effect of the Vlissingen queue, despite the TAC's clear disavowal of such impact; and (iii) it models a supply expansion, whereas the TAC alleges a supply restraint.[44] "The first step in [an injury and] damages study is the translation of the *legal*

[44] As reviewed below, the second and third of these deficiencies implicate multiple steps of Dr. Gilbert's analysis.

theory of the harmful event into an analysis of the economic impact *of that event*." *Comcast*, 569 U.S. at 38 (emphasis in original). The Court finds that the FLPs have failed at this first step.

i. Changes in the LME Load-Out Rules

As reviewed above, in November 2003, the LME first adopted a minimum load-out rule, requiring that each warehousing company be able to load out a minimum of 1,500 tons per day per location; that rule was in place at the start of the alleged conspiracy. TAC ¶ 523. In April 2012, the LME increased the required minimum to 3,000 tons per day for warehouse companies with more than 900,000 tons of metal under storage. *Id.* ¶¶ 524, 586. In February 2015, the LME instituted a "Load-In/Load-Out" rule, which linked a warehouse's minimum load-out rate to the value of the aluminum it loaded into storage. Hausman Decl. ¶¶ 100–01. Under each set of rules, the minimum rate generally operated as a *de facto* maximum rate, because warehouse operators loaded out no more metal than required. *See, e.g.*, *id.* at ¶ 13 & n.5 (noting that both sides' experts acknowledge that "warehouses historically did not load out at rates higher than the minimum"); TAC ¶¶ 524, 588; *see also* OA Tr. at 65–66 ("If a warehouse loads out faster than the minimum, it is giving away money for free.").

Dr. Gilbert states that he understood that, to avoid modeling harm not attributable to defendants, he needed "to estimate excess load-out rates arising from [d]efendants' alleged illegal behavior" only. Gilbert Rpt., App'x G at 112. In an attempt to filter conspiratorial from non-conspiratorial load-outs, Dr. Gilbert regressed the level of monthly load-outs using four control variables—LME warehouse stock levels, OECD industrial production growth, change in the LME contango, and the prior month's load-outs—and a dummy variable associated with his before and after periods. *Id.*, App'x G at 112 & Ex. G3; *see* Hausman Decl. ¶ 99. He then assumed that any increase in Detroit load-out rates not explained by his variables must have been the product of the alleged conspiracy. *See* Hausman Decl. ¶¶ 96, 99; Gilbert Dep. at 179.

Critically, however, Dr. Gilbert failed to control for the doubling of the LME's minimum load-out rule in April 2012—or any LME rule change. Hausman Decl. ¶ 100. As a result, the model mistakenly attributes to the alleged conspiracy an increase in Detroit load-outs actually attributable to the LME rule change. *Id.*

Before April 2012, daily load-out rates in Detroit hugged the LME-minimum rate of 1,500 tons per day. After April 2012, Detroit load-out rates approximated the new minimum of 3,000 tons per day. By not controlling for the rule change, Dr. Gilbert's model treats that doubling of daily load-outs as resulting from the alleged conspiracy, rather than as a result of the rule change. And, when defendants' expert, Dr. Hausman, corrected Dr. Gilbert's model to control for the rule change, he found that the alleged conspiracy had no effect on the Detroit queue. *Id.*; Hausman Reply Decl. ¶¶ 100–01. The excess load-out model thus suffers from a classic *Comcast* infirmity, in that it impermissibly "identifies damages that are not the result wrong." *Comcast*, 569 U.S. at 37; *cf. Forte v. Liquidnet Holdings*, 675 F. App'x 21, 24 (2d Cir. 2017) (affirming exclusion of expert whose regression controlled for only one variable when measuring pay discrepancies).

Called on this deficiency, Dr. Gilbert responded obliquely in a reply report that, although he ignored the LME rule change in identifying excess load-outs, he accounted for the rule change when he took the separate step of converting his estimate of excess load-outs into an estimate of the impact of such load-outs on the Detroit queue. *See* Gilbert Reply Rpt. ¶ 51(a) (responding to criticism of failure to control for LME rule change in identifying excess warrant cancellations by noting the "estimated *queue* series in my econometric models controls for both the 2012 and the 2015 LME rule changes" (emphasis added)). That ostensible cure is not up to the task. *See* OA Tr. at 80 (defense counsel terming this justification for ignoring the rule change "sleight of

hand"). Dr. Gilbert's model never accurately identifies any excess warrant cancellations in the first place; rather, he identifies increased load-outs attributable to the doubling of the LME load-out rule. His chain of models is not saved simply because he did not compound his error by ignoring the LME rule change a second time when converting his flawed "excess load-out" model results into an estimated impact on the Detroit queue.

Notably, when asked at his deposition if, in fact, he "did not control for the effects of the April 2012 LME load-out rule change," Dr. Gilbert did not deny the error. Gilbert Dep. at 185–86. He instead suggested that he might not "need to control for that" because, if not for the alleged conspiracy, there might not have been "any need for the LME to change its load-out limit." *Id.*; *see* Pl. Reply at 36 n.39. But this argument cuts the wrong way for the FLPs. Were it true, then the conspiracy boomeranged fully on itself, because the doubling of the load-out rule did more to shrink the queue than the alleged excess load-outs Dr. Gilbert estimates did to lengthen the queue. Hausman Reply Decl. ¶¶ 102–04. Dr. Gilbert's 11th-hour proposal to declare that the rule change was part of the conspiracy, as opposed to part of the but-for world, would imply *negative* damages of nearly $800 million during the class period—*i.e.*, significantly lower, not higher, aluminum prices paid by putative class members. *Id.* ¶¶ 104–05. In any event, by simply correcting Dr. Gilbert's Exhibit G3 model to control for the April 2012 rule change, the model's estimates of "excess load-outs" go to zero. Hausman Decl. ¶ 100; Hausman Reply Decl. ¶¶ 100–01.

Thus, because Dr. Gilbert's model fails to isolate the effects of the conspiracy—and instead appears to isolate the effect of doubling the LME load-out rule in April 2012, two years into the six-year alleged conspiracy—the FLPs lack classwide proof that the alleged conspiracy lengthened queues throughout the relevant period. *See, e.g.*, *Comcast*, 569 U.S. at 35; *Digital Music*, 321 F.R.D. at 93; *Laumann*, 105 F. Supp. 3d at 398–99. Accordingly, the FLPs cannot

establish that common issues will predominate over individual issues. *See, e.g.*, *Rail Freight III*, 934 F.3d at 623; *In re Asacol*, 907 F.3d at 58; *Digital Music*, 321 F.R.D. at 92–93; *In re Hydrogen Peroxide*, 552 F.3d at 311.

ii. Vlissingen

Dr. Gilbert's failure to account for the April 2012 LME rule change is compounded by an additional *Comcast* problem: His models rely on the combined impact of the Detroit and Vlissingen queues, despite the TAC's unambiguous disavowal of any link between the Vlissingen queue and increases in the Midwest Premium.

As reviewed above, on April 25, 2016, Judge Forrest denied the FLPs' efforts to amend the TAC to "broaden[] the scope of the conspiracy to also include" allegations relating to "a queue at Pacorini Vlissingen B.V.'s warehouse in the Netherlands." *In re Aluminum Warehousing Antitrust Litig.*, 2016 WL 1629350, at *6; *see generally id.* at *5–8. Judge Forrest explained that "the FLPs have long been aware of the significance of the Rotterdam Premium and Vlissingen warehouses," *id.* at *6, but, despite this "information that would have allowed them . . . long ago" to amend the TAC, they "tactically chose not to do so." *Id.* at *8. Accordingly, Judge Forrest denied the FLPs' attempt to "effectively change[] their claims and proposed class definition in the midst of class certification briefing in ways that could necessitate substantial new fact and expert discovery . . . that defendants could not have anticipated . . . based on the claims that survived in the TAC." *Id.* at *6.

Crucially, the still-operative TAC is not simply silent or neutral as to the role of queues at Pacorini's LME warehouses in Vlissingen. Rather, it unequivocally alleges that "increases in the Midwest premium caused and explained much more of the increase in the Rotterdam premium than do the . . . increases in the supply of aluminum in Glencore/Pacorini's LME warehouses in Vlissingen. The *increases in aluminum stored in Vlissingen have virtually no explanatory power*

for the increases in the Midwest Premium." *Id.* ¶ 187 (emphasis added); *see id.* ¶ 13 ("The length of the queues in the Vlissingen warehouses held by Glencore/Pacorini does not Granger-cause the Midwest [P]remium."). Thus, according to the TAC, the Detroit queue alone—wholly unabetted by the Vlissingen queue—raised the Midwest Premium during the class period.

Dr. Gilbert nevertheless modelled "excess load-outs" in Vlissingen and relied throughout his work on the premise disavowed by his clients that the Detroit and Vlissingen queues, in tandem, raised the Midwest Premium. *See* Gilbert Rpt., Exs. E2, G3; Hausman Decl. ¶¶ 108–11; Gilbert Dep. at 259–67. First, Dr. Gilbert's estimation of excess load-outs in Detroit relies on data from Vlissingen because he "estimates the equations for the U.S. and for Europe together as one system." Hausman Decl. ¶ 110; *see* Gilbert Rpt., App'x G & Ex. G3. Second, even beyond the initial excess load-outs model, none of Dr. Gilbert's damages estimates rely solely on the impact of the Detroit queue. Hausman Decl. ¶ 109. Dr. Gilbert explicitly considered and rejected "estimating damages by using . . . the Detroit and Vlissingen queues separately." Gilbert Reply Rpt. ¶ 61. Rather, because "theory implies that it is the length of the longest queue that will determine the [Midwest] [P]remium," Dr. Gilbert treats as the driving force behind the MWP either the longer of the Detroit and Vlissingen queues or, for periods in which both queues were long, the average of the two queue lengths. Gilbert Rpt. at 93; *see id.*, App'x F; Hausman Decl. ¶ 109; OA Tr. 83–85. Such reliance on Vlissingen data permeates Dr. Gilbert's chain of analysis. *See* Hausman Decl. ¶¶ 109–11.

Dr. Gilbert does not deny having relied on the Vlissingen queue. *See, e.g.*, Gilbert Reply Rpt. ¶ 60 ("As a matter of sound economic and econometric practice, my investigation and modeling attempts to account for market realities, including Vlissingen."). Indeed, in his initial

report, Dr. Gilbert noted that "it is difficult to accurately distinguish the effects of the two queues since they move very closely together from the start of 2012 until the end of 2014." Gilbert Rpt. at 93.

Instead, the FLPs primarily urge that the Vlissingen queue can be considered as a contributing cause of their injury because Judge Forrest's "decision denying leave to amend . . . [was] based strictly on procedural considerations." Pl. Sur-Reply at 27. But the basis for Judge Forrest's ruling is irrelevant. The TAC's explicit disavowal that the Vlissingen queue had an impact on the Midwest Premium, not the specifics of Judge Forrest's denial of leave to amend, make Vlissingen an impermissible basis for modeling antitrust impact and causation here. *See, e.g.*, *LIBOR VII*, 299 F. Supp. 3d at 519–20; *TufAmerica, Inc. v. Diamond*, 968 F. Supp. 2d 588, 600 (S.D.N.Y. 2013) ("[T]he facts alleged in a complaint . . . can be self-defeating."); *see also Andrews*, 882 F.2d at 707 ("The amendment of a pleading does not make it any less an admission of the party."). Simply put, plaintiffs' class certification expert may not pursue a theory of classwide antitrust injury that plaintiffs' operative complaint has explicitly repudiated.

In a footnote, the FLPs urge that the class certification motion nevertheless be approved, with leave for Dr. Gilbert later to submit a corrected report. They contend that "the impact of the queue-building activity in Vlissingen [need not be] a class nor a damages model issue, as Dr. Gilbert can calculate damages with Detroit alone if Vlissingen is no longer in the case, and all issues regardless of whether it is in or out are applicable to every member of the Class." Pl. Sur-Reply at 29 n.24; *see also* Pl. Reply at 39. Plaintiffs do not identify any case support for this audacious bid, which effectively asks the Court at once to grant Dr. Gilbert a mulligan and to assume that his future tee shot will hit the green.

The case law in fact does not countenance this approach. Dr. Gilbert's promise of yet an additional supplemental report that might, or might not, vindicate plaintiffs' certification bid—"[s]hould the Court require, I can estimate aggregate damages using only the Detroit queue," Gilbert Reply Rpt. ¶ 61 n.63—fails to carry the FLPs' burden now to establish that "each requirement" of Rule 23 is met "by at least a preponderance of the evidence." *In re U.S. Foodservice*, 729 F.3d at 117 (internal quotation marks and citations omitted); *see In re IPO*, 471 F.3d at 33 ("[T]he important point is that the requirements of Rule 23 must be met, not just supported by some evidence."); *In re Hydrogen Peroxide*, 552 F.3d at 318 ("A party's assurance to the court that it intends or plans to meet the requirements is insufficient."). Having not attempted to strip the Vlissingen queue out of his analysis, Dr. Gilbert cannot provide assurance that a yet-to-be-developed Detroit-only model would reliably demonstrate injury on a classwide basis. And to the extent that plaintiffs argue that this methodological lapse is irrelevant to the pending motion, that too is wrong. As *Comcast* makes clear, the failure of a model purporting to serve as evidence of impact and damages to "measure only those damages attributable to [plaintiffs'] theory" is very much a problem germane to class certification, and not merely a merits issue common to the class. *Comcast*, 569 U.S. at 35; *see also, e.g.*, *Jacobson v. Persolve, LLC*, No. 14 Civ. 735 (LHK), 2015 WL 3523696, at *7 n.4 (N.D. Cal. June 4, 2015) (where court had "denied . . . motion for leave to file a second amended complaint adding [new] theories," those "theories [we]re therefore not relevant to the instant [class certification] motion").

In sum, because Dr. Gilbert's model of classwide injury and causation inextricably interweaves in his analysis a causal variable—the effect of the Vlissingen queue—which plaintiffs long ago disavowed as having "virtually no explanatory power for the increases in the

Midwest Premium," TAC ¶ 187, the model independently fails to withstand rigorous *Comcast* review.

iii. Excess Load-Outs and the TAC

Defendants next argue that, whereas the TAC alleges a theory of "supply restraint," Dr. Gilbert's model of excess load-outs is a model of supply expansion. According to defendants, this discord between the expert's methodology and plaintiffs' theory of liability presents another *Comcast* problem.

As reviewed, the first step in Dr. Gilbert's chain of analysis purports to show that "excess" aluminum was loaded out of the relevant LME warehouses during the class period, allegedly as a result of defendants' conspiracy. *See* Gilbert Rpt., App'x G & Ex. G3; Gilbert Dep. at 103–07. Further, through the first two rounds of briefing, Dr. Gilbert assumed that the conspiracy had no effect on load-*ins*. *See* Gilbert Rpt. at 114 n.68 & Ex. G3; Gilbert Dep. at 105. Dr. Gilbert testified that it was "reasonable" to assume that "the same amount of aluminum would have been loaded into Pacorini Vlissingen and Metro Detroit" in the but-for world. Gilbert Dep. at 105–06. Thus, as Dr. Gilbert admitted at his deposition, his "excess load-out" model suggests that "if not for the alleged conspiracy, more aluminum would have stayed in the Metro Detroit [and Pacorini Vlissingen] warehouse[s] for a longer period of time," and "the effect of the alleged conspiracy was to reduce the amount of aluminum inventory in the Vlissingen and Detroit warehouses during the class period." *Id.* at 107. Only at the sur-reply stage, after repeated critiques by defendants in their briefs, did Dr. Gilbert assert a new theory—that defendants' "[l]arge warrant cancellations resulting in excess load-outs were accompanied by excess load-ins." Gilbert Sur-Reply Rpt. ¶ 67; *see id.* ¶¶ 17–19, 66–73.

Defendants argue that Dr. Gilbert's excess load-out model is in "fundamental conflict" with the "supply restriction scheme" alleged in the TAC. Def. Sur-Reply at 3. In particular,

defendants point to the TAC's allegations that the conspiracy created "a supply bottleneck in the Detroit warehouses of Metro," TAC ¶ 15(a), and "drastically curtailed the supply" of aluminum by "restraining load-out rates" at Metro, *id.* ¶ 207. *See* Def. Mem. at 14 & n.4. They further contend that Dr. Gilbert's about-face regarding load-in levels occurred "far too late" for the Court to consider it, *see* Def. Sur-Sur-Reply at 2–3 (collecting cases), and, in any event, still measures net excess load-outs of more than 1 million tons of aluminum, *see id.* at 3–4.

The Court does not read the TAC quite as narrowly as defendants do. Despite the FLPs' filings' loose language to the effect that defendants were "hoarding" aluminum, the core of the FLPs' theory has consistently been that defendants took coordinated actions to lengthen queues, which made it more difficult and expensive for other market participants to retrieve aluminum from the Metro Detroit warehouse, which in turn led to increases in the Midwest Premium. Dr. Gilbert's "excess load-out" model is at least an attempt to measure this concept of "excess warrant cancellation." The Court understands this concept to describe the addition of more metal to load-out queues, as opposed to the actual departure of aluminum from warehouses in a manner that made it available for consumption.

Notwithstanding the Court's rejection of defendants' claim that Dr. Gilbert's model in this respect deviated from plaintiffs' pleadings, Dr. Gilbert's modeling of excess load-outs presents a separate problem for plaintiffs' class certification. That is because it does not point towards an adverse price impact on all purchasers throughout the six-year class period. In Dr. Gilbert's but-for world, fewer warrants would have been cancelled, less metal would have been loaded out of defendants' LME warehouses, and queues would have been shorter. Kaplan Decl. ¶ 50. But perhaps the TAC's most serious concrete allegation of a conspiratorially agreed-upon practice is that the defendants agreed "not to de-stock each other's warehouses." Pl. Mem. at 6;

see supra pp. 21–23. An agreement *not* to destock is itself, necessarily, an agreement to cancel fewer warrants and thus maintain lower queues; it is the refrained-from act of "destocking" that would have required *more* cancelled warrants. Kaplan Decl. ¶ 50. Dr. Gilbert's analysis does not provide any assurance that putative class members who, for example, purchased aluminum during a phase of the conspiracy when defendants were refraining from "destocking" suffered the same harm resulting from anticompetitive conduct as putative class members who purchased aluminum when the (alleged) effect of a merry-go-round transaction was at its zenith. Indeed, conspiratorial warrant cancellations—whether in the form of merry-go-round transactions, proprietary cancellations, or other alleged methods—waxed and waned during the class period. For example, Metro entered into only six merry-go-round transactions during the entire lengthy class period. Prichard Decl. ¶¶ 3–4. In this respect, the off-and-on conspiratorial activity here thus deviated markedly from a paradigmatic direct price-fixing scheme, such as that in the *Auction Houses* litigation, in which the conspirators' conduct put in place, at all times during the class period, an artificial pricing structure. *See In re Auction Houses*, 193 F.R.D. at 163–64, 166.

The "lumpiness" of the allegedly conspiratorial warrant cancellations raises questions about whether all direct purchases were in fact harmed throughout the lengthy conspiracy. Dr. Gilbert elides this problem by utilizing averaging. He estimated an aggregated excess load-out figure for the entire time period and averaged it as a monthly number for the entire conspiracy. Gilbert Rpt. at 113–14 & Ex. G3; *see* OA Tr. at 66–67. Such averaging helped Dr. Gilbert circumvent the problem that warrant cancellations are "occasional and lumpy," which "makes them difficult to model." *Id.* ¶ 76. But this facet of Dr. Gilbert's model flouts the requirement that an expert's model reliably prove that *each* putative class member suffered individual injury. For that reason, courts have disdained models that have found classwide price impact by means

of averaging impact across a class period. *See, e.g.*, *Lamictal*, 957 F.3d at 192. Such averaging is particularly troubling here, where the FLPs' allegations reflect significant variation in the level of purported conspiratorial activity at any given moment during the class period. The FLPs "bear the burden of showing that, more often than not, they can provide common *answers*." *In re Petrobras Sec.*, 862 F.3d at 273. With the improper averaging mechanism excised, Dr. Gilbert's model is devoid of common proof that conspiratorial conduct caused pricing injury to all purchasers during the more than six-year class period.

Dr. Gilbert's 11th-hour "excess load-in" model has additional methodological flaws. Unlike his excess load-out model, which tries and fails to distinguish conspiratorial from non-conspiratorial load-outs, *see supra* pp. 87–91, the "excess load-in" model does not even attempt to distinguish between *excess* load-ins resulting from the conspiracy and *ordinary* load-ins that would have occurred in the but-for world. *See* Second Playforth Decl., Ex. 1 (sur-sur-reply declaration of David P. Kaplan) ("Kaplan Sur-Sur-Reply Decl.") ¶¶ 9–10. And Dr. Gilbert's model papers over significant variations during the class period as to the relationship between (ostensible) excess load-outs and (ostensible) excess load-ins. For certain time periods, Dr. Gilbert estimates that there were more *excess* load-outs than there were *total* load-ins, meaning that "it is not chronologically possible that his estimated excess load-outs correspond to the claimed excess load-ins." Kaplan Sur-Sur-Reply Decl. ¶ 14; *see id.* ¶¶ 11–14 & tbl.1. Dr. Gilbert tellingly eluded the issue, ultimately stating that his estimates of excess load-ins are "irrelevant to" and "have no effect [on]" his estimates of queue length and damages. Gilbert Sur-Reply Rpt. ¶ 72.

In sum, as to this area of his analysis, the primary problem with Dr. Gilbert's report is not that he impermissibly deviated from the theory of the TAC. It is that his models are repeatedly

insensitive to conduct which is conspiratorial and conduct which is not and that they elide salient differences over time. As with his failure to account for the April 2012 LME rule change, this inability to isolate the effects of the conspiracy at each point disqualifies the model from serving as classwide proof that the conspiracy caused antitrust impact at all relevant times. *See, e.g.*, *Comcast*, 569 U.S. at 35; *Digital Music*, 321 F.R.D. at 93; *Laumann*, 105 F. Supp. 3d at 398–99. And without such common proof, individual issues will predominate in this litigation. *See, e.g.*, *Rail Freight III*, 934 F.3d at 623; *In re Asacol*, 907 F.3d at 58; *Digital Music*, 321 F.R.D. at 92–93; *In re Hydrogen Peroxide*, 552 F.3d at 311.

b. The Impact of Queues on Overall Purchase Prices

Although the above-identified flaws in Dr. Gilbert's analysis alone preclude his model from reliably establishing classwide injury and causation, there are also modeling flaws at the later steps of his analysis that require the same result. In these steps, Dr. Gilbert claims to show that longer queues increased the Midwest Premium, Gilbert Rpt. ¶ 10(b) & App'x F, without any accompanying reduction in the LME price for aluminum, *id.* ¶ 10(c) & App'x D–E, and that higher Midwest Premiums were thereby passed through to all putative class members in the form of higher all-in purchase prices for physical primary aluminum, *id.* ¶ 10(a) & App'x C.

Defendants critique Dr. Gilbert's methodology as to these steps on two grounds. They argue that: (i) Dr. Gilbert's models wrongly deny any effect of queues on LME prices; and (ii) Dr. Gilbert's "pass-through" analysis relies on impermissible averaging. There is traction to both critiques. This reinforces the conclusion that Dr. Gilbert's modeling falls short of reliable classwide proof that the alleged conspiracy resulted in higher purchase prices paid by the members of the putative class.

i. The Effect of Queues on LME Prices

Defendants argue that—to the extent their actions lengthened queues at all—longer queues would have increased the proportion of the all-in price attributable to the MWP, without increasing the overall all-in price itself paid by putative class members, because queues deflated the LME price. According to defendants, because Dr. Gilbert's analysis gives short shrift to this issue and effectively assumes no such effect, his model attributes to the conspiracy harm that it did not necessarily cause, *Comcast*, 569 U.S. at 36–37, and generates false positives, *Rail Freight I*, 725 F.3d at 253.

This critique is based on the LME's "seller's choice" model, under which, when an LME futures contract is to be settled via delivery, the seller of that contract chooses which warrants to deliver for settlement. Hausman Decl. ¶ 10; *see* Kaplan Decl. ¶ 35. Because the seller gets to choose which warrants to deliver, the warrants used to settle LME futures contracts are generally the least valuable warrants in the LME system. Queues in turn reduce the value of warrants because they raise the costs of moving aluminum from an LME warehouse into the spot market, rendering LME aluminum less valuable than spot market aluminum. *See id.* ¶¶ 28–34. As one of the FLPs' experts explained, "queues decrease the relative value of aluminum stored in LME warehouses as compared to aluminum outside warehouses[;] . . . [s]ince a local queue decreases the value of the stored LME aluminum (by increasing the cost of taking delivery), a queue increases the local premium." Zona Rpt. ¶¶ 73–74. Accordingly, during the relevant period, sellers almost always chose to deliver Metro Detroit and Pacorini Vlissingen warrants, whose value was encumbered by long delivery queues at those locations. Hausman Decl. ¶¶ 10, 15; *see* Gilbert Rpt. at 94; Zona Rpt. ¶ 84; Senate Report at 210 & n.1277.

According to defendants, the fact that Metro Detroit and Pacorini Vlissingen warrants were used to settle almost all LME futures contracts during the class period also meant that the

value of those warrants determined the price at which the LME futures contracts traded. *See* Hausman Decl. ¶ 15. And therefore, defendants argue, as a result of the LME's seller's choice model, the impact of queues is quickly reflected in the LME price—because LME buyers know they will receive warrants encumbered by queues and because traders will always deliver such warrants to close out short positions. On this basis, defense expert Dr. Hausman thus concluded that LME warehouse queues have the effect of raising regional premiums, not because they raise the all-in price of physical aluminum, but rather because they cause LME warrants to trade at deeper discounts to spot market prices. *See* Hausman Decl. ¶¶ 28–34. In other words, "the effect of the queues is to increase [the regional premium] as a proportion of the 'all-in' . . . price," not to increase the overall all-in price paid by all putative class members. Liu Decl., Ex. 36 (Summary Public Report of the LME Warehousing Consultation) at 5.

The FLPs counter that (1) the impact of queues on the LME price is legally irrelevant, (2) their non-statistical evidence in the form of statements by industry participants and defendants' employees is sufficient to demonstrate that queues did not impact the LME price, and (3) in any event, Dr. Gilbert's analysis reliably shows that queues did not affect the LME price. The Court addresses these arguments in turn.

FLPs' claim of offset's irrelevance: The FLPs argue that consideration of the effect of queues on the LME Settlement Price is legally barred for two reasons. They are wrong as to each.

First, the FLPs argue that "to answer whether the all-in prices paid by class members were inflated by a supra-competitive MWP, or whether those prices were unaffected because of an offsetting decline in the LME price, requires the exact same inquiry and the exact same evidence for each and every class member." Pl. Sur-Reply at 25. As the Court has explained,

the FLPs are incorrect as to this point. *See supra* pp. 76–82, 93–94. Unless Dr. Gilbert's model can reliably establish common proof of impact, individualized inquiries into the effect of queues on different class members who purchased aluminum at different times pursuant to contracts with differing price terms will be necessary. *See* Hausman Reply Decl. ¶ 51; Kaplan Reply Decl. ¶¶ 51–59, 70.

Second, the FLPs contend that because "collusion to manipulate a price—even if only the component of a larger price—is a violation of the antitrust laws," the Court need not look beyond the effect of queues on the MWP price component in deciding whether to certify a class. Pl. Sur-Reply at 24.

For the proposition that fixing a price component may violate § 1 of the Sherman Act, the FLPs rely on *Gelboim v. Bank of America Corporation*, 823 F.3d 759, 771 (2d Cir. 2016). In *Gelboim*, plaintiffs appealed the dismissal of their claims that financial institutions had fixed the London Interbank Offered Rate ("LIBOR"), in violation of § 1. LIBOR was set each day by Thomson Reuters' survey of 16 banks about their cost of borrowing. Plaintiffs alleged that the banks fixed LIBOR by conspiring to report artificially low costs of borrowing. LIBOR, "the world's most important number," served as a component price in countless financial instruments and business dealings, which typically set interest rates at a spread above LIBOR and frequently expressed interest rates in terms of the spread (*i.e.*, "LIBOR plus spread"). *Id.* at 765–66. Defendants in *Gelboim* argued that because "LIBOR is not itself a price, as it is not itself bought or sold by anyone," they could not have engaged in price-fixing. *Id.* at 771. The Second Circuit rejected this argument. It explained that "LIBOR forms a component of the return from various LIBOR-denominated financial instruments, and the fixing of a component of price violates the antitrust laws." *Id.* In addressing antitrust injury, the Circuit further rejected defendants'

argument that plaintiffs had "remained free to negotiate the interest rates attached to particular financial instruments," explaining that "antitrust law is concerned with influences that corrupt market conditions, not bargaining power." *Id.* at 773 (citing *United States v. Socony-Vacuum Oil Co.*, 310 U.S. 150, 221 (1940)).

While instructive, *Gelboim* is not dispositive here. It addressed the facial adequacy of a complaint, not the standards by which common proof of antitrust injury is assessed at the class certification stage. It therefore does not respond to defendants' argument here that the price increase in the MWP was offset—and, at least for some direct purchases, wholly offset—by the downward impact on the LME Settlement Price, thereby eliminating any injury attached to those purchases. And the cases are factually distinct in a key respect. In *Gelboim*, the banks allegedly directly fixed LIBOR. It was therefore irrelevant that some customers had been able to negotiate down the interest rates they paid on LIBOR-based instruments. In contrast here, as the FLPs admitted at argument, defendants' conduct is not alleged to have involved direct price fixing of the MWP (or any other price). Instead, defendants, by multiple mechanisms, allegedly increased queue lengths, expecting this to elevate the MWP—and with it the all-in price paid by buyers. The Court therefore must consider the direct effects of the defendants' alleged queue-lengthening acts not merely on one component part (the MWP) of the all-in price paid by many purchasers, but on the all-price in its entirety (including the LME component), to assess whether defendants' actions caused direct purchasers classwide injury by raising the price of primary aluminum. *Cf. id.* at 775 (plaintiffs must, *inter alia*, identify "an actual injury placing appellants in a 'worse position as a consequence' of [defendants'] conduct" (quoting *Gatt Comm'cns, Inc. v. PMC Assocs., LLC*, 711 F.3d 68, 76 (2d Cir. 2013)). Whether an increase in the MWP was offset by a drop in the LME price therefore cannot be disregarded as legally irrelevant.

FLPs' claim that lay evidence proves no offset: The FLPs next argue that, even if an offsetting impact of queues on the LME price is properly considered on this motion, lay evidence shows that the LME price was unaffected. The FLPs here rely on the same materials which they asserted could alone establish classwide antitrust impact: statements from industry observers and employees of the defendants, smelters, and aluminum purchasers to the effect that longer queues result in higher prices. *See supra* pp. 83–84; Pl. Sur-Reply at 21–22; Pl. Mem. at 15–16. Most notably, the FLPs cite defendants' internal analyses of the effect of certain warrant cancellations and swaps on the MWP, which do not consider an offsetting increase in LME prices. *See* Pl. Sur-Reply at 22. For the reasons discussed earlier, this qualitative evidence cannot establish on a unitary basis that queue lengths that increased the MWP never brought about offsetting decreases in the LME price. *See supra* pp. 83–86; *see also, e.g.*, *Rail Freight III*, 934 F.3d at 626 (rejecting argument that "documentary evidence" was sufficient to prove classwide antitrust injury); *Asacol*, 907 F.3d at 54 (rejecting attempt to rely on "admissions" in defendants' documents as common proof of classwide injury); *Ward*, 2018 WL 934544, at *3 ("Absent a data-driven model, plaintiffs have failed to meet their burden under Rule 23.").[45]

FLPs' claim that Dr. Gilbert's model reliably proves no offset: The FLPs finally argue that Dr. Gilbert's econometric analysis adequately accounted for any impact of queues on the LME Settlement Price. Dr. Gilbert used econometric regression and cointegration methods to examine whether load-out queues impact the LME price. Gilbert Rpt. ¶¶ 10(c), 55–59 &

[45] Moreover, there is offsetting evidence. An August 2019 book co-edited by Dr. Gilbert itself acknowledges that "[t]he increase in premiums" attributable to longer queues "may not increase the overall price . . . if it simply reduces the portion of the price represented by the LME quotation." First Playforth Decl., Ex. 7 at 112. Another FLP expert, Dr. Zona, conceded at his deposition that none of his analysis is inconsistent with the conclusion that queues depress LME prices. Zona Dep. at 312–13; *see generally supra* pp. 84–85.

App'x D–E. Specifically, Dr. Gilbert used a pair of regression models that related a measure of the LME price (*id.*, Ex. E1) or the all-in price (*id.*, Ex. E2) to (i) variables intended to model supply and demand—*i.e.*, measures of OECD industrial production growth, smelter production costs, the level of LME warehouses stocks, and exchange rates—and (ii) measures of queue length. *Id.* ¶¶ 58–59 & App'x E; *see* Hausman Decl. ¶ 49. From this pair of models, Dr. Gilbert ultimately concluded that "there is no strong evidence that changes in queue length had a persistent impact on the LME Settlement Price, but, if there was such an impact, it was probably such as to raise and not reduce the LME price." Gilbert Rpt. ¶ 59.

In the first round of briefing on the class certification motion, defendants' expert Dr. Hausman criticized Dr. Gilbert's Appendix E analysis for its failure to control for the contango in LME prices, even though, elsewhere in his analysis of antitrust impact, Dr. Gilbert had controlled for the contango using his "spread" variable. *See* Hausman Decl. ¶ 50; Hausman Reply Decl. ¶ 28; Gilbert Rpt. at 96 ("necessary" to include spread variable); Gilbert Dep. at 84 ("important" to account for the contango); *see also* Gilbert Rpt. at 95 ("A decline in the contango will have made storage more costly and will thus have tended to reduce the Midwest Premium.").[46] When Dr. Hausman added an instrumented version of Dr. Gilbert's spread

[46] Confronted in his deposition, Dr. Gilbert cited the potential for joint endogeneity—*i.e.*, the possibility that the LME contango and LME prices each affect the other—as a reason not to include the spread variable in his Appendix E regressions. *See* Gilbert Dep. at 220–21; Hausman Decl. ¶¶ 52–53. But joint endogeneity is not a reason to omit an important variable from a model. Such is a "fundamental econometric mistake because it will create an omitted variables problem." Hausman Decl. ¶ 52 & n.57 (citing Jerry Hausman, *Specification and Estimation of Simultaneous Equation Models*, *in Handbook of Econometrics*, vol. 1 (Zvi Griliches and Michael Intriligator eds., 1983)). Rather, an "instrumented" version of the variable should be used to control for endogeneity. *Id.* Methods for testing for joint endogeneity, in particular the Hausman specification test, are well known and are typically covered in undergraduate and graduate econometric textbooks. *Id.* ¶ 53. Here, to avoid concern regarding endogeneity, Dr. Hausman used an instrumented version of Dr. Gilbert's spread variable and applied the Hausman specification test to test for endogeneity. *Id.*

variable to control for the effects of the contango, the models estimated that longer queues depressed LME prices and did not affect all-in prices. Hausman Decl. ¶¶ 54–56.

The FLPs counter by citing Dr. Hausman's deposition testimony to the effect that his version of the analysis was not a "well-specified model," and that "all I'm doing is taking exactly what [Dr. Gilbert] did, adding the [instrumented] spread variable . . . and now I find that the results are in accordance with what I believe correct economic theory to be." Hausman Dep. at 278–81. But the burden is not on Dr. Hausman to provide a better model than Dr. Gilbert's. *See Digital Music*, 321 F.R.D. at 78; *Scott*, 315 F.R.D. at 51; *Joffe*, 2019 WL 4673554, at *14; *Henkel*, 2016 WL 1271062, at *12. His instrumented variable exercise merely illuminates a methodological lapse by Dr. Gilbert: the failure to account for a significant variable whose inclusion could consequentially, if not drastically, affect the bottom-line conclusion of Dr. Gilbert's models of the impact of queues on the LME price. *See* Hausman Reply Decl. ¶ 47 ("[I]f this case proceeds to the merits stage, I might conclude that Dr. Gilbert's modeling strategy is fundamentally incorrect and that a different approach is required . . . [but my models] are reliable and correct for the purposes of testing Dr. Gilbert's work, including whether he has proven that queues do not affect LME prices and raise the all-in price.").

In a reply report, Dr. Gilbert offered a revised analysis, using multiple regressions. Gilbert Reply Rpt. at 31–35. From these, Dr. Gilbert concludes that inclusion of the spread variable to control for contango "leave[s] my results unchanged" and "is also unnecessary." Gilbert Sur-Reply Rpt. ¶ 37. Defendants challenge Dr. Gilbert's reply analysis on multiple grounds.

First, according to Dr. Hausman, even uncorrected versions of Dr. Gilbert's reply models show that queues either decreased or had statistically significant effect on all-in prices in 2014

and 2015. Hausman Reply Decl. ¶ 33; *see* Gilbert Reply Rpt. at 32, 34–45. Dr. Hausman notes that these "mixed results" from different periods "are consistent with queues reducing LME prices and not affecting all-in prices even before correcting for econometric errors." *Id.* Such mixed results exacerbate concerns that Dr. Gilbert's analysis is not reliable common evidence of unitary impact across the entire class period.

Second, Dr. Gilbert's reply models treat the LME contango entirely as a function of LME warehouse stocks and queues. Hausman Reply Decl. ¶¶ 28 n.24, 39–40. That is, Dr. Gilbert "models spread as a function of LME stocks and queue lengths, and neglects to include one of the primary determinants of the spread: borrowing costs [*i.e.*, interest rates]." *Id.* ¶ 40. When Dr. Hausman adapted the reply models to control for the impact of interest rates on the contango, the adapted models again were "consistent with the conclusions in [Dr. Hausman's] initial declaration that queues depress the LME price." *Id.*[47] The LME contango—which, as noted, was an impetus for defendants' financial-crisis-era acquisition of aluminum and for defendants' and traders' cash-and-carry trades and decisions to store aluminum—is a key background fact in this MDL. Dr. Gilbert's failure to separate the signal (the impact of the alleged conspiracy) from the noise (the impact of contango) thus, at minimum, is a source of further methodological concern as to his finding that LME prices were unaffected by queue lengths.

The FLPs and their experts next argue that, because the MWP is not perfectly negatively correlated to the LME price, defendants' criticisms must be incorrect. *See, e.g.*, Pl. Sur-Reply at 21, 26 & n.17 (attacking defendants' "Perfect Offset Hypothesis"). That argument attacks a

[47] The defendants raise additional issues, including Dr. Gilbert's apparent failure, in his effort to split data into multiple time periods in his reply report, to implement the approach he claims to use—the Bai-Perron method. *See* Def. Sur-Reply at 13–14 & n.8. The Court primarily focuses on the failure to control for contango, which even Dr. Gilbert concedes is "Dr. Hausman's most important criticism of my analysis of LME prices." Gilbert Sur-Reply Rpt. ¶ 33.

strawman. Defendants have not argued that LME prices and the Midwest Premium always move in equal and opposite directions. Indeed, Dr. Hausman acknowledges that certain economic events, such as the closure of a major smelter in the United States, would tend to move the two in the same direction. Hausman Reply ¶¶ 20–21.

The relevant issue is whether *queues* cause the MWP and LME price to move in opposite directions so as potentially to cause less than a classwide impact from queue-driven increases in the MWP, and, if so, whether Dr. Gilbert adequately accounted for that effect in his analysis. For the reasons described, the Court cannot find, by a preponderance of the evidence, that Dr. Gilbert's models clear that bar. His models ultimately assume that queues had no effect on LME prices *at any time* and gauge the impact of the alleged conspiracy by modeling changes in the MWP alone. His approach, for the reasons reviewed above, does not reliably assess the potentially considerable impact of queues on the LME price. For that reason, Dr. Gilbert's model may blame the defendants for pricing harm that they did not cause, *Comcast*, 569 U.S. at 36–37, and/or generate false positives, *Rail Freight I*, 725 F.3d at 253. These methodological shortcomings in Dr. Gilbert's report bolster the Court's conclusion that the FLPs lack sound common proof of classwide injury and causation.

ii. Dr. Gilbert's Pass-Through Analysis

Finally, defendants take issue methodologically with the "pass-through" analysis used in Dr. Gilbert's models. They argue that Dr. Gilbert again impermissibly relies on averaging that conceals uninjured purchasers and again fails to distinguish between that which is a product of the conspiracy and that which is not. As the Third Circuit has recently held, at the class certification stage, a model proffered as common proof of classwide antitrust injury may be defective—thus necessitating individualized injury inquiries—where it relies on average impact and thereby masks the existence of uninjured class members. *Lamictal*, 957 F.3d at 192; *see Rail*

Freight III, 934 F.3d at 626 (model's showing of a lack of injury to some class members would necessitate individualized adjudications of injury for those class members, preventing certification). The Third Circuit held that a district court "abused its discretion when it assumed, absent a rigorous analysis, that averages are acceptable." *Lamictal*, 957 F.3d at 194.

At issue as to this point is analysis by Dr. Gilbert on which the FLPs rely in attempting to establish that "increases in the Midwest Premium were passed through to the 'all-in' prices paid by aluminum purchasers." Pl. Sur-Reply at 11. Rather than directly modeling the effects of queues on prices paid by individual class members, Dr. Gilbert indirectly modeled those effects using a "pass-through" analysis. He there: (i) estimates the effects of queues on the Midwest Premium; (ii) estimates the average effect of general increases in the MWP on all-in prices rather than estimating the specific effects of queue-related increases in the MWP on all-in prices; and (iii) assumes that each individual class member's experience conformed to the estimated averages. *See* Hausman Decl. ¶¶ 23(c), 76–95; Gilbert Rpt., App'x C. According to Dr. Hausman, Dr. Gilbert did not identify any valid reason for modeling indirectly what he could have modeled directly. Hausman Reply Decl. ¶ 92. When Dr. Hausman used Dr. Gilbert's own regression variables to model directly what Dr. Gilbert modeled indirectly, he found that the all-in prices paid by over 50 percent of class members were unaffected by the queues. Hausman Decl. ¶¶ 85–86.[48] Such results, Dr. Hausman opines, are "not remarkable" given both that not all class members purchased aluminum under contracts that reference the MWP or MWTP and that

[48] As with Dr. Hausman's re-running of the models relating queues to the LME price, the Court considers Hausman's analysis for its demonstration of methodological infirmities in Dr. Gilbert's model, not as an unimpeachable superior model. In any event, Dr. Hausman suggests that, had he started from scratch, rather than applied an improved version of Dr. Gilbert's methodology, the percentage of class members whose purchase price was unaffected may have been even higher. Hausman Reply Decl. ¶ 91 & n.92.

queues impact the LME price. Hausman Decl. ¶ 88; *see generally* First Joint Ltr.; Kaplan Decl. ¶¶ 78–83; Kaplan Reply Decl. ¶¶ 51–60.

In defending his "aggregate analysis," Dr. Gilbert brushes aside Dr. Hausman's suggestion that a "company level analysis" is necessary, explaining that "[c]ontractual pricing arrangements differ across purchasers," and "in a company level analysis . . . one may need to take into account contracting practices specific to particular firms." Gilbert Reply Rpt. at 41. That defense is unpersuasive. The existence of varying contractual pricing arrangements if anything enhances the need to ensure that an expert's averages across purchasers do not "mask[] the fact that many [purchasers] likely paid no more" as a result of the conspiracy. *Lamictal*, 957 F.3d at 192; *see also, e.g.*, *Bell Atl. Corp.*, 339 F.3d at 307 (denying class certification because methodology was "based on nationwide averages" that did not "adjust for the variegated nature of the businesses included in the classes"); *In re Optical Disk Drive Antitrust Litig.*, 303 F.R.D. 311, 321 (N.D. Cal. 2014) (averaging analysis "makes no attempt to establish, but instead simply assumes, class-wide impact"); *In re Flash Memory Antitrust Litig.*, No. 07 Civ. 86 (SBA), 2010 WL 2332081, at *10 (N.D. Cal. June 9, 2010) (denying class certification where model "look[ed] only at an average price trend" and therefore "obscure[d] individual variations over time among the prices that different customers pay").

Dr. Gilbert's reliance on averages also yields false positives. For example, Dr. Gilbert's averages attribute "damage" to a contract in which the capped premium was lower than Dr. Gilbert's estimated but-for Midwest Premium. First Joint Ltr. at 22 & Ex. 41. And, although Dr. Gilbert estimated a 100% pass-through rate for Alcoa transactions on average, when he broke those transactions into four subsets, he concluded that at least one subset "did not include the Midwest Premium" and should be excluded. *See* Gilbert Reply Rpt. ¶ 48; Kaplan Reply ¶ 51.

To be sure, the FLPs later withdrew their claims of damages from those transactions. But his aggregate analysis's initial false identification of those transactions as damaged raises concerns about the capacity of Dr. Gilbert's chain of models to reliably establish, as it claims to do, classwide price impact by common proof. *Rail Freight I*, 725 F.3d at 254.

An additional problem with Dr. Gilbert's "pass-through" model is that it analyzes whether the *average* increase in the Midwest Premium raised prices. The correct question is whether *queue-driven* increases in the Midwest Premium—which presumably differed at various times including depending on queue length—raised purchase prices. Dr. Gilbert thus "conflates the effects of the queues with the averages of *all* economic events that affect the MWP . . . [and] therefore still fail[s] to isolate the effects of queues on all-in prices." Hausman Reply Decl. ¶ 22. Here too, Dr. Gilbert's model problematically fails to distinguish products of the alleged conspiracy from economic background events.

In the end, the range of significant methodological infirmities afflicting Dr. Gilbert's models, reviewed above, precludes the Court from accepting his submission as reliable common proof of classwide injury caused by the unusual, complex, and lengthy § 1 conspiracy alleged in this case. The FLPs thus lack common proof of antitrust injury caused by the alleged conspiracy. Accordingly, with injury provable only via individualized inquiries keyed to each particular purchaser, individual determinations of injury will predominate over the common issues in this litigation. The Court therefore denies the FLPs' motion to certify a class under Rule 23(b)(3). *See Amchem*, 521 U.S. at 615 (certification properly denied under Rule 23(b)(3) where it would "sacrifice[e] procedural fairness [and] bring[] about other undesirable results"); *Tyson Foods*, 136 S. Ct. at 1045 (certification improper where individual issues would be "more prevalent or important" than common issues).

3. Additional Individualized Issues

Although the absence of common proof of classwide injury is dispositive of the FLPs' motion for class certification, in the interest of completeness, the Court briefly notes additional issues requiring individualized determinations that would arise if this litigation were to proceed as a class action.

"[C]lasses that require highly individualized determinations of member eligibility," *In re Petrobras Sec.*, 862 F.3d at 268, may not be "sufficiently cohesive to warrant adjudication by representation," *Mazzei v. The Money Store*, 829 F.3d 260, 272 (2d Cir. 2016) (quoting *Amchem*, 521 U.S. at 623)). Here, individualized inquiries would be required, in particular, to determine (1) whether putative class members made purchases pursuant to a contract that included an explicit MWP or MWTP term; and (2) whether such transactions qualified as "first-level" purchases of primary aluminum.[49]

The FLPs' class definition requires that class members made a "purchase of a primary aluminum product with a price term based, in any part, on the Midwest Transaction Price . . . or the Midwest Premium." Pl. Reply at 6. Individualized inquiries would be required to determine whether putative class members purchased aluminum pursuant to a contract based on the MWTP or MWP.

[49] Separately, the Court notes that, even if Dr. Gilbert's model had survived as viable common proof of classwide injury, to satisfy Rule 23(b)(3), purchases from smelters other than Alcoa, Rusal, and Rio Tinto would have to be excluded. That is because Dr. Gilbert's analysis relies on transaction data and contracts produced by, and purports to show antitrust impact for purchases from, those three smelters only. Dr. Gilbert did not have usable data or records of, and did not offer any analysis as to suppliers other than those three. Gilbert Reply Rpt. ¶¶ 43, 48 & nn.41, 45. The FLPs thereby have not come forward with a practical means of isolating first-level purchases from other smelters, let alone purchases that included the Midwest Premium as a price component. *See* Second Joint Ltr. at 4–9.

The FLPs' TAC depicted the pricing of primary aluminum purchased from smelters as simple: "[P]hysical aluminum is purchased at the Midwest Transaction Price or another all-in price. This 'all-in price' is the LME price plus the Midwest [P]remium or another premium." TAC ¶ 4. Discovery, however, revealed the reality of the aluminum market to be far more complex. *See generally* First Joint Ltr. Although contracts priced by reference to an explicit MWTP term account for a majority of certain smelters' sales, many purchase contracts do not reference the MWTP or MWP at all, and those contracts that do reference the MWTP or MWP do so in a variety of ways. *Id.*; *see* Kaplan Decl. ¶¶ 78–83; Kaplan Reply Decl. ¶¶ 51–60. For example, some contracts specify a single fixed price. *See, e.g.*, Kaplan Decl. ¶¶ 79, 81 & n.253; Kaplan Reply Decl. ¶ 57; First Joint Ltr., Exs. 13, 29, 45–47. Other "fixed premium" contracts contain a floating base price that varies with changes in the LME Settlement Price, along with a fixed premium, which does not vary. *See, e.g.*, Kaplan Decl. ¶ 80; Kaplan Reply Decl. ¶¶ 53–54; First Joint Ltr., Exs. 12, 24–27, 39–42.

In the parties' first joint letter, filed shortly before argument, the FLPs for the first time stated that they "are no longer seeking recovery for purchases based on" fixed price or fixed premium contracts from Alcoa. This concession made good sense: If a contract's regional premium term does not vary, defendants' alleged conduct logically would not have raised the contract price (and might even have reduced it). *See, e.g.*, Second Joint Ltr., Ex. 9 (industrial user explaining that, due to the particulars of its fixed premium contract, "[i]f Midwest goes up, it helps us. If Midwest goes down, it hurts").

However, drawing an untenable line, the FLPs continue to seek recovery for similar fixed premium and fixed price contracts for the purchase of aluminum from Rio Tinto and Rusal. The FLPs suggest that some form of comparison process could be used to identify those Rio Tinto

and Rusal contracts that lack an explicit MWP or MWTP term that nevertheless implicitly embed the MWP or MWTP as a price component. But even if it were possible to determine—through close analysis of each individual contract and comparison to public pricing data—that at least some fixed price or fixed premium contracts implicitly incorporate the MWP, such analysis can hardly be executed on a "common" basis.[50] Individualized attention would be needed. The Court's assessment is that, at minimum, any class would need to be limited to contracts containing an explicit MWTP or MWP term.

Even so limited, more individualized inquiries would be needed. For example, among the contracts that contain an explicit MWTP term, some grant the purchaser an option to pay a price based on the MWTP or a fixed price, or contain a cap or collar on the regional premium component of the MWTP. *See, e.g.*, First Joint Ltr., Exs. 8–10 (options), 36–37 (caps and collars). Others grant considerable discretion as to how much volume would be purchased, with no apparently reliable way to determine the volume actually purchased pursuant to such contracts. *See, e.g.*, *id.* at 11, 14 & Ex. 23. Individualized attention would be needed to identify and isolate transactions clearly priced based on the MWP or MWTP. *See Mazzei*, 829 F.3d at 272 (upholding decertification where "the fact-finder would have to look at every class member's loan documents to determine who did and who did not have a valid claim" (citing *Dukes*, 564 U.S. at 351)); *Royal Park Invs. SA/NV v. HSBC Bank USA, N.A.*, No. 14 Civ. 8175

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[50] Such analysis would be further complicated by the fact that although, in discovery, the FLPs obtained certain transaction data from three smelters and contracts that lay out the terms pursuant to which aluminum was purchased, they did not obtain information from Alcoa or Rio Tinto that ties specific transactions to specific contracts. *See* First Joint Ltr. at 10. Further compounding the process of identifying transactions within the class, an unknown but not-insignificant portion of the produced contracts do not appear to have been executed. Individualized inquiry could well prove necessary to establish which of these contracts were performed and, from among the hundreds of thousands of transactions in the produced data, which were carried out pursuant to contracts that included an MWP or MWTP term.

(LGS), 2018 WL 679495, at *5 (S.D.N.Y. Feb. 1, 2018) (declining to certify class where standing and class membership would need to be determined on individual basis); *In re FX*, 407 F. Supp. 3d at 431 (denying class certification where "fact-intensive inquiries" into each class member's trades "would far outweigh any economies achieved through certification"); *see also Hunter v. Time Warner Cable Inc.*, No. 15 Civ. 6445 (JPO), 2019 WL 3812063, at *17 (S.D.N.Y. 2019) (denying class certification where common issues "are overshadowed by the individual inquiries that would be required to determine whether [persons] identified by Plaintiffs were eligible for class membership or ineligible on grounds of consent"); *In re Petrobras Sec.*, 862 F.3d at 274 ("The predominance analysis must account for such individual questions, particularly when they go to the viability of each class member's claims.").

Apart from the need for individualized inquiry into whether the MWP or MWTP was in fact a price term of a transaction, the FLPs' proposed class definition also limits membership to persons who made a "*first level* purchase of a *primary* aluminum product." Pl. Reply at 6 (emphasis added); *see also, e.g.*, *Aluminum I*, 2014 WL 4277510, at *39 (dismissing second-level and lower-level purchasers for lack of antitrust standing); *In re Aluminum Warehousing Antitrust Litig.*, 2016 WL 1629350, at *6 (denying motion to amend to the extent it sought to "expand[] the case beyond primary aluminum to also include secondary aluminum"); Pl. Reply at 45 n.48 ("[T]his case has always been about *primary* aluminum." (emphasis in original)). Transactions meeting these criteria, however, are not always self-identifying. Smelters sometimes purchase aluminum from other smelters or other sources, and then resell that aluminum. Kaplan Decl. ¶¶ 61–63. Based on the data produced in discovery, aluminum producers purchased, at minimum, hundreds of millions of dollars' worth of aluminum from other smelters during the class period. *Id.* ¶¶ 61–77 & Exs. 8–13. Purchases of aluminum from

a smelter following a smelter-to-smelter sale are second-level purchases, and therefore cannot support a viable claim. The FLPs have not identified a clean method to sort out such purchases.

The FLPs instead counter that fewer than 2.5% of transactions were smelter-to-smelter. Pl. Sur-Reply at 33 (citing Gilbert Reply Rpt. App'x D). But that figure ignores a significant percentage of smelter-to-smelter sales among Alcoa, Rusal, and Rio Tinto, as well as all sales to smelters by defendants, traders, and other smelters. Kaplan Reply Decl. ¶¶ 3–18. And while the FLPs claim that Dr. Gilbert can exclude "inter-smelter purchases," Pl. Sur-Reply at 33 (citing Gilbert Reply Rpt. ¶ 48), they never explain how they propose to use "common proof" to show that each putative class member in fact made first-level purchases of newly smelted aluminum, *see* Kaplan Rpt. ¶¶ 61–77 (providing examples of the required inquiries). The portion of Dr. Gilbert's reply report that the FLPs cite promises only that he can exclude "inter-smelter purchases," which "account for approximately 2% of all transactions"—*i.e.*, the smelter-to-smelter transactions. Gilbert Reply Rpt. ¶ 48 & n.48. But Dr. Gilbert tellingly did not provide the same assurance as to excluding second-level and lower-level aluminum purchases. That is a far more complex process. *See* Kaplan Decl. ¶ 77.

Accordingly, individual analysis of each class member's transactions would be required to determine whether the purchaser qualified for class membership. And once a purchaser was found to have engaged in a covered transaction, further individual attention to other individual transactions would be needed, to assure that defendants were not "held liable for losses they did not cause." *In re FX*, 407 F. Supp. 3d at 434; *see also In re Petrobras Sec.*, 862 F.3d at 272 ("These transaction-specific facts are not obviously susceptible to class-wide proof, nor did [the

FLPs] suggest a form of representative proof that would answer the[se] question[s] . . . for individual class members.”).[51]

The requirement that class members have purchased primary, as opposed to secondary, aluminum, would similarly appear to require individualized inquiries. The FLPs seek to elide this need with the blanket assertion that primary aluminum “is the only aluminum that smelters sell.” Pl. Sur-Reply at 3. But Dr. Gilbert himself identified 1,272 Alcoa transactions in the produced data as involving “scrap aluminum.” Gilbert Rpt. at 62. The FLPs have not come forward with a methodology, not involving individual inquiries, for reliably distinguishing between primary and secondary aluminum purchases from other smelters.

Exhibit 23 to the parties’ first joint letter usefully encapsulates the range of problems reviewed above. As an explicit MWTP contract between Rio Tinto and named plaintiff Ampal, this contract ought to seamlessly fit within the class: It involves a big-three smelter, an industrial user, and an explicit MWTP-based price term. But at least three individual issues preclude such easy classification. First, the contract grants wide discretion to the customer regarding purchase

[51] The FLPs attempt to distinguish *In re FX*, among other cases defendants cite, as having applied the “administrative feasibility” test rejected by the Second Circuit in *In re Petrobras Securities*. Pl. Sur-Reply at 33–34. The FLPs misread both *FX* and *Petrobras*. As the Second Circuit explained in *Petrobras*, a court—independent of determining whether Rule 23(b)(3)’s predominance requirement is met—must determine whether the proposed class satisfies the distinct Rule 23 requirement of “ascertainability.” *In re Petrobras Sec.*, 862 F.3d at 264 n.15. The Circuit clarified that—although other circuits had treated ascertainability as requiring a showing of “administrative feasibility”—in the Second Circuit ascertainability “requires only that a class be defined using objective criteria that establish a membership with definite boundaries.” *Id.* at 264. But, the Circuit explained, some of the inquiries that other circuits had treated as part of the administrative feasibility inquiry in fact were “territory belonging to the predominance requirement.” *Id.* at 268 (citing *Mazzei*, 829 F.3d at 272). Following this guidance, in *FX*, Judge Schofield found the need for individual inquiries into whether trades were actionable or not to be a fatal *predominance* issue. *In re FX*, 407 F. Supp. 3d at 431–35. The individualized inquiries here as to which purchases fell within the class definition similarly implicate the predominance requirement.

volume, permitting Ampal to purchase a minimum of 1,615 and a maximum of 3,825 metric tons of aluminum pursuant to the supply contract. First Joint Ltr., Ex. 23. It is unclear whether the contract reliably can be synched to transaction data showing the amount of aluminum actually purchased at the contract's MWTP price at all, much less synched by means of proof common to the entire class. Second, the contract permits delivery of "[a]ny North American [b]rand"—*i.e.*, not just aluminum smelted by Rio Tinto, but also second-level sales of aluminum that Rio Tinto acquired from any other North American smelter. *Id.* And, third, the contract calls for delivery of "[r]emelt" aluminum, calling into question whether any aluminum purchased pursuant to the contract was primary, as opposed to remelted scrap, aluminum. *Id.* Each of these determinations would require individualized inquiries, above and beyond the individualized assessments of injury and causation necessitated by the inability of Dr. Gilbert's model to reliably resolve these elements on a common basis.

For all these reasons, the Court holds, the FLPs have failed to demonstrate that, at a trial on their § 1 claims, common issues would predominate over individualized ones. The opposite is so. The Court accordingly denies the FLPs motion to certify the proposed class.[52]

CONCLUSION

For the foregoing reasons, the Court denies the FLPs' motion to certify a class pursuant to Federal Rule of Civil Procedure 23(b)(3) and to exclude the declaration of defendants' expert David P. Kaplan. An order will issue shortly as to next steps in this case.

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[52] Because common questions do not predominate, the Court has no occasion to resolve the separate Rule 23(b)(3) question of whether a class action would be a superior means of adjudication of these claims.

SO ORDERED.

Paul A. Engelmayer
United States District Judge

Dated: July 23, 2020
New York, New York