Persistence of Latency Arbitrage Opportunities in Retail Forex Markets:

An Information Asymmetry and Market Quality Analysis

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Abstract

Retail foreign exchange operates as a two-tier market. A tier-one institutional aggregated feed prices currency pairs at sub-millisecond resolution. Retail-facing brokers, by contrast, update client-facing quotes at frequencies that lag the institutional feed by tens to hundreds of milliseconds. The gap between fast feed and slow broker quote, when it exceeds an executable cost threshold, constitutes a latency arbitrage opportunity window. This paper documents that such opportunity windows persist systematically across months and across brokers, and analyses the persistence through an information asymmetry framework. The retail broker observes its own quote-update intervals, its own client-fill statistics, and the empirical distribution of opportunity windows it generates. The retail trader, in contrast, observes only post-fact fills on its own positions and has no first-order access to the aggregate distribution of broker-side execution events. The resulting information asymmetry transfers welfare from the retail trader to the broker (through wider quoted spreads, last-look rejection of toxic flow, and reduced strategy-set availability) and to the sophisticated arbitrageur (who invests in fast-feed infrastructure to monetise the broker's slowness). We propose that public arbitrage detection tools, deployed by independent third parties and publishing aggregate statistics in real time, function as a market quality infrastructure analogous to existing public disclosure mechanisms in other asset classes (TRACE in US corporate bonds, RTS 27 reports under MiFID II for European venues). The paper closes with a welfare analysis of public arbitrage disclosure and a comparative jurisdictional review of regulatory mandates that could institutionalise such disclosure for retail forex.

Keywords: retail forex, latency arbitrage, market microstructure, information asymmetry, market quality, welfare analysis, public disclosure, broker execution.

JEL classification: G14, G15, G18, D82, G28.

1 Introduction

The retail foreign exchange market intermediates roughly seven point five trillion United States dollars in notional volume every trading day, of which a non-trivial share is retail-directed (Bank for International Settlements, 2022). Unlike the institutional interdealer market, where

prices are formed in a tight competitive ecosystem of tier-one dealers and aggregators, the retail-facing layer is a relayed and intermediated market. Retail brokers maintain their own price servers, set their own client-facing quotes, and choose their own execution policies. The quotes a retail trader sees are not equal to the prices on which the broker hedges (if it hedges) in the institutional market. The wedge between the two is the central object of this paper.

That wedge has a measurable and operationally significant time dimension. When the institutional fast feed moves, the broker's client-facing quote does not move instantaneously: it moves with a lag that reflects the broker's quote-update frequency, its price-server architecture, and its risk-management policy. Between the moment the institutional feed prints a new price and the moment the broker's quote follows, an arbitrage opportunity exists. The trader who knows what the institutional feed is doing, and who has the execution infrastructure to act inside a sub-second window, can capture a known profit at the broker's expense. The window closes when the broker's quote catches up. Window durations on major currency pairs against retail-tier brokers are routinely measured in tens to hundreds of milliseconds (Fesenko, 2026b).

The existence of these windows is not in serious doubt: practitioners have exploited them for decades. The relevant questions, which the academic literature has largely not addressed for the retail layer, are:

1. Do opportunity windows persist over time, or are they competed away?
2. Why does the broker not eliminate them by closing the latency gap?
3. Who bears the welfare cost when they persist?
4. Is there a public-policy or market-structure response that could reduce the welfare cost?

This paper develops a framework for these questions. The contributions are three.

First, the paper documents the empirical persistence of latency arbitrage opportunity windows in retail forex using the BEQI broker-execution measurement methodology (Fesenko, 2026a). Opportunity windows are observable and quantifiable from a dual-feed measurement infrastructure that monitors a tier-one fast feed and a retail broker's client-facing quote simultaneously. The persistence finding is robust across multiple months of data and across multiple broker jurisdictions.

Second, the paper develops an information asymmetry framework that explains why these windows persist even though both sides of the trade can in principle observe them. The broker, by virtue of its position in the market structure, has direct access to the joint distribution of fast-feed and slow-quote prices. The retail trader, by virtue of having no privileged feed and no access to the broker's internal data, has only after-the-fact information about its own fills. The asymmetry is structural, not transient, and it would persist in the absence of public disclosure.

Third, the paper proposes that public arbitrage detection tools, deployed by independent third parties and publishing aggregate statistics in real time, function as a market quality infrastructure. The proposal is grounded in established public-goods economics and in the empirical precedent of public disclosure mechanisms in other asset classes. The paper closes with a comparative jurisdictional review of the regulatory frameworks (MiFID II RTS 27 in the EU, the CFTC's authority under Dodd-Frank in the United States, FCA Consumer Duty in the United Kingdom, ASIC's modernised market integrity rules in Australia) within which a public-disclosure mandate for retail forex execution could be institutionalised.

The remainder of the paper is organised as follows. Section 2 surveys the related literatures. Section 3 develops the information asymmetry framework. Section 4 presents the persistence evidence from the BEQI calibration sample. Section 5 conducts the welfare analysis. Section

6 presents the public disclosure framework. Section 7 reviews the policy implications and jurisdictional landscape. Section 8 discusses limitations and Section 9 concludes.

2 Related Literature

The framework draws on four established literatures: market microstructure foundations, information economics, the latency arms race in equity markets, and the smaller but growing body of work on retail-trader execution quality.

2.1 Market microstructure foundations

The classical microstructure literature (Kyle, 1985; Glosten and Milgrom, 1985; Stoll, 1978; Ho and Stoll, 1981) treats the bid-ask spread as compensation for inventory and adverse-selection costs and treats market quality as a joint product of liquidity provision and information aggregation. Madhavan (2000) and O'Hara (2015) survey the broader literature and identify execution timing as a first-order determinant of realised return for short-horizon strategies. The retail forex layer represents a particular structural configuration of these primitives: the retail broker functions as a market maker whose quote-setting policy is constrained by its hedging arrangements in the institutional market and by its regulatory regime.

2.2 Information economics

The information asymmetry framework of this paper draws on the foundational work of Akerlof (1970), Spence (1973), and Stiglitz and Weiss (1981). These authors establish that markets characterised by structural information asymmetries (where one side systematically has better information about product quality, transaction terms, or counterparty behaviour) produce welfare losses through adverse selection, signalling distortions, and credit rationing. The retail-trader / retail-broker relationship instantiates the asymmetric information structure precisely: the broker knows its own execution quality, the retail trader does not, and the broker's incentive to disclose accurately is weak in the absence of mandatory disclosure or independent monitoring.

2.3 Latency arms race in equity markets

A substantial literature documents the high-frequency latency arms race in equity markets. Hasbrouck and Saar (2013) measure the latency cost of low-latency strategy participation. Brogaard et al. (2014) show that high-frequency trading contributes to price discovery in equities. Budish et al. (2015) propose frequent batch auctions as a market-design response. Aquilina et al. (2022) measure the empirical scale of latency-arbitrage rents in equity markets and document that arbitrage opportunity rents in liquid equity markets sum to a meaningful share of total trading volume value. The retail forex layer is a strictly less efficient analogue of the equity-market structure these authors study, because the retail broker has structural reasons (regulatory constraints on hedging, capital constraints on technology investment, asymmetric information about client toxicity) not to compete down its quote-update latency to the institutional standard.

2.4 Retail forex execution quality and broker behaviour

The retail forex microstructure literature is smaller than its institutional counterpart, but King et al. (2012), Evans and Lyons (2002), and Bessembinder (1994) develop the relevant framework

for FX order flow and dealer pricing. The companion paper Fesenko (2026a) introduces the BEQI (Broker Execution Quality Index) methodology, which measures retail forex broker execution quality across five dimensions (matching latency, signed slippage, spread behaviour, last-look hold time, requote rate) and is the source of the calibrated empirical inputs to the present paper. The execution-time gap framework Fesenko (2026b) formalises the per-opportunity edge a strategy retains at a given round-trip time. Together, these three works develop the chain of inference from broker-level execution measurement (BEQI) through strategy-level edge retention (ETG) to market-quality and welfare analysis (the present paper).

2.5 Public disclosure mechanisms

The literature on public disclosure in financial markets establishes that mandatory transparency mechanisms (TRACE for US corporate bonds; the Order Audit Trail System and Consolidated Audit Trail for US equities; RTS 27 best-execution reports under MiFID II in the European Union) can materially improve market quality (Bessembinder et al., 2006; Edwards et al., 2007). Retail forex has no analogous mandatory disclosure mechanism at the time of writing. The proposal in Section 6 draws on this precedent.

3 The Information Asymmetry Framework

This section develops the information asymmetry framework formally. We work in continuous time over a single trading day. Three agents are active in the model: a tier-one fast feed (the institutional aggregated quote), a retail broker (the slow venue), and a retail trader.

3.1 Primitives and notation

Definition 3.1 (Fast feed quote)**.** The *tier-one fast feed quote* $F(t) \in \mathbb{R}_{>0}$ is the institutional best-bid-best-offer composite price for a given currency pair, available with sub-millisecond resolution to subscribers of the fast feed.

Definition 3.2 (Broker client quote)**.** The *broker client quote* $B(t) \in \mathbb{R}_{>0}$ is the price displayed to the retail trader. The broker updates $B(t)$ at discrete intervals $\{\tau_k\}_{k\geq 0}$, with inter-update times $\Delta\tau_k = \tau_{k+1} - \tau_k$. Between updates, $B(t)$ is constant. The update intervals depend on the broker's price-server architecture, its hedging policy, and its risk-management rules.

Definition 3.3 (Quote gap)**.** The *quote gap* at time t is $G(t) = F(t) - B(t)$, measured in price units (typically expressed in pips for retail forex).

Definition 3.4 (Opportunity window)**.** Let $c > 0$ denote a per-trade round-trip execution cost (commission, spread, financing). An *arbitrage opportunity window* is a maximal time interval $[s, s + W)$ such that $|G(t)| > c$ for all $t \in [s, s + W)$ and $|G(s-)| \leq c$, $|G(s + W)| \leq c$. The duration W is the window's lifetime.

3.2 Three information sets

The structural asymmetry of the retail forex layer is captured by the three agents' information sets.

Definition 3.5 (Broker information set $\mathcal{I}_B$)**.** The broker observes $F(t)$ continuously (it subscribes to the fast feed for its hedging operations), observes its own quote $B(t)$ trivially, and

therefore observes $G(t)$ in real time. It additionally observes its own fill history and the distribution of opportunity windows it has generated across its client base.

Definition 3.6 (Sophisticated arbitrageur information set $\mathcal{I}_A$)**.** The sophisticated arbitrageur subscribes to the fast feed at a non-trivial cost, runs an execution path against the broker, and observes $G(t)$ in real time. It does not observe the broker's internal data on the aggregate distribution of opportunities across other clients.

Definition 3.7 (Retail trader information set $\mathcal{I}_R$)**.** The retail trader observes $B(t)$ only. It does not subscribe to the fast feed. It has no first-order access to $F(t)$ or to $G(t)$ at any point in time. Its only signal about G is the after-the-fact distribution of its own fills, conditional on the orders it submitted.

The asymmetry $\mathcal{I}_R \subsetneq \mathcal{I}_A \subsetneq \mathcal{I}_B$ is the structural feature on which the analysis rests. It is a function of the market structure, not a transient information shock that competition can erode.

3.3 Why the asymmetry persists

In the equity market analogue, the asymmetry between fast and slow market participants is partially closed by public consolidated tape (the SIP in US equities) and by regulatory disclosure rules (best-execution reporting). In retail forex, no consolidated tape exists at the retail layer. The broker has no obligation to publish $G(t)$ statistics. The fast feed is a commercial product priced for institutional access. The structural asymmetry persists by default unless an alternative disclosure mechanism is introduced.

Proposition 3.8 (Equilibrium persistence under asymmetric information)**.** *In the absence of mandatory disclosure or independent third-party publication, the information asymmetry $\mathcal{I}_R \subsetneq \mathcal{I}_A \subsetneq \mathcal{I}_B$ persists in equilibrium. The retail trader cannot signal its preference for transparency in a way that disciplines the broker's quote-update policy, because the trader cannot observe the policy in the first place.*

The proposition is a direct application of the classical Akerlof-Stiglitz reasoning: in an information-asymmetric market, the side with private information has no incentive to disclose and the side without information has no instrument with which to demand disclosure. The market equilibrates at a level of disclosure that is strictly less than the social optimum.

4 Empirical Persistence Evidence

This section documents the empirical persistence of opportunity windows across time. The data source is the BEQI calibration sample (Fesenko, 2026a), a continuously-running dual-feed measurement infrastructure that observes a tier-one fast feed and a representative panel of retail forex brokers simultaneously.

4.1 Measurement methodology

The BEQI infrastructure records, for each currency pair and each monitored broker, the time series of $F(t)$ and $B(t)$. It detects opportunity windows under Definition 3.4 with a configurable cost threshold c (typically set to the broker's quoted spread plus a small buffer to ensure executable gaps). For each detected window, the infrastructure records the start time, duration, and signal-time differential $|G(s)|$. The detection threshold and methodology are documented in detail in the companion paper.

4.2 Persistence findings

Three persistence findings emerge from the BEQI calibration sample on EURUSD against a panel of seven retail brokers domiciled across multiple jurisdictions, observed continuously over a six-month period.

Finding 1 (Cross-time persistence). The empirical distribution of opportunity window durations on a given broker, conditional on its broker identity and time of day, is approximately stationary across the six-month observation period. The median window duration on the panel ranges from approximately 60 milliseconds to approximately 180 milliseconds across brokers, and individual broker medians vary by less than 15 percent across calendar months within the observation period.

Finding 2 (Cross-broker variation). Broker-level medians vary by a factor of three across the panel. The fastest broker in the panel has a median window duration in the 50 to 70 millisecond range; the slowest broker has a median in the 150 to 200 millisecond range. The variation correlates with broker domicile and with self-reported execution quality claims only weakly.

Finding 3 (Time-of-day clustering). Opportunity windows cluster strongly around session-open and session-overlap intervals (London open at 07:00 to 10:00 UTC, London-New York overlap at 12:00 to 16:00 UTC, Tokyo open at 23:00 to 02:00 UTC). The clustering pattern is robust across brokers. The Sliding Best-Window (SBW) algorithm (Fesenko, 2026c) provides a parameter-free identification of the densest time-of-day window for any given broker and currency pair from the bucketed event counts.

These three findings establish that opportunity windows are not a transient phenomenon. They are a structural feature of the retail forex market layer, persistent across time, varying systematically across brokers, and concentrated in identifiable intraday intervals.

4.3 Why are the windows not competed away?

A natural objection is that competition among brokers should compete down quote-update latency until opportunity windows vanish or are reduced to noise. Three structural reasons explain why the equilibrium has positive opportunity windows.

First, retail brokers have asymmetric capital constraints relative to institutional liquidity providers. Investing in sub-millisecond quote-update infrastructure (co-location, hardware FPGAs, microwave links) is fixed-cost-heavy and cannot be amortised across the retail client base in the same way it can across institutional flow.

Second, the broker's optimal quote-update frequency reflects a trade-off between adverse-selection cost (faster updates protect against toxic flow) and operational cost. Slower updates mean lower technology cost but higher exposure to informed flow. The optimum is not at the institutional frequency, because the marginal benefit of the next millisecond of speed is small relative to the marginal cost.

Third, last-look execution (where the broker has a brief option to reject a client order after price observation) and asymmetric requote behaviour provide the broker with private mechanisms to defend against toxic flow that are cheaper than closing the quote-update gap. These mechanisms shift the locus of broker defence from the public quote to private execution policy, where the retail trader has no signal.

5 Welfare Analysis

This section conducts a welfare analysis of the equilibrium described above. We identify three classes of welfare effects.

5.1 Retail trader welfare

The retail trader bears the welfare cost of the information asymmetry in three forms.

First, *wider quoted spreads.* The broker, anticipating informed flow, sets a wider spread on its client quote than would be set if all client flow were uninformed. The wider spread is paid by every retail client, including those whose strategy has no informational component. This is a classical adverse-selection cost transferred to the average retail trader.

Second, *execution opacity.* The broker's execution policy (last-look hold times, requote thresholds, signed-slippage asymmetries) is set to defend against informed flow. These policies generate welfare losses for retail traders even when the trader has no informational intent, because they shift fill outcomes asymmetrically against the trader.

Third, *reduced strategy-set availability.* Many retail brokers explicitly prohibit latency arbitrage in their terms of service, sometimes accompanied by hedging restrictions on a single account. The retail trader's effective strategy set is therefore narrower than the strategy set that the underlying market structure would permit, and the constraint is enforced by the broker without retail trader input.

5.2 Broker welfare

The broker captures positive welfare from the equilibrium. The mechanism is two-fold: the spread wedge described above, and the option value embedded in last-look and signed-slippage policies. The size of broker welfare gain depends on its specific execution policies and on its capital and technology constraints; the BEQI measurement infrastructure provides a path to estimating broker welfare gain empirically by attributing fill-level execution losses to broker-policy components.

5.3 Sophisticated arbitrageur welfare

The sophisticated arbitrageur, by subscribing to a fast feed and deploying low-latency execution infrastructure, monetises the broker's slowness. The arbitrageur captures rents proportional to the opportunity windows it can act on. The arbitrageur's investment in fast-feed and execution infrastructure is positively-priced because the rent stream is positive; in equilibrium, arbitrageur investment is set such that the marginal investment in further speed equals the marginal increment in expected rent capture.

The interaction between broker and arbitrageur is welfare-relevant only insofar as the broker's defensive measures (wider spreads, last-look) impose costs on the average retail trader. The arbitrageur and the broker engage in a zero-sum redistribution of the spread wedge, but the spread wedge itself is paid by the retail population.

5.4 Aggregate welfare

Aggregating the three welfare effects gives an unambiguous direction: the equilibrium of the retail forex layer under asymmetric information is welfare-inferior to a counterfactual equilibrium in which the broker's execution quality is observable. The size of the welfare loss is bounded above by the integrated broker rent across the retail trader population and bounded below by zero (the case where the broker's rent is exactly competed away in the disclosure counterfactual).

6 Public Detection Tools as Market Quality Infrastructure

The welfare analysis above motivates a search for institutional mechanisms that reduce the information asymmetry. The mechanism this paper proposes is *public disclosure of aggregate broker execution statistics through independent third-party detection infrastructure.*

6.1 The proposal

Independent third parties (academic, industry, or commercial) operate dual-feed measurement infrastructures analogous to BEQI. They detect opportunity windows in real time across a panel of monitored brokers and publish aggregate statistics (median window duration, time-of-day distribution, signal-time-differential distribution, persistence over recent rolling windows) on a publicly-accessible interface. The data is anonymous at the broker level if necessary (using broker identifiers without names) or named if the third party has sufficient legal protection to disclose broker identity.

The retail trader, by consulting the public disclosure, observes the aggregate distribution of opportunity windows for any monitored broker. The trader can rank brokers by their disclosed execution quality and choose accordingly. The broker, faced with the disclosure, internalises the disclosure into its quote-update policy: brokers whose disclosed statistics show high opportunity-window persistence face client outflow and have an incentive to invest in faster quote updates.

6.2 Public-goods analysis

The proposed disclosure mechanism has the structure of a public good. The disclosure is non-rival (one trader's consultation does not exclude another's) and partially non-excludable (open-access disclosure is non-excludable; subscription-based disclosure is partially excludable). Under standard public-goods analysis (Samuelson, 1954; Ostrom et al., 1994), the optimal provision of the disclosure is not necessarily provided by the private market in the absence of regulatory mandate or subsidy.

Two provision mechanisms are observable in practice. The first is voluntary third-party provision (academic research groups, industry trade associations, commercial third parties with adjacent revenue streams). The second is regulatory mandate (mandatory disclosure of execution-quality statistics by brokers themselves). Both mechanisms have institutional analogues in other asset classes: TRACE for US corporate bonds is a regulatory mandate; ESMA RTS 27 best-execution reports are a regulatory mandate; commercial venues like Markit, S&P Global, and others provide voluntarily-priced consolidated disclosures.

6.3 Concrete examples

A small number of public-facing arbitrage statistics dashboards already exist in the retail forex space, operated by industry trade groups, by individual brokers as marketing claims, and by software vendors. The author's own organisation operates such a public dashboard for the EURUSD-against-broker-panel case, with hourly-updated aggregate statistics computed by the SBW algorithm (Fesenko, 2026c) over a six-month rolling window. The dashboard reports event count, median window duration, signal-time-differential distribution, and the Best Window for the broker panel in question. The reference implementation is open-source and is the empirical analogue of the disclosure mechanism proposed here.

7 Policy Implications and Jurisdictional Landscape

The institutional path from voluntary third-party disclosure to mandatory disclosure varies across jurisdictions.

7.1 European Union

MiFID II RTS 27 already requires execution venues to publish quarterly execution-quality reports. The reports cover trade-by-trade price improvement, execution speed, and other quality metrics. The RTS 27 framework is structurally extensible to retail forex if the retail-facing FX intermediary is classified as a trading venue under MiFID II. Such a classification is not universal across EU member states: in some jurisdictions, retail forex brokers operate as systematic internalisers; in others, as multilateral trading facilities. Bringing all retail forex intermediaries explicitly under RTS 27 is an open policy choice.

7.2 United Kingdom

The FCA Consumer Duty (effective July 2023) requires regulated firms to deliver good outcomes for retail customers, including in respect of price and value. The Consumer Duty does not prescribe specific disclosure formats, but it places the firm's execution-quality decisions under conduct-of-business scrutiny. A consistent FCA interpretation that retail forex brokers must publish quantitative execution-quality statistics under the Consumer Duty is a natural extension.

7.3 United States

The CFTC has the statutory authority under Dodd-Frank and the Commodity Exchange Act to require disclosure of execution-quality statistics by retail forex dealers (RFEDs) registered under Part 5 of the Commission's regulations. The authority has not been exercised in this direction. Regulation 5.14 already prohibits hedging on the same account at US-regulated retail forex brokers, which itself is a constraint on retail trader strategy availability. A CFTC mandate for periodic disclosure of broker execution-quality statistics (analogous to FINRA's market quality reports for equities) would be a substantial policy step.

7.4 Australia and Asia

ASIC has modernised market integrity rules for derivatives trading. A mandatory disclosure regime for retail forex execution quality fits naturally into ASIC's existing framework, which

includes designated execution venues and best-execution obligations on retail-facing intermediaries. The Asian jurisdictions (Singapore, Japan, Hong Kong) have less detailed retail forex execution-disclosure regimes; the most-developed retail forex consumer protection regime in Asia is Japan's Financial Services Agency framework, which constrains broker leverage but does not require granular execution-quality disclosure.

7.5 Cross-jurisdictional spillovers

Retail forex brokers compete cross-border: a single retail trader can open accounts at brokers domiciled in multiple jurisdictions. Disclosure regimes in one jurisdiction have spillover effects on cross-domiciled brokers' competitive positioning. A unilateral EU disclosure mandate would (under the analysis above) shift retail flow toward disclosed brokers, exerting competitive pressure on undisclosed brokers in other jurisdictions to disclose voluntarily or to forfeit market share. This spillover provides a partial substitute for global coordination, although coordination on disclosure standards (analogous to the global coordination on derivatives trade reporting under the G20 OTC reform programme) would be more efficient.

8 Discussion and Limitations

The framework above rests on three structural simplifications.

First, the broker is modelled as a single risk-neutral agent maximising expected revenue net of execution and technology costs. In practice, brokers face heterogeneous regulatory regimes, hedging arrangements, and client compositions that produce richer behaviour than a single-agent model captures. The persistence finding of Section 4 is robust to this simplification because it is empirical rather than model-derived; the policy implications of Section 7 survive heterogeneous brokers because the policy intervention (mandatory disclosure) operates at the broker level regardless of internal broker structure.

Second, the welfare analysis treats the retail trader population as homogeneous. In practice, retail traders differ in their strategy sophistication, capital, and tolerance for execution opacity. The welfare loss is concentrated among traders who would respond to disclosed execution-quality information by switching brokers. Among traders who would not respond (because they do not consult the disclosure or because their strategy is insensitive to execution quality), the welfare loss from opacity is zero. The aggregate welfare estimate of Section 5 should be read as an upper bound on the welfare loss reachable through disclosure.

Third, the public disclosure proposal abstracts from the institutional details of how a third-party disclosure infrastructure would be operated, funded, and held to data-quality standards. The TRACE precedent demonstrates that the institutional design is solvable but is not trivial. Funding mechanisms include regulatory levies on monitored brokers, voluntary subscription fees from retail traders, and commercial advertising on public-disclosure interfaces. Data quality is enforceable through standard audit and certification mechanisms. The detailed institutional design is left to future work.

9 Conclusion

Retail foreign exchange operates as a structurally information-asymmetric market in which the retail broker has direct observation of the quote gap between fast feed and slow broker quote, the sophisticated arbitrageur observes the gap by investing in fast-feed infrastructure, and the retail

trader observes only its own fills after the fact. The empirical evidence in this paper documents that opportunity windows generated by the gap persist over time, vary systematically across brokers, and concentrate in identifiable intraday intervals. The information asymmetry transfers welfare from the retail trader to the broker and to the sophisticated arbitrageur. The transfer is structural rather than transient, and competition does not eliminate it in the absence of public disclosure.

The paper proposes that public arbitrage detection tools, deployed by independent third parties and publishing aggregate statistics on broker execution quality in real time, function as a market quality infrastructure analogous to public disclosure mechanisms in other asset classes. The framework provides a path to estimating the welfare effect of such disclosure and identifies regulatory mechanisms (RTS 27 in the EU, FCA Consumer Duty in the UK, CFTC authority under Dodd-Frank in the US, ASIC market integrity rules in Australia) within which a mandatory-disclosure regime for retail forex execution could be institutionalised.

The companion works (Fesenko, 2026a; Fesenko, 2026b; Fesenko, 2026c) develop the measurement, methodology, and algorithmic components on which the disclosure proposal rests. Together with the present paper, these works map the full chain of inference from broker-level execution measurement to strategy-level edge retention to market-quality welfare analysis to policy implications.

Reproducibility

The empirical persistence findings of Section 4 are based on the BEQI calibration sample, which is described in detail in the companion paper and is reproducible by deploying a dual-feed measurement infrastructure against the broker panel of interest. The SBW algorithm used for time-of-day window identification is documented in the companion paper and has an open-source reference implementation. The public dashboard described in Section 6 is operated as an open-source WordPress plugin (BJF Arbitrage Statistics) that the reader can deploy independently. The framework's information-economic and welfare-analytic content is reproducible from the textual statements above without further data or computation.

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