

Climate change and sustainable finance in the financial sector

December 2019

1. Introduction

Climate change and sustainable investment are issues that are increasingly affecting the financial sector and the Danish Financial Supervisory Authority's domain.

Climate change is creating an increasingly warm and environmentally-unstable planet, with ensuing financial risks. At the same time, the very progression to a climate-neutral economy poses a number of transition risks, especially for long-term investment in and exposures to sectors with a large carbon footprint. Climate change will thus impact the financial sector, including matters of risk taking, valuation of assets and advisory services to clients.

Sustainable finance aims to integrate sustainability considerations into financial products and services for the benefit of both investors and society at large. This entails increasing offerings of sustainable investment products. That trend carries a risk that such investment products are less sustainable than they appear to be, popularly termed "green washing", which may impair the confidence in and the integrity of the financial markets.

The task of the Danish Financial Supervisory Authority (DFSA) is to promote financial stability and to ensure that citizens and companies have confidence in the financial sector. The DFSA is thus also tasked with addressing factors that impact financial enterprises, financial markets and investors in financial products. In this way, climate change and sustainable finance affect key aspects of the DFSA's core tasks.

Consumer preferences, as well as the physical and transitional impacts of climate change, are forecasted to change and evolve over time. The impact on the financial sector and financial markets is thus not yet fully known. The green agenda may equally create new opportunities and markets for both products and services.

1.1 Climate change

As a major societal issue, climate change is a source of financial risk with the potential to impact financial stability. Increases in temperature cause more extreme weather, heavily increased groundwater and sea levels, more heat waves, etc. A rapid and radical reduction in CO₂ emissions towards a climate-neutral economy is a prerequisite for meeting the Paris Agreement targets of limiting the global rise in temperature to 1.5-2 degrees and of achieving the legally binding target of a 70% greenhouse gas reduction by 2030, which a large political majority in Denmark has agreed to introduce with a climate law. Such a radical transition could result in a number of transition risks.

Achieving the Paris Agreement targets and separate national measures requires significant private investment in climate adaptation and conversion of the economy, including infrastructure, transport, energy production, real estate and climate-friendly manufacturing. Denmark is therefore facing a transition period in which a number of challenges will affect its financial sector and a large number of other sectors.

1.2 Sustainable finance

Sustainable finance plays an important role in attracting capital to the green transition of the economy. This is being achieved by measures such as the establishment of the necessary financial infrastructure, increased transparency and better allocation of resources. Sustainable finance is based on the assumption that financial activity must take into account environmental, social and governance (ESG) factors. One key principle is that goals within one dimension must not be severely detrimental to others. The implementation of a renewable energy project must, for example, comply with human rights, follow good governance practices, protect employment, comply with tax rules, etc. in order to be characterised as sustainable. Sustainability risk is understood to mean an environmental, social or governance event or circumstance which, if it occurs, could materially impair the value of an investment¹.

The Paris Agreement and the United Nations Sustainable Development Goals (SDGs) were the precursors for the former European Commission's move to launch an ambitious work programme to promote sustainable finance through uniform and transparent regulation of the area². The work programme includes creating a common taxonomy for what qualifies as "green", disclosure obligations for financial market participants to provide consumers and investors with relevant information on the climate footprint and social profile of companies, definition of low-emission benchmarks and an Eco Label for financial products. In addition, the European Supervisory Authorities are working on sustainable finance through expert assistance and drafting of detailed regulatory standards.

2. The role of the Danish Financial Supervisory Authority

The task of the DFSA is to promote financial stability and to help ensure that citizens and companies have confidence in the financial sector. Thus, climate change and sustainable finance affect both aspects of the DFSA's core tasks.

Climate change risks impacting financial stability as a result of the major societal transformations facing society, and similarly, a number of new climate-related risks have emerged for the financial sector and the real economy.

Consumers and investors are also increasingly demanding sustainable and climate-friendly investment products and services. The number and scope of investment products described as sustainable are currently increasing significantly. Effective markets require a high degree of transparency and confidence that information in the market reflects the true characteristics of the underlying assets, which also improves investor and consumer protection. In this way, sustainable finance is providing new investment opportunities. Equally, however, it entails supervision to ensure that the products are genuinely sustainable, in order to safeguard investors and confidence in and the integrity of the markets.

¹ Regulation on disclosures relating to sustainable investments and sustainability risks:
<https://eur-lex.europa.eu/legal-content/EN/TXT/?qid=1576147075347&uri=CELEX:32019R2088>

² European Commission, 2018: https://ec.europa.eu/info/publications/180308-action-plan-sustainable-growth_en

The DFSA will seek to pursue a regulatory and supervisory approach that will enable the financial sector to manage risks in the transition to a low-emission economy and to a warmer world, in which investors and consumers are afforded the best possible protection.

3. Climate change and financial risks

The financial risks of climate change can be categorised as physical and transition risks. Physical risks posed by climate change cover both sudden and more extreme weather events (e.g. heat waves, cloudbursts, floods, fires and storms) and sustained climatic change (e.g. changes in precipitation, extreme weather variability, higher sea levels and rising average temperatures). Increased frequency and severity of extreme weather events may, for example, impair the market value of directly owned physical assets, such as properties. In addition, the market value of financial assets may be adversely affected. The reason is that many of the underlying business models rely on physical assets, which may be impaired by these weather events. On the liabilities side, climate change can have implications for the risks that are factored into non-life insurance companies.

Transition risks arise in the progression towards a greener economy and derive from extensive political, legal and technological changes as well as preferential and market changes, such as carbon taxes or changes in consumption patterns in relation to travel, food or the like. These can lead to significant changes in the value of many assets and create changed credit exposures for financial enterprises as costs and new business opportunities materialise. There may also be reputational risks associated with a lack of or slow conversion to more climate-friendly business models, as well as liability risks for companies that fail to adequately disclose or address their impact on the climate.

Transition risks include:

- New regulation that constrains or removes the premise for the prevailing business models of companies or sectors
- Rapid shifts in technology, such as the development of electric vehicles or renewable energy technologies, that affect the market value of more traditional investments in the automotive and energy sectors
- Companies that fail to reduce their CO₂ emissions sufficiently to meet consumer expectations and therefore may experience declining demand and a consequent decline in market value.

3.1 Types of risks

Climate-related risk factors might, for example, manifest themselves as rising market, credit, insurance and liquidity risks as well as operational risks.

3.1.1 Market risks

The transition to a low-carbon economy could have a particular impact on CO₂-intensive sectors that may face higher costs, be subject to increased regulation or see their business area reduced. The transition may impact energy and commodity prices, corporate bonds, equities and certain derivative contracts. The financial risk entailed by an abrupt switch to a low-emission economy may increase over the coming years if financial portfolios are not adapted to the expected climate development.

An increase in extreme weather phenomena may also adversely affect macroeconomic conditions such as economic growth, employment and inflation (due, for example, to extensive and sustained damage to infrastructure). This can lead to downgrades in credit ratings that affect the value of creditors' holdings.

3.1.2 Credit risk

The transition to a green economy may entail a number of new risks which the banking sector, among others, will need to address and incorporate into its risk profile going forward. This applies, for example, to the risk of collateralised assets declining in value as a consequence of the restructuring of the economy or ending up as stranded assets with more or less no value. Banks also need to be aware of the risk of the decline in the value of buildings in areas likely to be flooded in the future.

More extreme weather can also have sector-specific consequences. For example, crop yields in agriculture fell markedly in 2018 as a result of a prolonged drought, with consequent credit risks from lending to the agricultural industry, which obviously affected stress test assumptions in the field.

If damage from physical risks is not insured against, the financial cost may accrue to other market participants, which may increase the credit exposure for credit issuers.

3.1.3 Insurance risks

Rising temperatures and more extreme weather cause greater damage and thus higher insurance claim payouts. This leads to an increase in the sums insured and may mean that insurance companies withdraw their insurance coverage for specific sectors or geographical areas, for example low-lying infrastructure and very vulnerable countries or regions.

If insurance companies decline to insure property owners in specific geographic areas for example, this will entail a risk that citizens will be left economically vulnerable without the financial ability to cover the losses they risk in the event of extreme weather conditions.

3.1.4 Liquidity risk

Within banking, increased demand for green bonds risks fragmenting mortgage credit institutions' issuance transactions, thereby reducing the liquidity of the individual series. There may also be a risk entailed by the fact that bond issuances often have long maturities, while the sustainability agenda is evolving rapidly. This asymmetry may mean that the underlying assets that were assessed as green at the time of issuance do not necessarily retain this categorisation for their entire duration. This may cause losses for investors and reduce confidence in the issuing institution.

3.1.5 Operational risks

Operational risk is the risk of loss as a result of inappropriate or deficient internal procedures, human and systemic errors or as a result of external events, including legal risks. Companies whose operations or value chains are highly exposed to climate change are particularly at risk. Extreme weather phenomena may, for example, disrupt business processes and security of supply, while shifts in consumer perceptions and increased public focus may present reputational risks for sectors exposed to high CO₂ emissions.

"Conduct risks", investor distrust and reputational risks may also pose operational risks. Investor distrust and poor reputation can occur if a company fails to act in compliance with regulations. This may occur, for example, if the company has inadequate internal procedures in place to ensure that investment funds that are marketed as "sustainable" and "green" are in fact also managed in a way that ensures this.

Financial undertakings may also be exposed to operational risks if they outsource parts of their sustainability commitment to other companies with expertise in sustainable investment. Such a business model may in some cases lead to insufficient compliance with current regulations on outsourcing of activity areas.

Finally, there is a risk that the popularity of sustainable investments will lead to the emergence of companies that purport to offer sustainable investments, while in reality being involved in greenwashing. This concept would cover a situation in which products or services are marketed as sustainable and/or climate friendly even if they are not so, or even if only a small fraction of the underlying investments are actually green or sustainable.

4. Sustainability, finance and capital markets

Companies are increasingly developing investment products that are marketed as sustainable, climate-friendly or with ESG characteristics. This reflects an increased focus in the area from financial undertakings as well as the fact that consumers and investors are increasingly demanding such products.

Accurate and complete information to the market on the sustainability of securities is crucial. This increases transparency and can affect the pricing of assets. Thus, both physical and transition risks, together with production methods and societal factors, may influence how attractive a product is to invest in as well as its long-term risks and opportunities. Information on ESG factors and significant sustainability risks can thus serve to maintain the integrity of the capital markets. Conversely, inaccurate or deficient information on ESG factors and sustainability risks can pose reputational risks for financial market players.

Consumers and investors can be key players in the transition to a sustainable society. This requires that they have access to sustainable financial products and services that meet their preferences and needs. At the same time, it is important to ensure consumer and investor protection by making sure that products are genuinely sustainable. During a transitional period, however, it may be difficult to build up a well-functioning market for certain products, e.g. green mortgage bonds, if there is insufficient real estate that can meet future climate requirements or, more generally, if there is a shortage of investable sustainable products.

In particular, it is a challenge that no single common definition or minimum standard exists for assessing what may genuinely be termed sustainable and/or climate-friendly investment products. This carries the risk of greenwashing. Incorrect information on this could weaken confidence in the market for investment products and impair the ability of consumers and investors to contribute to the green transition if they opt to do so.

EU legislation is under way to address this, but in the meantime, it is important that financial enterprises implement measures to ensure that their products and services are in fact sustainable and/or climate friendly if marketed as such.

In the regulatory domain, new disclosure obligations in the financial sector are expected to be introduced. This applies, among other things to the forthcoming "Regulation on disclosures relating to sustainable investments and sustainability risks", which is expected to enter into force in early 2021. A common taxonomy for what can be characterised as "green" has also been agreed. The DFSA expects to be assigned supervisory obligations for parts of the EU regulation on sustainable finance.

Correct, concise and comparable information provides the best conditions for consumer and investor protection as well as for fair competition.

5. The DFSA's expectations

Climate change and sustainable finance can affect financial stability and confidence in the markets and are therefore a natural part of the DFSA's domain.

In relation to climate change, the DFSA generally expects the financial sector to follow the applicable rules for good governance structures in managing financial risks as a result of climate change. Risk management should be proportional to the nature, scope and complexity of the business model. This means that the undertakings must address all risks affecting them and that their governance must incorporate management of these risks in their strategy, risk profile, risk appetite, policies and guidelines.

Going forward, the DFSA therefore expects the financial sector to work on identifying the potential current and future impacts of the physical risks and transitional risks resulting from climate change through risk assessment and management. This may mean that undertakings are required to collect information from relevant parties where such information is available. It may also require financial enterprises to request additional information from companies they invest in or finance, including in relation to the planned investment horizon.

The DFSA also expects the financial companies to improve the quality of their risk governance and management as they increase their experience in dealing with financial risks associated with climate change. The DFSA plans to extend its supervision of the management of financial risks resulting from climate change in supervised entities over the coming years.

Concerning market confidence and consumer and investor protection, accurate information on disclosures and advisory services from financial enterprises are critical. For many consumers, these two elements are a core part of the decision regarding the extent to which they want to invest sustainably. Transparency surrounding the products and their sustainability, along with fair and proper investor advice, are key concerns when financial enterprises distribute sustainable investment products to investors. Such an approach must ensure that customers are left with investments that match what their preferences and financial circumstances can sustain.

It is vital that investors are clearly and adequately informed about sustainability issues and risks and that they receive information and advice in a fair, loyal and non-misleading way. This reduces information asymmetry and increases transparency, which can contribute to the integrity of capital markets and the financial system.

Distorted advisory services with a sole focus on advantages over disadvantages, as well as a lack of or inaccurate information, risk undermining confidence in sustainable products, causing inaccurate pricing and lowering liquidity in the markets. It is therefore important that financial enterprises safeguard the interests of clients, act in an ethically sound manner and provide advice as well as disclose information correctly and in a timely manner with respect to sustainability characteristics, sustainability risks and general investment risks for investors.

The DFSA recognises that a lack of common definitions and rules may lead to different interpretations of sustainability aspects, for example within specific sectors or regions, and recommends on that basis that undertakings use international, recognised framework tools (e.g. TCFD³) to rate, and disclose information on, the sustainability of their products and services. Recognised framework tools can be helpful in gaining and maintaining investor confidence. They can also help prevent misleading greenwashing and ensure that investors understand what they are buying.

In the efforts to address climate change and sustainability, it may be difficult to assess what significant risks will materialise in the future, given the substantial uncertainty about how climate change and sustainability risks develop. In the same way, sector and industry-specific conditions may apply. Thus, while the specific circumstances of individual financial enterprises may differ, it is important that they address them proactively, for example, by using scenario planning to prepare for the future and for forthcoming regulation.

The DFSA will be monitoring the area going forward with a view to ensuring financial stability, consumer and investor protection as well as confidence in and integrity of the capital markets.

³ Task Force on Climate-related Financial Disclosures (<https://www.fsb-tcf.org/>)