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January 5, 2024 *via Electronic Mail (rule-comments@sec.gov)*

Ms. Vanessa Countryman, Secretary
U.S. Securities and Exchange Commission
100 F Street NE., Washington, DC 20549

Re: Volume-Based Exchange Transaction Pricing for NMS Stocks (Release Nos. 34-98766; File No. S7-18-23; RIN 3235-AN29)[1]

Dear Ms. Countryman,

On behalf of Data Boiler Technologies, I am pleased to provide the U.S. Securities and Exchange Commission (SEC) with our comments on the captioned release concerning the proposed new rule 6b-1 under the Securities Exchange Act of 1934 to prohibit exchanges from offering volume-based transaction pricing in connection with the execution of agency or riskless principal orders in NMS stocks and require anti-evasion measures and other disclosure requirements.

I have written about the "Animal Farm" phenomenon in Traders Magazine[2] and other media since 2019, quoted *"a group of elite firms are able to negotiate with the exchanges for order flow and get some 'premium rebates' in return. Unfortunately, others who also contributed do not get the same rewards. Consequently, the big get bigger."* The problem persists as of today. The Commission did tell the exchanges to better justify the fees they charge.[3] The Commission also proposed[4] to recalibrate the Access Fee Cap in December 2022 to indirectly limiting Access Fee Rebates offered by the Exchanges.[5] This SEC proposal on Volume-Based Exchange Transaction Pricing is another attempt to 'FINESSE' the situation. The hard efforts and honorable goal in promoting FRAND (fair, reasonable and nondiscriminatory) should be applauded. However, these well-intentioned policies come too far behind market developments.

We discussed in our March 2023 comment letter[6] to the SEC that *"The focus of 'Hu-Murphy Paper'[7] is off ... Access fee rebate, Payment for Order Flow (PFOF), and market data/ market structure issues are all intertwined ... The noumenon of rebate incentives serves as royalty payments for the use of others' copyrighted material. The prevailing market problem is WHO OWNS THE DATA."*

LACK OF STANDARDS across different market centers' rebate and incentive systems is at the CORE of all issues. Proliferation of order types, offer new pricing schemes, latency advantages, and/or other perks (rebates, bundled or discounted services through integration or strategic alliances) are different ways to segment order flows that convolute the markets. It is hard to curb conflict of interests or 'milking the cow' behaviors because different market centers (Exchanges, Alternative Trading Systems (ATSs), Systemic Internalizers (SIs), Single Dealer Platforms (SDPs), etc.) do need different capabilities to optimize reach and attract new participants to their markets.

We see that the current administration of the SEC is trying to make all market centers similar; in addition to taking massive incentives out of the system through the December 2022 proposed reform[8] and this proposal. Making all market centers similar is a detriment to the variety factor of the 4Vs. It undermines the different roles the different constituents play and the frienemy dynamics they have in fabricating the fragmented market under Reg. NMS. The move may be perceived as helping the poor to go against the rich. Yet, the effects are quite the contrast, i.e., hurting the "Have-Nots" more than the "Haves". Please allow us to explain in the following.

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[1] https://www.sec.gov/files/rules/proposed/2023/34-98766.pdf
[2] https://www.tradersmagazine.com/departments/brokerage/animal-farm-and-market-data-negotiate-to-be-more-equal/
[3] https://www.reuters.com/article/us-sec-exchanges/sec-tells-exchanges-to-better-justify-the-fees-they-charge-idUSKCN1SS23T/
[4] https://www.sec.gov/files/rules/proposed/2022/34-96494.pdf
[5] Artificially altering the queue (equal waiting line at all checkout counters, except leaving much room for the Exchanges to selectively use tier rebates and other perks to divide the cake with the elites in hurting the other "content" creators) may affect the "apparent", NOT the real supply and demand for securities. See: https://www.linkedin.com/pulse/analogies-taboo-secs-market-reform-kelvin-to/
[6] https://www.databoiler.com/index_htm_files/DataBoiler%20SEC%20Market%20Structure%20202303.pdf
[7] https://www.telegraph.co.uk/finance/newsbysector/banksandfinance/5241263/Societe-Generale-chairman-Daniel-Bouton-to-step-down.html
[8] https://www.linkedin.com/pulse/secs-attempt-detoxify-entangled-industry-value-chain-kelvin-to/

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First, the 'Haves' never worry about insufficient incentives to go around in markets because they can exploit or squeeze the 'Have-Nots'. The basic forces of supply and demand suggest that income reduction would cause a decrease in demand. I.e., the 'Haves' will have less risk appetite, widen spreads and/or reduce market depth that dampen liquidity.[9] 'Have-Nots' will have a harder time to transact while paying more for the same services that may have been formerly subsidized by rebates and other incentives.

Second, demand for Exchanges proprietary products (PPs) is inelastic. Expanded core data under Market Data Infrastructure Rule (MDIR) is no substitute for PPs. Neither is "same manner and same methods" in making market data available under MDIR is equivalent to latency equalization, nor can it achieve the same results as using time-lock encryption to make market data available SECURELY in Synchronized Time.[10] Our analysis using Decision Field Theory:[11]

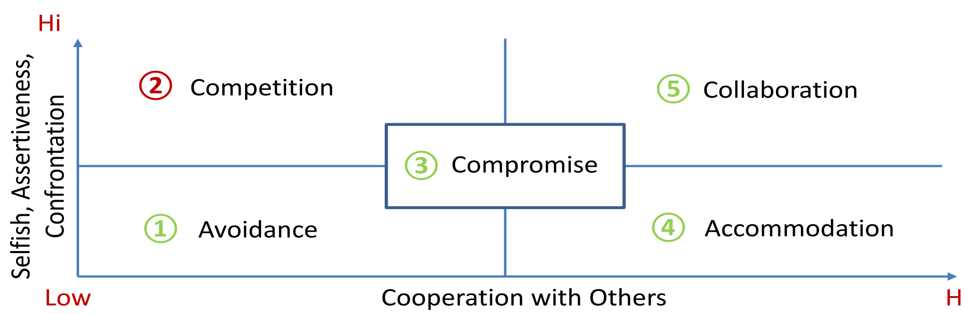
- Let 'X' be denoted as PPs where Exchanges optimally restrict access, i.e., priced out most of the "Haves".
- Let 'Y' be denoted as the average services (Securities Information Processors, SIPs) affordable to the "Have-Nots".
- Let 'C' be denoted as a new comprised offer by Competing Consolidators (CCs) priced between 'X' and 'Y'.

Current subscribers to depth-of-book and additional data want the entire industry to share the cost with them. The small group of "Haves" can switch from 'X' to 'C' to save themselves a little cost. Whilst the "Have-Nots" need to pay more to migrate from 'Y' to 'C'. If a current subscriber of the SIPs does not need the expanded core data, they still need to pay more for the same services because there will be fewer participants to share the cost of SIPs. **The "Have-Nots" are often the victim of time, sacrificed by rule makers' experiments.** The expanded core data may have no value (NOT a fit) for some current subscribers of 'Y'. Yet, they will be at a further disadvantage if they do not upgrade to either 'D' or 'X'. In essence, there is no real choice for the "Have-Nots", but ultimately, they pay more regardless of the usage values of bundled data or services (note: bundling can be a form of price discrimination).

In another scenario, suppose another market center or one of the CCs can come up with a new disruptive product 'D' to challenge the existing PPs. Let's hypothetically say, NYSE's roof top antenna upgrade from 100G[12] to 800G or faster. The price of 'D' is likely higher than 'X' for its better functionality and/or performance. The chance of an innovative product 'D' reaching critical mass is an uphill battle. If 'D' is deliberately priced below 'X' to induce subscribers of 'X' to switch to 'D', other market centers will mimic the upgrade. In turn, 'D' becomes the new 'X'. Banning Exchanges from using volume-based tiers for non-principal orders does not change the relative probabilities or hierarchy of demand for 'X', 'Y', 'C', and 'D'. **Do not get us wrong, we do support curbing pricing discrimination**.

FREE redistribution of displayed market data for Retail and other 'freebies', such as zero commission, subsidized investors education programs, etc. are indeed at the expense of price discrimination practices that further heighten costs on PPs, exacerbating the latency difference, and/or changing rebates/ incentives for others. The problem is – **WHAT GETS PAID** and **WHO GETS WHAT** is determined by a few elites rather than setting rate objectively with '4-Part test'.[13]

There are many reasons that smaller exchanges are not as competitive as large counterparts. See Chart 1 below that illustrates paths towards competition and other directions:



[9] See Table 5 of NASDAQ article about widening spread and reducing depth https://www.nasdaq.com/articles/a-data-driven-summary-of-the-secs-new-proposals

[10] https://www.linkedin.com/pulse/market-data-available-securely-synchronized-time-kelvin-to/

[11] https://en.wikipedia.org/wiki/Decision_field_theory

[12] https://www.ice.com/publicdocs/IGN_Colocation_Mahwah_Technical_Specs.pdf

[13] https://www.govinfo.gov/content/pkg/FR-2016-05-02/pdf/2016-09707.pdf

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Today's market centers are analogous to **Private Clubs favoring collaboration**. Take for example the following affiliated groups of non-display market data vendors/ Approved Publication Authorities (APAs):

> McKay Brothers (Quincy Data) got their investment from Susquehanna International Group (SIG), XR Trading, and Jane Street Group. PICO/ Redline Trading has close ties with Goldman Sachs, JPMorgan, Wells Fargo, UBS, Nomura, DRW, CTC, CMT Capital and Simplex Invest. Exergy acquired Vela and is affiliated with IPC. Quodd recently acquired Xignite is connected with Apex. BlackRock is behind SpiderRock Gateway Technologies. Colt is acquired by Fidelity. And then, there is the London Stock Exchange Group (LSEG) that owns FTSE Russell, Refinitiv and Maystreet; SIX Group is owned by 130 financial institutions; ICE Data Services that acquired Interactive Data some years ago; the list can go on and on.

Market data vendors are consolidating both vertically (see above) and horizontally (QuantHouse is part of IRESS; Options Technologies acquired Activ Financial and got Finetix from DXC in 2021; BMLL series B is funded by NASDAQ Ventures, FactSet, and IQ Capital's Growth Fund). To straighten out intricacies, it calls for a more comprehensive mechanism than limiting Exchanges use of tier rebates.

We do not disagree with Prof. C. Spatt's research[14] that suggests banning of Exchanges rebate tiering. Yet, there is merit in M. Kinak's comment (T. Rowe Price) at a SIFMA roundtable,[15] cited, *"Jumping tiers at end of the month* [is one concern]*. Get rid of "tiers" because it removes conflicts of interest that exist, I am all for that.* [Yet,] *it is difficult for institutions to be able to then go ahead and spread whether it is an additional fee or a rebate back to our customers. If that is the reason* [in recalibrating access fees and rebates, it] *ends up pushing potential conflicts upstream, from brokers if they exist currently with their routing to asset managers where now they are having to explain best execution obligations, versus, I am posting to collect a rebate on your behalf versus taking liquidity."*

The Elites would not mind the three big Exchange groups losing volume share to their affiliated ATSs, SIs, and SDPs if this proposal is adopted. Sadly, trading cost at Exchanges is the highest among all market centers. On-Exchange is used largely by Institutional as a last resort venue, except during the opening and closing hours. Be reminded that the Elites are sponsors of Members Exchange (MEMX) as well as controlling many off-Exchange market centers. How dividends may be computed and paid to the sponsors and strategic alliance are outside scope of this proposal. We doubt the usefulness of anti-evasion measures.

If banning Volume-Based Pricing for All Orders per Alternative 1 of this proposal, it simply is demonizing an otherwise permissible commercial pricing practice for Free Enterprises. The Commission does acknowledge on page 153 of the proposal that *"… principal order flow from proprietary trading … does not have the potential for a conflict of interest between members and customers with respect to routing. Because the member trades for its own account when routing in a principal capacity, only its own interests are at stake in the routing decisions."* Dodd-Frank Volcker Rule bans major banks from proprietary trading, but not smaller banks and non-banks. IEX's argument per the proposal's footnote 257 is nonsense. Trade in a principal capacity involves risk taking. Risk-return tradeoff by tiers is NOT anti-competitive. Alternative 1 is unjust and is a detriment to veracity (price discovery) factor of the 4Vs. Healthy markets need both farmers and hunters.

Alternative 2 – ban Volume-Based Pricing for All Orders except registered Market Makers (MMs), in effect is letting the MMs to intermediate orders. Incentives administration moves to the hands of MMs, which is an added bureaucracy. Alternative 3 – proceed with Transparency Provisions for All Orders without Tiers Prohibition, has the least impact to the existing incumbents, but would not achieve the policy objective in curbing price discrimination. Alternative 4 – banning the Linking of Volume-based Tiers for Closing Auctions to Consolidated Volume, creeping on the 3 big Exchange groups' turf would always result in fight back fiercely, including lawsuit against the Commission. The remaining alternatives regarding disclosures are relatively minors that we have no opinion.

In general, we despise picking winner(s) by Regulators or Regulatory price control because it is a detriment to the openness of capital markets.[16] Nurture another interest group to rival against the incumbents is not wrong, whilst Regulators ought to be cautious that the new interest group may be more demanding and as difficult to manage as the incumbents. Markets will be more polarized with two big ecosystems. In wishful thinking, the paradigm shifts when there are unresolvable disputes among the Elites that divide them up.

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14 https://www.cmu.edu/tepper/faculty-and-research/assets/docs/anti-competitive-rebates.pdf
15 https://events.sifma.org/equity-market-structure-roundtable
16 https://www.cato.org/commentary/problems-price-controls

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Yet, no one knows when and it sounded negative. So, let's positively consider how we can grow the overall pie to attract some of the current incumbents and a mix of Tier 2 firms to foster a new paradigm.

Our counter suggestion – COPYRIGHT LICENSING MECHANISM[17]

Again, **the LACK OF STANDARDS across different market centers' rebate and incentive systems** is at the CORE of all issues. Policy makers should consider Exchanges, ATSs, SIs, SDPs, and APAs as different streaming platforms to have the right focus. Amid the long debates over WHO OWNS THE DATA, the Facebook case[18] affirmed that data should be owned by "content creators" instead of the streaming platforms. Volume tiers to be based on total aggregate volume submitted to the exchange, with the associated tiered pricing applied to all members uniformly is not necessary more equitable as explained in this NASDAQ's article.[19] Interesting is, the article states that *"the quotes and trades contributions for price discovery should receive certain rebates."* This can be good news as it implicitly infers market participants are "content creators" with rights over market data. If rebates can be formalized and standardized as Copyright Royalties, it will curb rent seeking behaviors and benefit all participants.

Think about what gives rise to arbitrage or pick off on price. Anyone would have done it if they did not have to bear the corresponding cost in using others' copyrighted materials. Bilateral or multilateral trading facilities have the upper hand in terms of nimbleness to maneuver around in crafting niches than public stock exchanges. A grant bargaining on which type of market centers should have what capabilities to maximize overall reach and efficiency for the collective markets needs to occur to re-harmonize a New Paradigm.

Under **Copyright Licensing Mechanism**, different market centers and APAs will pay a wider range of broker-dealers, featured traders, algo developers in royalties if they shall choose to carry a broader "catalog" of whose order flows be streamed on their platforms. In turn, they earn appropriate subscription fees to cover their costs. By putting a value on quotes and trades composition, proper considerations will be given by agencies and streaming platforms to ensure BestEx and efficient deployment of resources, rather than engaging in non-productive fights that destroy values. The whole mechanism **levels the playing field**, and **it does not need to be a complete "pass-through" to mitigate conflicts**, rate setting only needs to be consistent in accordance with 4-Part Test.[13]

There are many relevant use-cases to learn from the Music Industry (e.g., licensing terms for direct usage, allowing the re-use of contents, and derivative works). According to Hannes Datta, George Know, and Bart J. Bronnenberg in their empirical research,[20] *"adoption of streaming leads to: INCREASES in QUANTITY of consumption … INCREASES in VARIETY of consumption… INCREASE in DISCOVERY of NEW music … Streaming revenue are climbing not only because more consumers are adopting streaming, but because consumers' OVERALL consumption of music is GROWING as well. Streaming creates a MORE LEVEL PLAYING FIELD for SMALLER artists… Streaming EXPANDS consumers' ATTENTION to a WIDER SET of artists… Streaming INCREASES consumer WELFARE by reducing search frictions (e.g., ENHANCING DISCOVERY) and help users DISCOVER NEW HIGH-VALUE CONTENT."*

The authors measured volume based on the number of songs (order flow) each user consumes in a given period. They measured the breath of variety consumed by users, and concentration – popularity of consumed content and calculated the concentration ratio based on each user's own favorite top song and genres, as a share of total plays. They measured repeat consumption share for both new and known artists, calculated the ratio of top new variety plays to top overall plays over a rolling period to access chance of new artists and/or songs being 'discovered'. "Discovery" in the context of Capital Markets, can encompass veracity in price discovery, velocity in filling orders/ finding matches, as well as discovering unknowns.[21] Rebates in the form of standardized copyright royalties encourage **contents creation** and help **build communities**. In short, the 4Vs are essential elements to contrive a New Paradigm, where there are bigger pieces for everyone (see Annex 1 and our whitepapers cited in footnote 17 for details).

The Music Industry's licensing framework has been proven successful. It helped music reach a wider audience and grew the overall pie. It has over a half century of litigations experience to **align rights and obligations** globally. To implement the Copyright Licensing

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[17] https://www.databoiler.com/index_htm_files/DataBoiler%20Copyright%20Licensing.pdf ; https://www.databoiler.com/index_htm_files/DataBoiler%20BIG%20OPP.pdf
[18] https://www.ft.com/content/a00ecf9e-2d03-11e8-a34a-7e7563b0b0f4
[19] https://www.nasdaq.com/articles/whos-really-setting-prices
[20] https://thearf-org-unified-admin.s3.amazonaws.com/MSI/2020/06/MSI_Report_16-136_revised.pdf
[21] https://www.pmi.org/learning/library/characterizing-unknown-unknowns-6077

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Mechanism in Capital Markets, the setup would require an administrator of rights and royalties. This organization can be a non-profit governed by the industry. The music industry established SoundExchange as their administrator. Copyright laws are well established. Related "willing seller willing buyer standard" of a "**4-Part Test**"[13] is already included in securities law 75 FR 3597.[22] The SEC only needs to add the other 3 standards – i.e., same parties' test; "effective competition" test; and same rights test for appropriate enforcement.

Further, to alter the dynamics, hierarchy of choices, or "context effects" of Decision Field Theory[11] mentioned earlier, the SEC and regulators around the world (e.g., FCA and ESMA) should address latency differences between SIPs/CCs and PPs. Consolidated tape acts as a "SECOND LINE PRODUCT" to Exchanges' PPs, versus it being a meaningful alternative to PPs can impact users' demand. Regulators have full authority to mandate proper **SECURITY protection** over both SIP/CC (consolidated tape) and PPs. For example, requiring **SYCHRONIZATION** of both SIP/CC and PP in accordance with an Atomic Clock[10] and prohibiting circumvention of SECURITY measures. It eliminates the problem of where the SIP/CC is located. Per our 2020 comment letters,[23] the SEC should require market centers to maintain a connectivity **disparity ratio** (< 2.5 times) to ensure consolidated market data evolves along with the ecosystem.

Conclusions and Other Remarks

We at Data Boiler support curbing price discrimination practices. We do not disagree with Prof. C. Spatt's research[14] that suggests banning of Exchanges rebate tiering. We argue that for-profit exchanges / integrated conglomerates are operating a "Jukebox model" to extract rent, hurting all, but mostly the smaller players. The use of Direct Market Access (DMA) and Sponsored Accessed (SA) is governed by specific rules and guidelines to ensure orderly trading and prevent and detect market manipulation. Firms may decide to go through a SA arrangement for many reasons, including reduced latency, additional revenue opportunities, and hitting volume discounts. Yet, the LACK OF STANDARDS across different market centers' rebate and incentive systems is at the CORE of all issues.

If this proposal is adopted as-is, the scenario of making off-exchange venues relatively more attractive as a destination for the flow would be exacerbated. Yet, if the Commission makes all market centers (Exchanges, ATSs, SIs, SDPs) similar, it is a detriment to the variety factor of the 4Vs. It undermines the different roles the different constituents play and the frienemy dynamics they have in fabricating the fragmented market under Reg. NMS. Our analysis using Decision Field Theory shown the context effects would hurt the "Have-Nots" more than the "Haves". Therefore, we do have reservations regarding this proposal.

Regarding rules and policies and procedures in place that require members to mark their orders for transaction billing purposes in a manner that would readily allow exchanges to comply with the proposed prohibition, the "Manning Rule"[24] prohibits a FINRA member firm from placing the firm's interest before/ above the financial interests of a client. It can be used to distinguish Agency orders versus Proprietary orders. The Commission may follow the Dodd-Frank Volcker Rule's definition of "riskless principal orders," or the Commission have cited many consistent definitions under existing securities laws, except a FINRA's definition that specifies that the member's principal trade and the customer fill occur at the "same price". So, we have no objection here.

The mentioned alternatives in the SEC proposal are undesirable or relatively minor. Prohibition in proposed Rule 6b-1 for agency and riskless principal orders seems to be a tolerance amid the dilemma. However, we doubt the effectiveness of the proposed anti-evasion measures and other disclosure requirements. Today's market centers are analogous to Private Clubs favoring collaboration. The Elites have upper hand over the "Have-Nots". They would not mind the Exchanges losing volume share to their affiliated ATSs, SIs, and SDPs.

Regulators should give smaller players and average investors a fighting chance while not skewing the markets in anyone's favor. The "Have-Nots" want to sway policies in their favor rather than committing their limited resources to compete in an arms race with the "Haves." Orderly function of markets depends on balancing different constituents' interests, efficiency in resolving disputes and weed out "defects", as well as common interests where individual's short-term sacrifices yield greater good in the long-term for the individual and all participants in the network.

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[22] https://www.govinfo.gov/content/pkg/FR-2010-01-21/pdf/2010-1045.pdf

[23] https://www.databoiler.com/index_htm_files/DataBoiler%20SEC%20Market%20Data%20Infrastructure.pdf ; https://www.databoiler.com/index_htm_files/DataBoiler%20SEC%20Market%20Data%20CTPlan.pdf

[24] https://www.sec.gov/files/rules/sro/finra/2008/34-57388.pdf

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Access fee rebate, PFOF, and market data/ market structure issues are all intertwined. The noumenon of rebate incentives serves as royalty payments for the use of others' copyrighted material. The prevailing market problem is WHO OWNS THE DATA." To alter the dynamics, hierarchy of choices, or "context effects" of Decision Field Theory[11] mentioned earlier, the SEC and regulators around the world (e.g., FCA and ESMA) should address latency differences between SIPs/CCs (consolidated tape) and PPs.

Healthy markets need both farmers and hunters. Variety helps reach a wider audience, reduce unknowns, and drive new customer values. Build communities by setting up an organization like SoundExchange, in the music industry, as an administrator of rights and royalties. Pareto improvement is achieved when someone is better off without anybody worse off or win-win for all.

What we need from the regulator are:

- a no action letter supporting the development of an industry-wide Copyright Licensing Mechanism.[17]
- mandating proper SECURITY protection over both SIP/CC (consolidated tape) and PPs; requiring SYCHRONIZATION of both SIP/CC and PP in accordance with an Atomic Clock and prohibits circumvention of SECURITY measures; plus, requiring market centers to maintain a connectivity disparity ratio (< 2.5 times).[10]
- consider the 4-part test[13] to promote FRAND and refrain from government price control.

Please also see our 2023 comment letters[25] to the UK FCA regarding wholesale data market study that emphasized on six themes: (1) Barriers to Entry and Expansion; (2) Network Effects; (3) Vertical Integration; (4) Suppliers' Commercial Practices; (5) Behavior of Data Users; (6) Incentives for innovation.

Feel free to contact us with any questions and please keep us posted where our expertise might be helpful.

Sincerely,

Kelvin To

Founder and President

Data Boiler Technologies, LLC

CC: The Honorable Gary Gensler, Chairman
The Honorable Hester M. Peirce, Commissioner
The Honorable Caroline A. Crenshaw, Commissioner
The Honorable Mark T. Uyeda, Commissioner
The Honorable Jaime Lizárraga, Commissioner
Dr. Haoxiang Zhu, Director, Division of Trading and Markets

This letter is also available at:
https://www.DataBoiler.com/index_htm_files/DataBoiler%20SEC%2020240105%20Volume-Based%20Pricing.pdf

[25] https://www.databoiler.com/index_htm_files/DataBoiler%20FCA%20202303%20Wholesale%20Data.pdf ;
https://www.databoiler.com/index_htm_files/DataBoiler%20FCA%20202303%20Wholesale%20Data.pdf

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Annex 1

Realign according to 4Vs

~ $4.5 billion a year in market data and connectivity for US equity and options + $2.5 billion in access fee rebate + $3.6 billion in payment for order flow = over $10.6 billion. Realign for more effective and Efficient use – i.e. ↑ # of diversified market participants, ↓ unknowns, weed out any conflicts, fund investor education and enrichment programs, partially off-loading cost, promoting FRAND

Copyright Licensing Mechanism

Discretion of different agents to allocate (w/ require disclosure)

Give average investors a fighting chance

DJ Mixing Engineers

Original "content" creator/ retail investors for executed trades.

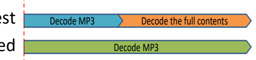
Agency trading, Retail, Order router
NOT liable unless in cahoots / known, of manipulative attempt

Original "content" creator/ retail investors for quotes contribution

Investor education enrichment programs
Restricted purposes, Periodic audits

TLE protects data from being decrypted prematurely.

The Fastest
Avg. Speed



Rate set by Free Market

50% | 4 Part-Test | 5% | *Rate NOT set by Gov't or any one group.* | 45%

Enable real-time risk control, auto-detect irregular activities + early warnings to modernize CAT's outdated design.

Mechanical Royalty
Obtain algo license to accelerate own development, new use case (treasure hunt others' trash)

Performance Royalty in replacements of today's incentives

- Willing seller willing buyer standard 75 FR 3597
- Same parties
- Same rights
- Effective competition

Bonus Pool

Healthy markets need both farmers and hunters.

Value Chain
- Performance Optimizers
- Asset Gathering
- Intermediaries
- Asset Maximizers
- Retail and Client Services

Royalty cover 50% + unlimited upside
Partially off-loading BDs cost to be paid for by the mechanism

Accelerate process speed, savings from compression Optimize contents' richness, balance diverse interests.

Machine learning A.I. shouldn't be exclusive to the elite groups.

Crowd intelligence

Sound library

Algorithms
80% of algo-wheel no longer generate Alpha & become sunk cost, license out unused algo. to earn 2nd profit

Broker-Dealers "Publishers"

Alpha

No change to today's pay

Base pay 50% of today's total package

Accelerate learning-curve: trade pattern recognition for every investor would enable the crowd to trade competitively.

Shared lessons to benefit the community while earn $$$

Discovery and reduce unknowns make markets safer.
(98% → 99.9% incremental improvement is better than 85% → 90% because it is 95% error reductions vs just 33%)

Pick & Choose, Pay for Channel Subscription(s)

Velocity
Time-lock Encryption (TLE) to make market data available securely in synchronized time

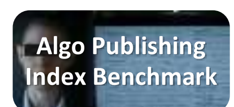
Consolidated Tape and Self-Aggregators

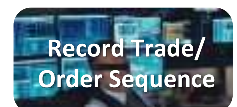
Proprietary data feeds

Secured Synchronized Starting Line

Non-Featured

Featured Artists





Pareto Improvement
Market efficiency gain

Order Flow

Volume ↑
(1) Fairness ↑ # of participants
(2) ↓ unknowns ↑ transparency
(3) New econ opportunities spur by innovations/ patented tech.

12-20 Algo or "Songs" per annum

20 Days' trade/ order sequence per month

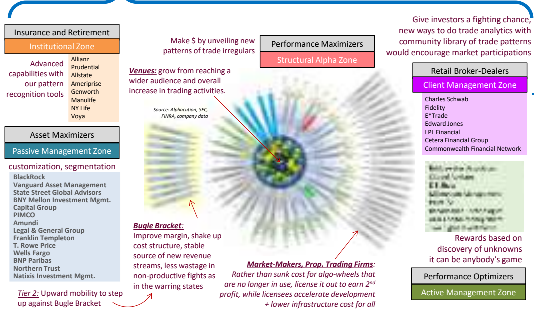
Different "streamers" based on who they want to serve, how many subscriptions they are going to get and determine whether to carry a broader or narrower "catalog", which align and address the economic viability of a constituent to exploit its economy of scope and/or economy of scale, hence weed out potential conflicts

Varieties ↑
Decentralize → more resilient, mass customization, better reach, field knowledge, equips next-gen investors, sustainable

Veracity ↑
↓ MEME/irrational exuberance, deter insurgent/ adversaries, contribute to price discovery

Trade Match

Share liabilities w/ Publishers if caused market chaos/ manipulation.



Reach wider audience.

Exchanges
→ Online radios or cable TVs, timeless classics, big liquidity pool big royalty burden

ATSs Dark Pools
→ Disney+ as an analogy for an established Bulge Bracket that also owns an ATS; Netflix

Wholesalers
→ The broader the "catalog", the platform would pay a wider range of BDs artists in royalties.

SDPs
→ Single Dealer Platforms/ Comm. Protocols; niche(s) may incl. profane content; Showtime

Catalog to disclose served segment(s)
Whose order-flow typically stream on the platform.

Non-Interactive

Interactive

Immunity up to certain limit
Passive distributors actively curate, moderate contents

Rights | Obligations | Pass through | Liabilities

By Kelvin To, Founder and President of Data Boiler Technologies