Why publicly-listed companies should split their stock

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In today's financial landscape, retail investors are turning to equity markets, driven by concerns over the sufficiency of state pensions and income growth (Gempesaw, Henry, & Velthuis, 2022). At the same time, institutional investors must increasingly adhere to stringent regulations on the liquidity of their investment portfolios (for example, the European Insurance and Occupational Pensions Authority, 2024 and the Securities Exchange Commission, 2025). These dynamics have prompted investors to rethink their investment strategies and reconsider their direct exposure to equities, underscoring the growing importance of having easy to access equity markets.

According to the World Federation of Exchanges (2025), there are currently 54,634 different companies listed on one or multiple stock exchanges. Stock exchanges offer these publicly-listed companies a venue to raise capital and open up their investor base to retail and institutional investors alike. Some publicly-listed companies have a low nominal stock price and are easy to trade, while others have large stock prices, sometimes in the thousands of dollars or euros, or have very illiquid equity, rendering it virtually impossible for market participants to invest in them after the initial listing on the exchange.

One way publicly-listed companies can prevent this and contribute to an accessible equity market is to split their stock. In this paper, I argue that companies ought to do so to foster a more diverse, inclusive, and efficient equity investor ecosys-

tem. To support this claim, I proceed as follows. First, I highlight the public nature of stock exchanges and argue that the assets traded on their venues should be accessible to all market participants. Next, I use this underpinning to argue that whenever companies are listed on a stock exchange, they become responsible for developing such a market environment and hence should divide their equity for two related yet separate reasons:

(1) to make the shares affordable, particularly for retail investors;
(2) to improve market liquidity, particularly for institutional investors.

Finally, I address two potential concerns and two alternative solutions.

Financial marketplaces

Markets connect buyers and sellers. They are a place where people come together to trade goods, services, real estate and commodities. Some markets are private while others are public. Private marketplaces are exclusive venues. They require a membership, a license, or set a minimum entry fee so that only a select group has access to what is available on that market. Public marketplaces are more democratic in nature. They aim to attract as many participants as possible and make their venue accessible for anyone interested in the assets on offer.

Stock markets are a specific kind of marketplace dedicated to the purchasing and selling of equity. Equities are also often referred to as stocks or shares and entitle the owner to a proportion of the company's assets and profits. The transfer of these ownership rights from seller to purchaser can either be done over-the-counter (OTC) in a multilateral trading facility (MTF) or via a stock exchange. Both types of venues bring buyers and sellers together, whether companies issue shares to raise capital or buy back shares from the market (issuer - investor), or investors trade the stock amongst themselves (investor - investor).

MTFs as private marketplaces

The main difference between the two marketplaces is that MTFs are tailored to large institutional investors and require a membership subscription. Only member institutions have access to the pool of equity assets available, generating trading volumes which are only revealed to non-members and the broader market after execution; so-called dark pools of market liquidity (see Bloomfield, O´Hara, & Saar, 2015; Halim et al., 2023; Ibikunle et al., 2021 for a more detailed discussion). Major platforms include Turquoise, Aquis, SIGMA X and Liquidnet.

These MTFs are mainly devised for institutional investors to execute block trades, which are so substantial they could possibly change the security's price before the trade has occurred. When made visible to the market, other market participants could possibly move the price at which they are willing to sell or buy up or down, cognizant that there is a big supplier on the other side of the trade regardless (Neumeier et al., 2023). Under the 2015 and 2021 Markets in Financial Instruments Directives (MiFID) issued by the European Securities and Markets Authority (ESMA), stock exchanges must publish the best bid and ask in the order book and can disclose these incoming block trades prior to execution. To counterplay this market dynamic, MTFs are, however, exempt from offering this level of pre-trade transparency in such cases, which makes them an attractive alternative for institutional investors which need to carry out large-in-scale transactions (Degryse, de Jong, & van Kervel, 2015; Degryse et al., 2021).

Since MTFs are targeted at institutional investors, the total licensing costs are considerable. Although the annual membership fees for most MTF platforms are discretionary and vary depending on the type of membership and services required, they usually range from a few thousand to tens of thousands of euros, pounds or dollars. At Liquidnet (2024), for example, the annual connectivity fee is £10,000 for its European Equity MTF, while the membership fees at Aquis (2024) rise as high as £120,000 to route orders on its Aquis Exchange UK, Aquis Exchange Europe and Aquis Stock Exchange dark trading venues.

Stock exchanges as public marketplaces

It seems that stock exchanges, on the other hand, embody the features of a public marketplace. They are accessible to a broader spectrum of participants, not only large institutional investors but also smaller market participants, and specifically retail investors. It is important to note here that whenever I refer to a stock exchange I mean the electronic platform on which the equities are traded on, not the companies operating these platforms. In fact most stock exchange companies have MTFs to manage large incoming orders and create these dark pools of liquidity. The London Stock Exchange Group (2025a) has Turquoise, Euronext (2025a) has Euronext Mid-Point Match, and Deutsche Börse Group (2024) has Xetra Midpoint.

The public nature of stock exchanges is exhibited in three distinct ways when compared to MTFs. Firstly, retail investors are indirectly connected to the major stock exchanges through an extensive network of online brokerage

and trading platforms or applications designed by commercial banks. This opens up investment opportunities which otherwise would have been unavailable for them or would have had to be performed under less favorable OTC conditions. Compared with MTF fees, those commissioned by retail brokers and commercial banks are much lower in absolute terms. Unlike the fee structure for MTFs, online broker applications such as InteractiveBrokers (2025a), Fidelity Investments (2025a), Charles Schwab (2024), Webull (2025a), and DeGiro (2024) charge a few dollars or euros commission fee per transaction, allowing retail investors to invest relatively small amounts in the stock market without costs heavily weighing on investment returns. In addition, opening the brokerage account itself often does not come with any additional charges or require investors to commit a minimum amount to the account.

Secondly, stock exchanges must report several key data points free of charge to foster market transparency (ESMA, 2021; see also EuroCTP, 2025; FCA, 2023). This helps to reduce the information barrier to enter the marketplace. ESMA's MiFID (2015, p. 3) requires exchanges to "make public the current bid and offer prices and the depth of trading interests in respect of shares admitted to trading." Key data points include the best bid and ask, its spread and the daily trading volume. This transparency enables market participants to better assess the liquidity risks they are exposed to or will take on and compare order prices.

Although MTFs are in general also subject to these regulations, waivers apply for a range of order types, including block trades (for a full list, see ESMA, 2015; 2021). To access this kind of information from MTFs, market participants would need to pay for an often costly proprietary data feed. But even trades processed on MTFs which are subject to these transparency rules require sophisticated IT infrastructure to source, cleanse and analyze data which boutique investment firms, smaller asset managers, and retail investors do not always have the resources to access. This information transparency gap again illustrates how MTFs are more exclusive in nature than traditional stock exchanges.

Lastly, my argument that stock exchanges reduce the cost of entering equity markets and should consequently be thought of as public marketplaces is supported by the fact that regulators in the UK (the FCA) and the EU (the ESMA) are seeking to launch a data feed which collects these key pricing and volumes data points from all stock exchanges. They are seeking to create a single source of accurate market data essential for trading, because they recognize that not having access to this kind of information can constitute a barrier to entry for retail investors

who may wish to trade equities but cannot afford the data and necessary IT infrastructure (see FCA, 2023, p. 71). For this reason, the EuroCTP, (2025, section 6), which facilitates this project on behalf of the ESMA, has announced that such a consolidated tape must be affordable for its users and "will be provided to retail investors at no cost, which will support the participation of retail investors in the financing of the European economy." The consolidated tape for equities is expected to go live in the third quarter of 2025 in the EU, while the FCA has yet to officially commit on a timeline.

The problem of accessibility

If I am right in claiming that stock exchanges should be considered public markets, this would imply that the assets on offer (corporate shares in the context of this paper) should be accessible for all. Everyone who wishes to buy or sell a stock from a publicly-listed company should be able to do so in a reasonably easy way:

Premise 1: Public marketplaces should be venues where trading assets are accessible

Premise 2: Stock exchanges should be treated as public marketplaces

Conclusion 1: Stock exchanges should be venues where trading assets are accessible

Premise 3: The shares of publicly-listed companies are traded on a stock exchange

Conclusion 2: The shares of publicly-listed companies should be accessible

However, accessibility has a different meaning for different participants: for retail investors it is predominantly lowering the nominal share price and for institutional investors it is increasing market liquidity. I expand on this in the following sections, and argue that a stock split can accommodate both needs.

Being an accessible market means having an environment where everyone can participate fully, irrespective of the size of their financial resources. One important facet of this is how easy it is to exchange something and remove any arbitrary conditions which prevent market participants from buying or selling. These arbitrary conditions are avoidable or at least reducible to the extent that they do not bar market participants so much from trading and are not in any way intrinsically connected to the value of what is on offer. I see two such conditions for equity investors: the nominal value of the share and the liquidity of the share.

The nominal price of a single share can sometimes be in the thousands of dollars or euros. A single share of the US homebuil-

der NVR would have cost an investor $8,200.56 on 26 January 2025 (Nasdaq, 2025). On the same date, a share of the pharmaceutical company AstraZeneca PLC would have cost £11,050.00 (The London Stock Exchange, 2025b) and a share of Lotus Bakeries, a Belgian cookie company (Euronext, 2025b), would have cost €10,100.00. Some may intuitively feel that saving this amount of money to invest will be challenging for most individuals. Data on the average household income and personal savings rate across the US, the UK, and the European Monetary Union supports this view.

Accessibility for retail investors

For example, according to data from the Federal Reserve Bank of St. Louis (2024) and the Bureau of Economic Analysis (2024), the average American saves 3.5% of their yearly disposable income, which in absolute figures amounts to a total of $2,174.97. In the UK, households save on average £5,403 every year. The median savings per year is £2,160, meaning that half of all households save more and half of them save less (Yurday, 2024). Based on the latest report from Eurostat (2023a; 2023b), the annual median household savings in the European Monetary Union was approximately €2,300 in 2023. Considering these savings totals and assuming households are willing to commit all their savings, it would take the average person at least four to five years to make an investment in any of these companies, which in financial markets where securities' prices move up and down in a split-second means a lifetime.

Often, retail investors with a long-term investment horizon want to invest in companies which have a high nominal share price. These stocks are attractive because they have achieved these high prices thanks to their consistent performance and continued growth. Over the past 20 years, NVR's share price has surged from $1,200 to $8,200.56 (Nasdaq, 2025). Meanwhile, AstraZeneca PLC's share price has quadrupled (The London Stock Exchange Group, 2025b), and Lotus Bakeries' share price has increased tenfold (Euronext, 2025b), all excluding dividend payments. Yet if retail investors miss the opportunity to invest early, high nominal stock prices can become a barrier, limiting the wider public's ability to participate and benefit from future gains (Da, Fang, & Lin, 2024; Gempesaw, Henry, & Velthuis, 2022; Sandhu, 2022).

Benefits of stock splits for retail investors

A stock split would be an evident solution for this problem. After all, it is a corporate action specifically

designed to make shares more affordable without changing the total value of the company (see Dennis & Strickland, 2003; Pandow & Ganai, 2023). In a 10-for-1 stock split, for example, each shareholder receives an additional nine shares for every share they already own, effectively increasing the number of shares tenfold while equally reducing the price per share by ten. Nvidia (2024, section 6), for example, announced such a 10-for-1 stock split at the end of May 2024 precisely "to make stock ownership more accessible to employees and investors." The nominal value of Nvidia's share price consequently dropped from about $1,200 a share to $120.

As a point of reference, I recommend the price of a single share to stay below the monthly median savings amount of the country where the company's stock is listed. In most countries salaries are paid monthly. Furthermore, many people make monthly contributions to their savings which would allow them relatively easily and within a reasonable timeframe to buy the shares. Using the figures mentioned earlier, the threshold would be $181.25 in the US, £180 in the UK, and around €191.67 in the European Monetary Union. Nevertheless, it remains to be seen how this would unfold in practice and if it had the desired effect of generating more direct investments in companies with high nominal share prices by retail investors. For example, in volatile markets, when share prices fluctuate heavily, the thresholds outlined above could be crossed but revert back within a few days, essentially making the stock split unnecessary in hindsight. For this reason, one may need to add a time qualifier, because what I have in mind here are sustainable breaches of the share price threshold level. Recent research does, however, seem to suggest that low price anchors foster retail ownership (Cox, Van Ness, & Van Ness, 2022; Sandhu, 2022).

One might question whether a market price is truly an arbitrary condition. For instance, when someone wishes to buy a car, the market price is what it is. It does not necessarily follow that car prices must come down because some otherwise could not afford one. Critics could reason that the price is linked to the asset itself and determined by supply and demand.

Unlike physical or material assets such as cars, company shares are dematerialized and underpinned by a certificate which reflects the market value of a company. Company shares do not physically embody the value of the company but merely symbolize and represent it. This dematerialized nature allows for the division of shares into smaller units while retaining the total market value of all the shares combined. For material assets, the price is inherently tied to the asset itself. Splitting it into smaller parts would affect its functionality and total worth. Either you

purchase the car for a given price, or you do not. All else being equal, the flexibility of certificates to decouple an asset from its market value ensures that ownership rights can be further distributed without changing the market value of the asset the certificate corresponds with, thus turning market price in effect into an arbitrary condition.

Benefits of stock splits for institutional investors

Stock splits can also be beneficial to institutional investors: several studies have shown that stock splits boost the liquidity of the shares in a sustainable way across stock markets (See Pandow & Ganai, 2023 for the Chinese market; Thakkar, Chowdhury, & Jha, 2019 for the Indian market; Tuominen, 2023 for the UK market; and Dennis & Strickland, 2003 for the US market). Liquidity is crucial for institutional investors such as mutual funds, pension funds, and hedge funds, because it reduces costs. After a stock split, more shares circulate in the market which narrows bid-ask spreads (Adhiendy & Arifin, 2017; Gorkittisunthorn, Jumreornvong, & Limpaphayom, 2006; Putri & Sihombing, 2020; for exceptions see Conroy, Harris, & Benet, 1990; Gray, Smith, & Whaley, 2003). With a narrower spread, the cost of buying an asset and immediately selling it (or vice versa) is reduced. This is a significant benefit for institutional investors which trade large volumes (Degryse, de Jong, & van Kervel, 2015; Degryse et al., 2021). Higher levels of liquidity are especially important in volatile markets. It means investors can adjust their portfolios more rapidly and less expensively in changing market conditions and manage their exposure to market risk more effectively (Neumeier et al., 2023).

Liquidity mitigates trade risk in another way as well. In more liquid markets, institutional investors can enter and exit positions more easily without causing significant price movements (see Degryse, de Jong, & van Kervel, 2015; Degryse et al., 2021; Neumeier et al., 2023). If a share becomes more liquid, institutional investors can more reliably split their large block trade into smaller tranches. This is because they are more confident that there are sufficient parties on the other side of the trade. When their tranched orders are less exposed to the rest of the market, it becomes less likely that other market participants will move the market against them, lowering trade risk and reinforcing price stability in equity markets.

Lastly, making shares more liquid diminishes settlement risk. When there are more shares of a security available in the market, it is less challenging to borrow them if the seller does not have a sufficient amount by the agreed settlement date (Baig et al., 2022). In an interconnected mar-

ket such as the equity market, this avoids late settlement fees for the responsible party and facilitates the onward delivery of shares, preventing breaks in the settlement chain from cascading down to other trading flows.

Market regulators and liquidity benchmarking

Market liquidity is not only important for institutional investors but also to regulators. As already mentioned, the liquidity of securities matters for the proper functioning of the whole market. For this reason, regulators restrict how much capital institutional investors can allocate to illiquid investments. The U.S. Securities and Exchange Commission (2025), for example, requires fund managers to report any illiquid assets whenever their allocation to such investments exceeds 15% of their total portfolio, and present a plan to bring the proportion back below the threshold within 30 days. Likewise, the European Insurance and Occupational Pensions Authority (EIOPA) (2024, p. 37) imposes, in combination with national regulations, several requirements "to ensure the liquidity of the investment portfolio", including the calculation and monitoring of multiple liquidity metrics for every single position, and limiting investments in illiquid assets as a percentage of the portfolio's total value (for the complete list, see pp. 37-40). These allocation restrictions prevent institutional investors from investing in more companies with illiquid equity or increasing their stakes in existing positions.

It seems a good starting point to look at what indicators public stock exchanges use to measure and score a company's liquidity, given that companies assume public responsibility whenever they raise funds through a stock exchange. Ultimately, it is their decision to be listed on a stock exchange and attract capital from investors in this way. Public stock exchanges often rely on the daily traded volume to determine if a stock is sufficiently liquid to be eligible for inclusion in a country's reference index. To be considered in the reference indices of Belgium (BEL 20), the Netherlands (AEX 25), or France (CAC 40) the trading volume "should represent at least 25% of the total number of listed shares [...] calculated over the course of the full 12 months" (Euronext, 2018, p.9; 2023, p.4; 2024, p.4). With a threshold of 10%, the benchmark of Germany's largest corporations (DAX 40) is less stringent (Deutsche Börse Group, 2022, pp. 83-85).

Other markets use relative calculation methods to decide whether a company's equity is sufficiently liquid. For example, to be eligible for Austria's reference index (ATX 25), "the stock exchange trading volume in money (average daily trading volume) [...] must be among

the 25 most actively traded stocks [...] in the market" (Wiener Börse, 2022, p. 6), while in the Polish reference index (WIG 20) companies in the last quartile are excluded (GPW Benchmark, 2021, p. 1).

My suggestion is that companies should aim to meet the liquidity thresholds of the market on which their securities are traded or markets with relative standards to rank as highly as possible . As a guideline, companies listed on the Belgian stock exchange should align their stock split policy with the liquidity requirements of the Belgian reference index, companies listed on the German stock exchange with those of the German reference index, and so on.

Having presented my theoretical framework, the final sections below address two potential concerns and two alternative solutions.

What about company ownership?

First, one might wonder if creating extra rules for how companies should manage their equity on stock exchanges merits regulatory intervention in companies' stock management policy and in the markets on which they are listed. Is this not a decision which should be left to the company's board and its private shareholders?

From the moment companies decide to become publicly-listed, they assume a public responsibility to ensure transparency, fairness, and stability in the market. A mandatory stock split is one such intervention designed to foster a stable and efficient market environment. By lowering the price per share, a stock split makes shares more accessible to a broader range of investors, thereby attracting more participants to the market. This also facilitates smoother and more frequent exchanges among market participants. Ultimately, such measures serve as self-protecting mechanisms for the market, promoting its overall health and resilience.

This does not need to imply that companies lose complete ownership over their equity. Companies can still choose whether to become publicly-listed, and if so on how many exchanges. However, once they decide to do so, they should ensure their equity remains accessible. Failing to do so would be problematic. It would exclude certain market participants from the marketplace, based on current conditions, the nominal price and the liquidity of shares, which are beyond their control and can change considerably during a company's lifetime on a stock exchange.

One might also consider the implications for companies listed on multiple exchanges. Such companies often trade at a different nominal share price and sometimes do

not have the same liquidity between listings.

What about multi-listed securities?

For instance, on 26 January 2025, Shell's shares traded at €31.29 on the Amsterdam Stock Exchange (Euronext, 2025c) and at £2,620.00 on the London Stock Exchange (The London Stock Exchange Group, 2025c). In my view, securities should be accessible on all exchanges where they are listed. This approach avoids additional costs for local investors.

Imagine a British retail investor who wishes to purchase £500 worth of Shell shares. Because of the high nominal price of the shares listed on the London Stock Exchange, they would need to do so on the Amsterdam Stock Exchange. But this would presuppose that their broker had a link to the Amsterdam Stock Exchange (which is not necessarily the case). Furthermore, they would incur extra costs for converting pounds into euros and any dividend payments would be subject to double taxation, a foreign and a domestic tax. If Shell shares were priced the same on the London Stock Exchange, these extra costs would not exist. To develop a more robust and resilient financial system, the aim should be to enhance accessibility and efficiency across all public equity markets, not just a single market.

What about fractional shares?

Are there more adequate options to alleviate this problem of accessibility to equity markets? Some might think that fractional shares would be a good alternative to my proposal (see for example Da, Fang, & Lin, 2024; Gempesaw, Henry, & Velthuis, 2022). Fractional shares allow investors to buy a percentage of a stock instead of purchasing the full share. However, while a step in the right direction, fractional shares have their own challenges and limitations. For a start, not all brokers offer fractional shares, and when they do, they are mostly only available for US listed companies, which limits accessibility for investors. From the five retail broker platforms mentioned earlier, InteractiveBrokers (2025b) offers fractional shares for eligible European and US stocks on the platform. The other platforms do not provide such a service (DeGiro, 2025) or only offer a selected list of US stocks (for example, Charles Schwab, 2025; Fidelity Investments, 2025b; Webull, 2025b).

Additionally, fractioning shares can create significant operational challenges for broker-dealers. These include bundling fractional shares to place full orders, managing bookkeeping, and handling account transfers. Brokers also need to accumulate enough fractions to buy a full share in the market, which can fur-

ther delay transactions and increase trade and settlement risk. Beyond these practical objections, there is a principled reason against relying on fractional shares. As previously mentioned, the responsibility for managing a company's stock should lie with the company itself, not the broker-dealers. It is companies which decide to attract capital from the public and become publicly-listed. Shifting this responsibility to broker-dealers would result in holding the wrong party accountable for a sound management of publicly-listed company stock.

What about secondary public offerings?

Others might think that secondary offerings were another solution (see for example Denis, 1994; Eckbo, Masulis, & Norli, 2009). Companies issue additional shares at a different price point after the initial capital raise. At first glance, secondary public offerings seem to provide comparable advantages to a stock split, with the added benefit of the company's board and its private shareholders retaining more control over the company's equity. The additional shares flowing into the market can attract new investors and in this way increase the stock's liquidity. This alternative might appear even more appealing when the price of the secondary offering is set below the price threshold, as outlined in the previous section, thereby opening up the public equities markets to retail investors. The problem, however, is that since these new issues are offered at a different price, the company's total market value changes.

To understand this problem in more detail, one needs to distinguish between two types of secondary offerings: non-dilutive and dilutive ones. Non-dilutive secondary offerings are where unlisted shares are for sale on the public exchange, while dilutive secondary offerings are new shares created to raise extra capital for the company.

For non-dilutive secondary public offerings, there are four possible scenarios, each with their challenges:

(1) the secondary offer does not match the existing market price of a single share and exceeds the minimum price threshold
(2) the secondary price offer does not match the existing market price of a single share and does not exceed the minimum price threshold
(3) the secondary offer matches the existing market price of a single share and exceeds the minimum price threshold
(4) the secondary offer matches the existing market price of a single share and does not exceed the minimum price threshold

Scenario 1 is the most obviously problematic in the context of this

paper. The offer price may prove to be too high for retail investors, barring them from participating in the secondary offer.

There are still issues, even if the offer price stays below the price threshold, as in Scenario 2. The secondary offer can in practice be treated as an exceptionally large order, influencing market prices. While there are good reasons for companies to issue additional shares, for instance for early investors to realize gains, it makes less sense as a measure to open up public equity markets for a broader investor base. The idea is to lower the barrier to entry to the market, not to interfere in the actual price making process and change market dynamics, something which secondary offerings inevitably do when they put shares on sale at a price different from the current market price.

Scenarios 3 and 4 seem unlikely because market prices move constantly and therefore rarely match public offerings. However, they most closely resembles a stock split. In these scenarios the total company's market value would stay the same. Scenario 3 can be discarded for the same reason as Scenario 1: the affordability of the shares for retail investors. But in Scenario 4, stock splits are the preferred solution because secondary market offerings hinge on the willingness of private investors to sell off a stake. Forcing them to do so to create additional liquidity and make public equity markets more accessible would clearly infringe their ownership rights.

Dilutive secondary offerings have one further drawback. By creating new shares, existing investors see their shares being diluted, reducing their stake and profits per share. With stock splits, the share of ownership remains unchanged, which leads me to conclude that they should be the preferred way for companies to make public equity markets accessible.

Conclusion

This paper argues that companies which have issued shares on a stock exchange ought to contribute to more diverse, inclusive, and efficient equity markets by dividing their stock. On the one hand, stock splits can democratize investment opportunities, allowing more retail investors to participate in the market as they seek to create an extra source of income. On the other hand, stock splits enhance a security's liquidity, providing institutional investors with investment opportunities which were previously deemed too illiquid and reducing trade and settlement risk. Embracing the practice of stock splits reflects a commitment from publicly-listed companies to social responsibility and the long-term health of public equity markets.

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