The Investment Association[1] and the Association for Financial Markets in Europe[2] are calling on European venues to review their cash equity markets trading hours. **We believe that the review of current trading hours will bring significant benefits to trade execution and enhance culture & diversity across financial services firms in Europe.**

AFME and the IA's members have achieved a strong level of consensus among buyside and sellside firms. As a result, we have now partnered formally as trade associations to bring this forward as a joint buyside-sellside call for action.

<u>The AFME/IA proposal seeks a 90-minute reduction of European cash equity market hours, to 7 hours.</u>

AFME & IA members propose two options as a basis for further dialogue between exchanges and market participants (and do not see a need to eliminate either option at this time):

1. **10:00-17:00 (CET)**
2. **10:30-17:30 (CET)**

In line with our comments below, these timings are driven by a desire to retain the overlap with the US market but still seek a 90-minute reduction to cash equity market hours. Given the morning overlap with Asia currently exists for only part of the year – during the summertime - we consider largest part of the reduction to market hours should take place at the start of the European trading session

AFME and the IA would support a 12 month harmonised pilot across all stocks and major exchanges and trading venues in order to test market structure benefits and impacts, at the end of which the industry could convene, assess success, and agree whether to either revert to existing trading hours or to formalise the change to exchanges' trading rulebooks.

This change in cash equity market hours will result in:

1. Better formed markets: deeper liquidity and narrower spreads
2. Better outcomes for European end investors
3. Better environment for participants: mental health, diversity and flexibility for employees

Collectively AFME and the IA's membership represents hundreds of financial firms ranging from the largest global institutions to the smallest partnerships. As associations, we agree it is now time to address cash equity market hours. The market must adapt to the rapidly changing technological and cultural background in which all participants operate.

Changing culture across an industry is a significant challenge. Adjusting cash equity market hours will not only improve liquidity and spreads but also represents a first small positive step on a longer journey towards improving culture and diversity in our industry.

[1] The Investment Association (The IA)
[2] The Association for Financial Markets in Europe (AFME)

A shorter day would improve flexibility for employees and would help the industry attract a more diverse range of individuals. In a recent survey[3] nearly 50% of respondents identified shorter trading hours from nine other possible factors as a means to improve gender diversity, and second only to flexible working policies (at nearly 60%). The key benefit from shorter exchange hours will be the *opportunity* it affords to firms attract, accommodate and retain individuals whose personal circumstances require more flexible hours.

In addition to market structure and culture issues, trading remains one of the areas of financial services where staff face significant mental health issues. We believe the excessively long hours play a major contributory part in generating and perpetuating this problem.

Euronext will note that we have included within our response data not only on Euronext-operated markets but also on Germany. We have included this to demonstrate that volume distribution and market impact dynamics are similar across all of Europe's main markets and we believe that all European exchanges, in dialogue with market participants, should pursue a synchronised change to cash equity market trading hours at the earliest opportunity.

The Investment Association (The IA): champions asset management, supporting 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 and many more across Europe.

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.

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).

[3] K&K Consulting 2019

1. IMPACT

1.1 Liquidity

In your view, what are the main elements impacting liquidity?

Would a shorter trading day concentrate or dilute liquidity? Please give examples or quote research or studies.

In most of Europe, cash equity markets open for a total of 8.5 hours. In comparison, the largest global stock exchange - NYSE[4] 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 09:30 – 16:00 with no apparent issues to complete trades or indeed access to securities.

The Japanese market (JPX) is open for 6 hours but with a one-hour lunch break (09:00 -11:30, then 12:30 – 15:00 JST). JPX is approx. 50% larger by market capitalisation than any single market in Europe and again, there is not an issue with completing trades in these significantly shorter market hours.

In Europe, equity liquidity profiles during the first hour of trading display relatively low liquidity and wider spreads (i.e. higher costs). As a result, little volume is executed at this time compared to later in the trading day, with liquidity continuing to shift towards the close. This can lead to worse outcomes for investors trading at times in which liquidity is not readily available.

Embracing the impact of technology and innovation has meant that market participants are able to trade using algorithms in thousandths of a second across multiple venues. Utilising these technologies has also removed the need for extended trading hours. As trading has evolved into ever higher speeds and smaller executions, the existing liquidity has become at times thinly stretched across what appears to be an unnecessarily long trading day (when measured in milliseconds).

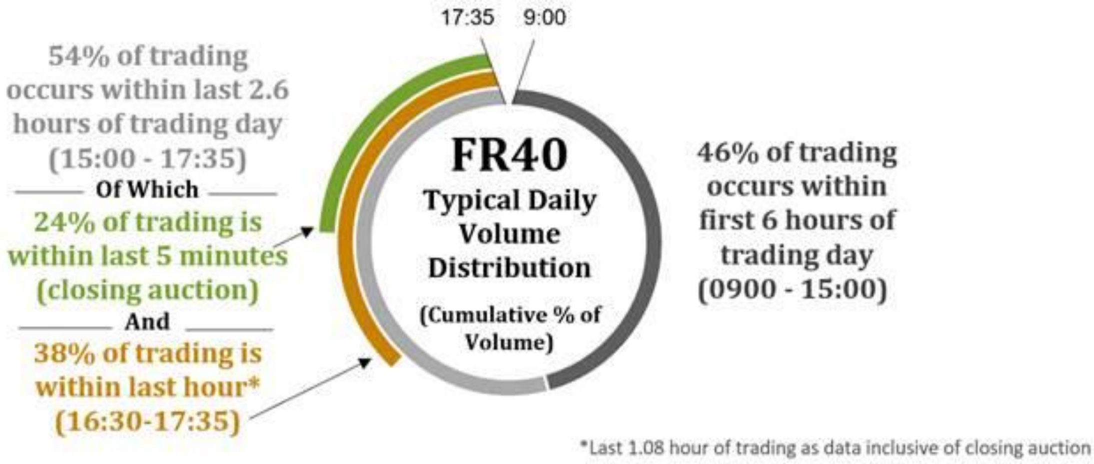
We do not consider that a reduced availability of trading time affects other global jurisdictions when considering their large market capitalisation and the ability to transact in shares in their markets. More concentrated hours will improve liquidity in Europe as trades will be less thinly spread over an extended period of time. This will reduce trading costs and market impact for firms.

Volume distribution and market impact

The charts below show that the closing auction typically represents 21%-24% of daily volume. To emphasise the shift, 34%- 38% of volume trades in the last hour and that increases to 49%-54% around in the last two and a half hours. Although Germany is not a Euronext-operated market, we include it here for a comprehensive view of Europe's main markets. Whilst there are a number of participants who will need to continue targeting the close, there are others who are currently doing so simply because liquidity levels are highest and spreads are narrowest at this time of the day.

[4] New York Stock Exchange (NYSE)

Charts 1&2: Typical Volume Distribution on Euronext markets



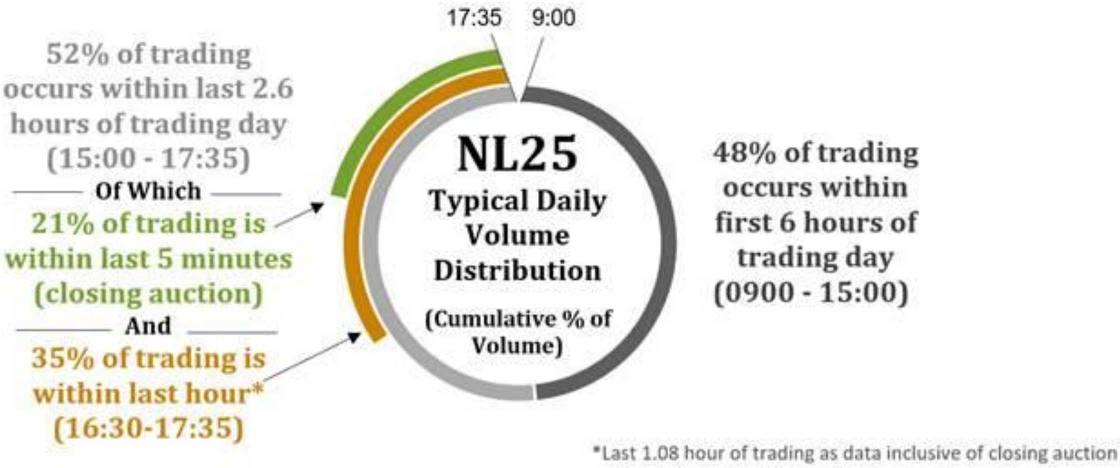
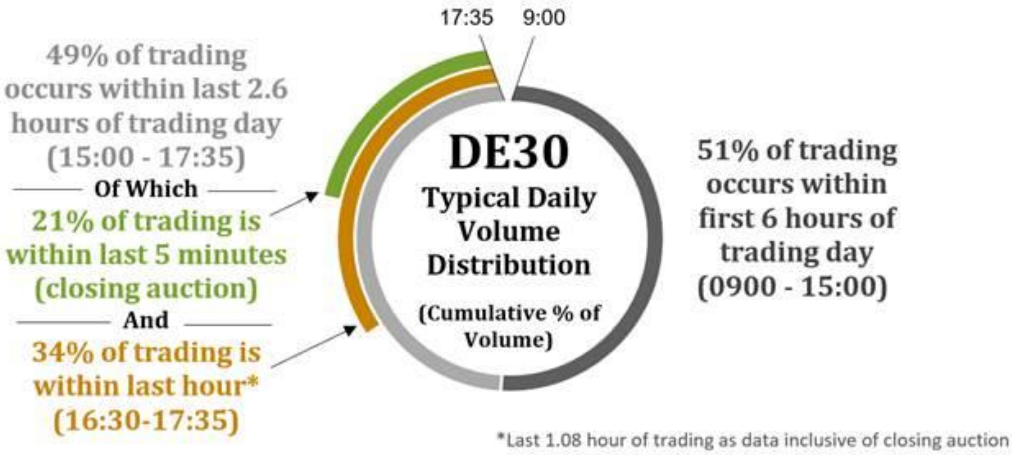


Chart 3: Typical Volume Distribution on German market

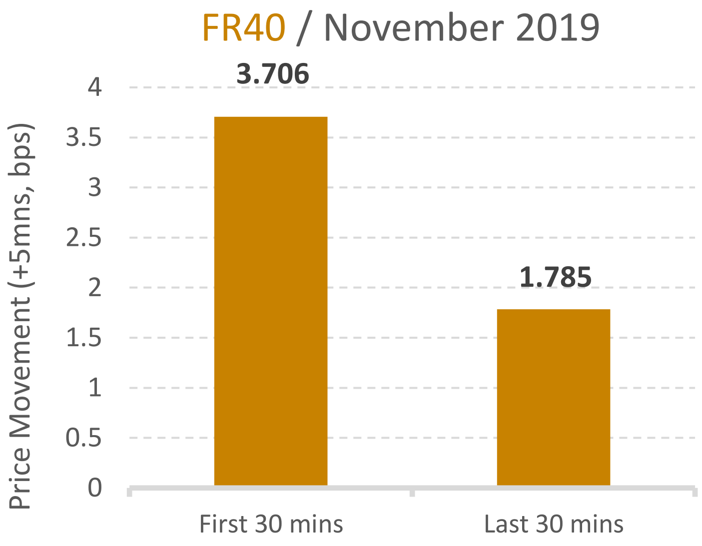


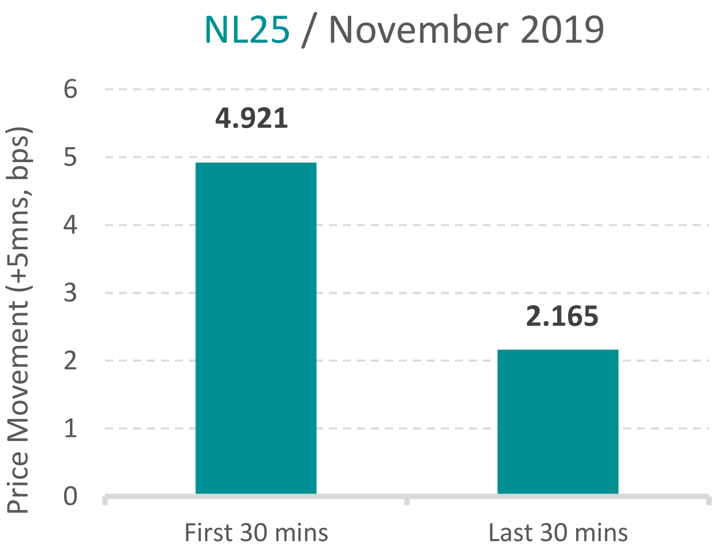
Source: BigXYT *Based on turnover traded in Nov 2019. Data includes volumes executed on all trading venues and adjusted SI volumes, it excludes off-book and other OTC trades.*

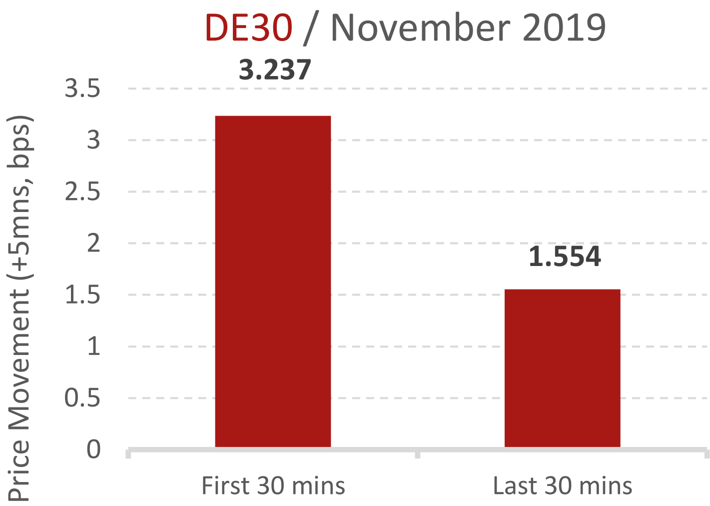
The evidence of a distortion is not just apparent in the traded volumes, but also the actual cost of trading. The difference in spreads, volatility, and market liquidity in the AM session vs. the PM session result in material differences to the cost of trading.

For a small 1% Average Daily Volume (ADV) trade on European Indices it would cost an average of between approx 1.55bps and 2.17bps 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 be more than double the AM cost at between 3.24bps and 4.92bps.

Charts 4-6: Estimated Cost of Trading 1% ADV in European Markets (First 30min vs Last 30min)







Source: BigXYT

Traders in the European cash equity markets inform us that the first hour is the most expensive time of day to trade. 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 consider that a shortening of the trading day by 90 minutes will centralise liquidity, facilitating more stable trading conditions and price discovery over the day.

In summary, evidence based on historic changes to market hours is that **if hours are reduced volumes will not reduce – and may in fact increase.** If, as expected, shorter hours drive an improvement in liquidity (spreads, depth) as a result of concentrating volume, overall volumes could increase – this is the belief of key market making and many institutional firms.

European markets' time zone positioning

The benefit of the overlap between European and US cash equity market hours is evidenced in better metrics on market quality and liquidity during the common hours, including tighter spreads, more liquidity and improved correlations.

By contrast, overlap between London and Asia is invisible from a data/metrics-perspective in regards to European equities. Whilst in theory it has been talked about as being beneficial, in practice there is no *discernible* benefit. We note the curious statement made in your CP that "*More recently, the unique position of Europe and its overlap with Asia came into light*". Despite recent trading circumstances in light of Covid19, however, there remains no overlap and we have seen no evidence in recent metrics that alters our positioning that any discernible benefit exists.

Whilst Europe continues 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 practice, global investment patterns are driven by investment opportunity and available liquidity rather than convenience. Asian investors investing outside of their domestic markets need to consider the U.S. market in particular. Given that the bulk of European liquidity manifests itself later in the day, the limited amount of overlap with European trading hours is of very little marginal value to those investors. Notably, the current overlap with Asia only occurs during the summertime clock adjustment, CEST[5].

There is currently no overlap with Stock Connect owing to the agreement with China and the Global Equity Segment has only a 10-minute overlap with Hong Kong during the open auction. During CEST this 10-minute overlap is extended to a 1-hour overlap in continuous trading. Taking also into consideration there is no overlap with Asia's largest market, Japan, the argument that reducing trading hours in Europe will limit the amount of useful overlap with trading hours in Asia does not hold together.

1.2 SMEs

How does the impact of a shorter trading day for SMEs differ to the impact of a shorter trading day for Blue Chips? Currently, some SMEs trade by double auction at 11:30 and 16:30. Would later opening / earlier closing make it necessary to also change auction times to maintain the same time period between the two auctions? Will a shorter trading day improve SME trading?

Shorter hours are expected to drive an improvement in liquidity (spreads and depth) as a result of concentrating volume. When cash equity markets are better formed with tighter spreads investors (retail and institutional) incur lower implicit transaction costs, making investment and investment returns more attractive. Therefore, improvements in market quality and liquidity arising from more concentrated market hours will have a positive investment effect for corporate issuers of all market capitalisation sizes.

Important news and earnings data on individual companies is specifically released outside of market hours so that all investors have equal opportunity to receive and digest it. 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. A useful next step would be to review the timings of the Regulatory News Service (RNS) such that the release of RNS remains pegged by 60-90 minutes prior to the market open.

With regard to the specific question on timings of SME stocks' auctions, we would agree that it would make sense to keep these timings pegged to amended opening and closing times.

[5] Central European Summer Time (CEST)

THE INVESTMENT ASSOCIATION

afme/ Finance for Europe

1.3 Retail investors

If the exchanges were to close earlier, would you expect to also shorten the trading day for retail investors? Would such a move prevent the extension of trading hours for the retail community in the future? What alternatives could be put in place to satisfy the retail community if a shorter trading day was implemented?

Retail investors will benefit a move to reduced hours during cash equity market continuous trading since this is expected to drive an improvement in liquidity (spreads and depth) as a result of concentrating volume. When cash equity markets are better formed with tighter spreads, retail investors incur lower implicit transaction costs, enhancing their investment returns.

It is also worth highlighting that the manner in which retail investors access cash equity markets has changed markedly in recent years. This investor group is now less constrained to delaying access until after working hours at home but can now take advantage of instant access throughout the day via mobile phone applications and other technology platforms.

Because retail investors typically send more market orders which execute at prices pegged to the far touch (whereas institutional investors balance market and limit orders, typically via use of algorithms), they have the most to gain from reduced spreads. Notably, the US market is open for 2 hours less than most European markets at just 6.5 hours and yet enjoys a much higher retail participation.

It is a misnomer to characterise buying cash equities as similar to buying a retail commodity product online. For example, buying a pen at 03:00 from a retailer's website is the same product and the same price as buying it at 10:00. In any event, for most retailers any such order for a pen placed at 03:00 will simply be held in the company's system until it opens in the morning and the order can be executed. Whilst there is the illusion of being open 24x7, in fact the pen will not be delivered any quicker than if ordered at 08:00.

Buying shares, certainly when trading in size, depends on the other participants who are active in the market at the time of trading. In the pen example, all that is necessary for the trade to happen is that the website is online. When buying equities in size it is necessary for both the venue to be open and other participants to be present who are willing to trade in size.

When considering any impact on retail investors it is important to understand what service the retail investor is actually paying for. To trade far outside the normal day's trading hours, where most of the volume takes place, the retail investor will likely be paying a significantly wider spread. The vast majority of retail trading accounts do not guarantee the speed of execution or indeed even access to the market. In times of market stress retail orders are likely to be queued in any event.

This change to cash equity market hours will improve liquidity and spreads. It is important to highlight that the vast majority of European retail investors delegate management of their assets / pension / wealth to a professional. Only a small proportion are engaged in the cash equity market directly. The European Central Bank (ECB) put the 2019 ownership of European shares by individuals at only 10%[6]

[6] Euro area household holdings of European listed shares was €0.85tn in 2019 (http://sdw.ecb.europa.eu/quickview.do?SERIES_KEY=351.SHS.Q.I8.B5.S1M.S1._X.LE.F511._Z.EUR.M.A.A.A._X._X.V._T.ZZZ.) compared a Euro area market capitalisation of €8.5tn (AFME Equity Data Report Q1 2020)

by value. Whilst longer trading hours (may) provide additional opportunities for this small minority to engage in day trading, the vast majority of people – the other 90% - will benefit from improved liquidity for large trades, and therefore better prices, by institutions trading on their behalf collectively.

The drivers for retail engagement in equity markets are often cultural. In the US, despite the much shorter trading hours, in April 2019 Gallup[7] found that 55% of Americans reported that they owned stock. Therefore, maintaining the existing long trading hours or even extending them is no guarantee of increased retail participation.

1.4 Trading activity

Do you expect that a shorter trading day would reduce, increase or have no effect on the volume of your trading activity? Please give examples.

AFME and The IA defer to firms to answer this question individually.

2. IMPLICATIONS

2.1 Synchronisation of trading hours

Would there be any benefits to venues opening or closing at different times? How would we ensure that all venues or Systematic Internalisers (SIs) open and close at the same time?

AFME and the IA remain of the view that European cash equity market trading hours for all execution venues, including Regulated Markets, MTFs and SIs, should remain harmonised. We look forward to entering a dialogue with European exchanges and their association, the Federation of European Securities Exchanges (FESE), to progress this important initiative.

With regard to concerns about any potential increase in trading off-venue outside of shortened trading hours, we consider that brokers and clients generally prefer to trade when markets are open, when they can better understand liquidity, pricing and risk. Currently, Systematic Internalisers are generally open during exchange trading hours and there are not material differences in their opening hours.

We highlight that SI quoting obligations align SI trading times with exchanges' market hours through the requirement to reflect prevailing market conditions, i.e where their quotes must be "*close in price, at the time of publication, to quotes of equivalent sizes for the same financial instrument on the most relevant market in terms of liquidity*". Furthermore, SI public policy documents state that that quoting is aligned, as mandated, with the most relevant market - generally the member state's primary exchange. In making SI quotes public, our member firms generally use exchange platforms for distribution. In addition, and as we discuss in our response to questions 4.2/4.3 below, achieving our objectives on diversity and well-being benefits equally applies to SIs. Therefore, taking these factors into account there are good reasons for SI opening times to remain aligned with cash equity exchange opening hours.

[7] https://news.gallup.com/poll/266807/percentage-americans-owns-stock.aspx

We would expect any pre-open or post-close trading to remain, as is typical now, driven largely by a need (typically post-Close) to urgently address unintended errors/risk-exposures – the volume of which is uncorrelated to market hours, or to reflect opportunistic trading in reaction to price-moving news in a security (although this affects a small proportion of stocks on a very limited number of calendar days), so is not statistically meaningful. Therefore, we expect this to remain the case on any adjustment to exchanges' cash equity market hours and we do not anticipate a growth in SI or Over the Counter (OTC) volumes pre or post market hours trading.

2.2 Benchmarks

What changes would be required for benchmark calculation in the case of trading hours being modified?

If cash equity market hours remain harmonised across Europe, we see no impact on benchmarks.

2.3 Settlement and Reference price

Should the timing of the calculation of reference or settlement prices be moved to reflect the change in opening or closing time? Do you expect different trading hours to have a positive, negative or no influence on the calculation of the reference or settlement price?

AFME and IA member firms would welcome entering a dialogue to explore harmonisation of the timings of reference price setting mechanisms across European exchanges where this could be beneficial to market efficiency, investor outcomes and firms' operational processes. However, we note that the timing of these mechanisms on Euronext's markets broadly suit our member firms.

2.4 Options trading

Would you expect to trade more or fewer options contracts if the underlying were trading for a shorter period of time? How would your derivatives trading activity change before market open / after market close?

2.5 Futures trading

Would you expect to trade more or fewer futures contracts if the day was shorter? Should the trading hours for derivatives products be changed to reflect the potential change in cash trading hours? Please give details of the reasons for your answer.

Taking 2.4 and 2.5 together, it is important to highlight why it makes sense to have shorter market hours for cash equities (and single stock derivatives), even if retaining longer hours for Foreign Exchange (FX) and equity index derivatives. Unlike consumer products (e.g. Amazon.com being open 24x7), FX or broad-based index derivatives, cash equity markets require an official Open and Close.

- Cash equity markets prices underpin indexes and derivatives, set benchmarks used to measure daily fund performance, and establish fair prices for consumers to enter/exit fund investments. The need for official Opening and Closing prices drives the need for formalised cash equity market hours with a set Opening and Closing time, and well-designed Opening and Closing mechanisms. Additionally, important news and earnings data on individual companies is specifically released outside of market hours so that all investors have equal opportunity to receive and digest it.

- Unlike with FX/Indices, there are thousands of equities to choose from, and hence the number of investors interested in trading a particular equity at any given moment is quite limited. Hence the need to concentrate liquidity in certain hours is relevant in equities but not some other products.
- Therefore, any aspiration of establishing 24x7 trading in individual equities is misplaced.

Shortening of cash equity market hours would likely impact FX and futures markets as follows:

- Index futures/options volumes directly linked to cash equity trading/hedging would likely also concentrate into the shorter hours.
- Index derivative volumes not directly linked to cash equity trading/hedging (e.g. expression of macro views) would continue to trade earlier/later, though some of those volumes may also concentrate towards the adjusted cash equity market hours.

2.6 Equity and Economic Research – Publication

How much of a concern would be to run an opening auction at the same time as the publication of economic indicators? How can this be mitigated? Should publication of economic indicators or company results be regulated?

We welcome Euronext raising this important factor since publication times of equity and economic data have not previously needed to be considered in relation to an adjustment to market opening times. We reiterate our comments around RNS timings in our response to question 1.2 above, that these should be reviewed in order to remain pegged to the open by 60-90 minutes, and another useful next step may be to enter dialogue with relevant bodies for the review the timings of economic indicator releases.

2.7 Post Trade

What are the implications for post trade of shortening the trading day by either opening later or closing earlier?

If the trading day was shortened by the market opening later, this is unlikely to have any significant implications for post-trade activities. The likely impact of the market closing earlier is that the 'peak' of operational end-of-day activities would move to an earlier time, which would generally be a favourable outcome but may involve some technology changes/operational reorganisation.

These activities are a mix of automated and manual processes and could include CCP netting, trade matching and confirmation, sending and processing of trade files and exception management processes.

2.8 Middle Office, Back Office, Settlement Teams

Are Middle Office and/or Back Office operations linked to the closing times of the stock exchange (i.e. do MO and BO operators have to wait for the close of the market to begin their post-trade operations)?

The processing of trades for settlement can occur from the point of execution onwards and is not expressly linked to the closing time of the stock exchange. Settlement of on-exchange trades takes place on T+2, therefore market hours are unlikely to have a significant impact on settlement operations

3. CHOICE OF TIMING PROPOSALS

3.1 Open later (continuous trading) (CET 10:00, 10:30, 11:00, or other?)

3.2 Close earlier (continuous trading) (CET 16:00, 16:30, 17:00, or other?)

3.3 Keep opening auction, delay continuous trading (open auction CET 09:00, followed by continuous CET 10:00)

3.4 Lunch break (CET 12:00 -13:00)

US and Japan cash equity market trading hours are already shorter at 6.5 and 6 hours respectively. The AFME/IA proposal seeks a 90-minute reduction, to 7 hours.

Therefore, taking Euronext's timing proposals together, AFME and the IA propose two options as a basis for further discussion (and do not see a need to eliminate either option at this time):

1. 10:00-17:00 (CET), or
2. 10:30-17:30 (CET)

While we support a later open, feedback from buy side and sell side and from other cash equity European market operators reveals that market participants strongly value the liquidity benefits bestowed by a longer overlap with the U.S, therefore, we consider closing before 17:00 (CET) too early. We do not support Option 3.3 since it does not satisfy our objectives on diversity and mental health[8], nor does it achieve another factor important to IA and AFME members which is that market participants are given additional time to digest news before trading commences. Option 3.4, as a standalone option, would also fail to achieve these two aims and is not palatable for members. We believe this option would unnecessarily extend the trading day.

[8] In October 2018, an OECD report (*Health at a Glance: Europe 2018*) stated that the total cost of mental health issues was over 4% of GDP across Europe and over 5% in Germany.

4. OTHER INFORMATION

4.1 Arrival time: At what time do you currently arrive at your office? (please confirm London time or Paris/Berlin/Rome time).

Most traders arrive around 07:00/07:30 (CET), 06:00/06:30 (UK).

4.2 Alternative to reducing trading hours: What other initiatives can be taken to improve work/life balance and gender equality in the financial industry?

4.3 Mental wellbeing improvements: Do you think that opening later will improve gender equality, mental health issues and work/life balance in the industry?

Taking 4.2 and 4.3 together, changing culture across an industry is a significant challenge. Adjusting cash equity market hours represents a first small positive step on a longer journey towards improving culture and diversity in our industry.

The vast majority of trading/dealing/investment professionals in the industry will continue to work the same hours (e.g. typically from 7:30am to 19:30 (CET)). The key benefit from shorter exchange hours will be the *opportunity* it affords to firms to attract, accommodate and retain individuals whose personal circumstances require more flexible hours.

As a result of the Covid-19 crisis there has been much discussion of a *new normal* in working from home. However, while the overall number of employees returning to the office permanently is expected to be below pre-crisis levels, the nature of cash equity trading drives our expectation that once the current crisis is over, many cash equity traders will return to the office. Therefore, in addition to the liquidity benefits outlined above, the essential first step to achieve the improved culture and health benefits will be through a reduction in trading hours.

In the recent survey by K&K Consulting[9], nearly 50% of respondents identified shorter trading hours from nine other possible factors as a means to improve gender diversity, and second only to flexible working policies (at nearly 60%). More flexible sectors such as technology present our industry more competition than ever before in attracting the best new talent.

The industry loses too many staff, and often women in particular, due to the challenges of balances responsibilities as a carer (whether for children or elderly relatives) with the long and inflexible working hours which derive in part from current exchange trading hours.

Contacts:

April Day, Head of Equities, AFME

april.day@afme.eu

Ross Barrett, Senior Policy Adviser, The Investment Association

ross.barrett@theia.org

[9] https://www.buysideintel.com/bsp-16-gender-diversity