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UNITED STATES OF AMERICA
before the
SECURITIES AND EXCHANGE COMMISSION

In the Matter of: The Application of BLOOMBERG L.P. For Review of Amendments to the CTA Limiting	Admin Proc. File No. 3-18316

CONSOLIDATED TAPE ASSOCIATION'S MEMORANDUM OF LAW IN OPPOSITION TO BLOOMBERG L.P.'S MOTION FOR A STAY OF AMENDMENT TO THE CTA/CQ NATIONAL MARKET SYSTEM PLAN PUBLISHED ON NOVEMBER 14, 2017, RELEASE NO. 34-82071

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GLOSSARY OF DEFINED TERMS

Term	Definition
2014 Amendments	Securities Exchange Act Release No. 73278 (October 1, 2014), 79 FR 60536 (October 7, 2014)
Administrator	NYSE, acting in its capacity as Network Administrator of the Consolidated Tape Association and Consolidated Quotation Plan
Advisory Committee Members	The members of the Plan Advisory Committee present at the May 25, 2017 CTA/CQ/UTP General Session, when the Amendment was proposed and discussed: Retail Representative (Richard Urian, Ameritrade), Investor Representative (Thomas Jordan, Jordan & Jordan), Vendor Representative (Kerry Baker-Relf, Thomson Reuters), ATS Representative (Ed Flynn, Morgan Stanley), Institutional Representative (Bill Conti, Goldman Sachs), Participant Representatives (Brett Redfearn (JP Morgan), Paul O'Donnell (Morgan Stanley), Melissa Hinmon (Glenmede), Ann Neidenbach (Convergex), and Hubert De Jesus (Blackrock)).
Amendment	Twenty-Second Charges Amendment to the Second Restatement of the CTA Plan and the Thirteenth Charges Amendment to the Restated CQ Plan, File No. SR-CTA/CQ-2017-04 (filed October 19, 2017)
BB	Brief in Support of Bloomberg's Motion to Stay CTA's Fee Amendment
Bloomberg	Bloomberg L.P.
Bunnell Decl.	Declaration of Keith Bunnell, sworn to February 6, 2018
Chang Decl.	Declaration of Lora Chang, sworn to February 27, 2018
CTA	Consolidated Tape Association
Exchange Act	Securities Exchange Act of 1934

Term	Definition
Henkin Decl.	Declaration of Douglas W. Henkin, sworn to February 28, 2018
Kasparov Decl.	Declaration of Emily Kasparov, sworn to February 23, 2018
Kotovets Decl.	Declaration of Gary Kotovets, sworn to February 5, 2018
McManus Decl.	Declaration of Tony McManus, sworn to February 5, 2018
Motion	Bloomberg L.P.'S Motion for a Stay of Amendment To The CTA/CQ National Market System Plan Published in the Federal Register on November 14, 2017, Release No. 34-82071
NYSE	New York Stock Exchange LLC
Participants	Bats BYX Exchange, Inc.; Bats BZX Exchange, Inc.; Bats EDGA Exchange, Inc.; Bats EDGX Exchange, Inc.; Chicago Board Options Exchange, Incorporated; Chicago Stock Exchange, Inc.; Financial Industry Regulatory Authority, Inc.; Investors Exchange LLC; Nasdaq BX, Inc.; Nasdaq ISE, LLC; Nasdaq PHLX LLC; The Nasdaq Stock Market LLC; New York Stock Exchange LLC; NYSE Arca, Inc.; NYSE American LLC; and NYSE National, Inc.
Plans	Second Restatement of the CTA Plan and the Restated CQ Plan
Regulation NMS	17 CFR PARTS 200, 201, 230, 240, 242, 249, and 270 (Release No. 34-51808; File No. S7-10-04)
SAPI	Bloomberg Server Applications Program Interface
SEC or Commission	United States Securities and Exchange Commission
SIFMA	Securities Industry and Financial Markets Association
SRO	Self Regulatory Organization

PRELIMINARY STATEMENT

CTA, through the Administrator, respectfully submits this opposition to Bloomberg's Motion to stay the Amendment.

If Bloomberg's assertions were correct, it had no reason to make the Motion, because it and its customers have nothing to worry about. But Bloomberg misstates what the Amendment does and why it does it, the history of CTA's interactions with Bloomberg regarding SAPI, and the state of competition among market data product vendors. CTA believes Bloomberg's goal is to maintain the undue burden on competition it has created by misreporting SAPI use.

Contrary to Bloomberg's assertions (*e.g.*, BB at 1), the Amendment does not impose "newly-increased fees" because it makes no changes to the fee schedule CTA set *in 2014*, which has different rates for display use and non-display use. Nor does the Amendment "target[]" SAPI "to benefit competing vendors" (*id.*). Rather, it clarifies the existing fee structure to ensure that all vendors are on a level playing field. The premise is simple: all CTA subscribers' fees should be determined in the same way, by how they use CTA data. The Amendment therefore applies to any vendor's product that enables subscribers to utilize CTA data for non-display uses and any subscriber who uses it for that purpose. By making the Motion, however, Bloomberg has put at issue what SAPI is and does and how (or if) Bloomberg polices its customers' use of SAPI, and so CTA's opposition must focus on those issues.

To understand the Motion's flaws, consider the following:

- Although Bloomberg claims that SAPI *could not* be used for non-display purposes, its original description of SAPI to the Administrator stated that SAPI's specifically contemplated uses included what are classified as core non-display uses.
- Assuming that Bloomberg correctly describes its customer contracts (which are not attached to the Motion), why would it need to include a provision barring use of SAPI for non-display purposes if SAPI could not be used for those purposes? BB

at 6. And aside from Bloomberg's *ipse dixit*, how is CTA to know whether Bloomberg is applying any such provisions?

- If SAPI *is not* being used for non-display purposes, why did a collection of Bloomberg customers (who presumably use SAPI) submit comment letters that can only be read to assert that they would suffer under the Amendment? If they do not use SAPI for non-display purposes, they are in no danger of paying non-display fees.

The Amendment changes no fees; it was designed to ensure a level playing field and assist CTA in determining how subscribers are using CTA data so that they can be charged correctly under the fees established in 2014, *a right CTA has under its contracts with every vendor who redistributes its data and every subscriber who uses its data.* By refusing to comply with the Amendment and making the Motion, Bloomberg (i) effectively concedes that SAPI does what Bloomberg claims it does not do, (ii) is breaching its contract with CTA, and (iii) is interfering with CTA's contracts with subscribers. When the record is considered in connection with the legal requirements for a stay and Bloomberg's behavior, the Motion must be denied.

STATEMENT OF FACTS

Background of Non-Display Use Fees and SAPI

In October 2014, the Plans' fee schedules were amended to establish fees for non-display data use and *reduce* device fees for professional subscribers. *See* 2014 Amendments. The 2014 Amendments realigned the Plan's fees more closely with the ways market participants consume market data, including reducing the rates professionals paid for display devices and establishing new fees for non-display uses of data. The 2014 Amendments defined non-display use as any use accessing, processing, or consuming CTA data for a purpose other than in support of a recipient's display or further internal or external redistribution. The 2014 Amendments included a non-exhaustive list of what would be considered non-display uses, including trading in any asset class, automated order or quote generation and/or pegging, price referencing for

algorithmic trading or smart order routing, operations control programs, investment analysis, order verification, surveillance programs, risk management, compliance, and portfolio valuation.

Bloomberg asserts that CTA has "recognized for more than a decade that SAPI is a display service." BB at 2. That is incorrect.

- Bloomberg first identified SAPI to CTA in 2004, ten years before non-display use fees were introduced. How SAPI was treated when display use was the only usage category is irrelevant.

- Even in 2004 Bloomberg stated that SAPI subscribers "typically use the application for the following purposes: pricing engines, portfolio valuations, order management programs, risk compliance engines, and programs trading applications." (Kasparov Decl. Ex. A § 4.1(A)(1) ("Server API")). Every one of what Bloomberg called "typical[]" uses for SAPI was included in the list of non-display uses in the 2014 Amendments, to which Bloomberg did not object.

- Following the 2014 Amendments, CTA notified Bloomberg that the SAPI definition in Bloomberg's current CTA vendor agreement showed that SAPI allowed non-display uses, and Bloomberg responded by trying to revise the *description* of SAPI in its CTA vendor agreement (while trying to maintain the display device designation). *See* Chang Decl. Ex. A. CTA did not agree to that attempt by Bloomberg. *See* Chang Decl. ¶ 5 n.2. And as the record discussed herein shows, Bloomberg apparently did not change the *functionality* of SAPI.

Bloomberg is wrong that CTA has always treated SAPI as a display device, and CTA has specifically not done so following the 2014 Amendments.

CTA Vendor and Subscriber Agreements

All CTA market data vendors and subscribers sign contracts with CTA that give CTA the express rights to audit users to determine whether vendor self-reporting is done in accordance with the terms of the agreement. *See* Kasparov Decl. Ex. B ¶ 9 ("**COOPERATION AS TO UNAUTHORIZED RECEIPT**"); *id.* ¶ 11 ("**RECORDS AND REPORTS**") (boldface in original); Kasparov Decl. Ex. C ¶ 5(e) ("INSPECTION"); *id.* ¶ 15 ("REPORTING: RECORDS: EQUIPMENT DESCRIPTION"). The audit function is thus a key component of the relationship to ensure that all vendors operate consistently regarding how they report usage by their customers.

The Amendment did not create those rights—they long pre-date it, are contractual, and apply to everyone. Bloomberg's claim that through the Amendment CTA "arrogates to itself" the right to determine whether a particular use is display or non-display use (BB at 16 n.10) misstates the long-standing terms of CTA's contracts and the role of the Administrator to ensure that vendors correctly report usage.

Bloomberg also claims that its customer contracts and SAPI customer lists are confidential and that it is entitled to withhold them from CTA (which it has done without prior authorization). *See* McManus Decl. ¶ 17 n.2; Bunnell Decl. ¶ 34; Kotovets Decl. ¶ 34. This claim is inconsistent with Bloomberg's vendor agreement and its customers' CTA agreements:

- Bloomberg enters into a vendor agreement with CTA and, pursuant to that agreement, must report all professional device and data feed customers to CTA. Contractually, Bloomberg must ensure that these customers do not use CTA data in unauthorized ways.
    - In particular, Bloomberg "shall otherwise cooperate and assist in any investigation relating to any unauthorized receipt of Market Data made available pursuant to this Agreement." Kasparov Decl. Ex. B ¶ 9(a).
    - Bloomberg must also maintain records of its customers' use of CTA data, permit CTA to audit those records, and provide reports to CTA regarding its customers' use of CTA data. *See* Kasparov Decl. Ex. B ¶ 11(a)-(c).
- Based on how Bloomberg reports its customers, CTA then enters into direct relationships with those customers via subscriber agreements and bills such customers directly based on the use reported by Bloomberg.
    - Each Bloomberg customer grants CTA the right to inspect its premises and observe how it uses CTA data. *See* Kasparov Decl. Ex. C ¶ 5(e).
    - And each Bloomberg customer must furnish to CTA in writing "such information, in such form and at such times" as CTA may reasonably specify "to permit billing of Subscriber for applicable charge(s)." *Id.* ¶ 15(b).

Bloomberg's confidentiality claims are thus baseless. And taken in its entirety, the Motion is a concession that Bloomberg is (and intends to remain) in material breach of its vendor agreement and is assisting any customers in breach of their agreements with CTA in so remaining as well.

The Amendment

After the 2014 Amendments went into effect, CTA became aware that certain vendors were mischaracterizing their customers' data usage in apparent efforts to avoid requiring their customers to pay non-display use fees, to the competitive detriment of vendors who properly characterize their customers' data usage (and whose customers thus pay the appropriate non-display use fees). CTA became concerned that certain vendors were providing subscribers with access to CTA data that allowed data use for non-display purposes without reporting delivery to those customers as a data feed, thus placing an undue burden on competition among vendors. The need for the Amendment was discussed extensively by CTA's Participants and Advisory Committee Members. *See* Kasparov Decl. ¶ 6. When the Amendment was proposed at a regularly-scheduled CTA meeting, there was no disagreement regarding its necessity and *no* Advisory Committee Members present at that meeting objected to the Amendment. *See id.*

On October 19, 2017, CTA filed the Amendment, which became effective that day. The Amendment neither changes nor imposes new CTA fees. It merely clarifies the definition of non-display use in the 2014 Amendments to eliminate some vendors' attempts to mischaracterize customers' data usage and engage in conduct competitively detrimental to other vendors. More specifically, and focusing on Bloomberg because it is the movant:

- Regardless of how any subscriber uses CTA data, because CTA bills subscribers directly for CTA fees, Bloomberg will pay no additional CTA fees as a result of the Amendment.
- No Bloomberg customer will pay non-display fees unless that customer is using CTA data for non-display purposes and thus would be subject to non-display fees

established in the 2014 Amendments (which can only be determined by examining how particular customers actually use the data).

- There will be no retroactive charges: Even if a subscriber is found to be engaged in non-display use, its fees will only increase prospectively.[1]

- If use of Bloomberg SAPI for non-display purposes is feasible and Bloomberg customers are using CTA data they receive via SAPI for non-display use, they should be charged fees in the same manner that any other subscriber would be charged fees based on such use.

Contrary to Bloomberg's assertions, there is substantial evidence supporting the need for the Amendment:

- Two market data vendors filed comment letters expressing support for the Amendment because they believed it was necessary to create a level playing field among vendors. *See* Henkin Decl. Exs. A & B.

- One of those vendors filed another comment letter reiterating its support for the Amendment and confirming that it had lost customers to SAPI and similar products because of the issues the Amendment would fix. *See* Henkin Decl. Ex. I.

- CTA has reason to believe that SAPI allows subscribers to use CTA data for non-display functions. *See* Chang Decl. ¶¶ 4-6. Indeed, CTA has had direct contacts from subscribers confirming that they were using SAPI for non-display purposes. *See id.* ¶¶ 7-9.

- And one market data consultant has confirmed to the Commission that he has direct experience with subscribers using SAPI to engage in non-display uses of CTA data, stating that in his experience that is subscribers' primary reason for buying SAPI licenses from Bloomberg. *See* Henkin Decl. Ex. H.

Thus, although the Amendment was not directed solely at SAPI and applies to any vendor's product that allows the same functionality, there is more than enough evidence supporting the need for the Amendment in general and insofar as it might impact SAPI.

To be clear, however, CTA has not concluded whether SAPI allows for non-display use. Rather, based on information it has received from customers, CTA is simply seeking to test

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[1] *See* Amendment at 2 n.5 ("The Participants would apply this proposed amendment prospectively to meet any concerns that the existing policy was insufficiently clear.").

the proposition, as provided for in CTA's contractual relationships with Bloomberg and its customers, by reviewing with Bloomberg customers how they use CTA data they receive via Bloomberg SAPI.

This Proceeding

On December 13, 2017, Bloomberg filed a denial of access challenge to the Amendment under Exchange Act Section 11A. This proceeding challenges only the Amendment, not the institution of non-display use fees. Those fees were instituted by CTA in the 2014 Amendments, which Bloomberg did not challenge and is now time-barred from challenging. Although SIFMA filed a petition challenging the 2014 Amendments, it expressly asked the Commission to hold that petition in abeyance (Kasparov Decl. Ex. E at 2), which the Commission has done.[2] The propriety of fees set by the 2014 Amendments is thus not at issue in this proceeding.

ARGUMENT

I. STANDARD OF REVIEW

To succeed on the Motion, Bloomberg must demonstrate that (i) it is likely to succeed on the merits of its challenge, (ii) it would suffer irreparable harm absent a stay, (iii) no other party would be harmed by a stay, and (iv) a stay is in the public interest.[3] The Commission

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2 Bloomberg concedes the existence of SIFMA's challenge in a footnote, stating that "[t]he Commission has not yet ruled" (BB at 14 n.9), but fails to mention that that is because SIFMA—represented by the same firm that represents Bloomberg—asked its challenge to be held in abeyance. Bloomberg nevertheless criticizes CTA for having suggested that this challenge be held in abeyance (as more than 330 others filed by SIFMA have been). *See* BB at 3 n.1.

3 *See, e.g.*, *Matter of the Application of Richard L. Sacks for Stay of Comm'n Order Approving Proposed Rule Changes by the Nat'l Assn. of Secs. Dealers, Inc. (N/K/A Financial Industry Regulatory Authority, Inc.)*, Release No. 34-57028, S.E.C. Docket 771, 2007 WL 4481516, at *2 (S.E.C. Dec. 21, 2007).

has recognized that "the imposition of a stay pending judicial review by an administrative agency is an extraordinary remedy."[4] This is because a strong presumption of regularity arises when an agency acts consistent with its rules; a stay is rare and depends on a demonstration that the agency process has misfired.[5]

When the issues argued in support of a stay motion have been considered by the Commission as part of the normal rule filing process, the Commission has denied stays.[6] Bloomberg's Motion reiterates arguments it made during the comment period for the Amendment, which arguments did not convince the Commission to abrogate the Amendment. Likewise, they are not a basis for staying the Amendment now that it has been in effect for more than four months. Indeed, this is a worse situation than a normal pre-effectiveness stay motion—despite the Amendment having been in effect for more than four months, Bloomberg has not demonstrated any harm to anyone and cannot do so.

II. BLOOMBERG CANNOT SHOW A STRONG LIKELIHOOD THAT IT WILL PREVAIL ON THE MERITS

Bloomberg spends much of its brief arguing that it will succeed because the prices CTA charges for non-display uses are improper. The Commission can ignore that argument because that question is not raised by this proceeding. In any event, Bloomberg is wrong.

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4 *See Matter of the Application of Marshall Spiegel for Stays of Comm'n Orders Approving Proposed Rule Changes by the Chicago Board Options Exchange, Inc.*, Release No. 34-52611, 86 S.E.C. Docket 1200, 2005 WL 2673495, at *3.

5 *See Coleman v. Paccar, Inc.*, 424 U.S. 1301, 1303 (1976).

6 *See Matter of Applications of William Timpinaro, et al. for Stay of Comm'n Order Approving Proposed Rule Changes by the Nat'l Assn. of Secs. Dealers, Inc. to Redefine Professional Trading Account and Day Trading*, Release Nos. 34-29809 & 34-29927, 50 S.E.C. Docket 238, 1991 WL 288326, at *3-7 (S.E.C. Nov. 12, 1991).

A. Bloomberg Cannot Challenge CTA's Non-Display Use Prices

As demonstrated above, CTA's non-display use prices were established by the 2014 Amendments, Bloomberg did not challenge the 2014 Amendments, and the entity that did (SIFMA) asked that its challenge be held in abeyance. And it has been more than three years since the 2014 Amendments were filed, more than the 30-day period within which a denial of access challenge must be made. *See* 15 U.S.C. § 78s(d)(2). Bloomberg thus cannot challenge CTA's non-display use fees and so its likelihood of success in contesting those prices is nil.

B. The Amendment Did Not Set Any Prices, And So Bloomberg's Objections Are Irrelevant

Bloomberg discusses extensively its views on how market data products should be priced (BB at 10-13), but the Amendment did not set any market data prices. As Bloomberg concedes (BB at 14 n.9), SIFMA's challenge to the 2014 Amendments is entirely separate from this one.

What is relevant here is what the Amendment does and why: It clarifies that the applicable fees should be charged based on whether a subscriber uses CTA data for display or non-display purposes so that all vendors who sell products that use CTA data can do so on a level playing field. *See* Chang Decl. ¶¶ 2-3; Henkin Decl. Exs. A, B, F, H & I. The Amendment is essentially an enhanced administrative mechanism for the obligations imposed by the 2014 Amendments and CTA's standard vendor and subscriber agreements (not just those involving SAPI).

Bloomberg claims that SAPI cannot be used for non-display purposes and it takes steps to ensure that SAPI is not used for such purposes. BB at 17. If all that is true, then neither Bloomberg nor its customers have anything to worry about; if a Bloomberg SAPI customer uses CTA data for display uses only, then such customer would not be subject to non-display use fees.

But that is not how Bloomberg originally described SAPI. And the fact that Bloomberg made the Motion and has refused to produce copies of its contracts and SAPI customer lists (in clear breach of its vendor agreement) also suggest otherwise. Moreover, if its customers are using SAPI for display uses only, why file comment letters complaining that they are likely to pay more under the Amendment? *See* Henkin Decl. Exs. C & E. The evidence that customers do use SAPI for non-display purposes, *see* Chang Decl. ¶¶ 4-11 & Henkin Decl. Ex. H, including one industry expert's statement that facilitating non-display use is the primary use of SAPI, *see id.*, suggests that Bloomberg SAPI customers are likely employing SAPI for non-display uses. The Administrator should have the opportunity to assess whether that is occurring.

Because the Amendment is about ensuring that vendors compete for customers who want to use CTA data on a level playing field and there is substantial evidence contradicting Bloomberg's assertions in the Motion, its chance of succeeding on the merits of this proceeding is zero.

C. Even If The Amendment Was About Pricing Market Data, Bloomberg's Objections Would Still Fail

Bloomberg rests its primary argument on dicta from *NetCoalition v. SEC*, 615 F.3d 525 (D.C. Cir. 2010) ("*NetCoalition I*") and the assertion that the Amendment cannot be valid because it does not mention costs. *See* BB at 11-13. As an initial matter, *NetCoalition I* cannot bear the weight Bloomberg places on it. It was not about pricing core data, and although the footnote Bloomberg cites does say the Commission has determined that core data fees "should" bear "some" relationship to cost, it goes on to note that "[t]o date" the Commission has "approved fees based on agreement among market participants." 615 F.3d at 529 n.2.

The Amendment did not address costs or potential revenues because the Amendment was not about fee changes or revenues—it was about clarifying the way vendors

report to CTA so that CTA can administer fees set in 2014 in a fair and reasonable manner that does not impose a burden on competition. Bloomberg dismisses the goal of establishing a level playing field among vendors (BB at 13),[7] but that goal is entirely consistent with the Exchange Act, and it does not make the validity of fees set in 2014 an issue in this proceeding.

CTA's desire to ensure that vendors properly apply the fees set in 2014 also distinguishes the *Instinet* orders[8] and *NASD v. SEC*.[9] There, a data vendor (Instinet) challenged NASD's method of calculating fees for the "NQDS" market data product. *NASD*, 801 F.2d at 1417. At the time, NASD offered NASDAQ data in four forms: Levels 1, 2, and 3, and NQDS. *Id.* at 1416-17. If someone wanted to buy data on "all market maker bids and offers," they could buy it directly from NASD (*i.e.*, a "Level 2 subscription") or through a vendor (*i.e.*, an "NQDS subscription" through Instinet). *Id.* NASD initially proposed to charge Instinet's customers a $150 fee for an NQDS subscription, the same price it charged for NASD's Level 2 subscription. *Id.* at 1417. Instinet challenged these fees, alleging that NASD could only charge to recover its costs. *Id.* The SEC agreed and ordered NASD to charge fees as if it were a "pass-through system." *Id.* at 1418.

The D.C. Circuit affirmed. *Id.* at 1419. The court looked at the specific competitive forces at play in that situation, where Instinet was NASD's direct—*and only*—competitor for

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7 Bloomberg is a dominant vendor, and in 2016 its revenues alone were 1.7 times the top 13 exchanges' market data revenues *combined*. *Compare* Henkin Decl. Ex. J at 16 (Bloomberg had 33.4% market share in 2016 with revenues of $9.18 billion) *with* Henkin Decl. Ex. K at 3 (total market data revenue from world's 13 largest exchanges in 2016 was $5.4 billion).

8 *Institutional Networks Corp.*, Release No. 20088, 1983 WL 116268 (S.E.C. Aug. 22, 1983); *Institutional Networks Corp.*, Release No. 20874, 1984 WL 472209 (April 17, 1984).

9 *Nat. Ass'n of Securities Dealers, Inc. v. S.E.C.*, 801 F.2d 1415 (D.C. Cir. 1986).

NQDS subscribers. *Id.* The court held that NASD's proposed fees would have ensured that Instinet (Nasdaq's only potential competitor, *id.* at 1422) could not have been competitive with NASD's Level 2 service. *Id.* at 1419.

Here, the Amendment addresses a remarkably different competitive posture. Unlike the *Instinet* cases, the Amendment does not adjust or create new fees. Moreover, *NASD* was based on very specific competitive circumstances—an SRO allegedly seeking to maintain a competitive advantage over a new market entrant by charging unwarranted fees. The Amendment, on the other hand, seeks to level the competitive balance *among existing vendors*, not between CTA and Bloomberg or any other vendor. As demonstrated above, Bloomberg is seeking to maintain its unwarranted competitive edge over vendors who correctly report their subscribers' non-display uses under the 2014 Amendments.

In addition, despite the Commission's concerns about the state of market data competition when the *Instinet* cases were decided more than 30 years ago, the Commission has since then approved core data fees "based on agreement among market participants." *NetCoalition I*, 615 F.3d at 530 n.2. Because the Amendment is designed to ensure fair competition among vendors, the *Instinet* cases do not support Bloomberg's position.

D. CTA Did Not "Arbitrarily Redefine" Any Fees

Bloomberg contends the Amendment is arbitrary and capricious because it "redefines non-display use and access fees" in a manner that contradicts the 2014 Amendment. BB at 14. Although Bloomberg correctly notes that the 2014 Amendments defined "non-display use" to target data feeds that deliver data without displaying that data to individuals, it incorrectly argues that the Amendment abandons the distinction between human displays and non-display uses. BB at 14.

Bloomberg concedes the Amendment states that it merely "clarifies" the definition of non-display use and that the Amendment's plain language limits non-display uses to data that is "not visibly available to a data recipient on a device." BB at 15 (quoting the Amendment). Bloomberg does not argue that this stated intention is inconsistent with the 2014 Amendments. Instead, Bloomberg asserts that the Amendment must contradict the 2014 Amendments because "it ignores that SAPI is a display service." BB at 15.

That argument is, of course, circular: Bloomberg argues that SAPI cannot facilitate non-display uses because Bloomberg did not report it as facilitating non-display use after the 2014 Amendments; therefore, the Amendment must conflict with the 2014 Amendments if it would change SAPI's status. BB at 15. There are at least five flaws with this argument:

- CTA issued the Amendment to clarify and advance the 2014 Amendment's intentions and foster fair competition among vendors.
- Under the 2014 Amendments, display use versus non-display use is determined by what a subscriber actually does with CTA data. The Amendment does not change that in any way.
- Following the 2014 Amendments, CTA put Bloomberg on notice that, as originally defined by Bloomberg, SAPI allowed for non-display uses. Bloomberg does not claim otherwise.
- All CTA vendors and subscribers are contractually required to submit to audits to allow CTA to charge them the correct fees based on their actual use of CTA data; the Amendment simply increases the effectiveness of that pre-existing contractual mechanism.
- There is substantial record evidence that, despite Bloomberg's protestations, subscribers can and do use SAPI for non-display uses. Moreover, other vendors that sell SAPI-like products do so by complying with the 2014 Amendments. *See* Chang Decl. ¶¶ 5-6.

Accordingly, CTA did not depart from its "past practices and official policies" when it submitted the Amendment's clarification of the 2014 Amendment. *Cf. Am Wild Horse Preservation Campaign v. Perdue*, 873 F.3d 914, 923 (D.C. Cir. 2017).

E. The Amendment Does Not Discriminate Against Bloomberg

Bloomberg alleges that CTA unfairly discriminated against it by filing the Amendment, claiming that there is no evidence of a competitive imbalance among vendors and that SAPI is the only product that will be affected by the Amendment. BB at 18. The ongoing competitive imbalance among vendors was the primary motivation for the Amendment, and the evidence for it is demonstrated at length above and in CTA's supporting declarations. *See supra* pages 2-7. For the avoidance of doubt, all products offered by all vendors that (i) allow non-display uses of CTA data and (ii) are used that way by subscribers will be affected in exactly the same way. The only question is whether vendors and subscribers have been complying with the 2014 Amendments in their reporting; if they have, no subscribers' CTA costs will change; they will change for any subscriber who is not complying. In short, what a product does and how subscribers use it are the only factors at issue, not the names of vendors or their products.[10] If the Amendment increases some Bloomberg SAPI subscribers' future costs for CTA data, it will only do so because Bloomberg and/or the subscriber will have been found—after a contractual audit—to have not been complying with the 2014 Amendments.

III. BLOOMBERG HAS NOT SATISFIED THE IRREPARABLE INJURY REQUIREMENT

Bloomberg argues that two forms of irreparable injury would occur in the absence of a stay. *First*, Bloomberg contends that the Amendment may "cause many customers to terminate their subscriptions" to SAPI in place of "alternative data services." BB at 19. *Second*, Bloomberg asserts that it would be irreparably harmed if it were required to disclose its

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[10] Bloomberg's discussion of Thomson Reuters' "Eikon SAPI" product (BB at 18) is irrelevant because Thomson Reuters stopped selling "Eikon SAPI." *See* Henkin Decl. Ex. I. It is telling that the only product Bloomberg can find to complain about is one its competitor discontinued after CTA indicated its intent to clarify this issue.

"confidential" SAPI customer list to CTA because that list constitutes proprietary information that could be extremely valuable to NYSE, "a corporate sibling" of one of Bloomberg's direct competitors. BB at 20. Both arguments fail.

To establish irreparable harm, an alleged injury "must be both certain and great; it must be actual and not theoretical."[11] With respect to Bloomberg's assertion that its customers would cancel their SAPI subscriptions (BB at 19), Bloomberg cannot meet its burden. *First*, this claim is not supported by evidence and is at best speculative.[12] As an initial matter, for Bloomberg to estimate how much business it might lose it would have to admit that customers use SAPI in ways it claims are impossible. Moreover, there is no basis for Bloomberg to believe that the Amendment will cause it to lose SAPI customers:

- The Amendment has been in effect for more than four months, and Bloomberg has not identified a single customer that has terminated a SAPI subscription. Nor did the market participants' comment letters complaining about the Amendment provide support for this argument. *See* Henkin Decl. Exs. C & E.
- When another vendor complied with the 2014 Amendments for its SAPI-like product, it did not experience the catastrophic loss of subscribers Bloomberg hypothesizes. *See* Chang Decl. ¶ 6.
- And when one subscriber conformed its usage of CTA data to the 2014 Amendments, it kept its SAPI subscription (thus losing Bloomberg no revenues) but instead ceased paying for CTA data by using delayed data instead of real-time data. *See id.* ¶ 8.

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11 *Matter of American Petroleum Institute, Chamber of Commerce of the United States of America, Independent Petroleum Ass'n of America, and Nat'l Foreign Trade Council's Motion for State of Rule 13Q-1 and Related Amendments to Form SD*, Release No. 34-68197, 104 S.E.C. Docket 3945, 2012 WL 5462858, at *4 (S.E.C. Nov. 8, 2012).

12 *See Matter of Application of Whitehall Wellington Investments, Inc.*, Release No. 34-43051, 72 S.E.C. Docket 2131, 2000 WL 985754, at *2 (July 18, 2000) (describing applicant's theory of irreparable harm through lost customers as "highly speculative and unsupported by evidence").

- Bloomberg has effectively rendered the Amendment inapplicable to its customers by refusing to supply CTA with a list of SAPI customers (in direct violation of its CTA vendor contract).

A stay would of course harm CTA and vendors who are complying and effectively reward Bloomberg's unilateral refusal to comply with the Amendment in violation of its CTA vendor contract.

Even if Bloomberg had shown an "actual" injury—it has not—it is still not entitled to relief. The Commission "has repeatedly held the fact that an applicant may suffer financial detriment does not rise to the level of irreparable injury warranting issuance of a stay." *See Sacks*, 2007 WL 4481516, at *3 (internal quotation marks omitted).[13] For example, the movant in *Sacks*—an individual—sought to stay changes to NASD's Code of Arbitration for Customer disputes, contending they would cause him "financial hardship" and destroy his business. *See id.* The Commission rejected this assertion because he did not "explain why his business could not resume after review if the rule [was] set aside." *See id.* Here, Bloomberg—a multi-billion-dollar company—has not claimed and cannot plausibly claim that the theoretical (and unquantified) losses it might incur if a subset of its customers were to cease using SAPI while its application is adjudicated would rise to the level of irreparable harm required for the extraordinary remedy of a stay.

Finally, Bloomberg's argument that disclosing its customers who use SAPI would cause it irreparable harm is frivolous. BB at 20. The obligations to provide CTA with that information long pre-date the Amendment and are governed by Bloomberg's contract with CTA and its subscribers' separate contracts with CTA. As demonstrated above, Bloomberg's customers

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[13] *See also American Petroleum*, 2012 WL 5462858, at *3 (movants failed to demonstrate that the additional compliance costs its members might experience prior to the adjudication of their challenge to Rule 13q-1 constituted irreparable harm).

that are CTA subscribers all have contracts with CTA that give CTA express rights to audit those subscribers, a contractual right that necessarily entails the right to audit SAPI customers. Accordingly, the Administrator already knows the identities of Bloomberg's customers. The only information the Administrator is now requesting is which customers use SAPI so the Administrator can determine whether those customers are using the data for display or non-display uses.[14] Moreover, in its vendor agreement with CTA, Bloomberg itself consented to submit to CTA audits to ensure that its subscribers are being correctly billed for CTA data. Thus, both Bloomberg and its customers waived any expectation of confidentiality from CTA with respect to how they use CTA data. Bloomberg cannot now attempt to shield itself and its customers from their contractual obligations to CTA by claiming that complying with those obligations will cause it irreparable harm absent a stay of the Amendment. *See Flextronics International, Ltd. v. Parametric Technology*, No. C 13-0034 PSG, 2013 WL 5200175, at *8 (N.D. Cal Sept. 16, 2013) ("[a]fter all, in a negotiated contract between two sophisticated businesses, that audit right is exactly what Flextronics agreed to"). The Commission should conclude there is no irreparable harm where (i) the audit rights under CTA's subscriber and vendor agreements and (ii) the Amendment share the same purpose: to ensure that CTA can appropriately bill subscribers according to the fee schedule set in the 2014 Amendments.[15]

IV. THERE WOULD BE SUBSTANTIAL HARM TO OTHER PARTIES IF A STAY WERE GRANTED

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14 The Administrator has an express information barrier policy in place to prevent access to confidential CTA customer information by the Administrator's affiliates. *See* Chang Decl. ¶ 11.

15 Of course, if any subscriber disagreed with an amount CTA billed it, it could dispute that with CTA in the ordinary course.

In its discussion of this stay requirement, Bloomberg continues to misstate the Amendment's impact. Bloomberg asserts that absent a stay, investors and members of the securities industry will be "priced out" of SAPI and that SAPI users will incur "sunk costs" in having to change data vendors after being "priced out." BB at 20. These arguments misconstrue the Amendment and its purpose and ignore the requirements for equitable relief.

A stay is an "extraordinary remedy" that is only warranted in exceptional circumstances. *See Nken v. Holder*, 556 U.S. 418, 428-49 (2009). Under the Exchange Act, a stay can be granted in response to a legal challenge, but Congress made clear that doing so is the exception, not the rule. 15 U.S.C. § 78y(c)(2). The default is that rule changes like the Amendment take effect upon filing with the Commission and remain in effect pending any challenges to them. *See id.*; *NetCoalition v. S.E.C.* (*NetCoalition II*), 715 F.3d 342, 344 (D.C. Cir. 2013). As it does with all four stay factors, Bloomberg bears the burden of showing that the balance of equities favors a stay, which requires proving that other parties would not suffer substantial harm from a stay. *American Petroleum*, 2012 WL 5462858, at *3.

First, Bloomberg predicts widespread harm to investors and SAPI users. BB at 20-21. Yet, the only Bloomberg customers who could be affected in any way by the Amendment are those who use SAPI for non-display purposes but are not being charged for such use as required by the 2014 Amendments. As explained above, any impact on a SAPI subscriber's fees would be (i) based on the fee schedules set in the 2014 Amendments, (ii) incurred after a contractually-agreed audit of the subscriber's data usage, and (iii) applied prospectively. Indeed, Bloomberg asserts that any such user would be violating their contract *with Bloomberg* if they are using SAPI for non-display purposes. BB at 6. Thus, the Amendment could only affect subscribers who (i) are using CTA data for non-display purposes (ii) in violation of contracts with CTA *and* Bloomberg. No one could say the balance of equities favors anyone like that. Moreover,

Bloomberg's contention that customers will be "priced out" of SAPI subscriptions (BB at 20) is not credible considering that the vast majority of Bloomberg customers' fees are paid to Bloomberg, not CTA.[16] Assuming the Amendment had an effect on any subscribers, it would be a far cry from Bloomberg's apocalyptic speculations, and it is telling that nothing in the record identifies any subscribers who would supposedly be "priced out" of SAPI.

Second, even assuming some SAPI subscribers would face higher fees, equity does not protect Bloomberg's effort to avoid that. The Amendment was designed to close a loophole that, by making the Motion, Bloomberg concedes would allow SAPI users to pay lower rates for non-display applications than investors who subscribe to other data-feed services were the Amendment stayed. With respect to subscribers who use SAPI for non-display purposes, this too-good-to-be-true bargain is not a legitimate business interest. And to the extent Bloomberg seeks to preserve a price advantage the Amendment would eliminate, *Bloomberg* is trying to avoid competing on a level playing field with other market data vendors. Equitable relief cannot be used to prevent ordinary market competition.[17] In this context, that means complying with the rules and regulations prescribed by the SIPs, exchanges, Commission, and Congress. The relief Bloomberg seeks is entirely inconsistent with that and thus cannot support a stay.

Conversely, the advantage Bloomberg seeks to preserve harms vendors who do follow CTA's rules and harms the SIPs by depriving them of fees their filings allow them to charge.

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16 Henkin Decl. Ex. H explains Bloomberg's SAPI fees. A simple calculation shows that a display user pays substantially more to Bloomberg than to CTA with and without SAPI.

17 *E.g.*, *Consultants & Designers, Inc. v. Butler Serv. Grp., Inc.*,720 F.2d 1553, 1558 (11th Cir. 1983) (considering whether employer's covenant not to compete was "attempting to prevent ordinary competition, something which the employer has no legitimate interest in preventing" (quotation marks omitted)); *Dyer v. Pioneer Concepts, Inc.*, 667 So.2d 961, 965 (Fla. App. 1996) (movant had "no business interest in prohibiting competition per se").

The Amendment, in part, was designed to level the vendor playing field—and eliminate a burden on competition—in response to specific complaints from vendors who believed they were losing customers due to Bloomberg's noncompliance with the 2014 Amendments. For Bloomberg to seek equitable relief staying the Amendment mocks the concept of balancing the equities. Considering what the Amendment does and why and how a stay would impact competing vendors, the balance of equities weighs strongly against granting a stay.

V. THE ISSUANCE OF A STAY WOULD NOT SERVE THE PUBLIC INTEREST.

After considering all the submissions about the Amendment—including essentially the same substantive objections from Bloomberg—the Commission took no action to abrogate the Amendment. Granting a stay when a movant has merely renewed arguments the Commission has already found unpersuasive would send the wrong message to the public. Again, stays are extraordinary remedies. *See Nken*, 556 U.S. at 428. It would be inconsistent with the presumption of regularity (*see supra* note 5) to grant one when a movant simply recycles past submissions.

First, staying the Amendment would be contrary to the typical purpose of equitable relief: preserving the *status quo*. The Commission had an opportunity to suspend the Amendment and trigger a full review process. *See NetCoalition II*, 715 F.3d at 344. It declined to do so notwithstanding comments by interested parties (including Bloomberg). The Amendment became effective on October 19, 2017. To grant a stay more than four months later and more than two months after the Commission declined to take action under Rule 608 of Regulation NMS would *change* the *status quo*.

Second, a stay is inappropriate because Bloomberg had an opportunity to raise its concerns before the Commission's time to act expired. In fact, eight comment letters besides Bloomberg's were filed before the final date for the Commission to act under Rule 608. But

"equity aids the vigilant"[18] and Bloomberg waited more than four months after the Amendment became effective and more than two months after the Commission's decision date to file the Motion. Moreover, Bloomberg's interactions with CTA before making the Motion support the conclusion that it improperly delayed seeking a stay. As Kasparov Decl. Ex. D demonstrates, CTA and Bloomberg had been communicating about CTA's request for a list of SAPI subscribers; Bloomberg's last communication (on January 30, 2018) stated "we are looking into this. I will get back to you with an update once I have one." Four business days later, Bloomberg "g[o]t back to" CTA by filing the Motion.

Despite the record, Bloomberg argues that not staying the Amendment is against the public interest because it will make market data more expensive and harder to access. BB at 21. As demonstrated above, however, the Amendment does not impose new or different fees, staying it would not affect the fees set in the 2014 Amendments, and Bloomberg has not identified anyone whose fees would rise absent a stay. And to the extent the Amendment increases costs for anyone (whether they use SAPI or some other product), it would be a result of charging them the correct fees in accordance with the 2014 Amendments, which Bloomberg never challenged.

Bloomberg also contends that staying the Amendment is in the public interest because higher costs reduce third-party incentives to develop market data services. BB at 22. Nonsense. What reduces vendors' incentives to innovate is the ability of *other* vendors to play by different rules, which is precisely what the Amendment is designed to stop.

Viewed in its proper light, the Amendment merely provides a mechanism to ensure that the 2014 Amendments are applied consistently to all vendors and subscribers by clarifying the definition of non-display uses. The public-interest prong cuts in favor of allowing the Amendment

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18 *E.g.*, *Kansas v. Colorado*, 514 U.S. 673, 687 (1995).

to stay in place, thereby supporting the uniform market-data system designed by Congress and administered by the Commission. "Any delay resulting from a stay would potentially frustrate Congress's [and the Commission's] desire to achieve these benefits." *American Petroleum*, 2012 WL 5462858, at *9. Here, a stay would allow Bloomberg to continue waging a guerilla war against the 2014 Amendments and prevent the Amendment from eliminating an undue burden on competition of which CTA has presented substantial evidence.

CONCLUSION

For all the foregoing reasons, Bloomberg's Motion should be denied in its entirety.

Dated: February 28, 2018

BAKER BOTTS L.L.P.

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UNITED STATES OF AMERICA
before the
SECURITIES AND EXCHANGE COMMISSION

In the Matter of: The Application of BLOOMBERG L.P. For Review of Amendments to the CTA Limiting Access to its Services	Admin Proc. File No. 3-18316

CERTIFICATE OF SERVICE

I hereby certify that on February 28, 2018, I caused a copy of the foregoing memorandum of law in opposition to Bloomberg L.P.'s motion for a stay of Amendment to the CTA/CQ National Market System Plan published on November 14, 2017, Release No. 34-82071.

Brent J. Fields
Secretary
U.S. Securities and Exchange Commission
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Dated: February 28, 2018

Douglas W. Henkin / J.M. with permission
Douglas W. Henkin

UNITED STATES OF AMERICA
before the
SECURITIES AND EXCHANGE COMMISSION

In the Matter of: The Application of BLOOMBERG L.P. For Review of Amendments to the CTA Limiting Access to its Services	Admin Proc. File No. 3-18316

CERTIFICATE OF COMPLIANCE

Pursuant to Rule 154(d) of the Commission's Rules of Practice, I hereby certify that the foregoing memorandum of law in opposition to Bloomberg L.P.'s motion for a stay of Amendment to the CTA/CQ National Market System Plan published on November 14, 2017, Release No. 34-82071 contains 6,940 words, according to the word-processing system used to prepare the brief, exclusive of the cover page, table of contents, and table of authorities.

Dated: February 28, 2018

Douglas W. Henkin with permission

In the Matter of the Application of Bloomberg L.P.

Securities and Exchange Commission Admin. Proceeding File No. 3-18316

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EXHIBIT	DOCUMENT
Declaration of Emily Kasparov, dated February 23, 2018	
A	Vendor Agreement that Bloomberg filed with the Plans in 2004
B	Bloomberg's current Vendor Agreement with CTA
C	Current form of CTA's Professional Subscriber Agreement
D	Email correspondence, dated January 30, 2018, from the Plans' Administrator asking Bloomberg to provide CTA with a list of Bloomberg subscribers who use SAPI
E	SIFMA's denial of access petition regarding the 2014 Amendments
Declaration of Lora Chang, dated February 27, 2018	
A	Email correspondence, dated October 5, 2016, from Bloomberg representing to CTA that it had reconfigured SAPI to remain a display device following the 2014 Amendments (not accepted by CTA)
Declaration of Douglas W. Henkin, dated February 28, 2018	
A	Comment letter regarding the Amendment filed by Thomson Reuters, dated November 28, 2017
B	Comment letter regarding the Amendment filed by DTN, dated December 8, 2017
C	Comment letter regarding the Amendment filed by 14 market participants, dated December 11, 2017
D	Comment letter regarding the Amendment filed by Bloomberg, dated December 11, 2017
E	Comment letter regarding the Amendment by Baird Equity Asset Management, dated December 11, 2017
F	Comment letter filed by CTA in response to certain comment letters regarding the Amendment, dated December 14, 2017
G	Comment letter regarding the Amendment by Bloomberg, dated February 7, 2018
H	Comment letter regarding the Amendment by S4 Market Data, dated February 26, 2018
I	Comment letter regarding the Amendment filed by Thomson Reuters, dated February 27, 2018
J	Report published by Burton-Taylor International Consulting called "Financial Market Data/Analysis Global Share & Segment Sizing 2017"
K	Kirsten Hyde, Kirsten Hyde, *Fee Fight: Ye Olde Market Data Battleground,* WatersTechnology.com (Feb. 21, 2018)

UNITED STATES OF AMERICA

before the

SECURITIES AND EXCHANGE COMMISSION

In the Matter of: The Application of BLOOMBERG L.P. For Review of Amendments to the CTA Limiting Access to its Services	Admin Proc. File No. 3-18316

DECLARATION OF EMILY KASPAROV

Emily Kasparov declares as follows:

1. I am the Chair of the Operating Committee of the Consolidated Tape Association Plan and the Consolidated Quotation Plan (the "Plans"). I make this declaration in that capacity in opposition to the motion by Bloomberg L.P. to stay the effectiveness of the Twenty-Second Charges Amendment to the Second Restatement of the CTA Plan and the Thirteenth Charges Amendment to the Restated CQ Plan, File No. SR-CTA/CQ-2017-04 (filed October 19, 2017) (the "Amendment").[1]

2. Attached hereto as Exhibit A is a true and correct copy of the vendor agreement "Exhibit A" that Bloomberg filed with the Plans in 2004.

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[1] Capitalized terms not defined herein have meanings set forth in the "Glossary of Defined Terms" contained in the Consolidated Tape Association's Memorandum of Law in Opposition To Bloomberg L.P.'S Motion For A Stay Of Amendment To The CTA/CQ National Market System Plan Published in the Federal Register On November 14, 2017, Release No. 34-82071.

3. Attached hereto as Exhibit B is a true and correct copy of Bloomberg's current vendor agreement with CTA, which governs Bloomberg's rights and obligations when it re-sells CTA data to its subscribers.

4. CTA bills all professional subscribers that subscribe to CTA data for that data directly, pursuant to form subscriber contracts. Attached hereto as Exhibit C is a true and correct copy of the current form of CTA's professional subscriber agreement.

5. Although CTA knows the identities of all professional subscribers that receive CTA data through vendors (including Bloomberg), in the case of Bloomberg CTA does not know whether particular subscribers use Bloomberg's SAPI service unless the subscribers tell CTA, which most do not. After the Amendment went into effect on October 19, 2017, the Plans' Administrator asked Bloomberg several times to provide CTA with a list of Bloomberg subscribers who use SAPI; attached hereto as Exhibit D is a true and correct copy of the last chain of correspondence regarding that issue.

6. The need for the Amendment was discussed at length by the Participants over many months at meetings attended by members of the Plans' Advisory Committee. The final determination to proceed with the Amendment was made at a CQ/CTA/UTP General Session meeting on May 25, 2017. The Participants were unanimous in their agreement that the Amendment should be filed with the Commission, and no Advisory Committee Member voiced an opposition to the proposed Amendment.

7. Although Bloomberg did not file a denial of access petition regarding the 2014 Amendments, SIFMA did. A true and correct copy of SIFMA's denial of access petition is attached hereto as Exhibit E.

I declare under penalty of perjury that the foregoing is true and correct.

Executed on February 23, 2018

Emily Kasparov

Gregory Reisert
Director
Market Data

New York Stock Exchange, Inc.
11 Wall Street
New York, NY 10005

tel: 212-656-5554
fax: 212-656-5922
greisert@nyse.com

NYSE

October 22, 2004

Ms. Elizabeth Cochrane
Bloomberg L.P.
499 Park Avenue
15th Floor
New York, NY 10022

Dear Elizabeth,

In accordance with the provisions of Paragraph 6 of the agreement between and the New York Stock Exchange, Inc., dated (the "Agreement"), this is to advise that the enclosed Exhibit A dated May 13, 2004, which was prepared by your organization, is acceptable as a replacement to the Exhibit A presently attached to the Agreement.

Specifically, the document cites Bloomberg's new Server API functionality in the Bloomberg display service. Please be reminded that the Exhibit A will need to be amended in the future if any non-trivial changes are made in the underlying sources, uses, services, entitlement procedures, etc.

There is no change in Bloomberg's monthly fees, but please be reminded that Bloomberg is required to report all display devices and data feeds entitled with Network A data.

Please let me know if you have any questions.

Regards,

Enclosure

cc: G.oGaylord - Milbank (with enclosure)o

EXHIBIT A

TO AGREEMENT FOR RECEIPT AND USE

OF MARKET DATA DATED JUNE 30, 1997 BETWEEN

THE NEW YORK STOCK EXCHANGE, INC.

AND

Bloomberg L.P.
(Customer's Name)

499 Park Avenue
(Address)

15th Floor
(Address)

New York, NY 10022
(City, State, Zip & Country)

Attention: Ms. Elizabeth Cochrane

Title: Exchange Liaison

Telephone No. (212) 605-2959

Facsimile No. (917) 369-4842

E-mail Address: ecochrane@bloomberg.net

Updated October 21, 2004

TABLE OF CONTENTS

1.0 TYPE(S) OF MARKET DATA TO BE RECEIVED
(Check the applicable boxes)

Real-Time	Delayed
Y Network A[1] Last Sale	Network A Last Sale
Y Network A[1] Bid-Asked	
Y NYSE Bond Last Sale	NYSE Bond Last Sale
Y NYSE Bond Bid-Asked	
Y OpenBook Data	
Y Liquidity Quote Data	

[1] NYSE-listed equity securities

[2] AMEX-listed equity securities, AMEX-listed bonds, and other equity securities that meet AMEX listing requirements.

2.0 SOURCE(S) OF MARKET DATA

Y Directly through a connection to SIAC systems

Indirectly through _____

3.0 SUMMARY OF USES OF MARKET DATA

Market Data will be used:	Yes	No
(a). As part of a real-time interrogation display or ticker display service.	Y	
If yes, will service be made available to persons other than the officers and employees of the Customer?	Y	
(b). For the purpose of compiling and disseminating stock tables to press associations or other publishers, or for the purpose of furnishing Market Data via magnetic tape.		N
(c). In operations control programs designed for monitoring and surveillance purposes, order/report price validation, limit order switching, order status verification and related activities, index calculation/dissemination, portfolio valuation services, software/system development, etc.	Y	
(d). In analysis programs leading to purchase/sales or other trading decisions, such as options analysis, arbitrage, and program trading.	Y	
(e). In market making programs which generate quotations or execute transactions in an automatic or semi-automatic manner.		N
(f). As part of a real-time automated telephone voice response service.	Y	
(g). To provide a data feed or other type of service where control over the use of Market Data and the reporting of uses and display devices cannot be directly maintained by the Customer.	Y*	
(h). As part of a delayed last-sale price interrogation, ticker display, or automated voice response service. (Note: bid-asked quotations may not be delayed.)	Y	
(i). As part of a closing price, after hours or historical pricing service.	Y	

Please explain any other planned use of Market Data not covered in items (a) through (i) above.

*e The only Bloomberg service that is included in this category is Bloomberg's Market Data Service ("MDS) (please see a description of MDS in 4.1(C)(7) below).e

4.0 DESCRIPTION OF SERVICE(S)

4.1 Services and Options

A.Interrogation Display Serviceso

1.o Market Data will be used as a part of a real-time interrogation display service to those Subscribers whoo subscribe to real-time data and whose terminals and/or logins are entitled to receive it. Last sale priceo information will be disseminated on a delayed basis to all other Bloomberg Subscribers. There are twoo different license types to the BLOOMBERG PROFESSIONAL service: Bloomberg Anywhere ando Bloomberg Terminal. Bloomberg Anywhere is a login based license for the BLOOMBERGo PROFESSIONAL service that allows the user to access the license from any internet connection usingo its unique user/login password (Secure ID device). For Bloomberg Anywhere licenses, any real-timeo entitlements are linked to the login of the user. Bloomberg Terminal is a device-based license for theo BLOOMBERG PROFESSIONAL service. For Bloomberg Terminal licenses, any real-timeo entitlements are linked to the primary work station. Bloomberg Traveler is a secondary access pointo (usually a portable laptop) that is linked to a Bloomberg Terminal license. For both Bloombergo Terminal and Bloomberg Anywhere licenses, a user can only be logged into one device at a time. As soon as the user logs into another device, they will automatically be logged off from where they wereo working previously. Access to Market Data shall be reported and paid for in a manner that is consistento with each Subscriber's own licenses (Bloomberg Anywhere and/or Bloomberg Terminal) to theo BLOOMBERG PROFESSIONAL service.o

Bloomberg's Applications Program Interface ("API") is a part of the BLOOMBERG PROFESSIONALo service. Users of the BLOOMBERG PROFESSIONAL service who subscribe to the API may integrateo Market Data received via the API into their proprietary applications and models. API is not a stand-alone service; it is available only to users of the BLOOMBERG PROFESSIONAL service whose deviceo or user ID is entitled to receive real-time data. Bloomberg does not provide its users with separateo software applications for manipulating data received via the API; rather, the API is itself a softwareo application that interacts with Bloomberg's database. Subscribers to Bloomberg's API service typicallyo use Microsoft Excel with the application to perform various calculations (on their own terminal) on theo data they receive via their Bloomberg Professional service. There is no additional fee for the API; theo API is included within the basic charge for a Bloomberg license. Bloomberg Subscribers who wish too subscribe to the API and to receive real-time Market Data via the API must sign the NYSE or AMEXo subscriber agreement as well as the Bloomberg Agreement and Bloomberg Datafeed Addendumo respecting use of Market Data. Paragraph 4 of the Bloomberg Datafeed Addendum requires APIo subscribers to comply with all restrictions on the use of exchange data required by providers of thoseo exchange data. The API is a computer application, not a server application. By agreement witho Bloomberg, NYSE and AMEX, each API user is generally prohibited from moving, copying,o broadcasting or otherwise routing real-time information (including the NYSE or AMEX Market Data) too any other display device.o

Server API. Server API subscribers are permitted to download Market Data from Bloomberg onto authorized servers and run server-based applications on the Market Data. From the authorized server, customers may make real-time data available internally to users whose device or user ID has been entitled by Bloomberg to receive such real-time data. Subscribers to Bloomberg's Server API service typically use the application for the following purposes: pricing engines, portfolio valuations, order management programs, risk compliance engines, and program trading applications. Bloomberg subscribers who wish to subscribe to Server API and to receive real-time Market Data via Server API must sign the NYSE or AMEX subscriber agreement as well as the Bloomberg Agreement and a specific contract governing subscribers' rights to use Market Data received through Server API (this specific contract will require Server API subscribers to comply with all restrictions on the use of exchange data required by providers of those exchange data). See Section 5.1 A for more information on entitlement control.

2.o Market Data will be used in operations control programs designed for monitoring and surveillance ofo

index calculation/dissemination, portfolio valuation services and system development. These services are used both internally and by the Subscribers. Bloomberg functions also include price/yield tables, equivalent yield calculations, hedge analysis, deliverable analysis, cost of carry analysis, sinking fund analysis, technical analysis, spread analysis, etc., of which Market Data plays a prominent role. Some of these apply only to particular types of securities: bonds, preferreds, or equities.

3.s Market Data will be used in analysis programs as the Bloomberg networks are widely used by traderss and analysts and Bloomberg excels in "analytics" and comparative programs as a key feature of thes BLOOMBERG PROFESSIONAL service.s

4.s Last sale price information will be provided on a 20 minute delayed basis to all interrogation devicess and/or logins that do not pay for real-time data as well as on the Bloomberg websites (www.bloomberg.com).s

5. Bloomberg also provides closing prices and all historical information for the data to all Bloombergs users. Bloomberg users typically desire historical data on a particular instrument, with the currents market simply being the latest data point in a time series. Graphical and tabular presentations are boths used to satisfy requests made once the security is defined. Since all data is stored at the host only, datas access on a physical level is from disc or memory in response to a request received sequentially ors concurrently.s

6.s OPENBOOK – Bloomberg is connected to and receives OpenBook Data through the NYSE Common Access Point (CAP) network. Bloomberg receives OpenBook Data and provides OpenBook services to its subscribers under the terms of the OpenBook Exhibit C, to the extent that such provisions do nots violate SEC rulings. Nothing in this Exhibit A waives Bloomberg's right to challenge the validity ofs any terms of OpenBook Exhibit C. Prior to giving access to Subscribers, Bloomberg will ensure thats the Subscriber has executed the Professional Subscriber Agreement. If the Subscriber has already executed the Professional Subscriber Agreement, Bloomberg will notify the subscriber electronically that the terms of the Professional Subscriber Agreement apply to the Subscriber's receipt and use of thes OpenBook Service. Bloomberg will report the names, addresses of Subscribers receiving OpenBook ands the number of devices and/or logins receiving OpenBook at least once a month. Bloomberg will makes OpenBook available via the BLOOMBERG PROFESSIONAL service (including API), MDS and Server API.s

7.s LIQUIDITY QUOTE – Bloomberg receives Liquidity Quote Data and provides Liquidity Quotes services to its subscribers under the terms of Liquidity Quote Exhibit C, to the extent that suchs provisions do not violate SEC rulings. Nothing in this Exhibit A waives Bloomberg's right to challenge the validity of any terms of Liquidity Quote Exhibit C. Prior to giving access to Subscribers, Bloomberg will ensure that the Subscriber has executed the Professional Subscriber Agreement. If thes Subscriber has already executed the Professional Subscriber Agreement, Bloomberg will notify thes subscriber electronically that the terms of the Professional Subscriber Agreement apply to thes Subscriber's receipt and use of the Liquidity Quote Service. Bloomberg will report the names, addresses of Subscribers receiving Liquidity Quote and the number of devices and/or logins receiving Liquidity Quote at least once a month.. Bloomberg will make Liquidity Quote available via the BLOOMBERG PROFESSIONAL service (including API), MDS and Server API.s

8.s AIRPHONE-Airplane passengers can dial a number from a GTE-Airphone built into the plane seats. Passengers may request any quote by entering a ticker symbol on the phone's number pad. The real-times last sale price and bid-asked prices will be read back to the passenger. This service is priced on thes metered-usage model without capping since the system can't identify each individual user. Ans audit/review of the quote meter must be performed by an external firm acceptable to NYSE within 90 days after the start of the service and annually thereafter.s

9.s Bloomberg users can access real-time or delayed quotes through their Phone, Palm, Win CE/Pocket PCs device, RIM/Blackberry Pager or Internet-ready phone with a user name and password. If theirs Bloomberg terminal and/or login are entitled for real-time prices, they will get real-time quotes.s

Otherwise, they will receive this information on a 20 minute delay. When the user logs into one of the devices listed above, they will automatically be logged off from their Bloomberg terminal. Screen prints are attached.

B.a Ticker Display Servicesa

1.a Network A sale price information will be retransmitted as part of real-time ticker display services overa Bloomberg Television (ABTV≅) which can be seen 24 hours a day, seven days a week on DirecTV - aa satellite service, on select cable systems and on certain UHF channels. BTV will redistribute 1) a real-time ticker display of Network A last sale prices and index values during NYSE regular market hoursa (currently 9:30 am to 4:00 pm ET) and 2) a ticker display of Network A closing prices outside ofa NYSE market hours.a

2.a BTV does not run a traditional ticker. Instead, on the lower third of the multi-screen format,a Bloomberg incorporates NYSE last sale prices in three categories which are contained in Bloomberg'sa non-traditional "ticker" (a crawl of information in graph form):a

1)aMost Active Issues (greatest volume)
2)a"Major Movers" - containing issues that have moved the marketa
3)a"Member Stocks" / S & P 500a

The names of the companies are written out and displayed with the stock symbol. When a company is trading higher than the opening price, it is displayed in green; when it is trading lower than the opening price, it is displayed in red; and when it is unchanged, it is displayed in white. The background is blue.

3. Certain Bloomberg content can also be seen on E! Entertainment Television each Monday-Friday morning from 5 a.m. - 8 a.m. local Eastern and Pacific time and each Saturday morning from 5:30 a.m. - 7 a.m. local Easter and Pacific time. The content contains various quotes from various exchanges - displayed alphabetically, in graphic "ticker" form - from the previous trading session. (A message willa be displayed intermittently on the screen indicating that the prices are not current).a

C.Other Uses of Market Dataa

1.a Bloomberg News Radio can be heard on AM 1130 WBBR in New York. Portions of the programminga can be heard on affiliated radio stations. Bloomberg News Radio may reference Network A anda Network B delayed last sale price information in its financial market reports.a

2.a Bloomberg Business News is a half-hour, pre-taped, full-screen program (no "ticker") which airs ona Public Television in the U.S. each weekday morning at 6 am. Closing prices from the previous tradinga session may be referenced.a

3.a Bloomberg will occasionally incorporate closing prices in its geographic indices. The indices - developed by Bloomberg - are comprised of stocks in a given region.a

4.a Bloomberg has an internet website (www.bloomberg.com) which displays delayed Network A anda Network B Market Data. There are other websites which link to and / or framea www.bloomberg.com , and use and inquiry-based system to access information through thea Bloomberg web site. A request can be entered for a specific quote, and an answer is provided througha the link and / or frame to www.bloomberg.com.a

5.a Bloomberg provides portfolio snap quotation during the trading day, closing prices delivered in bulka after market close and historical Market Data to Subscribers through its Data License service fora internal use in Subscribers' businesses. In addition, Data License subscribers may make limiteda redistribution of the delayed Market Data, closing quotes and historical Market Data.a

6.a Bloomberg allows its Subscribers to use a pager to access delayed and/or closing quotes.a

7.a MDS. Bloomberg's Market Data Service is a real-time market data broadcast feed service. MDS sendsa real-time Market Data from Bloomberg directly to the central servers of Bloomberg subscribers on aa continuous basis. Bloomberg will offer two data feed products: 1. Real time last sale prices anda bid/ask quotes and Exchange indices, 2. NYSE OpenBook and LiquidityQuote data.a

4.2 Equipment and Devices Used

A.Ticker Display Servicesa

Any person with a DirecTV satellite dish will get BTV as part of DirecTV's basic subscription package. Bloomberg Terminal subscribers, who have installed a satellite dish also have access to BTV on their terminal. The end user device to be used to display stock market information will be a standard NTSC consumer television set or other video monitor. The data will be delivered as an NTSC video signal requiring an NTSC television receiver to turn the baseband video signal into a television picture.

B.Interrogation Display Servicesa

The BLOOMBERG PROFESSIONAL service uses host & front end computers that receive real-time ticker information and feed it into the host computers. The CTS and CQS arrive and terminate onto 2 pairs of front end processors which are UNIX based. Data comes in on two diversified T1 circuits, one Teleport and one MFS, to two TSU's to two Bay ARN Routers. Functions available are those designed by and for Bloomberg L.P. use only, and include historical price/spread data, current levels and implied yield curve projections. The BLOOMBERG PROFESSIONAL service is generally a "retrieve on demand" data access system. However, there are "monitors" where the user can enter multiple securities for group display and automatic update. Most "requests" are "live" only at the time the request is made. However, monitors are refreshed continuously as done in typical "quotation" devices. Only "authorized" users receive real-time exchange data. Security is built into both the hardware and the software.

The BLOOMBERG PROFESSIONAL service is displayed on a PC or Workstation. The BLOOMBERG PROFESSIONAL service software allows the user to use one keyboard and screen to display and utilize Bloomberg data on their own PC. The BLOOMBERG PROFESSIONAL service is available on virtually all operating systems. In order for the Subscriber to get the BLOOMBERG PROFESSIONAL service software they must be running TCP/IP services. A Bloomberg router is provided at the point of presence at the Subscriber site to route data between the Bloomberg host computers and the client workstations.

(See attached for models of Bloomberg equipment)

4.3 Display Screens

See Attachment B.

4.4 Block Diagrams of Bloomberg system and Communications Network

See Attachment C.

4.5 Delayed Price Service

Bloomberg provides Delayed Last Sale Price Information:

(i)o Bloomberg will supply delayed last sale information to all Subscribers who do not apply for real-time data. The real-time data is physically delayed by Bloomberg and delayed users do not have accesso to delayed quotations (bid/ask data). All Subscribers have access to index information.o

(ii)o The delay is implemented at our computer site through our hardware/software. The Bloombergo Ticker Data Base is regularly updated by a dedicated subsystem called DELAYED-UPDATER. Any incoming value is added to a time sorted list dedicated to the delay period designated by each exchange.o The delays for these lists range from 10 minutes to 4 hours. Every 5 seconds the DELAY-UPDATERo checks the next tick on the list waiting to be released. When the current system time is greater than theo time of the tick + the delay time, it is processed, updating the data base, and sending it out to screenso which are monitoring the security. In the case of the NYSE data, delayed users do not see any of theo current day's last sale price data until 20 minutes have passed.o

(iii)oIn order to notify the users that they are receiving delayed data, the word "DELAYED" with theo time stamp of the last trade appears on the top of their screen. If the user does not have delayed data,o they will see the time of the last trade on their screen.o

(See attached example of the delayed data screen)

5.0 Data Entitlement - Control and Reportso

Bloomberg offers Subscribers the option to subscribe for real-time Network A or Network B data. If Subscribers do not subscribe to either Network A or Network B data, they will receive delayed quotes. Only Subscribers who request authorization for real-time data will have access to real-time.

For the products listed in Section 4.1(A)(1) of this Exhibit A, the procedure to provide real-time data is: ensure that every Subscriber has signed an approved contract for the NYSE or AMEX real-time data; then put a "Y" next to the market data symbol on the Bloomberg or non-Bloomberg license configuration/authorization screen. There is a unique subscription ID# for each Bloomberg and non-Bloomberg license. And, only select Bloomberg employees in the Contracts/Exchange Department are authorized to provide real-time data. The Exchange Department at Bloomberg determines who will be authorized for real-time data by making sure the appropriate agreements have been signed and NYSE and AMEX have approved this Subscriber to access real-time Market Data. Note: If a Subscriber receives delayed data, they will not get bid/ask data, only last sale pricing.

5.1 Control

A.oBLOOMBERG PROFESSIONAL service/API/Server APIo

(a)oAll data entitlements are centrally controlled. All application functions access the data through thiso centralized entitlement control. Each Bloomberg or non-Bloomberg license is identified by a uniqueo subscription ID number (SID). When a user or device (or server in the case of Server API) is authorizedo for real-time Market Data, the SID number must be authorized for the Market Data. Security is ensuredo through a high level of hardware and software design. In the case of Server API, the server will beo compatible with Bloomberg's central entitlement system, meaning the server enforces end-usero entitlements (performed by Bloomberg) and it ensures that only properly entitled users have access too real-time data. Bloomberg and the NYSE will each have the right to audit (physically or electronically)o each customer's use of the real-time Market Data.o

(b)o If the user's license is not authorized for real-time data, the delayed message will appear ono the screen.o

(c)e Only Subscribers who complete the appropriate contracts for Network A and Network B data wille be allowed to receive this data. To add or delete Market Data, the Subscriber will advise us of theire request and we can change their entitlement by placing a Y or N next to the indicator for Market Datae on our configuration/authorization screen for their Bloomberg or non-Bloomberg license. Bloomberge controls access to specific databases via a table matching licenses to access privileges. The samee software used to entitle a Subscriber once the proper contracts have been executed also generates thee reports provided to the exchanges and updates the Subscriber billing system. Therefore, the entitlemente for exchange services automatically updates Bloomberg's exchange reporting and billing systems.e

(d)e For auditing purposes, Bloomberg will keep the records of all Subscribers receiving the data on ae database file for at least three (3) years.e

B. MDS

The MDS service consists of three (3) distinct components - Producers, MDS and MDSPOP. Thee producer components process and normalize data streams. These riormalized streams are delivered to an MDS service component, which is configured to dispatch the data stream to specific MDSPOP(s). Producers and MDS run on Bloomberg premise-based systems and the MDSPOP component runs on client premise-based systems. MDSPOP connects to an MDS service to receive the real-time Market Data stream. Each MDS service is pre-configured for individual Subscribers and only receives those Market Data streams the target Subscriber is entitled to receive. Bloomberg personnel will control the real-time entitlements to each data stream received by a customer. The customer will control the individual users and/or devices that have access to this real-time data.

5.2 Fees & Reporting

Subscribers who are receiving real-time Market Data are reported to the New York and American Stock Exchanges via VARS.

See Exhibit C for fees and reporting in respect of Network A and Network B Last Sale Price Information redistributed on a pilot basis via DirecTV as part of a real-time ticker display service.

6.0 CUSTOMER AFFILIATES

N/A

7.0 SERVICE FACILITATORS

N/A

NEW YORK STOCK EXCHANGE LLC
AGREEMENT FOR RECEIPT AND USE OF
CONSOLIDATED NETWORK A DATA AND NYSE MARKET DATA

AGREEMENT made as of the ____ day of _____, 20___ between the executing person* ("Customer") and New York Stock Exchange LLC ("NYSE") acting on behalf of the Authorizing SROs* as Paragraph 12 describes.

RECITAL

The Authorizing SROs act (1) cooperatively pursuant to the "CTA Plan"[1] and the "CQ Plan"[2] (collectively, the "Plans") and on behalf of Other Data Disseminators*, and (2) individually on their own behalves, to facilitate the dissemination of the following categories of information:

Network A* Last Sale Price Information*
Network A Quotation Information*
NYSE Market Information*
Other Market Information*
Delayed Last Sale Price Information*

(This Agreement refers to such information collectively as "Market Data" and refers to each category of such information as a "Type of Market Data".) The Authorizing SROs authorize NYSE to enter into this Agreement to permit Customer to receive and redisseminate and/or otherwise use Market Data on a non-exclusive basis, and to perform or provide the Services*, (1) to the extent, for the purposes, and in the manner, specified in Exhibit A and (2) only in accordance with and subject to this Agreement. This Agreement incorporates Exhibit A.

TERMS AND CONDITIONS

Customer and the Authorizing SROs by NYSE acting on their behalf agree as follows:

PART I: MARKET DATA ACCESS AND USE

1. DEFINITIONS

(a) "Authorizing SRO(s)" mean each of the national securities exchanges, and the national securities association, that are signatories to either or both Plans. (This agreement refers to any such signatory as a "Participant".)

(b) "Customer Affiliate" means any person identified in Exhibit A (i) that receives one or more Services and (ii) as to which NYSE has made the "control relationship" determination that Paragraph 8(b) describes.

(c) "Data Recipient" means any person that is authorized in accordance with Paragraph 5 to receive one or more Types of Market Data from Customer acting pursuant to this Agreement.

(d) "Delayed Last Sale Price Information" means Last Sale Price Information that has been delayed for such period (the "Delay Period") as NYSE specifies on 60 days' written notice.

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* Whenever an asterisk follows the first use of a term, Paragraph 1 of this Agreement refers to or defines that term.

1 The CTA Plan was filed with the Securities and Exchange Commission (the "Commission") by certain of the Authorizing SROs pursuant to Rule 17A-15 (later amended and renumbered as Rule 11Aa3-2) under the Securities Exchange Act of 1934, as amended (the "1934 Act"). The Commission declared the CTA Plan effective as of May 17, 1974.

2 The CQ Plan was filed with the Commission by certain of the Authorizing SROs for the purpose of implementing Rule 11Ac1-1 under the 1934 Act. The Commission approved the CQ Plan on July 28, 1978.

(e) "Disseminating Party" means "CTA" and the "Operating Committee" (as defined in the CTA and CQ Plans, respectively), each member of CTA and the Operating Committee, each Authorizing SRO, each facilities manager for the dissemination of one or more Types of Market Data (e.g., the "Processor" as defined in the Plans), each Other Data Disseminator, each of their respective directors, governors, officers, employees and affiliates, and each director, officer and employee of each such affiliate.

(f) "Indirect Access" means access to one or more of the Authorizing SROs' Transmission Facilities through an intermediary and in a manner that (i) allows the access recipient to control the redistribution of Market Data or (ii) precludes the access provider (A) from exercising entitlement controls over the access recipient's use of Market Data in a manner that is satisfactory to NYSE, or (B) from otherwise fulfilling its reporting obligations under its agreement with the Authorizing SROs. (This Agreement provides terms and conditions pursuant to which Customer may provide and/or receive Indirect Access.)

(g) "Indirect Access Service" refers to Customer's provision of Market Data to a Data Recipient in compliance with Exhibit A and in a manner that NYSE, acting in its sole discretion, determines to constitute Indirect Access to the Transmission Facilities.

(h) "Interrogation Device" means any terminal or other device, including, without limitation, any computer, data processing equipment, communications equipment, cathode ray tube, monitor or audio voice response equipment, technically enabled to display, transmit or otherwise communicate, upon inquiry, Market Data in visual, audible or other comprehensible form.

(i) "Interrogation Service" means any service that permits retrieval of one or more Types of Market Data by means of an Interrogation Device.

(j) "Last Sale Price Information" means (i) the last sale prices reflecting completed transactions in Network A Eligible Securities or Non-Eligible Securities, (ii) the volume and other information related to those transactions, (iii) the identifier of the Authorizing SRO furnishing the prices, and (iv) other related information.

(k) "Market Minder" means any Service provided by a Vendor* by means of an Interrogation Device or other display which (i) permits monitoring, on a dynamic basis, of Last Sale Price Information and/or Quotation Information in respect of a particular security, and (ii) displays the most recent Last Sale Price Information or Quotation Information with respect to that security until such information has been superseded or supplemented by the display of new Last Sale Price Information reflecting the next reported transaction in that security and/or new Quotation Information reflecting updated bids or offers for that security.

(l) "Network A Eligible Security" has the meaning that the CTA Plan assigns to that term.

(m) "Network A Participant" means a Participant that makes available information relating to Network A Eligible Securities.

(n) "Non-Eligible Securities" include certain stocks, bonds, and other securities, that are not Eligible Securities and that are admitted to dealings on a Network A Participant that is a national securities exchange.

(o) "NYSE Market Information" includes Last Sale Price Information and Quotation Information relating to Non-Eligible Securities that are admitted to dealings on NYSE, index information that NYSE makes available and such other categories of information as NYSE or an Other Data Disseminator may make available and NYSE may from time to time identify.

(p) "Other Data Disseminators" means such:

(i) "other reporting parties" (as the CTA Plan defines that term); and

(ii) other non-Participant parties that make market information available over the Transmission Facilities, or that have a proprietary interest in the index information that a Participant makes available pursuant to the CTA Plan,

as NYSE may from time to time identify.

(q) "Other Market Information" includes such:

(i) Last Sale Price Information and Quotation Information relating to Non-Eligible Securities that are admitted to dealings on a Network A Participant other than NYSE;

(ii) index information that a Network A Participant other than NYSE makes available pursuant to the CTA Plan; and

(iii) other categories of information as a Network A Participant other than NYSE, or an Other Data Disseminator, may make available,

as NYSE may from time to time identify.

(r) "Person" means a natural person or proprietorship, or a corporation, partnership or other organization.

(s) "Quotation Information" means (i) all bids, offers, quotation sizes, aggregate quotation sizes, identities of brokers or dealers making bids or offers and other
information in respect of Network A Eligible Securities and Non-Eligible Securities; (ii) the identifier of the Authorizing SRO furnishing each bid or offer; (iii) each "consolidated BBO" (as the CQ Plan defines that term) in the foregoing information and any identifier associated therewith; (iv) each "ITS/CAES BBO" (as the CQ Plan defines that term) and any identifier associated therewith; and (v) related information.

(t) "Services" include both Subscriber Services* and Indirect Access Services.

(u) "Service Facilitator" means any person other than a "common carrier" (as defined in the Federal Communications Act) (i) that assists Customer as described and in the manner specified in Exhibit A in any aspect of Customer's receipt, dissemination or other use of Market Data (including any facilities manager, equipment operator, signal broadcaster or installation contractor) and (ii) as to which NYSE has made the "Service Facilitator" determination that Paragraph 8(a) describes.

(v) "Subscriber" means a recipient of one or more types of Market Data through a Ticker Display*, Interrogation Service, Market Minder Service, or other Market Data Service from a Vendor, another data redisseminator or the Authorizing SROs.

(w) "Subscriber Service" refers to any Interrogation, Ticker Display, Market Minder or other service involving the use of Market Data (other than an Indirect Access Service) that Customer may create and provide to its own officers, partners and employees and/or to other Data Recipients, all as Exhibit A describes.

(x) "Ticker Display" means a continuous moving display of Last Sale Price Information (other than a Market Minder) provided on an interrogation or other display device.

(y) "Transmission Facilities" include the data transmission facilities by which the Authorizing SROs make Market Data available pursuant to the Plans and such other data transmission facilities by which one or more Authorizing SROs may make Market Data available as NYSE may from time to time identify.

(z) "Vendor" means any person engaged in the business of providing Subscriber Services and/or Indirect Access Services to brokers, dealers, investors or other persons.

2. PROPRIETARY INTERESTS - Customer understands and acknowledges, and shall assure that each Customer Affiliate and Service Facilitator (if any) understands and acknowledges, that each Authorizing SRO and Other Data Disseminator has a proprietary interest in the Market Data that originates on or derives from its markets or in its index information.

3. CUSTOMER ACCESS TO MARKET DATA

(a) DIRECT ACCESS - Customer may receive one or more Types of Market Data through direct access to (i.e., through direct computer-to-computer interface(s) with) the Transmission Facilities.

(b) INDIRECT ACCESS - Customer may receive one or more Types of Market Data through Indirect Access to the Transmission Facilities through an intermediary. However, Customer may do so only after NYSE notifies the intermediary in writing of NYSE's approval.

(c) ACCESS SPECIFICATIONS AND EXPENSES - Customer may receive one or more Types of Market Data as Paragraphs 3(a) and 3(b) provide solely as and to the extent described, and in the manner specified, in Exhibit A. Where Customer adds, deletes or substitutes either any intermediary or any means of access (i.e., either direct access or Indirect Access), NYSE must first approve the addition, deletion or substitution and any related changes as Paragraph 6 describes. Except as NYSE may explicitly undertake, no Authorizing SRO is responsible for any cost or expense, or for providing any circuit, necessary for Customer to receive or transmit Market Data.

4. SRO MODIFICATIONS - Upon as much notice as is reasonably practicable under the circumstances, the Authorizing SROs, without liability to Customer or to any other person, (a) may discontinue disseminating any or all Types of Market Data either at all or in any particular manner, (b) may change or eliminate any circuit(s) carrying any or all Types of Market Data, (c) may discontinue converting any or all Types of Market Data into electrical signal form and/or (d) may change the speed or any other characteristic of the electrical signals representing any or all Types of Market Data.

5. CUSTOMER USE OF MARKET DATA

(a) PERMITTED USE OF DATA - Customer may receive and use a Type of Market Data pursuant to this Agreement solely as and to the extent described, and in the manner specified, in Exhibit A. Except as this Paragraph 5 describes, any redissemination or other use of that Type of Market Data is prohibited. Where NYSE has authorized Customer to provide one or more, but not all, Types of Market Data to a Data Recipient, Customer shall inhibit the provision of the unauthorized Type(s) of Market Data in the manner Exhibit A describes.

(b) SUBSCRIBER SERVICES - Customer may provide one or more Type(s) of Market Data to a Subscriber through a Subscriber Service solely as described and in the manner specified in Exhibit A and only pursuant to such one or more of the following requirements as NYSE specifies:

(i) if NYSE has notified Customer (by such means as NYSE may specify) that the person has entered into an appropriate agreement with NYSE that authorizes the person to receive and use the Type(s) of Market Data; or

(ii) while the person is a party to an effective agreement with Customer that includes terms and conditions in the form attached to this Agreement as Exhibit B (if any); or

(iii) Customer's compliance with such alternative or additional Subscriber Service requirements as NYSE may from time to time approve in writing.

Where Customer provides a Subscriber Service pursuant to clause (ii) or (iii) of this Paragraph 5(b), Customer shall assure that it has the ability to modify its agreements with Subscribers, and any alternative subscriber requirements, as NYSE may from time to time specify. Customer shall effect any such modification promptly, except that Customer may continue to provide a Subscriber Service to any existing Subscriber without effecting the modification for 90 days from that receipt. Customer shall discontinue its provision thereafter if the Subscriber has not agreed to the modification(s). Customer shall promptly describe to NYSE any breach by a Subscriber of the NYSE-prescribed portions of Customer's agreements with the Subscriber, or of NYSE-prescribed alternative subscriber requirements, about which it may learn. Customer shall not in any way amend, supplement, or otherwise modify NYSE-prescribed provisions or requirements or vitiate those provisions or requirements by any collateral agreement or understanding, except as NYSE may otherwise agree in writing.

(c) INDIRECT ACCESS SERVICES - NYSE will determine in its sole discretion whether the manner in which Customer intends to provide one or more Types of Market Data to other persons constitutes an Indirect Access Service. Customer may provide an Indirect Access Service solely as described and in the manner specified in Exhibit A. Customer shall not provide any person with an Indirect Access Service unless NYSE has notified Customer that the person has entered into an appropriate agreement with NYSE authorizing the Indirect Access. Customer shall promptly notify NYSE whenever any person commences or ceases to receive an Indirect Access Service.

(d) DELAYED LAST SALE PRICE INFORMATION SERVICES - If Customer elects to provide Delayed Last Sale Price Information Services (as described, and in the manner specified, in Exhibit A), Customer shall:

(i) comply with any contract and fee collection requirements that NYSE may specify from time to time as to persons receiving Delayed Last Sale Price Information;

(ii) assure that each display of Delayed Last Sale Price Information conspicuously exhibits a statement indicating that the information has been delayed and the duration of the delay; and

(iii) assure that any advertisement, sales literature or other material promoting any Delayed Last Sale Price Information Service, and any agreement for that Service, includes such a statement in a conspicuous manner.

Customer shall assure that the statement is effected in the form and manner Exhibit A describes and in a manner that makes it readily visible to any person viewing the display or promotional material. In addition, Customer shall comply, and shall use its best efforts to cause Subscribers to comply, with any other reasonable regulation that NYSE may adopt from time to time to assure that viewers of Delayed Last Sale Price Information are not misled as to its nature.

(e) SECURITIES PROFESSIONAL EXCEPTION - Insofar as (i) NYSE determines that Customer is a securities professional (such as a registered broker-dealer or investment adviser) and (ii) Exhibit A does not otherwise permit Customer to provide Market Data to a particular person or branch office, Customer, solely in the regular course of its securities business, may occasionally furnish limited amounts of Market Data to its customers and clients and to its branch offices. Customer may do so notwithstanding anything to the contrary in this Paragraph 5 and subject to such additional limitations as NYSE may specify in writing. Customer may so furnish Market Data to its customers and clients who are not on Customer's premises solely (i) in written advertisements, educational material, sales literature or similar written communications or (ii) during telephone conversations not entailing the use of computerized voice synthesization, other electronic communication or similar technology. Customer may so furnish Market Data to its branch offices solely (i) as the preceding sentence permits or (ii) through manual entry over its communications network. Customer shall not permit any customer or client to take physical possession of any component of the equipment and software used for or in connection with any Service, except as Exhibit A may otherwise provide.

(f) PERMITTED CONNECTIONS OF TICKER DISPLAY DEVICES - Customer may connect approved Ticker Display devices to the Transmission Facilities solely (i) for persons, and at locations, that NYSE has approved for that purpose and (ii) as described and in the manner specified in Exhibit A. Customer shall assure that any Ticker Display device complies with all NYSE requirements for content, format and timeliness.

6. SERVICE AND SECURITY VARIATIONS AND SUPPLEMENTS - Customer shall submit for NYSE's approval a description of any proposed, non-trivial variation or supplement to or deletion from any receipt, redissemination, other use or display of Market Data or to any Market Data security safeguard. Customer shall not implement any such variation, supplement or deletion unless NYSE approves its description in writing, whereupon Exhibit A shall incorporate the description. Customer understands that NYSE may not approve a proposed variation, supplement or deletion and that it acts at its own risk if any significant effort is expended in development prior to NYSE's approval. Customer further understands that an approved variation or supplement may be subject to one or more additional or substituted charges payable pursuant to Paragraph 10.

PART II: SECURITY

7. TRANSMISSION AND EQUIPMENT SECURITY

(a) PROTECTION OF TRANSMISSIONS AND EQUIPMENT - Customer shall assure that Service-related data processing, transmission and communications equipment and software are arranged and protected so that, so far as reasonably possible, no person can have unauthorized access to Market Data.

(b) SECURITY BREACHES AND REVISION - Customer shall assure that the security safeguards that Exhibit A describes are enforced. If, in its sole discretion, NYSE determines that one or more persons have unauthorized access to Market Data, Customer shall, in accordance with Paragraph 6, take all steps necessary to alter the security safeguards and the manner of its receipt or transmission of Market Data so as to preclude the access. Customer shall provide NYSE with such evidence as NYSE may request regarding the adequacy of those steps. If NYSE determines those steps to be inadequate, Customer shall promptly comply with any writing instructing Customer to discontinue transmitting Market Data by the inadequately-safeguarded means.

(c) INSPECTION - Customer shall assure that any person authorized in writing by NYSE has access, at any reasonable time, to any premises of Customer, any Customer Affiliate, any Service Facilitator or any person to whom Customer provides Market Data. In the presence of officials in charge of the premises, the authorized person may (i) examine any component of equipment and software used for the purposes of this Agreement and located at the premises and (ii) observe the use of Market Data and all operations located or conducted at the premises, but solely to monitor compliance with this Agreement. This Paragraph 7(c) does not require Customer to disclose any proprietary information other than as Exhibit A discloses.

8. SERVICE FACILITATORS AND CUSTOMER AFFILIATES

(a) SERVICE FACILITATORS - NYSE will determine in its sole discretion whether any person assisting Customer for the purposes of this Agreement is a "Service Facilitator" and, therefore, is excused from entering into a separate agreement with NYSE. NYSE will base its determination upon such criteria as (i) the nature and quantity of the Service-related functions that the person performs and (ii) the extent to which Customer owns, or is under common ownership with, the person. Customer shall not permit any person other than a common carrier to assist Customer in providing or performing any aspect of the Service unless (i) NYSE has determined the person to be a "Service Facilitator" and the person is acting in accordance with, and in the manner specified, in Exhibit A or (ii) the person has entered into an agreement with NYSE governing the assistance.

(b) CUSTOMER AFFILIATES - NYSE will determine in its sole discretion whether any "control relationship" between Customer and any person qualifies the person as a "Customer Affiliate" for the purposes of this Agreement. Subject to the charges to which Paragraph 10(a) refers and to the other applicable provisions of this Agreement, Customer may provide any Subscriber Service to partners or officers and employees of Customer Affiliates. For that purpose, any such partner, officer or employee is deemed "a partner, officer or employee of Customer".

(c) CUSTOMER'S GUARANTEE - Customer unconditionally guarantees that each Service Facilitator and Customer Affiliate (i) will fully comply with the provisions of this Agreement that protect against unauthorized access to Market Data, that relate to installation, maintenance and inspection, or that otherwise apply in respect of the Service Facilitator or Customer Affiliate to the same extent as if it had entered into this Agreement and (ii) will not cause Customer to fail to comply with this Agreement. Customer shall inform each Service Facilitator and Customer Affiliate of all relevant provisions of this Agreement and shall promptly provide NYSE with a full description whenever it learns that a Service Facilitator or Customer Affiliate has failed to so comply or has caused Customer to fail to comply.

(d) CURE AND DISCONTINUANCE OF ACCESS - Whenever NYSE notifies Customer in writing that it has determined that a Service Facilitator or Customer Affiliate has failed to act in accordance with, or in the manner specified in, this Agreement, Customer shall promptly cure the breach or rectify the failure. If NYSE so instructs, Customer shall discontinue giving Market Data access to the partners, officers and employees of the Customer Affiliate, or using the Service Facilitator, under this Agreement.

9. COOPERATION AS TO UNAUTHORIZED RECEIPT

(a) PREVENTION AND DISCOVERY - Customer shall use best efforts to assure that no "Unauthorized Recipient" obtains Market Data from Customer or from equipment and software that Customer uses for the Services. As to any Type of Market Data, an "Unauthorized Recipient" is any person other than a Data Recipient, Customer Affiliate or Service Facilitator in its authorized access to that Type of Market Data. If an Unauthorized Recipient does so obtain Market Data, Customer shall use its best efforts to ascertain the source and manner of acquisition, shall fully and promptly brief NYSE, and shall promptly pay the applicable amounts described in Paragraph 10. Customer shall otherwise cooperate and assist in any investigation relating to any unauthorized receipt of Market Data made available pursuant to this Agreement.

(b) CUSTOMER COOPERATION AND ASSIGNMENT - Any one or more Authorizing SROs may sue or otherwise proceed against any Unauthorized Recipient, including suing or proceeding to prevent the Unauthorized Recipient from obtaining, or from using, any Type of Market Data that it or they make available. If any one or more Authorizing SROs institute any suit or other proceeding against the Unauthorized Recipient, Customer, unless made a defendant in the suit or proceeding,

(i) shall assure that it and Customer Affiliates and Service Facilitators (if any) cooperate with and assist the Authorizing SRO(s) in the suit or proceeding in all reasonable respects, provided that the Authorizing SRO(s) reimburse Customer for reasonable out-of-pocket expenses; and

(ii) if the one or more Authorizing SROs so elect in writing, shall assure that all of Customer's, Customer Affiliates' and Service Facilitators' right, title and interest in the suit or proceeding and in its subject matter will be assigned to the Authorizing SRO(s).

If the one or more Authorizing SROs elect the assignment, it or they shall indemnify, hold harmless and defend Customer against any cost, liability or expense (including reasonable attorneys' fees) that arises out of or results from the suit or proceeding.

(c) THIRD PARTY SUITS AGAINST CUSTOMER - If any person brings a suit or other proceeding to enjoin Customer, any Customer Affiliate or any Service Facilitator from refusing to furnish any Type of Market Data to any Unauthorized Recipient, Customer shall promptly notify NYSE. The Authorizing SRO(s) that make that Type of Market Data available may intervene in the suit or proceeding in the name of Customer, the Customer Affiliate or the Service Facilitator, as appropriate, and, through counsel chosen by the intervening Authorizing SRO(s), may assume the defense of the action on behalf of Customer, the Customer Affiliate or the Service Facilitator. Intervening Authorizing SROs shall jointly and severally indemnify, hold harmless and defend Customer against any loss, liability or expense (including reasonable attorneys' fees) that arises out of or results from the suit or proceeding.

(d) WITHDRAWAL OF RECIPIENT APPROVAL - If NYSE notifies Customer in writing that the Authorizing SRO(s) have terminated the right of any authorized recipient to receive any Type of Market Data, Customer (i) shall cease furnishing that Type of Market Data to the person within five business days of the notice and (ii) shall, within ten business days, confirm the cessation, and inform NYSE of the cessation date, by notice.

(e) CUSTOMER INDEMNIFIED - If Customer refuses to furnish, or to continue to furnish, to any person any Type of Market Data solely because NYSE has notified Customer in writing that the Authorizing SRO(s) do not authorize, or no longer authorize, the person to receive that Type of Market Data, the Authorizing SRO(s) shall jointly and severally indemnify, hold harmless and defend Customer from and against (i) any suit or other proceeding that arises from the refusal and (ii) any liability, loss, cost, damage or expense (including reasonable attorneys' fees) that Customer incurs as a result of the suit or proceeding. The Authorizing SRO(s) shall have sole control of the defense of any such suit or proceeding and of all negotiations for its settlement or compromise. Customer's prompt notice to NYSE of any such suit or proceeding is a condition to Customer's rights under this Paragraph 9(e). Those rights do not apply when Customer ceases to furnish Market Data to a person, or in a manner, not authorized by NYSE.

PART III: PAYMENTS, RECORDS AND REPORTS

10. PAYMENTS

(a) GENERAL CHARGES - Customer shall pay NYSE in United States dollars the applicable charge(s) from time to time in effect. Customer shall pay any amounts due in accordance with such procedures, and within such time parameters, as NYSE may specify from time to time and shall pay any applicable tax (excluding any income tax imposed on any Authorizing SRO in respect of any such amount). The Authorizing SROs will provide Customer with 30 days' notice of any changes in the charge(s) payable by Customer.

(b) CHARGES FOR UNAUTHORIZED INSTALLATIONS - If NYSE notifies Customer that it has determined in its sole discretion that Customer has made any unauthorized or unreported provision or use of Market Data made available to Customer under this Agreement (including the improper receipt described in Paragraph 10(d)), Customer shall pay (i) any applicable charge(s) that would have been imposed on Customer, a Data Recipient or an Unauthorized Recipient in respect of a provision or use, whether by Customer or by a Data Recipient or Unauthorized Recipient, had it been authorized or reported and (ii) an administrative fee equal to ten percent of those charges. Customer's payment obligations apply regardless of whether a person responsible for an unauthorized provision or use received the Market Data from Customer directly or from a person in the chain of dissemination that began with an unauthorized provision or use by Customer. The Authorizing SROs reserve the right to recover punitive damages for any deliberate breach of good faith and the like.

(c) INTEREST ON UNPAID AMOUNTS - If Customer has not paid any amounts payable pursuant to Paragraph 10(a) within the applicable time parameters, Customer shall pay interest on the unpaid amount. That interest begins to accrue on the 31st day after the payment's due date. Customer shall also pay interest in respect of amounts payable pursuant to Paragraph 10(b)(i). That interest begins to accrue as of the date on which the amount would have been payable had the provision or use of Market Data been properly authorized or reported. The interest payable under this Paragraph 10(c) will equal the lesser of (i) one and one-half percent per month and (ii) the maximum rate of interest that applicable law permits.

(d) SUBROGATION AND RETURNS - If Customer has paid all amounts due in respect of any Unauthorized Recipient (i) Customer becomes subrogated to all rights of the Authorizing SROs to recover amounts from the Unauthorized Recipient and (ii) NYSE will return to Customer any amounts subsequently received from the Unauthorized Recipient, less any associated collection and administrative expenses.

11. RECORDS AND REPORTS

(a) RECORDS MAINTENANCE AND PRESERVATION - Customer shall maintain such billing records, reports, information, subscriber agreements and other documents as NYSE may reasonably require from time to time to permit the Authorizing SROs to bill for applicable charges and to monitor compliance with this Agreement. Customer shall have the ability to retrieve each such item as it applies to any NYSE-specified criterion, such as a particular Service, Data Recipient, location or account number. Customer shall preserve each such item for not less than three years.

(b) ACCESS TO RECORDS - During the term of this Agreement and for three years thereafter, Customer shall assure that any authorized representative of NYSE is able (i) to examine Customer's books and records relating to the Services (including, among other items, the items Customer must maintain pursuant to Paragraph 11(a)), (ii) to copy those books and records and extract information from them and (iii) to otherwise perform any auditing functions necessary to verify Customer's compliance with this Agreement.

(c) REPORTING - NYSE may from time to time require Customer to furnish or report all or some of the items that Paragraph 11(a) requires Customer to maintain. Customer understands that NYSE may require Customer (i) to so furnish or report some or all of those items upon occurrences of specified events and/or on a periodic basis and (ii) to provide detailed summaries. At the request of NYSE, Customer shall have audited, by an independent certified public accountant satisfactory to NYSE, a list of all Data Recipients and any other reasonably requested list, report or information relating to Customer's redissemination or other use of Market Data. Customer shall comply with this Paragraph 11(c) by such methods, in such format and within such time parameters as NYSE may reasonably specify.

(d) RELIABILITY OF CUSTOMER'S RECORDS - Customer shall use its best efforts (including the insertion of appropriate terms in Customer's agreements with Data Recipients, Customer Affiliates and Service Facilitators) to assure that Customer is supplied with timely, complete and accurate information so that Customer, in complying with this Paragraph 11, maintains and supplies NYSE with timely, complete and accurate information. Those efforts shall include the use of such entitlement controls as Exhibit A may describe. NYSE recognizes that certain information is beyond Customer's control (such as information identifying Service-related equipment and software that Customer has not supplied, installed or made available). Subject to the best efforts requirement of this Paragraph 11(d), Customer's obligations under this Paragraph 11 apply to information of this type only to the extent Customer has received it.

PART IV: PROVISIONS OF GENERAL APPLICABILITY

12. NYSE CAPACITIES - In respect of Network A Last Sale Price Information and Network A Quotation Information, NYSE acts, and receives payments, information and notices, under this Agreement in the one or more capacities for which the Plans provide. In respect of NYSE Market Information, NYSE so acts or receives solely on its own behalf. In respect of Other Market Information, NYSE so acts or receives on behalf of the Network A Participants or Other Data Disseminators that make that information available.

13. PROHIBITED USE AND PATENT INDEMNIFICATION - Customer shall indemnify, hold harmless and defend each Disseminating Party from and against any suit or other proceeding at law or in equity, claim, liability, loss, cost, damage, or expense (including reasonable attorneys' fees) incurred by or threatened against the Disseminating Parties that arises out of or relates to

(a) any use of Market Data other than as this Agreement provides by Customer, a Customer Affiliate or a Service Facilitator, or

(b) any claim that either any component of the equipment and software used for the purposes of this Agreement (excluding any equipment and software Customer or Service Facilitators (if any) do not supply, install or make available to, or operate or maintain for, a Data Recipient) or the manner of the use made of the component or of Market Data provided pursuant to this Agreement infringes any United States or foreign patent or copyright or violates any other property right.

NYSE's provision to Customer of prompt written notice of the suit or proceeding is a condition to Customer's obligations under the preceding sentence. Customer shall have sole control of the defense of the suit or proceeding and all negotiations for its settlement or compromise.

14. DATA NOT GUARANTEED - The Disseminating Parties do not guarantee the timeliness, sequence, accuracy or completeness of Market Data made available, or of other market information or messages disseminated, by any Disseminating Party. No Disseminating Party will be liable in any way to Customer or to any other person for

(a) any inaccuracy, error or delay in, or omission of, (i) any such data, information or message, or (ii) the transmission or delivery of any such data, information or message, or

(b) any loss or damage arising from or occasioned by (i) any such inaccuracy, error, delay or omission, (ii) non-performance, or (iii) interruption in any such data, information or message,

due either to any negligent act or omission by any Disseminating Party or to any "Force Majeure" (i.e., any flood, extraordinary weather conditions, earthquake or other act of God, fire, war, insurrection, riot, labor dispute, accident, action of government, communications or power failure, or equipment or software malfunction) or any other cause beyond the reasonable control of any Disseminating Party.

15. NO SPONSORSHIP - Customer shall assure that neither Customer nor any Customer Affiliate or Service Facilitator represents, either directly or indirectly, that any Disseminating Party sponsors or endorses in any manner Customer, any other person, any particular use of Market Data or any equipment and software.

16. ARBITRATION - The parties shall settle any controversy or claim arising out of or relating to this Agreement, or to its breach or alleged breach, by arbitration in New York, New York under the Commercial Arbitration Rules of the American Arbitration Association. The arbitrator(s) may issue injunctive and other equitable relief, but may not modify this Agreement. Either party may enter in any court having jurisdiction judgment upon any award that the arbitrator(s) render. For the purposes of so entering any such judgment, each party submits to the jurisdiction of the courts of the State of New York. Nothing in this Paragraph 16 derogates any right Customer, any Authorizing SRO, or any other person may have to appeal to the Securities and Exchange Commission any action taken or any failure to act under the 1934 Act, or any of its rules, or to pursue any claim relating to the unauthorized publication or use of communications under the Communications Act of 1934, as amended, at any time, whether before or after the commencement of any arbitration proceeding.

17. EFFECTIVE DATE AND TERMINATION - Upon its execution by each party, this Agreement becomes effective as of the date first above written. Upon becoming effective, this Agreement supersedes each previous agreement between the parties relating to any receipt or use of Market Data that Exhibit A describes. This Agreement continues in effect until terminated as this Paragraph 17 provides. Subject to Paragraph 4, either Customer or NYSE may terminate this Agreement as to one or more Types of Market Data on 30 days' written notice to the other. In addition, this Agreement terminates upon NYSE's withdrawal from the Plans. NYSE shall give Customer 30 days' written notice of any such withdrawal. Insofar as Customer receives access to Transmission Facilities by means of one or more interfaces with one or more intermediaries, this Agreement terminates as to that access immediately upon written notice from NYSE that it no longer approves the interface(s). Paragraphs 8(c), 9, 10, 11, 13, 14 and 16 survive the termination of this Agreement in general or as to any Type(s) of Market Data. They also survive any Network A Participant's withdrawal from either Plan as those paragraphs apply to any matter arising prior to the withdrawal.

18. PROVISION OF SERVICE TO NYSE - Upon request by NYSE, Customer shall provide to NYSE, free of charge, one subscription to such one or more of Customer's Services as the request may identify, together with the equipment necessary to receive, display or communicate the Service(s). NYSE shall use such subscription solely for purposes of demonstrating the Service(s) and monitoring Customer's compliance with this Agreement.

19. MISCELLANEOUS

(a) ENTIRE AGREEMENT - Exhibit C, if any, contains additional provisions applicable to any non-standard aspects of Customer's receipt and use of Market Data. This Agreement incorporates Exhibit C. This writing, Exhibit A, Exhibit B and Exhibit C contain the entire agreement between the parties in respect of their subject matter. No oral or written collateral representation, agreement or understanding exists except as this Agreement may otherwise provide.

(b) MODIFICATIONS - In keeping with Paragraph 19(g), NYSE may, by written notice to Customer, modify this Agreement as necessary to cause this Agreement to comply, or to be consistent, with any modification to or replacement of the 1934 Act, the rules under the 1934 Act, or either Plan. Subject to Paragraphs 5(d) and 6, neither party may otherwise modify this Agreement except pursuant to a writing signed by or on behalf of each of them.

(c) ASSIGNMENTS - Customer may not assign this Agreement, in whole or in part, without the written consent of NYSE.

(d) INDIRECT ACTS PROHIBITED - In prohibiting Customer from doing any act, this Agreement also prohibits Customer from doing the act indirectly (e.g., by causing or permitting another person to do the act).

(e) REASONABLENESS STANDARD - This Agreement requires or authorizes NYSE and other Authorizing SROs to provide notices and approvals, to make requests and determinations, to impose and specify requirements, and otherwise to act, in respect of a variety of matters. The Authorizing SROs shall perform those acts in a reasonable manner.

(f) GOVERNING LAW - The laws of the State of New York govern this Agreement. It shall be interpreted in accordance with those laws.

(g) ACT AND PLAN APPLICABILITY - This Agreement and the Services are subject at all times to the 1934 Act, the rules under the 1934 Act and the Plans.

20. NOTICES - Customer shall furnish any notice, description, report or other communication relating to this Agreement in writing or by such other means (e.g., by electronic mail) as NYSE may specify. The address of each party for all written communications relating to this Agreement is:

Customer (as set forth in Exhibit A)

CQ Plan Network A Participants and
CTA Plan Network A Participants
c/o New York Stock Exchange LLC (as below)

New York Stock Exchange LLC
11 Wall Street
New York, New York 10005
Attention: Director of Market Data

Customer may change its address by notice to NYSE. NYSE may change any other party's address by notice to Customer.

IN WITNESS WHEREOF, the parties have caused this Agreement to be executed as of the date first above written.

CUSTOMER

_____
(Name of Customer)

By:_____
Name:
Title:
Date:

NEW YORK STOCK EXCHANGE LLC

acting in the capacities
Paragraph 12 describes

By:_____
Name:
Title:
Date:

Vendor Account Number | | NYSE Account Number | |

AGREEMENT FOR RECEIPT OF CONSOLIDATED NETWORK A DATA AND NYSE MARKET DATA

This Agreement permits the undersigned "Subscriber" to arrange with authorized vendors or with the New York Stock Exchange, LLC. ("NYSE"), as appropriate to receive any one or more Types of Market Data* and to use that Market Data for interrogation* display, tape* display or other purposes not entailing retransmission. This Agreement governs whichever Type(s) of Market Data, means of receipt and use(s) Subscriber receives, arranges and makes. Subscriber and NYSE agree to all terms and conditions of this Agreement.

Subscriber Name		Phone #	
Subscriber Address			
City	State or Province	Zip	Country
Name and Title of Individual Signing:	Name	Title	
Billing address (if different than above) :			
Taxpayer ID/Social Security No/VAT # :		Type of Business:	
FINRA/CRD Number:			

SUBSCRIBER

By: _____

Dated: _____

NEW YORK STOCK EXCHANGE, LLC.
On behalf of the CTA Plan Participants (in respect of CTA Network A last sale information) and the CQ Plan Participants (in respect of CQ Network A quotation information) and on its own behalf solely (in respect of NYSE Securities Information*)

By: _____

Dated: _____

PART 1: PROVISIONS OF GENERAL APPLICABILITY

1. DEFINITIONS

(a) "Authorizing SRO" means each of the authorizing self-regulatory organizations (i.e., each CTA Plan Participant, each CQ Plan Participant and NYSE).

(b) "Interrogation," as used to differentiate devices and displays, refers to (i) displaying Market Data for a security in response to Subscriber's specific inquiries or (ii) displaying changes in Market Data as they occur for a limited number of securities specified by Subscriber.

(c) "Market Data" means (i) CTA Network A last sale information, (ii) CQ Network A quotation information, (iii) NYSE bond last sale information, (iv) NYSE bond quotation information, (v) NYSE index information and (vi) each other category of market information made available by NYSE as NYSE may designate from time to time. Each of the above categories includes all information that derives from the category's information. Stock and bond last sale prices and information deriving from those prices cease to be "Market Data" 15 minutes after the Authorizing SRO(s) make the prices available over their low speed data transmission facilities. NYSE may alter such period from time to time on 60 days' written notice to Subscriber.

(d) "NYSE Securities Information" means the Types of Market Data enumerated or referred to in clauses (iii)- (iv) of Paragraph 1(c).

(e) "Person" includes any natural person or proprietorship or any corporation, partnership or other organization.

*Whenever an asterisk follows the first use of a term, Paragraph 1 defines the term

(f) "Processor" means the processor under the CTA Plan and CQ Plan.

(g) "Subscriber Device" means a component of Subscriber Equipment* that provides an interrogation display,a tape display or both displays.

(h) "Subscriber Equipment" means any display device, computer, software, wires, transmission facility or other equipment by which Subscriber receives, displays or otherwise uses Market Data.

(i) "Tape," as used to differentiate devices and displays, refers to displaying on a current and continuous basis (i) last sale prices as made available over the data transmission facilities of one or more Authorizing SROs or as retransmitted by an authorized vendor or (ii) a subset of the prices so made available or retransmitted that Subscriber selects on the basis of, for example, transaction size or security.

(j) "Type of Market Data" means the Market Data in any of the categories enumerated or referred to in Paragraph 1(c).

2. PROPRIETARY NATURE OF DATA-Each Authorizing SRO asserts a proprietary interest in its "Relevant Market Data" (i.e., the Market Data that it furnishes to the Processor and in case of NYSE, that it otherwise makes available).

3. NYSE CAPACITY; ENFORCEMENT-Whenever this Agreement requires "NYSE" to take any action, or to receive any payment, information or notice, as to any Type of Market Data, NYSE acts on behalf of the Authorizing SRO(s) for the Type of Market Data. Any Authorizing SRO may enforce this Agreement as to its Relevant Market Data, by legal proceeding or otherwise, against Subscriber and may likewise proceed against any person that obtains its Relevant Market Data other than as this Agreement contemplates. Subscriber shall pay the reasonable attorneys' fees that any Authorizing SRO incurs in enforcing this Agreement against Subscriber.

4. CHARGES

(a) PAYMENT-Subscriber shall pay in United States dollars the applicable charge(s) as from time to time in effect, plus any applicable tax. Charges apply for receipt of Market Data whether or not used.

(b) BILLING-Subscriber will be billed in advance for recurring data and equipment charges on a periodic basis (monthly unless otherwise notified) based upon information that Subscriber or authorized vendors report. Subscriber will be billed upon incurrence for one-time charges, such as those relating to installations, relocations and provision of additional equipment facilities. Subscriber shall pay invoices promptly upon receipt. Errors in and omissions from invoices, and errors or delays in sending, or failures to send or receive, invoices, do not relieve Subscriber of its payment obligations.

5. DATA SECURITY

(a) RETRANSMISSION PROHIBITED-Subscriber shall use Market Data only for its individual use in its business. Subscriber shall neither furnish Market Data to any other person nor retransmit Market Data among its premises.

(b) CONTROL OF EQUIPMENT-Subscriber shall assure that it or its partners or officers and employees have sole control or physical possession of, and sole access to Market Data through, Subscriber Equipment.

(c) DISPLAYS ACCESSIBLE TO THE GENERAL PUBLIC-Notwithstanding the limitations of Paragraphs 5(a) and 5(b), Subscriber may install one or more Subscriber Devices on enclosed portions of premises to which the general public has access if Subscriber (i) controls the premises and access to them and (ii) gives NYSE written notice of the installation. Subscriber may permit individuals who are passing through or visiting the premises to operate or to view the devices on a sporadic basis, and for limited periods of time, during their temporary presence on the premises.

(d) EQUIPMENT SECURITY-Subscriber understands that this Paragraph 5 requires Subscriber to carefully locate and protect Subscriber Equipment. Subscriber shall abide by any written requirements that NYSE specifies to regulate the location or connection of Subscriber Equipment or to otherwise assure compliance with this Paragraph 5. Subscriber guarantees that any person installing or maintaining Subscriber Equipment will comply with this Paragraph 5.

(e) INSPECTION-At any reasonable time, Subscriber shall assure that authorized representatives of NYSE have access to the premises at which Subscriber Equipment is located, and, in the presence of Subscriber's officials, the rights to examine the equipment and to observe Subscriber's use of the equipment.

6. DATA NOT GUARANTEED-Neither NYSE, any other Authorizing SRO nor the Processor (the "disseminating parties") guarantees the timeliness, sequence, accuracy or completeness of Market Data or of other market information or messages disseminated by any disseminating party. No disseminating party shall be liable in any way to Subscriber or to any other person for (a) any inaccuracy, error or delay in, or omission of, (i) any such data, information or message, or (ii) the transmission or delivery of any such data, information or message, or (b) any loss or damage arising from or occasioned by (i) any such inaccuracy, error, delay or omission (ii) of nonperformance, or (iii) interruption in any such data, information or message, due either to any negligent act or omission by any disseminating party or to any "force majeure" (i.e., flood, extraordinary weather conditions, earthquake or other act of God, fire, war, insurrection, riot, labor dispute, accident, action of government, communications or power failure, equipment or software malfunction) or any other cause beyond the reasonable control of any disseminating party.

*Whenever an asterisk follows the first use of a term, Paragraph 1 defines the term

Initial:_____

7. DISSEMINATION DISCONTINUANCE OR MODIFICATION-The Authorizing SROs may discontinue disseminating any Type of Market Data, may change or eliminate any transmission method and may change transmission speeds or other signal characteristics. The Authorizing SROs shall not be liable for any resulting liability, loss or damages to Subscriber.

8. DURATION; SURVIVAL-Subject to Paragraph 7, either Subscriber or NYSE may terminate this Agreement on 30 days' written notice to the other. In addition, this Agreement terminates 90 days after Subscriber no longer has the ability to receive Market Data as contemplated by this Agreement. Withdrawal of an Authorizing SRO other than NYSE from the CTA Plan and the CQ Plan terminates this Agreement solely as to that Authorizing SRO. Withdrawal of NYSE from the CTA Plan and CQ Plan terminates this Agreement as to all other Authorizing SROs. Paragraphs 3, 5(d), 6, 15(c), 15(e) and 16(e) survive termination of this Agreement.

9. ENTIRE AGREEMENT: MODIFICATIONS-This writing contains the entire agreement between the parties in respect of its subject matter. This Agreement supersedes each previous agreement between Subscriber and NYSE pursuant to which Subscriber has been receiving Market Data except insofar as the earlier agreement covers receipt of Market Data through direct or indirect access to the high speed line described in the CTA Plan or the CQ Plan or any comparable high speed transmission facility that NYSE uses to make NYSE Securities Information available. The parties may only modify this Agreement by a writing signed by or on behalf of each of them.

10. ASSIGNMENTS-Subscriber may not assign all or part of this Agreement without the written consent of NYSE.

11. GOVERNING LAW; CONSTRUCTION-The laws of the State of New York govern this Agreement. It shall be interpreted in accordance with those laws. In prohibiting Subscriber from doing any act, this Agreement also prohibits Subscriber from doing the act indirectly (e.g., by causing or permitting any other person to the act).

12. APPLICABILITY OF 1934 ACT AND PLANS-This Agreement is subject to the Securities and Exchange Act of 1934, the rules under that act, the CTA Plan (as to CTA Network A last sale information) and the CQ Plan (as to CQ Network A quotation information).

13. NOTICES; NOTIFICATION OF CHANGES-The parties shall send communications relating to this Agreement to:

New York Stock Exchange LLC
11 Wall Street
New York, New York 10005
Attention: Director of Market Data

Subscriber (as above)

Subscriber and NYSE may each change its address by written notice to the other. Subscriber shall give NYSE prompt written notice of any change in (a) the Subscriber information listed above, (b) any other information provided to NYSE in connection with initiating the receipt of any Type of Market Data, or (c) any description provided pursuant to Paragraph 15(d).

PART II: SPECIAL PROVISIONS

This Part II applies only to the extent that Subscriber's activity or equipment falls within the scope of one or more of Paragraphs 14 through 16.

14. SECURITIES PROFESSIONALS: FURNISHING DATA TO CUSTOMERS AND BRANCH OFFICES

(a) SCOPE-This Paragraph 14 applies if Subscriber is a securities professional, such as a registered broker-dealer or investment adviser, and is an exception to Paragraphs 5(a), 5(b) and 5(c).

(b) LIMITED PROVISION OF DATA-Solely in the regular course of its securities business, Subscriber may occasionally furnish limited amounts of Market Data to its customers and clients and to its branch offices. Subscriber may so furnish Market Data to its customers and clients who are not on Subscriber's premises solely (i) in written advertisements, educational material, sales literature or similar written communications. or (ii) during telephonic voice communication not entailing the use of computerized voice synthesization or similar technology. Subscriber may so furnish Market Data to its branch offices solely (i) as provided in the preceding sentence, or (ii) through manual entry of the data over its teletype network. Subscriber shall not permit any customer or client to take physical possession of Subscriber Equipment. Subscriber shall abide by any additional limitations that NYSE specifies in writing.

15. REPORTING: RECORDS: EQUIPMENT DESCRIPTION

(a) SCOPE-This Paragraph 15 applies whenever an authorized vendor cannot know (e.g., by virtue of installing equipment or recognizing electronically a unique device identifier) all information necessary to bill Subscriber for applicable charge(s). For example, this Paragraph 15 typically applies to (i) Subscriber Devices not leased from NYSE or an authorized vendor, (ii) portable Subscriber Devices and Subscriber Devices that use portable components (e.g., software) to receive Market Data and (iii) Subscriber's receipt of Market Data through synthesized voice responses over telephones.

(b) REPORTING-Subscriber shall furnish to NYSE in writing such information, in such form and at such times, as NYSE may reasonably specify from time to time to permit billing of Subscriber for applicable charge(s). However, if an authorized vendor provides Market Data to any Subscriber Device, Subscriber shall furnish information regarding the device to the vendor instead of NYSE unless NYSE notifies Subscriber otherwise in writing.

*Whenever an asterisk follows the first use of a term, Paragraph 1 defines the term

Initial:_____

(c) RECORDS-Subscriber shall maintain the records upon which it bases its reporting for two years following the period to which the records relate. Solely to monitor Subscriber's compliance with this Paragraph 15, authorized representatives of NYSE may examine and verify those records at any reasonable time in the presence of Subscriber's officials.

(d) EQUIPMENT DESCRIPTIONS-Upon NYSE's written request, Subscriber shall provide NYSE with a description acceptable to NYSE of any Subscriber Equipment that an authorized vendor or an Authorizing SRO does not supply.

(e) INDEMNIFICATION-Subscriber shall indemnify and hold harmless each Authorizing SRO from and against any liability, loss or damages caused by (i) any inaccuracy in or omission from, (ii) Subscriber's failure to furnish or to keep, or (iii) Subscriber's delay in furnishing or keeping, any report or record that this Paragraph 15 requires. Subscriber shall do so even if Subscriber depends on information from a third party and the third party caused the inaccuracy, omission, failure or delay. Without limiting the generality of the foregoing, if NYSE determines that, as a consequence of any such inaccuracy, omission, failure or delay, applicable Subscriber charges were not billed when incurred, Subscriber may be billed for those charges and Subscriber shall promptly pay those charges plus any applicable tax.

16. EQUIPMENT SUPPLIED BY AUTHORIZING SROS

(a) SCOPE: DEFINITION This Paragraph 16 applies to Subscriber Equipment that one or more Authorizing SROs supply ("SRO Equipment").

(b) OWNERSHIP-The Authorizing SRO(s) or their supplier(s) own SRO Equipment. Subscriber shall not relocate, remove or alter SRO Equipment, or attach to SRO Equipment any equipment other than authorized equipment that an authorized vendor supplies, without NYSE's written consent. Subscriber shall return SRO Equipment in the same condition as it was when installed except for normal wear and tear and for failures for which the Authorizing SROs are responsible under Paragraph 16(d).

(c) ACCESS TO PREMISES-Subscriber shall assure that authorized representatives of the Authorizing SRO's and of their suppliers and service contractors may install, repair, maintain, relocate and replace SRO Equipment, and may remove any SRO Equipment that Subscriber no longer wants or to which it is no longer entitled, at any reasonable time.

(d) SITE PREPARATION AND MAINTENANCE-Subscriber shall prepare the site for SRO Equipment in a manner acceptable to the Authorizing SROs and shall bear all costs of providing adequate space and power. The Authorizing SROs shall maintain SRO Equipment subject to applicable charges. Maintenance includes repair or replacement of failed SRO Equipment and parts as necessary. Extraordinary charges may apply if Subscriber caused the failure.

(e) WARRANTY AND SCOPE OF LIABILITY-THE AUTHORIZING SROS PROVIDE NO WARRANTY, EXPRESS OR IMPLIED, INCLUDING, WITHOUT LIMITATION, ANY IMPLIED WARRANTY OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. Paragraph 16(d) sets forth the Authorizing SROs' entire liability for performance of SRO Equipment. The Authorizing SROs' liability to Subscriber for any liability, loss or damages relating to SRO Equipment other than for the cost of maintaining, repairing or replacing SRO Equipment, whether based in contract, in tort (including negligence and strict liability) or any other theory, shall in the aggregate not exceed the lesser of (i) $1000 or (ii) the total charges to Subscriber under this Agreement for the period preceding the breach or injury. The foregoing limitations do not apply to personal injury claims. In no event shall any Authorizing SRO be liable (i) for any indirect, incidental, special, consequential or punitive liability, loss or damages relating to SRO Equipment, regardless of the form of the action and foreseeability of the liability, loss or damages, or (ii) for any liability, loss or damages due to any "force majeure" (see Paragraph 6) or for any other cause beyond the reasonable control of the Authorizing SRO.

Initial:_____

From: Gadi Goldress (BLOOMBERG/ 120 PARK) <ggoldress@bloomberg.net>
Sent: Tuesday, January 30, 2018 12:45 PM
To: Eileen Kelly
Subject: RE: Bloomberg SAPI - Follow up

WARNING - External email; exercise caution

Good Afternoon Eileen,

I am back in the office this week and we are looking into this. I will get back to you with an update once I have one.

Thanks,
Gadi

From: Eileen.Kelly@nyse.com At: 01/30/18 08:55:34
To: Gadi Goldress (BLOOMBERG/ 120 PARK)
Subject: RE: Bloomberg SAPI - Follow up

Good Morning Gadi,

I know you were out when I sent this last week so I just wanted to follow up. Looking forward to your reply.

Thanks and Regards,

Eileen Kelly - Manager

Intercontinental Exchange (NYSE: ICE)

11 Wall Street, 15th Floor, New York, NY 10005

Tel: + 212.656.5812

eileen.kelly@nyse.com

www.intercontinentalexchange.com | www.theice.com | www.nyse.com

From: Eileen Kelly
Sent: Wednesday, January 24, 2018 12:29 PM
To: 'Gadi Goldress'
Subject: Bloomberg SAPI - Follow up

Hi Gadi,

Hope all is well. I'm following up the on conversation we had two weeks ago, I also left you a voicemail message last week on the same topic. Per our phone conversation, you were going to discuss internally and provide us the list of SAPI users that subscribe to CTA data. When can we expect the list so we can reach out to our subscribers and understand how they use the data?

Thanks and Regards,

Eileen Kelly - Manager

Intercontinental Exchange (NYSE: ICE)

11 Wall Street, 15th Floor, New York, NY 10005

Tel: + 212.656.5812

eileen.kelly@nyse.com

www.intercontinentalexchange.com | www.theice.com | www.nyse.com

UNITED STATES OF AMERICA
before the
SECURITIES AND EXCHANGE COMMISSION

In The Matter of:

The Application of SECURITIES INDUSTRY AND FINANCIAL MARKETS ASSOCIATION

For Review of Action Taken by Certain Self-Regulatory Organizations.

Admin. Proc. File No. 3-16220

APPLICATION FOR AN ORDER SETTING ASIDE RULE CHANGE OF CERTAIN SELF-REGULATORY ORGANIZATIONS LIMITING ACCESS TO THEIR SERVICES

The Securities Industry Financial Markets Association ("SIFMA") submits this application, pursuant to Sections 19(d) and 19(f) of the Securities Exchange Act of 1934 (the "Act"), for an order setting aside Release No. 34-73278; File No. SR-CTA/CQ-2014-03 (the "Rule Change") issued by the Consolidated Tape Association and participant exchanges ("SROs").[1] The Rule Change limits the access of SIFMA's members and their customers to market data made available by the SROs and is inconsistent with the Act.

1. SIFMA is a trade association that represents certain securities firms, banks, and asset managers. Market data is integral to the business of SIFMA's members and their customers, and members of SIFMA regularly access or seek to access the market data that the SROs make available.

2. On October 1, 2014, the SROs provided notice that they filed the Rule Change, which purports to allow them to charge new and amended fees for market data made available exclusively by the SROs. The Rule Change became effective upon filing with the SEC, and the SEC has not suspended the Rule Change or instituted proceedings to disapprove it.

3. SIFMA has submitted other applications pursuant to Sections 19(d) and 19(f) challenging earlier rule changes by the SROs that adopted or amended fees for various market data products. In an order dated May 16, 2014, the SEC held that (1) it has jurisdiction to review such applications by persons aggrieved by an SRO's rule change imposing fees for market data, and (2) such fees will be held unenforceable to the extent they are inconsistent with the Act, including the Act's requirement that the data for which those fees are imposed be made available

[1] The participants are BATS Exchange, Inc.; BATS-Y Exchange, Inc.; Chicago Board Options Exchange, Inc.; Chicago Stock Exchange, Inc.; EDGA Exchange, Inc.; EDGX Exchange, Inc.; Financial Industry Regulatory Authority, Inc.; International Securities Exchange, LLC; NASDAQ OMX BX, Inc.; NASDAQ OMX PHLX, Inc.; Nasdaq Stock Market LLC; National Stock Exchange; New York Stock Exchange LLC; NYSE MKT LLC; and NYSE Arca, Inc.

on "fair and reasonable" terms. Order Establishing Procedures 10–19, Rel. No. 34-72182, Admin. Proc. File Nos. 3-15350 & 3-15351 (May 16, 2014). In addition, the SEC referred to an administrative law judge ("ALJ") SIFMA's challenges to two of the rule changes and stayed proceedings on the other challenges. *Id.* at 19–22.

4. The SEC should set aside the Rule Change because it constitutes a limitation on access to the SROs' services for purposes of Section 19(d) and (f). This is so because it limits access to critical market data for anyone unwilling or unable to pay the onerous, supra-competitive fees the SROs are charging. Furthermore, the SEC should set aside the Rule Change under Sections 19(d) and (f) because SIFMA's members and their customers must pay fees that are not consistent with the Act. The Rule Change is not fair and reasonable and does not provide for the equitable allocation of reasonable fees among persons using the SROs' facilities. Nor does it promote just and equitable principles of trade or protect investors and the public interest. In sum, the Rule Change is unenforceable under Section 19(b)(3)(C).

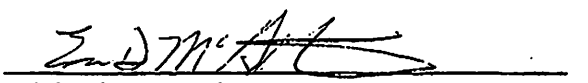
5. Under the SEC's "market-based" approach, market forces cannot provide a basis for finding that an SRO's non-core data fees are "fair and reasonable" unless the SRO is subject to significant competitive forces in setting the fees. The SROs have offered no evidence of such competitive forces. The SROs also have provided no evidence of the cost of collecting and distributing the data at issue, despite the D.C. Circuit's finding that such costs are undeniably relevant evidence, *see NetCoalition v. SEC*, 615 F.3d 525, 537–38 (D.C. Cir. 2010), and one SRO's concession that its marginal costs are "small, or even zero."

6. SIFMA respectfully requests that this application be held in abeyance pending a decision in the proceeding before the ALJ, as has been done with other challenges.

Dated: October 28, 2014

Respectfully submitted,

SIDLEY AUSTIN LLP



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Counsel for SIFMA

Rule of Practice 420(c) Statement: Service upon the applicant may be accomplished by serving their attorneys at the address listed above.

UNITED STATES OF AMERICA
before the
SECURITIES AND EXCHANGE COMMISSION

In The Matter of:

The Application of SECURITIES INDUSTRY AND FINANCIAL MARKETS ASSOCIATION

For Review of Action Taken by Certain Self-Regulatory Organizations.

Admin. Proc. File No. 3-16220

CERTIFICATE OF SERVICE

I hereby certify that on October 28, 2014, I caused a copy of the foregoing Application For An Order Setting Aside Rule Changes Of Certain Self-Regulatory Organizations to be served on the parties listed below by First Class Mail. Service was accomplished on the Exchanges via First Class Mail because of the large service list.

Kevin M. O'Neill
Deputy Secretary
U.S. Securities and Exchange Commission
100 F Street, NE
Washington, DC 20549
(via hand delivery)

Janet L. McGinness
Corporate Secretary
New York Stock Exchange LLC
NYSE Arca, Inc.
NYSE Amex, Inc.
11 Wall Street
New York, New York 10005

Edward S. Knight
Executive Vice President and General Counsel
NASDAQ Stock Market LLC
One Liberty Plaza
165 Broadway
New York, New York 10006

Jeffrey S. Davis
NASDAQ OMX
805 King Farm Boulevard
Rockville, MD 20850

John Yetter
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805 King Farm Boulevard
Rockville, MD 20850

Jeffrey Rosentrock
General Counsel
Direct Edge
545 Washington Boulevard
6th Floor
Jersey City, NJ 07310

Joanne Moffic-Silver
General Counsel
Chicago Board Options Exchange, Inc.
400 South LaSalle Street
Chicago, IL 60605

Michael J. Simon
General Counsel
International Securities Exchange, LLC
60 Broad Street
New York, New York 10004

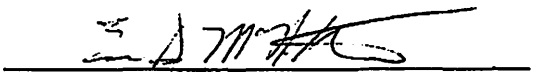
Eric Swanson
General Counsel and Secretary
BATS Exchange, Inc.
BATS Y Exchange, Inc.
8050 Marshall Drive
Lenexa, KS 66241

David Whitcomb
General Counsel
Chicago Stock Exchange, Inc.
440 South LaSalle Street
Chicago, IL 60605

Marcia E. Asquith
Corporate Secretary
Financial Industry Regulatory Authority, Inc.
1735 K Street
Washington, DC 20006

Philip M. Pinc
Vice President, Counsel and Secretary
National Stock Exchange, Inc.
440 South LaSalle Street, Suite 2600
Chicago, IL 60605

Dated: October 28, 2014



Eric D. McArthur

UNITED STATES OF AMERICA

before the

SECURITIES AND EXCHANGE COMMISSION

In the Matter of: The Application of BLOOMBERG L.P. For Review of Amendments to the CTA Limiting Access to its Services	Admin Proc. File No. 3-18316

DECLARATION OF LORA CHANG

Lora Chang declares as follows:

1. I am the Director of Market Data Administration, Intercontinental Exchange|NYSE. NYSE is a participant in and administrator of the Consolidated Tape Association Plan and the Consolidated Quotation Plan (the "Plans"). In my capacity as Director of Market Data Administration for NYSE I oversee administration of the Plans. I make this declaration in that capacity in opposition to the motion by Bloomberg L.P. to stay the effectiveness of the Twenty-Second Charges Amendment to the Second Restatement of the CTA Plan and the Thirteenth Charges Amendment to the Restated CQ Plan, File No. SR-CTA/CQ-2017-04 (filed October 19, 2017) (the "Amendment").[1]

Background

2. The key questions presented by Bloomberg's motion are (i) what Bloomberg's Server Applications Program Interface ("SAPI") allows its subscribers to do with

[1] Capitalized terms not defined herein have meanings set forth in the "Glossary of Defined Terms" contained in the Consolidated Tape Association's Memorandum of Law in Opposition To Bloomberg L.P.'S Motion For A Stay Of Amendment To The CTA/CQ National Market System Plan Published in the Federal Register On November 14, 2017, Release No. 34-82071.

CTA data they elect to receive through SAPI and (ii) what those subscribers actually do with the CTA data they receive through SAPI. Those determine whether a subscriber is using a "display device" or a "data feed." The reason this is important is that CTA's longstanding policy (as set forth in its rules filed with the SEC) is to charge different fees for display devices and data feeds.

3. At its core, the Amendment is designed to make clear that, regardless of the technology delivery method, (i) CTA access fees apply to any product made available by a CTA market data vendor that distributes the data in a way that enables non-display use of the data by the recipient and (ii) CTA non-display fees then also will apply if the recipient in fact makes non-display use of the data. If applicable, the access fees and the non-display fees are payable only by the data recipient based on use of data by that data recipient. The vendor is not charged these fees, but is responsible for accurately reporting the uses of CTA data by its customer data recipients.

4. If Bloomberg's SAPI product only enables a visual display of the data through a graphical user interface display, such use would be subject to display use fees only. Based on information Bloomberg provided to CTA in 2004, CTA understands, however, that SAPI can do much more than power display devices. SAPI in fact can act as a server which distributes data to other applications and/or, if the recipient so chooses, use the data for non-display functions. Thus, although a particular SAPI subscriber might end up using data delivered through SAPI to power display devices such as Bloomberg Terminals and other software services that act as display devices, CTA understands that SAPI's functionality also can act as a data feed permitting non-display uses.

Other Vendor and Software Company Reporting

5. Multiple vendors have products similar to SAPI, which they correctly report as data feeds subject to access fees by the recipients. These vendors have complained to CTA that they report their SAPI-like products correctly while Bloomberg reports SAPI as a display device,[2] and that they have lost clients to Bloomberg even though their products (i.e., their equivalents of SAPI) are cheaper than what Bloomberg charges for SAPI. They have concluded that they lost these customers because Bloomberg told the customers they could avoid CTA access and non-display use fees by using SAPI instead of competing products.

6. Some of these vendors have informed CTA that customers have told them they use SAPI for position keeping, risk management, and algorithmic trading, each of which constitutes a non-display use. One such vendor has a product similar to SAPI that it previously reported to CTA as a display device rather than as a data feed. Approximately one year ago, that vendor reached out to its subscribers who used that product as a data feed and told them that, if they continued to use the product that way, it would be reported to CTA as a data feed and they would be required to pay CTA access fees and, as appropriate, non-display use fees. Although some of these subscribers eliminated their data feed use of that vendor's product, others did not, and those using that vendor's product as a data feed now pay CTA fees exactly as the Amendment requires.

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[2] Although SAPI was initially approved by CTA as a display device, that approval pre-dated the 2014 Amendments (when there were no fees for non-display uses), and in 2016 Bloomberg represented to CTA that it had reconfigured SAPI to remain a display device following the 2014 Amendments. A true and correct copy of that representation by Bloomberg (which was not accepted by CTA) is attached hereto as Exhibit A.

Customer/Subscriber Interactions

7. CTA has been told verbally by customers that they were switching from a data feed (either Bloomberg BPIPE or another vendor's data feed product) to SAPI because they can do the same things with SAPI that they could with the prior data feed product without paying access fees or non-display use fees.

8. Bernardo Santiago, a market data industry expert who has worked for market data customers for the last 15 years (having held market data-related positions with several firms), has told CTA that he knows with certainty that many subscribers use SAPI for non-display uses and to power third-party software or internally developed applications, all of which indicate that SAPI functions as a data feed for those subscribers. By way of example, Mr. Santiago worked at a global asset management firm that used SAPI to receive real-time CTA market data for position keeping, which is a non-display use. However, because of the way Bloomberg reports SAPI users, CTA was not made aware of that non-display use by Bloomberg. Mr. Santiago corrected that firm's non-compliance by switching it to a CTA delayed data feed, which is not fee liable to CTA. In that way, Mr. Santiago enabled that firm to continue performing its position-keeping function using SAPI but without paying any CTA fees, reducing its market data costs while continuing to use SAPI by following CTA's rules properly.

9. Mr. Santiago has recently founded a consulting firm whose focus is to help firms that consume market data comply with relevant market data rules, including CTA rules. Some of these firms have told Mr. Santiago that Bloomberg told them they do not need to worry about paying the access and non-display use fees they would be required to pay by using other vendors' products if they use SAPI.

10. To ensure a level-playing field, CTA has requested information from Bloomberg regarding which of its customers use Bloomberg SAPI so that CTA can determine the appropriate fees based on use by such data recipients. CTA already knows the identity of Bloomberg customers, because they have been reported as device users. But because Bloomberg has not reported SAPI customers as data feed customers, CTA has no way of knowing which Bloomberg device customers are in fact SAPI customers. If Bloomberg reports its SAPI customers, CTA can assess whether such SAPI customers engage in non-display use of CTA data and how they should be charged according to the established fee schedule.

CTA's Information Barrier Policy

11. CTA has an internal policy for restricting access to confidential information about CTA subscribers so that it cannot be shared with NYSE's proprietary market data products group. Specifically, access to confidential information about CTA subscribers is given only to individuals with responsibilities for CTA market data and finance functions and is prohibited for individuals responsible for development, promotion, and maintenance of NYSE proprietary market data products. The purpose of this policy is to prevent confidential information about CTA subscribers from being shared for commercial purposes.

Conclusion

12. As the above makes clear, CTA understands based on information provided from multiple sources, including Bloomberg's own description of its SAPI product, that subscribers can use SAPI to manipulate data in ways that would constitute non-display uses were they reported correctly to CTA. Depending on usage, such subscribers (not Bloomberg) are required to pay CTA the access fees and (if applicable) non-display fees consistent with their specific usage, as set forth in the CTA fee schedule that went into effect in 2014; subscribers

would only have to pay non-display use fees if they actually engaged in non-display use. In addition, if such a SAPI subscriber firm is already paying CTA access and non-display fees through another data feed subscription, they would not be required to pay those fees again as CTA charges access and non-display fees only once. Bloomberg does not pay any of the fees at issue in connection with its subscribers' use of CTA data—CTA directly bills the subscribers for those fees based on how Bloomberg reports such usage to CTA.

13. However, without auditing users of SAPI directly (as their subscriber agreements with CTA specifically allow), CTA cannot determine how they use CTA data and what type of usage fees apply. Bloomberg is required by its CTA vendor contract to assist CTA in properly billing for subscriber data usage. Once CTA knows who Bloomberg's SAPI users are it is entirely possible that CTA might determine that specific SAPI users are engaged in solely display use of CTA data and thus are not subject to non-display use fees.

I declare under penalty of perjury that the foregoing is true and correct.

Executed on February 27, 2018

Lora Chang

From: Gadi Goldress (BLOOMBERG/ 120 PARK) <ggoldress@bloomberg.net>
Sent: Wednesday, October 5, 2016 4:24 PM
To: Eileen Kelly
Subject: Re:Server API

Here is the new definition to use as discussed:
Server API. Server API subscribers are permitted to download Market Data from Bloomberg onto authorized servers and run server-based applications on the Market Data. From the authorized server, customers may make real-time data available internally only to users whose device or user ID has been entitled by Bloomberg to receive such real-time data. Server API technology ensures that server-based applications can be used only to enable outputs of such applications in a display to users whose device or user ID has been entitled by Bloomberg. For the avoidance of doubt, Server API service shall continue to be considered as an Interrogation Display Service.

From: Eileen.Kelly@nyse.com At: 09/22/16 14:19:19
To: Gadi Goldress (BLOOMBERG/ 120 PARK)
Subject: Re:Server API

HI Gadi,

I'm following up on the conversation we had earlier this week. Please review the description of your Server Product offering as descrbied in your Exhibit A. Please confirm that this is an accurate description of the service. Based on the descritpion, SAPI can be used for non-display.

Server API. Server API subscribers are permitted to do authorized servers and run server-based applications on the customers may make real-time data available internally t entitled by Bloomberg to receive such real-time data. Sub typically use the application for the following purposes: management programs, risk compliance engines, and subscribers who wish to subscribe to Server API and to re must sign the NYSE or AMEX subscriber agreement as specific contract governing subscribers' rights to use Mar specific contract will require Server API subscribers to exchange data required by providers of those exchange da on entitlement control.

Thanks and Regards,

Eileen Kelly

Strategic Analysis & Market Data

New York Stock Exchange

An IntercontinentalExchange Company (NYSE: ICE)

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eileen.kelly@nyse.com

UNITED STATES OF AMERICA

before the

SECURITIES AND EXCHANGE COMMISSION

In the Matter of: The Application of BLOOMBERG L.P. For Review of Amendments to the CTA Limiting Access to its Services	Admin Proc. File No. 3-18316

DECLARATION OF DOUGLAS W. HENKIN

Douglas W. Henkin declares as follows:

1. I am a partner at Baker Botts L.L.P., counsel for the Administrator of the Consolidated Tape Association ("CTA") Plan and the Consolidated Quotation Plan (the "Plans"). I make this declaration in support of CTA's opposition to the motion by Bloomberg L.P. to stay the effectiveness of the Twenty-Second Charges Amendment to the Second Restatement of the CTA Plan and the Thirteenth Charges Amendment to the Restated CQ Plan, File No. SR-CTA/CQ-2017-04 (filed October 19, 2017) (the "Amendment").

2. Attached hereto as Exhibit A is a true and correct copy of a comment letter regarding the Amendment filed by Thomson Reuters on November 28, 2017.

3. Attached hereto as Exhibit B is a true and correct copy of a comment letter regarding the Amendment filed by DTN on December 8, 2017.

4. Attached hereto as Exhibit C is a true and correct copy of a comment letter regarding the Amendment filed by 14 market participants on December 11, 2017.

5. Attached hereto as Exhibit D is a true and correct copy of the comment letter filed regarding the Amendment by Bloomberg on December 11, 2017.

6. Attached hereto as Exhibit E is a true and correct copy of the comment letter filed regarding the Amendment by Baird Equity Asset Management on December 11, 2017.

7. Attached hereto as Exhibit F is a true and correct copy of the comment letter filed by CTA on December 14, 2017 in response to certain comment letters filed regarding the Amendment.

8. Attached hereto as Exhibit G is a true and correct copy of the comment letter filed regarding the Amendment by Bloomberg on February 7, 2018, but not including the attachment to that comment letter.

9. Attached hereto as Exhibit H is a true and correct copy of the comment letter filed regarding the Amendment by S4 Market Data on February 26, 2018.

10. Attached hereto as Exhibit I is a true and correct copy of a comment letter regarding the Amendment filed by Thomson Reuters on February 27, 2018.

11. Attached hereto as Exhibit J is a true and correct copy of a report published by Burton-Taylor International Consulting called "Financial Market Data/Analysis Global Share & Segment Sizing 2017."

12. Attached hereto as Exhibit K is a true and correct copy of Kirsten Hyde, *Fee Fight: Ye Olde Market Data Battleground*, WatersTechnology.com (Feb. 21, 2018).

I declare under penalty of perjury that the foregoing is true and correct.

Executed on February 28, 2018

Douglas W. Henkin

Douglas W. Henkin / Y. M. with permission

THOMSON REUTERS

David Craig
President
Financial & Risk

The Thomson Reuters Building
30 South Colonnade
Canary Wharf
London E14 5EP

The Honorable Brent J. Fields
Secretary
U.S. Securities and Exchange Commission
100 F Street, NE
Washington, DC 20549

November 28, 2017

Re: Notice of Filing and Immediate Effectiveness of the Twenty Second Charges Amendment to the Second Restatement of the CTA Plan and the Thirteenth Charges Amendment to the Restated CQ Plan (Release No. 34-82071; File No. SR-CTA/CQ-2017-04)

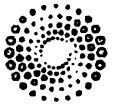
Dear Mr. Fields:

Thomson Reuters appreciates the opportunity to comment on the above-referenced Notice of Filing and Immediate Effectiveness of the amendments to the CTA Plan and the CQ Plan, which was published in the Federal Register on November 20, 2017. Thomson Reuters strongly supports the clarity and consistency it provides on how fees are to be applied.

As a vendor that distributes US equity market data, it is extremely important to us that our clients are charged the same fees regardless of the vendor or technical delivery they choose. This amendment makes clear that if a client incorporates data in their systems and software, the same fees should apply regardless of the product used to deliver the data. Thomson Reuters believes that this clarification will create more of a level playing field for vendors to compete and will allow clients to pick products knowing that exchange fees for comparable services won't differ depending on provider.

By supporting this amendment, Thomson Reuters is not taking a view on the level of fees that exchanges charge. This amendment doesn't contemplate the level of fees but instead clarifies the manner in which these fees should be applied. The amendment ensures that access fees, non-display fees, and fees for non-professional clients will be applied consistently going forward and any discrepancies will be eliminated.

Thomson Reuters is a leading source of intelligent information for businesses and professionals. We combine industry expertise with innovative technology to deliver critical information to leading decision makers in the financial and risk, legal, tax and accounting, organization. As the world's leading provider of market data, we provide real-time and historical data from more than 200 exchanges and hundreds of over-the-counter markets and price contributors covering 14 million instruments. These include equities, options, derivatives, fixed income, commodities and energy, and foreign exchange.



THOMSON REUTERS

Thomson Reuters believes this is a clarification that is critically needed in order to level the playing field for vendors distributing US equity exchange data. Please do not hesitate to contact [redacted] or phone [redacted] to discuss this further.

Yours sincerely,

David Craig
President, Financial & Risk
Thomson Reuters

The Honorable Brent J. Fields

Secretary

US Securities and Exchange Commission

100 F Street, NE

Washington, DC 20549

December 8, 2017

DTN appreciates the opportunity to comment on the Notice of Filing and Immediate Effectiveness of the Twenty Second Charges Amendment to the Second Restatement of the CTA Plan and the Thirteenth Charges Amendment to the Restated CQ Plan, File Number SR-CTA/CQ-2017-04. The amendments presented provide much needed clarification and we applaud the CTA Plan for listening to the industry, and more specifically to DTN's feedback, as it pertains to policy wording.

While we chose to address the clearest part of the policy in this comment letter, we will continue to work with the CTA Plan to ensure technological advances over the past several years are recognized and considered in future policy decisions.

DTN is elated by the language provided for Non-Professional Users in the amendment. As stated, Non-Professional users would not be liable for any fees other than $1 per month, regardless of the customer's use of the data. We believe this is a significant clarification that benefits Non-Professional traders/investors and is one we support fully.

DTN is highly competitive because of our superior products, price point and customer focused operation. A level playing field as it relates to exchange fees has been a goal of ours for years. There remains additional work to be done within the industry to ensure all pricing and use policies are easy to understand and 100% transparent. We look forward to continued dialog with the Exchanges/Market System plans, the SEC, and the industry to facilitate changes that provide consistent, affordable, and fair access to market data for all traders/investors.

Sincerely,

Jay Froscheiser

Vice President, Active Trader Products

DTN

December 11, 2017

Brent J. Fields
Secretary
Securities and Exchange Commission
100 F Street, NE
Washington, DC 20549

Re: **Notice of Filing and Immediate Effectiveness of the Twenty-Second Charges Amendment to the Second Restatement of the CTA Plan and the Thirteenth Charges Amendment to the Restated CQ Plan (Release No. 34-82071; File No. SR-CTA/CQ-2017-04)**

Dear Mr. Fields,

On November 20, 2017, the CTA amended the CTA Plan's fee schedule and non-display use policy to expand the applicability of the non-display fee and the access fee. The proposal is effectively the same as that which the CTA proposed in March. That proposal was withdrawn in the face of major industry pushback in April.

In its filing, the CTA asserts that Bloomberg SAPI is -- and always has been -- a datafeed (not a terminal product) and that Bloomberg SAPI is -- and always has been -- a non-display product. The immediate practical effect of this change in classification is a massive increase in fees that will have a disproportionately large impact on small and mid-size firms. A firm with 10 professional devices would experience a 2000% fee increase. Needless to say, the CTA has offered no cost justification or other rationale to justify such a massive increase.

The undersigned are among the hundreds of firms using Bloomberg SAPI. As data services professionals who are very familiar with the market and the Bloomberg SAPI product, we believe that Bloomberg SAPI is a

display product intimately tied to the Bloomberg terminal and **not** a datafeed product. Our clients rely on our Bloomberg SAPI interface.

This reclassification is a dramatic break with existing definitions and practice, with implications far beyond Bloomberg SAPI. If Bloomberg SAPI -- which utilizes state of the art monitoring and controls -- is considered a non-display/datafeed service, then it is hard to confidently state what product meets this new standard and whether, indeed the "display" category has been, as a practical matter, defined out of existence.

Bloomberg SAPI is properly classified as a terminal-based display product. We urge that this accurate classification remain in force.

Thank you for your consideration.

ACR Alpine Capital Research, LLC
Aleska Investment Group LP
AO Asset Management
Bluefin Trading LLC
Cantor Fitzgerald, LP
Duquesne Fund Services
Federated Investors Inc.
Garda Capital Partners LP
Global Endowment Management, LP
Luminus Management, LLC
MacKay Shields LLC
Masa Capital LLC
TLP Trading LLC
TRPV Capital

Bloomberg

Bloomberg LP 731 Lexington Avenue New York, NY 10022 Tel +1 212 318 2000

December 11, 2017

Brent J. Fields
Secretary
U.S. Securities and Exchange Commission
100 F Street, NE
Washington, DC 20549

Re: **Notice of Filing and Immediate Effectiveness of the Twenty Second Charges Amendment to the Second Restatement of the CTA Plan and the Thirteenth Charges Amendment to the Restated CQ Plan (SEC Release No. 34-82071; File No. SR-CTA/CQ-2017-04)**

Dear Mr. Fields,

Bloomberg L.P. ("BLP") appreciates the opportunity to comment on the Proposed Amendment captioned above. On November 14, 2017, the Consolidated Tape Association ("CTA") Plan Participants gave notice of their filing of the Proposed Amendment with the Securities and Exchange Commission. CTA seeks to amend its fee schedule and non-display use policy to substantially broaden the applicability of the non-display fee and the access fee. This would impose a massive fee increase—exceeding 6,000% for many small and mid-size firms—on a specific BLP product.

In response to the Commission's November 20, 2017 notice and request for comment, 82 Fed. Reg. 55130, this letter sets forth several of the reasons why BLP opposes CTA's badly flawed proposal. BLP offers these views based on its deep expertise in providing market data to its customers, including broker-dealers, retail and professional investors, and other consumers of market data who would be harmed by the Proposed Amendment.

By unilaterally implementing a fee increase that reaches 6,000% or more for core, top-of-book data that CTA exclusively provides, this proposal violates the law in at least five ways:

1. Arbitrarily expanding the definitions of "non-display use," "date feed," and "access fee" far beyond their 2014 context and justification, which focused on algorithmic and automated trading functions that replaced human users, so that these fees would reach human use of data displayed on a computer screen;
2. Imposing—without even mentioning costs—a massive fee increase for core, top-of-book trade and quotation data that the D.C. Circuit, the Commission, and CTA's member exchanges repeatedly have acknowledged are unconstrained by market forces and therefore subject to cost-based regulation;
3. Unfairly discriminating against a single vendor, product, and set of customers by imposing a targeted fee increase, through a quasi-regulatory process, without

identifying any factual basis or similarly situated product or customers subject to this undue burden on competition;

4. Disserving the public interest by increasing burdens on capital formation and mid- and small-sized firms, and the retail and other investors they serve, through unnecessary fees not tied to any demonstrated costs of the CTA exchanges, particularly in view of recent public statements regarding the importance of constraining market-data fees; and
5. Failing to offer any meaningful economic-impact or cost-benefit analysis, or even notice specific enough to allow affected parties to analyze the proposal on their own, in violation of Commission Rule 608.

Accordingly, CTA's proposed amendment contravenes the Securities Exchange Act and Regulation NMS, and inappropriately limits access to the services of a registered securities information provider. BLP respectfully requests that the Commission abrogate the effectiveness of the Proposed Amendment under Rule 608(b)(3). BLP is separately filing an application for review, under Section 11A(b)(5) of the Exchange Act, which will ask the Commission to set aside the proposal after notice and a hearing.

CTA'S REPEATED EFFORTS TO EXPAND FEES FOR CORE DATA

The highly irregular nature of CTA's efforts to amend its access and non-display use fees casts serious doubt on the validity and necessity of the Proposed Amendment. CTA's description of the Bloomberg SAPI product also contains many errors, which call into question the proposal's description of the market-data marketplace under CTA's 2014 non-display fee amendment. The facts set forth in this section support the five legal reasons, set forth below, why the Commission should suspend or set aside the Proposed Amendment.

Crucially, CTA's proposal addresses fees for core, top-of-book data that is displayed for real-time use by humans viewing data using server applications on their computers. Core data is provided by only one supplier, must be purchased by many market participants, faces no market-based pricing constraints from competing products, and is priced subject to Commission regulation. At a minimum, therefore, CTA's unorthodox and improper approach reflects the need for the Commission to closely scrutinize this massive fee increase for core data, rather than allowing it to take effect on the exchanges' own say-so.

A. Bloomberg SAPI. Contrary to the implication of the CTA proposal, BLP's Server Application Program Interface ("SAPI") product is not a non-display program akin to a black-box, algorithmic, or high-frequency trading system. SAPI subscribers use it as an extension of the familiar Bloomberg Terminal—the consummate setting for the use of displayed market data. SAPI supplies market data to subscribers who can view it through approved server applications on the same device the subscribers used to log into the Bloomberg Terminal.

The CTA proposal suggests that the receipt and use of SAPI data is uncontrolled. That is wrong. This data is supplied for individual use by specifically authorized individuals—not for enterprise use, as is the case for data-feed and non-display users. Non-display use of SAPI data, moreover, is contractually prohibited. SAPI is not designed to supply the amount of data

necessary for algorithmic or high-frequency trading. And SAPI technology actively monitors subscribers' download volumes to ensure customers do not engage in such trading: unreasonably high volumes trigger BLP's product-oversight team to determine whether SAPI subscribers are misusing their market data. SAPI users, furthermore, are identified through biometric authentication to ensure they are entitled to access and view the market data. BLP and the exchanges have worked together to improve SAPI's encryption and authentication, and BLP reviews and approves all applications to ensure SAPI data is used only for approved uses and only by approved persons.

The whole point of this product is to view market data and derived data in the most useful ways on a computer screen—specifically through third-party applications selected by customers and approved by BLP. SAPI's essential features have remained constant since BLP introduced the product in 2004. It does not facilitate rapid or automated trading independent of human eyeballs and decisionmaking; rather, it facilitates useful presentation of data for humans to view.

B. Data fees before 2014. Through 2013, two relevant fees applied to consolidated top-of-book data offered by CTA: the access fee and the display fee. The access fee applied to high-volume "data feeds" that could be used for any number of purposes, including electronic or automated applications. The display fee, by contrast, applied to users or devices receiving data for visual display. Accordingly, NYSE (as the CTA administrator) approved SAPI as a display product, rather than as a data feed, when it was launched in 2004. Therefore a professional subscriber would pay between $20 and $50 per device for quotation and last-sale price information for Network A securities, depending on the number of devices covered by the subscription, and $24 per device for the same information for Network B securities.

In 2013, CTA increased the access fee for data feeds. CTA justified the increase on the ground that "data feeds have become more valuable, as recipients now use them to perform a far larger array of *non-display functions*. Some firms even base their business models on the incorporation of data feeds into black boxes and application programming interfaces that apply trading algorithms to the data .... [T]hese firms pay little for data usage beyond access fees, yet their data access and usage is critical to their businesses." 78 Fed. Reg. 17946, 17949 (March 25, 2013). Both before and after the 2013 amendment, SAPI was recognized as display product subject to the display fee, not as a data feed subject to the access fee.

C. CTA's 2014 Non-Display Use Amendment. In 2014, CTA invoked the same automated-trading explanation for a new "non-display use" fee. 79 Fed. Reg. 60536 (Oct. 7, 2014). The exchanges cited the increased volume of trading conducted by high-frequency, algorithmic, and black-box computer programs. Meanwhile, according to CTA, a decreasing number of subscribers were using displayed market data. The 2014 proposal expressly distinguished between non-display devices and terminals viewed by a human:

> Changes in regulation and advances in technology have had an impact on market data usage in recent years. Automated and algorithmic trading has proliferated, the numbers of quotes and trades have increased significantly and *Data Feeds* have become exponentially faster. Today, Non-Display Devices consume large amounts of data, and can process the data far more quickly than any *human being looking at*

a terminal.

Id. at 60537–38 (emphasis added).

As a result, according to CTA, the exchanges' market-data revenue was under pressure from a decline in revenue from display fees. CTA's proposal also asserted that the increased value market participants derived from data feeds justified its new fee. Accordingly, the proposal defined non-display use in a manner that emphasized the *use of a data feed* for reasons other than human display:

> Non-Display use refers to accessing, processing or consuming [data], whether delivered via direct and/or redistributor *data feeds*, ... for a purpose other than solely facilitating the delivery of the data *to the Data Feed Recipient's* display or for the purpose of further internally or externally redistributing the data.

Id. at 60538 (emphasis added).[1] The proposal contained no economic analysis or factual support tying CTA's proposed fee categories and increases to the cost of producing and distributing core, top-of-book data.

As when CTA increased the access fee in 2013, its 2014 implementation of the non-display use fee did not change SAPI's treatment. CTA continued to categorize SAPI as subject to the display fee, not the access or non-display use fees.

The Commission itself has never approved the 2014 non-display use amendment, which became effective when filed under Rule 608(b)(3). SIFMA opposed the change as unlawful under the Exchange Act, and filed an application for Commission review of the amendment. SIFMA Application, File No. SR-CTA/CQ-2014-03 (Oct. 28, 2014). But SIFMA asked the Commission to hold the application in abeyance pending a decision in the *NetCoalition/In re SIFMA* proceeding. SIFMA's application for review remains pending.

D. March 2017 Attempt to Expand Non-Display and Access Fees. Following the 2014 amendment, CTA continued to categorize SAPI as a display product, not a data feed. Between 2014 and late 2016, CTA never challenged SAPI's classification as a display product or invoked its contractual rights to audit the use of CTA data by BLP users. Indeed, CTA did not audit BLP use or contact BLP with any concerns about potential non-display usage or circumvention before raising its complaints in the first instance with the Commission. BLP, for its part, has since 2014 continued to contractually require SAPI customers to use SAPI data for display use only, to monitor data consumption for potential non-display use, and to work with exchanges to strengthen the authentication and encryption functions that ensure appropriate data use.

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[1] *See also* CTA Market Data Non-Display Use Policy at 2 ("any data recipient that receives a real time CTA Market Data data-feed is required to complete and submit the Non-Display Use declaration"), available at https://www.ctaplan.com/publicdocs/ctaplan/notifications/trader-update/Policy%20-%20CTA%20Non%20Display.pdf.

On March 23, 2017, CTA nevertheless filed with the Commission a notice of its filing of a fee amendment for immediate effectiveness. SEC Release No. 34-80300 (the "March Amendment"). The March Amendment would have expanded the reach of CTA's non-display use policy in a way that is nearly identical to the amendment now at issue. Curiously, it purported merely to "clarify" the scope of the *existing* non-display use definition, rather than impose any substantive change to that definition (though it did propose to alter the text of the plan). Also unlike the current proposed amendment, the March Amendment did not mention Bloomberg, SAPI, or any allegedly inequitable classification of data-vendor products.

In that regard, the purpose of the March Amendment became clear four days after its filing. CTA described the amendment in a side letter to BLP, which was apparently not filed with the Commission. That letter clarified that CTA considered SAPI a data feed subject to access and non-display use fees.[2] Plainly, CTA's decision to set forth its rationale in a private letter rather than a public filing prejudiced the Commission's ability to review the amendment. In response, BLP, SIFMA, and several other stakeholders and smaller broker-dealers commented to register their opposition.[3] Although CTA filed its own comment letter defending the amendment on April 25, shortly thereafter it withdrew the amendment.

E. November 2017 Proposed Amendment. CTA filed notice of the Proposed Amendment on November 14, 2017. It has not yet filed, however, the amendment's actual text or otherwise published the specific changes CTA proposes to make. The Proposed Amendment is accompanied by a lengthier notice than was the case in March, but does not meaningfully change the substance of its withdrawn amendment. The principal difference between the March and November filings is the Proposed Amendment's explicit targeting of BLP's SAPI product in the text of the notice. Rather than sending BLP a side letter asserting that the Proposed Amendment covers SAPI, CTA has laid bare its targeting of BLP on the pages of the SEC Release and Federal Register.

As demonstrated below, this definitions set forth in this proposal would result in an extraordinary fee increase unrelated to any change in the data's use or the processor's cost.[4]

Non-Display Use Fees — The Proposed Amendment changes the definition of non-display use in footnote eight of the Plan's fee schedules. It states that any use of data that does not make data visibly available to a data recipient on a device is a non-display use. It also amends footnote two "to state that the device fee will only be applicable where the data is visibly available to the data recipient; any other data use on a device will be considered Non-Display

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[2] *See* Attachment A (letter from Margaret Sullivan, NYSE, to Gadi Goldress, Bloomberg LP) (March 27, 2017).

[3] *See* comments submitted at SEC Docket, Release No. 34-80300, available at https://www.sec.gov/comments/sr-ctacq-2017-02/ctacq201702.htm.

[4] Fees the CTA proposal imposes on non-professional users are beside the point. *Cf.* Letter of Jay Froscheiser, DTN, SEC Release No. 34-82071 (Dec. 7, 2017). Non-professional users do not subscribe to the SAPI product targeted by the Proposed Amendment. That is not to say that SAPI's professional subscribers serve only large investors. As described above, they regularly serve all manner of retail investors.

Use."[5] Consequently, the non-display use fee would no longer be linked to the concept of "data feeds" and, under CTA's application of this rule, products like SAPI that involve computer-based applications would trigger the non-display use fee even though the outputs of these applications—the derived data CTA says is *display* use—are displayed for viewing by human subscribers.

Access Fees —The Proposed Amendment also transforms the concept of data feeds and expands the applicability of access fees. The proposal states that access fees will apply if the recipient uses the data in a non-display manner or has the *ability* to "manipulate[e] and disseminat[e]" the data "to one or more devices, display or otherwise, regardless of encryption or instructions."

"Data feed," therefore, is reconceived as "information transmitted in a format that is not controlled or can be manipulated and integrated into their own systems." This is a vague and potentially quite broad definition covering a wide variety of potential uses by human traders and other natural persons. To the extent the definition overlaps with the category of non-display use, access fees do nothing more than double-charge customers for use already covered by the non-display use fee. CTA further states "if the data is delivered in a format that *allows for* non-display use, then such data delivery is tantamount to a data feed." And the proposal makes very clear the product it most intends to reach—SAPI. Indeed, SAPI is the only product identified. This product, which for years CTA has said was not a data feed, would be subject to access fees because CTA now (incorrectly) asserts it is "tantamount to a data feed."

[5] Like the March Amendment, the current version purports to "clarify" the 2014 definitions, 82 Fed. Reg. 55130, 55130, implying that SAPI would qualify as non-display use even under the previous terms. But that is plainly wrong. The 2014 amendment defined a "display use" as any use "in support of a data recipient's display." 79 Fed. Reg. 60536, 60538. That definition clearly applies to SAPI because, as explained above, SAPI *only* facilitates the display of market and derived data in a format useful to human viewers.

The fee increases for professional subscribers previously receiving display CTA data are massive:

Non-Display Fees (monthly)[6]				
Network	**Output Feed**	**Category 1**	**Category 2**	**Category 3**
Network A	Last Sale	$2,000	$2,000	$2,000
Network A	Bid/Ask	$2,000	$2,000	$2,000
Network B	Last Sale	$1,000	$1,000	$1,000
Network B	Bid/Ask	$1,000	$1,000	$1,000

Access Fees (monthly)[7]			
Network	**Output Feed**	**Direct Fees**	**Indirect Fees**
Network A	Last Sale	$1,250	$750
	Bid-Ask	$1,750	$1,250
Network B	Last Sale	$750	$400
	Bid-Ask	$1,250	$600

Previously, firms not considered data-feed recipients paid between $19 and $45 per professional device per month for quotation and last-sale information for Network A securities, and $23 per professional device per month for quotation and last-sale information for Network B securities. Under the Proposed Amendment, such firms would be required to pay at least an additional $6,000 per month in non-display use fees[8] and access fees for Network A securities, and an additional $3,000 per month for Network B securities.[9]

Small and mid-size customers would be disproportionately harmed by these fee increases. For a non-data-feed firm that previously paid to receive quotation and last-sale information for both Network A and Network B securities on 2 professional devices (roughly the average number of devices for a firm receiving Network A and B data through SAPI), these new fees would amount to an increase of more than 6,000%.[10]

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[6] For categories 1 and 2, a flat fee applies. For category 3, the fees are based on the number of platforms declared.

[7] These fees cover a data recipient's receipt of one primary data feed and one back-up data feed. Additional data feeds require payment of additional fees, as set forth in footnote 10 of the Plan's fee schedule, at https://www.ctaplan.com/pricing#45487110.

[8] The numbers are calculated based on the assumption that the firm only performs one of the three categories of non-display use. But there are three categories of non-display use of market data. Data recipients can be charged separately for each of the three categories of non-display uses.

[9] BLP offers last-sale and bid/ask data as a bundled product via SAPI. Therefore customers receiving Network A and/or Network B pay both fees.

[10] The SIFMA comment letter correctly observes that for a larger firm with 10 SAPI users, rather than 2, the additional $6,000 of monthly fees would represent an approximately 2000% increase. *See* Letter from Melissa MacGregor, SIFMA, SEC Docket, Release No. 34-82071. Yet even that eye-popping figure understates the true impact on the typical SAPI customer: a small or mid-size firm with just two authorized users.

	Before Amendment	After Amendment	Increase
Typical firm (2 users, Networks A and B)	$136/month	$9,136/month	6,617%

It is important to note that a SAPI customer can be liable for more than one of the three non-display categories CTA has created. That means the customer would pay the non-display fee more than one time. For example, if the firm listed in the table above receives two categories of non-display use, the above-mentioned $9,136 monthly fee would increase another $6,000 per month for the second category of non-display use. This would result in a total fee of $15,136 per month, or a 10,791% increase compared to the firm's pre-Amendment fee.

REASONS TO REJECT CTA'S PROPOSED AMENDMENT

1. The Amendment's Categorization of SAPI as a Non-Display Use Product Is Erroneous, Arbitrary, and Unsupported

CTA's attempt to extend the scope of access and non-display fees from algorithmic and automated trading to traditional human- and terminal-based activities is arbitrary, capricious, and unlawful. The limited reasoning and lack of evidence set forth by the Exchanges could not withstand scrutiny before any administrative or judicial tribunal.

The premise of CTA's Proposed Amendment is that BLP has mischaracterized SAPI as a display-use product. Yet for more than a decade, CTA and the exchanges consistently recognized that SAPI is a display product not subject to access or non-display fees. And since the 2014 amendment, nothing relevant about the SAPI product has changed. Indeed, the most relevant developments are further *limits* on permitted usage of SAPI that BLP has imposed since the product's 2004 launch and approval as a display product.[11] SAPI remains a product that is useful only if humans view and act on its displayed data. CTA points to no evidence controverting these facts or suggesting any misrepresentation of SAPI use.

The reality is that BLP has accurately described SAPI since SAPI was developed and approved for use in 2004. Neither CTA nor its administrator (NYSE) has ever challenged SAPI's technical safeguards, administrative controls, or use restrictions. CTA has never altered its initial 2004 approval of SAPI as a "display service" (*i.e.*, not a data feed). Since then, BLP has only made SAPI more restrictive. For example, black box usage is explicitly prohibited under SAPI customer contracts. Crucially, CTA never once asserted that SAPI amounted to a data feed or non-display use when it focused on algorithmic and automated use in supporting the 2013 access fee and 2014 non-display fee amendments. Even if there had been confusion about the proper classification, the appropriate response would be fact-gathering and negotiation by CTA and BLP over this specific product,[12] rather than unilateral imposition at the Commission

[11] SAPI's contractual prohibition of non-user-based, non-display applications was introduced shortly after BLP launched SAPI in 2004.

[12] The Commission repeatedly has emphasized that it relies, at least in the first instance, on consensus and negotiation regarding core-data pricing. *E.g.*, 69 Fed. Reg. 71272. This approach is impossible if

of a far-reaching rules change. If SAPI really amounted to a data feed or non-display product, CTA would not have had to "clarify" the definition; it simply could have enforced its fee plan under the rules in place during 2014, 2015, or 2016.

This pattern of silence and inaction, up until CTA's unsupported 2017 filings, belies the story CTA tells about exploitation of a regulatory loophole. And it shows the Proposed Amendment for what it really is: an effort by CTA to harvest more revenue for its member exchanges.

The breadth of the new proposed definitions, moreover, provides additional cause for concern. Under CTA's proposal, what was once an exception—non-display use for non-human trading activity—has become the rule. If approved, it threatens to swallow the definition of display use; it is hard to imagine what activity would not be susceptible for reclassification by CTA as "integrating" or "manipulating" data by someone sitting at a computer terminal.

2. CTA's Fees for Core Data Bear No Relationship to Costs and Cannot Be Sustained as Fair and Reasonable

The Proposed Amendment does not even attempt to meet the statutory standard for fair and reasonable fees for core market data. The Exchange Act, numerous Commission orders, and the D.C. Circuit all recognize that this exclusively-sourced data requires regulatory supervision. As a result, the fees must be set aside.

Core top-of-book data, consolidated by a SIP, is "the heart of the national market system."[13] But it is not subject to competitive constraints. The Exchange Act gives the exchanges a monopoly over this data, which market participants must purchase for trade-through and best-execution purposes. Investors of all stripes depend on its wide dissemination. Because core data is both uniquely valuable and uniquely monopolized, the Commission has recognized that it is particularly important to constrain the fees charged by a SIP like CTA.

The absence of effective market constraints has led the Commission and the courts to recognize that SIP pricing requires government regulation to ensure prices remain fair and reasonable. Accordingly, the Commission has required a reasonable relationship between the price and the cost of producing and disseminating this data.[14] The decisions in *NetCoalition I* and *NetCoalition II* both recognized this basic requirement.[15] The D.C. Circuit specifically

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exchanges unilaterally impose fee changes without meaningful engagement or notice.

[13] *Net Coalition v. SEC*, 615 F.3d 525, 529 (D.C. Cir. 2010) (quoting Regulation NMS, 70 Fed. Reg. at 37503 (quoting H.R. Rep. No. 94-229, at 93 (1975 Conference Report))).

[14] *See Institutional Networks Corp.*, Exchange Act Release No. 20874, 1984 WL 472209, at *4–5 (Apr. 17, 1984) (data fees charged by an exclusive processor "can only appropriately be based on the costs of collecting, validating and processing quotations," not on the "value-of-service"), *aff'd sub nom. Nat'l Ass'n of Secs. Dealers, Inc. v. SEC*, 801 F.2d 1415 (D.C. Cir. 1986).

[15] See *NetCoalition v. SEC*, 615 F.3d 525, 536 (D.C. Cir. 2010); *NetCoalition v. SEC*, 715 F.3d 342, 345 (D.C. Cir. 2013).

noted the "mandatory nature of the regime" and the role of the exchanges as sole-source providers of the data.[16]

Yet CTA's proposal did not even mention costs, the *NetCoalition* decisions, or the Commission's requirement that core data prices bear a reasonable relationship to cost.[17] Much less did the proposal offer any evidence or analysis that could support a massive increase in core-data pricing.[18] Even if it had tried, it is inconceivable that a fee increase of more than 6,000% could bear any reasonable relationship to the exchanges' costs of collecting and disseminating this data.

Given this lack of evidence or reasoning, the Proposed Amendment surely could not survive scrutiny in a Section 11A review proceeding. Nor could it pass muster at the D.C. Circuit—which has rejected most evidence the exchanges have offered in support of competitive price constraints even for *non-core* data.[19] Because CTA has not shown any relationship between its price increase and its costs, the Proposed Amendment must be set aside.

3. The Amendment Unfairly Discriminates Against BLP and Its Customers

CTA's amendment also violates the Act's prohibition against unfair discrimination by targeting a specific BLP product and its customers with a fee increase. As part of the regulatory bargain authorizing the exchanges to jointly and exclusively sell core market data, Congress required exclusive processors such as CTA to make quotation and transaction information available on terms that are "not unreasonably" or "unfairly" discriminatory. 15 U.S.C. § 78k-1(b)(5)(B), (c)(1)(D); *Institutional Networks Corp.*, Release No. 20874, 1984 WL 472209, at *11

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[16] *NetCoalition I*, 615 F.3d at 529 n.2. For this reason, the current challenge is distinct from the SIFMA litigation and should not be held for a decision on whether arguments about the competition and substitutability of exchanges' depth-of-book data constrain pricing for proprietary data. There is not any argument that competition or other market constraints apply to consolidated top-of-book data.

[17] *See, e.g.*, *In re Bunker Ramo Corp.*, Release No. 15372 (Nov. 29, 1978) (OPRA Order indicating costs are a relevant factor in determining the reasonableness of a fee for market information); *Instinet*, 1984 WL 472209, at *4–5 (concluding fee was an unwarranted denial of access because it was not supported by an adequate cost-based justification); Regulation of Market Information Fees and Revenues, 64 Fed. Reg. 70613, 70619 (Dec. 17, 1999) ("One standard commonly used to evaluate the fairness and reasonableness of fees, particularly those of a monopolistic provider of a service, is the amount of costs incurred to provide the service."); Concept Release Concerning Self-Regulation, 69 Fed. Reg. 71256, 71273 (Dec. 8, 2004) (1999 Market Data Concept Release recognized "that 'the total amount of market information revenues should remain reasonably related to the cost of market information.'") (quoting 64 Fed. Reg. at 70627); Regulation NMS, 70 Fed. Reg. 37496, 37567 (June 29, 2005) ("Under Section 11A(c)(1)(C), the more stringent ''fair and reasonable'' requirement is applicable to an ''exclusive processor'' ... that distributes the market information of an SRO on an exclusive basis."); NYSE ArcaBook Order, 73 Fed. Reg. 74770, 74779 (Dec. 9, 2008) ("the mandatory nature of the core data disclosure regime leaves little room for competitive forces to determine products and fees"); *id.* at 74779–80, 74786.

[18] Nor did the 2014 Amendment justify its new non-display fee with any such data. On that basis and others, Bloomberg continues to object to the lawfulness of the 2014 rule change.

[19] *See NetCoalition I*, 615 F.3d at 537–44.

("*Instinet*"). CTA's proposed amendment violates that standard in three crucial respects.

First, it uses CTA's quasi-regulatory pricing authority to unfairly target a single product by a single company. The notice repeatedly invokes Bloomberg and SAPI by name, mentioning them dozens of times in its short proposal. No other firm or product is identified. Although CTA's proposal at times suggests that the amendment to the definition of "non-display use" applies more broadly,[20] it never actually names any other affected product or vendor. What is more, CTA claims authority (citing no statutory or regulatory provision) to "make the sole determination as to whether a data recipient's use is subject to the Non-Display Use fee."[21] Thus, under the guise of "clarify[ing]" the definition of "non-display use," CTA is singling out SAPI for a price increase often exceeding 6000%, and claiming sole authority to target this or other products in the same discriminatory fashion in the future.

That ICE/NYSE has its own data vendor only heightens these concerns about discrimination and self-dealing. Interactive Data Corporation, owned by ICE, currently offers multiple potentially competing data products—a fact never mentioned in the proposal. This clearly warrants extra scrutiny of CTA's fees, as the Commission has recognized in its *Instinet* decision[22] and other market-data rulings.[23] Indeed, these concerns about discriminatory treatment would apply even if NYSE, as CTA administrator, applied the non-display use and access fees to competing products as well as SAPI. Because a competitor's corporate parent would receive the increased fees that its market-data customers would pay, any profits the exchange might lose as a data vendor could be recouped by its gains as a CTA member. Given CTA's lack of transparency, of course, BLP has no way of knowing whether the same fees would apply.

Second, CTA asserts that this amendment is necessary to "level the competitive imbalance that currently exists" among vendors under the 2014 non-display use amendment. 82 Fed. Reg. at 55135. Policing competition among vendors, however, is not part of CTA's responsibilities under the Exchange Act; its obligation is to ensure exclusive market data is disseminated on terms that are fair, reasonable, and nondiscriminatory. 15 U.S.C. § 11A(b). CTA goes so far as to suggest that some SAPI customers may not need the "unnecessary functionality" of SAPI—a product those customers have freely chosen to purchase in a competitive marketplace. 82 Fed. Reg. at 55133, 55136. This is presumptuous, unsupported, and completely irrelevant to the critical question whether CTA's own monopoly pricing is fair, reasonable, and nondiscriminatory under the Act. If allowed to stand, CTA's approach would set

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[20] *See, e.g.*, 82 Fed. Reg. 55130, 55130, 55132 (contending that the proposal addresses conduct by "some vendors" or "certain vendors").

[21] *Id.* at 55133.

[22] *See Instinet*, 1984 WL 472209, at *10 (recognizing that even the potential that an exclusive processor has anti-competitive motivations "requires the Commission to scrutinize [the processor's] fees carefully to ensure that they do not have inappropriate competitive effects").

[23] *Cf.* ArcaBook Order, 73 Fed. Reg. 74770, 74782 (Dec. 9, 2008) ("an exchange proposal that seeks to penalize market participants for trading in markets other than the proposing exchange would present a substantial countervailing basis for finding unreasonable and unfair discrimination and likely would prevent the Commission from approving an exchange proposal").

a dangerous precedent for any company or product that develops valuable ways of disseminating core market data.

To be clear, BLP favors a level playing field, in which similar products receive the same treatment. To the extent other vendors offer the same features as SAPI, these should be categorized the same way. It does not follow, however, that because *different* products pay the access and non-display use fees, BLP's display product should be subject to those fees as well. That one of BLP's competitors may offer a competing product says nothing about whether that product is similar to SAPI, whether it is subject to non-display or access fees (BLP has no way of knowing), or whether CTA's fees should be gerrymandered to include SAPI. *See* Thomson Reuters, SEC Comment Letter, Release No. 34-82071 (Nov. 28, 2017) (aggressively supporting the Proposed Amendment without indicating whether its data product is subject to the fees CTA seeks to impose on SAPI).

Third, CTA's proposed amendment unfairly discriminates against Bloomberg and its customers by misclassifying SAPI with dissimilar non-display and data-feed products. As discussed above, under the 2014 amendment, the products subject to the non-display and access fees are those used for "algorithmic trading" and other "automated" processes; those fees do *not* apply to uses "in support of a data recipient's display," or to "creation and use of derived data." 79 Fed. Reg. 60536, 60537–38. [24] The essential attributes of non-display use repeatedly cited by the exchanges—"consum[ing] large amounts of data," "*process[ed] ... far more quickly than any human being looking at a terminal*"—no more apply to SAPI customers sitting at their computers than to customers using other display products.[25] Yet the 2017 Proposed Amendment would group SAPI with other automated uses that would not be allowed through SAPI.

The Proposed Amendment would impose this non-display use fee based on SAPI's purported "functionality." It is illogical to apply a *use* fee based on anything other than the way the product is used. Regardless, CTA offers no evidence that SAPI is ever used for a non-display purpose even under its revised definition, let alone any evidence that would justify treating SAPI in every case as a non-display use. CTA's proposal incorrectly "presum[es]" BLP customers subscribe to SAPI "because they are using the data for purposes other than just display of the data." 82 Fed. Reg. at 55133. The gerrymandering of the non-display definition to target one particular product unfairly and unreasonably targets SAPI, and SAPI alone, for treatment as automated non-display use. That is the essence of unfair and unreasonable discrimination.

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[24] *See also* 78 Fed. Reg. 21688, 21670 (Apr. 11, 2013) (NYSE filing defining non-display use as "accessing, processing, or consuming [data] ... for a purpose *other than in support of its display* or further internal or external redistribution"); 76 Fed. Reg. 35498, 35499 n.12 (June 17, 2011) ("Non-display devices *do not graphically show ... market data* but instead use the data for performance of analytic or calculative functions (e.g. algorithms."); *In re Application of SIFMA*, Admin Proc. File No. 3-15350, Jurisdictional Br. of NYSE, at 16 (Aug. 19, 2014) (contrasting a "display use," which "display[s] the data to users," with a "non-display use," which "use[s] the data for trading purposes, such as using the data as an input into high frequency trading or other algorithmic models" (citations omitted)).

[25] *See* 78 Fed. Reg. at 21670 (NYSE notice applying non-display fees).

4. Increasing Market-Data Fees Disserves the Public Interest

CTA's proposal erects a convoluted regulatory structure atop an already complex web of regulations and interpretations. The result is increased costs and barriers to entry for market participants—particularly smaller entities which may lack the resources to navigate CTA's self-serving regime. Because the proposal would hinder capital formation, increase costs for retail investors, and disserve the public interest in broad dissemination of core market data, the Commission should abrogate and set aside the Proposed Amendments.

The inefficient and problematic nature of this regime is increasingly apparent to decisionmakers in the government and the financial-services industry. The Treasury Department's recent Report on Capital Markets[26] and the Recommendations of the Commission's own Equity Market Structure Advisory Committee,[27] for example, underscore why the Proposed Amendment should be rejected. By injecting higher costs into this particular segment of the market, these fee increases will disproportionately affect small and mid-size firms, small and mid-size businesses that work with those firms, and the retail and other investors they serve. They interfere with access to vital market information, particularly for the retail investors most in need of the Commission's protection. Heretofore, all sides of the extensive market-data debate have accepted that top-of-book data should be held to a cost-based standard of fair and reasonable rates. A potential increase in the cost of top of book market data in excess of 6,000% flouts this approach.

CTA also poses a problem for market participants by re-categorizing data for higher non-display fees even when the data is being utilized simply for best-execution purposes. This is significant because broker-dealers analyze the data to determine whether they are getting best execution for investors. This analysis combines several factors in a server-based application so the broker can see whether he or she will be getting best execution for the investor.

5. The Commission Should Abrogate the Effectiveness of This Procedurally Improper Amendment

The Proposed Amendment represents an attempt by CTA to drastically change the terms of its fee schedule without a Commission decision under Rule 608. The CTA designated the Proposed Amendment as "establishing or changing fees," thus permitting the amendment to become effective upon filing pursuant to Rule 608(b)(3)(i). As a result, the Proposed Amendment was not subject to a public notice and comment period or Commission approval prior to becoming effective. By abrogating the amendment, the Commission can demonstrate its commitment to transparency and public input for large, controversial fee changes.

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[26] U.S. Department of Treasury, A Financial System That Creates Economic Opportunities: Capital Markets (October 6, 2017), available at https://www.treasury.gov/press-center/press-releases/Documents/A-Financial-System-Capital-Markets-FINAL-FINAL.pdf.

[27] *See* SEC Equity Market Structure Advisory Committee, Recommendations Regarding Enhanced Industry Participation in Certain SRO Regulatory Matters (July 8, 2016), available at https://www.sec.gov/spotlight/emsac/recommendations-enhanced-industry-participation-sro-reg-matters.pdf.

Automatic effectiveness under Rule 608(b)(3)(i) may sometimes be appropriate for amendments that simply alter fees. The changes proposed by CTA, however, are not "simple" fee increases; they are significant definitional changes designed to extract vastly increased fees from across the industry. Indeed, their substantive definitions will shape how core data vendors innovate and offer data products going forward. These definitional changes for sole-source core market data certainly warrant a legitimate public notice and a comment period.

CTA repeatedly insists that the Proposed Amendment is merely a "clarification" of an "ambiguity" of the fee schedule and use policy. *E.g.,* 82 Fed. Reg. at 55130, 55132, 55134, 55136. Rather than clarifying an ambiguity, the Proposed Amendment entirely redefines "data feed" and "non-display use" to include data usage that is clearly display only—and that has been treated as a display use, not a data feed, since at least 2004. As noted above, the machinations that led to this "clarification" becoming a "fee amendment" only heighten the need for scrutiny.

Under any standard, however, CTA has not provided sufficient information to demonstrate that the Proposed Amendment complies with the statutory requirements of the Exchange Act, particularly as required by *Susquehanna Int'l Group v. SEC*, No. 16-1061 (D.C. Cir. Aug. 8, 2017). CTA *admittedly* has not prepared a true cost-benefit or economic-impact analysis as required by Rule 608(b)(4)–(5).[28] CTA's unsupported attack on BLP's purported mischaracterization of SAPI cannot substitute for the economic analysis required of a SIP or self-regulatory organization. And CTA has not even posted the text of the fee plan amendment as required by Rule 608(a)(8). The Commission should therefore suspend or abrogate these Amendment to allow for public scrutiny and Commission review.

[28] In fact, CTA admits it "cannot conduct a precise analysis of what changes to revenue would accrue if this amendment were to go into effect." 82 Fed. Reg. at 55136.

CONCLUSION

BLP respectfully urges the Commission to abrogate or stay the effectiveness of the CTA Proposed Amendment, or, in the alternative, to scrutinize and then set aside the Amendment after public notice and comment.

We appreciate the opportunity to provide BLP's views to the Commission on these important issues. If you have any questions or would like to discuss this matter further, please do not hesitate to contact me at [redacted] or [redacted].

Respectfully submitted,

By: Greg Babyak
Head, Global Regulatory Affairs and Public Policy, Bloomberg LP

By: Brian Doherty
Global Head of Product Development, Realtime Content, Bloomberg LP

RESPONSES TO THE COMMISSION'S QUESTIONS

The Commission solicited comment on four questions, 82 Fed. Reg. at 55136–37, to which BLP is pleased to respond:

Q1: Whether the impact of the 2014 CTA/CQ Fee Amendments on market data users has been consistent with the representations of the Participants?

A1: No, experience under the 2014 nondisplay amendments has been entirely inconsistent with CTA's representations. The 2017 proposal states that "some vendors appear to be ignoring the import of the 2014 Fee Amendments in order to gain an advantage over other vendors, allowing them to profit from new or existing customers by offering them lower fees than such customers could obtain from vendors who apply the 2014 Fee Amendments correctly." 82 Fed. Reg. at 55130. BLP is entirely unaware of any such "loophole," "ambiguity," or "advantage." The fundamental use of top-of-book data by BLP's SAPI product has not changed since well before the 2014 amendments. Because that rule change focused on algorithmic and automated trading using non-display data, and expressly distinguished human-driven trading using display data, it had no impact on SAPI.

The proposal also describes "certain vendors" (presumably BLP) allegedly "characterizing the usage of their customer as subject to solely the device fees despite the fact that the vendors were not delivering the data in a controlled format." *Id.* at 55132. This is also false. CTA understands that BLP works diligently to control the data supplied to its customers via SAPI. This involves contractual, biometric, and design limits directed to the customers themselves, as well as consultation with exchanges regarding the controls BLP utilizes for SAPI applications and data.

Finally, the proposal alludes to vendor behavior "upset[ting] the competitive balance among vendors." *Id.* Given CTA's failure to identify any disadvantaged vendor or any assessment of competition either before or after the 2014 amendments, it is difficult to assess this broad and vague claim. Suffice it to say that BLP is unaware of any such development in the data-vendor marketplace, which unlike the market for exclusive SIP data remains robust and competitive. And CTA has failed to offer the Commission, commentators, or affected constituents any factual information on which to assess the accuracy or significance of its claim. The 2017 proposal, of course, goes far beyond the steps taken in 2014, based on far less analysis and factual support.

Q2: The number of market data users that would be impacted by these Amendments?

A2: Currently hundreds of firms subscribe to BLP's SAPI product using CTA data, either Network A or Network B. The number of users at these firms varies between 1 and 20 per firm. On average, a BLP SAPI firm has 2.6 users per firm for Network A data, and 1.7 users per firm for Network B data. BLP is unable to predict the ways in which CTA will exercise the authority it claims to define which additional BLP and competitor products may fall under its newly expended definitions of "access fee," "data feed," and

"non-display use fee" offered in the Proposed Amendment.

Q3: The impact these Amendments would have on, for example, the fees paid by market data users?

A3: The Proposed Amendment would require user firms currently paying display fees to pay non-display use fees and access fees. As stated above, for a non-data-feed firm that previously paid to receive quotation and last sale information for both Network A and B securities on 2 professional devices (roughly the average number of devices for a customer firm receiving Network A and B data with SAPI), these new fees could amount to a price increase of more than 6,000%.

Q4: Whether the Amendments would have a disproportionally greater impact on certain segments of users (e.g., small and midsize trading firms)?

A4: The Proposed Amendment would have a disproportionally greater impact on small and mid-size firms, as described above. The typical SAPI customer is a firm viewing CTA data on two or three devices. By any measure, this is a small or mid-size firm. Such firms regularly serve retail investors most in need of efficient service, broad information access, and effective Commission protection. Under the Proposed Amendment, these firms (and their customers) could experience an increase in prices in excess of 6,000%. Following this price spike, firms would face a choice between becoming less competitive by paying the Exchanges' high rents, dropping the data-display interface the firm had selected in favor of a less attractive market-data product, or paying even higher fees for data-feed functionality the small or mid-sized firm may not need. Even if firms switched to a lower-cost option, moreover, CTA could still choose later to single out another vendor display product as sufficiently "integrated" with a computer to warrant the high non-display use fee.

Attachment A

Margaret Sullivan
Director

New York Stock Exchange
11 Wall Street
NYC, NY 10005
212-656-5553
Margaret.Sullivan@NYSE.com

March 27, 2017

Mr. Gadi Goldress
Bloomberg LP
120 Park Ave.
New York, NY 10165

Dear Gadi:

Please be advised that the Consolidated Tape Association ("CTA") filed with the Securities and Exchange Commission an immediately effective amendment to both the CTA Plan and Consolidated Quotation ("CQ") Plan that clarifies certain fees relating to Display and Non-Display Use and when access fees are applicable (the "CTA Fee Clarification") (see Securities Exchange Act Release No. 80300 (March 23, 2017) (File No. SR-CTA/CQ-2017-02)). The amended Fee schedule is available here: CTA Network A Pricing/Rate Schedule; CTA Network B Pricing/Rate Schedule

As described in greater detail in the CTA Fee Clarification, footnote 2 of the CTA Schedule of Market Data Charges (the "Schedule") provides that "display data use subject to the Network A and Network B Subscriber charges shall mean only data that is visibly available to the data recipient; any other data use on a Device shall be considered Non-Display Use." In addition, footnote 8 of the Schedule specifies that "any use of the Data that is not designed to make the Data visibly available to the Data recipient on a device is a Non-Display Use." Finally, footnote 10 of the Schedule now provides that the "access fee applies if (i) the data recipient uses the data for non-display; or (ii) the data recipient receives the data in such a manner that the data can be manipulated and disseminated to one or more devices, display or otherwise, regardless of encryption or instructions from the redistribution vendor regarding who has authorized access to the data." The CTA Fee Clarifications, as filed, are applicable to all data recipients and supersede any prior understandings of the operation of the Schedule.

Based on your description of Bloomberg's Service API functionality ("SAPI"), it does not qualify as a Professional/Internal Device under the Schedule. You describe SAPI as allowing firms to "run server-based applications" and "make real-time data available internally" to users' devices. Both of these uses imply that SAPI does not make data visibly available to the data recipient; rather, SAPI is an extranet service that provides access to a data feed. Therefore, pursuant to the Schedule, as clarified consistent with the CTA Fee Clarification filed with the SEC, we consider use of SAPI to be Non-Display Use and subject data recipients to the applicable access fees. Any prior communications regarding SAPI are superseded by the fee clarification.

Sincerely,

Margaret M Sullivan

Baird Equity Asset Management

December 11, 2017

Brent J. Fields
Secretary
Securities and Exchange Commission
100 F Street, NE
Washington, DC 20549e

Re: **Notice of Filing and Immediate Effectiveness of the Twenty-Second Charges Amendment to the Second Restatement of the CTA Plan and the Thirteenth Charges Amendment to the Restated CQ Plan (Release No. 34-83071; File No. SR-CTA/CQ-2017-04)**

Dear Mr. Fields,

On November 20th, 2017, the CTA amended the CTA Plan's fee schedule and non-display use policy to expand the applicability of the non-display fee and the access fee. The proposal is effectively the same as that which the CTA proposed in March. That proposal was withdrawn in the face of major industry pushback in April.

In its filing, the CTA asserts that Bloomberg SAPI is -- and always has been -- a datafeed (not a terminal product) and that Bloomberg SAPI is -- and always has been -- a non-display product. The immediate practical effect of this change in classification is a massive increase in fees that will have a disproportionately large impact on small and mid-size firms. A firm with 10 professional devices would experience a 2000% fee increase. Needless to say, the CTA has offered no cost justification or other rationale to justify such a massive increase.

The undersigned are among the hundreds of firms using Bloomberg SAPI. As data services professionals who are very familiar with the market and the Bloomberg SAPI product, we believe that Bloomberg SAPI is a display product intimately tied to the Bloomberg terminal and **not** a datafeed product. Our clients rely on our Bloomberg SAPI interface.

This reclassification is a dramatic break with existing definitions and practice, with implications far beyond Bloomberg SAPI. If Bloomberg SAPI -- which utilizes state of the art monitoring and controls -- is considered a non-display/datafeed service, then it is hard to confidently state what product meets this new standard and whether, indeed the "display" category has been, as a practical matter, defined out of existence.

Bloomberg SAPI is properly classified as a terminal-based display product. We urge that this accurate classification remain in force.

Thank you for your consideration.

Sincerely,

Reik Read
Director of Baird Equity Asset Management

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CHX | CHICAGO STOCK EXCHANGE

December 14, 2017

By Electronic Mail (rule-comments@sec.gov)

Brent J. Fields
Secretary
Securities and Exchange Commission
100 F Street, NE
Washington, D.C. 20549-1090

Re: File No. SR-CTA/CQ-2017-04

Dear Mr. Fields:

The Participants submit this letter in response to comment letters received by the Securities and Exchange Commission (the "SEC" or the "Commission") in connection with the above-referenced filing (the "Amendment"), which proposed clarifications to the fee schedules of the Consolidated Tape Association ("CTA") Plan and the Consolidated Quotation ("CQ") Plan (collectively, the "Plans"). The Amendment would clarify the applicability of the device fees, the Non-Display Use fees, and the access fee.

We appreciate this opportunity to address the issues raised by commenters to the SEC. We believe that comment letters requesting that the SEC abrogate the Amendment are based on a complete misunderstanding and mischaracterization of the filing. In particular, those commenters are attempting to misuse the comment process for the Amendment to interpose untimely objections to established fees that have been in place since 2014 pursuant to an effective rule change under Rule 608 of Regulation NMS ("2014 Fee Amendments").[1]

At its core, the Amendment is designed to clarify a simple concept: if a professional customer receives data and uses it in a non-display manner, such customer should be subject to non-display use fees. Despite what some commenters have stated, the Amendment is meant to address a competitive disparity between vendors whereby some vendors are receiving data and providing non-display functionality to their professional customers while charging lower fees despite providing the same non-display functionality as vendors charging the correct fees. It is this competitive disparity that will be rectified by the Amendment. If in fact a vendor's particular data product does not raise these competitive issues—because the data product does not provide the type of functionality that the Amendment is meant to address—then the Amendment will not apply to that product. But to try to use the comment process and abrogation procedure to rehash objections to non-display use fees implemented in 2014 only serves to maintain an unfair competitive landscape.

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[1] See Securities Exchange Act Release No. 73278 (October 1, 2014), 79 FR 60536 (October 7, 2014) ("2014 Fee Amendments").

The purpose of the Amendment is to level the competitive landscape for competing market data vendors.

Despite the mischaracterizations by SIFMA,[2] Bloomberg,[3] and other commenters apparently solicited by Bloomberg,[4] the Amendment is not designed to impose "massive fee increases" on market data subscribers, but instead to ensure that competing vendors operate on a level playing field. There is a very real concern that certain vendors are exploiting what they believe to be an ambiguity in the current fee schedule in order to provide their professional customers with a data product that has a higher level of functionality at lower costs as compared to products provided by other vendors. The Amendment is intended to ensure that the fee structure implemented in 2014 is fairly applied across all vendors, regardless of the product used to deliver the data, according to the function the product performs. This is why the Amendment was focused on creating functional definitions to determine when the device, non-display use, and access fees were applicable. With the wide variety of data products made available to professional customers, the Participants wanted to create a functional definition that could be equally and fairly applied across the entire industry and was not subject to manipulation.

Importantly, a competing market data vendor supports the Amendment for precisely these reasons. Thomson Reuters stated that "this clarification will create more of a level playing field for vendors to compete and will allow clients to pick products knowing that exchange fees for comparable services won't differ depending on provider."[5] If Bloomberg and SIFMA were correct that the Amendment is a "massive fee increase," a competing market data vendor would not support the filing. But as Thomson Reuters correctly recognizes, "[t]his amendment doesn't contemplate the level of fees but instead clarifies the manner in which these fees should be applied."

The "fee increases" that SIFMA and Bloomberg focus on were adopted as part of the 2014 Fee Amendments. The 2014 Fee Amendments were adopted only after extensive discussions with the industry and the Commission. It is inappropriate to attempt to re-hash objections to those fees in connection with the Amendment since the Amendment is designed to simply ensure that those fees are applied fairly across the industry and effects no changes to the fees themselves. What the fees are is not at issue in this rule filing process, how they are applied is, and SIFMA and Bloomberg's objections, if credited, would only serve to maintain the current uneven competitive landscape while having no effect on the fees adopted as part of 2014 Fee Amendments.

Further, the Participants have no pre-conceived expectation about the change in fees *collected*, if any, that may result from the Amendment. It could be the case that fees collected do

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[2] *See* Letter from Melissa MacGregor, SIFMA (Dec. 11, 2017) ("SIFMA Letter").

[3] *See* Letter from Greg Babyak, Bloomberg (Dec. 11, 2017) ("Bloomberg Letter").

[4] *See* Letter from ACR Alpine Capital Research, LLC, et al. (Dec. 11, 2017), Letter from Reik Reed, Baird Equity Asset Management (Dec. 11, 2017).

[5] *See* Letter from David Craig, Thomson Reuters (Nov. 28, 2017) ("Thomson Reuters Letter").

not change at all. If a vendor's product in fact does not enable non-display functionality, then the non-display use and access fees will not be applicable to that product if it is provided to a professional and the amendment will result in no additional fees being collected from that data recipient. Moreover, as previously stated to the Commission, it may be the case that a particular data product is providing a level of functionality that its users simply do not need. Therefore, even if a data product should be subject to the non-display use and the access fees, professional customers may realize that they should switch to a different data product that provides a lower level of functionality, thereby avoiding any potential additional fees.

The Amendment does not discriminate against any particular vendor, but instead ensures that vendors operate within a fair, competitive environment.

It is a mischaracterization of the Amendment to state that it is designed to discriminate against any particular vendor when the reality is that the Amendment is designed to ensure similar treatment of vendors providing similar data products. In its comment letter to the Commission, Bloomberg asserts that the Amendment violates the law by "[u]nfairly discriminating against a single vendor, product, and set of customers by imposing a targeted fee increase . . . ." But the text of the Amendment does not target any specific vendor or product, it focuses on the functionality provided by all data products offered by all vendors to determine whether any of those data products should or should not be subject to the non-display use and access fees, and the outcome of that depends solely on each data product's functionality.

By using definitions focused on functionality rather than an arbitrary feature, such as transmission method, the Amendment ensures the equal treatment of similarly situated data products. If, under the Amendment, a particular vendor's data product costs more than another vendor's data product, it will be because of the functional differences in what the data product offers to its professional customers. Abrogating the Amendment, on the other hand, would only serve to perpetuate an improper, unfair, and discriminatory interpretation of the non-display use and access fees.

Whether or not any particular data product is subject to the non-display use fees is a factual question that will be resolved separately from the implementation of the fees.

A large portion of Bloomberg's comment letter is dedicated to arguing that its Server Application Program Interface ("SAPI") product is not a non-display program but instead should be considered as enabling a display use only. Whether that is so or not is a factual question unrelated to the merits of the Amendment.[6] Previous statements regarding the applicability of the Amendment to Bloomberg's SAPI product have been based on the Participants'

[6] In defense of its position that SAPI is a display-only product, Bloomberg relies on the fact that its SAPI product was developed and approved for use in 2004 and was approved by the CTA Administrator as a "display service" in 2004, long before the industry developed the non-display use concept and defined it. The 2014 Fee Amendment was adopted in 2014, ten years later, after extensive consultation with the industry. Any discussions prior to 2014 therefore are immaterial.

understanding of the Bloomberg SAPI product and the description that Bloomberg provided on how the SAPI product works. In addition, the CTA Administrator had been advised by a Bloomberg customer that it was cancelling a datafeed because the Bloomberg SAPI product would provide it with the same functionality at lower cost. As a result, the CTA Administrator reached out to Bloomberg for additional information regarding customer use of the Bloomberg SAPI product, but did not receive sufficient information to assess whether the SAPI allows for non-display use. If the Bloomberg SAPI product enables only display uses, then the Bloomberg SAPI product would not be subject to the non-display use and access fees. Again, the Amendment is not designed to target any specific data product, but instead to focus on the functionality provided by a data product. If a data product does not allow for the use of data at issue, then the Amendment would not be applicable.

It is telling that some commenters have sought to defend the Bloomberg SAPI product and assert that their fees will increase substantially as a result of the Amendment.[7] If in fact the Bloomberg SAPI product were truly a display-only product, there would be no reason for any Bloomberg customers to worry about their fees increasing. A reasonable inference is that the alternative products that compete with the functionality provided by the Bloomberg SAPI product are in fact non-display products and that the price Bloomberg has been charging for the SAPI product, if provided to professionals, is in fact artificially depressed, to the competitive disadvantage of other vendors. Viewed from that perspective, the supposed "massive fee increase" decried by these commenters is actually a concession of an improper discount that users of the Bloomberg SAPI product have been able to take advantage of as a result of Bloomberg's exploitation of a perceived ambiguity in the fee schedules. Therefore, the outcry by these commenters regarding the Amendment may very well be a byproduct of the unfair competitive landscape that the Amendment is designed to address.

Abrogating the Amendment would only perpetuate the unfair competitive imbalance and would have no effect on the 2014 Fee Amendments.

SIFMA attacks the Amendment on the basis of a wide range of broad policy reasons, claiming that the Amendment would harm investors, fail to maintain fair, orderly, and efficient markets, and impede capital formation. But SIFMA's expansive attack on the NMS plan governance structure[8] and market data fees fails to even recognize the key purpose of the Amendment: to resolve the competitive imbalance resulting from certain vendors' mischaracterization of their data products. The Amendment is narrowly focused on leveling the

[7] It would appear that the use of similar language by the various commenters is a result of Bloomberg soliciting letters from its customers. Therefore, those letters are premised on the same mischaracterization of the Amendment as singling out Bloomberg, rather than an attempt to level the competitive landscape.

[8] SIFMA claims that the scope, objectives, and potential impact of the Amendment were not discussed with the Advisory Committee, citing to the General Session summary posted on the Plan's website for support. The General Session summary cited by SIFMA, however, was identified as being just that, a summary, and did not purport to reflect the extent of all discussions among the Participants and the Advisory Committee. The Amendment indeed was extensively discussed with the Advisory Committee at multiple meetings of the Plan's Operating Committee. The Amendment was discussed most recently at the May 25, 2017 meeting following the withdrawal of the previous filing; the advisors inquired at that time when the revised rule filing for the Amendment would be made, recognizing the necessity of treating vendors equally.

playing field between those vendors properly characterizing their products' functionality and other vendors who are attempting to obtain an unfair advantage by offering their professional customers lower fees despite providing the same functionality.

Abrogating the Amendment would not affect the establishment of non-display use fees since those fees were adopted by and extensively discussed in the 2014 Fee Amendments that were filed with the Commission. Instead, abrogating the Amendment would provide certain vendors with continued grounds for arguing the use of their data products are not subject to non-display use or access fees.[9] Such a result would allow certain vendors to maintain their improper competitive advantage over other vendors that are already properly characterizing their products' functionality.

* * * * *

For the reasons discussed above, we believe that the Commission should allow the Amendment to remain effective. To do otherwise would maintain the uneven playing field vendors have arrogated for themselves to the economic disadvantage of those vendors who have implemented (and continue to implement) the 2014 Fee Amendments correctly.

Sincerely,

Emily Kasparov
Chair
Plans' Operating Committee

Cc: John C. Roeser, Associate Director, Division of Trading and Markets
Katherine A. England, Assistant Director, Division of Trading and Markets
CQ/CTA Participants

[9] The Participants believe that the Bloomberg SAPI and similar data products would be subject to the non-display use and the access fee even if the Amendment was abrogated, assuming those products enable non-display functionality. The Amendment was simply designed to eliminate any perceived ambiguity that vendors may be exploiting to gain an unfair advantage over vendors who have properly applied the 2014 Fee Amendments since their inception.

Bloomberg

Bloomberg LP 731 Lexington Avenue New York, NY 10022 Tel +1 212 318 2000

February 7, 2018

Brent J. Fields
Secretary
U.S. Securities and Exchange Commission
100 F Street, NE
Washington, DC 20549

Re: **Motion to Stay the Effectiveness of CTA's Fee Amendments (SEC Release No. 34-82071; File No. SR-CTA/CQ-2017-04)**

Dear Mr. Fields,

Bloomberg L.P. writes to inform the Commission and interested parties of Bloomberg's motion, filed yesterday, for a stay of the above-captioned fee amendment of the Consolidated Tape Association ("CTA") national market system plan.

On November 14, 2017, CTA published a proposed amendment to the CTA/CQ plan that would substantially broaden the applicability of CTA's non-display and access fees for consolidated core market data. This was CTA's second attempt to expand these fees, following its withdrawal of a similar amendment in May 2017 after numerous commenters opposed the amendment. *See* Exchange Act Release 34-80819 (May 31, 2017), 82 FR 26171 (June 6, 2017) (SR-CTA/CQ-2017-02), and related comments. The change would impose a large fee increase—exceeding 6,000% for many small and mid-size firms—by treating the Bloomberg "SAPI" display service as a data feed subject to non-display and access fees.

Bloomberg, SIFMA, and many other market participants filed comments in opposition to CTA's November amendment.[1] The comments noted the amendment's tremendous financial harm, lack of cost-based justification for core-data fees, mischaracterization of Bloomberg's SAPI display service, misclassification of display devices and data feeds, and anticompetitive targeting of a particular market-data service—as well as the urgent need for Commission review of the amendment under Exchange Act §11A and Reg. NMS Rule 608(b). On December 13, 2017, Bloomberg and SIFMA filed applications for review of CTA's limitation of access under §11A.

In January 2018, however, the New York Stock Exchange—CTA's administrator—

[1] Commenters from the following institutions expressed opposition to the amendment: ACR Alpine Capital Research, Aleska Investment Group, AO Asset Management, Baird Equity Asset Management, Bloomberg, Bluefin Trading, Cantor Fitzgerald, Charles River Development, Duquesne Fund Services, Federated Investors, Garda Capital Partners, Global Endowment Management, Luminus Management, MacKay Shields, the Managed Funds Association, Masa Capital, SIFMA, TLP Trading, and TRPV Capital.

sought a complete list of Bloomberg's SAPI customers in order to enforce this fee increase. If Bloomberg must disclose this confidential customer list, and if its customers must face massive new fees for use of Bloomberg's service, Bloomberg and its customers would be irreparably harmed. That harm, moreover, would flow from an immediately effective amendment that the Commission has not yet approved, and that the Commission likely will find unfair, unreasonable, and discriminatory under the Exchange Act. In order to preserve the status quo pending the Commission's review, Bloomberg yesterday respectfully requested a stay of the amendment's effectiveness under Rule 401 of the SEC Rules of Practice.

Bloomberg's stay motion and supporting exhibits, which explain the invalidity and harm of CTA's amendment in greater detail, have been filed with the Commission, shared with CTA, and attached to this letter.

Respectfully submitted,

By: Greg Babyak
Bloomberg LP

Enclosures

cc: Jay Clayton, Chair
Robert J. Jackson, Jr., Commissioner
Hester M. Peirce, Commissioner
Michael S. Piwowar, Commissioner
Kara M. Stein, Commissioner
Brett Redfearn, Director, Division of Trading & Markets
David Shillman, Associate Director, Division of Trading & Markets
John Roeser, Associate Director, Division of Trading & Markets
David Metzman, Counsel to the Director, Division of Trading & Markets

Bernardo Santiago
CEO
S4 Market Data

1101 Brickell Ave
Miami, FL 33131

[redacted]

The Honorable Brent J. Fields
Secretary
U.S. Securities and Exchange Commission
100 F Street, NE
Washington, DC 20549

February 26, 2018

Re: Notice of Filing and Immediate Effectiveness of the Twenty Second Charges Amendment to the Second Restatement of the CTA Plan and the Thirteenth Charges Amendment to the Restated CQ Plan (Release No. 34-82071; File No. SR-CTA/CQ-2017-04)

Dear Mr. Fields:

S4 Market Data appreciates the opportunity to comment on the above-referenced Notice of Filing and Immediate Effectiveness of the amendments to the CTA Plan and the CQ Plan. S4 Market Data strongly supports the clarity and consistency it provides on how fees are to be applied and submit this comment letter in response to the comment letter filed by Bloomberg L.P. attaching Bloomberg's motion to stay the amendment.

S4 Market Data is a consulting firm servicing the financial information services industry, with special focus on Market and Reference data. A primary function of S4 Market Data is to introduce data consumers to market data management best practices. S4 Market Data was founded to assist firms in providing structure to their market data programs and verify that their data use is in compliance with the policies of exchanges and data providers in multiple countries.

Under Section 11A of the Exchange Act, exchanges must make market data available at fair, reasonable, and non-discriminatory rates. The amendment to the CTA Plan and CQ Plan that Bloomberg is seeking to stay serves this exact purpose. CTA defines Non Display use as the use of market data other than in support of its display or distribution.

Some examples of Non Display activities would be the following:

- Any trading in any asset class
- Automated order or quote generation and/or order pegging
- Price referencing for algorithmic trading
- Price referencing for smart order routing

MARKET DATA

- Operations control programs
- Investment analysis
- Order verification
- Surveillance programs
- Risk management
- Compliance
- Portfolio Valuation

I've worked in the market data industry for over 15 years at asset management firms, investment banks, hedge funds and broker dealers. In particular I have worked for firms that have used Bloomberg SAPI product that Bloomberg references in its comment letter. I have also discussed with other companies their usage of Bloomberg SAPI. Non Display fees should apply to similarly situated services and therefore should apply to Bloomberg SAPI as well in order to create a level playing field for all market data vendors.

The Bloomberg SAPI allow subscribers, if they choose, to perform these activities in other systems using the data which the SAPI provides them. The Bloomberg Server API is the license required for third party providers and client's in-house applications to source data via Bloomberg. Subscribers can access the same real-time market data, historical data, premium reference data and calculation tools with the Bloomberg Professional service (https://www.bbhub.io/solutions/sites/8/2015/09/Fact-Sheet-Server-API-SAPI.pdf). A Standard SAPI license covers streaming requests up to 5000 unique securities per month, up to 1.5 million static requests per day and permits the subscriber to feed the data received in up to 3 applications at a fee of $5,485/month. A Premium SAPI license covers streaming requests up to 10,000 unique securities per month, up to 3 million static requests per day and permits the subscriber to feed the data received in up to 6 applications at a fee of $10,970/month.

I have seen the Bloomberg SAPI used by subscribers to make CTA data available to Bloomberg Professional subscribers in third party providers applications as well as client's in-house applications for the purpose of using the data to perform Non Display activities. I was responsible for eliminating this practice at one of my former employers. This is fairly standard practice throughout the industry and the primary purpose for which I have seen subscribers purchase Bloomberg SAPI licenses.

S4 Market Data believes this is a clarification that is critically needed in order to level the playing field for vendors distributing US equity exchange data. Please do not hesitate to contact me at [redacted] or phone [redacted] to discuss this further.

Yours sincerely,

Bernardo Santiago
CEO
S4 Market Data

THOMSON REUTERS

David Craig
President
Financial & Risk

The Thomson Reuters Building
30 South Colonnade
Canary Wharf
London E14 5EP

February 27, 2018

The Honorable Brent J. Fields
Secretary
U.S. Securities and Exchange Commission
100 F Street, NE
Washington, DC 20549

Re: Notice of Filing and Immediate Effectiveness of the Twenty Second Charges Amendment to the Second Restatement of the CTA Plan and the Thirteenth Charges Amendment to the Restated CQ Plan (Release No. 34-82071; File No. SR-CTA/CQ-2017-04)

Dear Mr. Fields:

Thomson Reuters appreciates the opportunity to comment on the above-referenced Notice of Filing and Immediate Effectiveness of the amendments to the CTA Plan and the CQ Plan, which was published in the Federal Register on November 20, 2017. Thomson Reuters supports the Amendment and the clarity it provides on how fees are to be applied. Thomson Reuters does not believe that the subsequent motion to Stay filing serves the best interests of our industry and is requesting that the SEC deny the Stay.

Thomson Reuters is a leading source of intelligent information for businesses and professionals. We combine industry expertise with innovative technology to deliver critical information to leading decision makers in the financial and risk, legal, and tax and accounting industries. As the world's leading provider of market data, we provide real-time and historical data from more than 250 exchanges and hundreds of over-the-counter markets and price contributors covering 14 million instruments. These include equities, options, derivatives, fixed income, commodities and energy, and foreign exchange.

As a vendor that distributes US equity market data, it is extremely important that our clients are charged the same exchange fees regardless of the vendor or technical delivery they choose. The CTA filing in question clarifies exchange policies and pricing related to client usage of data in its feed systems and software. Thomson Reuters believes that this exchange amendment is needed to create a level playing field for vendors in the financial information industry to compete fairly. This change importantly provides clarity for customers who can now choose to use a vendor's products knowing that the exchange fees will not differ depending on the provider.

For years this lack of a level playing field has frustrated our customers, who did not understand why using our product may require payment of an exchange datafeed fee, while making similar use of a product of a competitor would generate lower exchange fees. After seeing many of our datafeed clients move to SAPI like products at other vendors because of the lower price point for exchange fees, we

THOMSON REUTERS

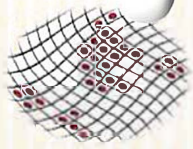
developed a technology solution designed to achieve the same lower exchange fees as Bloomberg SAPI. Bloomberg mentions this product, Eikon SAPI, in their motion. Once we became aware of the CTA's intention to clarify the policies and create a level playing field, Thomson Reuters made the decision to withdraw Eikon SAPI from sale.

By supporting the exchange filing and asking the SEC not to allow the Stay, Thomson Reuters is not expressing an opinion about the level of fees that exchanges charge. This issue is about the fair and consistent application of the fees and not the level of fees.

Thomson Reuters believes that granting the Stay would allow the current discrepancies to persist, resulting in continued confusion for vendors and customers. Please do not hesitate to contact me at [redacted] or phone [redacted] to discuss this further.

Yours sincerely,

David Craig
President, Financial & Risk
Thomson Reuters



Burton-Taylor
INTERNATIONAL CONSULTING
a division of TP ICAP

Financial Market Data/Analysis
Global Share & Segment Sizing
2017

Key Competitors

Global Market Share 2012-16

Global Segment Sizing 2012-16

Global Product Mix 2012-16

Global User Mix 2012-16

Global Institution Mix 2012-16

[redacted]

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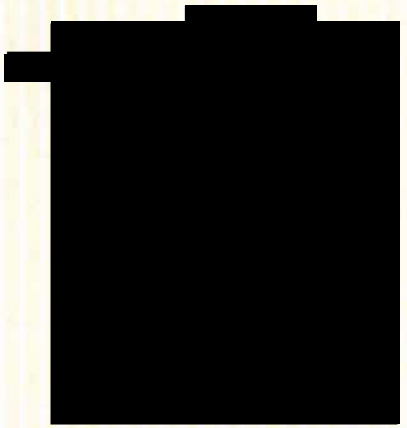

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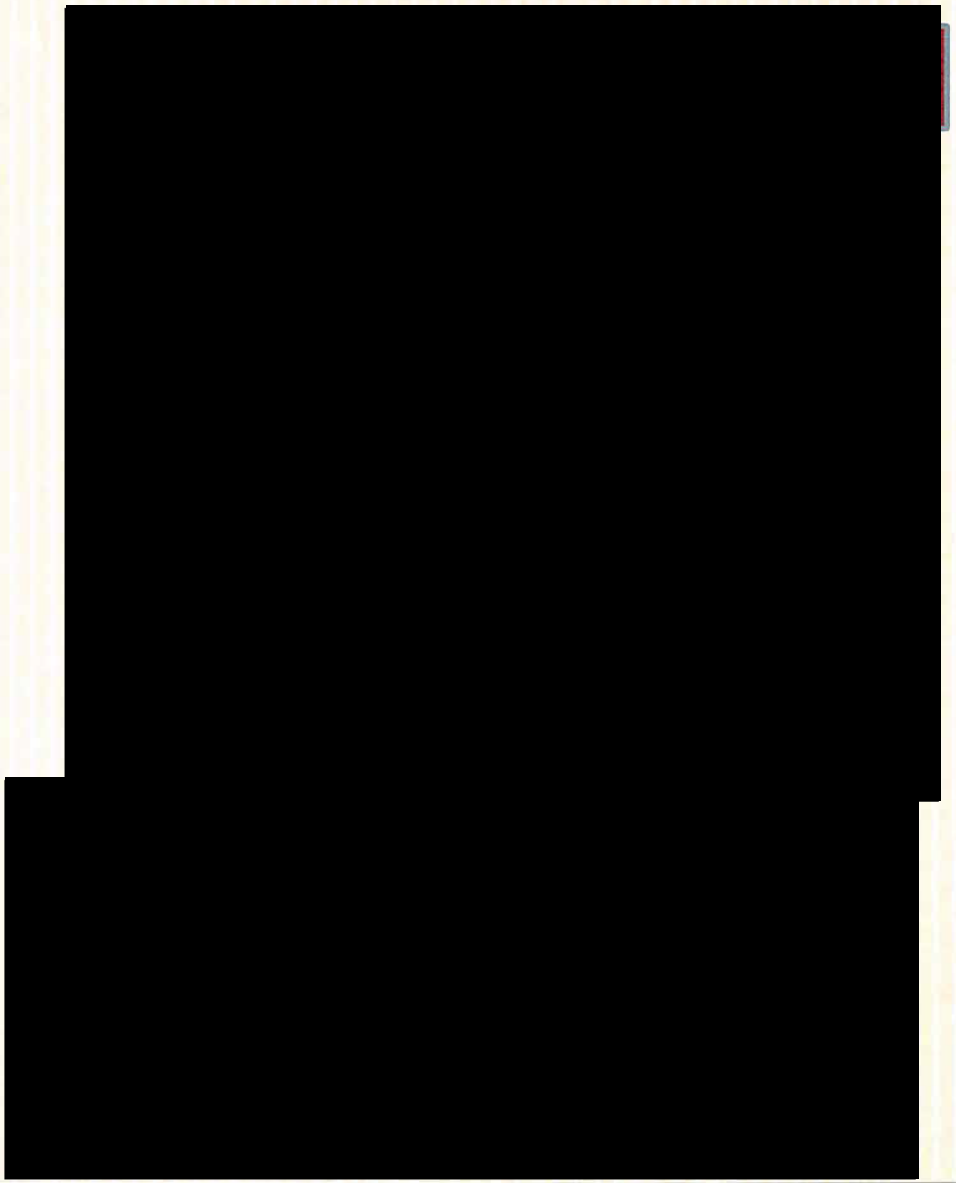

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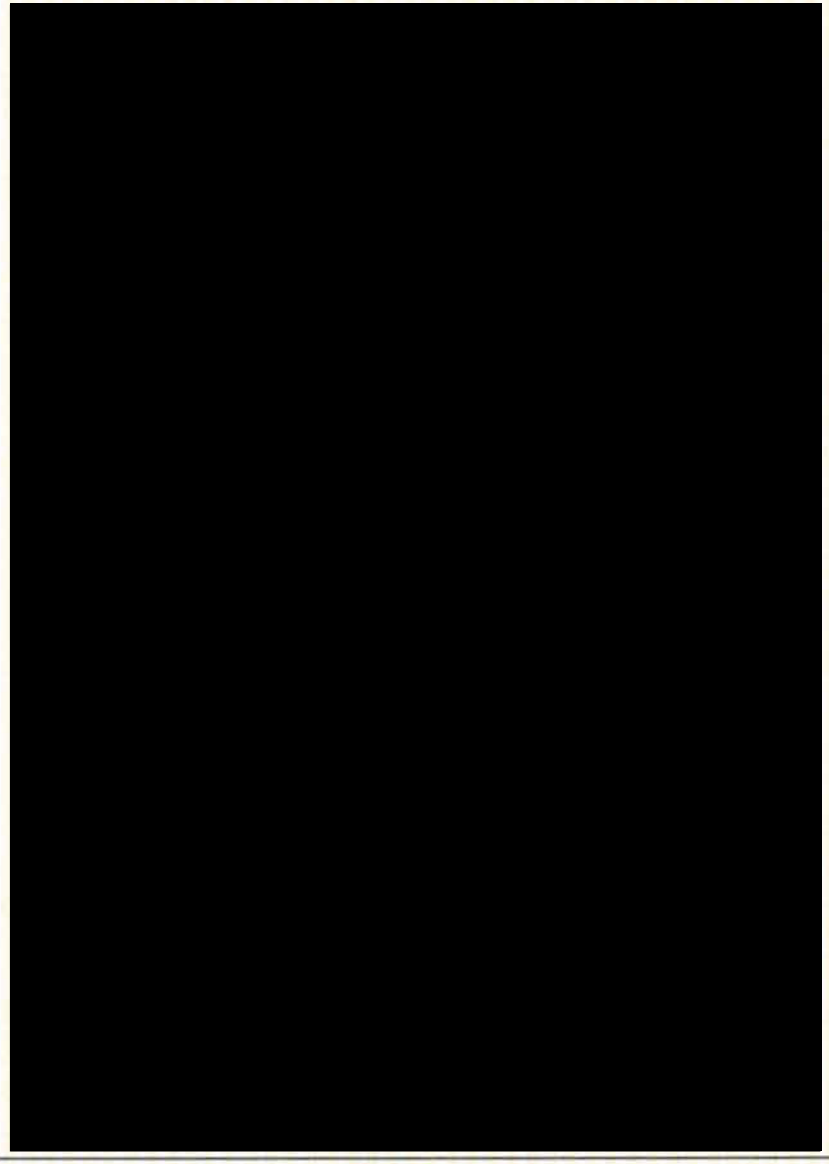
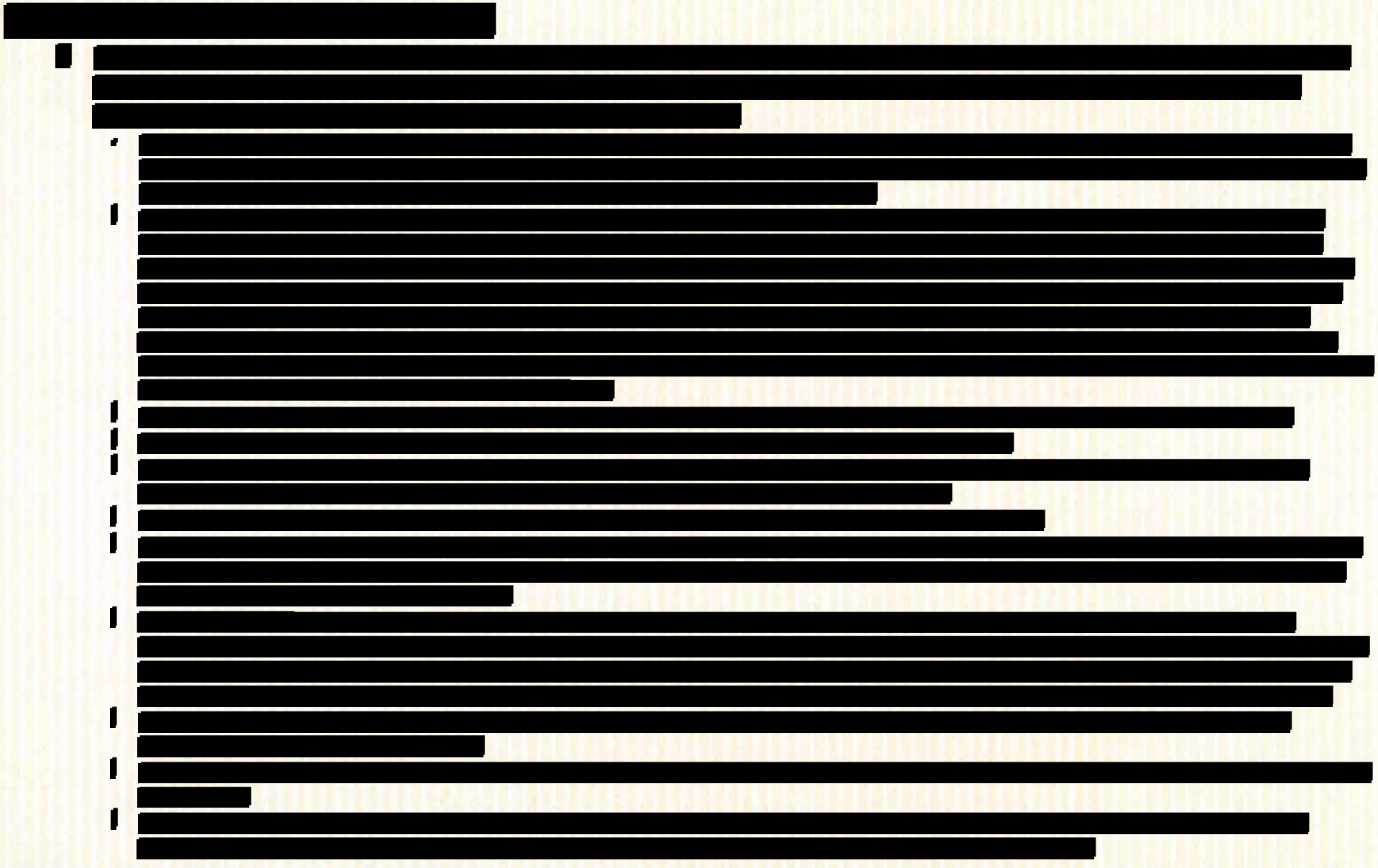


Report Overview



Report Overview

Report Overview

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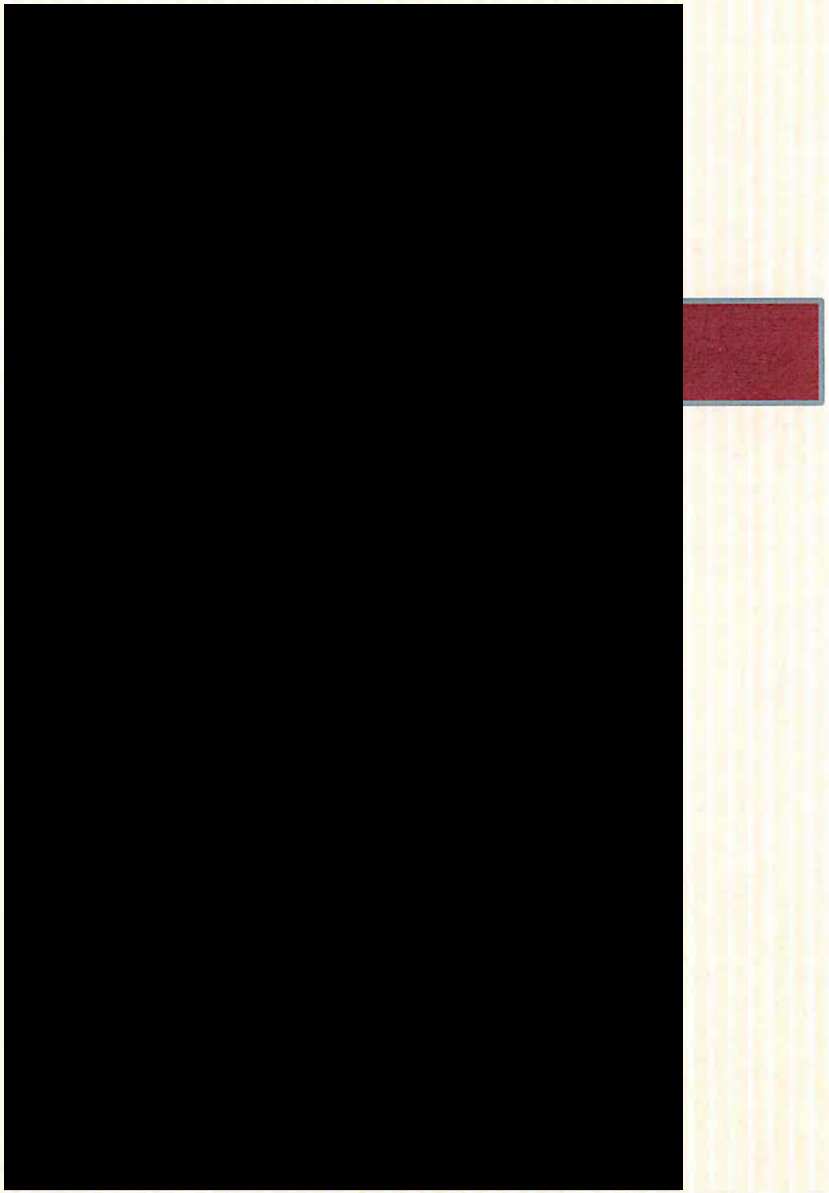

Key Findings – Company Market Sheets

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Market Data/Analysis – Company Growth

Company Market Sheets – Bloomberg

Company Market Sheets – Bloomberg

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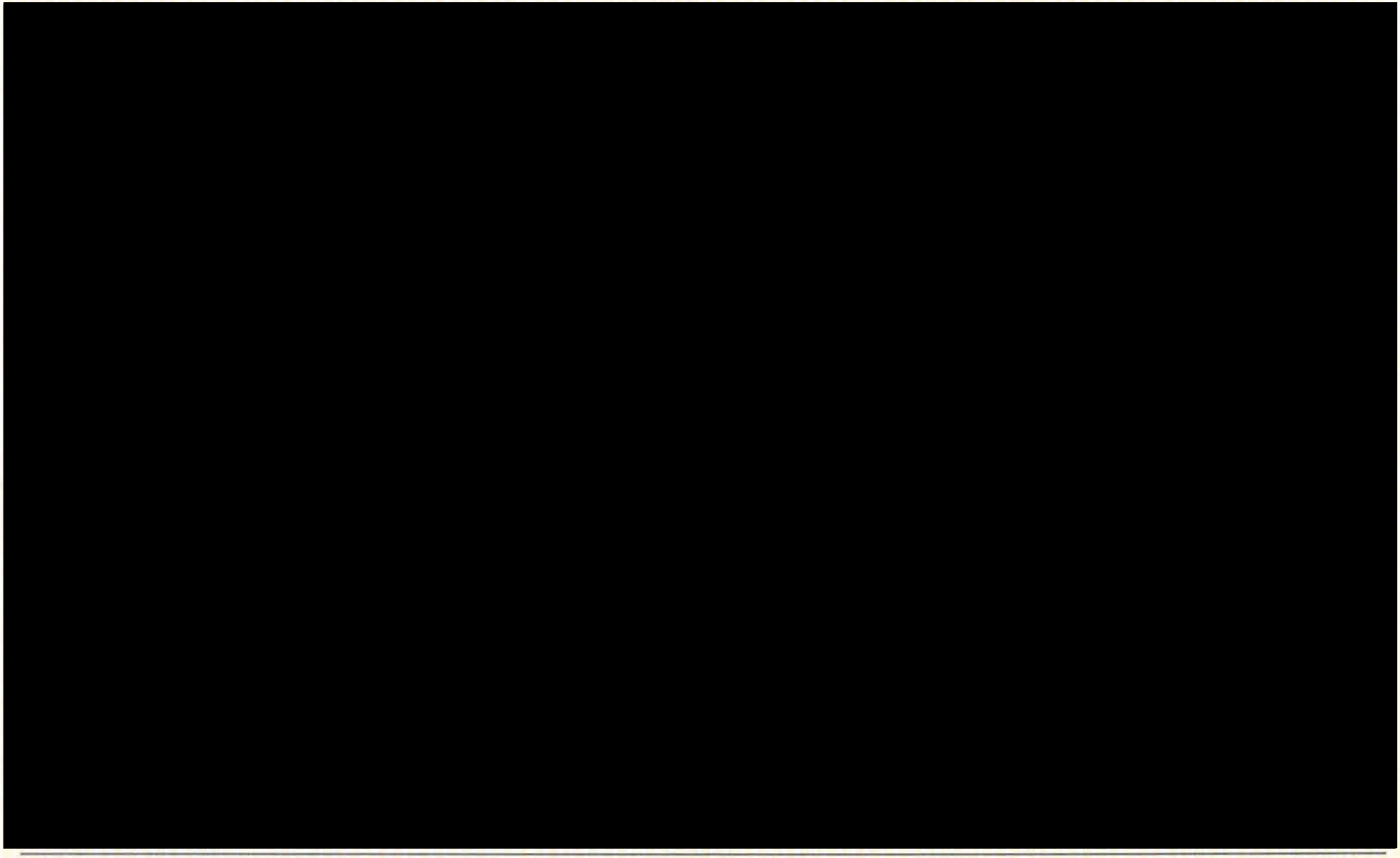
Company Market Sheets – Thomson Reuters

Company Market Sheets – Thomson Reuters



Company Market Sheets – S&P Global MI

Company Market Sheets – S&P Global MI

Company Market Sheets – FactSet

Company Market Sheets – FactSet

Company Market Sheets – ICEID

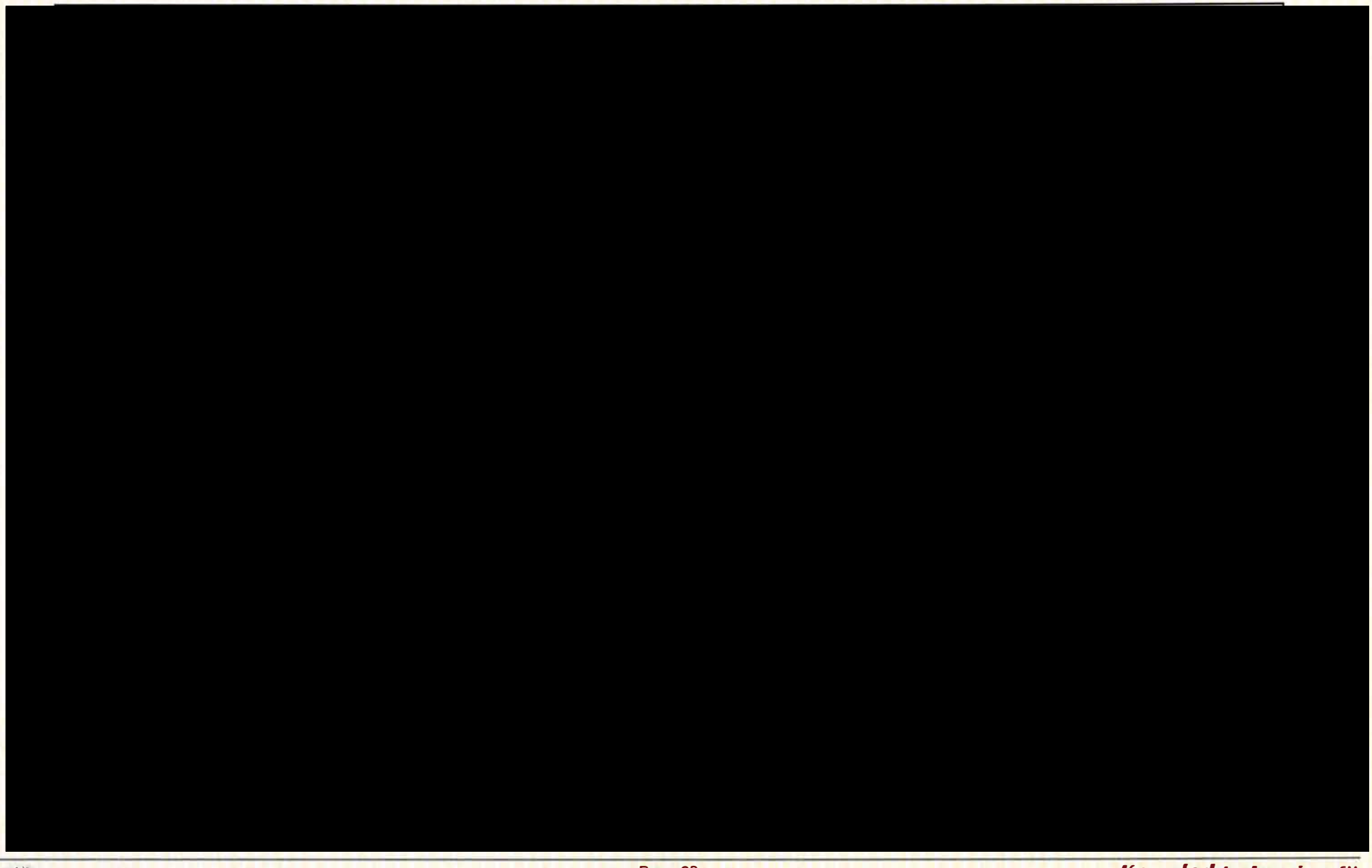
Company Market Sheets – ICEID

Company Market Sheets – Moody's Analytics

Company Market Sheets – Moody's Analytics

Company Market Sheets – Morningstar

Company Market Sheets – IHS Markit



Company Market Sheets – IHS Markit

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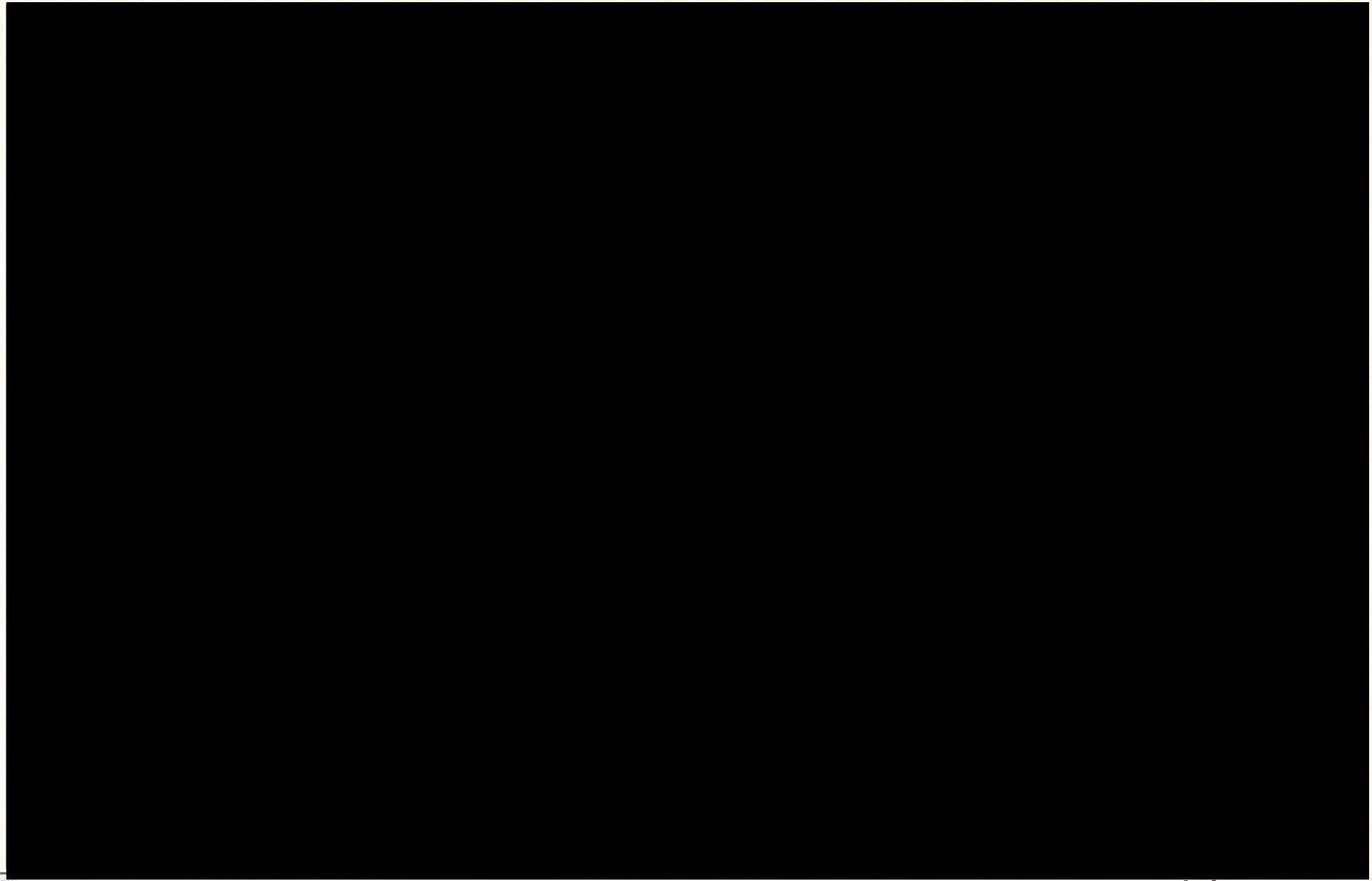

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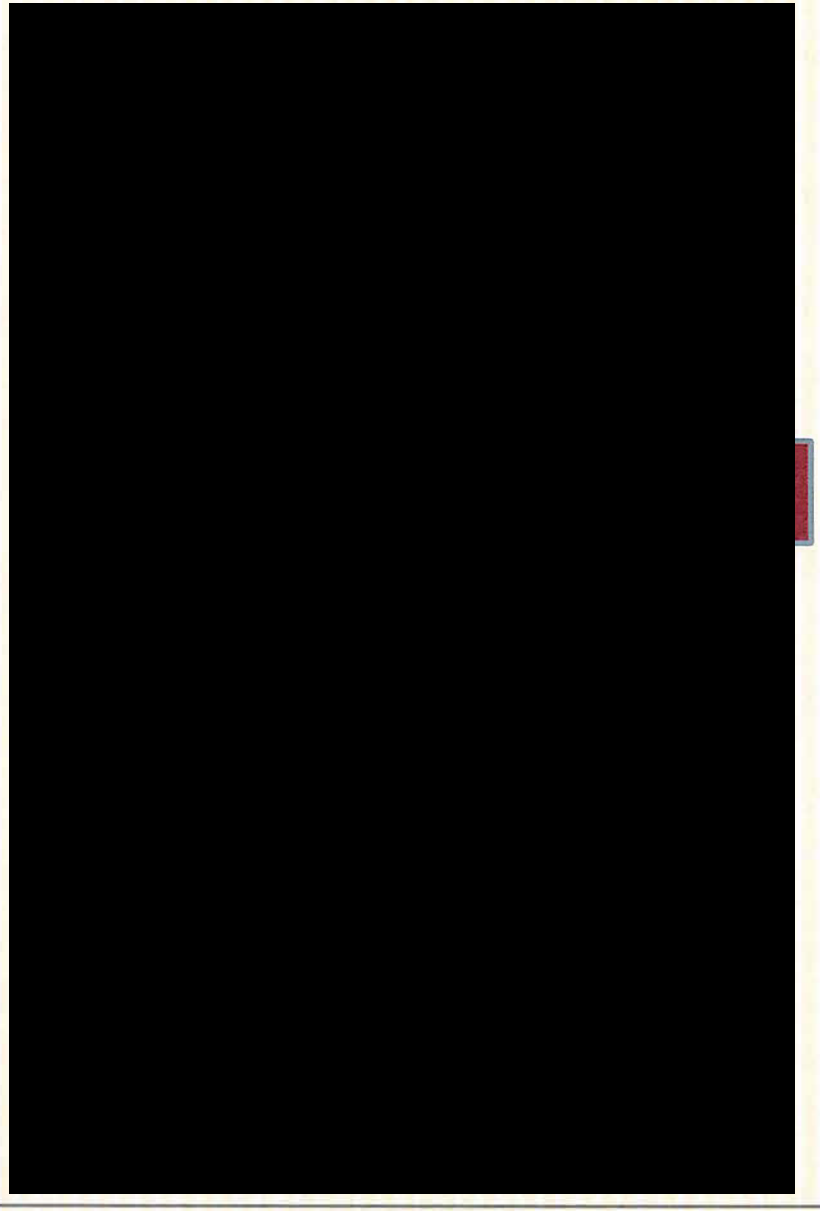

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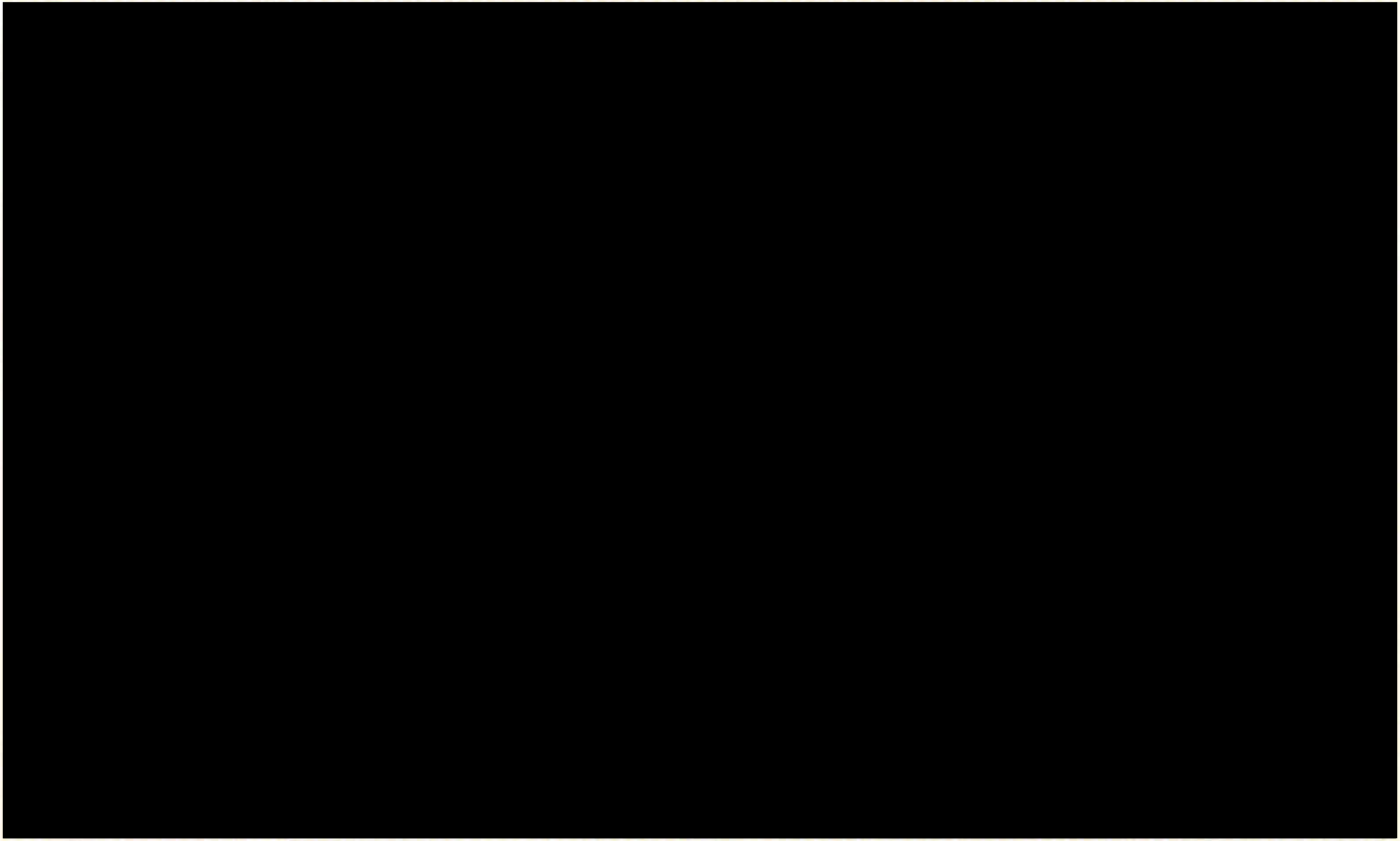
Key Findings – Global Segment Sizings

Market Data/Analysis – Segment Growth



Market Data/Analysis – Segment Trending

Market Data/Analysis – Segment Sizes 2013

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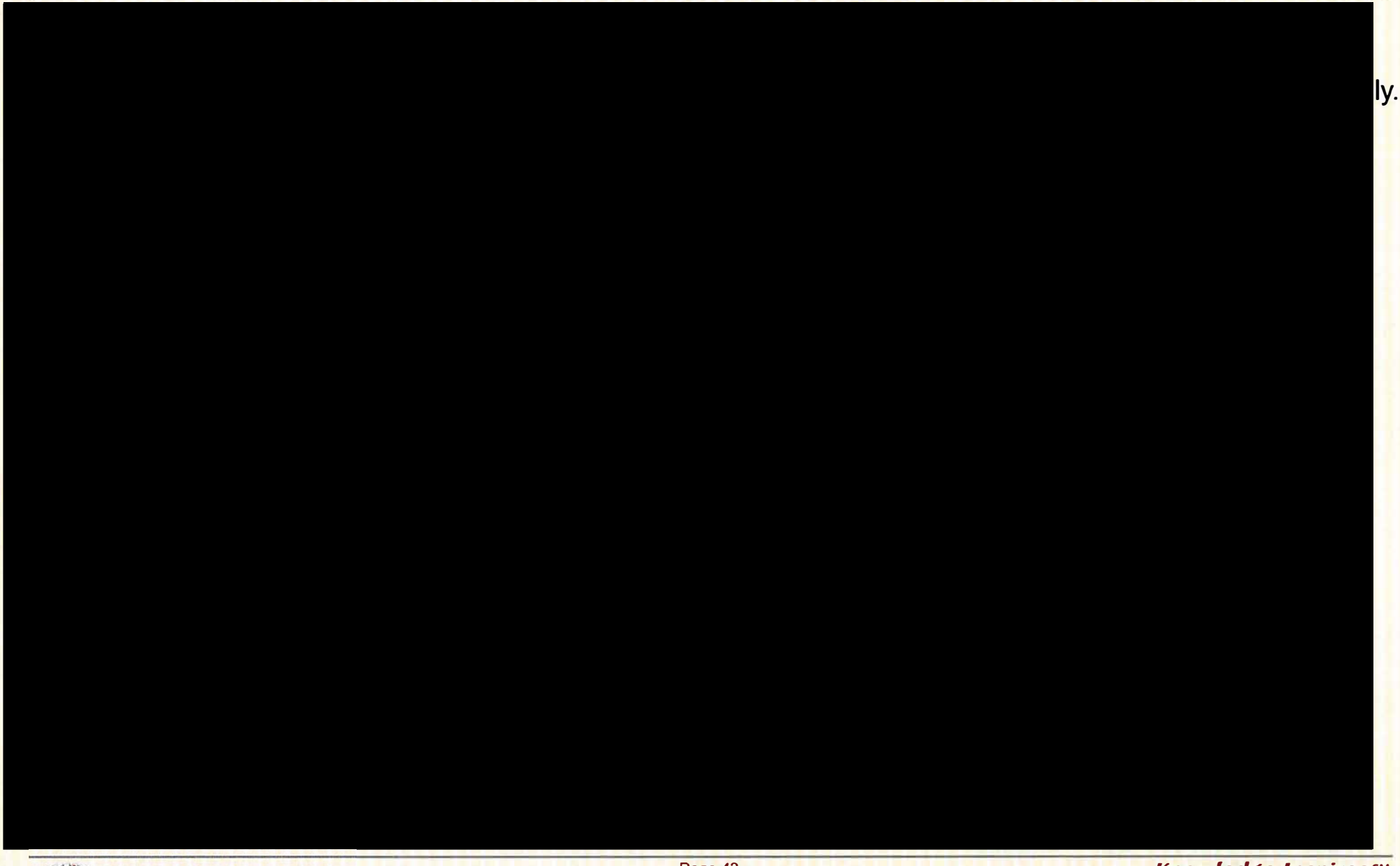
Market Data/Analysis – Segment Sizes 2014



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Market Data/Analysis – Segment Sizes 2015

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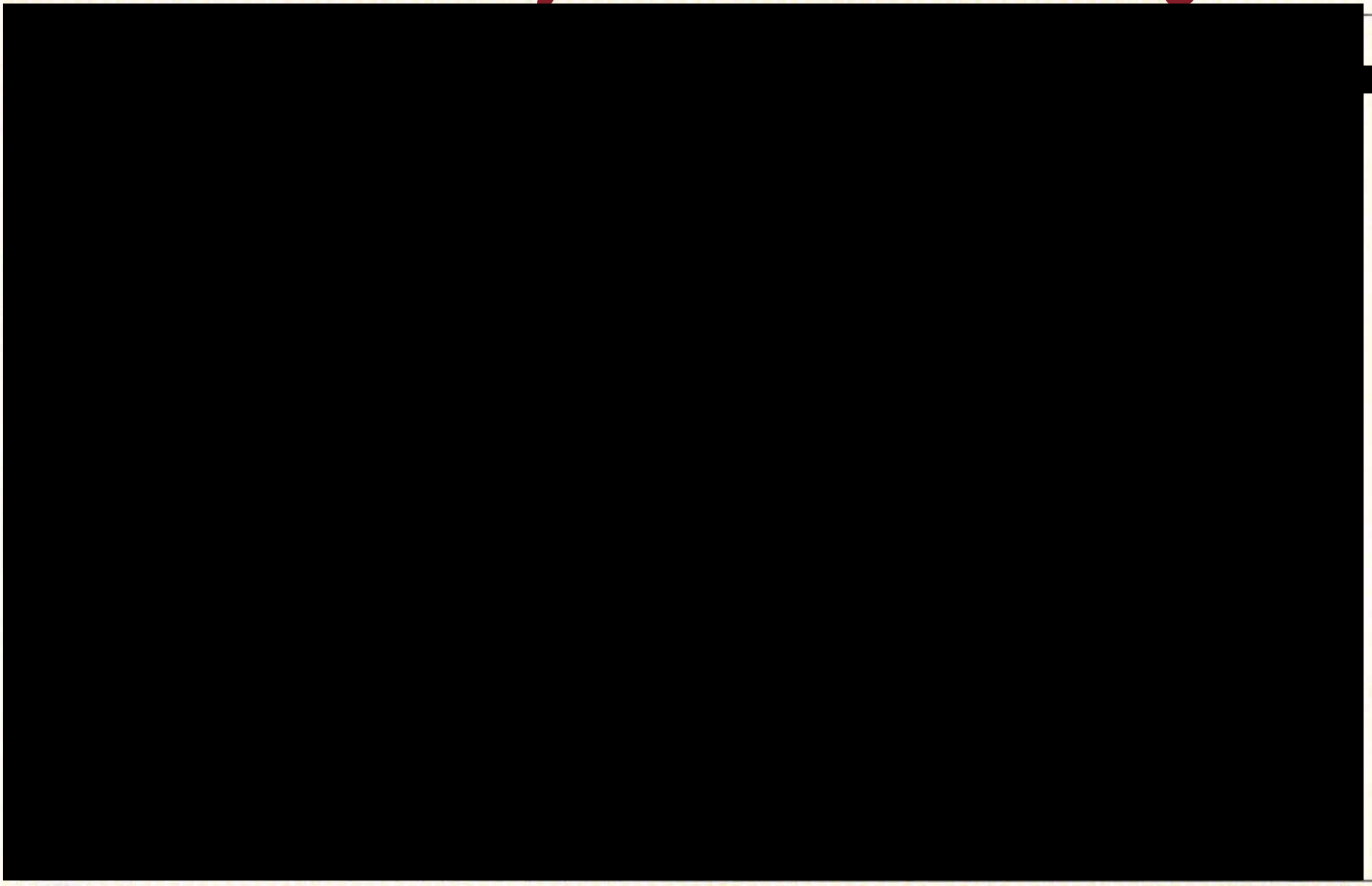
Key Findings – Global Market Share

Market Data/Analysis – Share Trending



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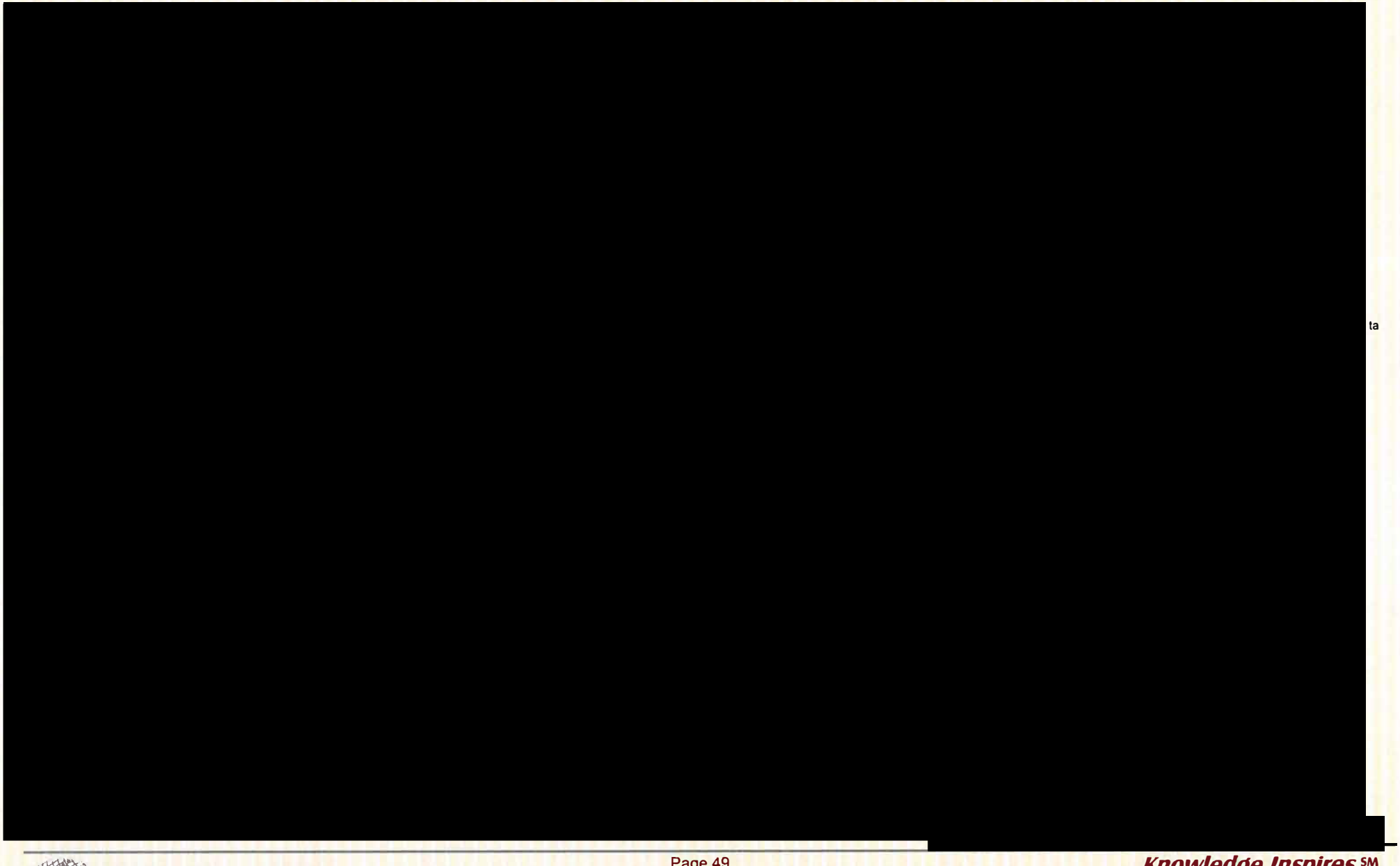


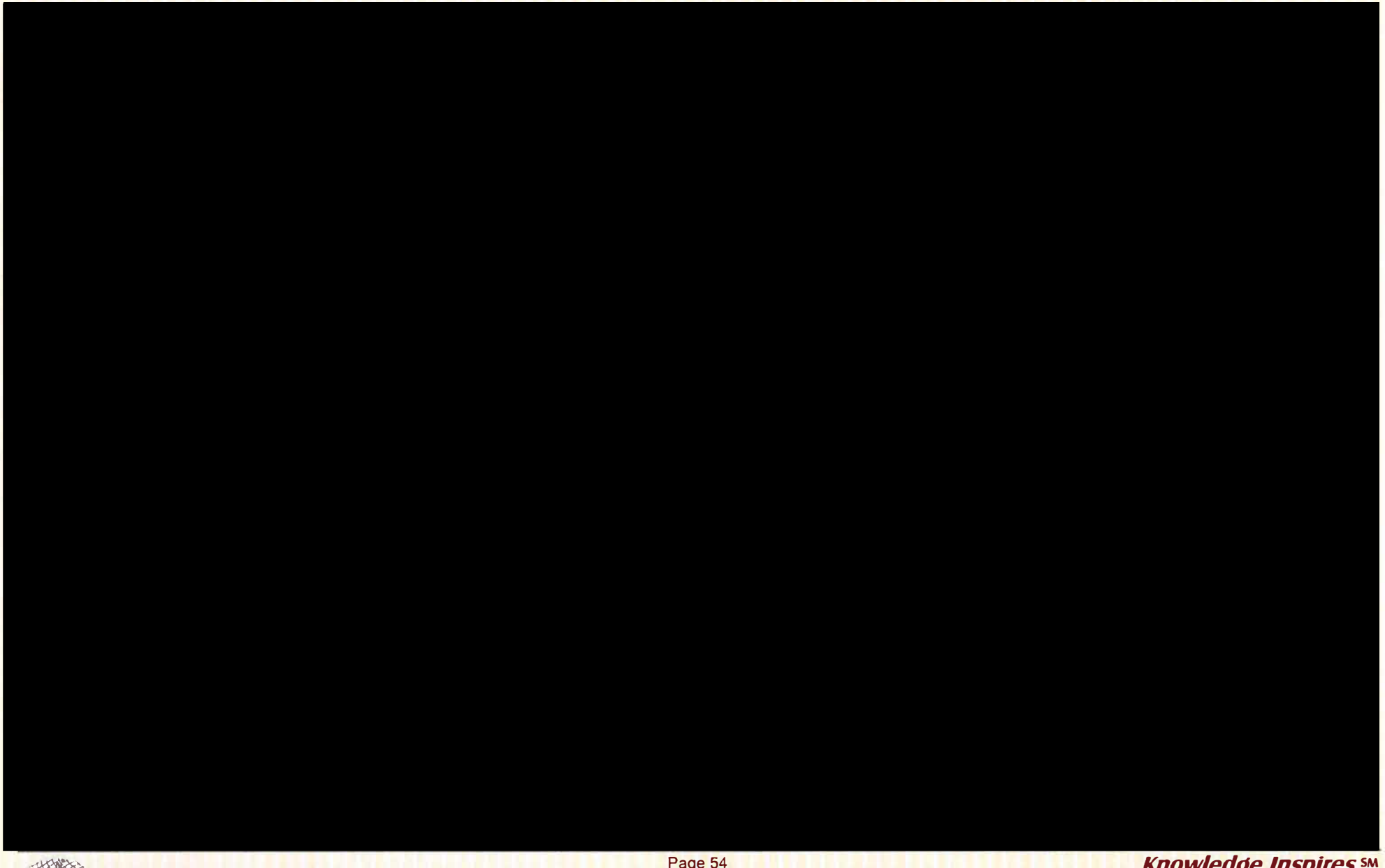
Market Data/Analysis – Share 2013

[redacted]

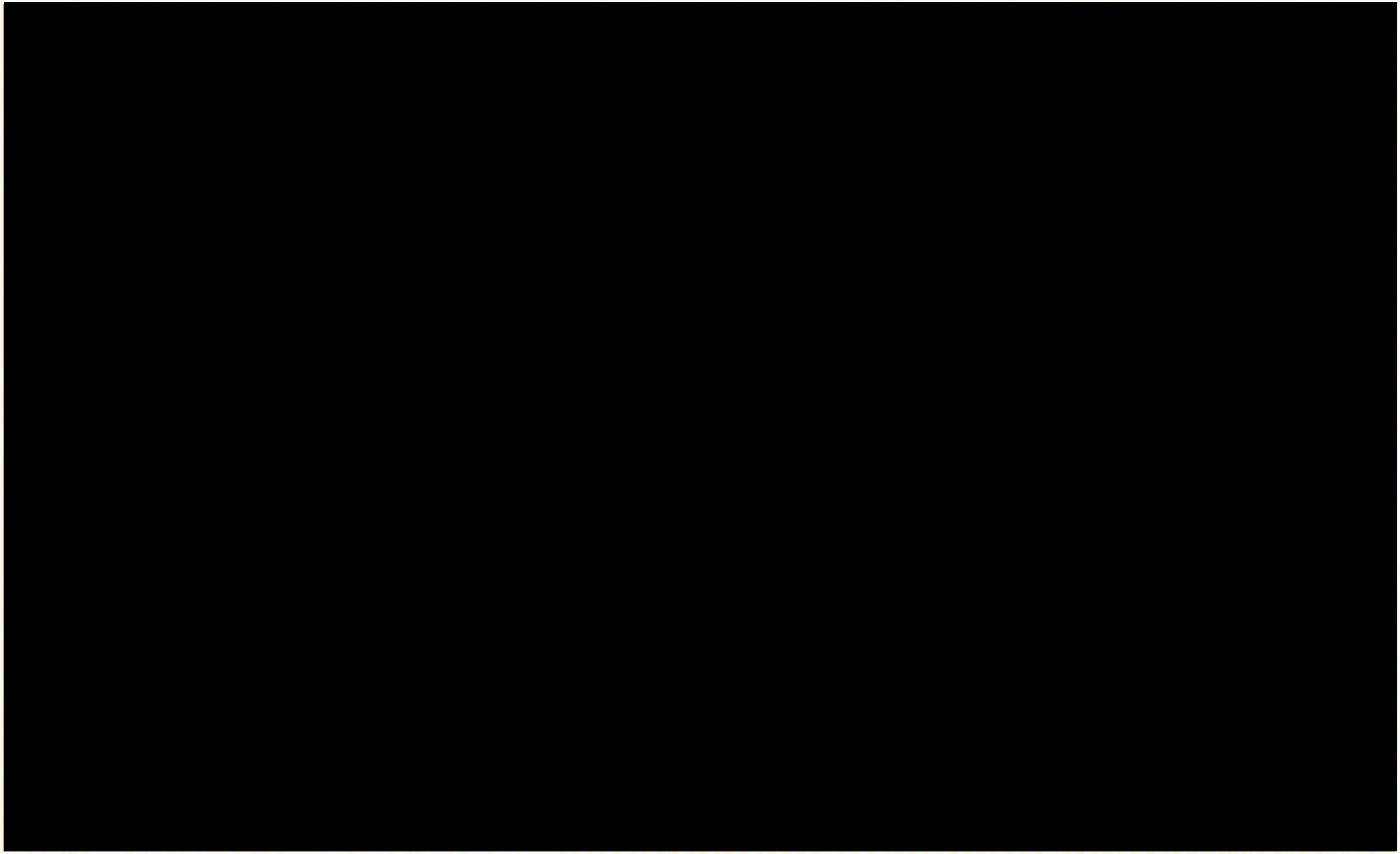
Market Data/Analysis – Share 2015

Market Data/Analysis – Share 2016

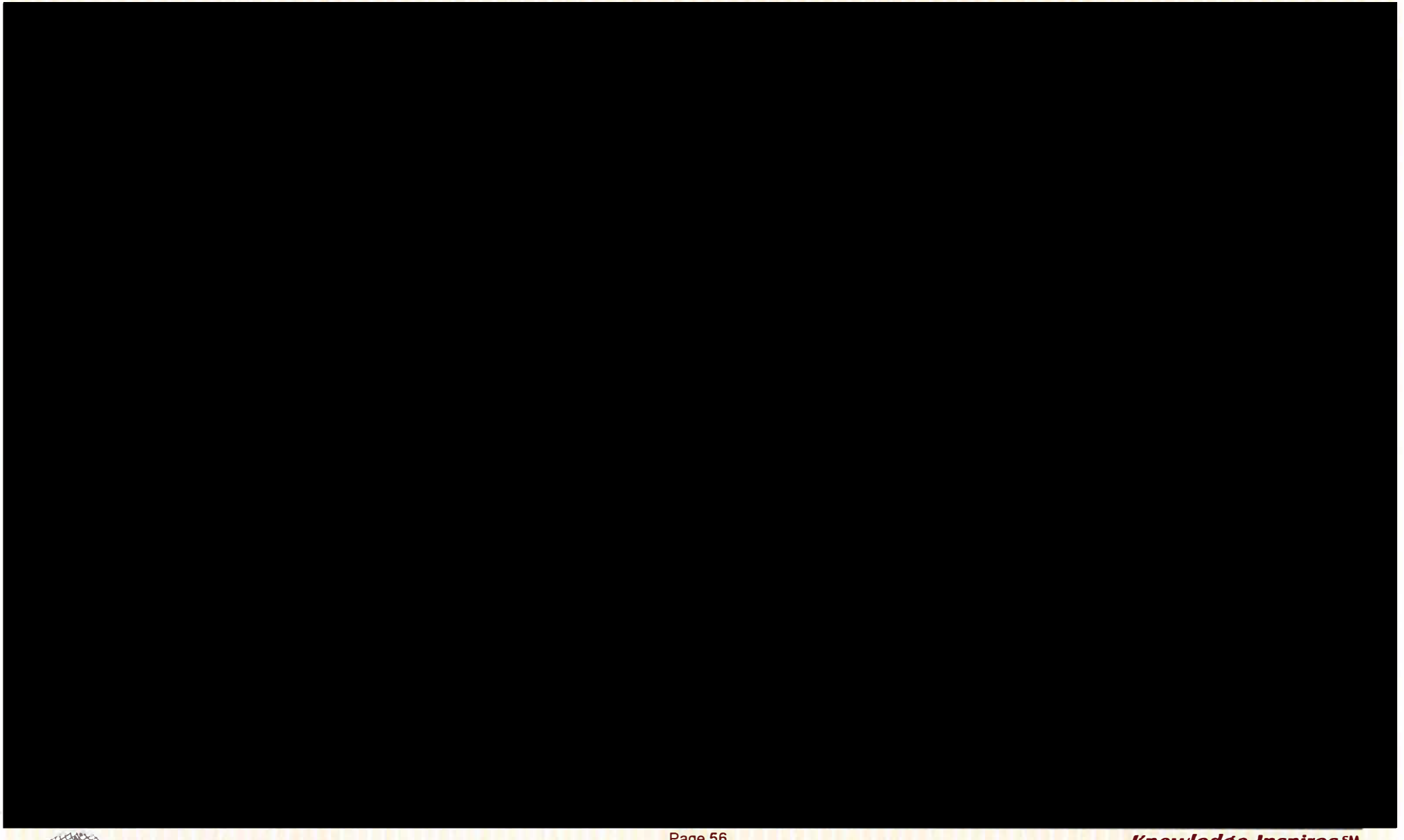
Market Data/Analysis – IM Share Trending



Market Data/Analysis – IM Share 2016



Market Data/Analysis – FIS&T Share Trending



Market Data/Analysis – FIS&T Share 2016

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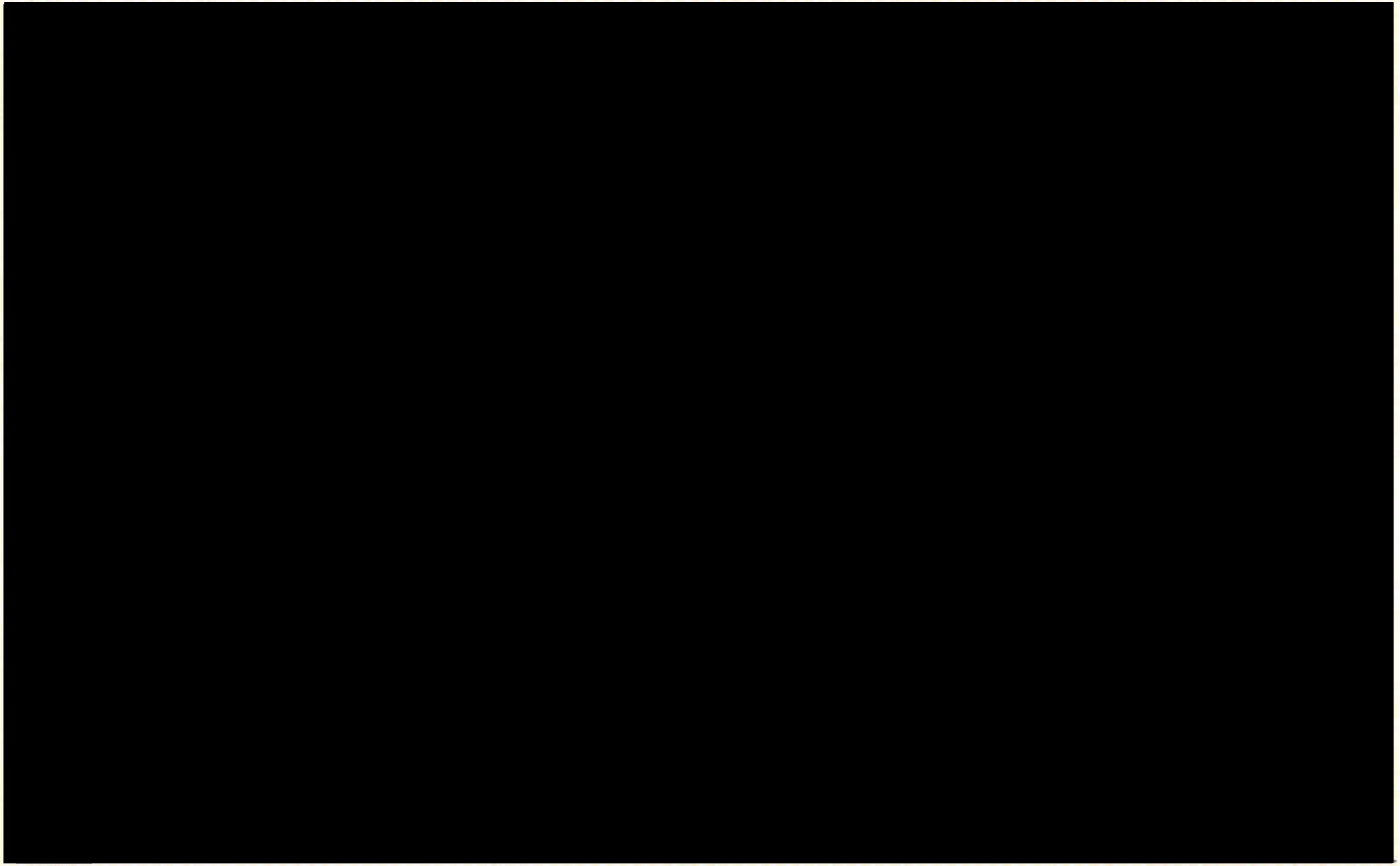
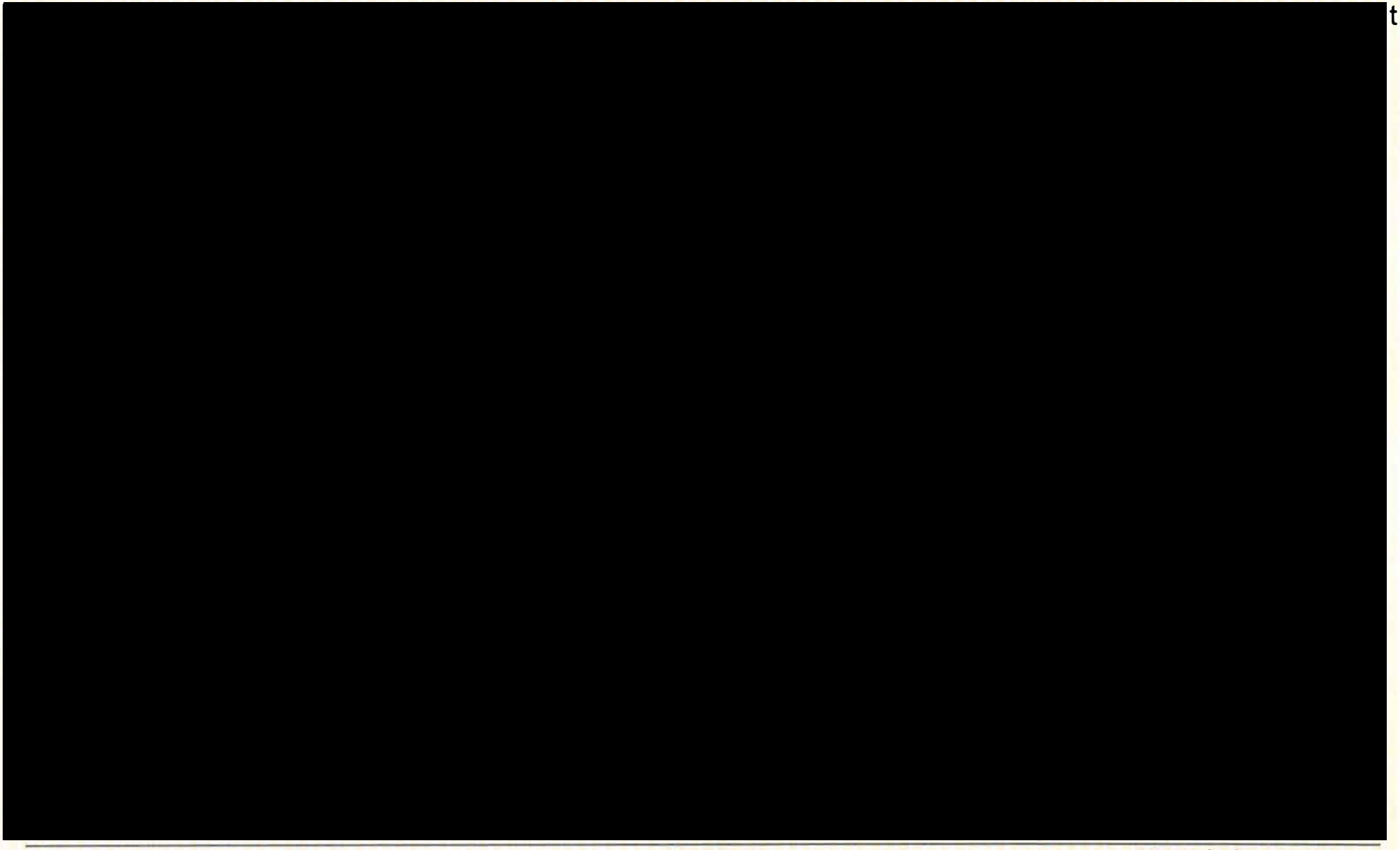
Market Data/Analysis – ES&T Share Trending

Market Data/Analysis – ES&T Share 2016



Market Data/Analysis – C&E Share Trending



Market Data/Analysis – C&E Share 2016

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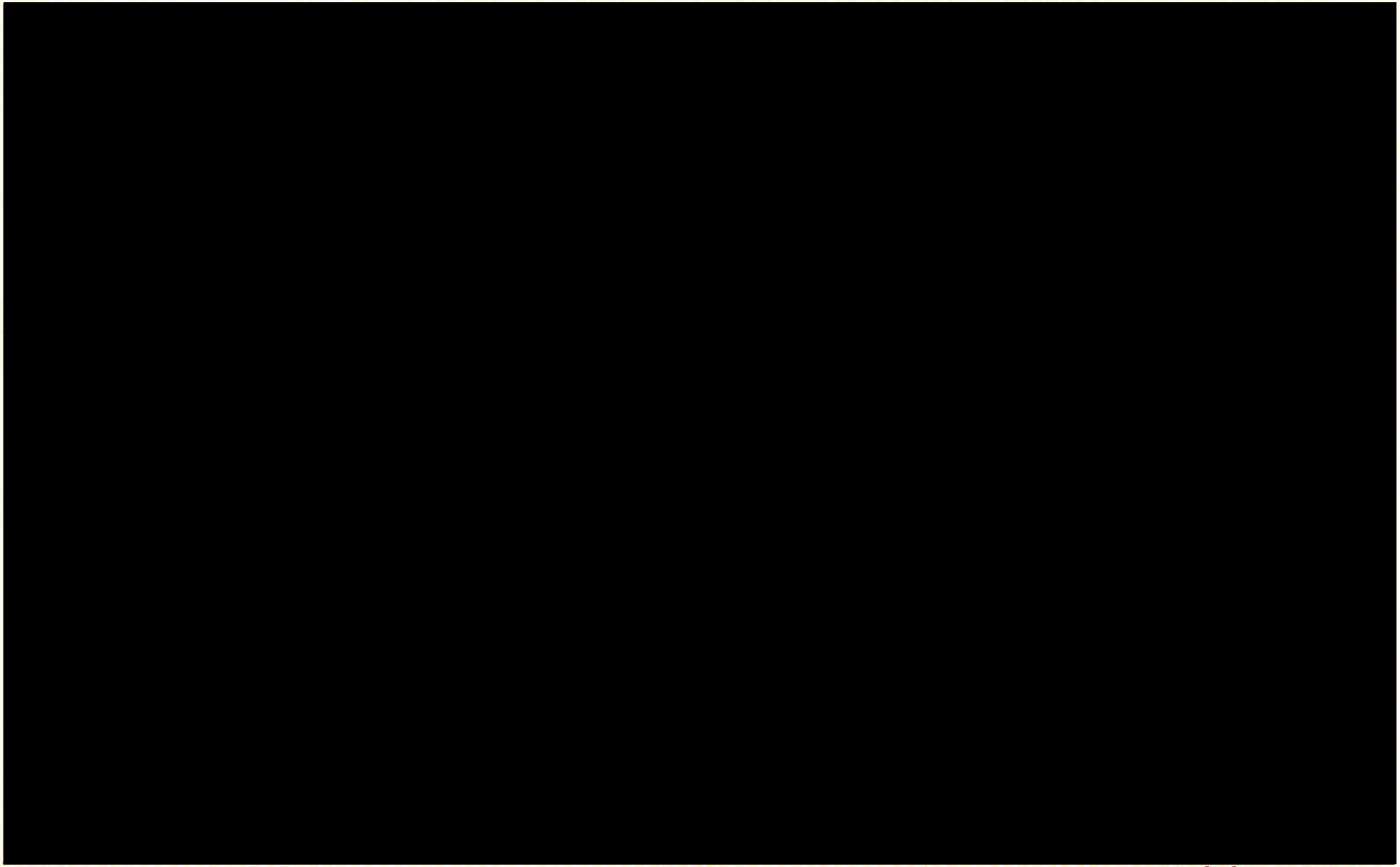
Market Data/Analysis – RWM Share Trending

Market Data/Analysis – RWM Share 2016

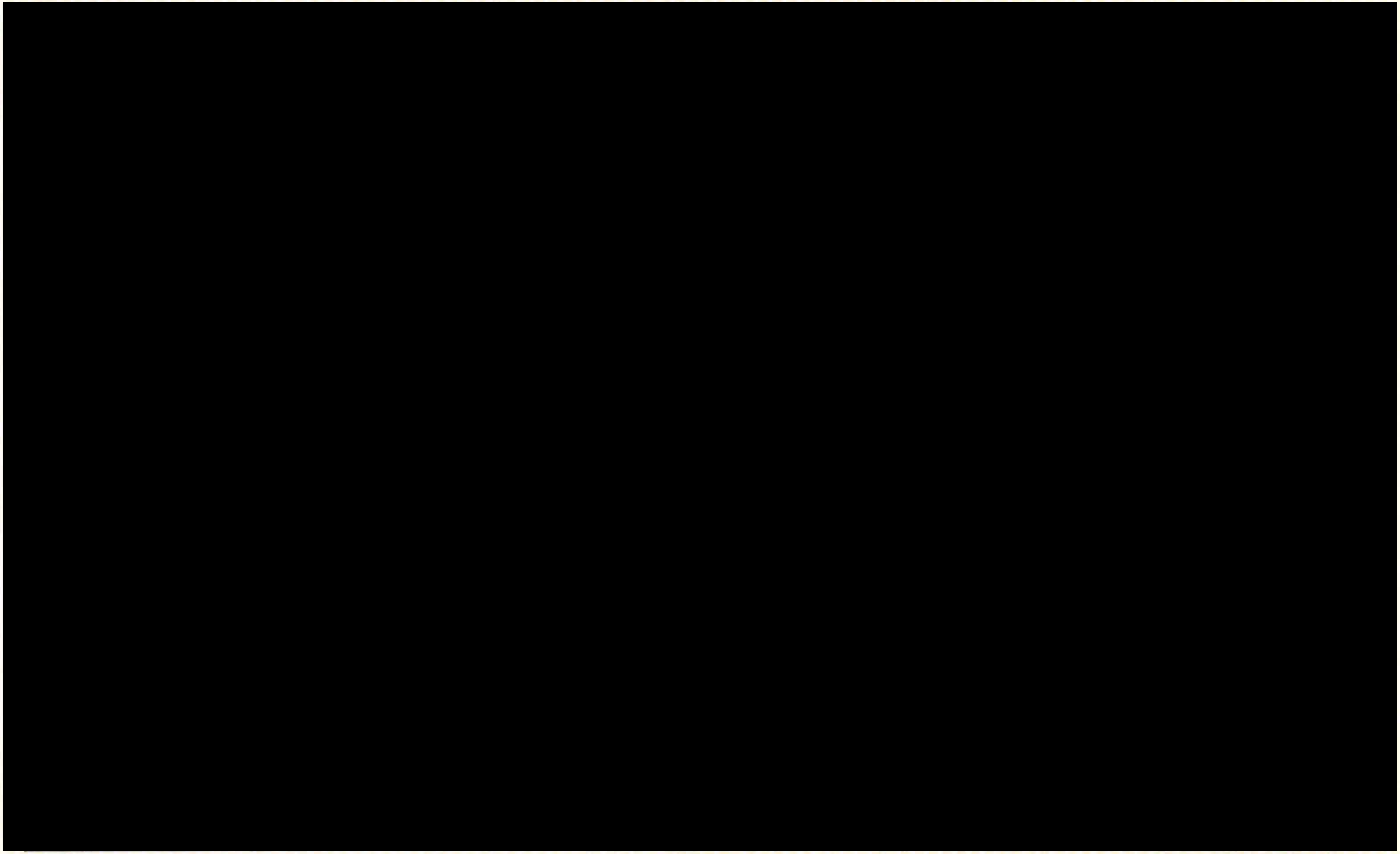
Market Data/Analysis – IB Share Trending



Market Data/Analysis – IB Share 2016

Market Data/Analysis – Corp Share Trending

Market Data/Analysis – Corp Share 2016



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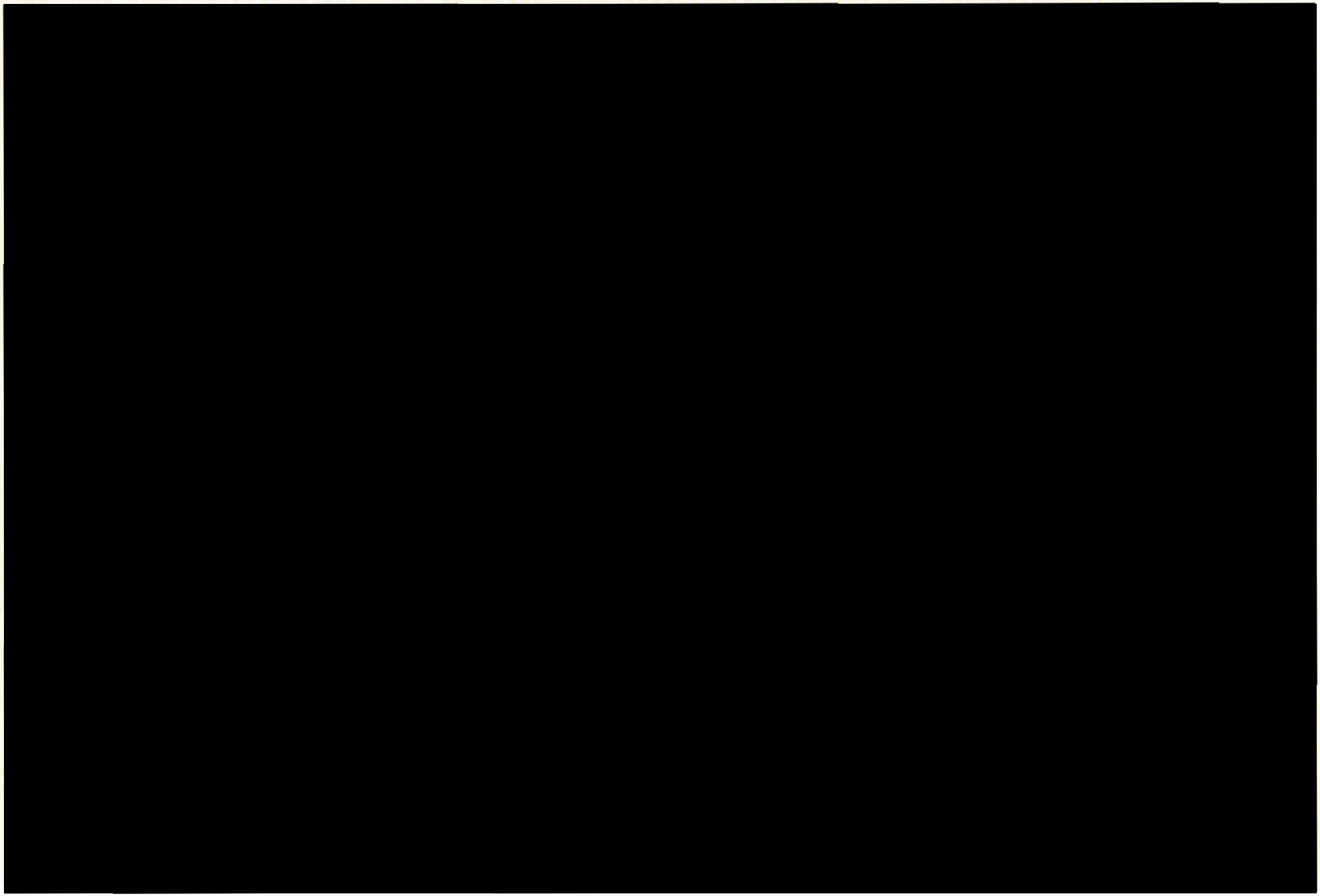
Key Findings – Global Product Mix

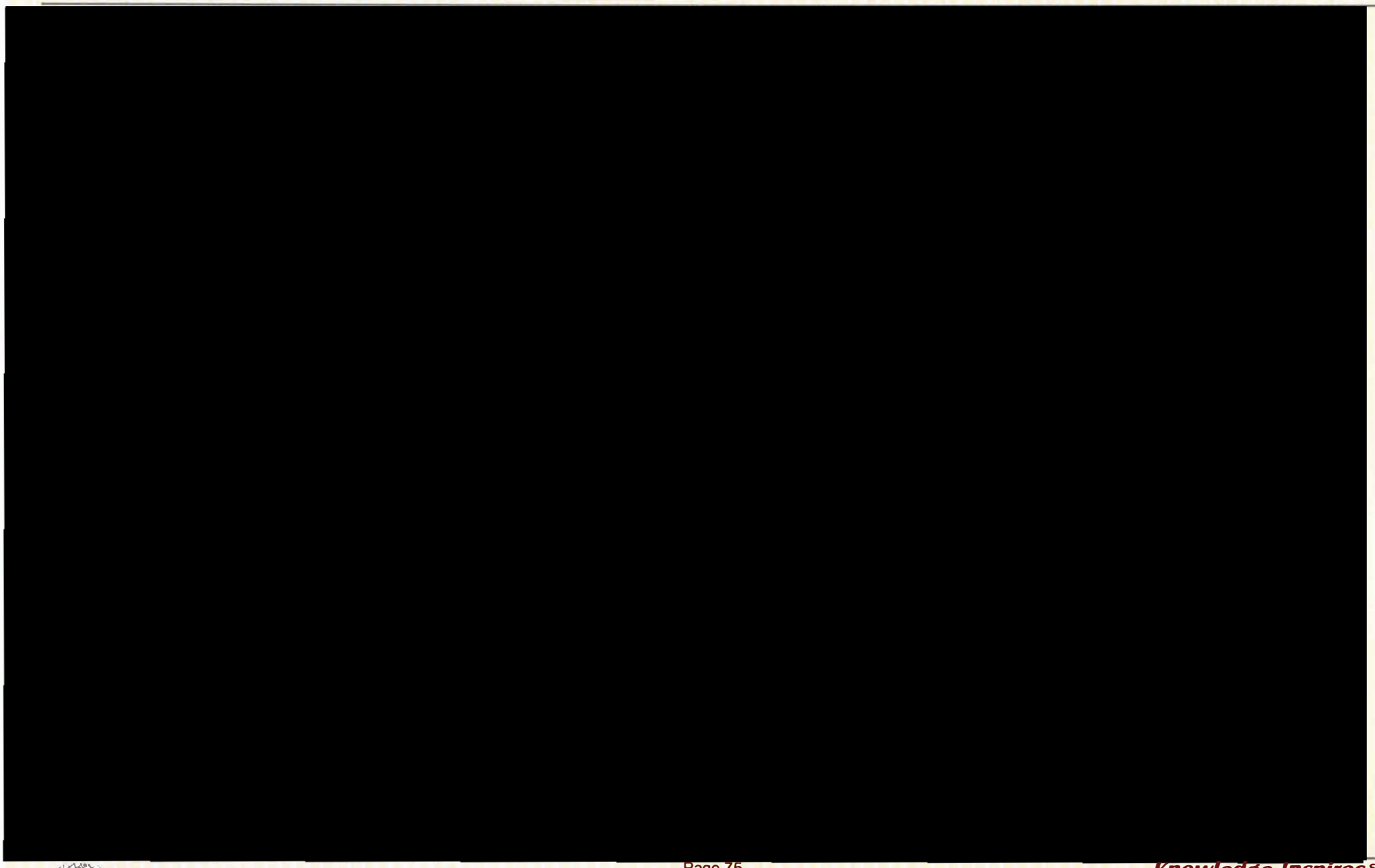
Market Data/Analysis – Product Growth



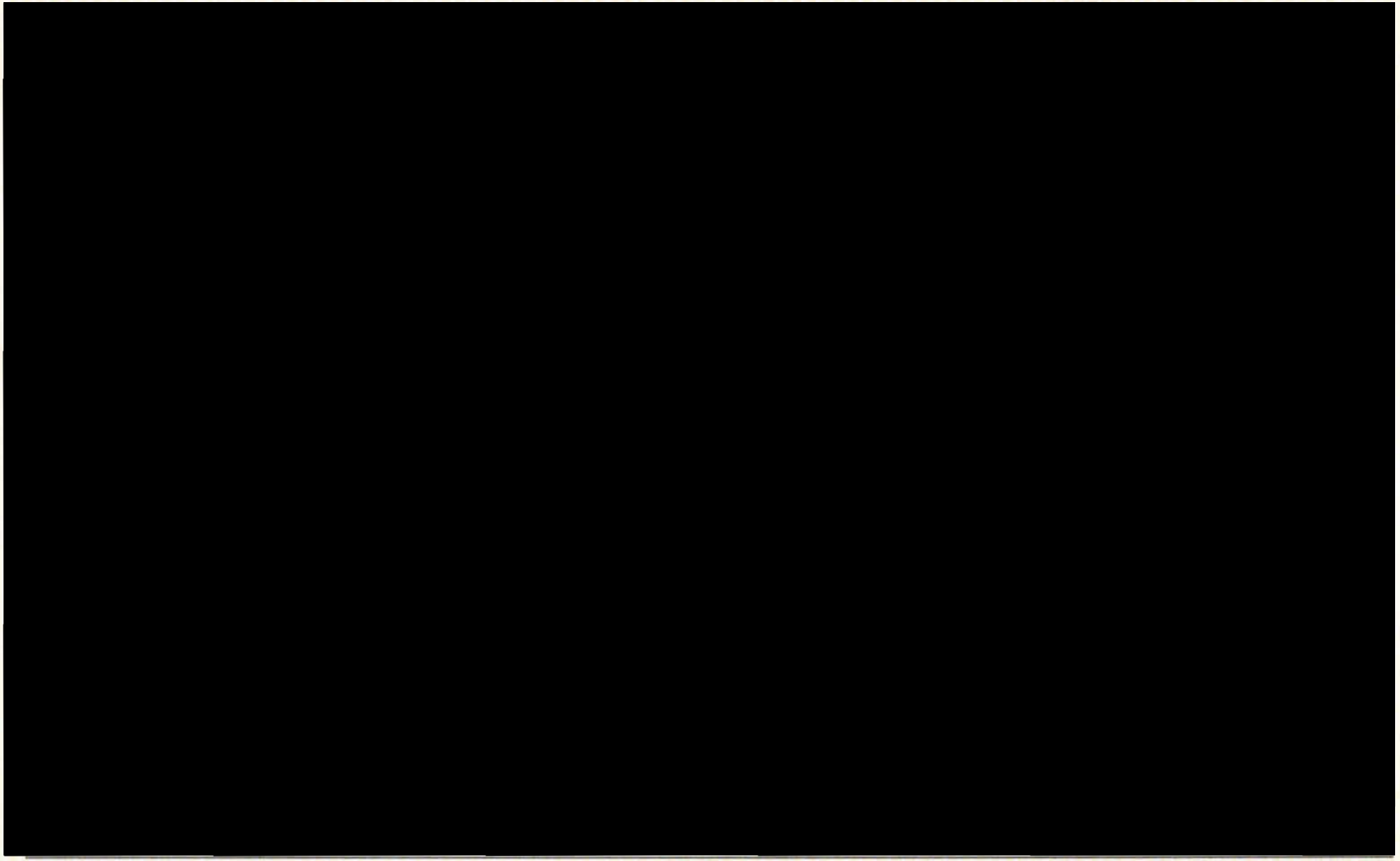
Market Data/Analysis – Product Trending

Market Data/Analysis – R-T Data Share 2016

Market Data/Analysis – PM & An Share 2016



Market Data/Analysis – PR & Val Share 2016



Market Data/Analysis – Research Share 2016

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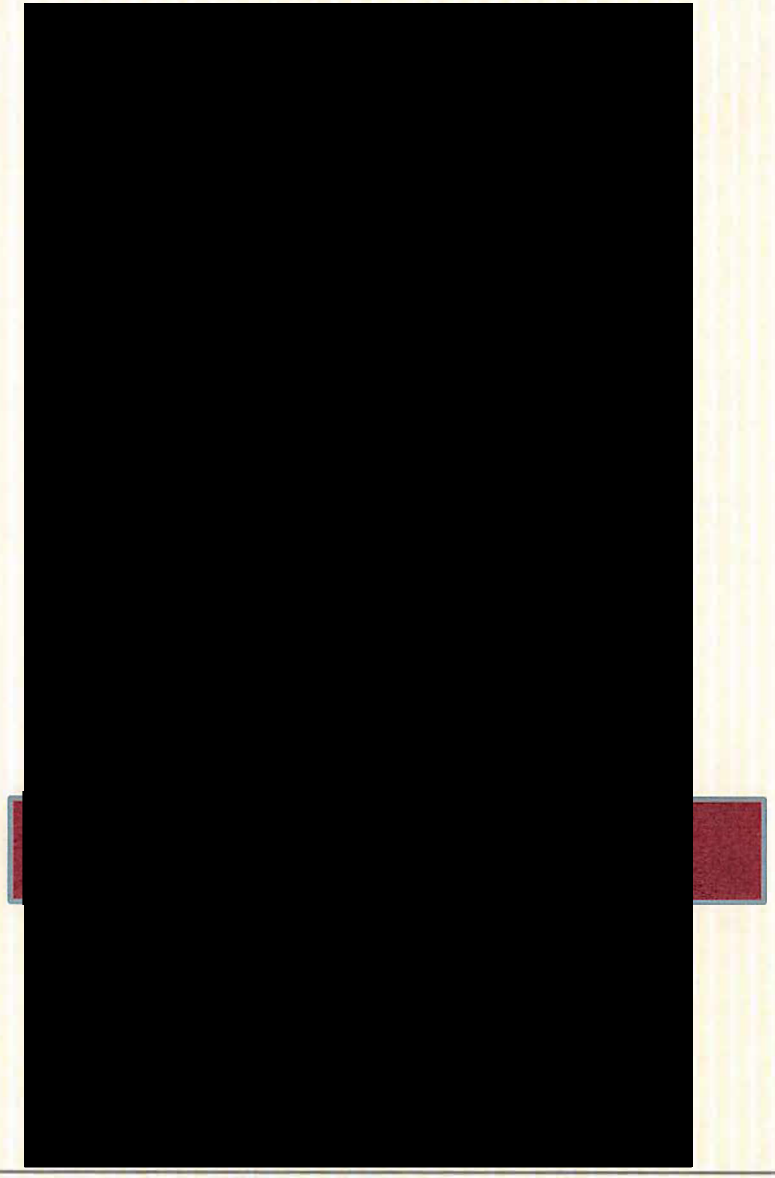

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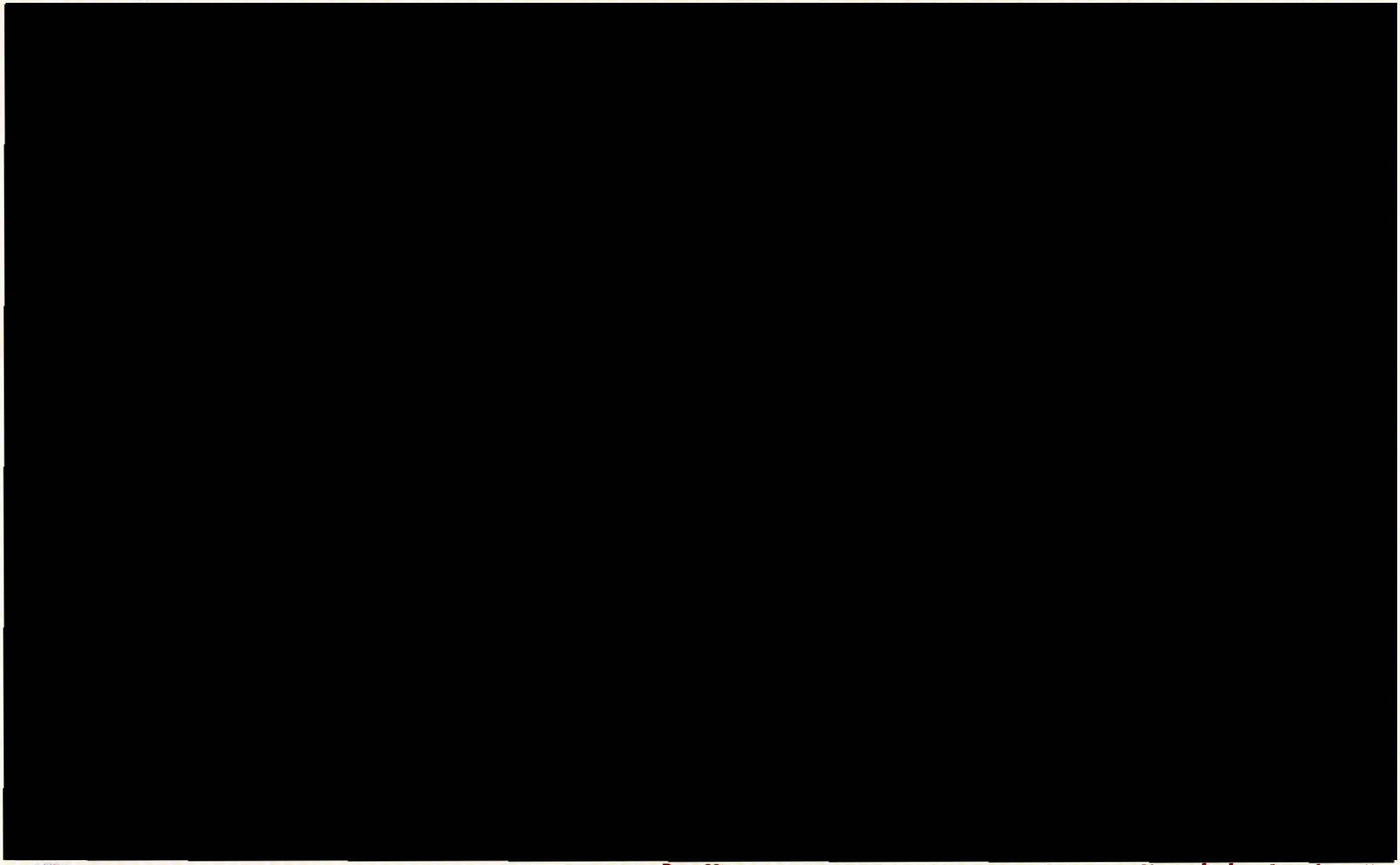
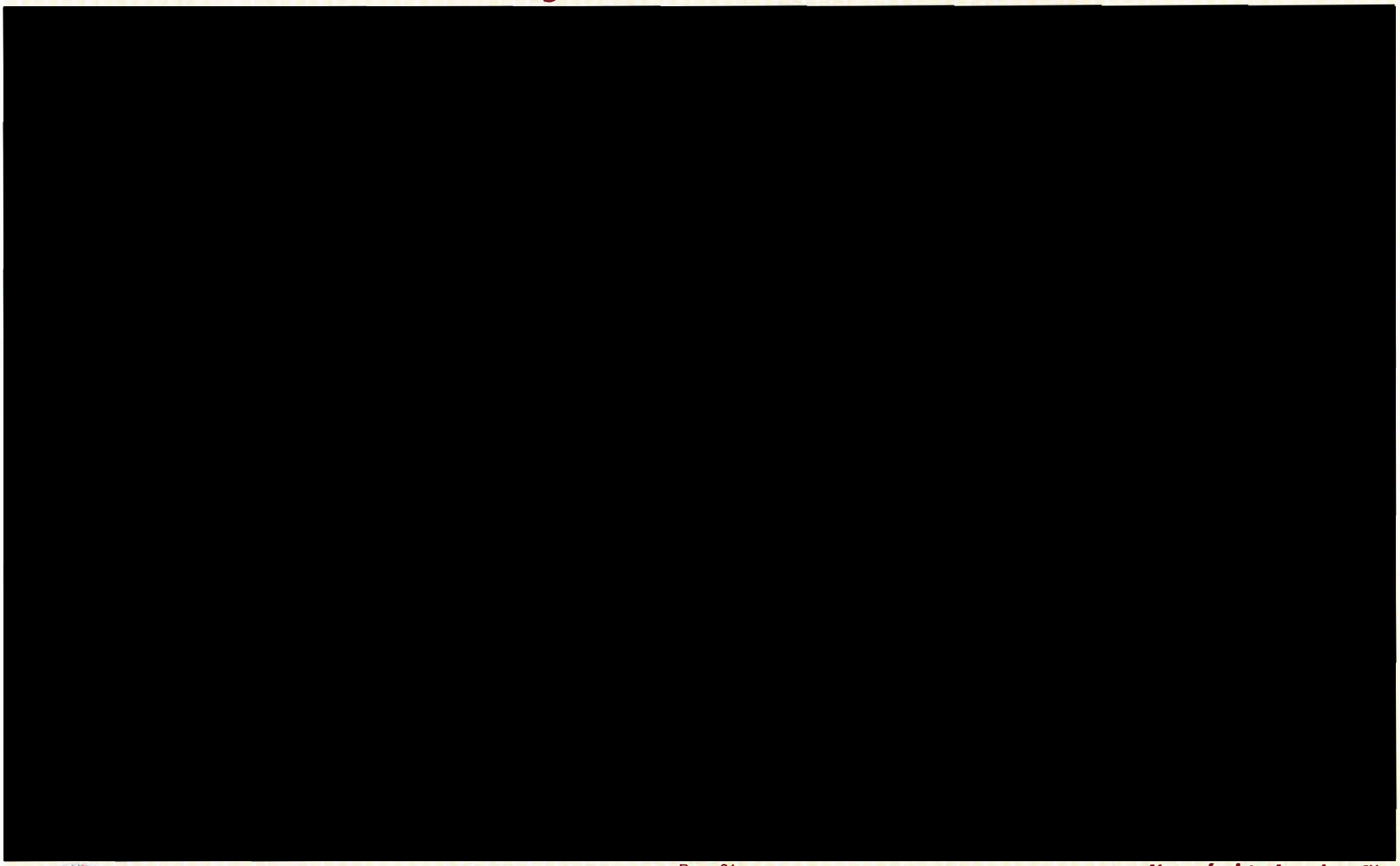
Key Findings – Global User Mix

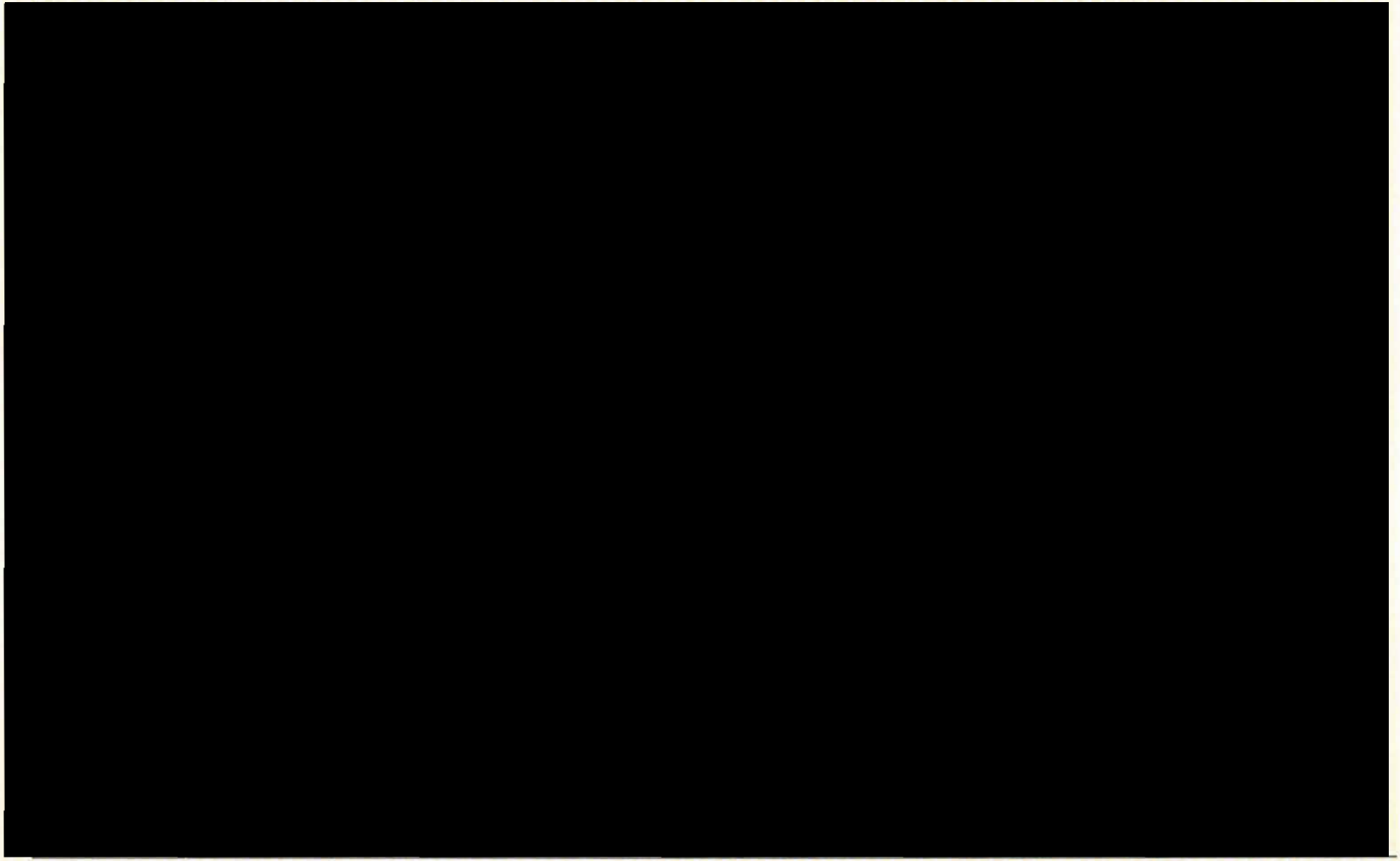


Market Data/Analysis – User Growth



Market Data/Analysis – User Trending

Market Data/Analysis – Sales Share 2016



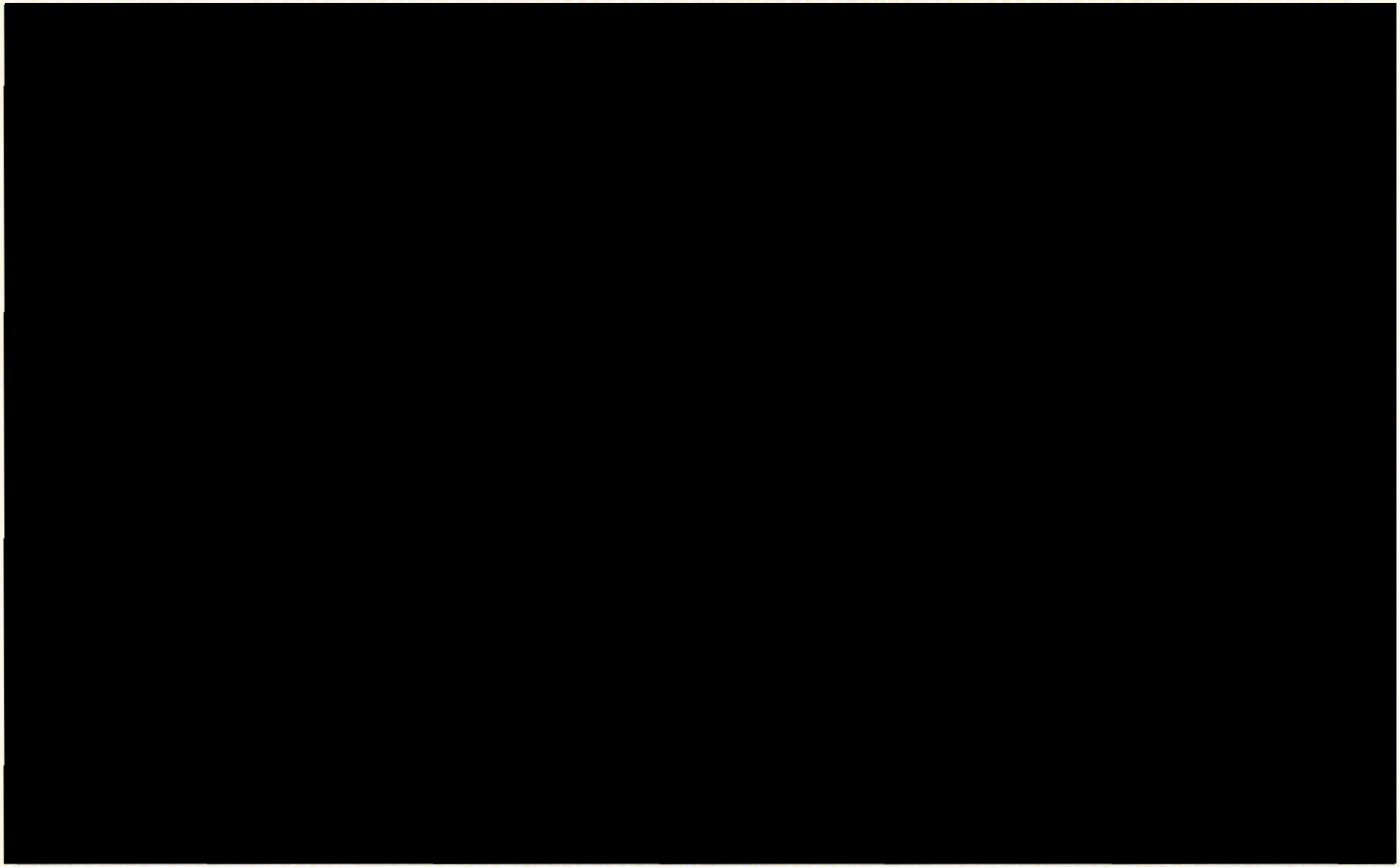
Market Data/Analysis – Traders Share 2016

Market Data/Analysis – R&C Share 2016

Market Data/Analysis – PM Share 2016

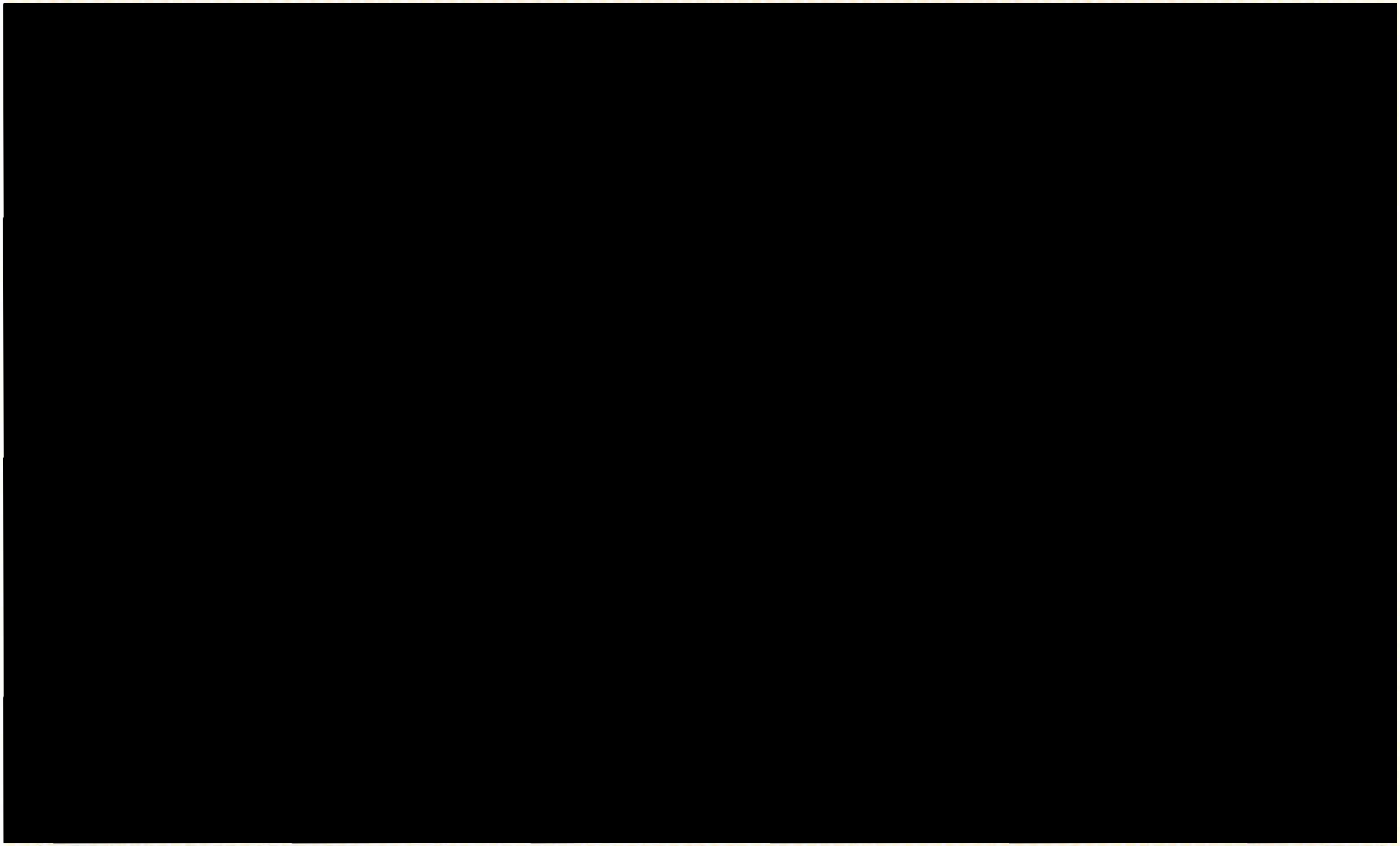
Market Data/Analysis – Analysts Share 2016

Market Data/Analysis – FA Share 2016

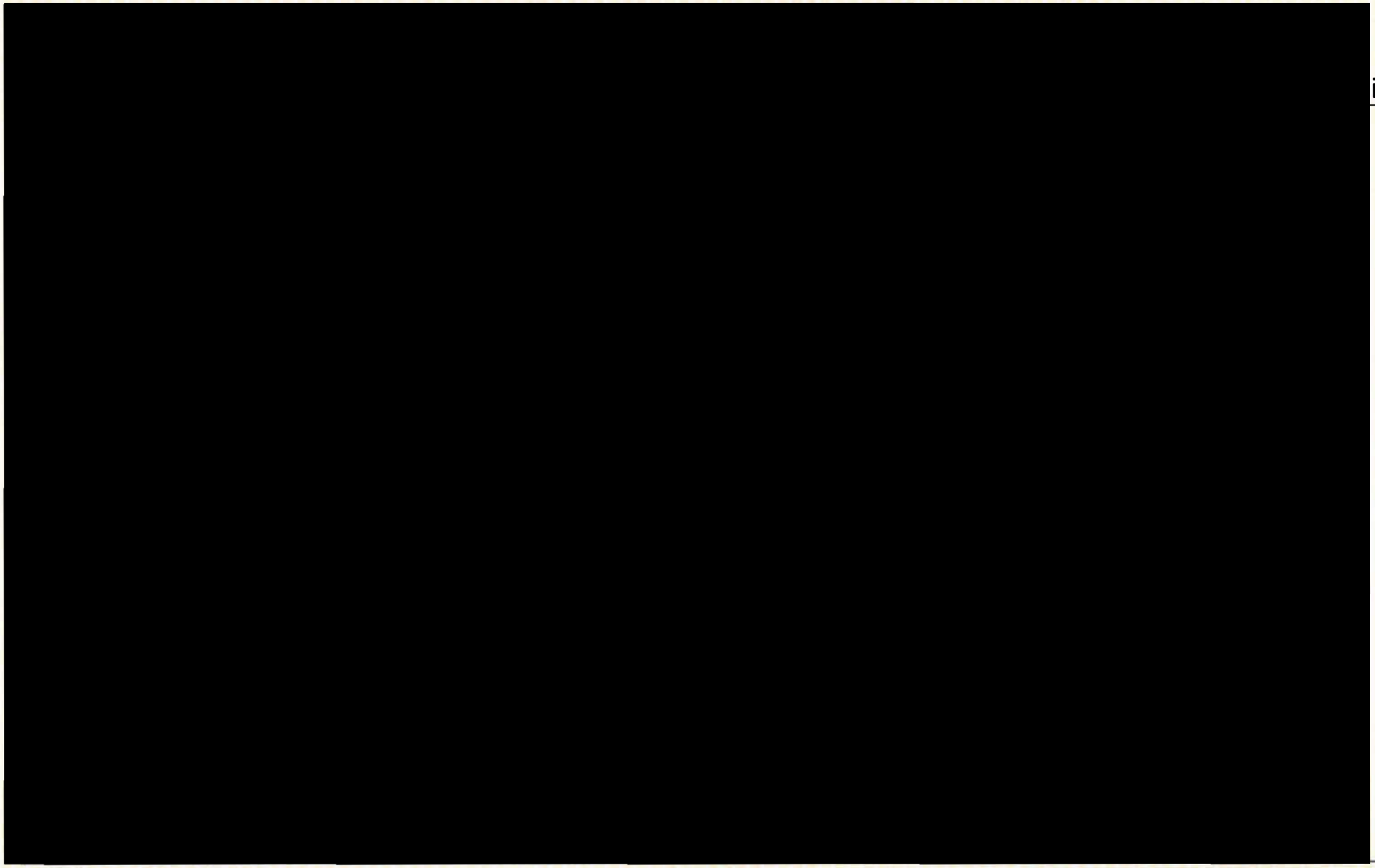


Market Data/Analysis – C-suite/IR Share 2016

Market Data/Analysis – IB/CF Share 2016



Market Data/Analysis – Media Share 2016



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Market Data/Analysis – Gov Share 2016

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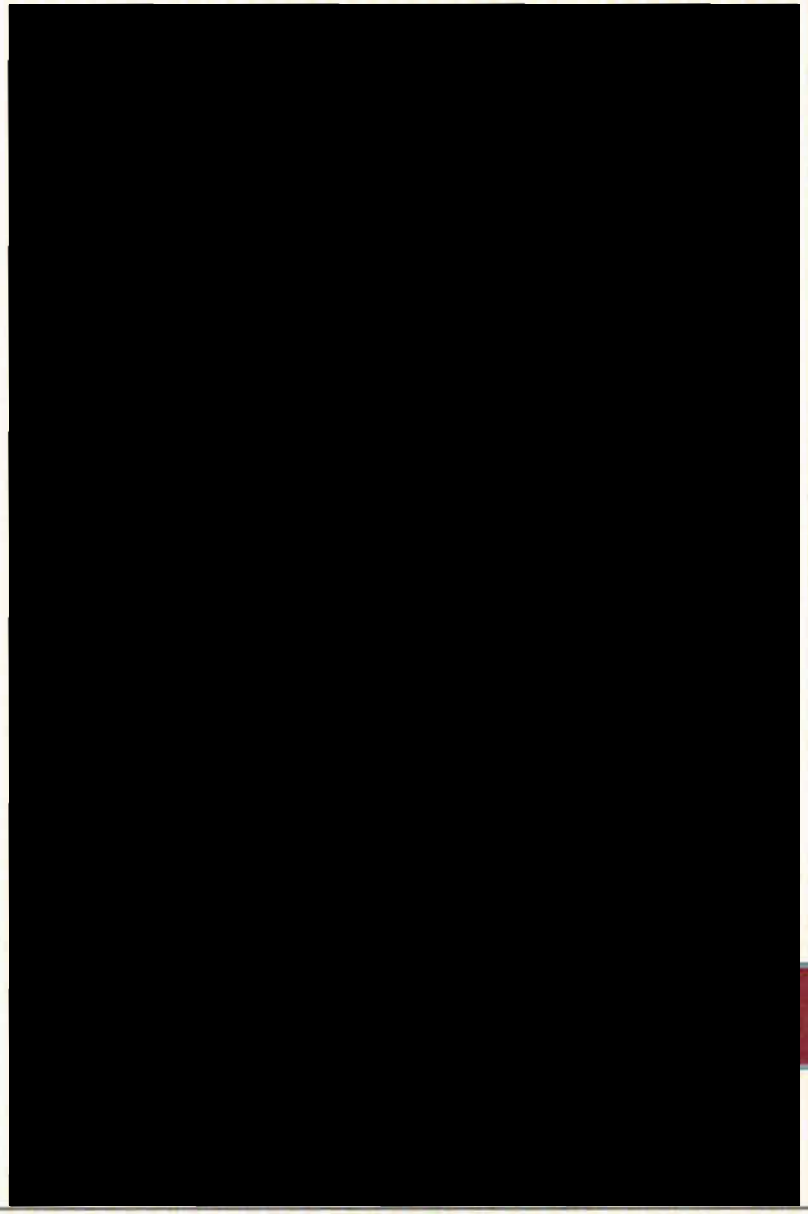
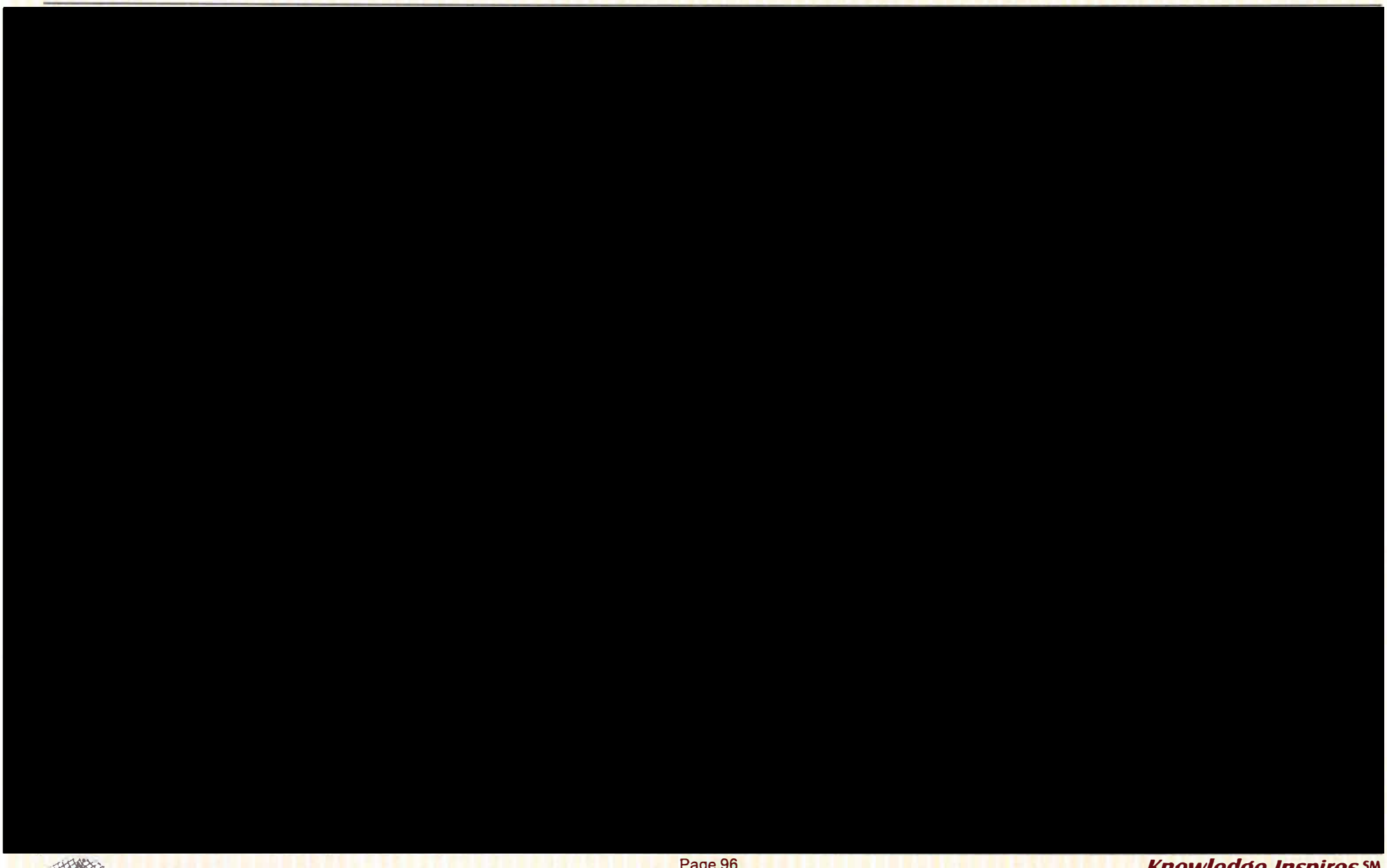


Key Findings – Global Institutional Mix

Market Data/Analysis – Institution Growth

Market Data/Analysis – Institution Trending



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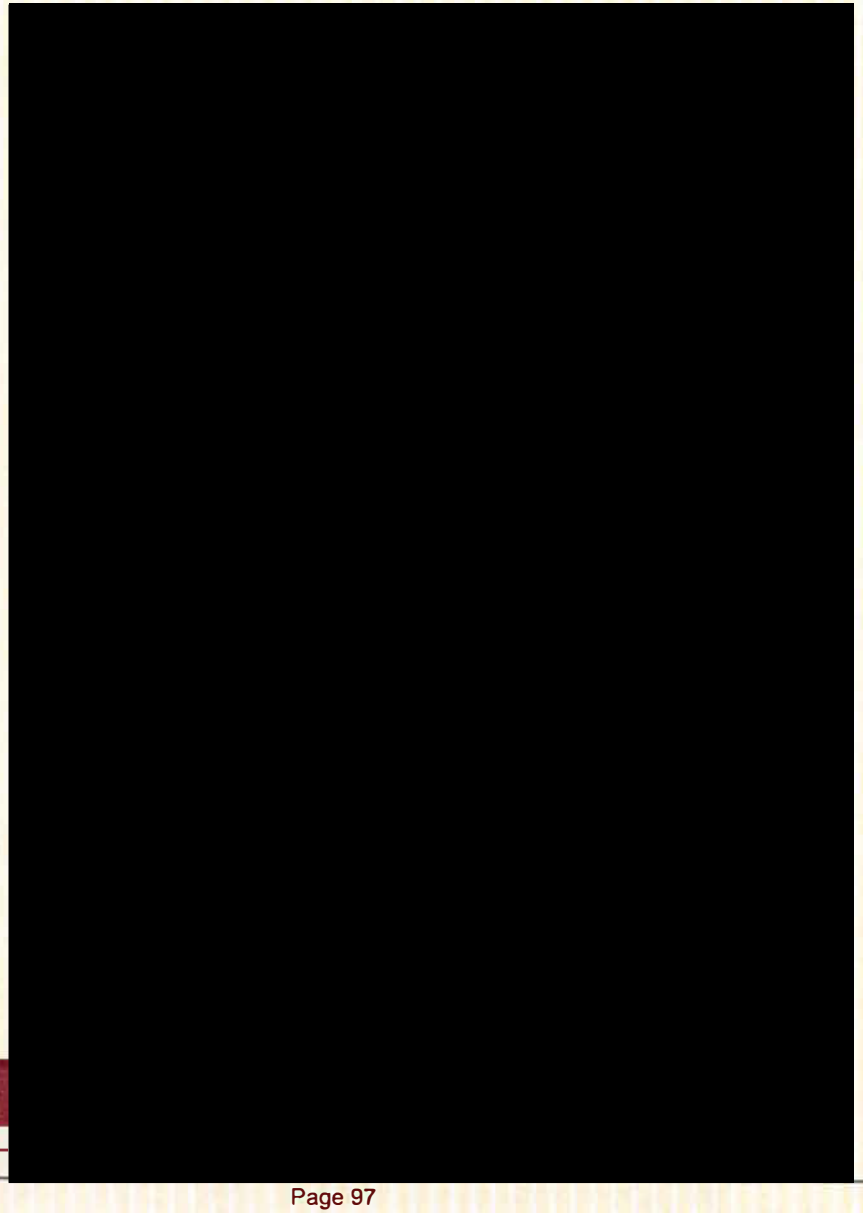
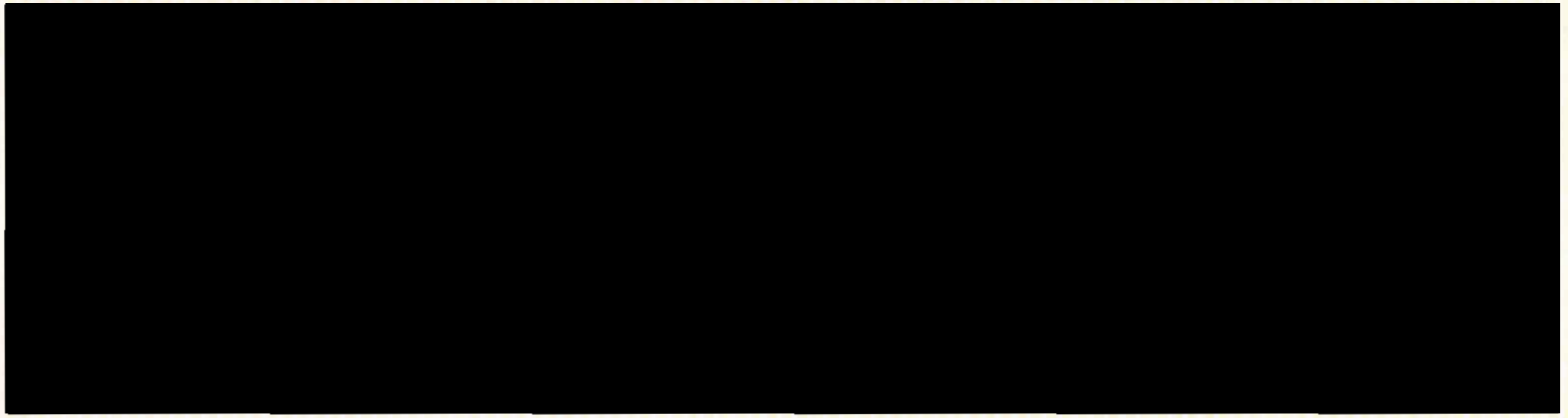


References – Methodology & Assumptions

References – Segment Definitions

References – Product Definitions



References – User Definitions

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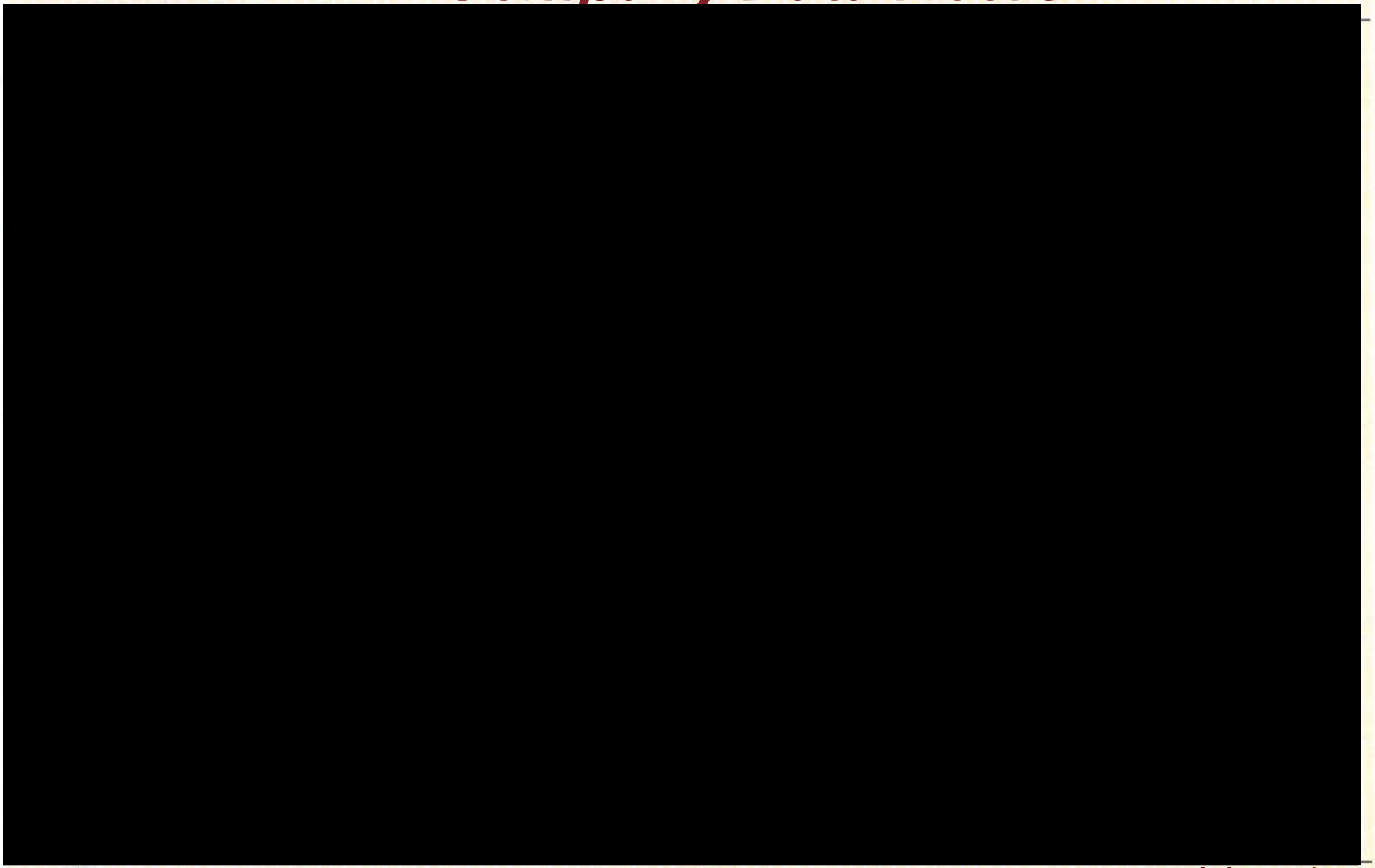

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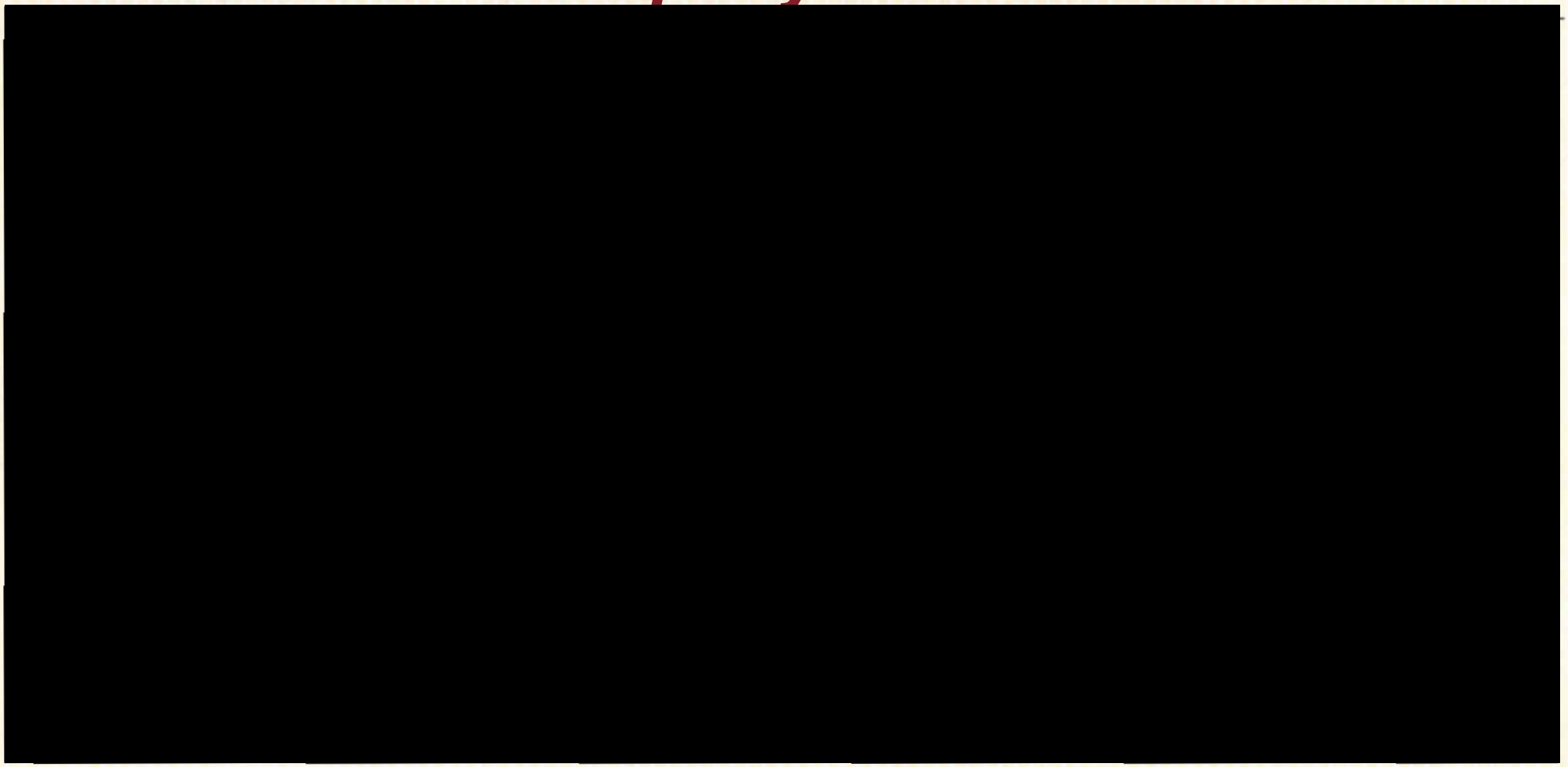

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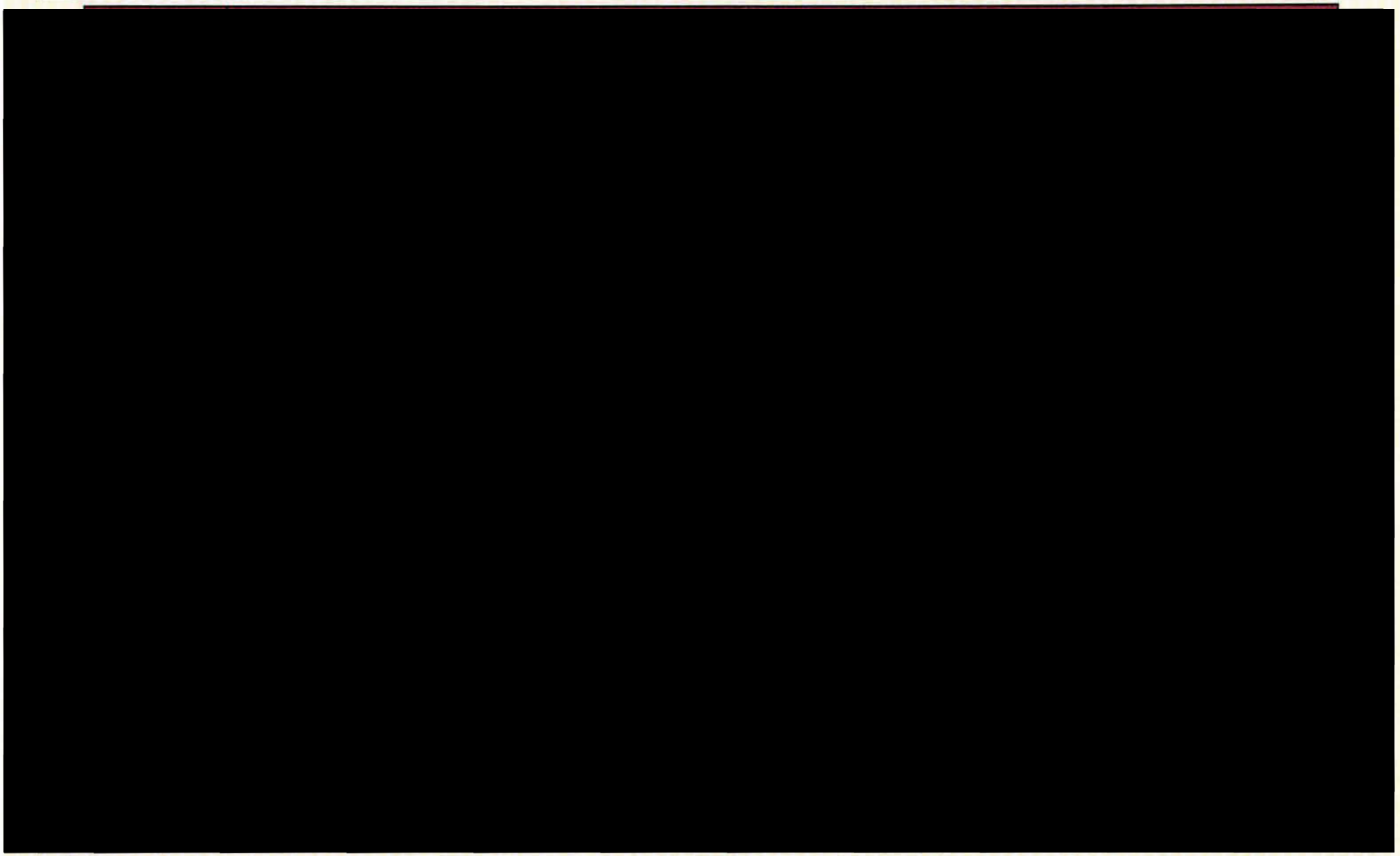

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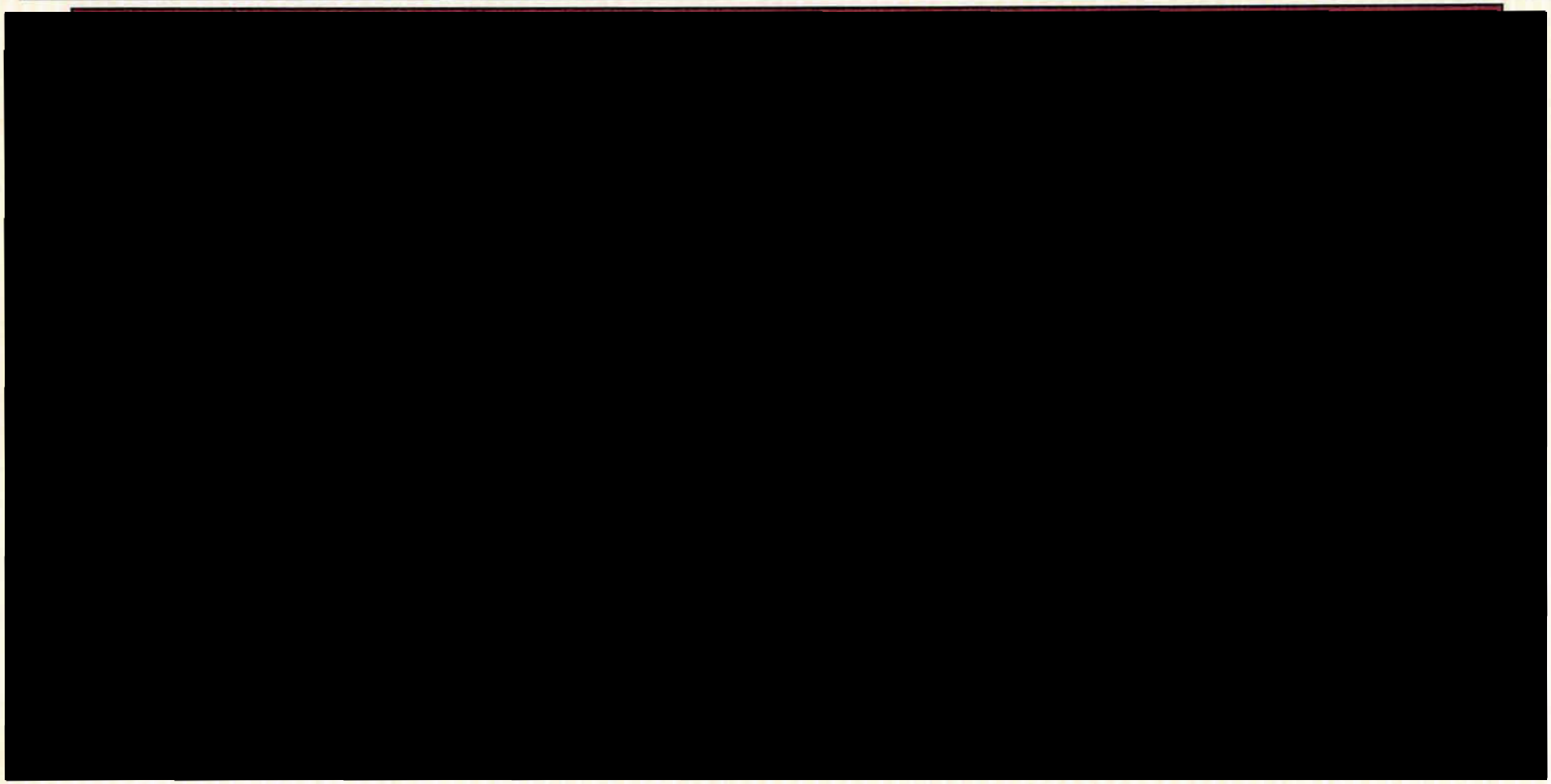

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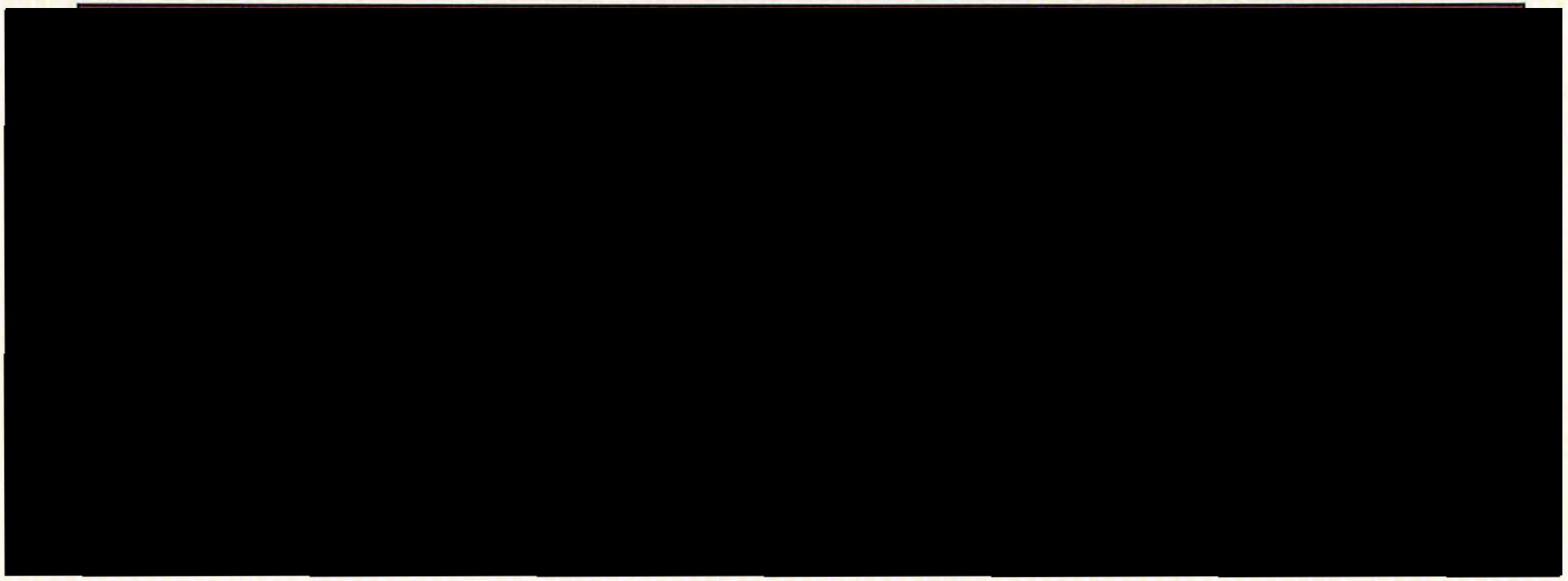

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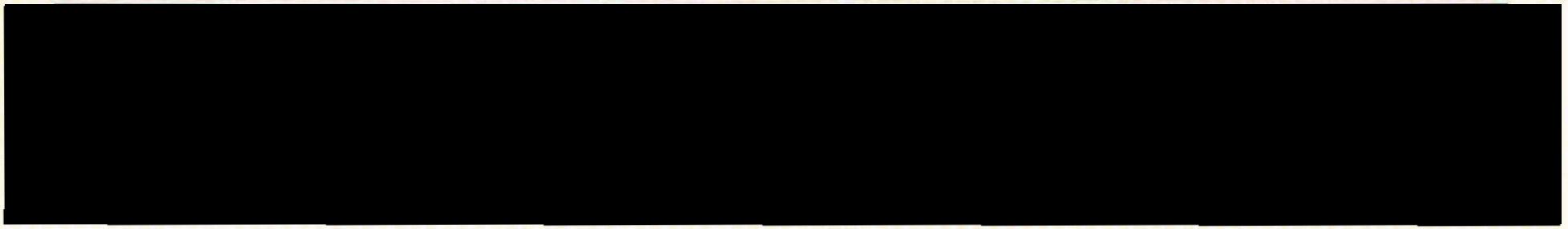

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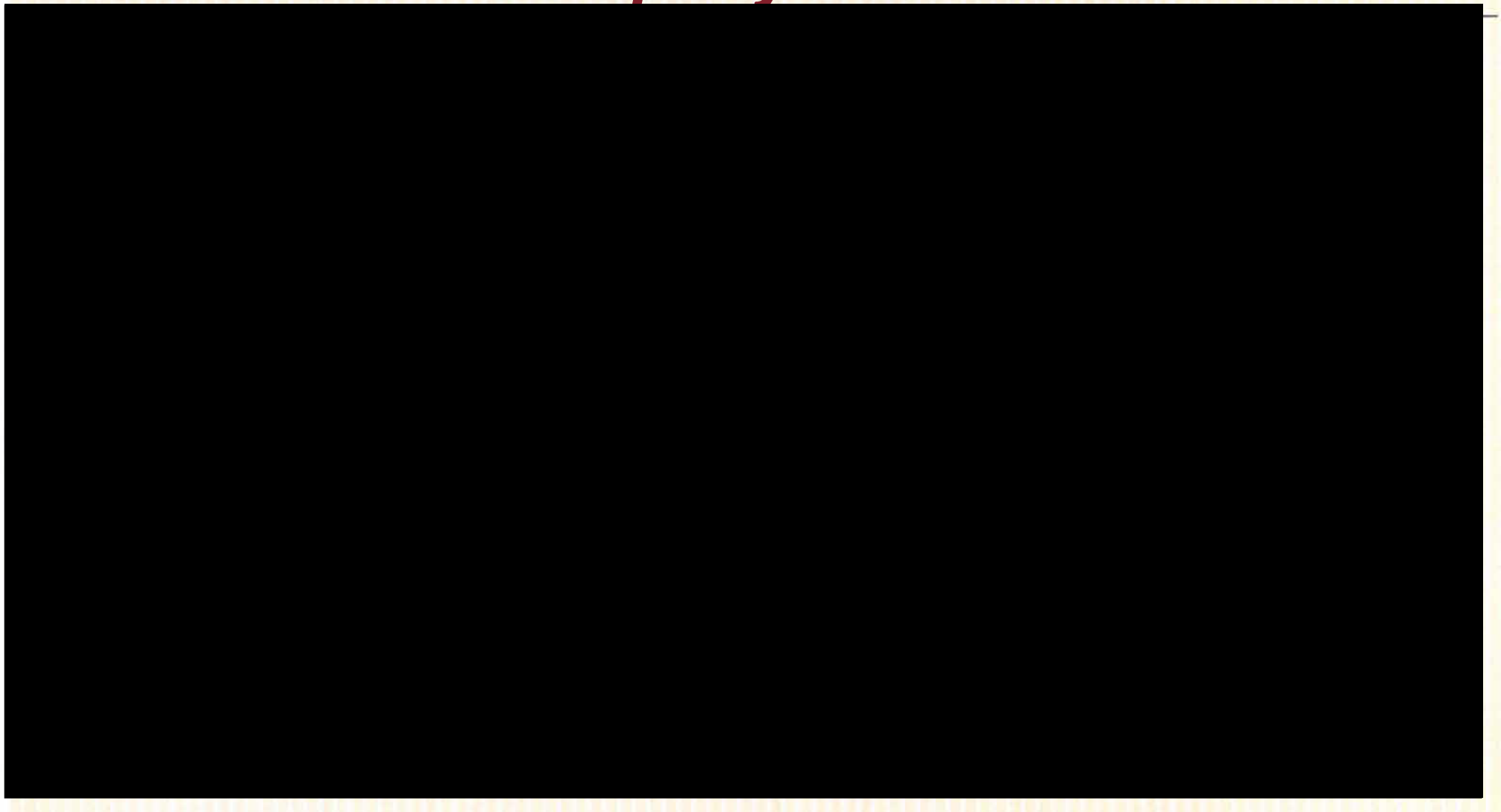

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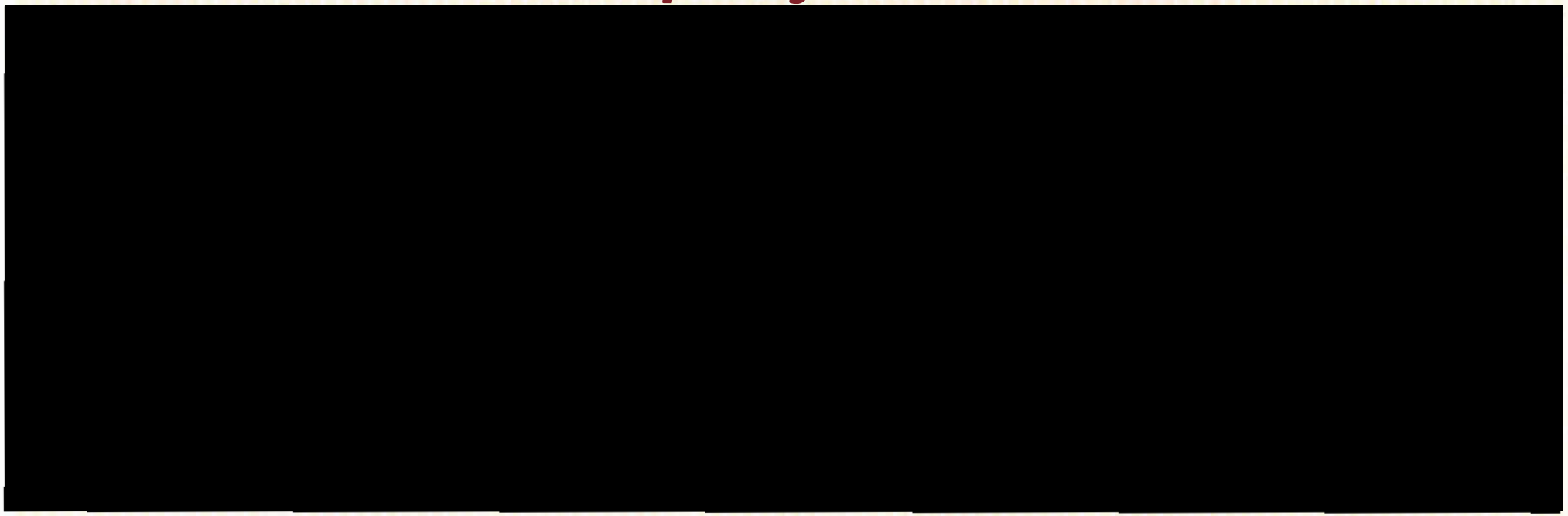

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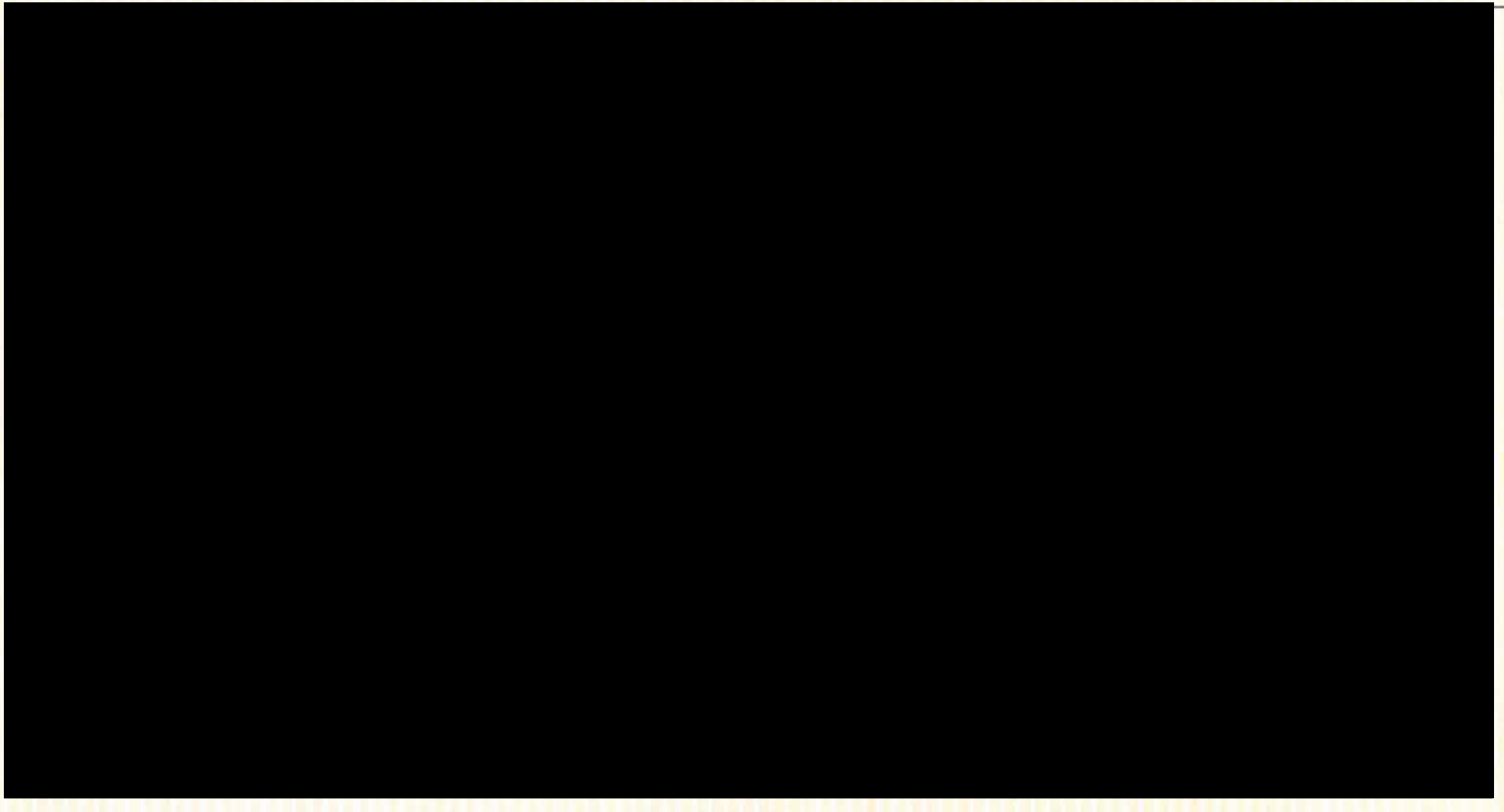

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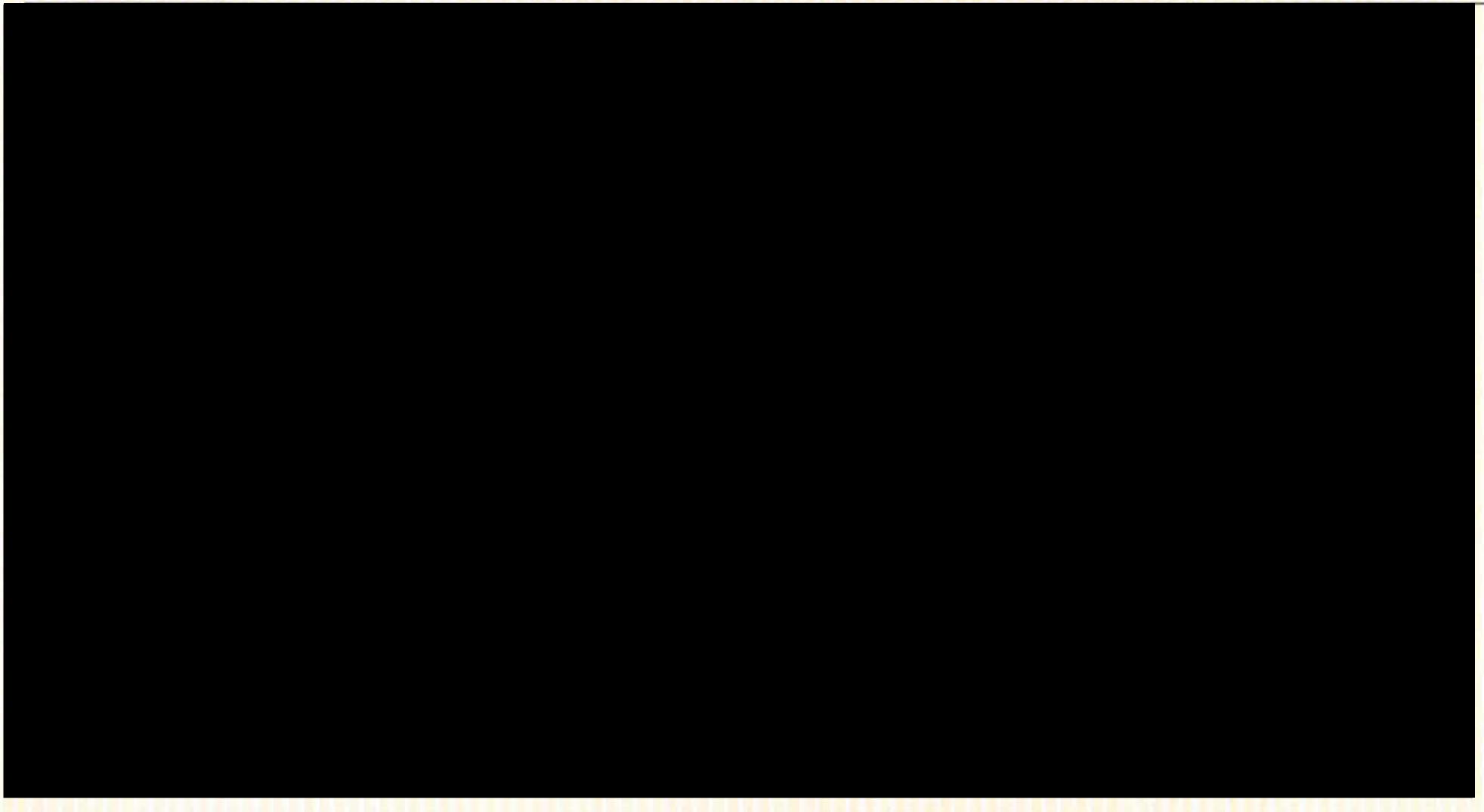


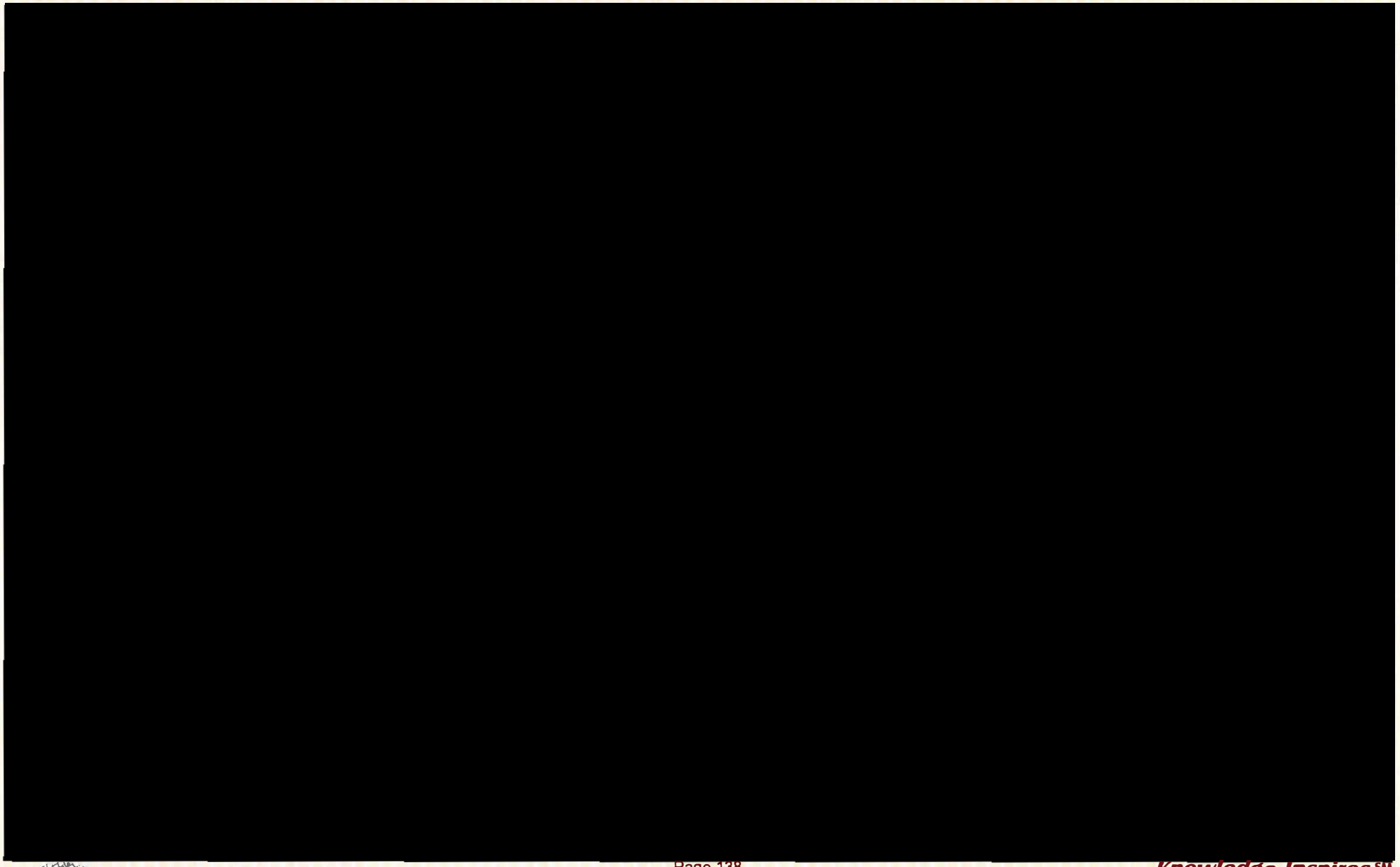
References – Company Data Notes

References – Company Data Notes

References – Market Share Calculations

References – Segment Growth

References – Customer/User Growth



References – Product Growth

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References – Institutional Growth

About the Author

Burton-Taylor International Consulting

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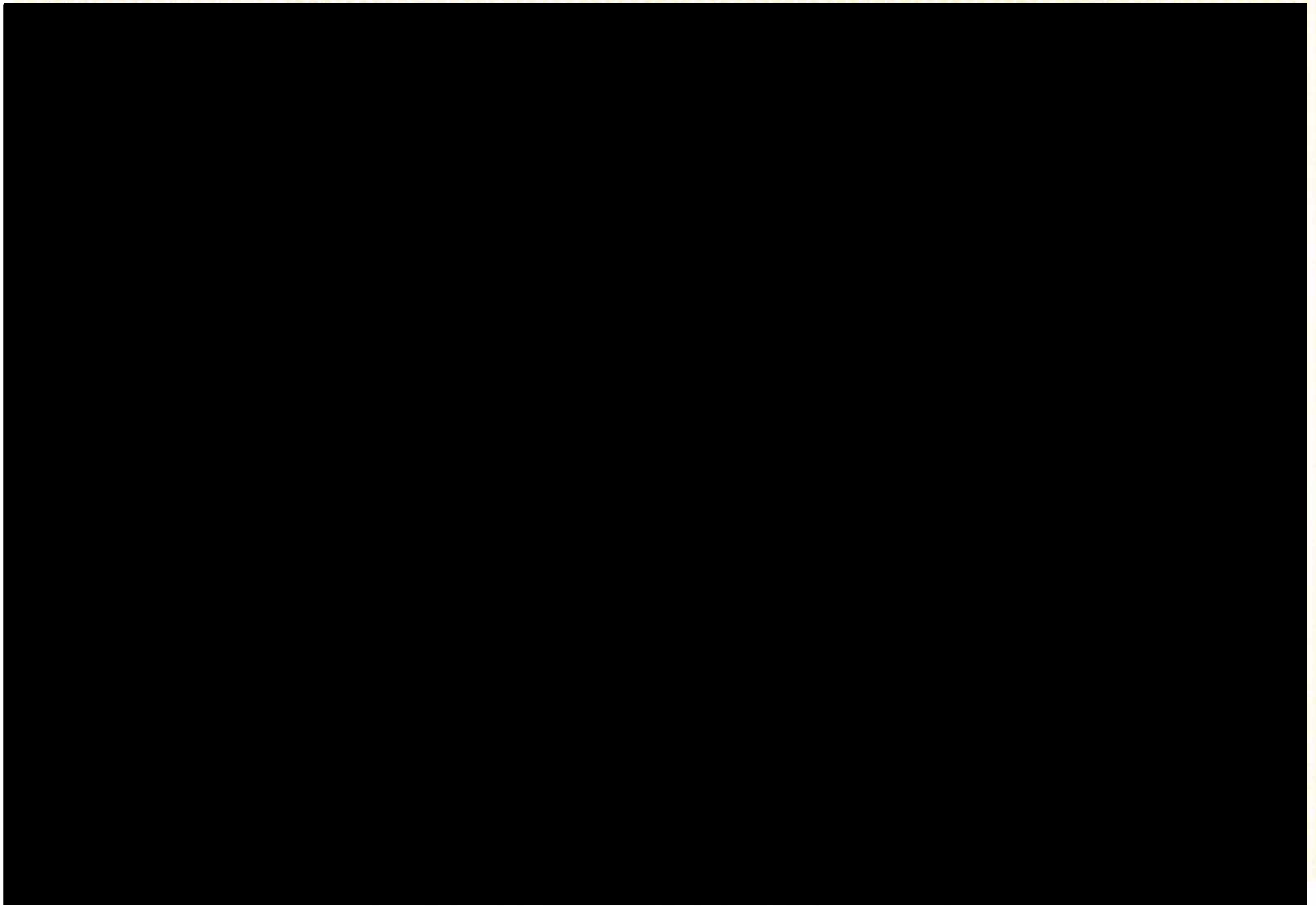

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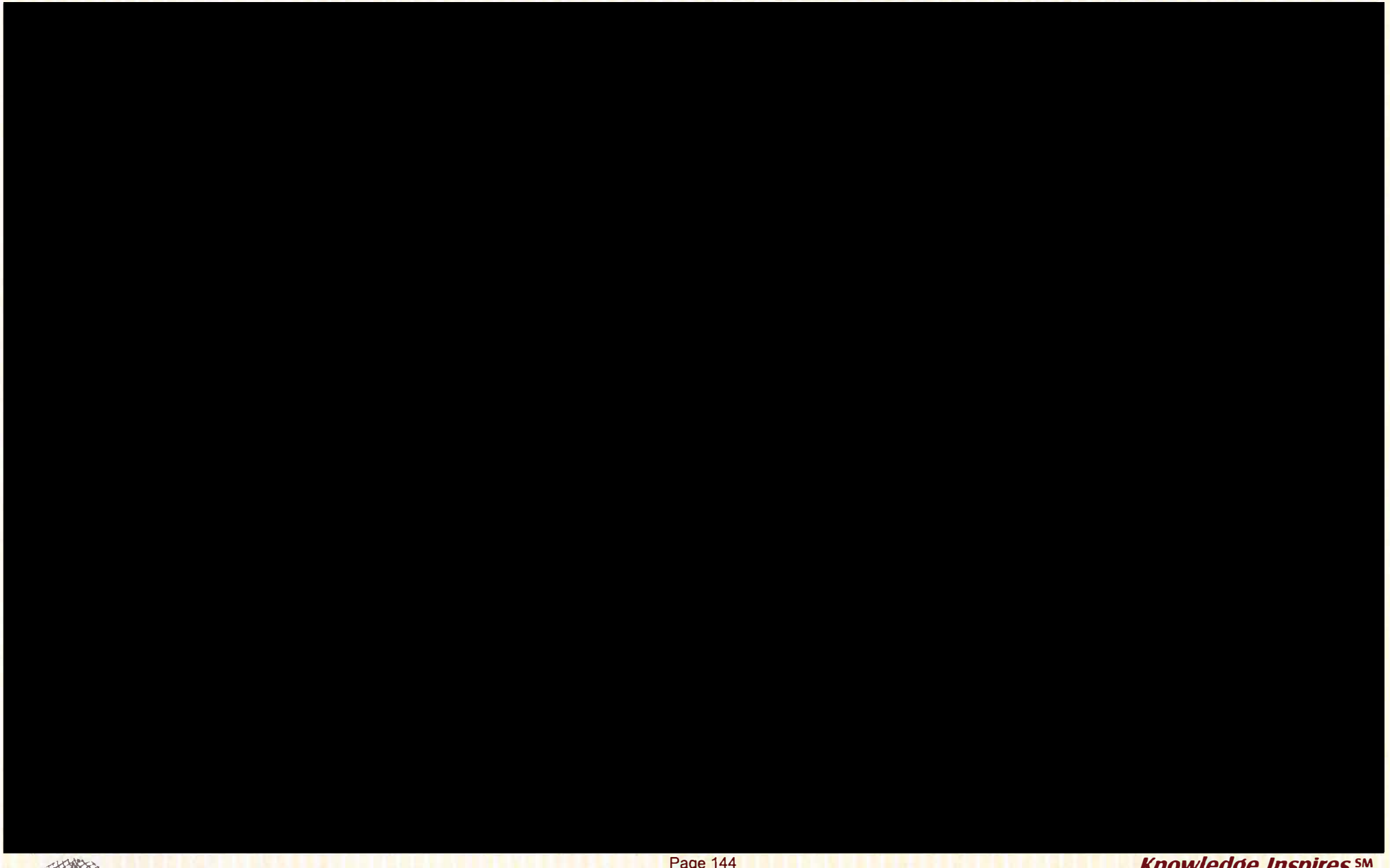

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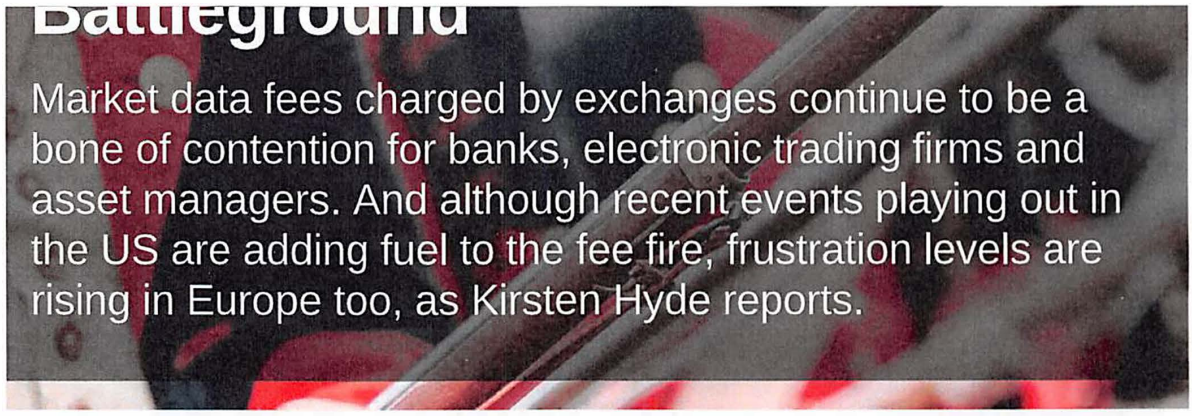

Kirsten Hyde

21 Feb 2018

Market data is becoming one of the biggest battlegrounds in the equities market, with banks, trading firms and asset managers uniting against a common adversary: exchanges, which they accuse of indulging in monopolistic practices and raising their fees significantly—particularly for market participants with whom they are often in direct competition—while not being totally transparent about the costs related to producing data, access to which has become a necessity in today's world of complex trading strategies.

While calls to US regulator the **Securities and Exchange Commission (SEC)** to scrutinize how exchanges' market data fees are determined have focused the limelight on data fees in recent months, trading firms in Europe are now turning up the heat on an issue that has been playing out between brokers and exchanges in equities for years.

Most recently, market participants have directed their ire at **Bolsas y Mercados Españoles (BME)**, Spain's national stock market, which raised its market data fees at the start of this year and set "special cases" fees for operators of venues that use its data to feed into price formation mechanisms on their own platforms. The higher fees particularly hit dark pools—private venues run by banks, exchanges or independent operators—and market makers and banks registered as systematic internalizers (SIs), which use proprietary capital to trade against customer orders.

Cboe Europe, the operator of Europe's largest dark pool, has said it is "extremely concerned" about BME's move. In a statement, Cboe Europe's chief legal and regulatory officer Adam Eades said,

"BME was already by far the most expensive exchange for market data. Its proposed increases in 2018 are truly excessive and anti-competitive."

Virtu Financial, which operates an SI in Europe via its division in Dublin, used its response to a European Securities and Markets Authority (Esma) consultation on another matter relating to SIs as an opportunity to propose that the industry has an "honest dialogue about the rapidly increasing costs imposed by trading venues," saying, "Recently, a sudden, arguably anti-competitive increase by one market operator in its market data fees targeted specifically at the operator's competitors, MTF operators and systematic internalizer customers, was so prohibitive that those participants were no longer able to support that market."

Indeed, UBS MTF announced at the end of December that it would no longer be trading Spanish equities where it uses BME as the reference market because of the "significant increase" in the exchange's market data fees.

"It seems BME is wary of dark pools and SIs potentially taking its market share and one way it can prevent this is to make it prohibitively expensive to use its data," says a London-based analyst.

BME, however, has previously insisted that its fee changes are not anti-competitive. BME declined to comment for this article, but told the *Financial Times* in December that it had discussed the fee package with customers, had cut some trading costs, and was surprised at UBS MTF's move.

Fighting on Two Fronts

The clash between BME and the trading platforms is one dispute in a much wider battle playing out on both sides of the Atlantic over fees that exchanges charge customers.

Market data has become an increasingly important revenue stream for exchange operators as they have moved to diversify away from transactional revenues in the face of lower trading volumes, muted volatility (until recently) and new competition. Revenues have been boosted by the rise of high-frequency trading (HFT), which

has made stock market information more valuable and prompted new contract and usage models at exchanges.

Revenues from the data businesses of the world's 13 biggest exchanges grew 29 percent to $5.4 billion in 2016, with data accounting for one-fifth of total exchange industry revenues, according to market research firm **Burton-Taylor International Consulting**. Its most recent figures show that exchanges' market data revenues for the first half of 2017 totaled $2.9 billion, an increase of 5.6 percent over the first half of 2016.

"The [exchange] market data and indexes segment continues to show significant growth with the sector recording a compound annual growth rate (CAGR) of 11.99 percent since 2011, and has become an engine of revenue growth for exchanges," Burton-Taylor's research says.

At the same time, the lack of volatility across financial markets has hurt the profits of market-making firms, while institutional trading commissions have declined and investors continue to deal with a shift from active to passive investing, placing trading costs—including data— under naturally greater scrutiny.

"Market data is becoming a more important revenue source for exchanges, and with this comes a need to invest in the infrastructure needed to capture, clean and distribute data. However, some brokers and venues feel that exchanges are going too far in raising market data fees each year. Brokers are particularly wary of rising data fees, given the constant pressure on trading commissions, which has just been exacerbated by the Mifid II unbundling rules," says Anish Puaar, European market structure analyst at **Rosenblatt Securities**.

One complaint leveled at exchanges is that in today's high-speed electronic markets, market participants have little choice but to buy premium data and other add-ons from exchanges, both to stay competitive and to comply with rules requiring them to execute trades at the best price available in the market at any given moment.

US exchanges do contribute to consolidated industry-wide datafeeds—the Consolidated Tape Association and the Unlisted Trading Privileges (UTP) Plan—but these provide a less complete picture of market activity. Critics argue that because the Securities Information Processors (SIPs) that collect and disseminate the data are slower than exchanges' direct feeds, which also include more

comprehensive data, such as depth-of-book and imbalance data, they are compelled to buy the pricier proprietary feeds to remain commercially competitive.

Some studies have found big increases in trading firms' market data bills. A report published at the end of last year by the Healthy Markets Association, a coalition of investment managers, found that market participants who wanted the fastest connections with the most detailed order information from three of the biggest US exchanges paid $182,775 per month in 2017, an increase of more than 150 percent over the $72,150 per month they paid in 2012.

Other participants spoken to by *Inside Data Management* expressed concern that the rise in market data fees could create market instability. "Some exchanges have pushed the levels of data fees, especially for non-display application usage, to such extremes that market participants have decided to stop executing orders themselves. Instead, they give away their orders to brokers using broker strategies," says Jork Muijres, product developer at Transtrend, a Netherlands-based asset manager. "It thus creates a market where only a few broker algorithms are active. When different market participants with different investment strategies send their orders to the market using the same broker strategy, this effectively becomes one large order. This reduction in the effective number of different market participants is a recipe for market instability. It harms the price discovery process in the market and it leads to an increase in systemic risk."

Exchanges, meanwhile, reject claims that they are abusing their market power, and counter that market data pricing is fair, that no trading firm is obliged to purchase faster and more comprehensive order data, and that they can terminate feeds or co-location arrangements if they become too pricey. In the US, exchanges also cite investments that have dramatically increased the speed of the SIP over recent years, and argue that market participants have a say in any decisions regarding the SIP through the SEC's public comment process.

They also say that the sale of data is competitive and the cost of proprietary data has risen commensurate with the fragmentation in the marketplace. In the US, exchanges do have some reason to feel vindicated. In June 2016, an SEC administrative law judge sided with exchanges against trade association Sifma in a long-running legal case over the cost of market data, saying that market data sales were subject to "significant competitive forces." Sifma has since appealed the decision, though the SEC has not yet ruled on the appeal.

The situation in the US has become even more tense recently after 24 brokers, traders and asset managers—including Morgan Stanley, Citigroup, Fidelity Investments, Virtu Financial and UBS—filed a comment letter calling on the SEC to review its process for approving new market data fees filed by exchanges. The firms also called on the SEC to force exchanges to disclose more information about fees, and to scrutinize how these fees are determined.

The group argues that securities laws in the US require exchanges to sell market data on terms that are "fair and reasonable" and non-discriminatory, and that exchanges' published rules do not disclose enough cost information related to their market data products to show whether the price increases conform to these legal standards.

Rising Costs

"There has been quite a public spat between trading firms and the exchanges in the US, but frustration has been building in Europe, too," says Tim Cave, an analyst at capital markets consultancy Tabb Group. "The issue with the Spanish exchange has really brought into the public domain the concerns market participants, particularly trading firms, have around the rising costs from exchanges—not just for market data, but for connectivity, execution fees, co-location, access fees, and clearing and settlement."

In fairness, BME was not the only exchange in Europe to make changes to its market data fees at the start of the year. Other exchanges that raised data fees include Nasdaq, Euronext and Deutsche Börse.

While Euronext declined to comment for this article, both Nasdaq and Deutsche Börse say their new prices mean that some users will actually see their costs fall. "Changes that have come with Mifid II, such as unbundling of pre- and post-trade products, as well as a number of other policy changes, can result in more consistent and—in some cases—lower prices for customers," a Nasdaq spokesperson says,

Mifid II, the new pan-European capital markets regulatory framework that came into force at the start of this year, contains requirements for exchanges to create new products and unbundle some existing products, says Hartmut Graf, head of data services at Deutsche Börse. "There were significant changes that needed to be made to the product structure, and some prices went up, others went down." For

example, Deutsche Börse introduced a new pricing model for non-display usage, which is use-case specific, so the more intensely a client uses the data, the more they pay, but if they use less, they pay less. It has also lowered its fees for non-professional users trading on Eurex and the Frankfurt Stock Exchange, cutting the cost of its Xtra Level 1 retail package from €15 to €4.90.

However, he notes that the exchange's fees include costs of supporting the significant amount of technology required to distribute its data—more than three billion price messages a day—and that these costs get passed on to customers.

More generally in Europe, exchanges cite the additional costs of compliance with Mifid II. For instance, Mifid II's Regulatory Technical Standard (RTS) 14 instructs exchanges and trading venues to make pre-trade and post-trade data, which has traditionally been bundled together, available to the public in an unbundled fashion. Exchanges have to disaggregate their data by asset class, country of issue, currency and whether the data comes from auctions or continuous trading, as requested by clients, which creates an added administrative burden.

Still, some industry observers have questioned whether the exchanges' price increases are in the spirit of Mifid II. "Exchanges are going to have to produce a lot more data as a result of Mifid II, and the cost of complying with Mifid II is one of the reasons they're giving to trading participants for the increase in some of their data fees. But actually, Mifid II is meant to be helping to control costs for market participants," says Tabb Group's Cave.

Alasdair Haynes, CEO and founder of Aquis Exchange, which offers a subscription pricing model that includes data, says talk of reduced fees at some exchanges belies a resulting overall net increase in revenues. "I've heard exchanges say that prices are going down for lots of people, but, net, they are going to make more money out of data than they have in previous years. Using regulation as an excuse to raise data costs goes against what the regulation is trying to do. Data is a billion-euro business in Europe. We're not talking about small amounts of money here," Haynes says.

Industry observers have also questioned how effective Mifid II will be in addressing the perceived high cost of market data. When the Mifid II negotiations were under way, some participants had hoped that the regulation would introduce caps on fees.

Esma, however, said it decided against price capping as it did not want to hamper investment, innovation and product development.

The final rules state that exchanges and other trading venues must price their data on a "reasonable commercial basis," that their fees should be based on the costs of producing and disseminating data "whilst being allowed to obtain a reasonable margin," and that data should be provided on a non-discriminatory basis so that all customers in the same category are offered the same price and other terms and conditions.

"Mifid II does give exchanges a lot of leeway in how they determine their market data fees," Rosenblatt's Puaar says. "While regulators did consider stricter price controls during the Mifid II negotiations, it's not really the domain of financial market regulators to intervene on these kinds of competition issues."

However, the unbundling of pre- and post-trade data, as outlined in RTS 14, should give customers with a narrow focus more flexibility and choice, and potentially reduce their market data spend, he adds.

Consolidated Tape or More Red Tape?

One idea that has been mooted in Europe is the introduction of a US-style consolidated tape for equities, a provision that is mandated for other asset classes in the Mifid regulation, as a means to provide a central source of prices.

While the industry has previously debated creating an equity consolidated tape, it has failed to materialize. "Mifid II will give the industry one more chance to create its own consolidated tape, but there doesn't seem to be the appetite for it, possibly because there is little commercial imperative," Puaar says.

Haynes agrees that the industry is unlikely to create a consolidated tape on its own, and advocates that regulators mandate it. "I believe it is necessary for a consolidated tape [for equities] to be introduced in Europe. I have always believed that the industry will not bring it in on its own, and it will have to be mandated. It was an error not to have put in a mandate about it in Mifid II. There are lots of people out there who have wanted to see a consolidated tape, but it won't happen unless it is mandated as there are too many vested interests," he says.

In addition to calls for a mandated consolidated tape, there have also been calls for regulators in Europe to step in and examine the overall issue of rising data costs, despite the authorities' hands-off approach to exchange market data fees so far. In its response to Esma's consultation on SI pricing, Virtu Financial said that escalating costs are having "profoundly negative effects" on the availability of liquidity and on price formation in the European Union. "These increasing costs are evident across all areas of the trading lifecycle, from market data… through to clearing and settlement," the firm said in its response. "The spirit of the regulation seeks to ensure a 'level playing field between means of trading.' As such, we respectfully suggest that it is expedient for the relevant European authorities and institutions to assess whether these developments are beneficial or detrimental to the markets [and] whether Mifid II is the catalyst for these cost increases; it is frequently being used to justify those increases. This issue is not unique to the EU, but it is an opportunity for the EU to take a leadership role in reining in the problem."

Calls for "shining a light on opaque costs" have also come from other quarters in the financial markets. Roger Rutherford, COO of electronic dealing platform ParFX, says that regardless of asset class, financial markets need market infrastructures to take the lead on transparency, fairness and equality, and to make market data affordable and cost-effective for everyone.

The long-fought battle over market data fees shows no signs of abating. But what were once individual disputes over fees are now crystalizing into organized battle lines. In the past, these battles were fought by market participants creating their own platforms for trading and post-trade services. The question is whether the situation will descend to all-out war (and whether that will deliver the desired competition and lower fees), or whether regulators can broker a lasting peace.