AIMA response to the European Securities and Markets Authority's consultation on short-termism

The Alternative Investment Management Association Limited (AIMA)¹ and Managed Funds Association (MFA)² (together 'we' or the 'Associations') appreciate the opportunity to comment on the European Securities and Markets Authority's (ESMA) survey on the causes of what ESMA suggests is “potential short-term pressures on corporations stemming from the financial sector”.

In introduction, we would like to mention a few elements that we believe are often overlooked in the debate on short-termism and that we think must be taken into account by regulators and policy makers when assessing policy options on the topic of short-termism.

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¹ AIMA, the Alternative Investment Management Association, is the global representative of the alternative investment industry, with more than 1,900 corporate members in over 60 countries. AIMA's fund manager members collectively manage more than $2 trillion in assets. AIMA draws upon the expertise and diversity of its membership to provide leadership in industry initiatives such as advocacy, policy and regulatory engagement, educational programmes and sound practice guides. AIMA works to raise media and public awareness of the value of the industry. AIMA set up the Alternative Credit Council (ACC) to help firms focused in the private credit and direct lending space. The ACC currently represents over 100 members that manage $350 billion of private credit assets globally. AIMA is committed to developing skills and education standards and is a co-founder of the Chartered Alternative Investment Analyst designation (CAIA) – the first and only specialised educational standard for alternative investment specialists. AIMA is governed by its Council (Board of Directors). For further information, please visit AIMA's website, www.aima.org.

² MFA represents the global alternative investment industry and its investors by advocating for sound industry practices and public policies that foster efficient, transparent, and fair capital markets. MFA, based in Washington, DC, is an advocacy, education, and communications organization established to enable hedge fund and managed futures firms in the alternative investment industry to participate in public policy discourse, share best practices and learn from peers, and communicate the industry's contributions to the global economy. MFA members help pension plans, university endowments, charitable organizations, qualified individuals and other institutional investors to diversify their investments, manage risk, and generate attractive returns. MFA has cultivated a global membership and actively engages with regulators and policy makers in Asia, Europe, North and South America, and many other regions where MFA members are market participants.
**Short-termism – need for better understanding of the concept**

From the European Commission's Action Plan,\(^3\) we understand that ESMA's objective is to collect evidence of undue short-term pressure on corporations coming from financial markets. Specifically, ESMA's assessment should cover "(i) portfolio turnover and equity holding periods by asset managers; (ii) whether there are any practices in capital markets that generate undue short-term pressure in the real economy".

Short-termism is defined as "the focus on short time horizons by both corporate managers and financial markets, prioritising near-term shareholder interests over long-term growth of the firm".

In our view, that definition needs to be examined and further refined before policies are designed to deal with consequences ascribed to short-termism. The definition assumes there are clearly identifiable moments in corporate life where short-term interests are in opposition to long-term growth opportunities. Such assumptions may be false, incomplete or both, depending on how the firm is managed by its executives. Furthermore, there are no balanced definitions of what short and long-term actually are, nor is there unequivocal evidence to demonstrate that shareholders or investors collectively as ‘markets’ are the catalyst of short-term corporate behaviour.

One of the key issues related to short-termism is to determine the flow of causality between well-managed firms that are successful in adopting a long-term growth strategy and those which are less successful and therefore need to adopt strategies that appear to be short-termist but are simply the outcome of companies or sectors having to retrench due to their inability to innovate and compete.

Innovation constantly disrupts business models and it is such disruption that makes management of businesses extremely difficult even if these businesses invest heavily in research, as well as fixed and human capital to ensure long-term success. Many such investments can prove to be misguided and, ultimately, wasteful if they go in the wrong direction by backing technologies or business models that do not grow.

The Harvard Business Review of Kodak’s failure to adapt to the era of digital photography highlights the difficulty of correctly identifying and adapting to disruptive technological change. Although Kodak invented the first digital camera, invested significantly in online photography platforms and seemingly did all the right things to succeed in the new era of digital photography and social media, it had to file for bankruptcy in the end because it did not realise that online photo sharing was the new business, not just a way to expand the printing business."\(^4\)

We, therefore, recommend that EU policy makers commit to considerable research and consultation before identifying short-termist behaviour, including understanding whether it exists, documenting its causes and understanding the significance of its consequences for the economy. One way to understand the long-term is that it is a consecutive string of short-term decisions, and those short-term decisions should not be at odds with the best interests of the long-term. Capital markets may exhibit features that appear, at first sight, to be driving sub-optimal long-term outcomes. However, as we point out in some of the sections below, many such features – such as providing transparency, discipline and liquidity - are the source of greater economic dynamism.


and sustainability when compared to other economic models. Our members must take these considerations into account to responsibly manage their investors’ assets.

Similarly, there may be other deeper causes that may lead to the perception or manifestation of increasing short-termism in the developed economies. These can include the move away from industries depending on fixed capital expenditures to more service-oriented businesses in mature economies, increased market power of individual companies in certain industries leading to excessive profits and underinvestment, deepening of global trade or an increasing rate of underlying technological change. All of these factors can lead to changes in the way our economies function which are either harmless and a simple manifestation of reaching another stage of economic development or potentially harmful but not necessarily related to capital market or financial institutions’ behaviour.

**Functional capital markets require a multiplicity of players with multiplicity of views and diversity of investment strategies and horizons**

The development and maintenance of vibrant, deep, and liquid capital markets requires different types of investment strategies to co-exist. AIMA research on the development of EU capital markets shows that growing the size of the EU capital markets by one-third could fuel a long-term real growth rate in per-capita GDP of around 20%\(^5\) thereby encouraging healthy capital markets, which has important implications for the EU. The main channels that link capital market size and higher growth potential are (i) the availability of funds for long-term risky investments – that is primarily equity finance; and (ii) the incentives for improving corporate governance stemming from external discipline provided by more transparent and demanding external oversight as compared to bank finance.

The diversity of institutional actors is one of the key preconditions of capital market development in the EU and globally. Investment managers that have either long or short holding periods both fulfil different roles in a financial marketplace and are complementary to each other, as each type of strategy caters for the very diverse needs of a myriad of issuers and investors, who all have their own reasons to seek access to capital markets. Asset managers that trade with higher frequency should not be characterised as “short-termist” as they do have ongoing fiduciary duty to their clients, are committed to deliver a rate of return for long duration of times and have often been operating for decades.

There are, additionally, a number of market structure changes that are allowing asset managers to harvest risk premia that would have previously been available to other financial institutions. One example is that of asset managers acting as liquidity providers or market makers, replacing investment banks and brokers who have had to exit from some of their strategies due to regulation such as the Volcker Rule or the increase of capital requirements for the trading book portion of a bank's balance sheet.

Similarly, technological developments have led to asset managers being able to automate many of the strategies they had previously employed at human-level speed. Such strategies may result in higher portfolio turnover of investment fund assets but should not be viewed as inherently short-termist. For example, as trading costs have decreased, greater automation has increased the ability to conduct better risk management and more frequent rebalancing of portfolios.

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Many investors specialise in identifying companies which may not be well run or embark on the wrong business strategy. These investors often engage with company boards and other shareholders to bring about a long-lasting change which should increase the value and viability of the company, while balancing the interests of shareholders and other stakeholders.

Market players who trade frequently are extremely useful, and sometimes vital, for treasury management, portfolio recalibration and/or in order to help managers fulfil their daily liquidity requirements for investors wishing to redeem part or all of their investment. Having stakeholders who assume this function increases the confidence issuers and investors put in capital markets and facilitates the creation of a virtuous circle whereby deep liquidity and efficient price discovery enables well-run companies to obtain the most valued form of long-term investment – equity finance.

Capital markets require a multiplicity of actors to provide much-needed liquidity and transparency that then serves many of the investors whose strategies focus on more traditional buy and hold approaches. Lack of liquidity has often been identified as one of the key impediments to the growth of EU capital markets. The more diversified the types of buyers, the more liquid a marketplace is. Research shows that equity market liquidity itself has a direct positive impact on economic growth, and increasing equity market turnover is associated with additional long-term economic growth.

The graph above shows the positive effect of increasing either capital market size (equity and bond market taken together) or equity market size or equity market liquidity on economic growth. Increasing either one of those variables by one standard deviation results higher GDP growth rate by 22%, 31% or 27% respectively. Interestingly, therefore, the results show that stock market depth (size of market capitalisation as a proportion of GDP) has almost the same impact on economic growth as stock market liquidity (value of stocks traded as proportion of GDP).

**Source:** Capital Markets and Economic Growth: Some Insights from a Recent Study, Marc Steffen Rapp, Professor at Philipps Universität Marburg, Germany 2014.

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Correlation between capital market development and measures of short-termism

Many have argued that short-termism leads to underinvestment in both fixed assets as well as R&D spending. The theory is that by focusing too much on short term financial returns to shareholders, management of companies do not devote enough resources to generate future growth and this is deemed to be among the main channels through which economies become less sustainable over the long term. Many argue that this pressure comes from too many market participants trading in a speculative manner rather than investing in companies for the long term which is evidenced by excessive liquidity: “While some trading is necessary to assist the provision of liquidity to investors, current levels of trading activity exceed those necessary to support the core purposes of equity markets.”

Such assertions are not supported by data. Several studies demonstrate that the level of R&D investments by companies listed on U.S. stock exchanges (among the most liquid in the world) is high in absolute terms as well as increasing over time. Interestingly, recent research shows that US publicly listed companies have a higher than R&D spending than private companies that are, at least in theory, largely insulated from short-term capital market pressures. Therefore, the link between excessive liquidity and under-investment appears to be difficult to establish. We provide further evidence related to this discussion in Annex II.

Short-termism and technological change

In a recent research paper on the impact of short-termism on R&D investment, perceived short-termism in financial markets may be the result of a global and multifactorial acceleration of decision-making and disruptive changes in our economies and societies. Instead of major new technologies being implemented every five decades, they now come every five years.

Corporate turnover is also accelerating, with the average lifespan of a corporation having halved between 1970 and 2010. Such a “creative destruction” mechanism, which also impacted job retention and unemployment, has intensified over the years, becoming “too fast and too severe for the body politic to absorb”, making the attack on stock markets’ short-termism a politically acceptable and easier way for policy-makers to deal with the complexity of a fast-paced global economic environment. This perception is further validated by some market players who have material interests to fuel such a debate, for example corporate board members who can use this theory to discredit activists or shareholders, reduce shareholder rights, dilute corporate accountability and entrench management.

As stated in this piece of research, “the foundational short-term problem is not that stock-market pressure dislodges firms from the right technological path, but that it forces faster and deeper change than before, which induces negative reaction in corporate, employment, judicial, and political circles. More people feel more vulnerable. Sharper technological shifts and enhanced global competition are the cause; stock markets are the messenger.”

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8 The Kay Review of UK Equity Markets and Long-Term Decision Making, Professor John Kay, July 2012
12 Ibid.
13 Ibid.
Therefore, any reflection and decisions related to short-termism which only focus on financial markets might overlook the real causes of the problem and not provide any solutions, while creating new layers of regulation or which can exacerbate poor decision-making and increase systemic risk.

Our responses to the ESMA survey

In relation to the various specific sections of the survey, we would like to highlight the following:

- **Investment strategies:** As stated above, diversity of institutional and retail market participants is what creates the core fabric of capital markets. Many strategies will have short term investment horizons, but are unlikely to be correlated with pressures that may be exerted on the management of companies allegedly afflicted by short termism. Market making, algorithmic trend following, and arbitrage strategies are good examples of this.

- **Environmental, Social and Governance (ESG) disclosures:** ESG disclosures should be investor-driven, and EU policy should focus on creating the right incentives for investors to select investments that include ESG, according to their investment objectives and ESG preferences. In order for investors to be able to make well-informed informed choices, asset managers should also be able to access reliable and comparable corporate data. Companies should disclose their ESG risks in a thorough and uniform manner.

- **Institutional investors engagement:** We believe that the EU should ensure that all types of shareholders are protected in order to maintain a climate of trust and transparency on EU capital markets. Some of our members are active shareholders that engage directly with corporations to shape their approach while others express their views without direct engagement; both approaches are valuable to the capital markets and the shareholders of corporations and should be welcomed by regulators. We would also direct the EU’s attention to certain unhelpful measures or proposals that are being discussed in some Member States, notably the Netherlands and France, which can negatively impact the dialogue between investors and corporates.

- **Remuneration:** Remuneration of asset managers both at the level of the management company and the individual is primarily driven by the need to align interest between asset managers and their investors, ensure sound internal motivation and incentive orientation and, under the EU regulatory regime, mitigate excessive risk taking and financial stability risks. Intervening in this well-balanced eco-system in order to reduce “short-termist” pressure on corporates will require a high burden of evidential proof to balance the potential negative impact such intervention could bring in disrupting arrangements built to deliver value to the end investor.

- **Credit Default Swaps (CDS):** CDS are important instruments to ensure liquidity on fixed income markets, as they help asset managers insure against credit exposures that can be illiquid or particularly risky. It is not clear how such financial assets can cause undue short-termist pressures on corporates.

Included in the Annex are AIMA and MFA’s comments on the various questions included in the ESMA survey.
We would be happy to elaborate further on any of the points raised in this letter. For further information please contact Marie-Adélaïde de Nicolay (madenicolay@aima.org) or Matt Newell (mnewell@managedfunds.org).

Yours faithfully,

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ANNEX I

In our responses below, we offer generally qualitative comments rather than quantitative or otherwise specific answers to the questions posed by the survey.

Disclosures on ESG factors

Investor-Driven Approach

While many asset managers and asset management strategies have incorporated ESG factors in their investment process, not every investor and not every investment strategy incorporates ESG. Rather than recommending that ESG factors be incorporated by asset managers, we would ask EU authorities to consider developing guidance to assist interested investors in selecting investments that include ESG factors.

We believe that policy makers can best achieve this by creating incentives for investors on the demand side of the asset management process, rather than imposing requirements (especially any prescriptive requirements regarding factors which must be applied as part of an asset manager's fiduciary obligations) to asset managers on the supply side of the asset management process. When designing incentives for investors to incorporate ESG factors into their investments, policy makers should recognise it may be impracticable to incorporate all ESG factors into every investment. We believe any approach should rely on underlying investor preferences and balance the goals of capital markets efficiency, financial stability and sustainability over time.

To help facilitate this investor-driven approach, we suggest that EU authorities adopt a framework for investment managers to provide a client or prospective client with information on what the composition of a fund or portfolio managed by that investment manager might look like in practice. This approach would then lead to a more detailed discussion with the client around whether that investment strategy would meet the prospective investor's investment objectives and ESG preferences. When an investor does not have such ESG preferences, the investment manager would not be compelled to act against the investor's wishes.

Improve non-financial corporate reporting

ESG risks tend to manifest over the medium- to long-term, and as such long-term investors need information on those risks. While alternative investment managers conduct their own due diligence into the ESG risks attached to a company before making an investment decision, such research can often be costly, time-consuming and ultimately largely dependent on disclosures made by the company in question. That is why it is crucial for companies to disclose their ESG risks in a thorough and uniform manner. While the EU's Non-Financial Reporting Directive (NFRD) is a step in the right direction, it is ultimately incomplete. Companies have broad leeway in how they report their non-financial risks and policies (assuming they report any at all), thereby making a comparison of companies difficult and time-consuming. Further, such disclosures are not audited, making it difficult for investment managers to be able to judge their accuracy.

Investors will struggle to properly integrate ESG information into their investment decisions while there is no standard, thorough and audited template for non-financial disclosures. A lack of such information could make investors more wary when making long-term investment decisions. Enhanced disclosures would benefit both investors and companies by increasing transparency, ensuring investors are compensated for the risks they assume, and rewarding companies with strong ESG profiles.
The role of fair value

AIMA and MFA support accounting standards that are transparent and appropriate for markets to function efficiently. We would caution against any drastic changes related to the frequency and quality of disclosures to the market.

Institutional investors’ engagement

The Associations’ memberships include asset managers that are engaged, including some activist managers. Evidence shows there is a positive correlation between shareholders’ activism and a company’s long-term performance. On average, activist engagement by alternative investors is correlated to improvements in strength of the company, reflected in higher share prices, operating performance and productivity. In addition, a recent study\(^\text{14}\) also demonstrated the positive impact on companies’ innovation efficiency over the five-year period following the activist intervention.

Furthermore, based on research conducted by AIMA,\(^\text{15}\) activist investment managers are relatively longer-term investors and frequently structured so as to provide “patient capital”. Indeed, while the average market-wide holding period of stocks is around three months, activist investment funds hold investments for longer periods than is common - holding periods average 1.8 years, while specialist activist funds have investment horizons averaging almost two years and can sometimes hold shares for significantly longer. As a consequence of the relatively long-term investment horizons, activist funds often employ structural characteristics designed to retain capital for the duration of activist campaigns.

Remaining obstacles to engagement with investee companies

Although shareholder protection has improved in the EU, obstacles to engagement with investee companies still remain, notably at the national level.

In general, we would encourage policy makers and corporate executives to protect and promote all shareholders’ rights as well as all shareholder engagement, whatever the type of investor. Indeed, we have observed initiatives at the national level which are to the detriment of pre-existing shareholders rights, such as for example the proposal in The Netherlands which would allow a corporate board to apply a “reflection period” of 250 days when faced with a change of strategy proposed by a shareholder.

We believe that this measure would have a strong negative impact on the ability of shareholders to efficiently engage with their investees. We also note the current debate in France to protect national corporates from activist fund managers, which could have repercussions on the general ability for shareholders of French companies to effectively engage with their investees’ board, depending on whether any material regulatory decisions are taken in the next few months.

Furthermore, we have observed a trend, notably in France and in the Netherlands, to potentially lower initial notification thresholds to very low levels. We note that it is harder to engage in a constructive dialogue with these restrictions in place. This has a chilling effect on investor/issuer dialogue. Private, constructive dialogue is the ideal form of investor-issuer engagement, and modifying disclosure rules would deprive companies of this opportunity. There are numerous


\(^{15}\) “Unlocking value – the role of activist alternative investment managers”, AIMA, February 2015.
instances where shareholders come to a private agreement with a company regarding sensible improvements, which are then announced to the market without reference to the involvement of the engaged, proactive investor/shareholder. Lowering thresholds would make those win-win scenarios more difficult to achieve.

Shareholder Rights Directive implementation

We are currently discussing the implementation of the revised Shareholder Rights Directive (SRD II) with our members, and we are committed to make this new Directive as efficient and meaningful as possible for the issuers and the end-investors. We will be happy to comment on the impact of the Directive once the new policies will have been tested in the market.

Remuneration of fund managers

As mentioned in ESMA's explanatory note, this section of the survey is meant to look at a potential "separation of behaviours" between asset owners and asset managers, as well as the remuneration practices of fund managers given the perceived impact they can have on an investee company's short-term pressure.\textsuperscript{16}

We note that this section only asks questions about different manager holding periods (hedge funds, private equity, fixed income, etc.), as well as their variable remuneration practices, in particular around the time horizons in which variable remuneration is likely to vest. There are no additional questions around the context of such strategies.

Relationship between a fund manager's variable remuneration and short-term pressure on corporates

We believe that data collected in response to the questions asked by ESMA in this section will not provide meaningful answers as it will only give a snapshot on the implementation of such practices, but will not give any evidence on whether, and to what extent, such practices have any impact on the perceived short-term pressures on corporates.

We believe that the assumption that there is a relationship between a fund manager's variable remuneration and the application of a short-term pressure on corporates is not correct. Variable remuneration systems in the fund management environment are already subject to two mechanisms - or two “layers” of calculation – which makes the link between a staff member of a management company and the short-term performance of an underlying portfolio company tenuous. These two layers (detailed below) create a distance between a fund manager's remuneration and an issuer's performance so we believe that looking at remuneration practices of asset managers is a poor choice of lever when trying to discourage short-termism in portfolio companies.

Firstly, a fund manager's variable remuneration has to be considered as the result of an aggregated number where the short-term performance of a single investee company is usually not relevant. Indeed, the variable remuneration is calculated, and paid, from the pool of the fund's

\textsuperscript{16} The link between fund managers' variable remuneration and short-term pressure on corporates is not explicitly mentioned in ESMA's survey's explanatory note but is stated in the High Level Expert Group report on sustainable finance, p.12 (January 2018), which initiated the thinking on short-termism in the EU.
The performance fee is itself based on the global performance of many different types of corporates in which the fund has invested.

Secondly, the potential collection of a performance fee is then subject to mechanisms such as a high water mark, whereby the fund will collect performance fees only if the performance of the fund is higher than the highest performance it has ever reached, and/or a hurdle rate, which is the minimum amount of profit or returns a fund must earn before it can charge a performance fee. Such mechanisms attenuate the possibility that the variable remuneration of those working at the manager could lead to short-term pressures on companies. Indeed, results from a single corporate are not necessarily meaningful, as only the combined performance of the whole cohort of a fund’s underlying corporates reaching a certain performance level will have an impact on a fund manager’s variable remuneration.

These structural features or mechanisms put some distance between the variable remuneration of fund managers and the corporates’ short-term results or performance and contradict the assumption that there is a link between fund managers’ remuneration practices and pressure on corporates. This survey is therefore potentially based on misleading assumptions.

The outcome of the survey is not applicable to all fund managers

We would caution ESMA against implementing general changes to the current remuneration regulatory framework for fund managers solely on the basis of any results from this survey. Indeed, the purpose – and the questions – of this survey is designed for fund managers involved in corporates-related markets (equity, bonds). This survey is however not relevant for the many other asset managers involved in other types of strategies such as foreign currencies, interest rates derivatives or government bonds, which have nothing to do with short-term pressure on corporates. We would therefore respectfully recommend against any changes to remuneration regulations on the basis of data collected from this survey.

Alignment of interests with investors

As regards alignment of interests between the fund manager and the fund investors, in general, asset managers are typically compensated for their services in the form of a management fee based on the level of assets under management and/or a performance fee, which ensures an alignment of interests with their investors. For owner-managed asset managers and for managers with senior managers and risk takers who participate in the profits of the business through profit shares, points or reference shares (‘firm principals’), there is already an alignment of interests between the manager and its clients, which addresses many of the policy concerns underlying the remuneration-related policy debate.

Furthermore, regulators have very recently pondered this question and consequently changed and harmonised remuneration rules for fund managers in the EU in the AIFMD and UCITS Directive frameworks as well as in the newly adopted investment firm’s prudential regime (not yet published in the Official Journal).

These regimes are among the most onerous compared to other financial centres, and reviewing them now would clearly impact EU market players’ competitiveness. We also do not see any obvious reason why such measures should be changed, especially after having been very recently reviewed by the co-legislators in the context of the new investment firms’ prudential framework.
Use of CDS by investment funds

The discussion of sell only or net sell CDS positions is of interest to our members. The questions posed in the questionnaire and the accompanying document do not explain the manner in which short-termism could be exaggerated by funds employing CDS based strategies. The single name CDS markets appear to be fairly small and have shrunk since the financial crisis. Indeed, the size of net notional exposures to EU corporate entities which are not in the broader CDS indices is extremely small.\(^\text{17}\) It is therefore surprising that the net selling of CDS markets could be seen as a potential source of macro-level short-termism.

Furthermore, CDS are an important means by which credit risk can be hedged. Rather than fuel short-termism, CDS can facilitate the lending that is crucial for long-term economic growth. The existence of CDS allows institutions to invest in fixed income assets with more certainty, as they can hedge against the risk of a default.

As the recent paper by the European Systemic Risk Board (ESRB) notes, selling CDS provides UCITS with exposure to fixed income, while offering greater liquidity than the typical bond – the same logic applies to AIFs.\(^\text{18}\) Such exposures are crucial to fund diversification, and thus risk mitigation. The extra liquidity provided by selling CDS rather than purchasing bonds, meanwhile, not only offers an added layer of protection against tail risk, but also ensures that UCITS in particular can more easily meet any investor redemption requests they may receive. Finally, the fact that selling CDS is less cash-intensive than buying bonds means that funds not only have more cash on hand to meet investor redemption requests, but they can also invest in other assets and thus further diversify their asset allocation.

Furthermore, any restrictions on the selling of CDS by UCITS or AIFs would limit the liquidity of the wider CDS market, making it harder for participants in the primary fixed income markets to hedge their risks and potentially lowering demand for fixed income assets. Restrictions on short CDS also inhibit investments in less liquid markets where it is complex to run a long/short equities book, so many investors go long a stock or debt and then short CDS to hedge. Such restrictions would disproportionately affect medium- and long-term fixed income or less liquid assets, concentrating demand in short-term or liquid assets and fostering greater short-termism in the fixed income markets.

\(^\text{17}\) "The European Corporate Single Name Credit Default Swap Market", ICMA, February 2018.
\(^\text{18}\) "Use of credit default swaps by UCITS funds: evidence from EU regulatory data", Achim Braunsteffer et al., June 2019.
ANNEX II

Correlation between capital market development and levels of R&D spending and investment

There does not appear to be any significant correlation between the size and depth of a country's equity market, or its liquidity and the performance of the economy alongside the key measures are often used as indicators of short-termism – lack of R&D spending and investment.

When it comes to a macro assessment of R&D as a proportion of GDP in G7 countries, as well as total investment as a proportion of GDP, we see there are broadly three distinct groups in each category (R&D and Investment as proportion of GDP) – high-, medium- and low-spend countries. Japan, the United States and Germany are among the high R&D spenders, and their economies have experienced growth in R&D spend since the mid-nineties. France is in the medium R&D spend category of countries with relative stagnation in spending. Canada, the UK and Italy are among the low R&D spending countries.

With investment, the picture is slightly different with results sometimes reversed: Canada, Japan and France are among the high investing countries. The United States and Germany are in the middle of the pack, with the UK and Italy at the bottom.

Comparing the results on R&D spend and investment with the data on equity market size and turnover shows that there are economies with deep and liquid capital markets with high R&D spend and investment (US), and those that have much smaller capital markets but also high R&D spend and investment (Germany). Countries like the UK or Italy exhibit yet a different set of characteristics – the UK is among the countries with more developed capital markets while Italy's market is probably the least developed. But both countries score low when it comes to R&D and investment.

![Chart 1: Gross R&D spending as % of GDP](image)
Chart 2: Investment as % of GDP

Source: OECD

Chart 3: Stock market capitalisation as % of GDP

Sources: Fred, ECB, ONS, CEIC
A cursory look at some of these basic variables shows that it may be difficult to draw any meaningful conclusions as to the effect of ‘market’ forces, as manifested by “excessive” equity market size or turnover, on the overall behaviour of economies at large.