



FINANSINSPEKTIONEN

How can the financial sector contribute to sustainable development?

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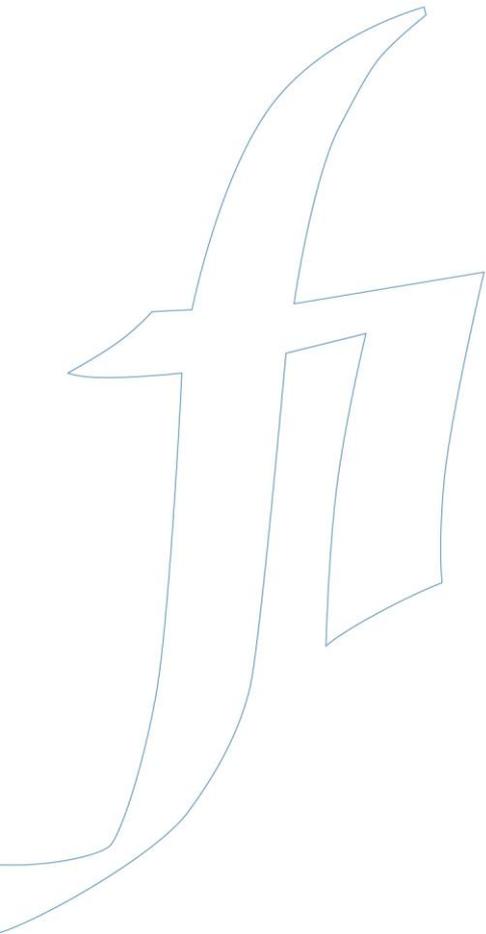


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Foreword

Finansinspektionen (FI) has been commissioned to continue to work on behalf of the Government with sustainability issues, with a view to their link to financial regulation and supervision and how supervision can constructively contribute to sustainable development.

FI has decided to report back on this assignment within the framework of two reports, which will be published at the same time. One report presents the outcome of a survey conducted by FI in which a number of firms in different parts of the financial sector account for, in general, if and how they work with sustainability issues and, in particular, their efforts related to climate issues. This report, which is the second report, aims to draw more fundamental conclusions based on the survey and FI's previous reports on the role of the financial market and financial supervision in this area.

Stockholm 7 November 2016

Erik Thedéen
Director General

Summary

Sustainability issues in general and climate change in particular represent a major challenge for society and will affect future development over a period of many years. This puts policy measures to the test in a number of areas, including policy regulating the financial market. It is therefore natural to analyse how both the financial sector and financial regulation can do their part to handle these challenges.

The relationship between climate change and the financial sector is a two-way street. The financial sector can play an important role in managing climate-related risks and support the transition to a low-carbon economy. At the same time, however, the climate-related risks could affect financial firms and the financial system as whole, e.g. in terms of financial instability. This calls for a wider perspective on risk management in the financial sector.

General measures that directly target the use of fossil fuels, for example carbon taxes, create incentives that efficiently and on a broad front steer usage away from fossil fuels. The financial sector, and thus financial regulation and supervision, cannot replace these types of direct measures. However, provided that such measures are in place, it is likely that stable and well-functioning financial markets can supplement and facilitate the reduction of climate risks and the transition to a low-carbon economy.

Work with sustainability and climate-related risks should be a natural part of the business models and risk management of financial firms. It must therefore also be a natural part of financial supervision. FI aims to capture these risks in its supervisory activities.

FI should handle climate and sustainability issues within the framework of financial supervision's current goals – stability, consumer protection and well-functioning markets. Achieving these goals are crucial also for the ability to contribute constructively to the challenges linked to climate change. New, separate goals for sustainability or new authorisations in this respect are therefore not currently justified.

Based on the existing goals, FI sees three areas where the financial industry and financial regulation can contribute to reaching the climate targets, as well as reducing the risks confronting the financial sector.

First, well-functioning markets create opportunities for efficient reallocation of capital to investments that are necessary to reach the climate targets. Without well-functioning capital markets, the transition will be more difficult, more expensive and more time-consuming.

One important prerequisite for having well-functioning financial markets is that participants have access to relevant information that ena-

bles them to value and price risks. FI therefore sees a need for relevant, industry-wide definitions related to the climate in order to decrease information costs and the risk that products will not deliver what they promise. This information may also make it easier for consumers and investors who have higher sustainability ambitions to lead the way. Industry-wide definitions should preferably be global, and the so-called Bloomberg Group is expected to deliver such a proposal to FSB/G20 in 2017. FI will follow up with the Swedish financial industry in 2017 on the group's proposal.

Second, there is a need for a better understanding of the risks that climate change and climate transition impose on the financial sector. Financial firms and industry organisations should develop their methods for managing and communicating how firms are affected by the climate transition and its risks. Extensive projects on this topic are already currently underway in the financial industry. FI expects that firms will be able to show in the next few years what they have done in terms of assessing the consequences of various climate scenarios. FI will also closely follow the methodology development that is taking place internationally.

Third, there are clear consumer protection aspects in terms of marketing to and information for customers for products that are sold as beneficial from a sustainability perspective. To avoid risks of so-called green-washing, FI will therefore investigate these aspects in order to ensure that consumers are receiving relevant and reasonably precise information about the products' sustainability profiles. This will also give consumers a realistic possibility to assess, for example, whether the fees are reasonable. This is important also to ensure that that these types of products do not earn a bad reputation.

Sustainability and climate risks

AN ECONOMIC PERSPECTIVE

Sustainability had its conceptual breakthrough in 1987 via what is known as the Brundtland Commission¹, which described sustainable development as development which “...meets the needs of current generations without compromising the ability of future generations to meet their own needs”. The opposite of a sustainable activity, in other words, would be an activity that is self-destructive, an activity that saws off the very branch on which it sits – and in some cases also the branches on which other activities are sitting.

Initially, the focus was clearly on environmental aspects, but the concept was subsequently widened to also include more general ethical aspects, such as respect for human rights, the promotion of democracy and good labour conditions, the prevention of harmful products and production processes, etc. These aspects were expressed, for example, in a policy document from the UN in 1999 entitled *Global Compact*. People often speak, in particular with regards to asset management, about the ESG factors (Environmental, Social, Governance), which break down the sustainability concept into three main tracks. Looking at the “S” and “G” factors, sustainability is primarily linked to businesses winning acceptance for and legitimacy from society and the sphere in which it is active. Business conducted at or above the limit for what is socially and ethically acceptable sooner or later will be eliminated from (or forced out of) the market by customers, investors, media and, ultimately, legislators.

Sustainability, in other words, has many dimensions and definitions and, if possible, even more associations.

From an economic perspective, you could say that sustainable business is business that is economically profitable for society in a long-term perspective. This means that different types of external effects can be internalised in the firms’ decision-making and actions and that a much more long-term horizon is applied than what is the case in traditional calculations. On both of these points, an assessment based on a sustainability perspective may deviate from a traditional corporate economic assessment.

Correctly and quantifiably considering all relevant externalities and applying a time perspective that often stretches across several decades² is naturally easier said than done. This means that sustainability assessments of various economic activities must necessarily be primarily qualitative and involve significant uncertainty. The importance

1 UN Report “Our Common Future”

2 There are, however, examples of certain businesses successfully integrating extremely long time horizons – such as forestry. A middle-aged forest farmer who plants his pines will most likely not be able to cut them down and sell them during his lifetime. Obviously, there are incentives here to take a long-term approach that works.

of externalities and long-time horizons also raises questions about whether the central government should influence the incentives that firms face to reach various sustainability goals and, if yes, how this should be done.

FOCUS ON THE CLIMATE ISSUE

As already mentioned, the term “sustainability” these days includes much more than just environmental issues. In this report, however, like in the other reports in this area that FI has published, the decision has been made to focus on climate issues. Even if the framework set out above is largely applicable to sustainability issues in general, measurement methods, conceivable measures, etc., are naturally very different for different types of sustainability aspects. Attempting to discuss all of these and their links to financial regulation and supervision in one report is hardly feasible. Placing the focus on the climate is natural, given both its importance and direct and concrete consequences for the commercial sector and the economy.

The financial market can support climate policy

Just like in other areas, the central government and its authorities are responsible for managing climate problems in an economically effective manner. Even if a certain tool could have an impact on a problem troubling the real economy, the tool must be weighed against the efficiency losses that would result from the intervention and also compared to other, perhaps more efficient, tools. This therefore raises questions about whether and to what degree measures within the area of financial regulation and supervision constitute efficient tools in climate-related policy.

It can be argued that such measures are an effective tool because the financial sector plays a key role in the economic system, and more specifically because it plays a role in aggregating and managing risks and funding investments in the real economy. These are obviously central factors when it comes to managing the risks associated with climate change and the investment needs associated with transitioning the economy to, for example, radically lower use of fossil fuels. A financial sector that works well, in other words, can act as a catalyst for sustainability and therefore also play an important role.

The special nature of the financial sector's links to several sustainability targets, however, means that its influence is primarily *indirect*. For example, banking activities as such do not have an extensive impact on the climate, but rather on lending activities and other services for non-financial activities, which in turn have a more tangible impact on the climate.

Is sustainability profitable or costly?

Investors face a fundamental conflict between return targets and sustainability targets if they are forced to remove certain firms or industries from their portfolios. This could mean that investors must opt out of investments that are profitable and would contribute to a higher return for the portfolio as a whole or face limited possibilities for diversification.

However, maintaining a high standard in factors such as environmental consideration and ethics can also reduce risk and create value, and thus be associated with profitability. In this context, though, the time horizon is of significance. In the short-term there can be a clear conflict between return targets and climate-related or other sustainability targets, but, at the same time, even short-term actors are most likely cognizant of their own reputation on the market. For example, being exposed in the media as conducting questionable business can be problematic for firms that would like to remain in the market.

For market participants with an explicit long-term horizon, for example pension funds, these conflicts should be much less significant, if they exist at all. This same basis should also be relevant for significant portions of the banks' corporate lending.

In other words, the answer to the question about whether there is a conflict between profitability and target goals on the one hand and sustainability goals on the other is not a simple Yes or No. The return losses that could result from a slight decrease in the potential investment possibilities must be weighed against the lower financial and non-financial risks.

Neither do the rather large number of empirical studies that have been conducted contradict this hypothesis. The general conclusion appears to be that it is not possible to draw a simple conclusion about a “sustainable” or “traditional” business profile that offers the highest return³. The collective overview, in short, does not support the position that prioritising sustainability in general would be unprofitable.

FIRM-SPECIFIC INCENTIVES

Financial firms may face different incentives for working with sustainability. For example, they may view climate change from a profitability perspective as a risk that needs to be managed or as an opportunity to pursue. They may also see it as a way to enhance their brand and raise their public reputation, but without necessarily making any major changes to their operations⁴. They may also simply be trying to comply with laws and regulations, both current and pending. All of these incentives may be present at the same time to varying degrees.

Firms that through their production focus, customer base, etc., view sustainability in terms of risks and opportunities will naturally work the hardest. A reasonable hypothesis here is that more and more financial firms will realize that climate change and climate policy constitute risks and opportunities that in different ways need to be actively considered. But this will hardly be applicable to all firms, and not necessarily because of a general lack of interest or awareness. What is more important is that these issues do not have the same relevance for all businesses. One example could be financial firms that work with clearing and settlement of securities transactions or payments; it is difficult to see any obvious sustainability dimensions in such a business. Another could be deposit services. Therefore, it is neither possible nor desirable for all financial firms to conduct their sustainability-related activities in exactly the same way and with the same ambitions.

Financial firms and their sustainability work

A survey recently conducted by FI⁵ indicates that most financial firms are aware that sustainability aspects in general and climate-related problems in particular represent a concrete external risk that they must monitor and

³ See, for example, Koedijk-Horst: “Doing well while doing good?” SOU 2008:107, Bil 5, Deutsche Bank: “Sustainable Investing - Establishing Long-Term Value and Performance” (2012), Sjunde AP-fonden: “The performance of socially responsible investment” (author Emma Sjöström) (2015)

⁴ This is usually referred to as “greenwashing” when it refers to measures to establish an attractive environmental facade, and “bluwashing” when it refers to improving an ethical profile.

⁵ See FI’s report, *Sustainability Work of Financial Firms* (November 2016)

manage. The Paris Agreement on the climate should have enhanced this, and the fact that major actors such as the USA, China and the EU Parliament recently ratified the agreement should further anchor the view that the climate transition is a reality and not an expression of political wishful thinking.

The survey also indicates that the development is progressing at an uneven rate in two respects:

- Some firms, particularly larger ones, are far ahead and have established their position on this topic, while others have taken more of a “wait and see” approach.
- There are significant differences between the firms when it comes to delineations, definitions, measurement methodologies, method of working, follow-up, etc.

Based on the responses from the firms in the survey and other information FI received, it is clear that climate-related and other sustainability issues are becoming more important for many firms. The firms' responses indicate that there is growing pressure from customers and the general public to take these aspects into consideration. Furthermore, there is also a growing interest in sustainability issues in general, in both Sweden and other countries. Initially, this was most evident in capital management and among institutional investors, particularly pension funds; in Sweden, the AP funds have played and continue to play an important role. But both the number of involved firms and the financial services that have been included have gradually expanded.

As demonstrated in FI's *Sustainability Work of Financial Firms*, a significant portion of the firms in the financial sector are currently working actively with sustainability issues.⁶ Industry organisations within the financial sector have also produced guidelines and a basis for calculating carbon footprints in different types of businesses, a project that was initiated by the Government but which firms and industry organisations have continued to develop. During the spring of 2016, the Swedish Investment Fund Association prepared a guideline for common reporting of carbon footprints for Swedish fund management companies. Insurance Sweden also decided in June on a joint recommendation for how insurance firms should calculate and report the carbon footprint in their investment portfolios. Another example is the Swedish Bankers' Association's work to coordinate sustainability criteria in lending activities.⁷

In other words, firms and industry organisations, to date in any case, are progressing at a good rate in their work on climate-related and other sustainability issues. The fact that there is currently some confusion regarding definitions, measurement methodologies, etc., is fairly natural, given the relative newness of the topic, and it is reasonable to assume that the market will develop a standard over time. FI will continue to actively follow developments, for example how the Swedish financial firms will handle and apply the proposals relevant in this respect that the Bloomberg Group is expected to announce in 2017.

6) A similar picture in this respect is also presented in a survey by KPMG, "Ready or not"

7) See, for example, Prop 2016/17:1, Expense Area 2, p. 45

More active measures to influence this progression may also become relevant if the market, for whatever reason, does not successfully advance the progression itself.

FINANCIAL REGULATION NOT A MAIN TOOL

The climate threat is closely linked to the fact that the economic costs for the emission of greenhouse gases are not reflected in the costs that the parties emitting the greenhouse gases must pay.⁸ For example, the World Bank estimates that only around 15 percent of all global emissions of carbon dioxide are subject to some form of carbon dioxide tax. In many cases, the applied tax rates are also low. A key step in successfully managing the climate issue is to find an efficient way to include the economic cost of emissions at firm-level.

Economic tools such as carbon dioxide taxes and the trading of emissions rights are judged in many cases to be the most efficient measures for achieving this kind of correction.⁹ At the same time, consideration must also be given to the fact that state intervention here, like in other contexts, introduces economic costs that must be weighed against the gains. The criterion for a well-designed regulation is that it creates economic gains that are greater than its costs.

One important starting point is that unilateral action from Sweden, regardless of the tool, will not have much of an impact from a global perspective. Production in Sweden currently represents only 0.1 percent of the global emissions of greenhouse gases, and even if we include the impact on emissions from consumption, the share is still extremely small. Successful handling of the climate threat requires global cooperation, which is also the underlying reason for the work leading up to the Paris Agreement.

A reasonable starting point for how Swedish measures can decrease the threat to the environment could therefore be to evaluate how different forms of regulation can contribute to the Swedish climate targets, which in turn contributes to the global targets.¹⁰

What, then, are the possibilities for Swedish financial regulation to contribute to handling the climate-related problems? The following table compares how effective different types of market-based regulations in principle could be expected to be given today's conditions. The alternatives that are described are tools targeting emissions (e.g. carbon dioxide taxes or a market place for emissions rights) or financial regulation (e.g. extra capital requirements for funding of carbon dioxide-intensive production).

⁸ As demonstrated previously, this is referred to as "externality" or "external effect" in financial contexts.

⁹ See, for example, OECD (2013), *Climate and Carbon: Aligning Prices and Policies*, OECD Environmental Policy Paper no. 1.

¹⁰ The goal referred to here is that Swedish net emissions shall be zero as of 2050.

Different regulation alternatives - links to cost-efficiency

	Emissions regulation	Financial regulation
Link to target	High	Low
Link to the problem	High	Low
Access to relevant information	High	Low
Difficulty bypassing the rules	High	Low

As can be seen above, financial regulation is expected for several reasons to be less effective than regulations that target emissions:

- Financial regulation, via the supply of funding, can only indirectly influence incentives for production that affects the climate. It therefore does not have a close link to either the target or the source of the problem. Measures should target to the greatest extent possible the businesses that need to change.
- There is currently no comparable information about emissions from different types of firms, which would be necessary to design a financial regulation that would have a direct impact on the climate targets.¹¹
- The financial markets are widely integrated across national borders, particularly within the EU. It should therefore be relatively easy for firms to bypass domestic funding sources and find other channels to fund activities that have an impact on the climate.¹²

There are several strong reasons supporting the belief that emissions-based tools – which form the foundation of Swedish climate policy – are much more effective for reaching climate targets than possible measures taken via the financial sector. A tool like carbon dioxide taxes has a broad effect on the price between fossil and non-fossil fuels, and thus it affects the incentives for production technology, production design, investments and consumption. Financial regulation that specifically focuses on climate targets, on the other hand, would be ineffective in comparison. There are therefore no economic argu-

¹¹ Recently, the head of the British Central Bank, Mark Carney, proposed that guidelines should be developed for the reporting of production that affects the climate. See "Resolving the Climate Paradox" (Bank of England, Sept 2016)

¹² If the measures instead would entail some form of relief for funding of climate-efficiently activities, these would probably not be able to be limited to Swedish firms, which would weaken the link to the target. It should also be added that even emissions regulations can be bypassed by moving production, but it is significantly easier and faster to move financing than production.

ments for using financial regulation as a substitute for emissions-related regulation, given the conditions found on the Swedish market.

In theory, financial regulation could have a slightly better impact on the climate, however, if the financial market was more isolated from external influences, such as the financial market in China. In a Swedish context, if financial regulation is to be used at all to achieve climate targets, this should occur within the framework of the EU, given the high degree of financial integration and coordination of financial regulation within the EU. However, it is not currently possible to design a regulation of the type we have today for, for example, credit risks within the capital adequacy regulations. The absence of relevant definitions, measurement methodologies and data make this impossible. This type of regulation is thus not currently a viable alternative as climate policy to limit emissions. But in any case it must still be considered to be a sub-optimal alternative from an efficiency perspective for the reasons stated above.

Existing financial regulation that does not have climate-related or other sustainability aspects as an explicit goal faces in part the same problem, i.e. a functional climate policy is needed as a starting point for financial regulation, to be able to effectively contribute to the climate targets. Changing the price relationships between fossil and non-fossil fuels creates economically sound incentives for the real economy and sends the right signals to the financial part of the economy. Assuming that such a climate policy was in place, it would probably be very beneficial to include climate aspects in “regular” supervision. Financial supervision that achieves its goals of stability, consumer protection and efficient markets creates a good and necessary foundation that helps reduce the problems related to climate change. But the effectiveness is highly dependent on the design of the general climate policy.

FI's supervision, climate risks and sustainability

The overall objective of financial regulation and supervision is to contribute to an economically efficient financial system in the broadest sense. Since participants on the financial markets cannot achieve this on their own, the central government needs to be involved. There are primarily two specific areas where the involvement of the central government has been identified as necessary: reducing the risks for instability in the financial system and protecting consumer interests. FI shall strive to achieve these goals in its work while also ensuring that the financial markets are working well.

NO NEED TO CHANGE THE SUPERVISORY GOALS

The goals and conditions forming traditional financial supervision are clearly related to and relevant for climate-related issues, and vice versa.

Climate changes mean changes to the finance sector's external conditions. They therefore create new risks – and new business opportunities – for firms. Firms need to monitor and manage these risks; otherwise, quite simply, they are not doing their job. FI, in turn, must monitor what the firms are doing and not doing – otherwise FI is not doing its job. FI therefore needs to follow how climate risks and the firms' sustainability work affect the risks in the financial sector.

In its work with climate risks and sustainability over the past year, FI identified various strengths and weaknesses in the Swedish financial system. From a global perspective, the Swedish financial sector appears to be well-situated to manage risks associated with climate change, and it is often a leader in sustainability initiatives. Investors, customers and the political system also place expectations on firms, but since climate-related issues constitute a rather new and thus complex area, there are significant knowledge gaps and applicable methodology is not fully developed. Financial firms need to deepen their risk analyses, improve their methods and develop the products they offer. A question that can be asked, then, is whether FI's goals, mandates, resources and competence profile need to be radically changed in order to handle these types of issues.

The current goals for regulation and supervision provide important support for sustainability work. Good risk management and resilience to disruptions, good consumer information and well-functioning credit and securities markets are also key to reducing and managing climate-related risks. In order to be able to steer financial resources to the climate transition, financial firms and systems must be able to control financial and operational risks that emerge from climate-related problems as well as risks associated with the transition. This will allow financial supervision to act as a catalyst for sustainable development.

Contributing to climate initiatives and sustainability constitutes a natural expansion of FI's work given the current goals for its supervision. FI does not perceive there to be any obstruction to working with climate-related and sustainability issues in a constructive and efficient manner within its current mandate, i.e. that ongoing stability and consumer supervision activities also should monitor and influence how firms manage climate-related risks and provide consumers with information. FI therefore does not currently see any need for new mandates or authorisations. The task facing FI is to integrate these aspects and risks into its continued supervisory work. Even if FI already currently includes sustainability aspects in its work, this is a long-term effort that needs further development.

It is also worth noting that a number of complications would arise if FI were to monitor and assess the financial firms' efforts to meet specific climate targets, i.e. using financial regulation as a direct tool for achieving certain climate goals. For example, climate-justified support for loans to businesses with a green profile could be expressed through a lower risk weight when calculating capital requirements. But since such loans do not necessarily have lower financial risk, a conflict could arise with FI's financial stability goal. Moreover, even if active supervision activities regarding climate risks would require skills development in the area, FI would probably need to significantly increase its competence if the assignment were to include the analysis and evaluation of the specific climate effects from the financial firms' operations. As more definitive criteria and comparable measurement methodologies develop, for example with regard to financial firms' exposure to carbon dioxide-intensive production, FI should be able to follow this development and take action as needed, but as a part of its existing supervision work. If, for example, such measurements were to develop in the wrong direction, this could be viewed as an indication of increased risk-taking related to the climate and give rise to supervisory measures from a financial risk perspective. In other words, FI would still be working within the framework of its traditional supervision assignment.

Finally, it can be said that a fundamental feature of and approach to the financial supervision conducted by FI is that the firms must have and maintain explicit responsibility for how they design their business model, organisation and risk management. The role of FI's supervision is not to take over this responsibility, but rather to support it from what society would deem to be good risk management and good market conduct by the firms and follow up on the outcome. FI should intervene if and when a firm does not have the desire or ability to behave and operate in a manner that is consistent with its importance for the economy. This starting point should also apply to climate-related and sustainability issues.

The following sections of this report discuss the supervisory issues that FI considers to be most important from a climate perspective.

FINANCIAL STABILITY

Stability risks lower in Sweden than in other countries¹³

Taken together, climate change and the measures that this change will require represent a far-reaching and comprehensive change to the external conditions facing not only the financial sector but also society as a whole. The consequences of this change be extensive and cover multiple dimensions, but at the same time it is difficult to pinpoint more precise effects of climate change at this point in time, both in terms of the impact on the economy at large and the financial sector. However, it is possible to identify two main types of risk.

Climate risks increase as the global average temperature and sea levels rise and extreme weather becomes increasingly common. One direct consequence of this is that insurance costs will rise as claims for damages increase. Indirect costs and risks will also rise due to destroyed ecosystems, heightened health problems and lower productivity growth. It is believed, for example, that an increase in the global average temperature of 2–3 degrees could lead to economic losses equalling up to 3 per cent of global GDP.

Forceful measures to bring down global emissions of greenhouse gases are needed to restrain climate change and reduce climate risk. At the same time, these measures, in the form of higher climate-related taxes and more stringent regulation, will lead to an extensive change in production and consumption patterns, giving rise to transition problems in large segments of the economy. This results in a **transition risk**. In order to have a 50 per cent chance of keeping the rise in global temperature to below 2 degrees, the combustion and release into the atmosphere of roughly half of today's coal, oil and natural gas reserves must never be allowed. Assets such as coal and oil that were once valuable, and the firms operating in these sectors, would thus decline drastically in value and become "stranded assets", which would also affect other firms that use large amounts of fossil fuels in their production. A considerable amount of assets would be affected, which would have an impact on the global financial sector.

FI has previously stated Sweden is less exposed to climate-related risks than many other countries in the world¹⁴. Sweden's transition risks are also considered to be lower than those in many other countries because activities that have a profound impact on the climate are not a significant part of the Swedish industry. FI has also noted the Sweden is a forerunner in climate policy, in particular when it comes to carbon dioxide taxes, which is a sign that the transition process has already started. Because of this, Swedish banks, insurance companies and capital investors are not widely or directly exposed to climate-related risk. At the same time, however, it is important to remember that the Swedish commercial sector and the Swedish financial sector in this respect, as in other respects, are dependent on what is happen-

¹³ The analysis in this section is primarily based on Finansinspektionen's report, *Climate Change and Financial Stability* (March 2016)

¹⁴ See *The effects of climate change on financial stability* (FI, March 2016)

ing on the international scene, both in terms of effects that may arise from general economic developments and more specifically from climate-related disruptions that may arise in financial markets in other countries. As demonstrated in the table below, the climate exposures are quite significant in size when looking at the EU as a whole.

Financial firms within the EU: Exposures to fossil-fuel-intensive firms 2014

	Banks	Insurance companies	CIUs
Exposure EUR bn	460-480	300-400	260-330
Share of assets, per cent	1.4	4	5

Source: The Effects of Climate Change on Financial Stability, p.25 (Appendix to FI's "Climate Change and Financial Stability", March 2016)

As a whole, FI deems the risks financial firms are facing with regard to climate-related factors are limited at this time. Some phenomena, for example the increasing storm damages, are effects of climate change that have already manifested themselves and will continue to do so in the future. These problems have already had a tangible impact, primarily in the area of non-life insurance.

When looking more specifically at the risks that are associated with the transition to a lower consumption of fossil fuels, however, the effects from the risks and structural changes will primarily be felt quite far in the future.¹⁵ This alone already introduces a complication since – with the exception of life insurance companies – few if any firms have forecasts or planning horizons that stretch over several decades. Even though risks may be building up over a relatively long period of time without visible drama, the effects of the climate changes may suddenly reach a tipping point, i.e. at some unknown point in time they may burst in very dramatic manner. A similar type of risk is found at the political level, namely the risk that necessary measures will be delayed to such a point that in the end drastic measures will be needed. The build-up of risk, in other words, is not linear. Then, in terms of financial systemic risks, it is necessary to focus on the so-called tail risks, i.e. events with low or uncertain probability but with very severe consequences if they were to occur.

As a whole, this makes it unusually difficult to assess the risks and know how to best manage them. This type of risk assessment and risk management differs significantly from the risk assessment and risk management that financial firms normally work with and requires in many respects a new methodology. For example, unlike in financial risk assessments and stress tests in general, it is of limited value to rely on historical outcomes. If there is one thing that can be said with a reasonable degree of confidence in this area, it is that damages resulting from storms, flooding, etc., will increase, and that transition problems will introduce a new reality in

¹⁵ The head of the Bank of England, Mark Carney, called the climate transition risks in a speech as "The Tragedy of the Horizon".

many respects. A basic methodology that relies on historical data and correlations may systematically underestimate potential risks. FI will monitor in its future supervision how the financial firms are working with risk assessments even in this respect.

FI's regulation and supervision aims to strengthen the resilience of the financial system to disruptions at a general level, e.g. by requiring banks and insurance companies to be well-capitalised and ensure they have suitable risk management systems. The character of the risks that are associated with climate change illustrate the importance of this approach and further solidify the importance of good resilience. However, FI does not believe that these risks mean that financial resilience in terms of capital requirements currently needs strengthening.

FI's report: *Environmental and sustainability perspectives in lending to corporates*"

FI submitted a report in November 2015, as commissioned by the Government, on the banks' internal rules regarding corporate loans from an environmental and sustainability perspective. The survey covered nine banks that together account for the majority of corporate lending in Sweden. FI also reviewed the legal conditions applicable in this context. FI's survey shows that the banks' internal regulations take environmental risk into account, as part of the credit risk in their credit assessments when lending to corporates. In other words, they have made an assessment from a financial aspect that a higher environmental risk can lead to a poor deal for the bank. The banks' internal regulations also show that environmental risk must be taken into account with respect to their own ethical guidelines, prestige and reputation risk.

According to FI's review, the legal conditions governing the banks' actions in this area require that they must include the business aspects of environmental risk in their credit assessments and manage the reputation risk that environmental risk may entail. Based on what FI has seen in the banks' internal regulations, the banks are observing these legal requirements.

FI also notes that several banks have made an effort to adapt their lending procedures to take more into account environmental and sustainability issues, for example by following various international principles or joining in international initiatives and standards. This applies in particular to the larger banks and banks with international operations.

FI highlights in its report the importance of banks being more open so that their customers, investors, counterparts and other stakeholders can form a clearer opinion of how the banks take account of environmental and sustainability issues in their lending procedures. Transparency is an important driving force for change and can in this context create additional incentives for the banks to continue to increase the scope and ambition of their work in the area of the environment and sustainability.

Working with sustainability scenarios

One aspect related to risk management is how stress tests should be formed in order to capture the special features – long time horizons, complexity, lack of data, etc. – that affect the climate issue and may serve as a

guide for how to best manage associated risks. Stress tests constitute the current method that tends to be used to assess how different types of negative scenarios could affect individual financial firms and financial systems, thus providing a basis for assessing whether there is sufficient resilience and how risk management should be designed. Stress tests typically show, for example, how a given credit portfolio, and thereby a bank, is affected by the occurrence of one or several events. The time perspective, in other words, is relatively short and the approach in most cases focuses on quantitative factors.

Stress tests for climate effects must be different in both their character and structure since the course of events is complex, drawn out and limited in terms of reasonably assured quantifications. The stress tests in Sweden will also be different because the direct exposures to different types of climate-related risks are relatively low in the Swedish financial system. However, as indicated previously, there are strong reasons for financial firms to develop stress tests, or perhaps rather scenario analyses, to assess the impact of various climate-related events that may arise via financial firms and systems in other countries.

FI expects the financial industry to make clear progress in this area in the next few years. Work is also progressing on these matters in various international organisations and networks, and it is important for both FI and the firms to follow these developments.

Naturally, in terms of risk management, just like in other areas, the needs and requirements must be adapted to each specific firm. For some firms and services, climate-related and other sustainability issues are naturally important, but for others not as much. It is necessary, however, for all firms to analyse their operations and take an active position on this matter, and in doing so apply a more long-term perspective than what is standard in normal business decisions.

CONSUMER PROTECTION

In recent years it has become more common to market financial services as “sustainable”, “ethical” or “environmentally friendly”. The actual underlying meaning of these fundamentally complex terms is not always clear, however, and there is rarely any in-depth discussion about their exact definition and any considerations that were made. For example, ethical positions, which on the surface may appear simple and obvious, are often complex and situation-dependent.¹⁶

It is also possible for an actor to choose different strategies to reach its goal even with clearly defined sustainability targets. When it comes to investors, the discussion usually revolves around two main types of strategies, refraining from investing or withdrawing from an invest-

¹⁶ For a more comprehensive discussion on this issue, please refer to, for example, Bauhn: “The Agent’s Perspective and the Ethics of the AP-Funds” SOU 2008:107, Annex 2

ment (exit) or as an owner or lender working to influence the firm (voice).

Selling savings products with a climate-profile or any other sustainability profile obviously meets the requirements and desires that many customers are raising. The problem for the consumer is that it can be difficult, and at times impossible, to assess the degree to which, and the manner in which, the selected strategy really generates positive sustainability effects. In a worst-case scenario the firm is engaged in “greenwashing”, i.e. using sustainability as a marketing tool that in reality lacks substance, and at the same time using this as a justification for charging a higher fee.

FI plays an important role in maintaining confidence in the financial firms and their consideration for the needs and interests of consumer. FI also needs to ensure that they follow current consumer protection rules. That said, FI does not consider it to be its role to define and regulate the content of terms such as “sustainable”, “ethical” or “environmentally friendly” financial services since consumers’, like firms’, interpretations of these terms vary significantly and, as stated, are in no way established.¹⁷

It is possible, though, for FI to look closer at some aspects within the framework of its existing mandate and regulations. For example, the information rules that exist could offer an opportunity in that they require that a consumer be informed about what a sustainability or environmental/climate profile specifically entails, the limitations and consideration the firm made, the impact strategies the firm intends to use and how the effects are monitored. If a fund manager cannot or does not want to report this information in a clear manner, there are grounds for questioning whether the marketing profile is serious or whether in practice it is simply a marketing and sales technique. It is crucial that FI follow up on this within the framework of its consumer protection supervision. It is also important to prevent these types of products from earning a bad reputation.

The so-called Fund Inquiry that was initiated by the Government has prepared and submitted proposals regarding these matters and proposes that FI receive an extended mandate for how firms inform consumers about the integration of sustainability aspects into the firms’ management.¹⁸ It should be noted that initiatives have also been taken in this area within the industry, e.g. SWESIF¹⁹ has prepared a *Sustainability Profile*, which is intended to provide fund savers with information about how funds apply sustainability criteria in their management.

¹⁷ See Finansinspektionen: *Sustainability Work of Financial Firms* (November 2016).

¹⁸ Fondutredningen (SOU 2016:45)

¹⁹ SWESIF is an independent network forum for organisations that work for or with sustainable investments in Sweden.

WELL FUNCTIONING FINANCIAL MARKETS KEY FOR THE TRANSITION PROCESS

The transition from fossil to non-fossil fuels will have far-reaching effects for all areas and sectors of the economy. The energy sectors will be affected the most, but other sectors will also be greatly affected, such as the auto industry, metal production and construction industry, just to name a few. In concrete terms this requires a comprehensive change in the production apparatus, and thus extremely large investment needs.

These needs cannot be forecast with any degree of precision, although the International Energy Agency (IEA) attempted in 2015 to estimate the size using the Paris Agreement as a basis.

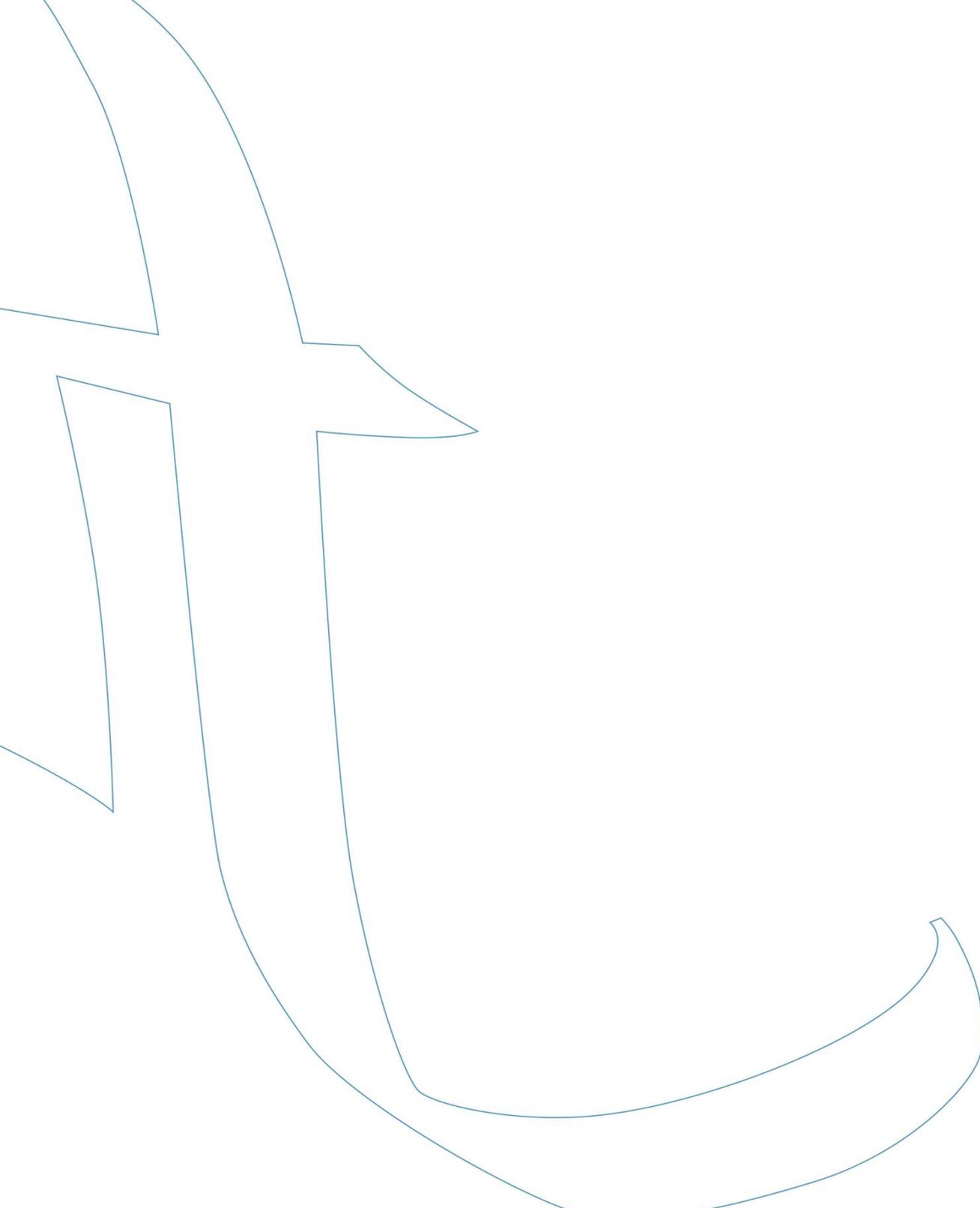
IEA makes the assessment that the transition up to 2030 will require investments in the energy sector of USD 13,500 billion and investments of USD 8,300 billion in the industrial and construction sectors.²⁰ This gives a clear indication of the enormous investments that are required.

Investments must be financed, and one of the several crucial conditions for this working is that the financing markets – the lending and securities markets – are functional and can fulfil their assignment of distributing and transforming savings into financing. If the financial markets cannot efficiently support this reallocation of capital, the climate transition will be more difficult, more expensive and take longer. Supervision's task of promoting well-functioning financial markets, in other words, plays an important supportive role in enabling the climate transition. The development of more unified definitions and measurement methods with regard to, for example, carbon footprints, improve comparability and transparency. This also contributes to a better overview and understanding of the risks and possibilities²¹ associated with the transition. Finally, it would also contribute to better pricing and more secure business decisions which may further improve the markets' ability to facilitate the transition.

It is a positive sign that internationally harmonised indicators for the impact of firms on the climate are being developed and applied. The challenge presented by the climate is of such central importance, and the measurement problems at the same time of such a complex nature, that this work deserves special status. Work to develop such indicators is currently ongoing within the Bloomberg Group, within the framework of the *Financial Stability Board*. The Group is expected to report to G20 at the beginning of 2017. During 2017, FI will monitor the measures Swedish financial firms and industry organisations will need to take based on the group's proposal.

¹⁸ IEA World Energy Outlook 2015

²¹ See, for example, Mark Carney: "Resolving the Climate Paradox" (Bank of England, Sept 2016). It may be noted that Mark Carney also views investments in transition as a way to lift the low investment levels in the economies, and thus, according to Carney, also to indirectly contribute to a normalisation of the monetary policy. This would thus be able to return positive macroeconomic effects even in the short term.



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