



PROPOSAL FOR A REVIEW OF MARKET HOURS IN EUROPE

The Investment Association champions UK asset management, supporting British savers, investors and businesses. Our 250 members manage EUR 8.54 trillion of assets and the asset management industry supports 115,000 jobs across the UK.

Our mission is to make investment better. Better for clients, so they achieve their financial goals. Better for companies, so they get the capital they need to grow. And better for the economy, so everyone prospers.

Our purpose is to ensure investment managers are in the best possible position to:

- Build people's resilience to financial adversity
- Help people achieve their financial aspirations
- Enable people to maintain a decent standard of living as they grow older
- Contribute to economic growth through the efficient allocation of capital.

The money our members manage is in a wide variety of investment vehicles including authorised investment funds, pension funds and stocks and shares ISAs.

The UK is the second largest investment management centre in the world, after the US and manages 37% of all assets managed in Europe.

The Association for Financial Markets in Europe (AFME) advocates for deep and integrated European capital markets which serve the needs of companies and investors, supporting economic growth and benefiting society. AFME is the voice of all Europe's wholesale financial markets, providing expertise across a broad range of regulatory and capital markets issues.

AFME aims to act as a bridge between market participants and policy makers across Europe, drawing on its strong and long-standing relationships, its technical knowledge and fact-based work. Its members comprise pan-EU and global banks as well as key regional banks, brokers, law firms, investors and other financial market participants.

AFME participates in a global alliance with the Securities Industry and Financial Markets Association (SIFMA) in the US, and the Asia Securities Industry and Financial Markets Association (ASIFMA) through the GFMA (Global Financial Markets Association).

OUR CALL FOR ACTION

The Investment Association (The IA) and AFME, together with our members, are calling on European equity trading venues (including the London Stock Exchange (LSE)) to review market opening hours across Europe and amend them to a consistent and harmonised 9am – 4pm (GMT) / 10am – 5pm (CET).

The current opening hours on the main markets in Europe are some of the longest in the world¹. These longer trading hours compared to the other global markets are no longer serving material benefits to savers, investors or firms.

Instead, our members tell us that a reduction of 90 minutes in European markets would bring significant benefits to the **market structure** (concentrating liquidity and allowing adequate time to absorb corporate announcements) and most importantly – an improved **culture** and **diversity** of our firms.

IMPACT ON MARKET STRUCTURE

Secure Access to Global Capital Markets

Whilst Europe, and the London market specifically, continue to span the global business day and offer deep pools of capital and access for all global companies to a varied investor base, over time the nature of markets and trading has changed so significantly that the long market opening hours, no longer serve their original purpose.

In London and most of Europe, the market opens for a total of 8.5 hours.

In comparison, the largest global stock exchange - NYSE² in the US – with a market capitalisation of approx. USD 23 Trillion (greater than all the European markets combined) is only open for 6.5 hours from 9.30am – 4pm with no apparent issues to complete trades or indeed access to securities due to a shorter market opening time.

The Japanese market (JPX) is open for 6 hours but with a one hour lunch break (9am -11.30am, then 12.30pm – 3pm JST). JPX is *approx*. 50% larger by market capitalisation than any single market in Europe and again, there does not appear to be an issue with completing trades in these significantly shorter market hours.

A comprehensive comparative list of global markets opening hours is provided in the Appendix and we are confident that the change of European market hours, as we have proposed it, will leave no issue with getting trades done across the globe.

Address the Distortion of the Market Day in Europe:

In London, both the opening and closing hour of the day are marked by distinct trading characteristics.

¹ See Appendix 1: Market Opening Hours

² New York Stock Exchange (NYSE)

The first hour often displays little liquidity³ and wider spreads (i.e. higher costs) and as a result, comparatively little volume.

We understand one factor that significantly affects the start of the day is the time of release of corporate earnings. In Europe, many corporate earnings reports are released 1 hour before the market opens (sometimes at market open). By contrast, in the US corporate earnings are released no later than 90 minutes before the open or after-market hours. This, alongside significant macro data being released at least an hour before the open, gives investors (traders and analysts) better time to assimilate information and encourages early liquidity as the market opens.⁴

Trading has become increasingly concentrated on the close⁵. The final hour of the day, on average, attracts 35% of total daily volume, a vastly disproportionate figure - as a result firms are drawn to trade into the closing auction. Nowadays, this is significantly driven by index tracking funds who need to trade at the close, but it also reflects the cumulative effect of liquidity being attracted to where the greatest flows are.

Embrace the Impact of Technology & Innovation:

Technology has advanced rapidly and the speed of execution has improved exponentially since the original market hours were established. Firms advanced trading algorithms are now able to trade in thousandths of a second across multiple venues. The operational processes supporting trading have also evolved significantly, as such it is no longer necessary to have such an extended trading day. For example, the recent 90 minute outage at the London Stock Exchange (LSE) on 16 August 2019 did not result in noticeably less volume going through on that day.

There is other innovation too – for example, the LSE now offers a specific segment to provide investors with the opportunity to reduce time zone risk whilst accessing exposure to global securities⁶.

Finally, a harmonisation of market hours across Europe would address any concerns about liquidity shifting from any one market to another as a result of this change. It's important that all the major markets in Europe move their trading hours together. Liquidity would not drift from one market to another as European markets would be moving their opening hours in concert.

With the help of case studies, we explore current market structure in more detail in Part I of this paper.

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³ Liquidity: The ability to easily trade in large volume at a given price.

⁴ US corporate earnings tend to come out between 6am and 8am (11am-1pm UK time) or after hours, then Economic data such as unemployment, payrolls, is released at 8.30am (1.30pm UK), then the market open is 9.30am (2.30UK time).

⁵ A recent <u>Bloomberg article</u> which stated "At 8 1/2 hours, Europe has the **world's longest trading day**. But only after it ends do markets come alive."

⁶ LSE Global Equity Segment

IMPROVED CUITURE & DIVERSITY

We are convinced that the adoption of shorter market hours would not only improve market structure, but will have a significant positive impact on individual employees and indeed our industry's ability to attract a more diverse talent.

Our members tell us that the existing long hours culture has resulted in a number of substantial problems for both individual firms and the market as a whole.

Anecdotal evidence from members is that trading remains one of the areas of financial services where staff face significant mental health issues. Although, due to the (historical) stigma attached to such conditions, individuals are often very reticent to report such problems. As such empirical data is not readily available to demonstrate this connection. We consider that the excessively long hours play a major contributory part in generating and perpetuating this problem.

We intend to explore the impact on employees' mental health in more detail. We have consulted with the City Mental Health Alliance (<u>CMHA</u>) to explore ways in which organisations can improve mental health and wellbeing in the workplace.

We view our call for action on market hours as an integral part of our industry work on improving overall diversity and culture in financial services, including the IA recently launched <u>Culture framework</u> and <u>Talent Strategy</u>.

Part II contains more detail on the link and the impact of reduced market hours on improved diversity and culture within our firms.

PROPOSED PLAN OF ACTION

Initially the IA and AFME will write to relevant UK & EU27 national exchanges requesting that they consult market participants on a reduction of market hours. We propose to initially write to the LSE, Turquoise, Euronext, NasdaqOMX, Deutsche Börse, CBOE, Aquis and Liquidnet.

London Stock Exchange have indicated that they will consider any requests they receive in their upcoming consultation to the market. Following the initial letters, the IA and AFME will seek to build a consensus of industry opinion to respond positively to the consultations.

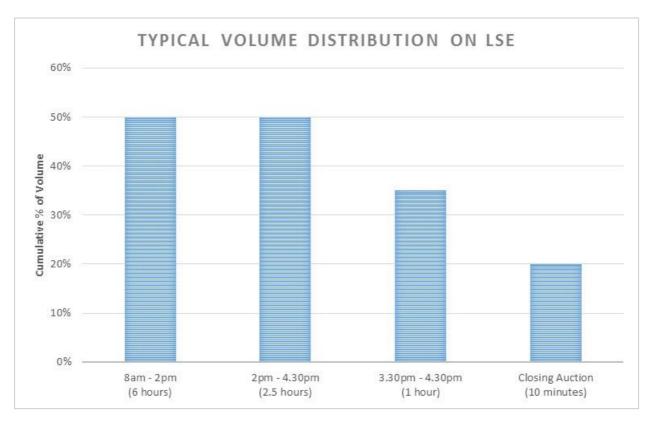
This idea has already leaked to the press over the summer. It has been reported across multiple mainstream press outlets and received much positive reaction.

PART I- MARKET STRUCTURE:

CASE STUDY: DISTORTED TRADING DAY

The closing auction now consistently represents well over 20% of the daily volume in Europe. To emphasise the shift, around 35% of volume trades in the **last hour** and that increases to around 50% in the last two and a half hours.

Chart 1: Typical Volume Distribution on LSE



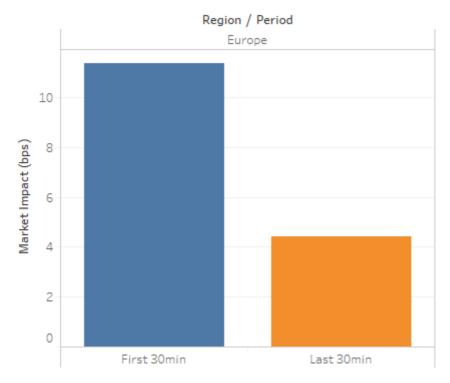
The evidence of a distortion is not just apparent in the traded volumes, but also the actual cost of trading.

The difference in spreads, volatility, and market liquidity in the AM session vs. the PM session result in material differences to the cost of trading.

For a small 1% Average Daily Volume (ADV) trade on the FTSE 100 Index it would cost 4.4bps to execute the trade in the last 30 minutes of the day (excluding the closing auction), whereas the same trade in the first 30 minutes of the day would cost nearly three times more at 11.4bps.

Chart 2: Estimated Cost of Trading 1% ADV in the London Market (First 30 min vs Last 30 min)





Source: BofA Securities

Traders in the London market indeed tell us that the first hour is the most expensive time of day to trade. They consider that this is caused by the wider spreads and lack of liquidity. This cost differential further perpetuates the migration of liquidity to later in the day and a degradation in morning liquidity.

For comparison, in the US market, which is shorter in duration by 2 hours and turns over approximately 6X the volume of the European markets combined, there is still a cheaper cost of trading in the afternoon where liquidity is higher and spreads/volatility lower, but the differential in cost to the morning session is much smaller. This demonstrates greater stability in liquidity conditions over the day in the US market.

Overall, we believe a shorter day will centralise liquidity, facilitating more stable trading conditions and price discovery over the day.

CASE STUDY: LSE IOB TRADING EXTENSION

There are limited examples of exchanges reducing hours.

However a counter example is available: the LSE recently extended the trading hours of its International Order Book (LSE IOB) by one hour in September 2018. We explore the effect of this move in some detail below.

The extended hours were introduced with the intention of providing international investors greater opportunity to trade IOB securities and align times across European markets. This provides an example to compare the IOB market efficacy when it traded with shorter hours as compared to when it traded with longer hours and analyse the impact on liquidity and market structure.

Comparing the market statistics before the change (Jan - 2 Sep 2018) vs after the change (3 Sep - November 2018) and using the FTSE 100 as a control for market background /seasonality, we observed that:

- Average Daily Trading Volume (ADTV) decreased (-9%) vs. the FTSE 100 (-6%), suggesting that longer hours did not bring more liquidity vs. shorter hours on the LSE IOB.
- Bid-Ask spreads widened on the IOB (+28.1% to 11bps [£turnover avg. weighted]/ 57bps [median]) post the longer hours change, more so than observed on the FTSE 100 (+11.6%)
- An increase in trade sizes on the IOB post change (+12.2%), but interestingly quote sizes reduced (-8.6%), potentially due to higher market volatility post introduction see Chart 3 below. With slightly larger trade-sizes and flat/lower ADTV post change, this also highlights that trade frequency has decreased, which along with spreads/volatility is a good indicator of market quality & liquidity, and highlights the ease with which firms can get into and out of positions.

Collectively, post extending the hours, the net market structure effects observed of wider spreads, reduced touch sizes, reduced/flat ADTV make trading the IOB market more challenging and likely to increases costs to end investors.

Chart 4: Market Microstructure Evolution Pre/Post IOB Changes, IOB vs. FTSE 100, Graphs Indexed to 100





Methodology: Calculated metrics are £turnover avg-weighted across stocks per index. Spreads are time-weighted over day. Trade/Quote size are mean average. Volatility is scaled to trading session and calculated using period bid-ask log returns. Where data is aggregated across days, median values are used. **Source:** BofA Securities Tick data, Pre Period: January – September 2; Post Period: September 3 - November 28 2018. Graphical time series data is indexed to 100 to compare changes in values over time.

PART II- DIVERSITY & CULTURE

Our members and industry leaders believe that a reduction in market hours would be an important step in helping to increase diversity and inclusion in trading. Whilst it is not a panacea, shorter hours are a necessary building block towards a more diverse trading floor. The reduction in trading hours should be supplemented by employers taking active steps to create a healthy workplace culture, including having in place clear robust diversity & inclusion policies and taking positive steps to promote employee wellbeing.⁷ A useful next step would be to review the timings of the Regulatory News Service (RNS) such that the start shifts with the market opening hours to remain one hour before the market opens.

Simply put, a shorter day would help a more diverse range of individuals to enter this area of work. The reduction, to 9am – 4pm GMT/10am – 5pm CET, would improve flexibility for employees. It is likely that the change in hours would also draw in more diversity generally into the industry. It's worth noting that traders carry out extensive operations both before and after the market is open.

The current lack of diversity becomes a blocker in itself in particular in relation to gender and ethnicity. The existing narrow culture acts a deterrent to new and more diverse talent applying or staying in the industry since they do not readily identify with those doing these types of jobs as their peers.

Such long hours may also help to perpetuate the generally narrow gender and cultural backgrounds seen in trading. The resulting lack of diversity can also impact the conscious and unconscious bias⁸ of individuals on the trading floor.

Trading has become increasingly computer driven, algorithmic trading is rapidly becoming the dominant channel in volume, value and number of trades. Traders coming into the industry are increasingly required to have highly tuned coding skills as well as the traditional mathematical and technical requirements. Such disciplines are

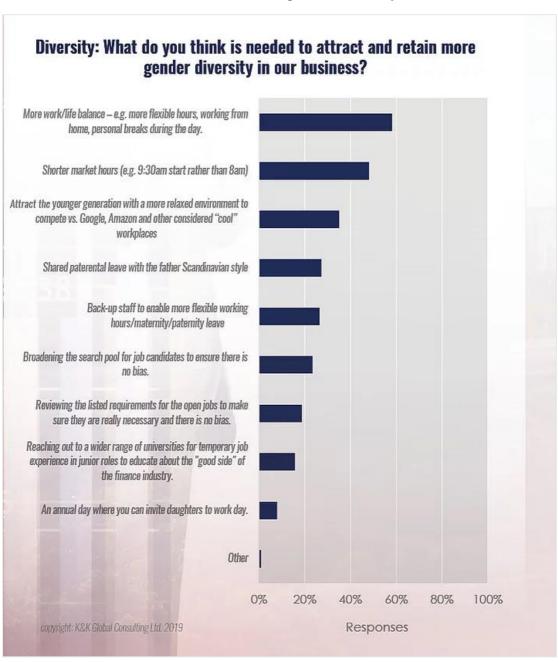
⁷ The IA's Culture Framework supports firms to create a healthy workplace by enabling them to evaluate and shape their culture.

⁸ Unconscious bias: "we are each 'hard-wired' to respond positively to people we perceive to be like us" – Oxford Learning institute, University of Oxford.

dominated by men in academic institutions⁹. This means new people coming into the industry are drawn from a narrow pool. Therefore unless something is done to tackle this problem now, trading will continue to lag behind a wider asset management and financial services industry that is moving to a new and better approach.

A 2019 survey¹⁰ that covered 129 buyside heads of trading globally reported that the best way to attract and retain more gender diversity in trading is to provide a better work / life balance. Employees are increasingly looking for more work / life balance when they are looking for jobs.





⁹ According the recent UCAS data provided by the Higher Education Statistics Agency (HESA), 35% of STEM (Science, Technology, Engineering, Maths) students in higher education in the UK are women – September 2019. (stemwomen.co.uk)

¹⁰ Copyright K&K Global Consulting 2019

Mental health problems in the workplace have serious consequences not only for the individual, but also for the productivity of the organisation. In Organisation for Economic Co-operation and Development (OECD) countries, mental ill-health is responsible for between one-third and half of all long-term sickness and disability in the working age population.

The 'Fit mind, fit job' report provides a synthesis of the findings of the OECD's four-year review. It concludes that a transformation is required in policy thinking about mental health and work and sets out the key elements for an integrated policy approach to promoting better mental health and employment outcomes.

It is important that asset managers (and the wider financial services industry) seek to make changes to historical working practices. Attracting the best young talent into trading has become increasingly difficult as graduates with the right mix of coding and technical skills are taking up the opportunities offered by technology companies rather than financial services firms.

Many staff are working a twelve hour day, often arriving at their desk at 6.30am (or before) and staying until after 6pm, this represents a significant obstacle to attracting and retaining talent. The addition of commuting time only exacerbates this problem. Anyone with family commitments is less likely to be willing or able to spend such long hours in the office.

The physical drag on individual staff is also significant. Staff are habitually doing a ten hour working session sat at their desk in an industry where lunch breaks are often still frowned upon. This is not conducive to good mental and physical health. We would note that no firm that we are aware of prevents individuals from leaving their desk, but the prevailing and pervasive culture across the industry is that traders are at their desk for the whole trading day.

The working day is further extended since most traders arrive at least one hour before the market opens, to prepare, and stay at least one hour after the close in order to book trades, assist operations and look at after-market secondary offerings. The IA estimates that the average trader works a 12 hour day starting at 6.30am, representing a 60 hour week. The European Working Time Directive (Directive 2003/88/EC) established minimum general safety and health requirements for firms. The directive stipulates that workers should have a maximum weekly working time of 48h, including overtime.

APPENDIX 1: MARKET OPENING HOURS:

			Time zone		Local time		GMT		
	World exchanges	ID	Zone	DST	Open	Close	Open	Close	Opening Hours
N/S America	Mexico Mexican Stock Exchange	BMV	-6	Apr-Oct	08:30	15:00	14:30	21:00	6h 30m
	United States New York Stock Exchange	NYSE	-5	Mar-Nov	09:30	16:00	14:30	21:00	6h 30m
	United States NASDAQ	NASDAQ	-5	Mar–Nov	09:30	16:00	14:30	21:00	6h 30m
	Canada Toronto Stock Exchange	TSX	-5	Mar–Nov	09:30	16:00	14:30	21:00	6h 30m
	Brazil Bolsa de Valores de São Paulo	Bovespa	-3	Feb-Oct	10:00	17:55	13:00	20:55	7h 55m
	Argentina Buenos Aires Stock Exchange	BCBA	-3		11:00	17:00	14:00	20:00	6h
Europe	United Kingdom London Stock Exchange	LSE	0	Mar–Oct	08:00	16:30	08:00	16:30	8h 30m
	Portugal Euronext Lisbon	PSI	0	Mar–Oct	08:00	16:30	08:00	16:30	8h 30m
	Republic of Ireland Irish Stock Exchange	ISE	0	Mar–Oct	08:00	16:30	08:00	16:30	8h 30m
	Germany Frankfurt Stock Exchange (Xetra)	FSX	1	Mar–Oct	09:00	17:30	08:00	16:30	8h 30m
	Poland Warsaw Stock Exchange	GPW	1	Mar–Oct	09:00	17:00	08:00	16:00	8h 30m
	France Euronext Paris	EPA	1	Mar–Oct	09:00	17:30	08:00	16:30	8h 30m
	Switzerland Swiss Exchange	SIX	1	Mar–Oct	09:00	17:20	08:00	16:20	8h 20m
	Spain Spanish Stock Exchange	BME	1	Mar–Oct	09:00	17:30	08:00	16:30	8h 30m
	Italy Milan Stock Exchange	MTA	1	Mar–Oct	09:00	17:30	08:00	16:30	8h 30m
	Netherlands Euronext Amsterdam	AMS	1	Mar–Oct	09:00	17:30	08:00	16:30	8h 30m
	Sweden Stockholm Stock Exchange	OMX	1	Mar–Oct	09:00	17:25	08:00	16:25	8h 25m
	Norway Oslo Stock Exchange	OSE	1	Mar–Oct	09:00	16:25	08:00	15:25	7h 25m
	Denmark Copenhagen Stock Exchange	CSE	1	Mar–Oct	09:00	16:55	08:00	15:55	7h 55m
	South Africa Johannesburg Stock Exchange	JSE	2		09:00	16:50	07:00	14:50	7h 50m
	Russia Moscow Exchange	MOEX	3		10:00	18:40	07:00	15:40	8h 40m
	Turkey Borsa Istanbul	ISE	3		10:00	18:00	07:00	15:00	8h
Australasia	India Bombay Stock Exchange[5]	BSE	5.5		09:15	15:30	03:45	10:00	6h 15m
	India National Stock Exchange of India[6]	NSE	5.5		09:15	15:30	03:45	10:00	6h 15m
	Malaysia Bursa Malaysia	MYX	8		09:00	16:45	01:00		5h 45m
	Singapore Singapore Exchange	SGX	8		09:00	17:00	01:00	09:00	
	Taiwan Taiwan Stock Exchange	TWSE	8		09:00	13:30	01:00	05:30	4h 30m
	Hong Kong Hong Kong Stock Exchange	HKEX	8		09:30	16:10	01:30		5h 40m
	China Shanghai Stock Exchange	SSE	8		09:30	15:00	01:30	07:00	4h
Ā	China Shenzhen Stock Exchange	SZSE	8		09:30	15:00	01:30	07:00	
	Japan Tokyo Stock Exchange	TSE	9		09:00	15:00	00:00	06:00	5h
	South Korea Korea Stock Exchange	KRX	9		09:00	15:30	00:00	06:30	6h 30m
	Australia Australian Securities Exchange	ASX	11	Oct-Apr	10:00	16:10	23:00	05:10	6h 10m
	New Zealand New Zealand Stock Market	NZSX	13	Sep-Apr	10:00	16:45	21:00	03:45	6h 45m