#13 - 2012

NBIM DISCUSSION NOTE

Well-functioning financial markets

19/11/2012

In this note we discuss the theoretical foundation for well-functioning financial markets and why well-functioning financial markets are essential to reach the objective for the management of the Fund. Against this background we discuss, how NBIM may work to influence how the markets we invest in function.

Executive Summary

- NBIM is a large, long-term, global investor. Well-functioning financial markets are essential to reach the objective for the management of the Fund and fulfil our mission to safeguard and build financial wealth for future generations.
- Resilient, robust financial markets that are less prone to shocks and facilitate long-term growth are among the most important factors determining the long-term return on the Fund. Corporate transparency helps overcome potential information asymmetries between us as an owner and the companies we commit fund capital to. Fair access to the markets enables us to easily and rapidly determine the best available price and serves to minimise search and transaction costs.
- Well-functioning financial markets are described in standard microeconomic theory. According to theory, interventions might be warranted to correct market imperfections and failures. Interventions that are not soundly based risk being ineffective or could lead to unwanted and unforeseen consequences.
- NBIM should engage in the development of regulatory frameworks and industry-wide standards with the aim of safeguarding the long-term interests of the Fund.
- Successful engagement requires that we commit sufficient time and resources. Through high-quality, research-based, credible and timely engagement using our in-depth market knowledge, we should aim to influence how the markets we invest in function.

1. Motivation

NBIM is the asset management department of the Norwegian central bank, Norges Bank. We manage the Norwegian Government Pension Fund Global on behalf of the Norwegian government with the objective of maximising the long-term international purchasing power of the Fund with moderate risk. Our mission is to safeguard and build financial wealth for future generations. Our exercise of ownership rights is to safeguard the long-term return on the Fund.

NBIM is a large, long-term, global investor. Well-functioning financial markets that execute payments, channel capital and allocate risk efficiently are important for NBIM in order to reach the objective for the management of the Fund and fulfil our mission.

The growth rate of the global economy is among the most important factors determining the long-term rate of return on the Fund's investments. We have a strong interest in promoting behaviour and supporting regulations that yield more resilient, robust financial markets that are less prone to shocks and facilitate long-term growth.

Good corporate governance of the companies we invest in contributes to growth and financial stability by underpinning market confidence and financial market integrity. Corporate transparency helps overcome potential information asymmetries between us as an owner and the companies we commit capital to.

We trade in the international securities markets on a daily basis. We are concerned about fair access to markets and issues related to market transparency, integrity and liquidity. Fair access to the markets enables us to easily and rapidly determine the best available price and serves to minimise search and transaction costs.

The rest of this note is structured as follows: Section 2 establishes a theoretical foundation for the discussion of well-functioning markets; Section 3 provides an overview of different stakeholders; Section 4 sets out a list of issues that NBIM could focus on as a long term, global investor; and Section 5 discusses how these issues could be approached.

2. Theoretical foundation

NBIM's strategy for well-functioning financial markets should be founded on a sound theoretical basis. This theoretical foundation will provide guidance and direction for how we should assess different issues. We are, however, aware that the answers provided by theory will be challenged in practice. Nevertheless, the theoretical foundation will facilitate a structured approach when discussing the functioning of the markets we invest in.

Economic theory on competitive markets is a natural starting point when discussing the theoretical foundation. Economic theory will describe a perfectly competitive financial market as complete, liquid, innovative, dynamic and legitimate. In complete markets, it is possible for an investor to construct, within existing assets, any position on future states of the world optimal for him, given his initial wealth. This is a requirement for a market outcome to be efficient, in the absence of externalities. It is further a requirement that the market is liquid so that these positions may be constructed with minimal loss of value at any time within market hours. In innovative and dynamic markets, new effective products, processes, services and technologies are developed, and there is continuous change in both the supply of and demand for any particular product or group of products. A legitimate financial market requires a legal framework with well-defined property rights that determine what may be sold as well as what rights are conferred to the buyer.

In a perfectly competitive market, the cost of entry and exit are zero or close to zero. It is therefore relatively easy for participants to enter or exit the market. None of the market participants has the capacity or market power to significantly influence the price of a homogenous product. Relevant and precise information is available to all at reasonable cost, implying that the prices and quality of products are assumed to be known to all consumers and producers. Finally, there are no externalities

where an exchange can cause additional effects on third parties, positive or negative. In a competitive market, any voluntary exchange is therefore mutually beneficial to both parties involved in the trade. These conditions are seldom fulfilled. Market failures/imperfections occur. The three main reasons for such market failures are presence of externalities, asymmetric information and monopoly power. In financial markets, the two first reasons are the most prominent.

Negative externalities arise when the costs of individual actions do not incorporate potential broader costs that may be imposed on others from those actions. The cumulative effect of leveraged financial institutions simultaneously expanding and cutting their positions is a potentially important systemic externality. Asymmetric information means that one party to a transaction has more or better information than the other party. This might result in adverse selection[1] or moral hazard[2]. Lack of transparency about bank balance sheets, underlying pools for securitised investments or an investor's risk-bearing capacity, for example, could give rise to asymmetric information. In other cases, information might be available but not in an appropriate form. Globalisation, technological improvements and deregulation of financial markets have fostered a competitive market environment. Nevertheless, proprietary trading and clearing systems might raise the barrier to entry in certain markets and grant monopoly power to some market participants.

Market failures may warrant interventions. Some proponents argue that market failures are likely to be more pervasive in financial markets than other markets and that there exist forms of government intervention that will make these markets function better and improve the performance of the economy (see, among others, Stiglitz et al. 1993).

Coase (1960) explored institutional and legal arrangements in order to enable private agreements in the presence of externalities. The Coase theorem states that if trade in an externality is possible and there are no transaction costs, bargaining will lead to an efficient outcome regardless of the initial allocation of legal rights.[3] In practice, poorly defined property rights, costly negotiation and other obstacles to bargaining may prevent the efficient outcome. In such cases government intervention may be warranted. Weber (2009) argues that, compared to self-regulation, governmental regulation has the advantages of democratic legitimacy and enforceability since this type of regulation implicates a previous legislative process.

Levine (2011) argues that the incentives shaping the decisions of financial institutions exert a profound impact on economic growth. Financial regulation is not therefore just about preventing crises: it is also about cultivating financial systems that provide growth-promoting services. Good regulation can increase the confidence of investors and thus serve to attract capital to financial markets. In the book *Regulating Wall Street*, Cooley and Walter (2010) argue that a good regulatory architecture should encourage innovation, provide transparency, ensure safety and soundness, and promote competitiveness in global markets. Efforts to simultaneously pursue these objectives might create challenging policy trade-offs between financial efficiency and innovation on the one hand and institutional and systemic safety on the other.

Financial markets are dynamic. Regulations have to be adjusted constantly to keep up with changes in the external environment and potential regulatory arbitrage. These dynamics could indicate that simple regulations may be more effective, and more enforceable, than complicated regulations. The Bank of England's Andy Haldane echoed this in his speech to fellow central bankers at Jackson Hole in August 2012 where he called on regulators to rip up the Basel Accord and start again with simpler rules. A general challenge is that the legislative democratic process may be long and cumbersome. New regulations may in some cases be put into force only to find that the technical circumstances

1 An example of adverse selection is where people who are a high risk are more likely to buy insurance because the insurance company cannot effectively discriminate against them, due to either lack of information or regulatory constraints.

2 Moral hazard is a situation where a party will have a tendency to take a risk because the costs that could result will not be felt by the party taking the risk. An example is where people are likely to behave more recklessly after becoming insured, because the insurer cannot observe this behaviour or cannot effectively retaliate against it. It has been argued that governments' implicit guarantee to the banking sector created a fertile ground for moral hazard and excessive risk-taking in the banking sector.

3 The theorem also assumes that agents can express all their preferences in terms of money, and the amount of money will not create a wealth effect.

have already advanced, making the new regulations ineffective or obsolete. This is often described as regulatory lag.

Regulations will often represent a cost to market participants. Some organisations might therefore favour more regulations simply because they due to scale are better positioned than their competitor to bear the costs associated. This may serve as an example on how different stakeholders acting in their own interest have different view on how to correct for market failures.

Further, well-intended regulatory initiatives might generate perverse incentives. Lawmakers need to beware of the interaction between internal incentives and incentives originating outside the financial sector. During the recent financial crisis, the focus on return on equity and short-term remuneration packages in an environment with loose monetary policy and abundant cash available gave strong incentives for financial institutions to increase leverage, in some instances to levels that proved unsustainable.

Regulations come in many shapes and forms, from the overall legislative framework decided in parliament to voluntary standards developed and agreed among market participants. The balance between legislation, regulation, self-regulation, voluntary standards, etc. will vary from country to country dependent upon both cultural and historical factors. For all types of regulations, efficient enforcement is key. A carefully designed regulatory framework is of little value of the enforcement of the same framework fails to live up to the same standards, for example in the presence of fraud or corruption. Ultimately, the functioning of financial markets will be a joint outcome of market forces and the incentives provided by various rules and regulations, both intended and unintended.

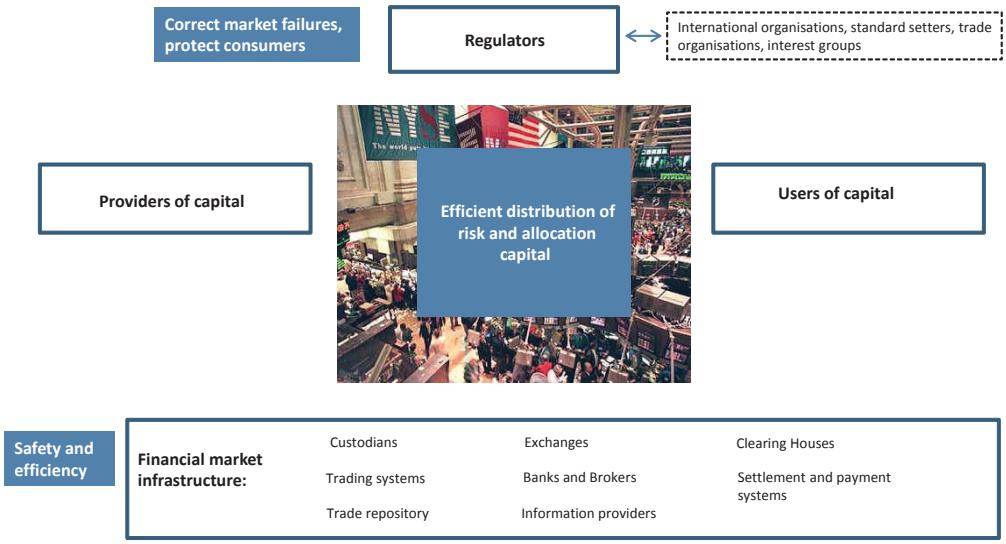
3. Overview of stakeholders

In its simplest form, a market is a place where parties engage in the exchange of goods and services. In financial markets, the exchange takes place between providers of capital and users of capital. Following this definition, our discussion will not be limited to public markets, but also apply to private markets.

Although stakeholders agree that a certain type of market failure/imperfection exists, they might differ in their assessment of how such failures should be corrected, if they should be corrected at all. A reasonable assumption is that all stakeholders will act in their own interests. This means that they will not always act in accordance with the aspirational goals we set out in section 1 and 2.

Further, different stakeholders may attach different weights to the various aspects of well-functioning financial markets. While some stakeholders are likely to put high emphasis on issues such as innovation, competiveness and efficiency other stakeholders might be more concerned about transparency and investor protection. The chart below and the following discussion may serve as an illustration of the diversity of different stakeholders in the financial markets. The illustration below covers professionals (other than consumer protection) only, regulators might also respond to other types of public pressures such as the media.

Chart 1: Stakeholders in financial markets – an illustration



Source: *NBIM*

Providers of capital (investors) and users of capital (issuers) are the ultimate beneficiaries of financial markets. Most of the other stakeholders we present below can be considered as "intermediaries" or part of the financial market infrastructure.

Capital can be provided in the form of equity or loans sourced from private and public savings. Mutual funds, hedge funds, pension funds, life insurers, sovereign wealth funds and reserve funds are the most important stakeholders managing savings on behalf of other parties. Through the market mechanism, these savings are transformed into productive investments by public and private companies. Kay (2012) argues that the main purpose of the financial systems is to enables savers to have confidence in the borrowers whom they do not know: confidence that they will earn the returns they expect and be able to realise their investment when they need funds.

Financial market infrastructure plays a critical role in the financial system and the broader economy by establishing a common set of rules and procedures and allows market participants to manage their risks more efficiently and effectively. This provides liquidity, improves transparency, facilitates price discovery and reduces investor uncertainty through safekeeping of assets. The International Organization of Securities Commissions (IOSCO) and Bank of International Settlements (BIS) (2011) define financial market infrastructure as a multilateral system among participating financial institutions, including the operator of the system, used for the purposes of recording, clearing or settling payments, securities, derivatives or other financial transactions. As illustrated in the diagram above, we use the term financial market infrastructure somewhat more broadly and include custodians, exchanges, brokers and information providers such as credit rating agencies and data providers.

Government regulations are generally decided at national level by authorities such as the Securities and Exchange Commission (SEC) in the US and the Financial Services Authority (FSA) in the UK, based on overall principles set by the politicians. Given the global nature of financial markets, national discretion might pose some challenges. Despite commonly agreed principles and objectives, different definitions, approaches and national policy objectives will result in differences from country to country. The European Union has established three European supervisory authorities – the European Securities and Markets Authority (ESMA), the European Banking Authority (EBA) and the European Insurance and Occupational Pensions Authority (EIOPA) to foster greater supervisory convergence between member states over time.

In many countries, the different regulatory bodies' respective mandates overlap to some extent, complicating the process. For example, six US public entities – the Commodity Futures Trading

Commission (CFTC), SEC, Federal Deposit Insurance Corporation (FDIC), Federal Reserve Board, Treasury Department and Office of the Comptroller of the Currency – have to act jointly to bring the Volcker Rule into effect.

Recently the G-20 has played an important role in setting the direction and formulating the key priorities in a new regulatory framework. The Financial Stability Board (FSB) was established to coordinate the work of national financial authorities and international standard-setters. Examples of international standard-setters are the Basel Committee on Banking Supervision (BCBS), the Committee on Payment and Settlement Systems (CPSS), the Committee on the Global Financial System (CGFS), the International Accounting Standards Board (IASB), the International Association of Insurance Supervisors (IAIS)), the International Audit and Assurance Standards Board (IAASB) and IOSCO. In all areas, the need to deliver timely action has to be balanced by the need to ensure transparency, legitimacy and sufficient consultation with stakeholders.

Principles, standards and regulations are not designed by the regulating bodies in a vacuum. Regulators are often appointed by and responsible to politicians who in turn respond to public pressures. Such mechanism may result in regulatory actions that fail to deliver a better functioning financial market[4].

The bigger banks tend to have their own advocacy groups, but there are also organisations such as the Association for Financial Markets in Europe (AFME), Asia Securities Industry and Financial Markets Association (ASIFMA) and Securities Industry and Financial Markets Association (SIFMA) that aim to offer a single voice for the respective region's capital markets participants and their views at national, regional and global level. There are also more instrument-specific interest groups such as the International Securities Lending Association (ISLA), the International Swaps and Derivatives Association (ISDA) and the Futures and Options Association (FOA).

On the buy side, the number of well-established broad interest groups is more limited. There are some groups originating from more traditional corporate governance work such as the International Corporate Governance Network (ICGN) and Council of Institutional Investors (CII). Historically, sell-side market participants have been more active on the advocacy front than those on the buy side. The International Capital Market Association (ICMA) aims to bring all market participants together to facilitate the interaction between issuers, lead managers, dealers and investors for the benefit of an efficient and well-functioning security market.

There are a number of issuer networks such as the Business Roundtable of the US which is quite influential on federal policy on a number of issues, including corporate governance. Similar groups exist in Europe. Further, positions taken by local professional associations and bodies such as the British Bankers' Association, the Association of British insurers, the American Bar Association and Delaware Supreme Court tend to have global spill over effects.

In additional you have a number of self-regulatory organisations. These self-regulatory bodies aim to create a level playing field serving the common interest of all market participants. In the US, the Financial Industry Regulatory Authority (FINRA) oversees close to 4,500 brokerage firms and 630,000 registered securities representatives[5]. FINRA's chief role is to protect investors by maintaining the fairness of US capital markets through setting professional standards and encouraging ethical behaviour. Other countries have agencies pursuing similar objectives, such as the Chartered Institute for Investment & Securities (CISI) in the UK with more than 40,000 members[6]. A general challenge for all such organisations is to keep abreast with financial complexity driven by new products and technological advances.

Concerns related to market transparency, governance and liquidity in private markets have traditionally been dealt with in private agreements between the investor and the issuer. This is in the process of

4 The literature on the costs and benefits of regulations suggests that policymakers' enthusiasm for tighter regulatory standards is not matched by unambiguous evidence that the benefits outweigh the costs, see Jenkinson and Ramadorai 2008 for a brief review.

5 Source: www.finra.org

6 Source: www.cisi.org

changing. In addition to government efforts mainly designed to increase investor protection, a number of self-regulatory initiatives have emerged. Organisations such as the European Association for Investors in Non-Listed Real Estate Vehicles (INREV) engage in a number of different activities with an ambition to improve transparency, professionalism and best practises across the industry. The goal is to make non-listed real estate funds more accessible and attractive to investors. Within private equity (PE), the International Limited Partner Association (ILPA) has developed a set of principles to improve alignment of interests, governance and transparency of investments in PE funds. Trade organisations, such as the European Venture Capital Association (EVCA), have also been actively engaged in the establishment of standards for governance and valuation of private investments.

The role of the financial industry in allocating capital, coping with risk and providing financial services has strong public interest implications. A number of non-governmental organisations (NGOs) have engaged in advocacy activities to promote the public interest in issues related to the regulation of the financial sector. Finance Watch and Better Markets are two such groups that were established after the 2007 financial crisis.

A number of institutions have engaged actively in the debate about the need to reform the global financial system in the wake of the financial crisis. There have been at least three broad categories of participants in this debate from a more academic angle. There are the international finance institutions, such as the IMF and World Bank, mainly focussing on macro-related issues such as systemic risk and the need to strengthen macro prudential oversight. Research departments at central banks, such as the Federal Reserve Bank of New York, have provided similar types of analysis. Further, a number of academic institutions, such as New York University and the London School of Economics, have launched research projects summarised respectively in *Regulating Wall Street* and *The Future of Finance*. Within this category, there are research networks such as the Centre for Economic Policy Research (CEPR) in Europe and the National Bureau of Economic Research (NBER) in the US. A third group compromises independent think-tanks such as the Centre for European Policy Studies (CEPS), the European Capital Markets Institute (ECMI), the International Centre for Financial Regulation (ICFR) and the Centre for the Study of Financial Innovation (CSFI), all based in Europe, and groups such as the Brookings Institution and the Peterson' Institute in the US.

This brief overview illustrates the complexity in understanding the dynamics in financial markets where a multitude of stakeholders are acting in their own self-interest. The interaction between these different stakeholders and their relative strength influence the agenda and shape the discussion.

4. Overview of issues

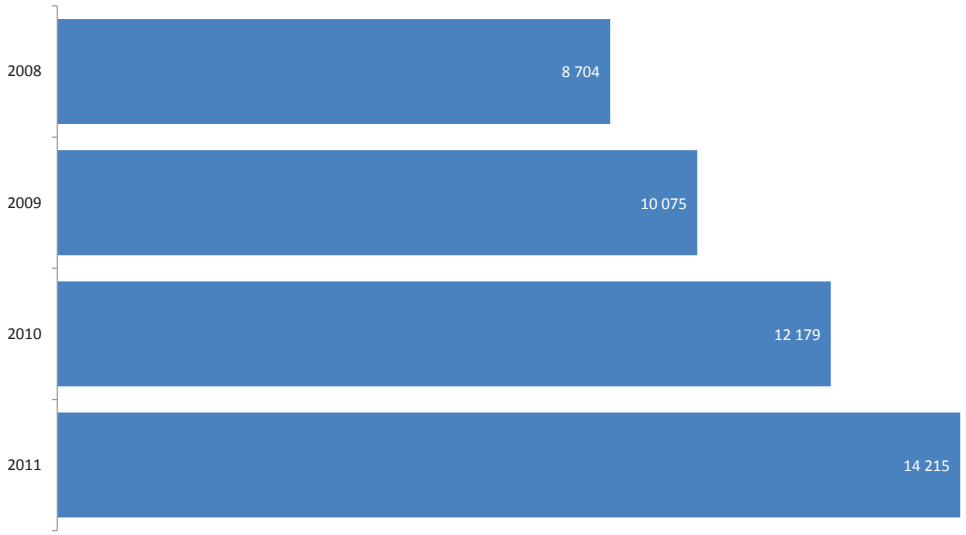
Perfectly competitive financial markets are hard to come by. This implies that the markets we invest the Fund in will not necessarily exhibit all the characteristics discussed in the section on the theoretical foundation. The recent financial crisis highlighted great challenges related to how financial markets function. We saw mispricing of risk, and the difficulties of managing financial imbalances. Other problems were related to liquidity. The problems facing large investment banks in September 2008 implied, in effect, a closure of the main fixed-income markets. Markets for other less liquid assets, such as real estate, private equity and infrastructure, also dried up, while the more liquid markets for listed equities experienced sharp declines and periods of record-high volatility driven by both unwinding of leveraged positions and forced selling motivated by regulations.

Politicians and regulators recognised the need for a revised global financial regulatory framework with the ambition of creating a more resilient system better able to serve the needs of the real economy based on accountability and transparency. Currently politicians seem less willing to leave parts of financial markets unregulated or subject only to 'light touch' regulation. The quote below could serve as an illustration:

> "*There are gaps in the regulatory framework that have to be closed, because unregulated activities must not take place. Financial markets should be organised, transparent and fair for investors*".[7]

7 Press release from the European Parliament's Committee on Economic and Monetary Affairs.

Chart 2: Global regulatory events.



Source: *Thomson Reuters Special Report (2012): The state of regulatory reform.*

Thomson Reuters (2012) finds that more than 60 regulatory events occur each day. A regulatory event could be anything from a speech, which may signal the direction of a new regulation, to a final binding rule mirroring the fact that regulations can be issued at different levels. Europe and the US, the epicentres of the financial crisis, account for roughly 75 percent of regulatory events. Perhaps more surprising is the fact that the major regulators, such as the SEC, FSA and central European bodies, together account for only 20 percent of regulatory activity.

With the current focus on regulation, the list of issues NBIM could engage in is long. Below, we look more closely at some of the issues high up on the international agenda. The purpose of this section is to illustrate the diversity of issues NBIM could engage in as a long-term investor and point in the direction of relevant research on some of these issues. We do not aim to come up with a list of priorities. We keep our discussion brief and at an overall level. In order to formulate a strategy on any of these issues, additional research and analysis are warranted.

4.1 High-frequency trading

High-frequency trading (HFT) is not a single strategy, but rather a set of technological arrangements and tools employed in a wider number of strategies. IOSCO (2011) identifies three types of risks and challenges posed by HFT: the efficiency of markets, the fairness and integrity of markets, and the stability and resilience of markets.

For us as an investor, the key questions in this respect are to what extent the increase in HFT has distorted the price discovery process. The observed tighter bid-ask spreads may have come at the cost of shallower markets. We know that one trade order today requires more trading than it did in 2006. The average size of an equity transaction on a trading platform fell from approximately 25,000 euros in 2006 to 10,000 euros in 2009 (OXERA 2011). Large investments in trading technology may have created barriers to entry, and concerns have been raised that the proliferation of HFT could facilitate extreme price shocks being transmitted between different asset classes and different trading venues more easily.

The debate on HFT has been hampered by the availability of evidence and analysis. The UK's Government Office for Science established the Foresight project to provide independent advice to policy-makers by drawing upon the available science and evidence from across the world. Their

report on the economic impact of MiFID rules aimed at HFT [8] aims to narrow this gap and provide a thorough assessment based on interviews with stakeholders, studies and consultation with regulatory authorities, market participants' responses to consultations and other papers, as well as findings in the academic literature. The general finding in most of the academic studies is that that high-frequency trading appears to contribute to improved market quality under normal market conditions, but appears to be associated with periodic illiquidity. See, for example, Brogaard (2010), Hendershott, Jones and Menkveld (2011), Hasbruk and Saar (2011), Kirilenko et al. (2011) and Easley, Lopez de Prado and O'Hara (2011). Useful reviews of the academic literature can also be found in Gomber et al. (2011) and Penalva (2011).

4.2 Dark pools

Dark pools refer to trading venues where pre-trade prices and order sizes are not visible.

For us as an investor, there are a number of issues surrounding the use of dark pools. On the one hand, dark pools may be an efficient way to build a position in shallow markets. On the other hand, the existence of dark pools might impact the price discovery process and hamper market integrity due to possible differences in access to markets and information.

By definition, high-quality data on dark pools are in short supply. There is very limited empirical evidence on dark pool activity, both cross-sectional and time series. The evidence from the fairly limited academic research that has been conducted is mixed. Based on data for a large cross-section of US stocks, Buti, Rindi and Werner (2011) find that increased dark pool activity improved liquidity, but lowered share volume. Gresse (2012) uses European data and finds a neutral effect from dark trading on the liquidity of stocks listed on the London Stock Exchange and Euronext. Brandes and Domowitz (2010) and Buchanan et al. (2011) also study dark pool trading in Europe and find that increased participation in dark pools enhances the price discovery process, while Degryse, De Jong and Kervel (2011) find that fragmentation is beneficial for the liquidity of 52 Dutch stocks as long as trading is transparent, but that dark trading has a detrimental effect on liquidity in the sample of Dutch stocks they examine.

4.3 Pre- and post-trade transparency

Exchanges provide an open, transparent, regulated trading venue and demand both pre- and post-trade transparency[9]. Trading in equities normally takes place on such exchanges[10] or alternative trading venues subject to similar transparency requirements. Trading in fixed-income instruments, on the other hand, is mostly conducted through the use of investment banks as intermediaries with limited trade transparency[11].

Current regulatory initiatives imply that the pre- and post-trade transparency obligations for equities will cover all financial instruments. On the one hand, transparency improves the price formation mechanism, facilitates comparisons between different trading venues and promotes market integrity, as market manipulation can be more easily identified.

On the other hand, studies suggest that increasing disclosure in the form of greater pre- or post-trade transparency might have ambiguous effects on liquidity in fixed-income markets (see, for example, O'Hara 1995 and Madhavan 2000 for a survey).

4.4 OTC derivatives

Over-the-counter (OTC) derivative contracts are not standardised and traded on an exchange, but are privately negotiated between two counterparties (for example, a bank and an investor).

8 "What is the economic impact of the MiFID rules aimed at regulating high-frequency trading?", paper commissioned as part of the UK government's Foresight project on the future of computer trading in financial markets.

9 Pre-trade transparency is the public disclosure of current bid and offer price together with the depth (volume) available at those prices. Post-trade transparency is the public disclosure of the price, volume and time of all executed transactions, as close to real time as possible.

10 NBIM currently invests only in listed equities.

11 Note that BlackRock, the world's largest money manager, has announced plans to start a bond-trading system that will allow investors to bypass investment banks as part of the group's wider efforts to streamline trading and access liquidity across various means (*Wall Street Journal*, 12 April 2012).

Due to the non-standard negotiated nature of OTC contracts, asset class innovations may often originate within the OTC space. However, the counterparty risk involved with OTC exposures is a potential source of contagion in the financial system. Furthermore, during periods of financial stress, lack of transparency about risk exposures may spill over to the wider economy as institutions seek to limit their exposures to each other by pulling out of existing positions.

In September 2009, the G-20 leaders agreed that all standardised OTC derivative contracts should be traded on exchanges or electronic trading platforms, where appropriate, and cleared through central counterparties (CCPs) by the end of 2012. The ambition is to increase transparency and reduce counterparty and operational risks associated with trading in OTC derivatives[12].

4.5 Short-selling

Short-selling relates to the selling of a security that the seller does not own, or any sale that is completed by the delivery of a security borrowed by the seller. The ability to short the market contributes to a complete market, as discussed in Section 1. Short-selling plays an important role in financial markets for a variety of reasons, such as providing more efficient price discovery, mitigating pricing bubbles, increasing market liquidity and facilitating hedging and risk management activities. There have, however, been concerns that short-selling, used in a deliberately abusive manner, might have potential destabilising effects on pricing, and that restrictions on investors' ability to short the market are therefore needed.

A general finding from academic studies on short-selling is that frictions and outright bans hurt market quality as they prevent timely price discovery and fail to boost stock prices (e.g. Miller 1997, Diamond and Verrecchia 1987, Duffie, Garlenau and Pedersen 2002, Lamont 2004 , Bai, Chang and Wang 2006 and Federal Reserve Bank of New York 2012). Another finding is that short sellers act as contrarian traders who contribute to market efficiency. For further details, see, for example, Boehmer and Wu (2011), Diether, Lee and Werner (2009), Dieter and Werner (2011) and Beber and Pagano (2011).

4.6 Financial transaction taxes

A financial transaction tax is a levy placed on a specific type of monetary transaction for a particular purpose. The introduction of such a levy is currently being discussed in several European countries. The political ambition is to secure a fairer contribution from the financial sector to the public finances of the European Union and stabilise financial markets by reducing speculation. Currently, it looks a tax on transactions of bonds, shares and derivatives might be implemented in a number of European Countries by the end of 2014[13], Still, details about which transactions should be taxed as well as the rate are still to be ironed out. For NBIM, such initiatives may, all else being equal, make trading more costly in the affected markets.

4.7 Banking regulation

The direction of future banking regulation is set out in the Basel III agreement covering the regulation of systemically important financial institutions and issues relating to capital requirements, liquidity requirements and leverage ratios. Special attention has been given to the design of resolution regimes which imply that investors will be exposed through various bail-in mechanisms[14]. Limitations on banks' activities, such as separating traditional banking activities from investment activities, have already been implemented[15] or are under consideration[16].

12 Clearing through CCPs may reduce counterparty risk. However, one should recognise the potential risk building up in the system due to the sheer size of the new clearing houses. Concerns have been raised that clearing houses for OTC derivatives only shift the systemic risk but do not reduce it. *The Economist* (2012) argues that failures in CCPs are rare, but they do happen: Hong Kong's futures clearing-house ran out of resources in 1987, for example, and it took a government bail-out and the closure of the main stock market for things to get back to normal.

13 France introduced a transaction tax as of August 2012.

14 Zhou et al. (2012) define *bail-in* as a statutory power to restructure the liabilities of a distressed SIFI by converting and/or writing down unsecured debt on a "going concern basis". In a bail-in, the SIFI concerned remains open, and its existence as an on-going legal entity is maintained.

15 In the US, the Volker Rule prohibits banks from owning, investing or sponsoring hedge funds, private equity funds or any proprietary trading operations for their own profit.

16 See the white paper from the UK Treasury and Department for Business, Innovation and Skills (BIS).

For NBIM, as a long-term investor, the design of future banking regulations is important for a number of reasons. First, the banking sector plays a pivotal role as counterparty in financial transactions and for financial stability and long-term growth in general. Second, increased transparency of bank balance sheets might serve to reduce information asymmetries for NBIM as a direct investor in bank equity and bonds. Concerning resolution schemes, perhaps the most important issue is to ensure transparency around the treatment of a specific instrument in cases where the bail-in mechanism is triggered. Finally, market liquidity might suffer if banks' are prohibited from engaging in different types of activities, with higher transaction costs as a possible outcome.

The appropriate design of banking regulations has been the subject of a number of academic studies. Acharya (2009) argues that the limited liability of banks and the presence of a negative externality of one bank's failure on the health of other banks give rise to a systemic risk-shifting incentive where all banks undertake correlated investments, thereby increasing economy-wide aggregate risk. Regulatory mechanisms that are commonly based only on a bank's own risk fail to mitigate aggregate risk-shifting incentives and can accentuate systemic risk. Acharya argues that prudential regulation should operate at a collective level, regulating each bank as a function of both its joint (correlated) risk with other banks and its individual (bank-specific) risk. The increased focus on macro prudential oversight/regulation following the financial crisis suggests that policy-makers are subscribing to this view.

Acharya, Pedersen, Philippon and Richardson (2010) propose that each financial firm should be charged a "tax" based on its expected loss conditional on the occurrence of a systemic crisis. In their preferred approach, individual firms would be required to purchase contingent capital insurance, i.e. insurance against the losses they incur during systemic crisis. The cost of this insurance determines the firm's systemic risk tax. Such taxes are levied with the aim of internalising negative externalities to correct market failures (Pigou 1920).

4.8 Shadow banking

In June 2011, the FSB offered the first "official" definition of shadow banking as the system of credit intermediation that involves entities and activities outside the regular banking system. This fairly broad definition captures activities such as repurchasing agreements, securitisation vehicles and money market funds as well as direct lending from pension funds and insurance companies.

As a long-term global investor, NBIM is engaged in a number of these activities. For example, by using the repo market as an alternative to bank deposits, we can reduce counterparty risk. Shadow banking activities have become an integral part of the modern financial system and can provide an alternative to bank deposits and funding for the real economy when other funding sources are impaired. However, shadow banking entities and activities may also create a number of risks. Some of these might be systemic in nature and linked to the interconnectedness of shadow banking entities and the regular banking system.

Adrian and Ashcraft (2012) [17] argue that it is maturity transformation that renders financial intermediaries intrinsically fragile, since by definition an entity engaging in maturity transformation can at no time honour a sudden request for full withdrawal. The dilemma of the current regulatory reform efforts is that the motivation for shadow banking has likely become even stronger as the gap between capital and liquidity requirements at traditional institutions and non-regulated institutions has increased.

4.9 The role of financial market indices

Benchmarks are critical to the pricing of many financial instruments. ISCO (2012) argues that doubts about the integrity and accuracy of benchmarks may undermine market confidence, distort the real economy and potentially cause losses to investors and market participants. The renewed regulatory efforts in this field have to be seen in relation to the recent investigation into attempted manipulation of benchmarks. Current initiatives aim to establish best practices for how benchmarks should be calculated and governed to ensure a sufficient degree of transparency.

17 Adrian and Ashcraft (2012) provide a review of the rapidly growing literature on shadow banking and a conceptual framework for its regulation.

These are all issues of importance for NBIM as a long-term investor. Global standards in this area might improve market transparency and improve the price discovery process. However, even if such standards are put in place, decisions made by index providers may have a significant impact on security prices and the functioning of the market simply as a result of the sheer size of assets tracking these indices. This is of particular relevance in markets and segments where one index provider has a dominant position. Index providers in this respect can be anything from providers of stock market indices to proxy advisors in the voting market.

4.10 The role of credit ratings

An issue related to the role of financial market indices is the role of credit rating.

Hard-wiring of CRA ratings into laws, regulations and market practices can cause herding and cliff effects if regulation effectively requires or incentivises a large number of market participants to act in a similar fashion. As experienced during the recent financial crisis, high reliance on credit ratings amplified the pro-cyclical behaviour of market participants and may have helped to cause systemic disruptions.

4.11 Corporate governance

An effective corporate governance system helps to provide the degree of confidence necessary for the proper functioning of a market and is an important contributor to financial market stability. Information asymmetries might arise as institutions issuing bonds or stocks might have superior information to investors in these instruments. Improved corporate transparency and disclosure requirements could help lessen such asymmetries and secure a well-functioning market. The corporate governance framework should ensure that timely and accurate disclosure is made on all material matters regarding the corporation as recommended in the OECD's Principles of Corporate Governance.

4.12 Data quality

Financial markets rely on huge quantities of data for trades to be executed efficiently. Poor-quality data can distort the pricing mechanism and yield an inefficient allocation of risk and capital.

Although data might be submitted correctly at micro level, aggregation of data might prove challenging. On-going efforts to establish a legal entity identifier (LEI) for financial contracts[18] could facilitate the aggregation of data as well as a better assessment of micro- and macro prudential risks. A universal standard such as LEI will also facilitate risk management at investor level, as it will reduce uncertainty as to which counterparty is involved in a certain trade.

4.13 Financial reporting

Comprehensive, accurate and informative financial reporting is essential to promote long-term stability of financial markets. The lack of a single set of high-quality, understandable and enforceable global accounting standards makes comparisons across different jurisdictions more challenging. It is, however, important that harmonisation between IASB[19] and FASB[20] is not pursued at the cost of lower quality and less meaningful reporting.

Accounting information cannot provide a complete view of the situation of firms, in particular for complex firms such as major international banks. Proponents have argued in favour of a move towards an "open-source" banking system, allowing investors to obtain complete information on bank exposures along any appropriate dimension on demand to enable comparison between different financial institutions.

4.14 Offshore financial accounts

The discussion of the potential role of offshore financial centres and offshore financial accounts has gained momentum in the wake of the financial crisis, and they are explicitly targeted in the upcoming US Foreign Account Tax Compliance Act (FATCA). The objective of FATCA is to prevent tax evasion

18 See FSB (2012) *A Global Legal Entity Identifier for Financial Markets*, report dated 8 June 2012.

19 The IASB is an independent, privately funded accounting standard-setter responsible for developing International Financial Reporting Standards (IFRS).

20 The FASB is the designated organisation in the private sector for establishing standards of financial accounting in the US.

by US citizens and residents through the use of offshore accounts. UK authorities have signalled that they might follow this initiative.

Low taxes are not the same as lack of transparency or money laundering. However, if offshore accounts are used for unintended tax avoidance, NBIM might be investing in a company with an unknown liability. Offshore accounts may also be used as a tool to hide the true identity of NBIM's counterparty in certain type of transactions. Initiatives such as FATCA might serve to improve transparency. Another initiative that might yield comparable results is so-called country-by-country reporting, which relates to efforts to force companies to reveal the profit they make and the tax they pay in every country they operate in. Another example is the efforts undertaken by the OECD. In early 2000 OECD published a list where 40 jurisdictions were identified as tax havens. Over the past years these jurisdictions have committed to move towards increased transparency and effective exchange of information. As of today none of the jurisdictions on the OECD list are classified as un-corporative tax havens. Norway has entered into information sharing agreements with 39 of the 43 jurisdictions on the OECD list.

4.15 Future issues

It is challenging to identify the issues that will shape tomorrow's discussion on the functioning of the financial markets. Since the financial crisis, there has been a welter of piecemeal financial regulation targeting perceived weaknesses and gaps either in regulatory requirements or in the supervision of the markets. Few, if any, have tried to put all these pieces together and asked the question whether the sum of all the parts will provide a financial system capable of delivering efficient long-term allocation of risk and capital as a foundation for growth and prosperity.

Financial markets tend to experience cycles. During periods of relative calm and good news, investors have a tendency to crowd into favoured markets and segments, giving rise to excesses and, in some instances, speculative bubbles. Bubbles eventually burst, often with negative consequences for the real economy. The responses of governments to financial market cycles also tend to follow a pattern, often trying to correct the failure after the bubble has burst. The risk is that the regulatory response to the last crisis might have the effect of setting the parameters for the next. Attention should be given to new excesses emerging as market participants adjust to a new regulatory framework.

Cross-border capital flows are essential to facilitate efficient allocation of capital and distribution of risk. In a low-growth environment, there is a risk that governments may turn to increased protectionism in order to shelter domestic interests from global competition. As the Fund is a long-term, global investor, such a move is likely to tilt the risk-return trade-off in a negative direction.

International co-ordination has long been recognised as one of the pillars of good regulation and serves to reduce regulatory arbitrage. Recently we have witnessed increased divergence in national approaches. A fragmented approach to regulation could result in higher compliance costs for investors such as the Fund that are active in multiple jurisdictions. However, when assessing the level of international harmonisation, it is important to be aware of potential gaps between formal and substantive harmonisation. New issues are also likely to arise as the Fund's strategy develops. A likely development is that the share of the Fund invested in private markets will rise. As a big, global investor, we might engage actively in the development of standards applicable in these markets. All in all, the identification of future issues may benefit from interaction both between the different stakeholders as discussed above and with the academic community. New insights and ideas may be developed from the interaction between regulators, practitioners and academics. We will therefore discuss how NBIM could potentially engage on issues relating to well-functioning markets.

5. How we may work

5.1 Foundation for strategy

As a significant, long-term investor, NBIM has the ability and responsibility to influence companies and markets to the financial benefit of the portfolios we manage. The sheer size of the Fund makes us a recognised stakeholder. We have long experience and in-depth knowledge of the markets we invest in. However, to impact how markets develop, we will need to ensure that our involvement is relevant and of high quality and founded on research-based insights.

NBIM must act in a professional and credible manner, pursuing the long-term interests of the Fund, and recognise that the interests we pursue might differ from those of other stakeholders. It takes time and persistence to build both knowledge and reputation. A successful implementation of NBIM's strategy for well-functioning financial markets will require both significant internal resources and a long-term commitment.

There are various tools available to a long-term, global investor such as NBIM. Below, we discuss some of these tools. We have structured the discussion under two separate headings: foundation for engagement and activities.

5.2 Foundation for engagement

NBIM principles for well-functioning financial markets

As part of our strategy for well-functioning markets, NBIM could develop a set of principles which would serve as a platform for our work and facilitate a consistent approach to different issues over time. These principles could be high-level and publicly available and provide a sound theoretical foundation for NBIM's engagement.

NBIM has previously published Investor Expectations documents on children's rights, water management and climate change risk management. These documents state NBIM's expectations of companies on these specific issues and serve as a basis for monitoring compliance.

In Appendix 1, we attach a draft expectations document for well-functioning markets as it was presented to the Executive Board of Norges Bank in November 2011. This document presents some of the important principles NBIM needs to emphasise, but also illustrates that the topic of well-functioning markets is broad and far-reaching. Compared to the previously published NBIM Investor Expectations documents, there is no single addressee for the expectations on well-functioning markets. The counterparties for our engagement will differ depending on the specific issue addressed. It is clear that an "expectations document" is a challenging format for this broad topic and a more tailor-made approach is therefore warranted.

*Interaction with high-quality researchers*The financial crisis and subsequent recession dramatically increased interest among academics in research into asset pricing with frictions. For NBIM, it is important to understand how these issues affect our investment opportunities. We therefore have a strong interest in strengthening our ties with the academic community.

We will define a set of research questions relevant to the long-term management of the Fund. Some of these questions may be closely linked to issues we have discussed in this note. We will establish different models for interaction with the academic community and facilitate high-quality academic research on these questions, either on our own or in collaboration with other stakeholders.

5.3 Activities

Proactive dialogue

Interventions in the financial markets are usually decided as the result of a long process where a number of stakeholders contribute. NBIM may engage proactively in dialogue with politicians, international organisation and standard-setters, regional and national regulators and our counterparties in market transactions as well as the companies we invest in.

NBIM may pursue these options alone or join forces with other "like-minded" market participants. A joint approach could help to strengthen the voice of the buy side on these issues. Up until now, the sell side, represented by major banks, has been far more active on the advocacy front.

Through membership of special-interest organisations, we can influence the agenda and contribute in the debate. We have done this with success previously. One example is efforts undertaken under the auspices of the ICMA where NBIM joined forces with like-minded investors and established the Covered Bond Investor Council (CBIC). Since it was established two years ago, CBIC has promoted the quality, simplicity and transparency of the covered bond product. With the objective of increasing transparency, CBIC has set up a Transparency Working Group to identify key information needed by covered-bond investors to make well-informed investment decisions. The ambition is to establish a standard required to obtain the "covered bond" trade mark.

NBIM currently has representatives in a number of such groups/networks covering a wide range of areas. The most relevant ones are listed below:

- International Corporate Governance Network (ICGN)
- Council of Institutional Investors
- Asian Corporate Governance Association
- UN Principles for Responsible Investment
- ICMA Asset Management and Investors Council (AMIC)
- ICMA Covered Bond Investor Council (CBIC)
- TraderForum in US
- NYSE Euronext European Institutional Traders Advisory Committee
- Foreign Exchange Contact Group, ECB
- Barclays Index Advisory Council• FTSE Policy Group
- FTSE EMEA Regional Committee
- Institutional Traders Advisory Committee in Europe (ITAC)
- International Swaps and Derivatives Association (ISDA)

Respond to public consultations
NBIM may respond to requests and submit statements in public consultations. This has, historically, been the area where NBIM has been most active, albeit the number of interventions has been fairly limited up to this point (see Appendix 2 for a summary of efforts undertaken over the past two years).

Exercising ownership rights
As an investor in bonds and equities, we can address our concerns about specific issues related to well-functioning financial markets as part of our dialogue with the companies in our portfolios.

NBIM's principles for active ownership are based on internationally accepted global standards such as the OECD's Principles of Corporate Governance and Guidelines for Multinational Enterprises, and the United Nations Global Compact. We use our ownership rights to promote good governance in the companies we are invested in. Our global orientation as manager of the Fund pushes us in the direction of a global/regional focus rather than a strategy focussing on country-specific issues. The

sheer size of the Fund does, however, imply that the Fund is regularly among the largest shareholders in the companies, sectors and countries we invest in. We might therefore be expected to voice an opinion on country-, sector- and company-specific issues as well.

Equal treatment of shareholders has been defined as a focus area for NBIM's ownership activities. If some investors are given special treatment or granted certain waivers, this might distort the market-pricing mechanism and result in an inefficient distribution of risk and capital. Recently, NBIM voted no to the Greek debt restructuring because the Fund opposed the special treatment given to certain bondholders and argued that all bondholders should be treated equally to secure a well-functioning market for European sovereign bonds in the future.

Investments
Before any investments are made, we consider the functioning of the markets we invest in. The mandate from the Ministry of Finance requires NBIM to approve each market before the Fund's capital is invested in it. If, as part of this process, we identify certain market imperfections, we can either seek to mitigate these through internal control mechanisms or, if they are extreme, choose not to approve a specific market or segment even if it is part of the Fund's investment universe as defined by the Ministry of Finance.

List of abbreviations

BCBS	Basel Committee on Banking Supervision
CEPS	Centre for European Policy Studies
CFTC	Commodity Futures Trading Commission
CEPR	Centre for Economic Policy Research
CGFS	Committee on the Global Financial System
CPSS	Committee on Payment and Settlement Systems
CSFI	Centre for the Study of Financial Innovation
EBA	European Banking Authority
ECMI	European Capital Markets Institute
EIOPA	European Insurance and Occupational Pensions Authority
ESMA	European Securities and Markets Authority
FASB	Financial Accounting Standards Board
FDIC	Federal Deposit Insurance Commission
FOA	Futures and Options Association
FSB	Financial Stability Board
IAASB	International Audit and Assurance Standards Board
IAIS	International Association of Insurance Supervisors
IASB	International Accounting Standards Board
IMF	International Monetary Fund
ISLA	International Securities Lending Association
ISDA	International Swaps and Derivatives Association
ICMA	International Capital Market Association
IOSCO	International Organisation of Securities Commissions
MiFID	Markets in Financial Instruments Directive
MiFIR	Markets in Financial Instruments Regulations
NBER	National Bureau of Economic Research
OTC	Over The Counter
SEC	Securities and Exchange Commission

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Appendix 1

Draft expectation document on well-functioning markets as presented to the Executive Board of Norges Bank, November 2011

Well-functioning markets

Norges Bank Investment Management (NBIM) manages the assets of the Norwegian Government Pension Fund Global.

The fund shall ensure that future generations will benefit from the petroleum wealth of Norway.

Well-functioning financial markets execute payments, channel capital and allocate risk efficiently and are essential for NBIM in order to safeguard and build financial wealth for future generations.

Expectations

In well-functioning markets, asset prices reflect the most relevant information about future economic profits. Well-functioning markets provide the information necessary for large-scale reallocation of wealth.

In theory, well-functioning markets are free from identifiable market failures. In practice, well-functioning markets for bonds, equities and other financial instruments are dynamic, competitive, efficient and legitimate.

Well-functioning financial markets facilitate the flow of capital from investors to the users of capital and are important for the growth rate of global output. This growth rate is the most important factor determining the long-term rate of return.

Well-functioning financial markets are, to some extent, self-regulating. Market participants should conform to commonly accepted best practices. The sum of individual decisions may fail to lead to sustainable outcomes and warrant regulations that can correct these market failures.

NBIM will promote market practices and support regulations that increase corporate and market transparency and secure the stability of financial markets. Our expectations in these areas are set out in this document.

A. Corporate transparency

NBIM will support initiatives to improve corporate transparency and disclosure to overcome potential informational asymmetries in reporting.

NBIM expects all companies and other market participants to disclose all information which will not put their competitive position at risk. NBIM acknowledges the importance of market mechanisms in influencing firms' disclosure and reporting choices, both in isolation and when interacting with regulators.

NBIM expects all companies to act in accordance with the intention of the regulatory code. Corporate transparency is a joint outcome of market forces and the incentives provided by various rules and regulations, including the quality of enforcement.

NBIM expects all companies and other market participants to pay taxes according to the intention of the tax code of the jurisdictions in which they operate. Taxes on businesses could be considered a fee for being part of a domain for the regulation of trade and transactions. Tax evasion distorts the allocation of labour and capital and might reduce economic growth.

NBIM expects efforts to harmonise accounting and reporting standards across markets to continue. Such harmonisation is necessary to overcome informational asymmetries.

B. Market transparency

NBIM supports coordinated efforts to improve market transparency in order to ensure well-functioning markets and overcome informational asymmetries and monopoly power.

NBIM expects companies to be listed on exchanges which are located within jurisdictions committed to the transparency of markets.

NBIM expects that all markets should ease access for all investors through enforcing pre- and post-transaction price transparency, secure anonymity of trading positions and provide infrastructures for enforcement of regulations against market manipulation.

NBIM acknowledges the important economic role of over-the-counter markets as a platform for financial innovation. The economic benefits should be clearly distinguished from the potential imperfections. NBIM supports regulatory scrutiny of all trading infrastructures, in particular in over-the-counter markets.

NBIM expects that large, standardised securities should be traded through centralised clearing houses or exchanges. Smaller, less standardised securities should at least have a central trading platform to which all market participants have access. NBIM expects regulators to play a coordinating role and provide incentives to move trading by large market participants to centralised trading infrastructures.

C. Stability of financial markets

NBIM supports innovations that contribute to more complete markets and efficient price discovery, increase market liquidity and facilitate hedging and other risk management activities.

NBIM expects accounting to be based on fair-value principles. Inherent pro-cyclicality may be amplified when accounting is based on such principles. Measures that might counter pro-cyclical effects should be carefully considered.

NBIM expects market regulation to be stable, coherent and predictable. Regulation should be relevant and adequate, but limited to what is necessary to facilitate and secure well- functioning markets.

NBIM recognises that there are potentially self-amplifying spirals within the financial system and supports initiatives by investors, exchanges and regulators to identify and reduce the risk of systemic failure. The cumulative effect of leveraged financial institutions simultaneously expanding and cutting their positions is a potentially important systemic externality.

NBIM expects regulatory initiatives to include special resolution regimes that ensure orderly liquidation procedures for unwinding systemically important institutions and safeguard counterparty risk in secured transactions. Left to private incentives, financial institutions might not internalise all counterparty-risk externalities.

NBIM will make its knowledge available to lawmakers and regulators working on reforms to improve financial markets.

Appendix 2

NBIM responses to public hearings

2012

- Response to ESMA on An Overview of the Proxy Advisory Industry (2012-06-25)
- Submission to the Hong Kong Stock Exchange on proposed environmental, social and corporate governance reporting guide for listed companies (2012-04-09)

2011

- Joint submission to IIRC on Discussion Paper on Integrated Reporting (2011-12-15)
- Endorsed statement by CalPERS on new SEC rule on proxy access (2011-09-13)
- Letter to CFCT on US regulatory reforms related to central clearing of OTC (2011-11-02)
- Submission to the Green Paper on the EU corporate governance framework (2011-08-05)
- Submission to European Commission Directorate-General Internal Market and Services on disclosure of non-financial information by companies (2011-01-18)
- Comment on margin rules to the Office of the Comptroller of the Currency, Federal Housing Finance Agency, Board of Governors of the Federal Reserve System, Federal Deposit Insurance Corporation and Farm Credit Administration (2011-07-06)
- Letter to CFCT SEC on Dodd-Frank (2011-02-18)
- Response to ESMA on the impact of high frequency trading (2011-07-01)
- Submission to the Global Reporting Initiative on the review of its reporting framework (2011-06-27)

2010

- Letter to SEC on US proxy voting system (2010-10-29)
- Submission to a public consultation by the Global Reporting Initiative on revisions to the reporting indicators on human rights (2010-08-19)
- Letter to European Commission Directorate-General Internal Market and Services on modernisation of the transparency directive (2010-10-01)
- Letter to European Commission Directorate-General Internal Market and Services on Green paper on corporate governance in financial institutions and remuneration policies (2010-08-31)
- Letter to The Norwegian Code of Practice for Corporate Governance on recommendations for corporate governance (2010-08-05)
- Letter to International Accounting Standards Board on extracting activities (2010-07-30)
- Letter to Australian Treasury on taxation of sovereign investments in Australia (July 2010)
- Response to CESR on non-equity markets transparency in the context of the MiFID review(June 2010)
- Submission to Singapore Stock Exchange on sustainability reporting for listed companies (2010-08-28)
- Submission to the International Finance Corporation on sustainability framework review (2010-08-27)
- Submission to the Bank for International Settlements on corporate governance principles for banks (2010-03-16)
- Submission to the Financial Reporting Council of the UK on a proposed stewardship code for investors (2010-04-19)

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