

United States Court of Appeals
FOR THE DISTRICT OF COLUMBIA CIRCUIT

Argued February 16, 2010

Decided August 6, 2010

No. 09-1042

NETCOALITION,
PETITIONER

v.

SECURITIES AND EXCHANGE COMMISSION,
RESPONDENT

NYSE ARCA, INC. AND
THE NASDAQ STOCK MARKET, LLC,
INTERVENORS

Consolidated with 09-1045

On Petitions for Review of an Order
of the Securities & Exchange Commission

Carter G. Phillips argued the cause for the petitioners. *Dennis C. Hensley*, *Kevin J. Champion*, *Richard D. Bernstein*, and *Roger D. Blanc* were on brief.

Mark R. Pennington, Assistant General Counsel, Securities and Exchange Commission, argued the cause for the respondent. *Michael A. Conley*, Deputy Solicitor, and *Luis de la Torre*, Senior Litigation Counsel, were on brief.

Douglas W. Henkin argued the cause for intervenors NYSE Arca, Inc. et al. in support of the respondent. *David S. Cohen*, *Eugene Scalia* and *Amir C. Tayrani* were on brief.

Before: HENDERSON and GARLAND, *Circuit Judges*, and EDWARDS, *Senior Circuit Judge*.

Opinion for the Court filed by *Circuit Judge* HENDERSON.

KAREN LECRAFT HENDERSON, *Circuit Judge*: In 2006, NYSE Arca, one of the largest securities exchanges in the United States, proposed to begin charging a fee to investors for access to its proprietary “depth-of-book” product, ArcaBook. ArcaBook lists pending orders placed on NYSE Arca—specifically, bids to buy at prices lower than, and offers to sell at prices higher than, the prevailing market price. The Securities and Exchange Commission (SEC or Commission) approved NYSE Arca’s proposal, finding the proposed fees for ArcaBook were “fair and reasonable” and “not unreasonably discriminatory.” Petitioners NetCoalition, a public policy corporation representing approximately 20 internet companies (including Google and Yahoo!), and the Securities Industry and Financial Markets Association (SIFMA), a trade association representing more than 600 securities firms and banks, challenge the SEC order, arguing that it violates the Securities Exchange Act of 1934, 15 U.S.C. §§ 78a *et seq.* (Exchange Act), and the Administrative Procedure Act, 5 U.S.C. §§ 551 *et seq.* (APA). For the reasons set forth below, we conclude that the SEC did not adequately explain the basis of its approval nor, on this record, support its conclusion with substantial evidence and, accordingly, we remand to the SEC.

I. Background

The Exchange Act provides the framework by which the SEC regulates the transactions and the classes of participants in the major securities markets in the United States. *See Bradford Nat’l Clearing Corp. v. SEC*, 590 F.2d 1085, 1090 (D.C. Cir.

1978). NYSE Arca is registered with the SEC as a national securities exchange, *see* 15 U.S.C. § 78f, and as such is a securities industry “self-regulatory organization,” or SRO, *see id.* § 78c(a)(26) (defining “self-regulatory organization”). Although self-regulatory, NYSE Arca remains subject to comprehensive SEC oversight and control. *See Karsner v. Lothian*, 532 F.3d 876, 880 (D.C. Cir. 2008) (citing 15 U.S.C. § 78s(b)). For example, an exchange is required to file its governing rules with the SEC and comply with them. *See* 15 U.S.C. § 78o-3(a)-(b). An exchange’s rules must, among other things, “provide for the equitable allocation of reasonable dues, fees, and other charges among its members and issuers and other persons using its facilities,” *id.* § 78f(b)(4); “promote just and equitable principles of trade” and not “permit unfair discrimination between customers, issuers, brokers, or dealers,”¹ *id.* § 78f(b)(5); and “not impose any burden on competition not necessary or appropriate in furtherance of the purposes of” the Exchange Act, *id.* § 78f(b)(8). As an SRO, an exchange must also file any proposed rule change (including a fee change) with the SEC for approval. *See id.* § 78s(b)(1)-(2). The SEC notices a rule change proposal for public comment and either approves it if it is consistent with the requirements of the Exchange Act or disapproves it. *See id.* The SEC has delegated the initial consideration of a rule change to its Division of Trading and Markets (which until 2007 was known as the Division of Market Regulation). *See* 17 C.F.R. § 200.30-3(a)(12).

In 1975, the Congress expanded the authority of the SEC through a major overhaul of the Exchange Act. *See Bradford*, 590 F.2d at 1091. Among other things, the 1975 Amendment directed the SEC to facilitate the establishment of a “national

¹A broker trades on behalf of investors while a dealer trades on his own account. 15 U.S.C. § 78c(a)(4)-(5). Most securities firms do both and are referred to as “broker-dealers.”

market system for securities,” or NMS, to link securities markets nation-wide in order to distribute market data economically and equally and to promote fair competition among all market participants. *Id.* at 1094 (citing 15 U.S.C. § 78k-1); *see* Regulation NMS, Release No. 51808, 70 Fed. Reg. 37,496 (June 29, 2005). The Congress specified five factors to guide the SEC in establishing the NMS: the Commission is to assure (1) efficiency, (2) fair competition, (3) availability of market data, (4) practicability of order execution in the best market and (5) the opportunity for an investor’s order to be executed directly, that is, without the participation of a dealer. 15 U.S.C. § 78k-1(a)(1)(C). Under SEC oversight during the next three decades, the NMS grew to encompass the securities of over 5,000 companies with a collective U.S. market capitalization of more than \$14 trillion. Today NMS stocks are traded simultaneously on one or more of the nine national exchanges that participate in the system, including the New York Stock Exchange (NYSE), the NASDAQ Stock Market (NASDAQ) and NYSE Arca, as well as at non-exchange trading sites like (1) alternative trading systems; (2) electronic communication networks (ECNs), including the BATS Exchange (BATS ECN); and (3) market-making securities dealers.

Because NMS stocks are traded so many places at once, one of the important innovations of the NMS system is to make available to investors a stream of “core” market data consolidated from all of the exchanges. Regulation NMS, 70 Fed. Reg. at 37,503 (consolidated data stream “form[s] the heart of the national market system” (quoting H.R. Rep. No. 94–229, at 93 (1975), *as reprinted in* 1975 U.S.C.C.A.N. 321, 324 (Conference Report))). Core data for each NMS security consists of three things: (1) last sale reports, which include the price at which the latest sale of the security occurred, the size of the sale and the exchange where it took place; (2) the current highest bid and lowest offer for the security, along with the number of shares available at those prices, at each exchange;

and (3) the “national best bid and offer,” or NBBO, which are the highest bid and lowest offer currently available in the country and the exchange(s) where those prices are available.

To ensure that an investor can obtain core data for each NMS security, the SEC requires each exchange, including NYSE Arca, to report last sales (*i.e.*, the price and size of the most recent trade on NYSE Arca) and the current best bid and offer to one of several central data processors for consolidation. *See* 17 C.F.R. §§ 242.601, 242.602. Each central data processor then disseminates the consolidated information, including the NBBO, to broker-dealers and data vendors. *See id.* § 242.603(a)-(b). The SEC must approve the fees charged for core data, *see* 17 C.F.R. § 242.608(b)(1), and a broker-dealer is required to purchase the consolidated core data and make it available to an investor seeking to place a trade,² *see id.* § 242.603(c). In this way, today’s core market data system

provides investors in the U.S. equity markets with real-time access to the best quotations and most recent trades in the thousands of NMS stocks throughout the trading day. For each stock, quotations and trades are continuously collected from many different trading centers and then disseminated to the public in a consolidated stream of data. As a result, investors of all

²The SEC has determined that because of the mandatory nature of this regime, core data fees should bear some relationship to cost. *See* Regulation of Market Information Fees and Revenues, Release No. 34-42208, 64 Fed. Reg. 70,613, 70,627 (Dec. 17, 1999). To date, however, the SEC has instead approved fees based on agreement among market participants. *See* Concept Release Concerning Self-Regulation, Release No. 34-50700, 69 Fed. Reg. 71256, 71272 (Dec. 8, 2004).

types have access to a reliable source of information for the best prices in NMS stocks.

Regulation NMS, 70 Fed. Reg. at 37,503.

All other market data is “non-core” data.³ This case involves non-core data referred to as “depth-of-book” data. Depth-of-book data consists of outstanding limit orders⁴ to buy stock at prices lower than, or to sell stocks at prices higher than, the best prices on each exchange.⁵ Because depth-of-book data is non-core data, the SEC does not require that it be included in the consolidated data stream or made available to an investor at the time of trade execution.⁶

³The terms “core” and “non-core” are SEC creations; the Exchange Act makes no such distinction. *See* Order Setting Aside Action by Delegated Authority and Approving Proposed Rule Change Relating to NYSE Arca Data, Release No. 34-59039, 73 Fed. Reg. 74,770, 74,779 (Dec. 9, 2008) (Exchange Act and regulations “do not differentiate between types of data and therefore apply to exchange proposals to distribute both core data and non-core data”).

⁴Generally speaking, a national securities exchange handles two types of orders: a “market” order, which is an offer to immediately trade at the prevailing market price on that exchange, and a “limit” order, which is an offer to trade a certain amount of a security at a specific price. A limit order that is not at a price that can be executed is added to the exchange’s “order book” at the quoted price level.

⁵If the current best bid or offer for a security in an exchange’s order book is better than or equal to the best price available nationally, it is necessarily reflected in the core data as the NBBO.

⁶In fact, the SEC specifically rejected such a proposal in 2005 in order to “allow market forces, rather than regulatory requirements, to determine what, if any, additional quotations outside the NBBO are displayed to investors.” Regulation NMS, 70 Fed. Reg. at 37,567 (“Investors who need . . . more comprehensive depth-of-book

Depth-of-book data matters because of a concept called “depth,” which refers to the number of shares of a security available to trade at any given price point. If a trader wants to buy a certain number of shares that exceeds the depth (volume of shares available) at the best price, depth-of-book data will tell him the number of shares available at prices *inferior to* the best price.⁷ In this way, depth-of-book data allows a trader to gain background information about the “liquidity” of a security on a particular exchange, *i.e.*, the degree to which his total sale or purchase price will differ from what he would receive if the entire trade were made at the prevailing best prices. For instance, even a very large buy order for a security with high liquidity on a certain exchange will trade at or close to the best price while a similarly large order for a security with lower liquidity on that exchange will cost more *in toto* due to the fewer number of shares available at or near the best price.

A simplified example may help illustrate the concept of liquidity and the utility of depth-of-book data. Assume an investor wants to make an offer to sell 3,000 shares of company

information[] will be able to obtain such data from [securities] markets or third party vendors.”). Nor does a broker-dealer need to purchase depth-of-book data in order to meet its duty of best execution (which requires it to exercise reasonable diligence to obtain favorable order execution terms for customers) or any other statutory or regulatory requirement.

⁷In 2001, stock prices began to be measured in one-cent increments instead of “sixteenths,” *i.e.*, 1/16 of a dollar. Before 2001, significant depth accumulated at the NBBO price because the difference between the best price and the next inferior price was 1/16th, or 6.25 cents. With the initiation of decimalized trading, however, the difference between those prices was reduced to only one cent, which substantially decreased the depth at the best prices and substantially increased the depth at the various one-cent price points inferior to the best prices.

XYZ. The best bid price reflected in the core data at NYSE Arca for XYZ is 1,000 shares at \$10. The investor knows he can sell up to 1,000 shares at \$10 but he does not know at what price his remaining 2,000 shares will sell until after his order is placed. This is where depth-of-book data comes in. Assume further that NYSE Arca's depth-of-book data tells the investor that, apart from the best bid price from the core data, an additional 1,000 shares of XYZ are available at the next price level of \$9.99 and yet another 1,000 shares at \$9.98. Before he places his order, then, he knows that his 3,000-share sale will fetch \$29,970 (the sum of 3,000 shares sold in three 1,000-share blocks at \$10, \$9.99, or \$9.98 each). Lower liquidity—*i.e.*, fewer shares of XYZ available at or near \$10—will result in a lower total sale price. It is in this sense that depth-of-book data “is useful primarily as background information on liquidity outside the best prices.” *See* Order Setting Aside Action by Delegated Authority and Approving Proposed Rule Change Relating to NYSE Arca Data, Release No. 34-59039, 73 Fed. Reg. 74,770, 74,792 (Dec. 9, 2008) (Order).⁸

⁸This example is simplified because depth-of-book data reflects only *displayed* orders; some brokers, however, request that a portion of their orders be kept in reserve (*i.e.*, not be displayed) in the exchange's order book. In addition, and due in part to the reserve liquidity, most trades are made at the NBBO price or better, including orders approaching 10,000 shares. *See* Order, 73 Fed. Reg. at 74,792 (at least 90% of NYSE Arca's, NYSE's and NASDAQ's “executed share volume of marketable orders were at prices equal to or better than the NBBO in May 2008”). Non-professional (or retail) investors' trades tend to be smaller and thus are especially likely to execute at the NBBO price or better. *See id.* at 74,793 (“This undisplayed liquidity enables retail investors to receive executions for most of their orders at prices equal to or better than the NBBO, regardless of the displayed size at the NBBO.”).

In May 2006 NYSE Arca filed a proposed rule change with the SEC pursuant to SEC Rule 19b-4. NYSE Arca proposed to charge a fee for its depth-of-book data (which data it had formerly made available at no cost)—in particular, ArcaBook, “a compilation of all limit orders resident in the NYSE Arca limit order book.” NYSE Arca Application at 7. It proposed to charge a broker-dealer a \$750 monthly fee for access to the ArcaBook data feed. It also proposed to charge an additional user fee of up to \$30 for a professional subscriber and up to \$10 for a non-professional subscriber per device displaying the ArcaBook data.⁹ Finally, it proposed to cap the monthly fee charged to a broker-dealer at \$20,000 for 2006 with an escalation provision for future years.

As noted earlier, NYSE Arca is required to show that a rule change is consistent with the Exchange Act—that it provides for, among other things, an equitable allocation of reasonable fees among users and does not unnecessarily burden competition. *See* 15 U.S.C. § 78f(b). NYSE Arca is also an “exclusive processor” of securities information under the Exchange Act because it distributes on its own behalf information regarding its quotations and transactions. *See* Order, 73 Fed. Reg. at 74,779 n.175; 15 U.S.C. § 78c(a)(22)(B) (defining “exclusive processor”). This means that its distribution of non-core market data also has to be done on “fair

⁹A “non-professional subscriber” is an end user who is a natural person and who is neither (1) registered or qualified with the SEC, the Commodities Futures Trading Commission, a state securities agency or a securities exchange or association, (2) engaged as an “investment adviser” under the Investment Advisers Act of 1940, 15 U.S.C. §§ 80b-1 *et seq.* nor (3) exempt from a securities association registration requirement by virtue of being employed by a bank or other exempt organization. *See* NYSE Arca Application at 22. All others, including end users that are not natural persons, are “professional subscriber[s].” *See id.*

and reasonable” and “not unreasonably discriminatory” terms. *Id.* § 78k-1(c)(1)(C)-(D); *see* 17 C.F.R. § 242.603(a) (same).

NYSE Arca sought to establish that its ArcaBook fees conform to Exchange Act and regulatory requirements in two ways. First, it “believe[d] that the proposed market data fees would reflect an equitable allocation of its overall costs to users of its facilities.” *See* NYSE Arca Application at 6-7. Second, it suggested that its fees “are fair and reasonable because they compare favorably to fees that other markets charge for similar products.” *Id.* at 7. On the latter point, NYSE Arca noted that at that time the NYSE charged professional subscribers \$60 for monthly access to its depth-of-book product, OpenBook, while NASDAQ charged up to \$76 for combined monthly access to its two depth-of-book products, TotalView and OpenView (which provide real-time depth-of-book data related to (1) NASDAQ- and (2) NYSE- and American Stock Exchange-listed securities, respectively). *See id.*

The SEC published the proposal for public comment in the Federal Register on June 9, 2006. The SEC, through delegated authority (at that time, its Division of Market Regulation), approved the proposal on October 12, 2006. NetCoalition petitioned the SEC for review of that order one month later. The SEC granted review on December 27, 2006 and invited parties or persons to file statements supporting or opposing the October 12 Order. After receiving twenty-five comments, the SEC published a notice of a proposed “Draft Order” on June 4, 2008, after which it received sixteen additional comments.

Although the SEC set aside the October 12 order,¹⁰ it approved the proposal in its own 114-page order dated December 2, 2008 and published in the Federal Register seven days later. *See* Order, 73 Fed. Reg. 74,770. Briefly, the Order evaluates the NYSE Arca’s proposal under a “market-based approach.” That approach has two parts. The SEC first asks “whether the exchange was subject to significant competitive forces in setting the terms of its proposal for non-core data, including the level of any fees.” Order, 73 Fed. Reg. at 74,781. If so, the SEC approves the proposal “unless it determines that there is a substantial countervailing basis to find that the terms” violate the Exchange Act or SEC rules. *Id.* If not, the exchange must “provide a substantial basis, other than competitive forces, in its proposed rule change demonstrating that the terms of the proposal are equitable, fair, reasonable, and not unreasonably discriminatory.” *Id.* The SEC approved NYSE Arca’s fees for ArcaBook data on the grounds that (1) NYSE Arca is subject to “[a]t least two broad types of significant competitive forces,” *id.* at 74,782, and (2) there is no countervailing basis under the Exchange Act to disapprove the proposal, *see id.* at 74,794. Petitioners NetCoalition and SIFMA both timely petitioned for review on January 30, 2009 and we subsequently consolidated the petitions for review. *See* Order Granting Resp’t’s Mot. to Consolidate, No. 09-1042 (D.C. Cir. Mar. 30, 2009). NYSE Arca and NASDAQ intervened in support of the SEC.

II. Analysis

Our jurisdiction arises under 15 U.S.C. § 78y(a)(1) (“A person aggrieved by a final order of the Commission . . . may

¹⁰The Order does not specify why the SEC set aside its Division of Market Regulation’s October 12, 2006 order other than to say that “[t]he Petitioner and commenters raised a number of important issues that the Commission believes it should address directly at this time.” Order, 73 Fed. Reg. at 74,771.

obtain review of the order in the United States Court of Appeals . . . for the District of Columbia Circuit . . .”). We review the Order under the APA’s arbitrary and capricious standard, *i.e.*, we “hold unlawful and set aside agency action” that is “arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with law” or “unsupported by substantial evidence.” 5 U.S.C. § 706(2)(A), (E). Under the APA, the SEC is required to “examine the relevant data and articulate a satisfactory explanation for its action including a ‘rational connection between the facts found and the choice made.’” *Motor Vehicle Mfrs. Ass’n of U.S., Inc. v. State Farm Mut. Auto. Ins. Co.*, 463 U.S. 29, 43 (1983) (quoting *Burlington Truck Lines v. United States*, 371 U.S. 156, 168 (1962)). The SEC’s factual findings are conclusive if supported by substantial evidence. *See* 15 U.S.C. § 78y(a)(4).

The petitioners challenge the Order on three grounds: first, the SEC violated the Exchange Act by failing to engage in cost-based ratemaking; second, the SEC arbitrarily rejected its earlier cost-based approach to determine whether market data fees are “fair and reasonable”; and third, the SEC’s conclusion that NYSE Arca was subject to significant competitive forces that constrained its ability to set fees for market data is not supported by substantial evidence.

A. SEC’s “Market-Based” Approach Does Not Contravene Exchange Act

The petitioners assert, first, that the SEC’s “market-based” approach to evaluating the fairness and reasonableness of NYSE Arca’s ArcaBook fees conflicts with the Exchange Act. As noted earlier, the Congress has expressly delegated to the Commission the power to determine, after notice and comment, whether a proposed rule change is consistent with the Exchange Act. 15 U.S.C. § 78s(b)(2); *see supra* at 3. Accordingly, we review the agency’s interpretation of the Exchange Act under the familiar two-step analysis set forth in *Chevron, U.S.A. Inc. v.*

Natural Res. Def. Council, Inc., 467 U.S. 837, 842-43 (1984). See *Fin. Planning Ass'n v. SEC*, 482 F.3d 481, 487 (D.C. Cir. 2007); cf. *United States v. Mead Corp.*, 533 U.S. 218, 226-27 (2001) (“*Chevron* deference [appropriate] when it appears that Congress delegated authority to the agency generally to make rules carrying the force of law, and that the agency interpretation claiming deference was promulgated in the exercise of that authority.”).

Chevron step one applies if the “Congress has directly spoken to the precise question at issue . . . [because] that is the end of the matter; for the court, as well as the agency, must give effect to the unambiguously expressed intent of Congress.” *Chevron*, 467 U.S. at 842-43. If the statute is “silent or ambiguous with respect to the specific issue,” we proceed to step two, at which step we accept the agency’s interpretation of the statute as long as it is reasonable. *Id.* at 843. We bear in mind that “[i]t is irrelevant that this court might have reached a different—or better—conclusion than the SEC.” *Am. Equity Inv. Life Ins. Co. v. SEC*, — F.3d —, 2010 WL 2757499, at *7 (D.C. Cir. July 12, 2010) (citing *Nat’l Cable & Telecomm. Ass’n v. Brand X Internet Servs.*, 545 U.S. 967, 980 (2005)). In considering the permissibility of an agency’s construction of a statute, we determine not only whether the agency’s interpretation is reasonable but also whether the agency has acted within its authority under the statute. See *Goldstein v. SEC*, 451 F.3d 873 (D.C. Cir. 2006) (“As always, the ‘words of the statute should be read in context, the statute’s place in the overall statutory scheme should be considered, and the problem Congress sought to solve should be taken into account’ to determine whether Congress has foreclosed the agency’s interpretation.” (quoting *PDK Labs. Inc. v. DEA*, 362 F.3d 786, 796 (D.C. Cir. 2004)); see also *Am. Bar Ass’n v. FTC*, 430 F.3d 457, 468 (D.C. Cir. 2005) (rejecting agency suggestion “that *Chevron* step two is implicated any time a statute does not expressly negate the existence of a claimed administrative

power”). Finally, a statute’s “general declaration of policy” does not protect agency action that is otherwise inconsistent with the congressional delegation of authority for “[a]gencies are . . . ‘bound, not only by the ultimate purposes Congress has selected, but by the means it has deemed appropriate, and prescribed, for the pursuit of those purposes.’” *Colo. River Indian Tribes v. Nat’l Indian Gaming Comm’n*, 466 F.3d 134, 139 (D.C. Cir. 2006) (quoting *MCI Telecomms. Corp. v. AT&T*, 512 U.S. 218, 231 n. 4 (1994)).

Under the Exchange Act, the SEC has a duty to ensure that NYSE Arca’s proposed fees for market data are, among other things, “fair and reasonable.” 15 U.S.C. § 78k-1(c)(1)(C) (fees must be “fair and reasonable” and not “unreasonably discriminatory”); *see* 17 C.F.R. § 242.603(a) (same); 15 U.S.C. § 78(f)(b)(4) (exchange must also “provide for the equitable allocation of reasonable dues, fees, and other charges among . . . persons using its facilities”). The petitioners believe that the SEC’s market-based approach is prohibited under the Exchange Act because the Congress intended “fair and reasonable” to be determined using a cost-based approach. The SEC counters that, because it has statutorily-granted flexibility in evaluating market data fees, its market-based approach is fully consistent with the Exchange Act.

We agree with the SEC. None of the statutory language answers the “precise question” whether the SEC is required to evaluate non-core data fees under a cost-based approach.¹¹

¹¹In contrast, another Exchange Act provision also enacted as part of the 1975 Amendment requires that the fees charged as commissions be “reasonable *in relation to the costs* of providing the service for which such fees are charged.” *See* 15 U.S.C. § 78f(e)(1)(B) (emphasis added). In other words, the Congress knew how to tie a fee’s reasonableness to its underlying cost but declined to do so for non-core data fees. *See Catawba County, N.C. v. EPA*, 571 F.3d 20, 36

Chevron, 467 U.S. at 842-43. Because the Congress delegated authority to the Commission to determine whether an SRO’s rule change is consistent with the Exchange Act and because the statute is silent as to whether a market-based approach is consistent with the same, under *Chevron* step two we uphold the SEC’s action if it is based on a “permissible construction of the statute.” *Id.* at 843; see *Sea-Land Serv., Inc. v. Dep’t of Transp.*, 137 F.3d 640, 645 (D.C. Cir. 1998) (“[*Chevron*] deference comes into play . . . only as a consequence of statutory ambiguity, and then only if the reviewing court finds an implicit delegation of authority to the agency”); cf. *Michigan v. EPA*, 268 F.3d 1075, 1082 (D.C. Cir. 2002) (“Mere ambiguity in a statute is not evidence of congressional delegation of authority.”).

The petitioners rely on portions of the legislative history suggesting the Commission was supposed to “assume a special oversight and regulatory role” over exclusive processors by treating them as public utilities, a role inconsistent with allowing market forces to determine market data prices. S. Rep. No. 94–75, at 12 (1975), as reprinted in 1975 U.S.C.C.A.N. 179, 190 (Senate Report); see *id.* at 11, 1975 U.S.C.C.A.N. at 189 (“Any exclusive processor is, in effect, a public utility, and thus it must function in a manner which is absolutely neutral”); Conference Report at 93, 1975 U.S.C.C.A.N. at 324 (“[W]here a self-regulatory organization or organizations utilize an exclusive processor, that processor takes on certain of the characteristics of a public utility and should be regulated accordingly.”). These statements, however, refer to an “exclusive *central* processor for the *composite* [*i.e.*, consolidated

(D.C. Cir. 2009) (“When interpreting statutes that govern agency action, we have consistently recognized that a congressional mandate in one section and silence in another often ‘suggests not a prohibition but simply a decision not to mandate any solution in the second context, *i.e.*, to leave the question to agency discretion.’” (quoting *Cheney R.R. Co. v. ICC*, 902 F.2d 66, 69 (D.C. Cir. 1990))).

core data] tape or any other element of the national market system,” not to an exchange acting as the processor of its proprietary non-core data. Senate Report at 11, 1975 U.S.C.C.A.N. at 189 (emphases added); *see also* Conference Report at 93, 1975 U.S.C.C.A.N. at 324. In fact, the legislative history indicates that the Congress intended that the market system “evolve through the interplay of competitive forces as unnecessary regulatory restrictions are removed” and that the SEC wield its regulatory power “in those situations where competition may not be sufficient,” such as in the creation of a “consolidated transactional reporting system.” Conference Report at 92, 1975 U.S.C.C.A.N. at 323; *see* Senate Report at 12, 1975 U.S.C.C.A.N. at 190 (“[I]n situations in which natural competitive forces cannot, for whatever reason, be relied upon, the SEC must assume a special oversight and regulatory role.”). This reading is consistent with the notion that the Congress did not intend to take away the SEC’s authority to rely, at least in some circumstances, on the market. *See id.* (“[A] fundamental premise of the bill is that the initiative for the development of the facilities of a national market system must come from private interests and will depend upon the vigor of competition within the securities industry as broadly defined.”).

Moreover, while “competition” is only one of five objectives included in the 1975 Amendment, 15 U.S.C. § 78k-1(a)(1)(C), the SEC’s market-based approach does not impermissibly elevate competition above the other objectives. In its Order, the SEC responded to the congressional desire that it rely “on competition, whenever possible, in meeting its regulatory responsibilities for overseeing the SROs and the national market system.” 73 Fed. Reg. at 74,781; *see id.* at 74,771 (Congress intended that “competitive forces should dictate the services and practices that constitute the U.S. national market system for trading equity securities”). Accordingly, the SEC took a more traditional “regulatory approach,” *id.* at 74,781, to core data (“where competition may not be sufficient,” Conference Report

at 92, 1975 U.S.C.C.A.N. at 323) and a “market-based approach,” with a greater reliance on competition, to non-core data, *see* Order, 73 Fed. Reg. at 74,780-81 (SEC prefers consolidation for core data but deconsolidation for non-core data to “allow[] greater flexibility for market forces to determine data products and fees”). We conclude the SEC’s interpretation—that a market-based approach to evaluating whether NYSE Arca’s non-core data fees are “fair and reasonable”—is a permissible one.¹²

B. SEC Did Not Arbitrarily Reject Prior Cost-Based Approach to Calculating Market Data Fees

The petitioners next contend that, in approving NYSE Arca’s proposed fees, the SEC arbitrarily “rejected” its prior cost-based approach. Under APA review, an agency may not “depart from a prior policy *sub silentio* or simply disregard rules that are still on the books.” *FCC v. Fox Television Stations, Inc.*, 129 S. Ct. 1800, 1811 (2009). An agency acts arbitrarily by “fail[ing] adequately to justify departing from its own prior interpretation” of a statute. *Goldstein v. SEC*, 451 F.3d 873, 883 (D.C. Cir. 2006).

The petitioners cite two examples of the cost-based approach from which the SEC allegedly departed without explanation but neither example—each of which is distinguished

¹²We have similarly held that a “just and reasonable” standard did not “preclude[] the FERC from relying upon market-based pricing.” *Elizabethtown Gas Co. v. FERC*, 10 F.3d 866, 870 (D.C. Cir. 1993) As long as “there is a competitive market the FERC may rely upon market-based prices in lieu of cost-of-service regulation to assure a ‘just and reasonable’ result.” *Id.* (quoting *Tejas Power Corp. v. FERC*, 908 F.2d 998, 1004 (D.C. Cir. 1990)); *see also EarthLink, Inc. v. FCC*, 462 F.3d 1, 13 (D.C. Cir. 2006) (contrasting “cost-based” pricing required under 47 U.S.C. § 271 with “the more relaxed ‘just and reasonable’ standard of 47 U.S.C. §§ 201 and 202”).

in the Order—fits the petitioners’ characterization. They first cite several statements contained in a 1999 SEC “Market Information Concept Release” proposing changes to, among other things, the SEC’s then-regulation of market data fees. *See* Regulation of Market Information Fees and Revenues, Release No. 34-42208, 64 Fed. Reg. 70,613 (Dec. 17, 1999). The Concept Release noted that “the fees charged by a monopolistic provider of a service (such as the exclusive processors of market information) need to be tied to some type of cost-based standard in order to preclude excessive profits if fees are too high or underfunding or subsidization if fees are too low” and therefore “the total amount of market information revenues should remain reasonably related to the cost of market information.” *Id.* at 70,627. But this statement (and the Concept Release in general) addressed market data fees charged by a central exclusive processor of consolidated core data. *See* 64 Fed. Reg. at 70,615 (discussing dissemination of “*consolidated* market information” pursuant to plans that “govern all aspects of the arrangements for disseminating market information,” including “fees that can be charged”) (emphasis in original). The SEC did not intend by this statement to require that fees for an exchange’s proprietary non-core data must also be cost-based. While costs are “[o]ne standard commonly used to evaluate the fairness and reasonableness of fees, particularly those of a monopolistic provider of a service,” the Congress “did not require the Commission to undertake a . . . strictly cost-of-service (or ‘ratemaking’) approach to its review of market information fees in every case.” 64 Fed. Reg. at 70,619; *see id.* (“Such an inflexible standard, although unavoidable in some contexts, can entail severe practical difficulties.”) (footnote omitted). Instead, as the SEC recognized, the Congress gave it flexibility in evaluating “fair and reasonable” market data fees.¹³ *Id.*

¹³Moreover, the Concept Release merely stated the SEC’s “belie[f] . . . that it may be possible to develop a more flexible, cost-

The petitioners' second example is no more persuasive. In 1984, the SEC stated that an "exclusive processor's fees should be based strictly on the expenses it incurs in providing the information to vendors." Order Announcing Commission Findings, Modifying Interim Relief, and Instituting Proceedings, Release No. 20874, 49 Fed. Reg. 17,640, 17,647 (Apr. 24, 1984) (Instinet Order). The issue arose when the SEC rejected a proposed fee to access market information because the SRO that proposed the fee was not only charging market data vendors (like Instinet) but was also directly competing with the vendors by "providing enhanced information products to its own direct subscribers." Concept Release, 64 Fed. Reg. at 70,623. The SEC emphasized that the cost-based approach was used due to "the particular facts of the present case." Instinet Order, 49 Fed. Reg. at 17,646; *see* Order, 73 Fed. Reg. 74,787 n.254 (citing Concept Release, 64 Fed. Reg. at 70,622 ("The Commission repeatedly emphasized . . . that the scope of its decision was limited to the particular competitive situation presented in the proceedings.")). Nor is the SEC's interpretation of the Instinet order a novel one, given that it had already distinguished the order on its "peculiar competitive context" in the 1999 Market Information Concept Release. 64 Fed. Reg. at 70,623.

In any event, more recent examples illustrate that the SEC's "market-based" approach is not an unexplained shift from its

based approach" that avoided cost-calculating difficulties and at the same time maintained "a reasonable connection between the cost of market information and the total amount of revenues derived from market information fees." 64 Fed. Reg. at 70,628. The Release, which identified itself as a "request for comments," did not purport to suggest the "belief" as a rule. *Id.* at 70,613-14 ("[T]he Commission has decided to invite public comment before taking further action. This release is intended to assist the public . . . by identifying a variety of specific issues . . . on which the Commission is particularly interested in receiving comments.").

earlier cost-based pronouncements. In 2001, the SEC’s Advisory Committee on Market Information made clear that “the extent and manner of dissemination of deeper market information can be determined by market forces—*i.e.*, by the business decisions of individual market participants—rather than by regulation.” Report of the Advisory Committee on Market Information: A Blueprint for Responsible Change, § B.2, <http://www.sec.gov/divisions/marketreg/marketinfo/finalreport.htm> (Sept. 14, 2001) (last visited July 22, 2010) (Advisory Committee Report). Likewise, the SEC itself intended in Regulation NMS that “market forces, rather than regulatory requirements” play a role in determining the market data (other than the NBBO) to be made available to investors and at what cost. 70 Fed. Reg. at 37,567. In fact, in 2002 the SEC approved NASDAQ’s proposed fees for its own depth-of-book product without analyzing costs. *See* Order Approving Proposed Rule Change, Release No. 34-46843, 2002 WL 31554080 (Nov. 18, 2002). We conclude that the SEC’s “market-based” approach does not arbitrarily depart from prior practice.

C. SEC Failed to Show that NYSE Arca is Subject to Significant Competitive Forces in Pricing ArcaBook

Although we uphold the SEC’s market-based approach against the petitioners’ cost-based challenges, we do not mean to say that a cost analysis is irrelevant. On the contrary, in a competitive market, the price of a product is supposed to approach its marginal cost, *i.e.*, the seller’s cost of producing one additional unit. *See Tejas Power Corp.*, 908 F.2d at 1004 (“In a competitive market, where neither buyer nor seller has significant market power, it is rational . . . to infer that price is close to marginal cost, such that the seller makes only a normal return on its investment.”). Supracompetitive pricing may be evidence of “monopoly,” or “market,” power. *See United States v. Microsoft Corp.*, 253 F.3d 34, 51 (D.C. Cir. 2001) (“Where evidence indicates that a firm has in fact profitably [raised prices

substantially above the competitive level], the existence of monopoly power is clear.”). Thus, the costs of collecting and distributing market data can indicate whether an exchange is taking “excessive profits” or subsidizing its service with another source of revenue, as the SEC has recognized. Concept Release, 64 Fed. Reg. at 70,627 (cost-based standard “preclude[s] excessive profits if fees are too high or underfunding or subsidization if fees are too low”); *cf. MCI Telecomms. Corp. v. FCC*, 675 F.2d 408, 410 (D.C. Cir. 1982) (“A basic principle used to ensure that rates are ‘just and reasonable’ is that rates are determined on the basis of cost.”) (footnote omitted). Even NYSE Arca’s proposal acknowledges that costs are relevant in assessing the reasonableness of its fees. *See* NYSE Arca Application at 6-7 (“NYSE Arca believes that the proposed market data fees would reflect an equitable allocation of its overall costs to users of its facilities.”); *see also* Comment Letter of Mary Yeager, Corporate Secretary, NYSE Arca, Inc. at 13, 16 (Feb. 6, 2007) (in setting fee levels NYSE Arca considered “the contribution that revenues accruing from Arca Book Fees would make toward meeting the overall costs of NYSE Arca’s operations” and noted “market data revenues compare favorably to the markets’ cost of producing the data”).

Moreover, the risk that NYSE Arca could exercise market power appears to be elevated in the pricing of its proprietary non-core data. There is no dispute that NYSE Arca is the “exclusive” provider of this data. While many exchanges sell Google stock, only NYSE Arca offers access to the Google limit orders included in its depth-of-book product, ArcaBook. As of June 2008, NYSE Arca was one of the largest exchanges in the nation in terms of shares traded. *See* Order, 73 Fed. Reg. at 74,783 tbl. 1 (NYSE Arca had third-highest share of volume in U.S.-listed equities among national exchanges). Although the SEC is correct that “[m]any businesses . . . are the exclusive sources of their own products” without also having market power, *id.* at 74,786, as recently as 2005 the SEC was

“concerned that an SRO with a significant share of trading in NMS stocks could exercise market power in setting fees for its data,” including data “beyond the NBBO.” Regulation NMS, 70 Fed. Reg. at 37,559. The Order thus recognized that if an “exchange could, in fact, exert monopoly power over its pricing of non-core data, it obviously would be inappropriate for the Commission to rely on non-existent competitive forces as a basis for approving an exchange proposal.” 73 Fed. Reg. at 74,787.

The SEC concluded, however, that NYSE Arca could not exercise market pricing power as to ArcaBook. But the Commission did not require NYSE Arca to substantiate its market data costs—not at the time of NYSE Arca’s fee application, not before the SEC published the draft proposal and not before the Order issued. Instead, the Commission noted more than once the difficulty of cost calculation in determining whether a fee is fair and reasonable, often by referring to earlier orders. *See, e.g.*, Order, 73 Fed. Reg. 74,794 (cost-based approach entails “whole host of difficulties in calculating the direct costs and common costs of market data—an endeavor that the Commission discussed at length in 1999 and will not repeat here”); *id.* (cost-based regulatory approach “would be extraordinarily intrusive on competitive forces, as well as quite costly and difficult to apply in practice”). At one point the SEC seemed to suggest that it might allow NYSE Arca’s fees to be set by competition simply because of the difficulty of cost-calculating. *See id.* (“faced with the pragmatic challenge of determining whether non-core market data fees are fair and reasonable,” SEC “strongly believes that the current level of competition in the U.S. equity markets provides a much more useful basis to make this determination than a regulatory attempt to measure market data costs”).

The petitioners maintain that the SEC’s failure to consider NYSE Arca’s costs make its determination that NYSE Arca is

subject to significant competitive forces arbitrary and capricious because cost-collecting is in fact not difficult. The APA “establishes a scheme of ‘reasoned decisionmaking.’ . . . Not only must an agency’s decreed result be within the scope of its lawful authority, but the process by which it reaches that result must be logical and rational.” *Allentown Mack Sales & Service, Inc. v. NLRB*, 522 U.S. 359, 374 (1998) (quoting *State Farm*, 463 U.S. at 52); *see also United Techs. Corp. v. U.S. Dep’t of Def.*, 601 F.3d 557, 565 (D.C. Cir. 2010) (agency failed to provide reasoned basis for conclusion because “[a] naked conclusion . . . is not enough”). While “we have long held that agency determinations based upon highly complex and technical matters are entitled to great deference,” *Domestic Sec., Inc. v. SEC*, 333 F.3d 239, 248 (D.C. Cir. 2003) (internal quotation omitted), “we do not defer to the agency’s conclusory or unsupported suppositions.” *McDonnell Douglas Corp. v. U.S. Dep’t of the Air Force*, 375 F.3d 1182, 1187 (D.C. Cir. 2004). In addition, an agency may not shirk a statutory responsibility simply because it may be difficult. *See Chamber of Commerce of U.S. v. SEC*, 412 F.3d 133, 143 (D.C. Cir. 2005) (difficulty in formulating cost estimate does not relieve SEC of “statutory obligation to determine as best it can the economic implications of the rule it has proposed” because even “in face of uncertainty, agency must exercise its expertise to make tough choices . . . and to hazard a guess as to which is correct, even if . . . the estimate will be imprecise”) (internal quotation and citation omitted).

But the SEC did not approve NYSE Arca’s proposed fees based primarily on “difficulties in calculating the direct costs and common costs of market data.” Order, 73 Fed. Reg. at 74,794. It did so instead based on its determination that consideration of costs was unnecessary because of an alternative indicator of competitiveness: NYSE Arca is subject, the SEC said, to “[a]t least two broad types of significant competitive forces” in pricing ArcaBook—namely, “(1) [its] compelling need to attract order flow from market participants[] and (2) the availability to

market participants of alternatives to purchasing the ArcaBook data.” *Id.* at 74,782. That determination fails the APA’s reasoned decisionmaking standard for another reason advanced by the petitioners, as we now explain.

1. Order Flow Competition

We begin with the points on which the SEC and the petitioners agree. No one disputes that competition for order flow is “fierce.” Order, 73 Fed. Reg. at 74,782 (“Attracting order flow is the core competitive concern of any equity exchange—it is the ‘without which, not’ of an exchange’s competitive success.”). As the SEC explained, “[i]n the U.S. national market system, buyers and sellers of securities, and the broker-dealers that act as their order-routing agents, have a wide range of choices of where to route orders for execution”; “no exchange can afford to take its market share percentages for granted” because “no exchange possesses a monopoly, regulatory or otherwise, in the execution of order flow from broker dealers”; and therefore “NYSE Arca must compete vigorously for order flow to maintain its share of trading volume.” *Id.* at 74,782-83. The parties also agree that there is a connection between order flow and market data, *i.e.*, that “[a]n exchange’s ability to attract order flow determines whether it has market data to distribute.” *Id.* at 74,783.

The dispute centers on whether the connection works both ways: not only that increased order flow makes market data more valuable but that more modestly priced market data drives increased order flow. The SEC concluded that it does: an “exchange’s distribution of market data significantly affects its ability to attract order flow.” *Id.* (“The wide distribution of . . . depth-of-book order data[] to many market participants is an important factor in attracting . . . orders.”); *id.* at 74,791 (“wide dissemination” of market data is “important tool” to attract order flow). The SEC contends that order flow competition constrains NYSE Arca’s pricing of its depth-of-book data for two reasons.

First, the wide dissemination of ArcaBook will attract interest in the prices listed therein of those traders who wish to buy or sell more shares than the number of shares shown in the core data. *See id.* at 74,783 (“The extent to which a displayed [limit] order attracts . . . interest will depend greatly on the wide distribution of the displayed order to many market participants.”). Second, because many traders who buy depth-of-book data from NYSE Arca also select on which exchanges to trade—in particular, “the large broker-dealer firms that control the handling of a large volume of customer and proprietary order flow”—NYSE Arca can risk its order flow share by overpricing market data. *Id.* (“Given the portability of order flow from one trading venue to another, any exchange that sought to charge unreasonably high data fees would risk alienating many of the same customers on whose orders it depends for competitive survival.”). For these reasons, the SEC concluded, NYSE Arca’s proposal “cannot reasonably be interpreted as that of a monopolist able to take advantage of its market power over a small group of professionals who value the data highly, but rather that of an exchange facing significant competitive pressures in attempting to sell its data to a large number of professionals.” *Id.* at 74,792.

The conclusion is not objectionable in theory. The problem is that it is at odds with the SEC’s repeated statements throughout the Order and in its briefs that depth-of-book data is simply not very important to most traders, even professionals. *See, e.g.*, 73 Fed. Reg. at 74,791 n.295 (rejecting the notion that “an exchange’s depth-of-book data is so critically important that the exchange is not significantly constrained by competitive forces in pricing that data”). This data, it appears, “is useful primarily as background information on liquidity outside the best prices” because “more than 90% of the time, traders do not access the liquidity displayed in an exchange’s depth-of-book order data, even for large orders.” *Id.* at 74,792 (92% of NYSE Arca’s May 2008 “executed share volume of marketable orders were at prices equal to or better than the NBBO” for orders

ranging from 100 shares to 9,999). According to the Commission, depth-of-book data is “most accurately characterized as useful, but not essential, for professional traders.” *Id.*; *see* Resp’t’s Br. 48 (“The availability of core data makes resort to depth-of-book unnecessary for most investors . . .”); *id.* at 50 (“The limited appeal of depth-of-book data is reflected by the fact that of the 420,000 professional users who purchase core data in NASDAQ-listed stocks, only 19,000 professional users purchase NASDAQ’s depth-of-book data product.”); *see also* Intervenors’ Br. 7 (“Use of depth-of-book data is uncommon even among professional investors . . .”). But if the SEC is correct that depth-of-book data is “unnecessary” and of “limited appeal” to most investors, it is not clear why “wide distribution” of the data “to many market participants” is critical in attracting order flow. Order, 73 Fed. Reg. at 74,783. If anything, the SEC’s order seems to suggest that the depth-of-book tail is wagging the order flow dog—but without a consistent explanation of how or why this is so.

This is not to say that wide dissemination of market data *cannot* increase order flow but rather that it is not *necessarily* so.¹⁴ More problematic is the lack of support in the record for

¹⁴Perhaps one way to resolve the apparent contradiction between asserting both the critical role of market data and at the same time its limited appeal to most investors is to say that the data *is* important but only to those “[i]nstitutional investors that need to trade in large size [and] typically seek to assess market depth beyond the best prices,” Order, 73 Fed. Reg. at 74,784, or to “algorithmic order routing services” that use computer algorithms to determine the most profitable trading sites, *id.* at 74,792. In other words, perhaps only a minority of professional traders is interested in NYSE Arca’s depth-of-book data but those few execute an outsized share of the total trading volume so that unreasonable fees would cause them to place their orders elsewhere and ultimately affect order flow. But if this is the SEC’s theory, it is not supported by evidence of the traders using

the SEC's conclusion that order flow competition constrains market data prices. Granted, the record includes statements from NYSE Arca and other exchanges to support the conclusion. *E.g.*, Order, 73 Fed. Reg. at 74,784 (“NYSE Arca, in setting the fee, acknowledged that it needed to balance its desire for market data revenues with the potential damage that a high fee would do to its ability to attract order flow.”). The self-serving views of the regulated entities, however, provide little support to establish that significant competitive forces affect their pricing decisions. Nor does the remaining evidence provide substantial support. For example, the SEC quoted the 2001 Advisory Committee Report's statement that “a market's inability to widely disseminate its prices undoubtedly will adversely impact its ability to attract limit orders and, ultimately, all order flow.” *Id.* at 74,783 n.216 (quoting Advisory Committee Report § B.1). But this was a conclusion, not evidence. Moreover, it was made in the context of “whether basic market information should continue to be required to be provided in a consolidated format to market participants,” *see* Advisory Committee Report § B—thus supporting the unremarkable proposition that failure to disseminate *core* data could adversely affect order flow.¹⁵

NYSE Arca's depth-of-book data or of the percentage of total trading volume those traders may generate.

¹⁵In fact, the Advisory Committee disagreed over whether competitive forces would ensure that market data fees remain “fair and reasonable.” While some Committee members were “concern[ed] that the rise of publicly-held for-profit exchanges, and their obligation to maximize shareholder value, will put upward pressure on market data fees,” others argued that the exchanges' inclination to increase data fees “will be checked by the need to make data available to generate order flow and attract listings.” Advisory Committee Report § D.3.d. The Report did not resolve the disagreement but rather cautioned that “the Commission may want to be more vigilant in assuring that a

The SEC also cited two anecdotes to support its determination that competition for order flow constrains non-core market data fees. The SEC first described how Island ECN “ceased displaying its order book to the public in three very active exchange-traded funds” in order to avoid certain regulatory strictures—and promptly lost fifty per cent of its substantial market share in the three funds. Order, 73 Fed. Reg. at 74,784. The SEC also cited the fact that BATS ECN and International Stock Exchange (ISE) provided their depth-of-book data to customers free of charge, ostensibly as a way to generate order flow. Together, these examples show that depth-of-book market data is apparently important enough to at least some traders that it must be made available; they say nothing about whether an exchange like NYSE Arca is constrained to price its depth-of-book data competitively.¹⁶

2. Alternatives to Depth-of-Book Data

The SEC also asserts that an exchange must consider the extent to which institutional and other “sophisticated traders would choose one or more alternatives instead of purchasing the

for-profit SRO’s market data fees meet the statutory ‘fair and reasonable’ standard.” *Id.*

¹⁶The SEC points to a NASDAQ-commissioned economic study described in the Order which employs the “total platform” theory whereby market data and trade executions are “joint products” with “joint costs” at each trading “platform,” or exchange. Resp’t’s Br. 43-44; see Order, 73 Fed. Reg. at 74,779. Although an exchange may price its trade execution fees higher and its market data fees lower (or vice versa), because of “platform” competition the exchange nonetheless receives the same return from the two “joint products” in the aggregate. But this is not the theory of competition the SEC relied on below and it may not press it for the first time on appeal. See *BNSF Ry. Co. v. Surface Transp. Bd.*, 604 F.3d 602, 613 (D.C. Cir. 2010) (citing *SEC v. Chenery Corp.*, 332 U.S. 194, 196 (1947)).

exchange's data." Order, 73 Fed. Reg. at 74,784. According to the SEC, given the other sources (and potential sources) of market data available to sophisticated investors—specifically, (1) core data, (2) depth-of-book data from other exchanges, (3) “pinging” orders and (4) the threat of independent distribution of depth-of-book data by data vendors or securities firms acting in concert—NYSE Arca must price ArcaBook reasonably or it will lose these subscribers. *Id.* at 74,784-85; *see id.* at 74,791 n.295.

But the existence of a substitute does not necessarily preclude market power. *See* 2B Phillip E. Areeda, Herbert Hovenkamp & John L. Solow, *Antitrust Law* § 506(a) (3d ed. 2007) (Areeda); *see also* *Ariz. Pub. Serv. Co. v. United States*, 742 F.2d 644, 651 (D.C. Cir. 1984) (“[T]he mere existence of some alternative does not in itself constrain the railroads from charging rates far in excess of the just and reasonable rates that Congress thought the existence of competitive pressures would ensure.”). Rather, whether a market is competitive notwithstanding potential alternatives depends on factors such as the number of buyers who consider other products interchangeable and at what prices. *See* Areeda § 506c. We evaluate market competitiveness in antitrust cases, for example, by asking whether there exists a “reasonably interchangeable” substitute in the same market, which “depends not only on the ease and speed with which customers can substitute it and the desirability of doing so, . . . but also on the cost of substitution, which depends most sensitively on the price of the products.” *FTC v. Whole Foods Mkt., Inc.*, 548 F.3d 1028, 1037 (D.C. Cir. 2008) (en banc) (citing *United States v. Microsoft Corp.*, 253 F.3d 34, 53-54 (D.C. Cir. 2001) (per curiam)); *see id.* at 1037-38 (describing “small but significant non-transitory increase in price,” or “SSNIP,” technique developed by the Department of Justice and Federal Trade Commission to analyze reasonable substitutability). The inquiry into whether a market for a product is competitive, therefore, focuses on the customer and, in particular, his price sensitivity—in economic terms, the

product's "elasticity of demand." Areeda § 503 ("Elasticity' here refers to the rate at which customers will turn away from the firm's product in response to a price increase or toward it in response to a price decrease."); *see* Order, 73 Fed. Reg. at 74,792 ("The availability of such alternatives increases the elasticity of demand for an exchange's depth-of-book data.").

The SEC's analysis of alternatives does not reveal the number of potential users of the data or how they might react to a change in price. We do not know, for example, how many traders accessed NYSE Arca's depth-of-book data during the period it was offered without charge—and thus how many traders might be interested in paying for ArcaBook. *See* Arg. Tr. 32 (SEC: "[W]e don't have numbers."). Nor do we know whether the traders who want depth-of-book data would decline to purchase it if met with a supracompetitive price. The Order does provide some idea of how many traders *buy* depth-of-book data (albeit on a different exchange): of 420,000 professional traders who subscribed to NASDAQ's core data product as of April 30, 2007, only 19,000 (less than 5%) purchased its depth-of-book product.¹⁷ *See* Order, 73 Fed. Reg. at 74,785 ("[T]hat 95% of the professional users of core data choose not to purchase the depth-of-book order data of a major exchange strongly

¹⁷We also know that as of July 2008, about 15% of ISE members—20 of 140—subscribe to its depth-of-book product even though it is free. *See* Order, 73 Fed. Reg. at 74,779; Comment Letter of Michael J. Simon, Secretary, International Stock Exchange, at 2 (July 10, 2008). Given that ISE's share volume in U.S. listed stocks is significantly smaller than that of NYSE Arca (.9% compared to 16.5% during June 2008), it is no surprise that its market data is less in demand. *See* 73 Fed. Reg. at 74,784 (depth-of-book data provided by exchanges and ECNs with greater trading volume "will be proportionally more important in assessing market depth" and thus "smaller exchanges may well be inclined to offer their data for no charge or low fees as a means to attract order flow").

suggests that no exchange has monopoly pricing power for its depth-of-book order data.”). But the fact that there are few buyers does not by itself demonstrate a lack of market power—which, after all, is “the ability to raise price profitably by *restricting output*.” Areeda § 501(emphasis added).

Stated differently, evidence that few people buy the data tells us little about whether the data is “critically important” to those traders who do. And without additional evidence of trader behavior, the SEC has not adequately supported its determination that the alternatives it identifies in fact constrain NYSE Arca’s depth-of-book fees. Order, 73 Fed. Reg. at 74,784-85. Core data, for example, reveals only the *best* prices available; it is not a “substitute” for depth-of-book data, which measures the number of shares available at prices *inferior to* the best prices. Depth-of-book data from other exchanges could be an alternative for individual securities but that determination cannot be made without knowing how actively the security is traded on those exchanges. *See id.* at 74,785 (depth-of-book data provided by exchanges and ECNs with greater trading volume “will be proportionally more important in assessing market depth”). Likewise, a “pinging” order, which involves placing a limit order for a number of shares larger than that included in the core data, reveals the number of shares available at the order price or better and therefore does provide “background information on liquidity.” *Id.* at 74,792. But a pinging order also *executes a trade* for both displayed and undisplayed orders at (and superior to) the “pinging” price, meaning that it is not an obvious alternative, at least without evidence that traders in fact use it in lieu of depth-of-book data. Finally, even if we assume that the “threat of independent distribution of order data by securities firms and data vendors” is not unduly speculative, *id.* at 74,785, the SEC’s duty is to ensure that fees are “fair and reasonable”—not to predict that, with the entry of a competitor, they might someday get there. *Cf. Microsoft Corp.*, 253 F.3d at 53–54 (“The test of reasonable interchangeability . . . consider[s]

only substitutes that constrain pricing in the reasonably foreseeable future, and only products that can enter the market in a relatively short time can perform this function.”). In sum, the SEC had insufficient evidence before it to conclude that a trader interested in depth-of-book data would substitute any of the four alternatives (or simply do without) instead of paying a supracompetitive price.

* * *

For the foregoing reasons, the petitions for review are granted—we are unable to perform our APA review on the record before us in order to affirm the SEC’s determination that NYSE Arca’s ArcaBook fees are “fair and reasonable” and otherwise compliant with the Exchange Act. In addition, the SEC has failed to “disclose a reasoned basis,” *see Am. Equity Inv. Life Ins. Co.*, 2010 WL 2757499, at *10, for concluding that NYSE Arca is subject to significant competitive forces in pricing ArcaBook. The Commission’s Order Setting Aside Action by Delegated Authority and Approving Proposed Rule Change Relating to NYSE Arca Data, Release No. 34-59039, 73 Fed. Reg. 74,770 (Dec. 9, 2008), is therefore vacated and remanded to the Commission for further proceedings consistent with this opinion. *See Am. Equity Inv. Life Ins. Co.*, 2010 WL 2757499, at *12 (decision to vacate depends on seriousness of order’s deficiencies and disruptiveness of vacatur (citing *Allied-Signal, Inc. v. U.S. Nuclear Regulatory Comm’n*, 988 F.2d 146, 150–51 (1993))).

So ordered.