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Bridging the Capital Market Gap between Europe and the United States of America

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Main Contribution

This thesis presents an analysis of the capital markets gap between Europe and the United States, exploring its dimensions, underlying causes, and potential pathways for bridging this divide. The research highlights a significant disparity between the two regions in both public and private capital markets, with U.S. markets outperforming in terms of size, liquidity, and efficiency. Several critical factors contribute to Europe's lagging market performance, including regulatory fragmentation, limited technological innovation, and a conservative investment climate.

The study underscores the advantages of the U.S. capital markets, which benefit from a more integrated market structure and a regulatory framework conducive to dynamic market participation. In contrast, Europe's approach, characterized by cautious regulatory practices and market fragmentation, has hindered its market performance. The research provides an examination of the main strategies currently in place to mitigate these disparities, focusing particularly on the European Union's Capital Markets Union (CMU). The CMU initiative, designed to foster greater market integration and improve access to capital across the EU, is evaluated for its strategic goals, challenges, and effectiveness.

Despite the CMU's strategic importance, the study finds that its implementation has faced several obstacles, preventing it from fully achieving its objectives. These challenges include political resistance from member states, insufficient regulatory harmonization, and varying levels of market development across the region. The research suggests a need for a more focused and pragmatic approach to the CMU, advocating for clearer goals, well-defined timelines, and enhanced collaboration among EU member states.

The conclusion of this thesis offers several policy recommendations aimed at enhancing the competitiveness of European markets. Key proposals include incentivizing private pension contributions to increase investment capital and adopting successful models, such as France's "Tibi" initiative, to stimulate investments in technology-driven sectors. The study underlines the necessity of a coordinated policy framework that addresses both regulatory reforms and promotes technological innovation to close the capital markets gap and strengthen Europe's economic position on the global stage.

By providing a thorough analysis of the current state of capital markets in Europe and the U.S., this research aims at contributing to the current debate concerning structural reforms needed to boost Europe's economic resilience and competitiveness.

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CHAPTER 1: INTRODUCTION

1.1 The Puzzle

Since 2008, a pronounced divergence in economic growth has increasingly characterized the economies of the European Union (EU) and the United States of America (USA). Until 2008, these economies were closely matched in size, with the EU's economy valued at approximately \$16.2 trillion and the USA's at around \$14.7 trillion. However, by 2022, this parallel trajectory had shifted dramatically. The US economy expanded to reach \$25 trillion, while the EU, even with the inclusion of the UK, grew to only \$19.8 trillion.

Excluding the UK, the US economy is now nearly 50% larger than that of the EU. This gap is even more stark when considering GDP per capita growth over the last 12 years, which was 19.2% in the USA compared to just 7.6% in the EU. This growing disparity has widened further following each economic crisis, leading to a situation where GDP per capita in the EU is roughly half that of the US. Moreover, when adjusted for purchasing power, the average income in the US exceeds that of the Eurozone by more than 20%.

This substantial economic divergence has prompted numerous scholars, experts, and policymakers to analyse the underlying causes and to reconsider the competitiveness of the European Union's economy. A critical area of focus in these discussions is the role of capital markets, which are essential for economic vibrancy and growth potential.

Capital markets facilitate the efficient allocation of financial resources, drive investments in innovation, and support overall economic stability. In the United States, the capital markets are characterized by their high liquidity, broad investor participation, and a dynamic environment that fosters substantial economic growth and adaptation.

In contrast, the European capital markets are hampered by fragmentation, regulatory diversity, and limited integration across national borders. These challenges have curtailed the growth and efficiency of European markets, contributing significantly to the broader economic disparities with the United States.

For instance, while the market capitalization of the S&P 500 in the US has surged to about \$38 trillion, tripling in value over a decade and a half, Europe's Stoxx Europe 600 index has remained relatively stagnant, its original value in 2008, at around \$13 trillion.

Moreover, the impact of the technological sector on public markets significantly underscores this divergence. In the US, public markets have provided robust support for high-growth tech firms, leading to significant market gains and fostering substantial contributions to the economy. Conversely, Europe's slower growth in tech industry, reflected in its public markets, further amplifies the gap between the EU and US capital markets.

The disparity extends into private markets as well, where the U.S. demonstrates a more vibrant and accessible ecosystem for venture capital and private equity, crucial for boosting start-ups and scaling businesses. This dynamic private market facilitates rapid technological innovation and economic scalability, highlighting a stark contrast to Europe's more conservative and fragmented landscape. This environment restricts not only technological advancement but also the broader capacity of private markets to contribute effectively to economic growth.

Addressing these disparities requires a comprehensive understanding of the factors at play and a concerted effort to implement strategic reforms.

1.2 Scope of this study

The scope of this study is to contribute to the above mentioned debate on the causes and consequences of the growing capital markets gap .

This study encompasses a comprehensive examination of the divergences between the capital markets of Europe and the United States (US), with a specific focus on their impact on economic growth and competitiveness. This research aims at quantifying such divergences and at identifying some of the underlying causes of these differences. Moreover this study assess their implications, and proposes targeted policy recommendations to bridge the gap.

By exploring various facets of capital market structures, including both public and private sectors, this study seeks to offer a holistic view of the financial landscape in these two major economic powerhouses.

1.3 Research questions

This work will be driven by three main questions:

RQ1: What is the magnitude of the gap in capital markets, both private and public, between the Europe and the United States? What trends characterize these disparities?

RQ2: What factors contribute to the observed disparities in capital markets between these regions?

RQ3: What strategies are being implemented to reduce the gap in capital markets and how are they performing? What other strategies could be implemented?

1.4 Methodology and Data

The methodology of this study employs a comprehensive approach to examine the divergences between the capital markets of Europe and the United States, focusing on their impact on economic growth and competitiveness. The primary data sources include a wide range of public

financial records, market reports, and databases that provide insights into market capitalizations, investment trends, regulatory frameworks, and economic indicators from both regions.

The research relies on quantitative data to measure the magnitude of the gap in capital markets, analysing trends over a decade. Data points such as market capitalization, total deal volumes in private equity, and number of initial public offerings (IPOs) are examined. This data is sourced from recognized financial and economic databases.

The study employs a comparative approach to identify the structural and performance-related differences between the Europe and US markets. This work relies on data from the region of Europe and not specifically from the European Union, unless otherwise stated. This decision is driven by two primary considerations. Firstly, the availability of comprehensive data sets specifically for the European Union is limited; most of the accessible databases provide information on a broader European region, encompassing more countries than the EU alone, especially the United Kingdom. Secondly, the recent exit of the United Kingdom from the European Union significantly impacts the volume and relevance of available data. Excluding the UK from the analysis would substantially reduce the data pool and potentially skew the insights regarding market dynamics and economic trends in the region. Therefore, to maintain robustness and breadth in our analysis, it was deemed appropriate to include data pertaining to the entire European region, thereby ensuring a more comprehensive evaluation of the capital markets across Europe. Nevertheless, across the comparative study, in chapters 2 and 3, some specific considerations are made on the European Union.

1.5 Structure

The structure of the work is organized into six chapters. Following this first introductory part, chapter two focuses on public markets, examining their importance, the divide between the USA and Europe, the role of pension funds, and the overall market structure. This chapter outlines the substantial impact of public markets on economic stability and innovation, particularly highlighting the differences in market dynamics and regulations between the two regions.

Chapter three shifts focus to private markets, discussing their critical role in economic development and comparing the venture capital and private equity landscapes in Europe and the US. This chapter provides an analysis of the factors contributing to the vibrancy of the US markets compared to the more fragmented and conservative European markets.

Chapter four, dedicated to the Capital Markets Union (CMU), assesses this pivotal EU initiative aimed at bridging the gap by enhancing market integration and accessibility. It critically analyzes the CMU's effectiveness and the ongoing challenges in achieving its goals.

The fifth chapter offers policy recommendations based on the findings from the previous chapters. It suggests actionable steps for the European Union to enhance its financial markets' competitiveness and efficiency, aiming to reduce the observed disparities with the United States.

Finally, the sixth chapter highlights the conclusions of this work.

CHAPTER 2: PUBLIC MARKETS

The second chapter of this research is dedicated to public markets.

Public markets, also known as financial markets, are platforms where securities such as stocks, bonds, and other financial instruments are bought and sold. These markets are crucial for efficient capital allocation, providing liquidity, and facilitating price discovery. According to the U.S. Securities and Exchange Commission (SEC), public markets allow for the trading of securities in a regulated and transparent environment, ensuring that prices reflect the collective actions of buyers and sellers based on available information.

Public markets include major stock exchanges like the New York Stock Exchange and NASDAQ in the United States of America (USA) or Euronext Paris, Milan or Amsterdam in the European Union. In such exchanges a variety of financial products are traded openly by a diverse range of investors, from individuals to large institutional investors.

This chapter will first outline why public markets are important for the economy and for society. Then, the divide between the USA and Europe, with a specific focus on EU countries, will be explored as well as some of the causes for this divide. Lastly, common trends in public markets will be analysed.

2.1 Why are Public Markets important?

Public markets are essential in the economic framework, serving as key mechanisms for capital allocation, risk management, and innovation facilitation, especially in advanced economies such as the United States and the European Union. These markets play a significant role in channelling savings into productive investments as shown by the development of stock markets closely linked with economic growth. Studies have demonstrated a positive correlation between market development and economic performance, particularly in the U.S., where capital markets are characterized by high liquidity and broad market participation. This supports dynamic economic activity by efficiently allocating resources (Bekaert & Campbell, 1998).

However, European markets often encounter challenges such as fragmentation and regulatory diversity, which can impede the efficient allocation of capital. This has historically restricted their growth compared to the U.S., where a centralized financial system provides a more conducive environment for large-scale investment and economic expansion (Boubakari & Jin, 2010).

Public markets also distribute risk and enhance financial stability. In the U.S., the diversity and maturity of financial instruments help spread financial risks, increasing the financial system's resilience to economic shocks. The U.S. Treasury markets, known for their depth and liquidity, offer a reliable haven for global investors during periods of economic uncertainty, allowing for

quick adjustments to new information and helping maintain stability without causing significant price fluctuations (Bekaert & Campbell, 1998).

European markets, however, show vulnerabilities due to less integrated financial systems. The variability in market development across EU member states can lead to uneven responses to economic pressures, complicating the collective financial stability of the region (Boubakari & Jin, 2010).

Additionally, public markets are crucial for innovation, particularly through funding technology-driven firms. The NASDAQ in the U.S. illustrates how public markets can sustain the development of the technology sector by providing robust funding avenues for startups and established tech giants alike, propelling the U.S. to a leading position in global innovation, particularly in the tech industry (Bekaert & Campbell, 1998).

The maturity and depth of public markets contribute significantly to financial stability. In the U.S., diverse financial instruments and a wide investor base help distribute financial risk, thereby enhancing the resilience of the financial system to shocks. The U.S. Treasury markets, known for their depth and liquidity, are a prime example, providing a safe haven for global investors in times of economic uncertainty. Liquid and efficient markets also enhance stability by allowing for quick adjustments to new information without large price fluctuations (Bekaert & Campbell, 1998).

Europe, while having made significant strides, still shows signs of susceptibility due to less integrated financial markets. The varying degrees of market development across member states can lead to disparate responses to economic shocks, complicating the collective financial stability of the EU (Boubakari & Jin, 2010).

Public markets also serve as a catalyst for innovation, particularly through the facilitation of venture capital and the funding of technology-driven firms. The NASDAQ in the United States is a testament to how public markets can support the technology sector by providing a robust funding avenue for start-ups and tech giants alike. This market dynamic has propelled the U.S. into a leading position in global innovation, particularly in the tech sector (Bekaert & Campbell, 1998). Efficient capital markets are not only about providing funding but also about reducing the cost of capital, thereby encouraging more investment in innovative projects

Europe has seen similar benefits, with public markets like the Euronext fostering start-up growth through initiatives like the Tech40 index, which supports innovative tech companies in raising visibility and capital.

2.2 The divide in public markets

The public market landscape significantly illustrates the expanding disparity between the United States and Europe, a gap that has notably widened since the Global Financial Crisis (GFC) of 2007. Initially, the aggregate valuation of the S&P 500, a principal index of the U.S.

market, was approximately \$14 trillion, closely mirroring the \$13 trillion total value of Europe's top 600 companies within the Stoxx Europe 600. However, post-GFC, a pronounced shift occurred. The valuation of the S&P 500 escalated to an impressive \$38 trillion, effectively tripling its worth in just over a decade and a half. Conversely, the valuation of the Stoxx Europe 600 remained relatively stagnant (Allianz Research, 2024). This divergence is also mirrored in the pricing trends of each index.

The trajectories of the public markets in these two economic powerhouses are increasingly diverging, not only in terms of valuations but also in aspects such as Initial Public Offerings (IPOs) and market capitalization relative to GDP. Historically, the number of IPOs in the European Union was very similar to those in the U.S., suggesting a vibrant market on both sides of the Atlantic. However, this parity has shifted, with the EU's number of IPOs now less than half of those in the U.S. Moreover, in terms of market capitalization relative to GDP, the U.S. stock market now more than doubles that of the EU, which also lags behind Asia (Final report of the Technical Expert Stakeholder Group on SMEs, 2021).

The decline in the vibrancy of European public equity markets is further exemplified by the decreasing number of listed companies within the EU. From 2010 to 2018, the total number of listed companies on both main and junior markets in the 27 member states dropped from 5,414 to 5,024, indicating a contraction of approximately 17% over just over a decade (Oxera Consulting LLP, 2020). This modest yet significant reduction highlights broader challenges in maintaining a dynamic ecosystem for public companies in European markets.

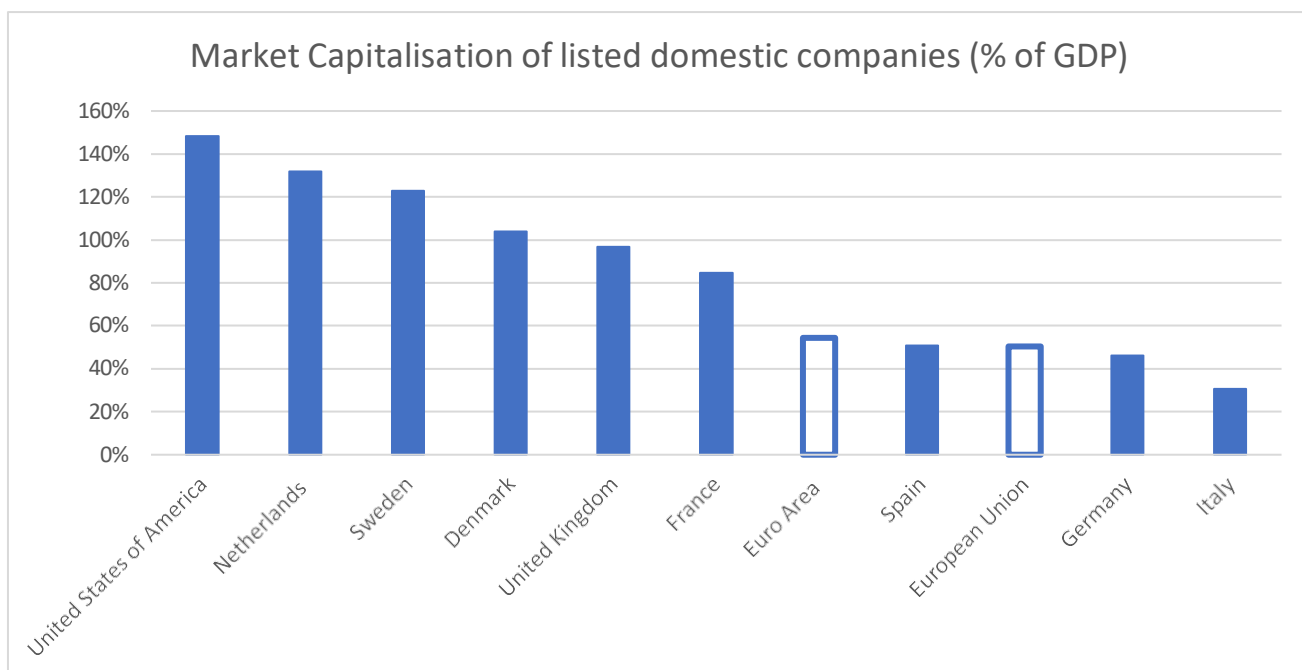
These disparities carry profound implications for businesses, investors, and policymakers. For European businesses, the stagnation in market value and reduced number of IPOs may signal constrained avenues for capital, potentially limiting growth and innovation. For investors, the diminished prospects for substantial returns in European public markets might encourage capital diversion towards more dynamic ecosystems like those in the U.S. or Asia, impacting productivity and wage growth across the region.

In response to these issues, it is crucial to delve deeper into the underlying causes of the divergence in public equity markets, focusing on factors such as the role of pension funds, market structure, and the influence of rapidly growing tech companies.

2.3 The role of Pension Funds

Despite the generally smaller scale of public equity markets in Europe compared to the United States, there is significant variation among European nations. Figure 1 illustrates the size of public equity markets across selected countries, quantified by the market capitalization of listed companies as a percentage of their GDP:

Figure 1



Data: World Bank and CEIC, 2019.

The Euro Area averages a market capitalization equivalent to 54% of GDP, while the United States stands out prominently at the top of the list with a market capitalization amounting to 148% of GDP. In stark contrast, Germany and Italy, two of the three largest European economies, both register below 50%. France, while performing well in comparison to its European counterparts with a market capitalization at 85% of GDP, still trails the United States by nearly 65 percentage points (OECD, 2019).

Among the European countries depicted in figure 1, those with more developed public equity markets relative to the size of their economy also boast well-established private pension and insurance systems. Notable examples include Denmark, the Netherlands, Sweden, and the United Kingdom. This correlation suggests that the maturity of public equity markets in these countries is closely linked to the robustness of their private pension systems. Furthermore, most EU pension and insurance schemes exhibit a pronounced home bias, with a substantial portion of investments remaining within national borders: 60% in Spain, between 70–75% in Germany and the Netherlands, and 80% in France. This strong preference for domestic markets underscores the critical role local pension systems play in cultivating equity markets across Europe (International Monetary Fund, 2019).

Given the significant influence of pension funds in the United States and their relatively limited role in the largest European economies, one might consider whether this disparity contributes to the underdevelopment of European equity markets. Pension funds are known to stabilize markets and enhance liquidity. Due to the long-term investment horizon associated with pension savings, these funds provide a steady source of capital, which is crucial during volatile periods as it helps buffer against market downturns and speculative trading, ensuring continuity and predictability in market behaviors.

The impact of pension funds extends beyond market stabilization to encompass broader financial development. Research indicates that pension funds not only promote the growth of financial markets but also lead to more efficient investment outcomes (Davis, 1995; Meng, 2010; Rocholl, 2010). This efficiency derives partly from the professional management of these funds, which, equipped with extensive research and analytical resources, are capable of making well-informed investment decisions.

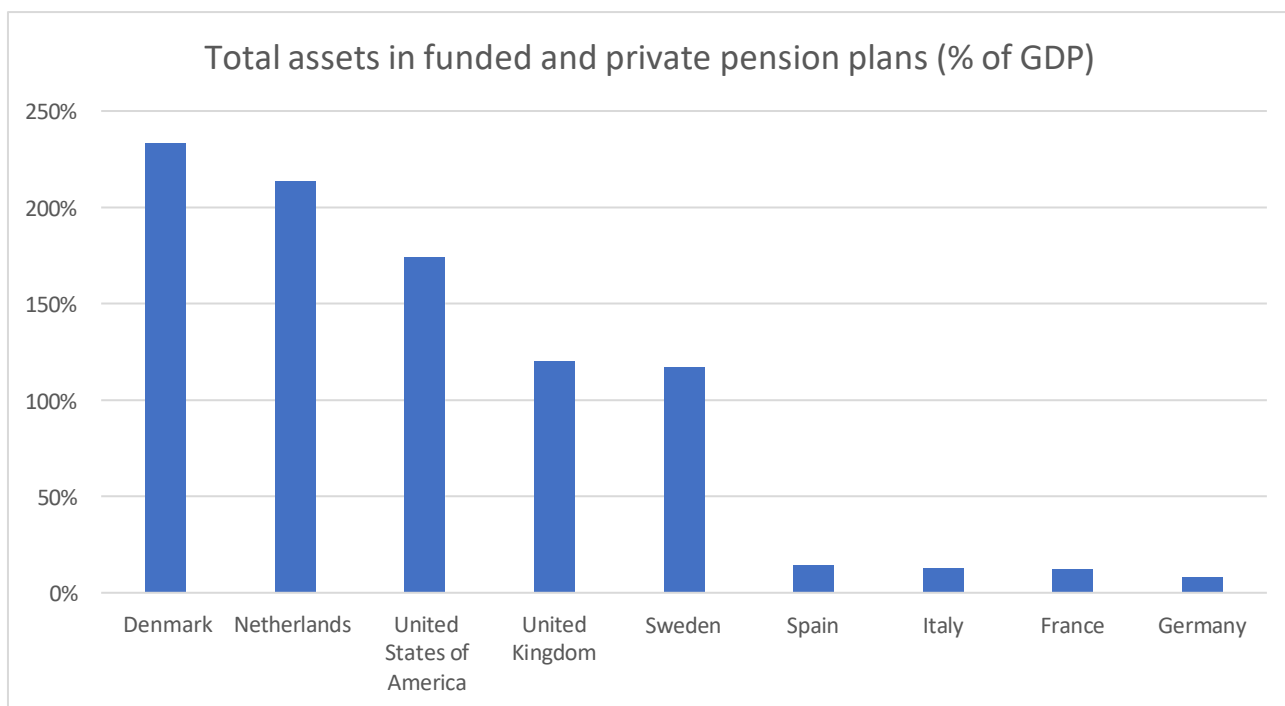
Additionally, pension funds are instrumental in stimulating private and national savings, which are vital for the financial health and economic stability of a country (Kohl & O'Brien, 1998; Poterba, 1998; Reisen & Bailliu, 1997). The incentivization mechanisms for savings, facilitated by tax advantages and other benefits, encourage individuals to contribute to pension plans, thereby enlarging the pool of available capital for investments in the stock market.

The interdependence of pension funds and financial markets is substantiated by the intrinsic link between pension provisions and market performance. The sustainability of pension schemes and the retirement income derived from them are directly tied to the performance of the stock market, underscoring a mutual dependency between the two entities (Clark, 2000). Clark further posits that financial markets are reliant on investments from pension funds, highlighting their significance in the broader financial ecosystem.

The investment practices of pension funds carry significant implications for global stock markets and subsequently for the future retirement income of individuals (Badrinath & Wahal, 2002; Lakonishok, Shleifer, & Vishny, 1992). These practices influence stock prices, corporate governance, and market trends, ultimately shaping the global investment landscape. Recent studies have evolved to emphasize the positive correlation between pension reforms, the size of pension funds, and the development of capital markets (Walker & Lefort; Davis, 2004), underlining the pivotal role of pension funds in fostering more capitalized and liquid stock market environments.

Indeed, pension funds are more developed in the United States than in Europe. It is estimated that pension funds' assets in OECD countries amount to approximately \$51 trillion.

Figure 2



Data: OECD, 2021.

Within this context, the United States boasts the largest pension market in the OECD, with assets valued at \$40 trillion, equivalent to 174% of GDP. In stark contrast, major European economies such as Spain, France, Germany, and Italy have pension assets below 15% of GDP. However, countries like Denmark and the Netherlands exceed 200% of GDP, with Finland and the United Kingdom also performing robustly at 117% and 121%, respectively (OECD, 2023).

These funds significantly impact the stock market, with more than \$15 trillion in assets from American pension funds and other financial institutions linked to the performance of the S&P 500 index (Rennison, 2023). By examining figures 1 and 2, a strong positive correlation with a coefficient of 0.8 is observed between the datasets, suggesting that the underdevelopment of pension funds in Europe could potentially explain the underperformance of European stock exchanges relative to their American counterparts.

In summary, although European public equity markets are generally smaller on average than those in the United States, some European countries with well-developed private pension and insurance schemes, such as Denmark, the Netherlands, the UK, and Sweden, outperform others. Nonetheless, the largest economies of the European Union suffer from underdeveloped pension funds, which may be limiting the growth and competitiveness of European stock exchanges relative to American markets.

2.4 Market Structure

The United States of America has 3 listing exchanges, 16 trading exchanges and 1 clearing house. By contrast Europe has 35 listing exchanges, 41 trading exchanges and 18 clearing

houses (Asgari, Smith, Wilson, & Douglas, 2024). What challenges does such a fragmented market pose?

Some scholars argue fragmentation leads to higher welfare benefits. The existence of multiple prices across exchanges allows market participants to have a more deeper understanding of the intrinsic values of assets (Malamud & Marzena, 2017; Wittwer, 2021). This enhanced price informativeness could lead to greater allocation efficiency.

A fragmented market is claimed to offer reduced transaction costs and improved execution quality. The rationale behind this claim is straightforward: increased competition among trading venues should, in theory, drive down costs and incentivize exchanges to optimize their service offerings (O'Hara & Ye, 2011; Daures & Moinas, 2014; Cespa & Vivev, 2022). Such an environment not only benefits traders through lower expenses but also enhances the overall market quality by fostering innovation and efficiency among exchanges.

Despite these potential benefits, the fragmentation of markets brings significant challenges that could potentially outweigh the advantages. First of all, the data shows that, while Nasdaq and NYSE compete aggressively to attract every IPO, in Europe there is actually less competition between exchanges as 95% of IPOs are carried out on domestic exchanges. Thus the nationality of the company matters more than the efficiency and depth of a particular market (Wright & Hamre, 2021).

Another disadvantage is the adverse selection costs. Fragmentation facilitates the emergence of cross-venue arbitrage opportunities, especially for traders equipped with superior speed or information, exacerbating the risks for ordinary investors (Pagnotta & Philippon, 2018; Baldauf & Mollner 2021).

Furthermore, market depth, market's ability to absorb large orders without significant price impact, may suffer as a consequence of fragmentation. As trading volumes are dispersed across numerous exchanges, the liquidity at each exchange diminishes, potentially leading to higher volatility and price discrepancies (Chen & Duffi, 2021). Such fragmentation can undermine the efficiency of price discovery processes, as the diluted market depth increases the cost of trading and impacts the stability of financial markets.

Additionally, multiple trading venues introduces complexity in fee structures and execution quality. With each exchange setting its own fees and offering varying levels of service, traders may find it challenging, potentially leading to inefficiencies and suboptimal execution of trades (Foucault & Colliard, 2011). This complexity not only adds to the operational costs for market participants but also complicates the regulatory aspect, further entrenching the barriers to efficient market operation.

Concerning regulatory environment, the complexity of having to comply with different regulations in every European country needs to be further explored. Investors face different rules in every EU country. In fact, at the moment, the regulatory structure of EU public markets is a multi-layered framework that comprises:

- EU-wide legislation, which sits at the top and it features key directives and regulations such as the Listing Directive, Transparency Directive, Prospectus Regulation, Market Abuse Regulation and Shareholder Rights Directive II.
- Following, there are national laws specific to each EU member state which cover aspects like company law, taxation, sometimes, stricter rules for particular market segments within that country;
- Lastly, there are the rules set by individual exchanges. Companies looking to list on a specific exchange must comply with these rules, which may include additional requirements beyond those legislated.

The regulatory regime is thus complex and combines EU regulations with national provisions and individual exchanges' rules (Oxera Consulting, 2020).

The regulatory aspect contributes to having smaller fragmented markets. This poses a challenge as there is a strong correlation between the size of a stock market and its depth, IPO activity and liquidity (Wright & Hamre, 2021). In fact, the value of domestic IPOs in Europe between 2015 and 2020 has been worth approximately 22% of GDP compared to 32% in the USA.

A recent example of the problem is represented by Britain's biggest chip company Arm. The Cambridge-based company decided to carry out its IPO in New York instead of choosing a European exchange such as its domestic exchange in London which is the in Europe. Considering the liquidity available, could the record-breaking US\$54 billion IPO have happened in a European exchange? Arm probably did not believe so.

Nevertheless, some progress has been made concerning market fragmentation. In the past 20 years that has been considerable consolidation. In 2000, in Europe, there used to be 31 exchange groups which have now "only" become 16. Euronext now controls seven different exchanges (Paris, Amsterdam, Brussels, Lisbon, Dublin, Oslo and Milan) and the same number is operated by Nasdaq (Stockholm, Helsinki, Copenhagen, Iceland, Tallin, Riga and Vilnius). This consolidation has shown good results. On every measure, exchanges that are part of a bigger group prove deeper and perform better in terms of IPO activity than standalone exchanges (Wright & Hamre, 2021).

However, while the operating companies have consolidated while the stock exchanges have remained one per country (Wright & Hamre, 2021).

To conclude, the market in Europe is a highly fragmented market with 35 listing exchanges compared to 3 in the USA. Moreover, such listings do not fully compete to attract the best IPOs as there is a strong home bias. This harms the depth, IPO activity and liquidity of such exchanges which, by consequence, lose competitiveness as shown by the recent case of Arm which chose New York for its US\$54 billion IPO. In addition, the regulatory regime of exchanges in the Union European is complex EU regulation with national provisions and individual rules of exchanges. This means that every listing has a different regulatory environment. Lastly, consolidation between exchange groups in Europe has shown good results but this hasn't reduced the number of stock exchanges present.

2.5 The impact of tech companies

The biggest company in the world is Microsoft, that, to the day in which this research paper is being written, is worth approximately US\$3.1 trillion. This is more than the entire market capitalisation of all companies included in the CAC40 (US\$ 2.8 trillion), the biggest index in Europe which includes the top companies in France. Apple and NVIDIA with market capitalisations of, respectively, US\$ 2.6 trillion and US\$ 2.2 trillion, are both bigger, on their own, than the DAX40, the German index including the top domestic companies.

The impact of this sector on the American stock exchanges is clear: the six largest companies in the United States are all “tech” companies such as Microsoft, Apple, NVIDIA, Alphabet, Amazon and Meta. By contrast, three of top 6 companies in Europe (and the top three companies in France) such as LVMH, Hermès and L’Oréal, all belong to the luxury sector. There is thus a structural difference between how the indexes representing the top companies in each country are composed in terms of economic sectors.

Between October 2022 and January 2024 the so-called “Magnificent Seven” (the cited six largest companies in the US with the addition of Tesla) rose by nearly 117% pushing the S&P500 to a new high (Russel & Rennison, 2024). Depending on market oscillations, the magnificent seven account for 30 to 35% of the S&P500 index and up to 50% of the Nasdaq100 (Patel, 2023). Moreover such stocks have delivered 101% returns versus the equal-weight index, which yielded 2.5% and the recent rise in stock market concentration has been the steepest in 60 years (JP Morgan, 2024).

The difference in the tech sector is staggering: the tech industry listed in the U.S. market is ten times larger than its counterpart in Europe. This doesn't even account for mega companies such as Amazon, Meta, or Tesla, which, despite their tech-centric operations, are categorized under different sectors (Goldman Sachs, 2023).

Europe, therefore, lacks the fast-growing tech companies that have powered the extraordinary rise of US stocks (Smith, Wilson, Douglas, & Asgari, 2024).

This is also visible when considering the average age of top public companies. The average age of companies in the S&P 500 is significantly lower than in Europe. The median age of S&P500 top 10 companies in 2000 was 85 years while, today, is it 33 years (McKinsey, 2018) showing a certain level of dynamism of the economy. Overall, the average age of S&P companies is 52 years old. By comparison, the average age of companies in the FTSE MIB, the top 40 companies in Italy, is 115 years and the median age is 78,5 years. The CAC40 shows similar numbers with an average age of 105 years.

The underrepresentation of fast-growing tech companies in Europe is a primary factor explaining the widening gap between European and American stock exchange in terms of market capitalisation but also IPO activity.

Although this will be further explored in the chapter dedicated to private markets, This disparity is not merely a matter of different sectoral strengths but points to deeper structural and regulatory challenges that European companies face. This concerns, among multiple reasons, access to capital from venture capitalists, a fragmented internal market that limits scalability and a stricter regulatory framework.

To conclude, in the last years a large portion of the American stock market growth has been driven by tech companies such as the magnificent seven. By contrast, Europe has not seen a similar boom of fast-growing tech companies which, in turn, has not trailed European stock market growth.

2.6 Common Trends in Public Markets

Over the past four decades, the landscape of public markets has undergone significant transformations characterized by a decrease in the number of listed companies in Europe as well as in the United States of America.

Concerning the USA, from a high of 4,943 firms listed in 1976, this number dwindled to 3,627 by 2016 despite population growth from 219 million to 324 million over the same period. This dramatic shift from 23 listed firms per million inhabitants to 11 represents a significant contraction in the availability of public corporate entities (Doidge, Kahle, Karolyi, & Stulz, 2018).

Several factors have contributed to the decreasing number of public listings. Predominantly, the consolidation of firms through mergers and acquisitions has significantly reduced the number of independent public entities. Companies often delist due to failure to meet exchange standards or choose to go private, exacerbated by regulatory burdens like the Sarbanes-Oxley Act. Although the act directly affected only a small number of firms, it may have had wider indirect impacts on market participation decisions. Furthermore, the structural shift towards larger, more established companies has led to a market less hospitable to smaller, newer entrants, often due to the high costs and complexities associated with maintaining a public listing.

As mentioned, this trend, while prominent in the U.S., is not unique globally. The European Union has experienced a significant decline in the number of public listings over recent years. For instance, from 2010 to 2018, the total number of listed companies in the EU's 27 member states dropped from 5,414 to 5,024, a decrease of approximately 7%. This trend highlights a broader disengagement from public market activities and underscores the challenges faced by European markets in maintaining a vibrant ecosystem for public companies (Oxera 2018). The shift in the public market landscape has several economic implications. As markets become dominated by larger, older firms, overall market volatility decreases, contributing to more stable but potentially less dynamic markets. There has been a noticeable pivot from physical capital investments towards R&D and intangible assets. This shift impacts the types

of firms that enter and succeed in public markets, favouring those with substantial intangible assets over traditional manufacturing or capital-intensive firms. The evolution towards larger firms has also influenced how capital is returned to investors, with a significant increase in share repurchases and dividends, reflecting a mature, less growth-oriented market environment (Doidge, Kahle, Karolyi, & Stulz, 2018).

Looking forward, the decreasing trend in listings raises concerns about the future landscape of public markets. Will this trend continue, and what will be the long-term impacts on innovation and market dynamism? As firms increasingly opt for private funding or stay private longer, public markets may see reduced opportunities for individual investors and a shift in the economic landscape that could favour established players over emerging innovators.

As firms increasingly turn to private markets to seek capital, it becomes essential to evaluate how Europe is performing in comparison to the USA in these areas. The shift towards private funding is particularly driven by the regulatory and operational challenges associated with public listings, alongside a more favourable valuation environment in private markets.

This trend raises pertinent questions about the dynamics of private market growth and investment in both regions, and whether Europe can leverage these trends to compete effectively with the private markets of the United States. For such reason, the next chapter is on private markets.

CHAPTER 3: PRIVATE MARKETS

Private markets refer to parts of the financial system where investments are not publicly traded, but instead, are transacted privately among specific investors. These markets are characterized by direct transactions between parties without the oversight of public exchanges, allowing for greater confidentiality and flexibility in terms of investment terms.

Private markets include different segments, which sometimes overlap, such as private equity, venture capital or private debt. As defined by investment professionals, these markets allow investors to access opportunities not available on public exchanges, often involving longer investment horizons and potentially higher returns, although with higher risks and lower liquidity compared to public markets. Investments in private markets are typically accessible only to accredited or institutional investors due to their complex nature and the higher minimum investment thresholds involved.

This chapter will outline why private markets are important and what their economic impact may be. Subsequently, the growing trend of private markets will be explored before analysing the divide in such markets between USA and Europe with a focus on venture capital and private equity. Contemporarily, some of the reasons for such divide will be highlighted.

3.1 Why are private markets important?

Private markets encompass all financial transactions and investments that occur outside of the public eye, involving entities and investors that engage directly with each other without the intermediation of public exchanges (Fenn, Liang, & Prowse, 2001). Investments in private markets are characterized by their illiquidity, as the assets cannot be easily sold or exchanged for cash without a significant loss of value. This illiquidity premium, however, often results in higher returns compared to similar public market investments.

The primary role of private markets is to channel private capital to investments across various stages of company growth, from early-stage start-ups to established firms looking for expansion or restructuring. Private equity and venture capital funds invest in companies in exchange for equity, driving growth through strategic guidance and capital injections. These investments play a crucial role in innovation and economic development, particularly in sectors like technology (Bose, Dong, & Simpson, 2019).

More over private markets are particularly adept at providing the appropriate type of financing at each stage. For example, start-ups may rely heavily on venture capital, which is equipped to handle the high risk and potential high returns, whereas more mature businesses might leverage private debt to fund expansions or streamline operations (Berger & Udell, 1998).

Private debt markets also offer an alternative to traditional bank lending, providing bespoke financing solutions to businesses that might not have access to public bond markets. This

segment of the private market enhances the financial system's stability by diversifying the sources of funding available to businesses (Berger & Udell, 1998).

The contribution of private markets are significant to the broader economy by supporting companies that are not yet ready or willing to access public markets. They provide a critical pathway for many firms to scale operations and innovate, driving job creation and technological advancements. The agility of private markets allows them to adapt quickly to new economic conditions and innovations, often acting as a barometer for trends that will later take hold in the public domain (Awrey, 2014).

Their role is essential to the global financial ecosystem, providing liquidity, capital, and economic development, and enhance the efficiency of capital allocation across different sectors and geographies. As such, they are indispensable in promoting a diversified and resilient financial landscape capable of sustaining global economic growth.

Before looking at the differences between the USA and in Europe, it is important to outline the main segments of private markets.

Venture capital (VC) firms invest in early-stage companies with significant growth potential, typically in innovative sectors such as technology and biotechnology. This form of financing is crucial for start-ups that lack access to capital markets or other traditional forms of financing due to their size, assets, or stage of development. The involvement of VC is not just financial; VC firms often provide strategic guidance, management expertise, and operational support to help these companies grow and realize their potential. Venture capital is pivotal for fostering innovation and driving economic growth, particularly in high-tech industries (Kumar, 2014).

Private equity (PE) represents a broader category of investments that includes buying stakes in private and public companies to improve their value before eventually selling them for a profit. Unlike venture capital, private equity can involve a variety of strategies including leveraged buyouts, growth capital, and distressed investments. PE firms typically exert a more considerable control over the management of the companies in which they invest, aiming to improve operational efficiencies and drive business growth before exiting the investment through sales or IPOs. This form of investment plays a critical role in the business cycle by providing companies with the capital necessary to expand or restructure, thus enhancing their long-term sustainability and profitability (Stowell, 2010).

Hedge funds are alternative investments using pooled funds that employ different strategies to earn active returns for their investors. Hedge funds may invest in public equities, derivatives, bonds, and commodities. They are known for their aggressive investment strategies and their ability to generate high returns by leveraging investments, both long and short positions, and other speculative investment practices. Hedge funds are typically accessible only to accredited investors as they require less SEC regulations than other funds, providing them with a broader range of investment and leverage options (Achleitner & Kaserer, 2005).

Private debt includes loans or debt financing provided by entities other than traditional banks. This market has grown as banks have reduced their lending in the wake of increased regulations. Private debt offers investors fixed returns and is generally secured against the assets of the borrower, making it a less risky investment compared to equity. Private debt is crucial for small to medium-sized enterprises (SMEs) that do not qualify for traditional bank loans but need capital to expand, restructure, or support ongoing operations. The strategic role of private debt in the financial markets is expanding, providing essential liquidity to companies that might otherwise struggle to secure financing (Buchner et al., 2023).

These segments of private markets each play distinct roles but collectively contribute to the robustness of the financial system by providing capital, liquidity, and support to different types of investments. In the next sections the main differences between the USA and Europe concerning such segments will be analysed.

3.2 Economic Impact of Private Markets

Private markets play a crucial role in fostering innovation and entrepreneurship, acting as catalysts for technological advancements and new business development. These markets are particularly adept at identifying and nurturing niche innovations that may not initially attract interest from larger, more traditional investors due to perceived risks or their specialized nature. For example, in industries such as fashion, private markets significantly contribute to innovation in areas like private labeling and niche marketing. These investments help firms differentiate their products and capture specific market segments, enhancing innovation within those niches and leading to diverse market offerings that cater to varied consumer preferences (Parrish, 2010).

Moreover, private markets provide essential funding that enables companies to undertake high-risk, high-reward research and development (R&D) activities. This support is vital in sectors where development cycles are lengthy and capital-intensive, such as biotechnology and clean energy. For instance, in the offshore wind sector, private market investments have not only propelled technological advancements but have also facilitated the entry of firms into international markets, supporting global industry growth without relying solely on domestic market formation strategies. This highlights the role of private investments in promoting sustainable energy solutions and fostering a more environmentally conscious business approach (van der Loos, Negro, & Hekkert, 2020).

In regions where traditional financing mechanisms are underdeveloped, such as many emerging markets, private markets are essential in supporting innovation. Access to external financing in these markets is associated with significant increases in firm innovation, underscoring the important role private markets play in overcoming barriers to innovation due to financial constraints. This support is pivotal for local entrepreneurs who require funding to bring innovative products and services to the market, thereby driving local economic growth and technological advancement (Ayyagari, Demirguc-Kunt, & Maksimovic, 2011).

Collaboration between public and private sectors in innovation activities also helps in risk sharing and resource pooling. Such partnerships often lead to enhanced technological advancements and market readiness of innovations, creating a conducive environment for the commercialization of research. The mediating roles of industrial research institutes in Sweden exemplify how public-private collaborations can enhance the R&D landscape, benefiting from both public funding and private sector dynamism. This synergy between public initiatives and private ambition facilitates a more integrated approach to addressing complex challenges such as climate change and public health, ultimately leading to more robust societal advancements (Bienkowska, Larsen, & Sörlin, 2010).

Private markets also exert a significant influence on employment levels and overall economic growth. Private equity and venture capital are instrumental in job creation by providing the necessary capital and strategic support for firms to expand their operations and enter new markets. This often leads to increased hiring to support new business activities. Research shows that access to public capital markets through initial public offerings significantly increases firms' ability to invest in human capital, subsequently leading to higher employment growth compared to private firms. This growth is primarily driven by the relaxation of financial constraints, enabling firms to access broader equity and debt markets, thus supporting extensive investment in human resources (Borisov, Ellul, & Sevilir, 2021).

The inflow of private capital, including foreign direct investments and private equity, enhances economic growth by improving the financial stability of recipient countries and enabling them to invest in critical sectors. For instance, while foreign direct investment (FDI) shows a positive impact on growth, other forms of capital inflows like foreign debt and portfolio investments might have a negative impact unless mediated by well-developed stock markets, which can positively channel these flows toward growth (Choong et al., 2010).

The development of private markets also influences the sectoral composition of employment. In developed economies, private sector employment growth is most prominent in industries requiring highly skilled labor. This sector-specific growth often aligns with technological advancements and innovation driven by private market investments, emphasizing the transformative impact of private capital on modern economies (Garrett & Rhine, 2011).

Furthermore, the effects of private market activities on employment can vary regionally and over different time spans. In emerging markets and less developed countries, the presence of robust domestic financial markets is crucial for transforming the impact of private capital flows from negative to positive, thereby promoting sustainable economic growth and employment (Agbloyor, Abor, Yawson, & Adjasi, 2014).

Private markets significantly influence innovation and economic growth by providing essential funding and strategic support to niche industries and high-risk sectors. These markets facilitate collaborations between public and private sectors, enhancing research and development efforts and leading to technological advancements. Additionally, private markets drive job creation

and sector-specific employment growth, particularly in industries requiring skilled labor, by enabling firms to expand operations and access broader equity and debt markets.

3.3 Trends in Private Markets

Recent trends in private markets have evolved considerably over the past decades, moving from niche alternative investments to significant components of strategic asset allocations. This evolution is particularly noted by the substantial growth in private equity and venture capital, as they increasingly become mainstream investment avenues due to a combination of factors including financial innovation, regulatory changes, and market dynamics. For instance, the shift towards a more auction-driven private equity market is marked by increased competition and efficiency, driving the need for firms to seek new sources of revenue beyond traditional investment strategies (Anson, 2004).

Furthermore, there is a notable trend towards blurring the lines between public and private markets, influenced by changing investor behaviours and the continuous search for higher returns. This shift is also supported by technological advancements that enhance the liquidity and management of private investments, making them more accessible and attractive (Knutzen, 2022).

Additionally, the landscape of private markets has been significantly shaped by the growth in market size and valuation. The private equity market, for instance, has seen its assets under management increase dramatically, from less than \$5 billion in the early 1980s to over \$100 billion by the mid-1990s (Prowse, 1998). By 2025, this number is expected to reach \$5.8 trillion (Deloitte Insights, 2020). Overall, today, private markets assets under management are estimated at \$13 trillion and have grown at a 20% yearly rate since 2018 (McKinsey & Company, 2024).

Several key reasons contribute to the explosive growth of the private equity market, notably the widespread adoption of the limited partnership model as a preferred organizational structure for private equity funds. This model effectively aligned the interests of general partners (managers) and limited partners (investors), facilitating a more efficient management of investments and better control over portfolio companies. Additionally, significant tax and regulatory reforms during this period, particularly those reducing the tax burden on investment gains and easing restrictions on institutional investment in private equity, played a crucial role. These changes not only made private equity more attractive from a returns perspective but also helped institutionalize the sector, attracting large flows of capital from pension funds, endowments, and other institutional investors. The growth of private equity during this period was further fuelled by a robust economic environment that provided numerous investment opportunities across various industries (Prowse, 1998).

Of particular interest for this research and its hypothesis, is the role of impact of the regulatory framework. Regulatory changes have significantly facilitated the growth and mainstreaming of

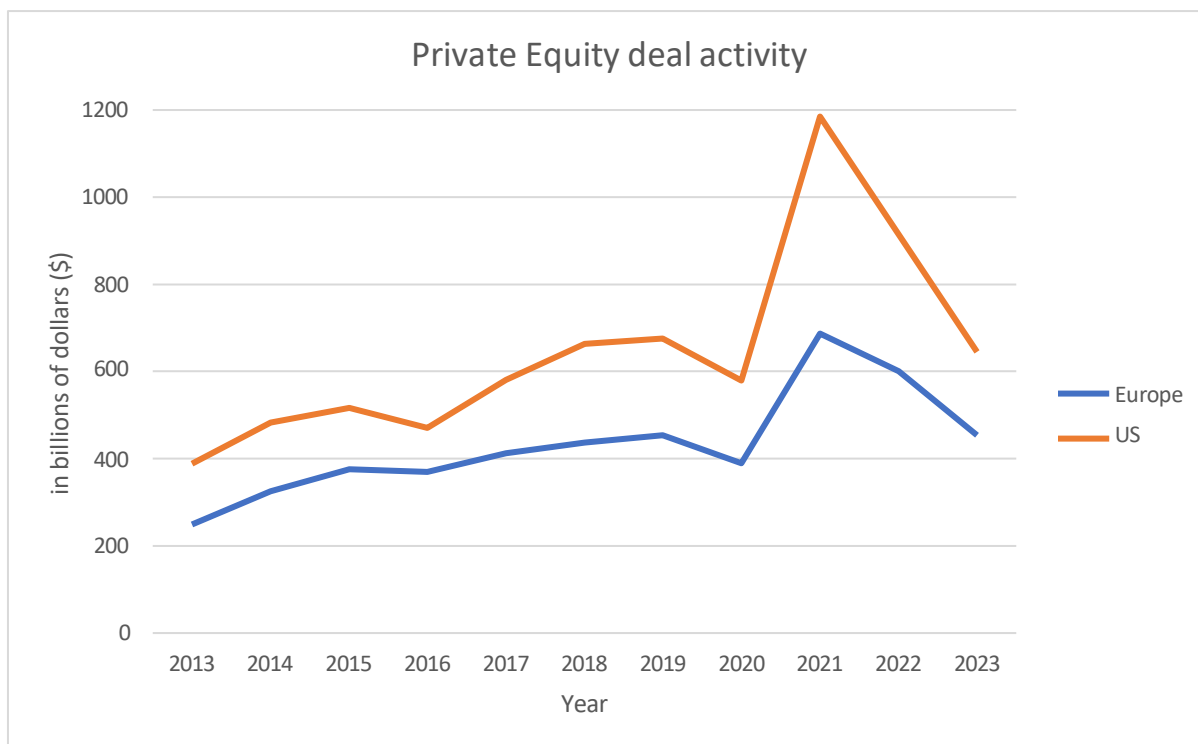
private markets. Over the past decades, regulatory environments have evolved to create more favourable conditions for private investments, especially in the United States of America. For example, amendments in securities law to simplify the process of private offerings and adjustments in financial oversight have reduced the barriers to entry for new investors and allowed more flexible and innovative investment structures. These regulatory adaptations have been instrumental in enabling private markets to attract a broader base of investors, enhance capital formation, and increase transparency, thereby increasing market participation and investment flows. This regulatory shift not only supports the liquidity of private investments but also contributes to a blurring of lines between public and private markets, allowing a more fluid movement of capital across different market segments (Knutzen, 2022).

3.4 The divide in private markets

After having outlined the importance of private markets and its impact on the economy, this section will focus on the divide in private markets between Europe and the United States of America. In particular, the subsections will be on private equity and venture capital

3.4.1 Private Equity

The analysis of private equity deal activities from 2013 to 2023 underscores a pronounced disparity between the European and American markets in terms of the total capital mobilized, measured in billions of U.S. dollars. On average, the United States has consistently surpassed Europe in annual private equity deal volume by approximately \$213 billion. This differential reached its peak in 2021, with the United States outstripping Europe by nearly \$500 billion, marking the peak discrepancy within the decade under consideration. Conversely, 2016 emerged as the most favourable year for Europe, where the difference in deal volumes between the regions narrowed to slightly over \$100 billion, indicating a temporary contraction in the prevailing disparity.



Data: Dealroom. Figures for Europe converted to dollars.

In the year 2023, the transactional dynamics maintained a similar trend, with the United States recording private equity deals amounting to \$645 billion, contrasted with Europe's lower figure of \$454 billion. Overall, the graph shows similar trends for both regions.

All data also shows similar patterns for all other metrics such as number of deals or asset under management (AUM) with Europe trailing behind in every category.

If we consider the European Union specifically, the situation worsens. EU private equity investments remain, relative to GDP, less than one third of those in the United Kingdom or US (Lehmann, 2020).

To comprehensively why such differences between the private equity markets in the United States and Europe it is essential to incorporate insights from both contemporary sources and broader economic analyses.

The U.S. private equity market is notably larger and more mature, characterized by its substantial volume of mega-deals and an aggressive fundraising environment. This market's robustness is partly underpinned by a regulatory framework that supports large-scale leverage and buyout activities, conducive to high-risk, high-reward investments (Seretakis, 2012). In contrast, the European private equity market, while significant, is marked by a more conservative approach to deal-making. European transactions typically involve less leverage, partly due to stricter regulatory requirements such as the Alternative Investment Fund Managers Directive (AIFMD), which imposes rigorous operational and reporting standards on fund managers. This directive aims to enhance market transparency and protect investors but

also adds a layer of complexity and cost that can potentially reduce investment flexibility and responsiveness (Seretakakis, 2012).

Further structural differences are highlighted by the underdevelopment of private equity in continental Europe, attributed to less favourable legal and fiscal environments, a risk-averse culture, and comparatively underdeveloped financial markets (Black & Gilson, 1999). These factors contribute to a more fragmented and conservative private equity landscape in Europe compared to the United States.

Additionally, trends over the last two decades show a shift in the financing of the real economy, moving away from public markets and traditional bank financing towards alternative sources like private equity. In Europe, this shift has been influenced by the retrenchment of banks from lending, particularly to SMEs and mid-market companies, since the 2009 financial crisis, which has further accentuated the role of private markets in economic financing (Friedberger & Sraer, 2021).

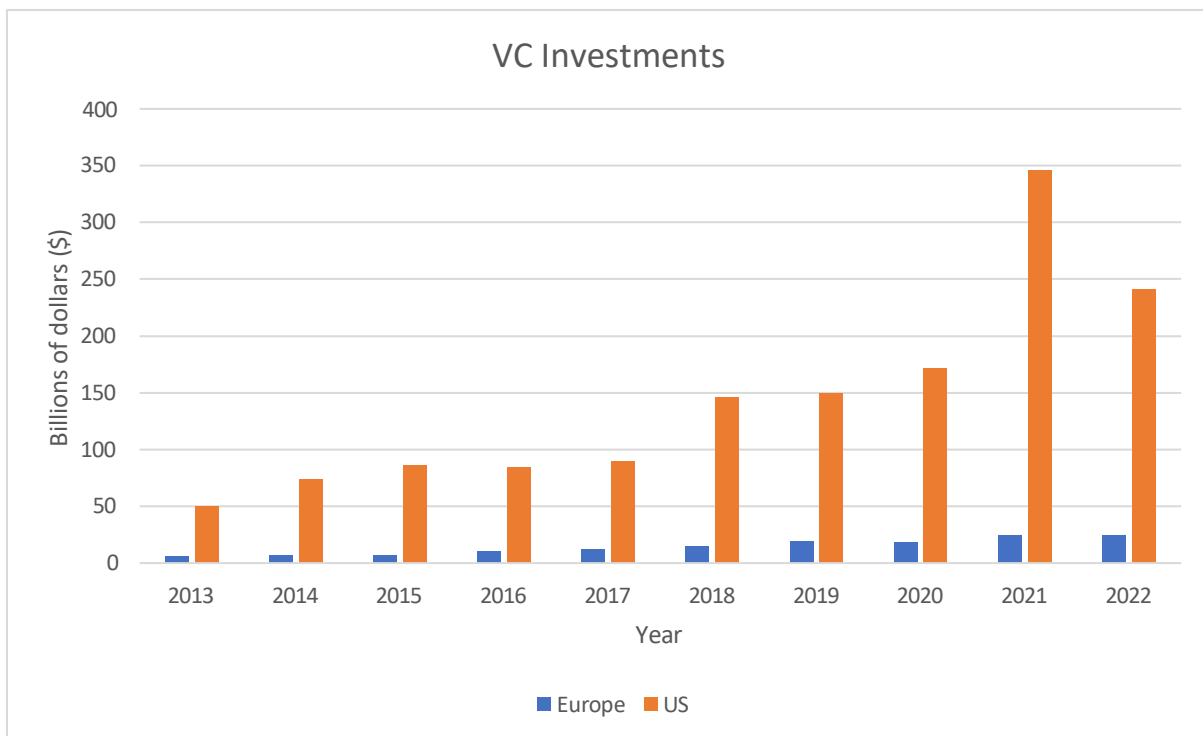
The strategic responses to these market conditions also vary between the two regions. In the U.S., private equity funds have played a pivotal role in channelling extensive capital into high-growth sectors such as technology and biotech, reflecting a higher tolerance for risk and an emphasis on maximizing returns on investment. European funds, on the other hand, tend to focus more on stability and are more involved in traditional industries, which mirrors the general economic landscape and investor mentality across the region (Friedberger & Sraer, 2021).

Another issue, concerns the economic structure of the different regions. The prevalence of SMEs in Europe does present certain challenges considering the business models of private equity. Private equity typically targets companies with potential for rapid growth and significant return on investment, which often includes larger scale operations or those with clear and substantial growth prospects. The nature of SMEs, particularly their size, the scope of their market operations, and often their need for substantial restructuring or strategic guidance to achieve scalability, can make them less attractive to traditional private equity investments. SMEs frequently require investments that offer not just capital but also operational expertise to unlock growth potential, which may not align with the shorter-term exit strategies preferred by typical private equity models (Lehmann, 2020).

These insights collectively explain, at least partially, the fundamental differences in how private equity markets are structured and operate across the United States and Europe, driven by a combination of regulatory, cultural, and economic factors. Each market's characteristics significantly influence the strategies employed by funds and the types of transactions that prevail, thereby shaping the overall impact of private equity on their respective economies.

3.4.2 Venture Capital

Although sometimes considered part of private equity, venture capital is particularly interesting to analyse. Unsurprisingly, the landscape of venture capital (VC) investments shows significant differences between Europe and the United States, underlined by the vast differences in annual investment volumes and growth trajectories over the past decade. On average, VC investments in the United States outperform their European counterparts by a factor of 9.8 times per year. This substantial performance gap is highlighted by the record-breaking year of 2021, where U.S. venture capital investments soared to a record-breaking \$345 billion. In stark contrast, Europe's VC investments during the same period amounted to approximately \$24 billion, which, despite being significantly lower, marked a record high for the region.



Data: Statista. Figures for Europe converted to dollars.

From 2013 to 2022, the venture capital ecosystem in Europe demonstrated substantial growth, with annual investment figures climbing from \$6.2 billion to a record \$24 billion. This growth, while noteworthy, pales in comparison to the exponential expansion observed in the United States. Over the same period, U.S. VC investments escalated dramatically from \$50 billion to \$241 billion, with a remarkable peak of \$345 billion in 2021.

This huge difference may be explained by numerous factors, some of which are discussed below.

Firstly, the regulatory environment in the United States is generally more favorable to venture capital and startups. The U.S. offers a regulatory framework that supports quick and flexible business operations and easier exit strategies for investors, which are critical for the dynamism

of the venture capital market. For instance, the Jumpstart Our Business Startups (JOBS) Act implemented in 2012 significantly eased the fundraising restrictions for startups, enhancing their ability to attract capital (Cumming & Johan, 2013).

In contrast, European markets are often hampered by more stringent regulations that can inhibit both the establishment of startups and their ability to grow rapidly (Schertler, 2006).

Secondly, the market size and scalability in the U.S. provide a more substantial opportunity for venture capital investments. The integrated market with a uniform language and business culture facilitates easier scaling of business operations across state lines without the barriers often encountered in Europe's fragmented market consisting of multiple languages and diverse regulatory regimes (Aizenman & Kendall, 2018). This scalability attracts more venture capital as investors are often looking for businesses that can expand quickly and generate significant returns.

Thirdly, the U.S. benefits from a robust ecosystem of venture capital with dense networks of investors who have a deep understanding of technology and innovation-driven markets. This network effect not only helps in nurturing startups but also in providing subsequent funding rounds. The presence of leading global technology firms and a large pool of skilled entrepreneurs creates a self-reinforcing cycle of innovation and investment, which is less pronounced in Europe where venture capital networks are generally less developed and more localized (Sorenson & Stuart, 2001).

Additionally, cultural differences play a significant role in influencing venture capital dynamics. The U.S. is characterized by a more pronounced risk-taking culture that is conducive to venture investments. American entrepreneurs are typically more willing to take risks and venture capitalists are more prepared to invest in unproven technologies compared to their European counterparts, where there is generally a more risk-averse mentality (Landström, 2007). This cultural inclination towards risk-taking in the U.S. is supported by a higher tolerance for failure, which is essential for fostering a dynamic entrepreneurial environment.

Tax incentives also significantly influence venture capital activities. The U.S. tax system offers various benefits for startups and their investors, such as deductions and credits that can significantly reduce the cost of capital for new businesses. These incentives are designed to encourage both the creation of new companies and the investment in these companies by reducing the financial risk for venture capitalists (Da Rin, Nicodano, & Sembenelli, 2006).

Finally, the historical development of venture capital in the United States has contributed to its current dominance. The U.S. venture capital industry has matured over decades, starting from the post-World War II era, which saw the establishment of the first venture capital firms. This long history has contributed to a deep institutional knowledge and a strong legal and business framework tailored to meet the needs of the venture capital sector, aspects that are still developing in many European countries (Gompers & Lerner, 2002).

In summary, the higher levels of venture capital investment in the United States compared to Europe can be attributed to a combination of regulatory advantages, market conditions, cultural

attitudes towards entrepreneurship and risk, tax incentives, and a mature venture capital ecosystem. These factors collectively create an environment that is more conducive to the growth and success of venture capital-funded enterprises.

3.5 Conclusion

This chapter on private markets has provided an analysis of the role these markets play in the global financial ecosystem, offering liquidity, capital, and pathways for economic growth and innovation. Private markets, which include private equity, venture capital, hedge funds, and private debt, allow for investments that are not accessible via public exchanges, thus providing capital to companies at various growth stages. Moreover, it discusses the economic impact of these markets. The discussion then transitioned into a comparative analysis of private market dynamics, focusing on private equity and venture capital, between the USA and Europe, pointing out significant differences in investment volumes, regulatory environments, and market maturity, which influence the volume and outcomes of these investments. In particular, total private equity deal activity in 2023 in the USA amounted to \$645 billion while Europe's to \$454 billion. Concerning venture capital, the gap worsens as the American market is roughly ten times the size of its European counterpart.

Having seen the divide between Europe and the US in public and private markets, the next section will focus on what European policymakers are trying to do to fill this gap.

In particular, the next chapter will focus on the response of the European Union thus, following Brexit, the UK is not included in the next chapter. Focusing on the EU allows to encompass 27 different countries which account for the majority of public and private markets in Europe.

CHAPTER 4: THE CAPITAL MARKETS UNION

In addressing the divide between the European Union and the United States in public and private capital markets, the Capital Markets Union (CMU) stands out as the main initiative put in place by the European Union. The CMU was launched in July 2014 by the European Union due to a mix of factors. One of the main ones was the recognition that the EU's financial system relied too heavily on banks, as well as the aim to present a new vision that could positively influence the upcoming referendum on EU membership in the United Kingdom (Véron, 2024). Concerning the latter objective, we all know how it ended. But is the CMU succeeding in creating a more competitive and accessible EU capital market?

Due to its importance for the main question this research is trying to address, this chapter is dedicated to exploring the CMU.

The following sections aim at describing the CMU and its main measures before analysing the state of the art of such initiative and describing what the European Commission has been doing in the last months.

All information concerning the content of the CMU is from official documents from the European Commission (European Commission, 2020) unless differently specified. The analysis of the state of art is drawn mainly from two reports.

4.1 What is it?

This strategic EU framework aims to deepen and further integrate the capital markets across EU member states. CMU has multiple objectives: it seeks to diversify financing sources, enhance access to capital for all businesses, particularly small and medium-sized enterprises (SMEs), and reduce the cost of funding. At its core, the CMU aims to make the EU's financial systems more efficient and resilient, facilitating growth and bolstering Europe's competitiveness on the global stage.

Considering the challenges outlined in the previous chapters, particularly the fragmentation of markets and the underdevelopment compared to the U.S. market, the CMU is poised to address these issues systematically. By aiming to remove barriers that currently prevent capital from flowing freely across all EU member states, the CMU helps to level the playing field and create a market that includes and involves more actors. This inclusivity is important to incentivise a more robust investment culture across Europe, which traditionally has been more conservative compared to the United States.

The CMU also targets regulatory improvements that could enhance the overall ecosystem for investments. By simplifying and harmonizing the EU's financial regulations, the CMU makes it easier for investors to operate across borders within the EU. This is particularly important in a union where varying national regulations have historically complicated cross-border

investments and economic activities. Thus, the CMU not only supports the growth and integration of European capital markets but also serves as a direct response to the fragmentation and regulatory hurdles that have stifled market efficiency and growth in the past.

By reinforcing economic resilience and expanding the sources of non-bank financing, the CMU is a step towards reducing Europe's traditional dependence on banks. This shift is crucial in a landscape where banks have been the predominant source of funding for businesses, which contrasts with the U.S. model where capital markets play a more significant role in business financing. The CMU's aim to create a more integrated and efficient capital market in Europe aligns with the broader objectives discussed in earlier chapters, particularly in enhancing the EU's ability to compete globally and maintain financial stability.

Some of the main measures of the CMU include:

- Creation of an EU-wide platform;
- Simplification of listing rules;
- Development of local capital markets;
- European long-term investment funds;
- Harmonize regulatory frameworks.

Creation of an EU-wide platform

One of the provisions of The Capital Markets Union (CMU) is the creation of an EU-wide platform. This platform is designed to offer seamless access to both financial and sustainability-related company information. The establishment of such a centralized resource aims to enhance transparency and improve the availability of critical data across the EU. By providing a comprehensive repository of information, the platform will facilitate more informed investment decisions and foster a deeper understanding of the sustainability practices of businesses. This initiative not only supports investors in making more educated choices but also aligns with the EU's broader goals of promoting sustainable investment practices and increasing overall market efficiency. This platform is expected to be particularly beneficial for small and medium-sized enterprises (SMEs) that often face challenges in disseminating information to potential investors, thereby improving their visibility and access to capital.

Simplification of listing rules

Another strategic initiative under the Capital Markets Union (CMU) is the simplification of listing rules, specifically designed to alleviate the burdens on small and medium-sized enterprises (SMEs). By streamlining the requirements and processes associated with public listings, the CMU seeks to lower the barriers that SMEs often face when accessing public markets. Reducing the complexity and cost of listing can encourage more SMEs to consider public financing as a viable option, thereby broadening their funding sources beyond traditional bank loans or private equity. This approach not only aims to diversify the financial ecosystem but also enhances the growth potential of SMEs by providing them with greater exposure to capital markets. The simplified listing rules are expected to lead to an increase in public listings, thereby invigorating the European capital markets with new energy and opportunities for growth, especially in innovative and high-growth sectors where SMEs are predominant.

Development of local capital markets

The Capital Markets Union (CMU) also emphasizes the development of local capital markets across the European Union as a key measure to enhance public market accessibility. This initiative is focused on strengthening the financial infrastructure at a national level, which is essential for ensuring that companies, irrespective of size or location within the EU, can access public capital markets more readily. This measure is particularly aimed at smaller EU member states which have more difficulties in achieving scale in their respective local markets. By developing local markets, the CMU aims to reduce the dependency on major financial hubs, thus democratizing the availability of investment and liquidity options. This decentralization of financial services is intended to foster a more inclusive market environment where smaller and peripheral economies can attract investment more effectively. Enhancing local market capacities helps to ensure that economic growth and investment opportunities are more evenly distributed across the EU, supporting wider economic cohesion and stability.

Nevertheless, no further specifications are given on *how to* develop such local capital markets.

European long-term investment funds (ELTIFs)

The Capital Markets Union (CMU) addresses the need for more sustainable and long-term investment structures through the enhancement of European Long-term Investment Funds (ELTIFs). ELTIFs are designed to boost long-term investments in unlisted companies, SMEs, and infrastructure projects that are crucial for sustainable growth across the European Union. This initiative helps channel investment towards projects that require long-term commitments and are essential for achieving the EU's ambitious sustainability goals.

ELTIFs aim to provide stable and sustained funding to projects that contribute to the EU's environmental and infrastructure objectives, thus filling a critical funding gap in the European investment ecosystem. One major approach is broadening the scope of eligible investment projects and simplifying the regulatory requirements for ELTIFs. This could make it easier for these funds to operate and attract capital.

By offering a regulated European framework, ELTIFs also ensure investor protection and market stability, which are key to attracting more substantial long-term investments. This structured approach not only supports significant projects necessary for the EU's strategic interests but also aligns with the broader CMU goal of diversifying and strengthening Europe's investment environment.

Harmonize regulatory frameworks

The CMU seeks to harmonize regulatory frameworks across the European Union to prevent regulatory arbitrage and ensure consistent investor protection. A crucial aspect of this harmonization involves creating a standardized system for withholding tax relief across EU member states. This system aims to reduce administrative burdens and financial costs associated with cross-border investments.

The establishment of a uniform withholding tax relief mechanism is proposed to streamline the process of claiming tax exemptions on dividends, interests, and royalties within the EU. By reducing the withholding tax rates or simplifying the procedures for cross-border investors, the

EU can significantly lower the investment costs and increase the attractiveness of European markets to both domestic and foreign investors. This proposal addresses the complexity and inconsistency of existing tax regimes across different member states, which often pose a significant barrier to free capital flows and investment diversification.

Further, the CMU's approach includes efforts to align and standardize regulatory practices across the EU. This standardization extends beyond tax measures to include broader financial regulations, aiming to create a level playing field for all market participants. By eliminating discrepancies in investor protection and market access, the CMU enhances market stability and builds investor confidence, which is crucial for attracting long-term investments.

These reforms are part of a broader strategy to reduce fragmentation in the European financial markets, making them more efficient and competitive globally. A more harmonized market is expected to facilitate greater liquidity, increased investment opportunities, and more robust economic growth across the Union. Such regulatory alignment also plays a critical role in supporting the EU's objectives of achieving a digital single market and a sustainable economy, as efficient capital markets are vital for funding innovation and projects that are central to these goals.

4.2 State of the Art

Exactly ten years from the launch of the CMU initiative, it is possible to carry out a first assessment of the state of the art thus its current implementation and achieved results.

The assessment of the Capital Markets Union (CMU) over its first decade shows a modest performance with limited achievements. Despite broad rhetorical support across the European Union and ambitious legislative measures planned under the CMU's second action plan, the integration and enhancement of the EU's capital markets have not realized significant transformational changes. This shortfall is primarily attributed to the inertia that stems from nationalistic defensiveness and special interests in both the public and private sectors (Véron, 2024).

There is a notable disconnect between the CMU's intended reforms and their actual impact on the ground. Many policy areas, such as taxation, insolvency law, and pension finance, which are crucial for achieving a deeper and more integrated capital market, have seen minimal progress due to their complex national implications and the diverse interests involved. The lack of substantial progress in these areas underscores the difficulties in harmonizing and advancing financial system reforms across diverse national landscapes within the EU.

Additionally, the implementation of key initiatives, such as the European Single Access Point (ESAP) and the consolidated tape for financial markets, has been slow, with full operational status expected several years after their legislative approval. This delay further exemplifies the challenges faced in aligning and executing the CMU's objectives across member states.

Other reports have tried to assess CMU progress through chosen key performance metrics measured yearly (AFME , 2023). Such assessment has confirmed stagnant progress across several key performance indicators, suggesting that the initiative has struggled to achieve its intended outcomes over the medium term.

Such evaluation indicates that while there are isolated improvements attributed to cyclical factors, the overarching trend shows limited forward movement in enhancing the depth and integration of the EU's capital markets, particularly in comparison to global standards.

In particular, access to market-based finance for corporates has seen a decline, highlighting an ongoing reliance on traditional bank financing over capital markets instruments. The opposite of the initial goal set by the CMU in 2014! The securitisation of loans, a key mechanism for freeing up bank capital and enhancing liquidity within the financial system, has also seen a significant reduction, underscoring the challenges in transforming bank-based financial systems to market-based systems within the EU (AFME , 2023).

Additionally, the indicators for intra-EU integration slightly worsened, and household investments in capital markets have not shown any major progress, further illustrating the slow pace of achieving a fully integrated and efficient capital market ecosystem in Europe.

These findings call for a renewed focus on implementing strategies that can effectively deepen the capital markets, suggesting that the current approaches may require reevaluation to address the persistent barriers to integration and development within the EU's financial landscape.

Overall, the CMU's first decade reflects a scenario where despite significant legislative efforts, the practical outcomes have been underwhelming, highlighting the complex interplay of EU-wide policy ambitions with national interests and regulatory frameworks (Véron, 2024).

In the past year, other CMU proposals have been put forward by the European Commission. The next section will analyse and explore those four proposals.

4.3 Which way forward?

As previously explained, most of the legislative and non-legislative measures delivered by the European Commission have not yielded the expected results. It is thus important to change direction. The Commission, in the past year has put forward three main actions:

- Listing Act;
- Harmonising Corporate Insolvency Law;
- Harmonising Withholding Tax Procedures.

Listing Act

The main piece of legislation is the Listing Act, proposed in 2022. This Act includes revisions to several key financial regulations including the Prospectus Regulation, Market Abuse

Regulation, and the Markets in Financial Instruments Directive and Regulation (MiFID II/MiFIR). It also introduces a new directive to allow multiple-vote share structures aimed at giving founding shareholders more control even after public listing (European Commission , 2024).

A central feature of the Listings Act is to simplify and reduce the administrative and financial burdens associated with public listings in the EU. By amending the existing regulations, the Act seeks to streamline the process for companies, particularly SMEs, to access public markets. This is crucial in fostering a more inclusive financial ecosystem where smaller companies can leverage public capital markets to fund their growth and expansion more efficiently.

The introduction of multiple-vote share structures under this Act is particularly important. This provision aims to make European markets more appealing to family-owned businesses and innovative founders who wish to retain greater control over their companies post-IPO. This approach mirrors structures often seen in the U.S. markets, where dual-class share structures are common among tech companies looking to balance capital raising with founder control.

The Listings Act is expected to play a significant role in increasing the overall market capitalization and liquidity in European public markets. This enhancement is seen as vital to the CMU's goal of reducing Europe's traditional reliance on bank financing by providing a diversified range of financing options available to companies across the Union.

On February 1st 2024, a political agreement has been reached between the European Commission and the Council.

Harmonising Corporate Insolvency Law

The recent proposal for the Directive on harmonising certain aspects of insolvency law by the European Commission aims to facilitate distressed mergers and acquisitions and reduce legal uncertainties in cross-border investments. The Directive seeks to harmonize minimum standards across EU member states, improving the efficiency and predictability of insolvency proceedings. It includes provisions for more effective asset recovery, streamlined procedures, and fairer distribution of assets to creditors, thereby reducing the risk premium for investors. There are safeguards to ensure transparency and equal treatment of creditors. However, a requirement for court authorisation could make "process longer and less certain, potentially decreasing some of its advantages" (AFME , 2023).

Harmonising Withholding Tax Procedures.

In a move to improve the efficiency of cross-border investments within the European Union, the European Commission introduced a Directive in June 2023 aimed at the faster and safer relief of excess withholding taxes. This directive addresses a longstanding barrier to cross-border investment by proposing a solution that includes the implementation of a common digital tax residence certificate and uniform reporting obligations for financial intermediaries.

These measures are anticipated to simplify the withholding tax refund procedures, reducing administrative burdens and costs associated with tax compliance for investors across the EU. With potential cost savings estimated at EUR 5 billion annually for investors, this initiative is also expected to broaden the investor base for EU corporates, attracting more capital from both within and outside the EU. Furthermore, the directive emphasizes the critical role of certified financial intermediaries (CFIs) in ensuring the smooth execution of these processes.

By standardizing these elements, the proposal seeks to ensure that the FASTER (Fast and Secure Tax Relief) system operates effectively, benefiting both investors and the CFIs responsible for initiating tax relief and refund procedures. This development represents a proactive step by the EU to remove fiscal obstacles (AFMA, 2023).

In the next years it will be possible to understand whether such proposals have been fully implemented and which results they have yielded.

4.4 Conclusions on the CMU

The Capital Markets Union is a very ambitious initiative set out by the Commission in 2014, ten years ago. Despite the efforts and numerous legislative and non-legislative measures, such initiative has not yielded the expected results. Progress has been very slow and the main objectives listed in the initial plan have not been reached. Most indicators have been worsening and the capital market divide between the European Union and the USA has not narrowed. New ideas need to be put forwards and a change of paradigm is needed. The next chapter will explore some policy recommendations.

CHAPTER 5: CONCLUSION AND POLICY RECOMMENDATIONS

The concluding chapter of this analysis offers a series of policy recommendations derived from the evaluation carried out in this work. Such recommendations are crafted for the European Union as this allows to maximise impact given its 27 member states.

Recognizing the challenges inherent within the European Union's fragmented capital markets and the systemic underperformance relative to the U.S., this chapter aims to propose concrete, actionable steps to enhance the competitiveness of EU financial markets.

5.1 Capital Markets Union (CMU)

As outlined in chapter 4, the implementation of the CMU has encountered numerous obstacles, including political ones. The results have not been as expected. A new approach is needed to make sure that in the next years the CMU is completed.

Recommendation 1 – Streamlining the CMU: Less is more

The new CMU should focus only on certain critical areas. The initiative launched in 2014 was very ambitious and included a wide range of measures which have failed to deliver. Focusing on core areas will ensure that the initiative has a tangible impact on the EU's financial landscape. For each targeted objective, a detailed roadmap should be crafted, outlining specific milestones and timelines. This roadmap should provide a clear sequence of feasible steps, measures with interim goals and deadlines, to ensure progress. Such structured planning will enable consistent tracking and assessment of the initiative's advancement, helping to maintain focus and momentum. Such roadmap can be inspired by the method currently being used in the National Recovery Plans carried out by member states under the Next Generation EU program (milestones and targets).

The new roadmap should be collaboratively developed with active participation from member states. This approach should include regular consultations with national financial authorities and market stakeholders to design the initiative with active participation of member states. Engaging member states in the design process will not only enhance the initiative's relevance and applicability but also boost political and practical support across different jurisdictions.

The implementation of the CMU should be organized into clearly defined phases, with specific commitments from each member state. As in the Next Generation EU initiative, these commitments should be publicly declared to ensure transparency and foster a sense of accountability. By defining responsibilities and expectations clearly, the initiative can prevent bottlenecks and ensure that setbacks in one area do not derail the overall progress. A mechanism for ongoing review and adaptation should be established, involving a broad array of stakeholders, including financial institutions, regulatory bodies, and consumer groups from across the EU. This iterative process will allow the CMU to remain flexible and responsive to changing economic conditions and emerging challenges, thereby sustaining its relevance and effectiveness over time.

5.2 Pension Funds

As mentioned in chapter 2, countries with stronger pension funds perform better in capital markets. The enhancement of EU pension systems stands as a pivotal policy recommendation aimed at strengthening the region's financial markets, particularly in terms of boosting available capital for investment in both public and private sectors.

Recommendation 2.1 – Incentivise contributions to pension funds

Boosting contributions to pension funds from private citizens and companies can strengthen pension funds and, consequently, financial markets. This may also be a solution to the worsening demographics in most countries of the European Union which will make national pension systems more economically challenging to sustain.

One effective strategy involves offering higher tax incentives for individuals, such as tax deductions or credits on pension contributions. This not only makes saving more attractive but also provides immediate financial benefits, encouraging more people to invest in their pension plans.

Regulatory changes are also essential to encourage private pension contributions. Firstly, the introduction of portable pension schemes would allow individuals to retain their pension benefits when changing employers or moving across EU countries. Removing any obstacles to such pension mobility may thereby enhance the flexibility and appeal of contributing to private pension schemes.

Other initiatives, particularly targeted at younger demographics, may incentivise the habit of saving from an early age and boost investments. An examples of such initiative in the past is the “Child Trust Fund” implemented in the UK.

Collectively, incentivising the development of private pension systems in the EU may ensuring a greater influx of capital into the markets, thereby supporting broader economic stability and growth.

Recommendation 2.2 – More “Tibi” initiatives across the EU

Encouraging institutional investors to make greater and riskier investments is essential for mobilizing capital, particularly in sectors such as venture capital. Following the model of France's "Tibi" initiative provides a robust framework for this approach. The Tibi initiative, specifically designed to boost venture capital investment, targets institutional investors such as pension funds, urging them to increase their activity in the technology sector. Initiated in response to the need for more substantial capital pools to support the growth of tech companies, this initiative has successfully directed significant investment into sectors critical for economic and technological progress. The impact has been profound, with billions of euros injected into the French venture capital ecosystem, establishing it as one of the best systems within the European Union.

Promoting the Tibi initiative as a best practice offers a viable blueprint for other member states seeking to enhance their venture capital ecosystem. By adopting and adapting this model, other countries can significantly boost their tech sectors, which, as highlighted in chapter 2, are crucial for bridging the gap in public market performance between the US and Europe. This strategic promotion not only helps to elevate the technological sectors across Europe but also stimulates broader economic growth by enhancing the overall venture capital environment.

5.3 Regulatory Framework

The regulatory framework is a recurring theme when exploring the reasons behind the gap. Nevertheless it is complicated to outline precise areas of intervention to improve such situation. One of those, should be the role of the European Securities and Markets Authority (ESMA)

Recommendation 3.1 – Expanding the powers of the European Securities and Markets Authority (ESMA)

As recently proposed by President of the ECB Cristine Lagarde, Expanding the powers of the European Securities and Markets Authority (ESMA) could significantly streamline and strengthen the regulatory framework of the European Union's financial markets. A more centralized regulatory authority within the EU should ensure greater consistency and effectiveness in financial market oversight. By augmenting ESMA's powers, the EU could centralize many aspects of financial regulation that are currently dispersed across national authorities. This centralization would facilitate uniform application and enforcement of financial regulations across all member states, reducing fragmentation and eliminating the inconsistencies that can arise from diverse national regulations. Standardizing financial practices and disclosures across member states could also ensure a level playing field between member states and a more integrated single market.. Although mirroring the SEC's role in the United States seems utopic at the moment, certain steps in that direction should be taken.

Recommendation 3.2 – Integration of Stock Exchanges

In addressing the challenges posed by the numerous stock exchanges across the European Union, each with its distinct set of rules, a strategic approach towards harmonization is essential. While the creation of a single, unified exchange might currently be unfeasible, leveraging existing infrastructures such as Euronext, especially following its recent expansion through the acquisition of Borsa Italiana, represents a significant step towards achieving greater harmonization in the EU's financial market landscape.

The expansion of Euronext, which now includes a major southern European exchange, creates an opportunity to standardize trading rules and regulatory practices across a broader

range of markets within the EU. This consolidation can serve as a model for other exchanges, promoting a more integrated approach to financial trading across Europe.

Accelerating on the harmonization of exchange rules is crucial. There is also a need for a pan-European regulatory framework that encompasses all aspects of securities trading and listing. This framework should be designed to facilitate the seamless operation of integrated financial markets, reducing barriers to entry for new participants and fostering a competitive yet fair trading environment.

Although not exhaustive in closing the capital markets gap, implementing some of these policy recommendations may significantly boost public and private markets across the European Union.

CHAPTER 6: FINAL REMARKS

In the first chapter, this study sets the stage by illustrating the economic divergence that has expanded since 2008, particularly emphasizing the significant growth in GDP and capital market performance in the US compared to a relatively stagnant European market.

The second chapter focuses on the structural analysis of public markets, highlighting the regulatory and operational disparities that contribute to the lagging performance of European markets against their American counterparts. It also explores the impact of technological advancements and different investment behaviors that influence market dynamics.

The third chapter shifts focus to private markets, comparing the venture capital and private equity landscapes. It identifies the ecosystem for private investments in the US and contrasts this with the more fragmented and conservative European approach, which has been less effective at fostering technological innovation and high-growth enterprises.

The fourth chapter assesses the effectiveness of the Capital Markets Union (CMU) in Europe, an initiative aimed at reducing market fragmentation and enhancing financial integration across the EU. Despite its goals, the CMU has struggled with implementation challenges, which the chapter analyzes in detail.

Finally, the document concludes with a series of policy recommendations designed to bridge the identified gaps. These recommendations include enhancing regulatory coherence, fostering innovation, and improving access to capital, particularly through incentives for private pension contributions and adopting models that have shown success in specific European countries like France's "Tibi" initiative.

This research was structured to address three primary questions which may be answered, considering the findings of this study, as follows:

- 1. What is the magnitude of the gap in capital markets, both private and public, between Europe and the United States, and what trends characterize these disparities?**

The study revealed a significant and expanding disparity in both public and private capital markets between the two regions. The United States consistently outperforms Europe in terms of market size, liquidity, and efficiency. Trends highlighted include the robust growth of the US markets fueled by high technology sector performance and a regulatory environment conducive to market expansion and flexibility.

- 2. What factors contribute to the observed disparities in capital markets between these regions?**

Several critical factors were identified that contribute to the gap. These include regulatory fragmentation and conservatism in Europe, lesser technological advancements in European markets compared to the US, and a more aggressive and flexible investment environment in the US. The EU's more cautious approach to financial markets, coupled with varying national regulations, further exacerbates the divide.

3. What strategies are being implemented to reduce the gap in capital markets, and how are they performing? What other strategies could be implemented?

The research assessed the effectiveness of existing strategies like the Capital Markets Union (CMU) aimed at enhancing market integration and accessibility within the EU. Despite its ambitious goals, the CMU has shown limited success in bridging the gap. Policy recommendations suggest that a more focused approach with clear objectives, timelines, and collaborative efforts involving member states could enhance its effectiveness. Furthermore, strategies such as incentivizing private pension contributions and adopting initiatives like France's "Tibi" model across the EU could mobilize additional capital for investment, particularly in technology-driven sectors.

By acting together and putting aside national pride, the EU can work towards narrowing the capital markets gap with the United States, thereby strengthening its economic stance on a global scale.

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Bridging the Capital Market Gap between Europe and the United States of America

Ruggero Bongiorno

Abstract

This thesis explores the critical need to bridge the capital markets gap between Europe and the United States, analyzing the structural differences, underlying causes, and potential strategies to enhance European capital markets' efficiency and competitiveness. The research identifies that the U.S. capital markets are more integrated and liquid, offering greater access to financing and investment opportunities, which supports economic growth and innovation. In contrast, Europe's capital markets remain fragmented, constrained by regulatory differences and a more conservative investment environment. The study examines the European Union's efforts through the Capital Markets Union (CMU) initiative, aimed at unifying and deepening capital markets across member states, while highlighting the challenges and limitations faced in achieving these goals.

The findings suggest that Europe's capital market landscape could benefit significantly from regulatory harmonization, enhanced technological infrastructure, and a cultural shift towards greater risk-taking and innovation. Policy recommendations include streamlining the CMU, directing more investments towards venture capital and strengthening pension funds to create more resilient and integrated markets. The thesis concludes that closing the capital markets gap is essential not only for economic growth but also for reinforcing the EU's strategic autonomy in the global financial landscape.

Key words

Capital Markets, Financial Markets, Regulatory Fragmentation, Financial Policy.