#### **BANKING FOR A LOW CARBON FUTURE:**

## A MULTI-STAGE MODEL OF CORPORATE CLIMATE CHANGE RESPONSES IN A LOW-SALIENCE INDUSTRY

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by

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#### **ABSTRACT**

While there is a great sense of urgency in the scientific community to act now in order to slow the imminent negative effects of global warming, most organizations continue to run their operations as though the external context has not changed significantly.

For the banking sector, in particular not much research has been conducted in the area of their strategic engagement with climate change (CC), despite the fact that the engagement of this sector is crucial for the transition to a low-carbon economy.

This is why this thesis focuses on the banking sector. Through an exploratory comparative case study of four banks, this thesis investigates mechanisms that have led to, or have been prevented from, the integration of climate change in the respective bank's corporate strategies.

In particular, it answers the following questions: How are banks interpreting climate change in their organizational context? To what degree does the initial individual interpretation influence the attentional distribution through structures and communication of the issue internally? Can this explain the variance in observed strategic choices? In order to answer those questions, a multi-level analysis was conducted using three different theoretical perspectives: the macro, meso and micro.

- The macro lens, grounded in institutional theory, is important in order to generate understanding about the perception of current institutional pressures possibly influencing corporate responses.
- 2. The meso lens, grounded in the Attention Based View of the Firm, serves to analyze how attention structures inside the banks influence the distribution of attention towards the topic and influence the degree of integrating climate change-related aspects across the organization.

3. The micro lens, based on the concept of moral intensity (Jones, 1991), serves as an alternative interpretation model to explore how managers make sense of climate change as individuals. Further, the concept of "issue selling" investigates what language managers use to generate attention regarding climate change while using different attentional structures explored through the meso lens.

The findings are based on four case studies of banks located in Europe, each of which show a different degree of climate change integration in their corporate strategy. The case studies drew upon field research including 23 semi-structured interviews with senior managers and members of the executive teams from those four banks, six interviews with stakeholders and a comprehensive analysis of publicly available corporate documents, company-related media releases, videos and further interviews, but also confidential corporate material that was made available to me.

Through analysis of the data, the following findings can be made:

Most banks perceive climate change in terms of pressure: coercive pressure from clients, very limited pressure from regulators in the area of risk and as mimetic pressure to respond. Some banks, however, also perceive climate change to be a moral issue that demands their contribution to act. In those banks, climate change is regarded as a morally intense issue — this term being defined as a commonly accepted phenomenon with extreme consequences for the future of the society they are embedded in and that they serve. One bank mainly had a scientific view on climate change as a human-induced natural phenomenon.

Depending on these first interpretations, the findings suggest that different languages are deployed to further distribute the issue across the organization. In the case of scientific and institutional interpretations, the main language used to sell the issue inside the organization and to justify its incorporation as part of strategy was economic. climate change was translated into financial risk, business opportunity or a potential for cost reduction.

Banks that mainly interpreted climate change as a moral imperative to act, communicated this issue differently. They proffered moral arguments that were grounded in the organization's mission to serve society and based their strategic engagement on this mission. Economic arguments were only deployed at the stage of operationalization of climate change.

These different languages influenced the arenas where conversations linked to climate change took place and how widely attention was subsequently distributed across the organization. In the case of a scientific language, climate change was not incorporated into strategy and remained as a topic of general interest, managed by the corporate social responsibility (CSR) function.

In the case of an economic language, climate change was strictly contained to a few of already existing governance channels and sometimes even ignored entirely. No further attention to the issue within the companies could be observed. Strategic engagement and change were strictly related to fields where economic impact could be generated at the lowest transaction cost possible.

In the instances where moral language was used within governance channels, conversation yielded a different level of engagement. In these cases, governance structures provided a platform for generating a common and more holistic understanding of the phenomenon and its impacts. The attentional engagement with the complexity of the issue grew across the organization and led to creation of new governance communication channels to help address emerging issues. As a result, the strategic integration of climate change was more holistic and comprehensive.

The thesis makes theoretical contributions to institutional theory, Attention Based View of the Firm, the issue selling literature and Governance Ethics. Its results also have important implications for practice.

#### **ACKNOWLEDGEMENTS**

Although the core of earning a PhD is to demonstrate the ability to produce original research that expands the boundaries of knowledge, implicitly suggesting that this is done by the individual alone, I don't know many PhD students who can really claim this to be true. At least, I don't feel that I can. This is why I would like to express my deepest gratitude to those who've been there with me and for me before and during my PhD journey.

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#### 1 INTRODUCTION

#### 1.1 Motivation for Study

Climate change (CC) has been described as the mega trend — the biggest challenge humanity has to face, and one which has been at the heart of research in many disciplines. Despite broad research interest in the topic, the reality is sobering: the world is not advancing fast enough, whether in mitigating climate change, or in adapting to environmental changes that we can already observe (Slawinski et al., 2017), not to mention the changes that we can expect in the future.

This dissertation side steps from a former research paper, written in 2016, explaining and systemizing cognitive and behavioral biases that this author, with a co-author, found in literature and through our work in a business school setting, and that, in our eyes, were leading to the ignorance of the importance of dealing with climate change that we observe today (Mazutis and Eckardt, 2016).

Through an in-depth analysis of cognitive biases, four main groups of bias were identified (perception, optimism, relevance and volition biases) that are at play and that, in our opinion, were crucial in discounting the importance of climate change.

The main idea which emerged from this research was recognizing that those aspects that contributed to salience of climate change and to the realization of urgency to act, in fact, were very similar, if not the same, aspects that according to Jones (1991) constitute the concept of "moral intensity". In particular, one theme and a question emerged from that research work: to understand whether moral intensity did play a role in focusing the attention of managers in an organizational setting, or if other, more dominant factors were at play when it came to acknowledging or ignoring the topic.

Given that there is already some research on attention to climate change relating to some physically exposed industries like agriculture (Packardt, 2000), wineries (Galbreath, 2011), tourism (Giles and Perry, 1998; Harrison et al. 1999), oil and gas and automotive (Van der Woerd, et al., 2000; Kolk and Levy, 2004; Pinkse and Gasbarro, 2016) just to name a few, this author decided to focus on an industry that, so far, has not attracted much attention in this but that, in my opinion, is extremely important: the banking industry.

Studying banks appealed to me for three reasons:

- 1. Banks indirectly contribute to most of the greenhouse gas (GHG) emissions by financing "dirty industries" (RAN et al., 2019).
- 2. Banks have an important role to play in financing our transition to low carbon economy (Guterres, 2019).
- 3. From a research perspective, banks are interesting because they are rarely physically impacted by climate change; they are not targeted by media or politicians and labelled as a "dirty industry" and contributors to climate change; hence, climate change is potentially not very salient for them (Furrer et al., 2012; Orsato et al., 2015).

This led to the research focus of this doctoral thesis and its empirical nature: to explore specifically to what extent, and in what way, climate change has already translated into a pressure to act within the European banking industry and if — following the line of my previous research — moral intensity has had any role to play in it. Then, in a second step, my goal is to shed light on the similarities and differences in the way financial organizations respond to the climate change challenge:

- How are they interpreting the challenge?
- To what degree does the way managers make sense of climate change influence the way they advocate (or not) the issue internally?

• How does this impact the organization's level of attention to the topic and hence, enable changes in strategy?

Given the importance of the topic and the incredible potential of the role that banks can play in changing the game, by providing financing of the US\$ 12.1 billion needed for the transition to low carbon future (Zindler and Locklin, 2016; Foster et al., 2018). Throughout this dissertation the aim is to help enlarge the keyhole through which we view corporate responses to climate change.

Examining the phenomenon from three different theoretical perspectives — the macro, meso and micro — contributes to building a more complete picture, as well as a basis for an analysis of the observed variance in corporate responses to climate change across the banking industry.

The macro and micro analyses aim to provide more information about how climate change is interpreted by decision makers. The meso level helps understand what happens "in the box", or inside the organization.

Furthermore, the objective is to see if, and to what extent, those different factors (macro, meso and micro) are interdependent and possibly mutually reinforcing, supporting the generation of ideas for future organizational and managerial action.

#### 1.2 Research Focus Questions

There are two main research questions that provide the basis for purpose, context and methods that this study addresses: 1) How can the variety of organizational responses of international banks to climate change be interpreted theoretically; and 2) How does a topic like climate change find its way into the corporate strategy in an industry that is not necessarily exposed to it; what contributes to its detection and effective integration?

This dissertation approaches this phenomenon by applying three lenses:

- 1. The macro lens serves to generate understanding about the perception of current external pressures possibly influencing corporate responses.
- The meso lens helps to carve out "attention channels" but also communication practices and discourses influencing the level of climate change integration inside the banks.
- 3. The micro lens serves to identify and categorize how the nature of the issue is influencing the different use of channels and narratives.

The purpose of the focus questions is not to act as testable hypotheses. Rather, they serve to guide and focus the study with the final goal of expanding existing, rather than testing, theory on how different interpretations of climate change within a business impacts its organizational outcomes.

#### 1.3 Thesis Structure

This thesis is structured as follows:

Chapter 2 begins with an empirical context to the phenomenon in question. A scientific definition of climate change puts forward evidence for its anthropogenic nature and give an overview of its impacts on humans and ecosystems. Based on this, a deduction is made about the ethical nature of climate change and is further defined as a moral issue. Moreover, the gap between corporations' contributions to climate change is illustrated, as well as their inaction with regard to mitigation — on the one hand, an adaptation toward climate change outcomes and, on the other, despite a wide array of calls to action by supranational bodies and governments (for an overview see Table 2.2). Next, an overview of the propositions found in the literature is provided that offer possible explanations why we observe this gap.

Further empirical context is then given to illustrate what role banks could possibly play in combating climate change — first by describing their impacts and second by outlining the difficulties inherent in defining a role for them.

In order to develop criteria for measuring the level at which banks have integrated climate change into their communication and strategies, and the effectiveness of the measures the banks in the sample taken, possible lines of action that banks could take in the areas of corporate functions, in their business operations and through their governance structures are described.

Chapter 3 provides an overview of the theories against which the data collected could be analyzed. These theories serve as lenses rather than filling a deterministic function, and they allow an analysis on three levels: macro, meso and micro. The macro- and micro-level analyses aim to provide more information about how climate change is perceived by managers and decision makers, and to find out to what extent their way of perceiving and attending to the topics can help make sense of the current organizational responses that we see. The meso-level analysis helps to understand what happens "in the box", for example, inside the organization; or, in other words: why, when, and how the "antecedents" are playing out at the strategic level.

The theoretical grounding of the macro lens is based in institutional theory (DiMaggio and Powell, 1983, Oliver, 1991 and Delmas and Toffel, 2008), in order to allow a subsequent analysis of institutional pressures as factors explaining and limiting banks' strategic choices.

Then the meso level is introduced, which is based on the Attention Based View of the Firm (Ocasio, 1997). Its purpose is to provide a lens to analyze organizational factors that influence corporate strategy, such as attentional structures and communication channels, and could explain different levels of implementation of climate strategies.

Finally, on the micro-level, individual factors are elaborated upon; for example, the awareness of the moral dimension of climate change, may also influence the strategic choices that managers make. Then, further explained is why the perception of moral intensity is a good indicator as to whether individuals perceive moral pressure to act against climate change. In order to make the link between the individual perception of climate change as a morally intense issue and the impact on the organizational strategy, the concept of "issue selling" (Dutton and Ashford, 1993; Dutton et al., 2002; Mayer et al., 2019) is introduced, which posits that the use of language has an important influence on organizational attention and strategic outcomes.

Following the overview of the empirical and theoretical context, in Chapter 4, the methodology used is outlined (choice of research method, research setting and case selection criteria, data sources and collection and the data analysis approach) to inductively explore the phenomenon. Chapter 5 begins with exploratory findings, illustrating each of the case studies with regard to perception and interpretation of climate change by individuals and organizations, the way climate change was subsequently discussed or "sold" and what attentional structures were then used to link it to the response repertoire and organizational outcomes. The chapter concludes with findings illustrating emerging patterns and approaches that could be derived from the comparison of the findings of each of the case studies and serves as a basis for the development of the theoretically grounded model that is subsequently introduced in the discussion in Chapter 6. Here, the theoretical lenses described in Chapter 4 are reviewed and linked back to what was empirically observed and discussed in Chapter 5, in order to answer the research focus questions.

Chapter 7 covers the anticipated contributions to theory and practice, necessary limitations and directions for future research, as well as delimitation, which is discussed in Chapter 8. A short conclusion constitutes Chapter 9.

#### 2 EMPIRICAL CONTEXT

In order to provide empirical context to the study, this chapter gives a quick overview of the facts and scientific evidence about climate change (hereinafter also referred to as CC), the current corporate responses and in particular the way the banking industry is responding to the challenge.

#### 2.1 Climate Change: Definition, Impacts and Inaction

Climate change is real, it is here, and it is here to stay. The International Panel on Climate Change (IPCC) has made it very clear in recent publications that the global average temperature is already more than 1°C higher than in the pre-industrial era; Arctic sea ice is shrinking; sea level rise is accelerating; and, the world is suffering more extreme weather events. The trend is also set to continue, with global warming reaching an increase in global average temperatures of 1.5°C between 2030 and 2052, assuming the current rate of increase continues (IPCC, 2018).

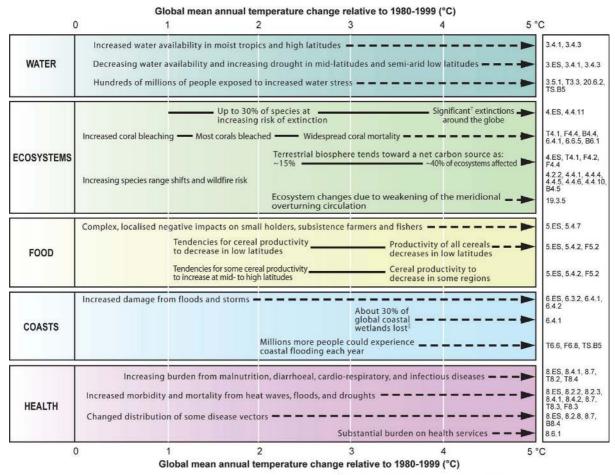
The general definition and usage of the term "climate change" varies depending on the context in which the phenomenon is being studied. As the focus of this thesis is human behavior in the context of strategic decision making, it is reasonable to apply a climate change definition that focuses on human agency rather than a more general one, referring to any changes in climate including those cyclical changes due to natural variability. As such, in this thesis the term "climate change" is defined as it is in the United Nations Framework Convention on Climate Change (UNFCCC) and supported by the latest IPCC findings (IPCC 2014). This definition reads: "The scientifically observed century-scale rise of the average temperature of the Earth's climate system and its related facts, solely focusing on the human influence on the climate system through anthropogenic GHG [for example, greenhouse gas] emissions." In its Fifth Synthesis Report (IPCC 2014), the IPCC clearly confirmed that

human influence on the climate system is undisputed and growing, with impacts observed across all continents and oceans. The scientific consensus on human-caused global warming is shared by 97% of publishing climate scientists (Cook et al., 2016).

A recent report found that 63% of all industrial anthropogenic carbon and methane emissions are caused by just 90 companies, 83 of which were oil, gas and coal companies (Heede, 2014). Notwithstanding this very high degree of concentration of GHG emitters, it is also true that carbon emissions are the product of billions of decisions made every day by individual managers and consumers around the world.

Impacts of climate change on human systems are heterogeneous because they depend not only on the rise of temperature and changes in climate variables, but also on social and economic parameters of the particular geography in question (see Figure 2.1).

Figure 2.1 Overview of Projected Adverse Impacts of Global Climate Change



† Significant is defined here as more than 40%.

<sup>‡</sup> Based on average rate of sea level rise of 4.2 mm/year from 2000 to 2080.

Source: IPCC, 2007 b

Note: Numbers in the right-hand sidebar refer to the corresponding chapters in the AR4.

Given the severe impacts on people and ecosystems — already greatly harmed but expected to suffer even more damage in the future — climate change cannot be ignored any longer: neither from being legitimate, nor from a moral perspective. This argument echoes a World Bank review of climate change and human rights, which stated, "Consensus-driven, welfare-based approaches stand in uneasy relief, in the eyes of many, against the very tangible climate change harms already evident in many countries" (McInerney-Lankford, 2011).

Barry et al. (2013) have therefore demanded a more diversified categorization of climate change, arguing for a moral, ethical and philosophical debate around the issue. This claim is firmly grounded in a long-standing discussion, emerging from a 20 year-long school

of thought propounded by a number of moral philosophers, who have been asking whether climate change involves good and bad, right and wrong, and responsibility and blame (for example, Gardiner, 2006; Jamieson 2007 and 2009; Davidson 2008).

In line with this thinking, Grasso (2013) has rightly pointed out that the moral foundation of climate change relates to avoiding and preventing potential harm to others, whereas harm relates to the endangerment of anyone's life, health or liberty of possession (Stephens and Lewin, 1992). Consequently, these two moral duties can only be instrumental in dealing with already potentially existing and future harm resulting from climate impacts, and, as such, they represent two sides of the same moral coin, namely: avoiding/preventing some people from harming some other people. This is the moral core of climate change. From a normative perspective, there is therefore little doubt that climate change is an ethical issue: it is a real threat to human civilization because of its severe consequences to human lives and ecosystems, compromising the rights to life, liberty and personal security of those directly impacted by it.

Therefore, we should not reduce climate change to its dimension of eco-system risk, run calculations and simulations to estimate potential effects and reflect upon technological solutions to address some of the outcomes; climate change is also an ethical problem and the ethical dimension needs to be addressed because, once incurred, potential and actual ethical transgressions may not be repaired. The ethical dimension is also a powerful motivator to act against climate change, as will be demonstrated later in this study. Further, it is precisely this ethical dimension, grounded in injustice and potential harm, that puts pressure on industries in the wider sense and companies in particular, by society, governments, regulators and environmental organizations to rethink their strategies in order to diminish their contribution to this phenomenon. However, this pressure varies hugely from one country to another and across industrial sectors (Dunn, 2002), as seen in Table 2.1.

# <u>Table 2.1 Sample of Calls to Actions by Supranational Bodies, Governments</u> <u>or Governmental Organizations in the Past Five Years</u>

Date	Organization	Warning
May, 2014	United Nations (UN)	We have 15 years left to prevent catastrophic increase in global
		temperatures of 2°C.
May, 2014	White House	Impact of CC: Temperatures will rise by 10°F by 2100 if we do nothing; There are 50% of Americans who are vulnerable to rising sea levels; Increased risk of storms, floods, droughts and wildfires; Over the next ten years, 40% in economic losses from climate impacts and other costs.
June, 2014	International Energy Agency	Business as usual will lead to a 6°C rise in temperatures by 2050; Only a scenario that sees a switch to renewables, electrifying everything and major increases in energy efficiency will allow for 2°C rise.
June, 2014	NY Mayor Michael Bloomberg, former U.S. Treasury Secretary H. Paulson and Tom Steyer	If we don't act now, by 2050 \$66–\$106 billion worth of US coastal property will be below sea level (up to \$507B by 2100); predict 50–70% loss in annual crop yields in parts of US.
June, 2014	World Bank	CC poses one of the greatest global challenges, threatening to roll back decades of development and prosperity.
Sept.,2014	Institutional Investors Group on Climate Change	A coalition of 347 global institutional investors who manage \$24 trillion in assets call on world leaders to institute a stable, reliable and economically meaningful carbon pricing, as well as develop plans to phase out subsidies for fossil fuels.
Nov., 2014	PWC	Need to speed up decarbonization to 6.2% per year, every year, until 2100 to avoid catastrophe (otherwise we will hit 3.6°F by 2034).
Nov., 2014	IPCC (International Panel on Climate Change)	Emissions must fall 40–70% by 2050 (near zero by 2100) or "The end of the 21st Century will bring high risks of severe, widespread, and irreversible impacts globally".
June, 2015	Lancet Commission on Health and Climate	"Climate change is a medical emergency": direct health impacts of extreme weather events; Indirect impacts from changes in infectious disease patterns, air pollution, food insecurity and malnutrition, involuntary migration, displacement and conflict.
June, 2015	Pope Francis Encyclical on the Environment	"There is an urgent need to drastically reduce carbon dioxide emissions by substituting renewable energy for fossil fuels."
June, 2015	Dutch Court	Rules that the Dutch government has a duty of caring to mitigate climate change; Comparable legal cases mounting around the world.
July, 2015	Economist Intelligence Unit	Financial industry can expect \$4.2 trillion in losses in present value terms if global temperature rises by 2°C, \$7 trillion if it rises by 5°C, \$13 trillion if it rises by 6°C (or 10% of global GDP).
Sept., 2015	Bank of England	Warns investors of potentially huge losses from climate change arguing that companies should disclose not only what they are emitting today but how they plan to transition to the net-zero world of the future.
Oct., 2015	Citibank	Climate change will cost the global economy \$44 trillion by 2060 unless we take decisive steps to rein in GHGs.
Oct., 2015	NATO	"Climate change related risks are significant threat multipliers that will shape the security environment in areas of concern for the Alliance."
Dec., 2015	COP21 (Paris)	197 nations agree on urgency to keep global temperature rise to under 2°C.
Feb., 2016	UNICEF	Call to action by UNICEF Executive Director Lane: "Climate change disproportionately affects the world's most vulnerable people – and the most vulnerable of all people, children. () The

		world's diplomatic triumphs can become tragedies if the world fails to combine efforts to combat climate change."	
Nov., 2017	World Scientists' Warning (15,000 scientists signed)	"Humanity has failed to make sufficient progress in generally solving foreseen environmental challenges, and alarmingly, most o them are getting far worse Soon it will be too late to shift course away from our failing trajectory."	
Feb., 2018	Lancet Commission on Health and Climate	"Anthropogenic climate change threatens to undermine the past 50 years of gains in public health": The delayed response to climate change over the past 25 years has jeopardized human life and livelihoods and puts the world on a high-end emissions trajectory that will result in global warming of 2.6 – 4.8°C by the end of the century.	
June, 2018	UNEP FI and 288 Institutional Investors	288 investors with more than \$26 trillion in assets call on world governments during the G7 Summit, to scale up climate action to achieve the goals of the Paris Climate Agreement.	
Oct., 2018	IPCC	The world is currently 1°C warmer than in pre-industrial times. The 2°C target is dangerous; instead we need to target maximum 1.5°C in order to minimize severe risks of droughts, floods, poverty, water stress and migration. We have 12 years to limit climate change catastrophe: At the current level of commitments the world is on course for 3°C of warming.	
Nov., 2018	UN Environment	Current national commitments on emission reduction are not sufficient to bridge the emissions gap in 2030. The world's original level of ambition needs to be tripled to stay within 2°C warming and fivefold for the 1.5°C scenario.	
Jan., 2019	National Academy of Science, US	Continued atmospheric warming will lead to southwest Greenland becoming a major contributor to sea level rise.	
Jan., 2019	World Economic Forum	UN Secretary General Guterres: "Climate change is the most important systemic risk for our world in the future. We are losing the race. Climate change is progressing faster than we thought but the political will is slowing down. This is a paradox and we have to change it."	

Source: Updated from Mazutis and Eckardt, 2016 and sourced from Sourced from www.sustainabilityadvantage.com, World Economic Forum, UNEP FI

Note: PwC = PricewaterhouseCoopers; IPCC = International Panel on Climate Change; GDP = gross domestic product; GHG = global greenhouse gas; NATO = North Atlantic Treaty Organization; COP21 = 21st Conference of the Parties; UNEP FI = United Nations Environment Programme Finance Initiative.

Following (modest) regulation and public (including Non-governmental organizations [NGO]) awareness and calls to action, these supranational agreements do have a moderate impact on business leaders. There is empirical evidence showing how corporate boards have been expressing more concern over the topic of climate change over time (Enkviskt and Vanthournout, 2007). In fact, the majority of global executives do regard climate change as a strategically important challenge and consider it important to their product development, investment planning and brand management; at least in abstract terms (Bonini et al., 2010).

However, despite growing recent evidence of climate change, as witnessed by an increasing number of extreme weather events, there has been no demonstrable effect, to date, of climate change risk on asset prices, corporate valuations, or any other significant financial metric. In other words, climate change risk is currently not discounted by investors — a phenomenon that Stern has called "the biggest market failure the world has seen" (Stern, 2007).

This may help to explain why the vast majority of CEO's report that climate change is not prominent on their agendas in concrete terms. Being trapped into delivering short-term financial gains (Glynn and Lounsbury, 2005; Hoffman et al., 2010) rather than valued for long-term strategic thinking, they tend to discount the potential future impact of climate change on their business (Bazerman, 2008), even at the risk of possibly causing their companies to suffer irreparable damages, which may be the result of their inaction (Bazerman, 2006). Hence, it comes as no surprise that the challenge of climate change has not made it into CEO's' top ten relevant strategic issues — it ranked 20th in a PwC Global CEO survey from 2017. While in 2015, only 29% of companies considered climate change to be a "quite or very urgent" issue, a greater percentage (32%) considered climate change "not urgent at all" (Kiron et al., 2015). In its recent Global Risk Assessment, the World Economic Forum confirmed this lack of perceived urgency (WEF, 2018). Similar to the PWC survey, the WEF survey also finds that the topic of climate change does not make it into the top ten global risks, ranking only 18th on the Global Risks of Highest Concerns for Doing Business within the next ten years (WEF, 2018).

This obvious discrepancy between the need for action and the reality has been preoccupying researchers from different disciplines in the field of Business and Natural Environment (B&NE). Theoretically, the challenge has been approached through the lense of existing business disciplines regarding organizations, corporate strategy, operations and accounting, augmenting these perspectives with further insights from economics, sociology and psychology. From a strategic perspective, the phenomenon of organizational climate change inaction has been conceptualized, for example:

- As an ongoing battle between competing interests (Wright and Nyberg, 2017).
- As a conflict between different time perspectives (Slawinski et al., 2017).
- As a response to market demands (Pinkse and Kolk, 2009).
- As attention to appropriate response to the institutional, political environment (Delmas and Toffel, 2012; Murillo-Luna et al., 2008; Reid and Toffel, 2009).
- Or, as a reaction towards physical threats stemming from first physical impacts caused by climate change (Galbreath, 2011).

Companies are further described as being "trapped" in path dependency of the predominant market logic, which is more focused on short term gains (Hoffman et al., 2010). This is also the predominant rationale for criticizing climate relevant action as "green-washing", in other words as superficial actions or narratives decoupled from actions that mainly serve to legitimize companies' business interests rather than genuinely embracing a new way of doing business (Banerjee, 2008).

To add to these aspects, there is also a significant body of research looking into human cognition and the difficulty that humans have in grasping the concept, understanding the risk of climate change and feeling concerned about it. For example, an entire series of biases and cognitive shortcuts, such as anchoring and hyperbolic discounting, make it difficult for humans to acknowledge the relevance of climate change and to perceive it as urgent or salient (for an overview see Mazutis and Eckardt, 2016). The relatively low anchor of 2°C–5°C change in temperature simply does not scare us sufficiently, particularly since most of human beings experience a far higher amplitude of temperatures over the course of a year (Weber, 2006). Scientists' predictions that significant consequences only will appear in 20 to 30 years,

do not help us perceive climate change as having immediate relevancy today (Joireman et al., 2010; Spence et al., 2012). Furthermore, managers also have the tendency to be overconfident in the "human" ability to deal with the complexity of the issue and the likelihood of negative events (Lovallo and Kahneman, 2003), which leads to the belief that we can trust human capacity to come up with a technological solution to fix the problems once this becomes a necessity. The latter also leads to a dependency on authorities to set forth rules and standards that would force action today because there is also a belief that adopting more aggressive climate change initiatives would put the company at a competitive disadvantage (Mazutis and Eckardt, 2016). Hence, instead of proactively seeking strategic alternatives for a more aggressive approach (Tenbrunsel et al., 2000), managers tend to choose to do the minimum required by law, which is currently far from sufficient to mitigate climate change.

All of the above converges into one main finding: companies and managers simply do not pay sufficient attention, perceive pressure (external or internal), or feel the urgency to act on climate change. The result is that both organizations and individuals remain in their "business as usual" space.

This is exactly where banks may come into play as catalysts for action, due to the specific role that they play in the economy, by funneling investments and providing money to finance business activities. Banks have direct access to most of the market players around the globe through direct or active ownership or proxy voting, but also through regular dialogues with their clients. They can therefore potentially exercise their power, generate pressure on any company they have invested in, and stimulate those firms to control their environmental impacts and innovate their businesses towards a low-carbon business model. In this sense, they could fill the void currently resulting from the lack of market, political, institutional pressures or individual lack of attention to act against climate change.

A pre-requisite for such action, however, is that banks — who find themselves trapped in the mechanisms described above — overcome their lethargy and take a more proactive stance to develop comprehensive climate change strategies themselves. Given that international banks have a client reach around the globe, and across multiple boards and legal systems, activating these players as catalysts for change could present an efficient way to overcome the current global governance vacuum that we are facing (Scherer and Palazzo, 2011).

Where banks stand today, and what they need to do to transform themselves in order to play this catalytic role, is addressed in the next section.

### 2.2 Climate Change and the Banking Industry

Until now, banks have considered their role in the market as that of an intermediary, outside the realm of the economy, mainly providing services addressing the needs of other economic players. These services include mobilizing and allocating financial resources by funneling them between savers and borrowers, providing clearing and settlement systems to facilitate trade and mitigating risks through the use of various products dealing with risk and uncertainty. Banks specialize in assessing the creditworthiness of borrowers and providing an ongoing monitoring function to ensure borrowers meet their obligations. Accordingly, they ameliorate the information asymmetry between investors and borrowers (Allen et al., 2012). But as much as it all may seem to depend on business rationale and financial risks, it must be stated that there is no such thing as a "neutral" investment, loan or service. By enabling or inhibiting the commercial activities of other economic players (who contribute relatively more or less to climate change), every financial decision a bank takes has an indirect impact on the climate: positive or negative.

Yet the banks have not been put under public scrutiny with regard to their contribution to climate change, most likely because like many other service industries, banks are not commonly considered to be high polluters. The reality is that only limited data are available regarding GHG emissions of banks. Most of this data is available through the Carbon Disclosure Project (CDP), using the GHG Protocol as a standard to report.

This Protocol classifies a company's GHG emissions into three "scopes":

- Scope 1 emissions are direct emissions from owned or controlled sources.
- Scope 2 emissions are indirect emissions from the generation of purchased energy.
- Scope 3 emissions are all indirect emissions (not included in Scope 2) that occur in the value chain of the reporting company, including both upstream and downstream emissions (GHG Protocol, 2017).

Beginning some 15 years ago, the finance sector has mainly been reporting on Scope 1 and 2 emissions. Despite this, global figures quantifying GHG emissions (Scopes 1 and 2) of the finance sector are not available. Specific figures on banks only (such as, excluding other types of players in the financial industry, such as insurance companies) are unavailable as well. However, some efforts have been made at the national level that can provide an indication of the range of the volume of emissions generated by this sector. For example, the French Commissariat Général au Développement Durable regularly conducts a comprehensive analysis to break down GHG emissions in the French national inventory (ORSE et al., 2016). It uses different parameters according to how imported or exported emissions are dealt with and how they are adjusted according to final demand for "consumption" rather than "production". Using this methodology, it could confirm that the financial sector — like other service industries — can generally be considered relatively

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<sup>&</sup>lt;sup>1</sup> Which is not the case with other, more GHG-intensive sectors, such as energy, agriculture or transport.

minimal contributors to climate change when compared to other industries. In their national ranking, the finance sector scores second lowest across all industry sectors with regard to Scope 1 and Scope 2 emissions contributing to climate change (ORSE et al., 2016). There is no reason to assume that this picture should differ significantly when considering the finance sector's contribution at the international/global level — when restricting our analysis to direct GHG emissions generated by the bank's operations. However, this does not take into consideration its indirect contribution to climate change generated by lending and investment decisions.

The phenomenon of climate change and its relationship with banking, its impact on the bank (for example, as a risk factor), and the impact of a bank's strategic choices as contributors to climate change have not yet been fully explored in academia; what we see instead are conversations focusing on the "how to" aspects, such as evaluating climate change as a risk factor (Hugenschmidt et al., 2001), or deliberating about possible product innovations (Hoepner and McMillan, 2009; Furrer et al., 2012). This chapter aims to provide a more structured and comprehensive frame in order to lay the groundwork for the criteria that will later be used to examine the level of integration of climate change aspects within the strategy of banks, as has been necessary to theoretically sample the case studies.

On an abstract level, there are two main strategic questions and choices that can be asked: Firstly, where can a bank become active with regard to operating in a manner that respects the climate by minimizing its direct and indirect impact? Second, and more importantly for the purposes of this study, what should a bank do to take a proactive role in being a sustainable, climate conscious catalyst for change?

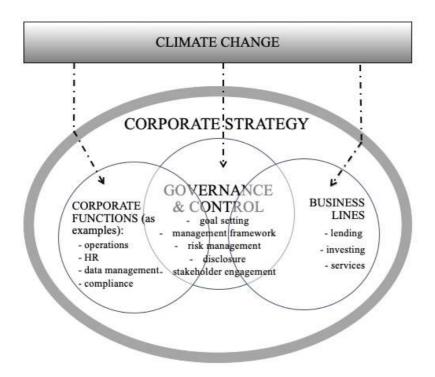
Taking it from here, the following sections will cover in greater detail where and how climate change-relevant aspects can be integrated into corporate and business strategy.

However, it is important to stress that it is not the intention of this thesis to become a

compendium of products, assessments and procedures relating to the integration of climate change into different banking products, asset classes or services, or to provide guidance on how to account for portfolio risks related to a bank's climate change exposure. Thus, it is by no means comprehensive. Rather, its aim is to provide an overview of the possible fields of action available to banks as a basis to understand how the level of climate change integration at the strategic level can be assessed.

In Figure 2.2., the author's overview of the high-level structure relating to the following sections is presented.

Figure 2.2 Overview of Strategic Areas Where Climate Change Can Be Integrated



## 2.2.1 Integrating Climate Change into Corporate Functions

In order to reflect on the variety of ways in which a bank may be exposed, or contribute to climate change, a description of the direct contributions to climate change begins

the discussion, followed by examples of how CC can be integrated into other different corporate functions.

The most straightforward approach is to set GHG targets for the bank's direct emissions. Because banks are service companies, these emissions stem mainly from energy used in buildings, travel, waste management, IT systems, etc. As such, they are not much different from the decisions faced by many other companies that offer services, so that the evaluation of a bank's GHG emissions is relatively straightforward: decisions are based on CO<sub>2</sub> reduction.

To define the amount of GHG emissions, reduction targets versus efforts reported serve as a good proxy (Gerardi et al., 2015). Here the list of choices encompasses traditional energy efficiency investments (for example, improving energy standards of buildings, reducing energy usage through IT and lighting, investment in more efficient systems, specific light bulbs, setting travel policies and dealing with waste, to name just a few). Operational management at this level entails setting energy and CO<sub>2</sub> reduction targets and following them up by measuring electricity consumption and building-related emissions, estimating the impact of travel (both business-related and employees' daily commutes), paper usage and waste.

A similar climate change-relevant strategic decision would be to decide and set targets on overall reduction of the indirect CC impact of the bank. This would then encompass the development and setting of individual climate change-relevant performance targets for every function, but also the revision and adjustment of processes and procedures in the bank, as well as changes in accounting, reporting and control. This can go as far as reviewing procurement processes, adjusting compliance guidelines and policies (such as, sector guidelines and policies limiting investments in fossil fuels), reviewing internal audit procedures, complementing accounting rules and expanding the scope of CC reporting.

For example, in the area of human resource management, training, rewards and incentives related to climate-aware behavior (such as, diet, commuting, printing, etc.) can be introduced. Regarding employees working in the business part of the bank, specific performance targets, as well as rewards and incentives linked to them, can help promote "green" products to clients. Even more powerful, is for portfolio managers to set overall GHG emissions reduction targets of the managed assets/portfolios.

Last but not least, the area of risk management offers significant opportunities to leverage the generation of attention to climate change within a bank and trigger far-reaching strategic responses. Since the global financial crisis in 2008, the importance of comprehensive risk governance and management has been underlined by regulators, leading to a significant increase in the importance of this function (Brodeur et al. 2010; Härle et al., 2015). Moreover, CC poses a genuine risk for banks. In this analysis, strategic risk management is considered integral to governance and, therefore, it is included in the related section at the end, even though the implementation of risk management is part of the banks' corporate functions.

#### 2.2.2 Integrating Climate Change into the Business

As mentioned above, the true leverage point that banks have is their capacity to direct money to clients and projects as they finance their businesses.

From a historical point of view, banks have traditionally been very willing to support incumbent industries and familiar technologies that have enormous climate impacts (RAN, 2019). In addition, economies of scale have incentivized a focus on large-scale, capital-intensive projects (BankTrack et al., 2017). As a result, GHG-intensive operations, such as coal-fired power plants, oil and gas development and arctic oil exploration have had ready access to the capital markets, with commercial banks financing a significant share of these investments (BankTrack, 2019). Even more problematic is the fact that these projects remain in operation for decades, meaning that business decisions made by the banking sector today

will have a lasting impact of our ability to meet GHG reduction targets in the future, as well. These GHG emissions, also called "financed emissions", can be defined as "the portfoliolevel aggregation of GHG emissions associated with a portfolio's underlying entities or projects" — the portfolio being that of a financial institution and in particular of a bank (Weber et al., 2016).

Some studies claim that certain universal banks<sup>2</sup> indirectly finance more GHG emissions than is produced by entire countries (Milieudefensie, 2007). Since the Paris Agreement in 2015, 33 global banks have financed \$1.9 trillion of fossil fuel projects, with \$600 billion financing the activities of 100 companies that are aggressively expanding fossil fuel extraction through fracking or tar sand oil exploitation (RAN et al., 2019).

In view of the above, acknowledging its indirect impact, and then trying to reduce it, would be a powerful strategic choice a bank could make in order to address climate change.

A recent report from the 2°Investing Initiative, a global think tank developing climate risk metrics for financial markets, describes more than a dozen methodologies that were developed to track indirect or financed emissions, helping banks and investors identify their CC exposure and opportunities of their decisions (2°Investing Initiative, 2013).

<u>Table 2.2 Overview of a Selection of Prominent Methodologies Tracking Climate</u>
<u>Change Impacts</u>

Name	Covered Asset Types	Sources of Carbon Data
Ecofys / PCAF <sup>3</sup>	Listed Equity	National Inventories, CDP,
	Sovereign Bonds	Reported data by companies and
	Project Finance	modeled data, Bloomberg, MSCI,
	Mortgages	Trucost, Southpole
	Commercial Real Estate	
	Corporate Debt	
	Corporate / SME Loans	

<sup>&</sup>lt;sup>2</sup> A universal bank participates in all banking activities, such as commercial and investment banking, as well as providing other financial services, such as insurance.

<sup>3</sup> PCAF is a global partnership of financial institutions to assess and disclose GHG emissions of loans and investments.

	Indirect Investments	
Science Based Targets Initiative	Listed Equity	Uses Ecofys Methodology
(SBTi)	Mortgages	
	Real Estate	
	Corporate Debt	
	Project Finance	
Portfolio Carbon Initiative	Project Finance,	Company Data
(PCI)	Bonds (developing "green" and	
	"brown")	
	Loan Metrics	
	Carbon Risk Assessment	
MSCI ESG Research	Listed Equities	Company data reported to CDP or
		by government agencies
South Pole Carbon	Listed Equities	Validated data from all available
	Bonds issued by listed companies	sources (CDP, CSR reports, other
	Private Equities/SME Loans	sources) and models
	Real Estate	
	Impact Investment	
	Project Finance	
Trucost	Listed Equities	CDP and reported data by
	Corporate bonds of listed companies	companies and modeled data
	Real Estate	
	Infrastructure	
Inrate	Listed Equities	US EEIO model with enhanced
	Corporate Bonds	life-cycle data
	Private Equity	

Source: 2°Investing Initiative, From Financed Emissions to Long-Term Investing Metrics, 2013.

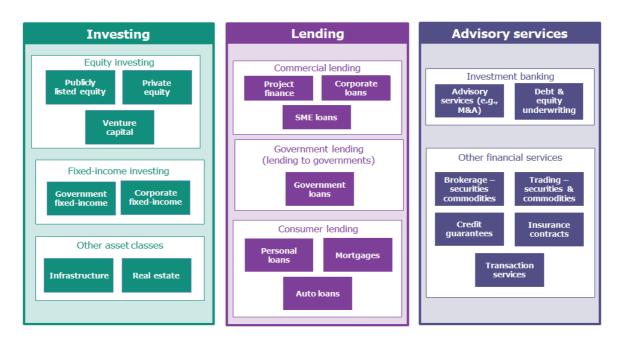
We can see modest attempts in the banking industry to combine some of those methods (for example, PCAF and Science-Based Targets [SBT]) and it remains to be seen that if over the next years one of those methodologies becomes an industry-wide standard. Nevertheless, measuring the impact of a bank's portfolio is merely a recognition of the industry own contributions to climate change. In order to really make a difference, banks would need to go further and over time change the composition of their portfolios towards low carbon.

Given the diversity of different products and services banks typically offer within their portfolio, strategic choices consequently call for different strategies to mitigate climate change and offer different possibilities to generate CC impact.

To start with a simplified view, the banking business model can be divided into three main areas of activity:

- Investing money (private, corporate, institutional, or the bank's own money) in a variety of asset classes.
- Lending money to private or corporate clients in order to finance their projects, technologies or other activities (interbank lending belongs to this category).
- Other financial services, including payments, insurance and guarantees, but also genuine advisory, such as in merger and acquisition transactions.

Figure 2.3 Overview of Different Banking Fields of Activity



Source: Greenhouse Gas Protocol & UNEP FI, Guidance for the financial sector: Scope 3 accounting and reporting of greenhouse gas emissions, 2013.

Regardless of whether investments or lending are being examined, high-level strategic choices, in fact, remain very similar, even though the path to concrete climate-friendly impact may be very different: the choice is to integrate climate-relevant metrics into investment and lending decisions (internalizing externalities), by integrating climate change into business processes across the entire value chain.

In order to be comprehensive, the integration would further demand that the bank includes a wide-ranging analysis of climate change impacts; hence, internalizing CC externalities into all of their lending or investment decisions by taking a holistic view at mitigation and adaptation costs, in order to establish accurate pricing of these products and give due appreciation to climate damaging factors.

On the investment side, this would include the integration of climate change-related aspects in due-diligence processes to adjust client's rating and product pricing, research and analysis for markets and companies and guidelines and criteria for asset allocation. For example, banks could ask for a higher premium for clients with a particularly high contribution to CC, high carbon exposure, or even the exclusion of clients from the investment portfolio.

Currently this approach leads to the creation of black-lists that exclude specific CO<sub>2</sub>-intensive industries, companies or practices (also called "brown investments"), and so-called "white-lists" encouraging particular investments with climate change-positive impact, either in the area of mitigation or adaptation to climate change (called "green investments") (Kahlenborn et al., 2017).

A similar logic applies when it comes to investments in infrastructure, since this asset class typically refers to listed and unlisted infrastructure funds and direct or co-investments in infrastructure companies (Inderst, 2016). Here, climate change aspects can be integrated again through an in-depth evaluation of the respective fund or infrastructure company.

Analogous to the use of financial ratios to determine the expected return on investment, applied as part of the investment screening, banks can rely on existing frameworks (or develop their own), relevant to the respective asset class, to decide if an investment fits within the pre-defined risk/return and sustainability profile, as requested by the investor. The strategic decision is then to give guidance on how to adjust the existing

portfolio through divesting and investing in a particular equity or technology, infrastructure, and the like.

Different approaches to GHG optimization exist, for example:

- Adjusting sector weights.
- Tilting toward less carbon-intensive companies within sectors.
- Exiting highly carbon-intensive sectors altogether.
- And/or hedging.

All of these options can be deployed by a bank to achieve an overall low carbon investment portfolio. Banks can further decide to make it a requirement to engage in shareholder dialogues with the companies in which they invest (whether for their own account or on a fiduciary basis), with the aim of fostering good governance and encouraging these companies to adjust their corporate strategy to respond to climate change. They can also exercise voting rights in shareholder meetings to encourage a more optimal direction when it comes to company impact on CC and adjust their proxy voting guidelines for investments and assets that they manage on behalf of their clients; for example, by setting a rule not to support resolutions if they believe that a company is not making measurable improvements in addressing GHG or in implementing effective climate risk strategies (Langton, 2018).

Additionally, by using the existing channel of its direct client relations, a bank could also create external demand for green investment opportunities and proactively engage with the market in order to respond to and serve its need for green products for every business line.

On the lending side, the bank could start with an appropriate assessment of the absolute footprint of a loan to a company, or a project, and set clear maximum targets for the total footprint allowed to be included in its loan portfolio, in order to align this side of the business with its climate change goals. On the other hand, banks could also attract and reward loans that contribute to CC mitigation, for example, by lowering their premiums.

Unfortunately, it appears that the vast majority of banks do not direct their strategy toward building up in-house capabilities, to innovate around green products, or even to "brainstorm" around green investment or lending opportunities. Instead, several studies show that the majority of financial intermediaries — banks — are reluctant to offer sustainable investment options, even in cases where clients make direct requests of this nature (Hoepner and McMillan, 2009). Investment intermediaries — more specifically, the professionals behind them — tend to neglect sustainable (and socially impactful) investments, even though investors have clearly demonstrated an interest in impact or green investments. For example, Schrader (2006) found that financial advisors refrain from recommending to those clients who have expressed ethical concerns access to the socially responsible investment products (SRI) contained in their bank's portfolio, while 19% of financial advisors went so far as to deny the existence of such products. Similarly, Paetzold and Busch (2014) showed that investment advisors withhold SRI information from their clients in retail banking. This was confirmed by a recent study by the International Network of Financial Centers for Sustainability (McDaniels and Nolan, 2019). This network, which was established in 2017 to provide a platform for financial centers to collaborate on growing green and sustainable finance, has identified that "a lack of green financial products is a key barrier to the growth of sustainable finance in some of the world's largest financial centers" (p. 10).

Accordingly, it appears that the many banks are undertaking only the bare minimum required by law and appear to be only "somewhat" in line with their clients' expectations, namely by either doing nothing at all, or at best merely mentioning that climate change is a significant challenge for humanity — for example, in the prefaces of their annual reports — while continuing to maintain business as usual.

### 2.2.3 Integrating Climate Change within Governance and Risk

Last and most importantly, the adoption of all the above needs to be coordinated and managed across the entire organization. In order to do this, appropriate governance structures need to be put in place to ensure implementation. In light of the fact that climate change is not only a risk factor or a business opportunity or cost for operations but an ethical issue (see Chapter 2.1), the integration of the value aspect into the organizational governance needs be considered as well, and can be achieved by applying the values management framework as a frame of reference (Wieland, 2014), for example. This framework is grounded in principles of strategic normative management and sets forth that a firm must consciously decide to create appropriate governance structures and ensure that attention is assigned and sustained to the normative side of the corporate agenda.

Starting with the tone of the top management, openly addressing climate change as a mission for the bank, combined with appropriate board oversight and setting goals that account not only for the economic side of the equation and the mitigation of financial risk but also for the moral one by defining the willingness to contribute to CC mitigation and adaptation. This can then be formalized through codified CC-relevant mission statements and the development and integration of governance structures that serve to cascade those aspects and guidelines down throughout the organization. Developing programs and engaging in organizational learning to increase CC literacy of management and staff through training, but also providing organizational structures that facilitate day-to-day knowledge transfer from CC experts to all professionals, are needed to ensure appropriate integration by regularly exposing employees to clear messages from the board and the top management team (TMT). Only then can CC receive the "collective" attention that is needed in order to shift the bank's overall way of conducting business.

Furthermore, risk mitigation is another important part of the governance function.

Acknowledging climate change at the bank's strategic level includes correct assessment of climate change-related risks for the bank and further defining the risk appetite that the bank is ready to accept with regard to its investment and loan portfolio.

As previously described, the need to mitigate climate change goes hand in hand with the need to transition the economy to one that is low carbon, on a global scale. From the perspective of the market, a low-carbon transition translates into a new and uncertain landscape of commercial risks and opportunities (see Chapter 2.2.5.).

According to the Financial Stability Board's Task Force on Climate-Related Financial Disclosures (TCFD), climate risks can be broadly classified into physical and transformation risks. "Physical risks" are defined as the risks resulting from climate variability, extreme events and longer-term shifts in climate patterns. These risks entail real asset exposures, in particular property (Connell et al., 2018) and the predictions are growing.

In 2015, the Economist Intelligence Unit warned that the financial industry will face significant losses from the effects of climate change, due to both direct and indirect impacts. The direct damage results from company assets which will be damaged through increased incidence of extreme weather events, such as floods, droughts and severe storms; but also the entire indirect negative impact on portfolios will be considerable, through weaker overall economic growth and lower asset returns (EIU, 2015). The expected losses could total \$4.2 trillion in present value terms based on the scenario of an average temperature rise of 2°C. To give just one example, in 2018 the World Bank (Connell et al., 2018) predicted that climate change will put \$158 trillion in assets at risk, from river and coastal floods, by 2050.

Another less immediate risk is that of "transition risks"; risks, in other words, associated with the transition to a low-carbon economy. This entails, on one hand, the risk related to available technology and on the other hand to policy changes necessary to transform the economy away from fossil fuels as the primary energy source (Colas et al., 2018).

Banks need to develop a deeper understanding of the assessment of climate changerelated risks because sooner or later it is expected that the oil, gas and coal industries will
suffer significant revenue losses as a result of the need to reduce greenhouse gas emissions.

Additionally, the non-compliance of certain investment projects with the 2°C trajectory will
jeopardize banks' financial viability over the long term. The same applies to the correct
assessment of physical risks. Blackrock, the world's largest asset manager, has recently run a
stress test on its municipal bonds, commercial-mortgage-backed securities and electric
utilities in the US and found that as of today, climate risks are not priced into the products
(Blackrock, 2019). Its report states: "It will be increasingly important for investors to consider
long-term climate predictions and the preparedness of states and municipalities to climaterelated risks when assessing their creditworthiness".

To tackle these challenges, different instruments are being developed in an attempt to determine effective ways of assessing risk of investment and loan portfolios, to help set appropriate targets and to build comprehensive frameworks to measure the climate progress being made by banks.

Currently, the TCFD's methodology and the drought stress testing methods are the most commonly used and most promising in terms of acceptance by the industry.

The former is particularly interesting, as it introduces a wider range of analysis and the possibility of assessing a bank's risk exposure and climate change strategy adjustment by weighing the relative impact of "green financing" (financial flows associated with zero- or low-carbon assets or activities) against "brown financing" (financial flows toward activities and technologies that contribute significantly to GHG emissions). This is also useful in developing a view at the portfolio perspective of a bank-at-large and allowing for further strategic adjustments.

<u>Table 2.3 Frameworks and Tools That Can Be Applied to the Banking Sector to Assess</u>

<u>Risks Associated With Climate Change</u>

Framework and Organization	Aim of the Tool / Approach	Status of the Initiative
TCFD framework: Launched by the	Aims to develop a voluntary,	Established October 2017: A pilot
Financial Stability Board's Task	consistent framework for climate-	project started by including 16
Force on Climate-Related Financial	related financial risk disclosure,	banks to test and further develop
Disclosures of the United Nations	providing information on climate	the framework.
Environment – Finance Initiative	risk exposure (typology) to	July 2018: New methodologies
(UNEP-FI).	shareholders.	released for the banking industry.
RMS: Drought Stress Test Project	Measuring risk based on the	2016: First stress-test conducted by
for Financial Institutions	catastrophe modeling framework,	nine financial institutions as a
Launched by:	which the insurance industry has	pilot. The participating institutions
• (German) Federal Ministry for	used for 25 years. It looks at five	were: Caixa Econômica Federal,
Economic Cooperation and	drought scenarios in four countries	Itaú Unibanco, Santander Brazil,
Development (BMZ).	– Brazil, China, Mexico and the	Banort, Citibanamex, Trust Funds
Natural Capital Financial Alliance	US – to model the impact on 19	for Rural Development (FIRA),
(NCFA).	different industry sectors, the	Citigroup, UBS and Industrial and
• Deutsche Gesellschaft für	companies in those sectors and the	Commercial Bank of China
Internationale Zusammenarbeit	likelihood that they will default on	(ICBC).
GmbH (GIZ).	their loans.	
This consortium was led by global		
modeling experts Risk Management		
Solutions (RMS) who designed,		
developed and implemented the tool		
and framework underlying it.		

The existence of frameworks to evaluate climate change exposure, however, is worthless if these are not widely used; even though 80 banks have already signaled support for the TCFD recommendations, this does not imply that the framework is actually fully implemented or even applied. This would, therefore, require a strategic decision by every bank to start applying these frameworks, contribute to their future development and refinement and disclose the results of the risk assessment.

On the one hand, the particular case of the TCFD framework, disclosure of carbonrelated metrics from the bank's clients is a prerequisite to perform the assessment. On the
other hand, this could generate a positive side effect by creating additional pressure on their
clients to correctly measure and report their own GHG emissions, increasing overall
comparability and transparency of GHG emissions disclosure across all sectors and increasing
public exposure of their "dirty" clients.

### 2.2.4 Moving beyond the Status Quo: From Rriding Shotgun to Steering

As mentioned previously, banks are in an ideal position to seriously take up the "transmission" function within the markets (Allen et al., 2012). Hence, beyond incorporating climate change across the organization, measuring financed emissions, steering towards decarbonizing their own portfolios and mitigating climate exchange risks, banks would also have to use the influence linked to their role in order to amplify the movement.

This can include banks' proactive engagement with regulators to lobby for more aggressive policies across the industry with regard to, for example, carbon disclosure, as well as participating in trade associations to establish and refine industry standards, develop indices and mainstream "green" criteria to increase transparency for clients. Last but not least, banks could further engage in multi-stakeholder collaborations across industries to discuss climate change-relevant risks and solutions, as an example.

Indeed, a number of more proactive banks do exist, such as ones that are getting involved at all three levels, namely: working on, and applying, climate-relevant metrics that they can use to assess and report on the impacts of their portfolios; embracing the climate-related risk; and, proactively developing products to finance the transition to low carbon. Beyond this, some of these banks can go even further, developing and integrating CC-relevant metrics for all other corporate functions, in line with what has already been described above (Furrer et al., 2012).

These observations have led to the emergence of the main questions posed by this thesis: What is it that makes some banks adjust their strategies to fight climate change more proactively and moving so much faster than others? And why do some top managers in banks display a significant level of attention to, and engagement with, climate change, whereas others seem not to have this topic on their radar at all?

### 2.2.5 Summary of the Criteria to Analyze Bank's Climate Strategy Effectiveness

In summary, the criteria used to analyze a bank's climate strategy should reflect not only the variety of ways the bank may have exposure to, and be impacted by, climate change, but also how the organization itself may also be contributing to it.

To structure the relevant areas of a bank's activities, the criteria selected rely on concepts including both strategy content and strategy process (Ginsberg, 1988), whereby "content" describes the specifics of what was decided in terms of goals and scope and "process", or strategy making, including the organization's overall approach to managing its relationship with the external context. Further criteria to evaluate governance structures based on the ideas of the values management framework (Wieland, 2014) must also be considered to allow for a more comprehensive analysis.

First, the bank's activities are built on supporting corporate functions that ensure the functioning of the organization and support the business (Roth and Van der Velde, 1991).

These have been described in Section 2.2.1. and include mainly emission-mitigating efforts, as well as initiatives to offset any unavoidable emissions in order to achieve carbon neutrality, as a minimum.

Table 2.4 Criteria to Measure Effectiveness of Climate Strategy: Corporate Functions

CORPORATE FUNCTIONS		
Element	Criteria	
Mitigation	CO <sub>2</sub> reduction targets set.	
	CO <sub>2</sub> reduction target achievement independently verified.	
Offsetting	Offsetting used to achieve neutrality of operations.	
	Offsetting through independent, verified partners.	

Second, the assessment of a bank's climate strategy needs to cover its business activities.

These can be divided into investing, lending, and providing special services to clients.

Table 2.5 Criteria to Measure Effectiveness of Climate Strategy: Business

BUSINESS	
Element	Criteria.
Investing	Amount of directly managed assets screened for climate change impact (CDP report).
	CC-related investment products: e.g., risk-hedging, alternative investments, real
	estate, infrastructure.
	Measuring the carbon footprint of investments (by asset class and on portfolio level).
	Targets to lower the overall carbon footprint investment portfolio of the bank
	including public announcements of divestments from carbon-intense sectors.
	Adjusting sector weights accordingly.
	Black-listing companies contributing extensively to CC and directing investments in
	less carbon-intensive companies within sectors.
Lending	Carbon loans, lending / financing at lower pricing to clients reducing carbon
	emissions / using renewables, carbon funds.
Services	Special advisory services related to carbon management or CC (climate risk
	management, carbon market transactions).
Core Process	Research: CC-related aspects integrated in analysis for markets, regions, sectors and
Integration	companies, as well as reflected in valuation.
	Disclosure of CC-related risks and opportunities in prospectuses and investment
	proposals.

Finally, and central to the evaluation of the effectiveness of the climate strategy of the bank, is the degree of sophistication of its governance structures in integrating climate change.

Table 2.6 Criteria to Measure Effectiveness of Climate Strategy: Governance

GOVERNANCE	
Element	Criteria.
Management Framework	Codification and integration of CC-related aspects in company's publicly available mission statement.
Tuniework	Clearly assigned responsibilities at top management level to promote CC-related
	activities.
	Clearly assigned responsibilities at management level to steer the implementation of
	CC-related aspects across the business.
	CC-relevant companywide goals on direct and indirect CC impact reduction.

	Business wide guidelines available on how to implement CC-relevant aspects into
	business.
	Active ownership guidelines / clear policies for proxy voting including CC-relevant
	criteria.
Risk Management	Managing CC-related exposures of the bank (assessment of own physical risk).
	Assessing and managing CC-related risks of the bank's investment and loan portfolio
	(e.g., implementing TCFD across all business lines).
Learning	Internal road shows on CC-related issues in general but also in relation to the
	business.
	Structures to facilitate knowledge transfer from CC experts to all professionals.
Disclosure	Public disclosure of direct and indirect impacts on CC by the bank.
	Disclosure of internal processes and best-practices to implement CC-relevant aspects
	across the business (for example, through CDP reporting).
Engagement	Active membership in investor coalitions (such as Ceres, CDP, UNEP-FI, TCDF,
	Carbon Trust, PCAF, etc.) to promote and mainstream CC-related best practices and
	frameworks.
	Public policy engagement and disclosure on progressive climate legislation.

### 3 THEORETICAL CONTEXT

Climate change has been described as the grand challenge (Ferraro et al. 2015; Reinecke and Ansari, 2016), among the biggest facing humanity. Hence, attempts to understand how individuals, organizations, countries, economies and legislators interpret and deal with it has been researched from different angles. The goal of this thesis is to augment understanding of what would be required to influence the corporate strategic agenda with regard to climate change. Furthermore, this thesis aims at refining and/or expanding our theoretical understanding of the impact of an unpredictable, complex, and mostly future, external environmental challenge on corporate and business strategy to increase our knowledge about how different motivations lead to various strategic outcomes.

Corporations may be viewed as people operating within their boundaries and their routinized interactions (Abell et al., 2008). As such, an explanation for a strategic response to

a new challenge such as climate change also needs to integrate different levels of analysis. Previous organizational and psychology research on climate change has pointed to the role of individual framing (Mazutis and Eckardt, 2016) and organizational logic (Hoffman, 2011). Nevertheless, a broader perspective on CC suggests that antecedents (for example, business-client pressures and government policies, as well as individual interpretations and attitudes) not only operate at different levels but are also closely interconnected across these levels (Hulme, 2009; Slawinski et al. 2017). Therefore, this thesis examines the phenomenon from a multi-level perspective (the macro, meso and micro) that draws upon theories from a variety of disciplines, including psychology, sociology and strategic management.

The macro- and micro-level analyses aim to provide more information about how climate change is perceived by managers and decision-makers, as well as to find out to what extent their way of perceiving and attending to the topics can help make sense of the current organizational responses. The meso-level helps to understand what happens "in the box", or inside the organization; in other words, why, when and how the "antecedents" are playing out at the strategic level.

#### 3.1 Macro-Level Analysis

Given that climate change is an external phenomenon, a reasonable point of departure appears to be the macro-level analysis to determine whether it can be considered to be an external pressure on the organization. Institutional theory, in particular, provides an explanation as to how institutional pressures that exist in an organizational field can influence organizational strategy. An "organizational field" includes 'those organizations that (...) constitute a recognized area of institutional life: key suppliers, resource and product consumers, regulatory agencies and other organizations that produce similar services or products' (DiMaggio and Powell, 1983, p. 148).

(Neo)Institutional theorists suggest that normative, coercive and mimetic pressures — located in the professions, state, and the market, respectively — do constrain organizational behavior, leading towards conformity (DiMaggio and Powell, 1983).

The notion of normative pressures is grounded in what is viewed as suitable for, or what is expected of, organizations as seen through the lens of the respective organizational field or profession (Scott, 1995; Tolbert and Zucker, 1983). In other words, normative pressures have an important impact on the development of the corporate strategy and the definition of key performance objectives as they frame and thus limit the set of envisioned pressures and organizational choices. An otherwise attractive organizational choice may be dismissed because it is not perceived as suitable within a given professional context (Munir and Baird, 2016).

Coercive pressures, on the other hand, stem from "political influences and the problems of legitimacy", whereas legitimacy can be referred to as the adoption of sustainable practices that are considered as being proper and appropriate by the stakeholders. In other words, external social, political and economic pressures influence the firm's strategic choices and organizational decision-making as it seeks to adopt legitimate practices or to legitimize its practices towards other stakeholders (Jennings and Zandbergen, 1995; North, 1990). As such, and in line with Hoffman (2001), coercive pressures also include pressures from market actors, such as customers or suppliers who are constituents of the organizational field.

Finally, mimetic pressures can be described as the voluntary imitation of organizations within an industry that are considered highly legitimate or successful (DiMaggio and Powell, 1983) with the goal of increasing the likelihood of their own survival by minimizing environmental uncertainties. As such, organizations try to capitalize on the success of competitors through imitation of their strategic direction and choices and, thus, to gain stability.

Against this backdrop, a firm's strategic choices in response to external pressures and expectations, and its organizational behavior, may be pre-empted by institutional processes to which they adhere in order to obtain stability and legitimacy and which they take for granted. Once stability and legitimacy are achieved, the institutional argument predicts convergence or isomorphism among organizational actors (DiMaggio and Powell, 1983).

Whereas the above aims to explain forces that lead organizations towards conformity and homogeneity, institutional theory also provides theoretical explanations for organizational change and its underlying institutional foundations, including process, interaction and events (Abbot, 1992). This includes the process by which different types of pressure, and their sources, influence the strategic response of the firm. By linking institutional theory of organizations to strategic management, Oliver (1991) posited that "organizational responses to institutional pressures toward conformity will depend on why these pressures are being exerted, who is exerting them, what the pressures are, how or by what means they are exerted, and where they occur" (p. 159). These different factors can all influence the likelihood of corporate resistance towards homogeneity.

Several scholars have also argued that focusing on institutional forces may not be sufficient to explain organizational change, arguing that we should instead look more broadly to include the market and technical environment (Kraatz and Zajac 1996, D'Aunno et al., 2000). Taking this into account, Delmas and Toffel (2008) then looked further inside the organization to describe how those institutional and market factors can channel its attention to different external pressures, such as environmental aspects, leading it to reorder its priorities which ultimately results in a strategic shift in a firm (Delmas and Toffel, 2008).

Building on the work of Hoffman (2001), Delmas and Toeffel (2008) investigated how firms engage with constituents from their market environment (for example, customers and suppliers), as well as nonmarket actors (regulators and activist groups). In their study, they

found that different organizations differ in their receptivity to institutional pressures from the diverse set of constituents in their external environments.

Remaining within the logic of institutional theory, they referred back to principles that guide "occupational communities" and constitute the mechanisms behind the normative pressures that DiMaggio and Powell (1983) describe. In that logic, individuals of a certain occupational group will look at a given phenomenon and source of pressure through their own occupational lens and, in their response, they will follow the principles considered legitimate within their occupation: a lawyer through a legal lens, for example, and a finance employee through a financial lens. In other words, every occupational group will pay attention to different stimuli and translate the respective pressure into an occupational-specific response.

Which pressure generates the greatest attention within the company (leading eventually to an organizational response) depends on two factors: first, on the influence of the department within the organization that "notices" the pressure and second, on the receptivity to this type of pressure of the respective "implementing/executing" decision-making manager (Delmas and Toeffel, 2008).

The categorization of these various sources of pressure is particularly interesting in light of the challenge of climate change. Up until now, the discussion around climate change in social, political, and economic discourse often includes competing economic, religious, innovation, environmental, national security, governance, moral and ethical frames (Ansari et al., 2013; Hoffman, 2011; Wright and Nyberg, 2017). Even in Europe, the very existence of climate change is still partly disputed, or at least its causes and effects partly "questioned".

In addition, no universally recognized supra-national authority exists to deal with climate change globally; hence, current responses tend to resemble "cooperation under anarchy" (Levin et al., 2012). This also affects national/European responses, where there

continues to be disagreement on the what, when and how to best respond, which leads to a legislative vacuum, at least where regulating the banking industry is concerned.

For an industry generating low carbon emissions, such as banks, and which is currently limited in its direct exposure to climate change effects, it would therefore be interesting to explore if, how, where, and why CC is, first, perceived and second, translated into institutional pressure.

Such an investigation could potentially yield additional information about how organizations translate those types of grand challenges and what strategies they deploy to institutionalize their practical responses to them, once they consider the challenges legitimate.

However, in order to understand this process of translating and institutionalizing, a prerequisite is to look even deeper inside the organization (meso-level) and even inside the heads of managers (micro-level).

## 3.2 Meso-Level Analysis

One way of looking at how organizations deal with institutional pressures is through the lens of the attention-based view of the firm (ABV). According to the firm's ABV, the process of translating and institutionalizing is an effective consequence of sustained attentional engagement of the management with a given issue (Ocasio 2011; 2018).

Against this backdrop, however, ABV also posits that it is very much the context in which cognition and action of managers is situated which determines which aspects of the environment managers attend to, and which opportunities are retained within the firm (Ocasio, 1997, Ocasio and Joseph, 2015, Joseph and Wilson, 2017). The theory is mainly based on the concept by Simon (1947) and the work of Cyert and March (1963), taking into account that social actors, managers as an example, are limited in their cognitive capabilities when it comes to processing information and calculating trade-offs.

The theory of ABV takes these limitations into account, defining *attention* as "the noticing, encoding, interpreting and focusing of time and effort by organizational decision-makers" on both *issues* (that is, the available repertoire of categories for making sense of the environment: problems, opportunities, and threats) and *answers* (the specifically available repertoire of action alternatives: proposals, routines, projects, programs and procedures) (Ocasio, 1997, 2011).

Knowing that a manager can only focus attention on one issue at a time, before directing attention to another issue (Greve, 2008), managers (or decision-makers) structure their organization in such way that they can delegate attention to multiple issues across the organization and, thus, lower their own attention load (Rerup, 2009).

These *attentional structures* therefore serve to distribute managerial attention throughout the firm, so that managers within various subunits and organizational levels can focus on different aspects of the particular issue and secure appropriate integration both within the strategic agenda but also top-down within the business and corporate functions (Ocasio 2011, 2018).

ABV differentiates between governance channels where the focus of attention flows and operational channels. As defined by Ocasio and Jonas (2015): operational channels are those in which the technical tasks of the organization are carried out, where workers and first line (or front line) supervisors deal with production, sales, marketing, research and other technical issues, occasionally with input from governance channels. Governance channels are those where middle- and senior-level managers attend to the allocation of resources, the formulation, monitoring and control of both business and corporate strategies and policies (Ocasio and Joseph, 2015). It is within the governance channels that the organizations link the available set of answers to the available set of issues and, hence, guide the evolution of the firm's strategy.

In order to sustain the *attentional engagement* of an organization with a given topic, communication channels also need to work from the bottom-up so that all of the different dimensions that emerge from the issue can be dealt with in line with managerial objectives. As such, communication channels serve as arenas for sensemaking and competition over ideas and viewpoints that can occur (Nigam and Ocasio, 2010; Ocasio et al., 2018).

Finally, to make this efficient, it is necessary to formalize communication practices and transform them into formal collective interactions to control, allocate and monitor organizational attention and resources; or, in other words, into *governance structures* (Joseph and Ocasio, 2012).

Taking the ABV into account, this thesis will explore if, and how, managers in banks generate attentional engagement with the issue of climate change, and further analyze if the level of organizational attention and strategic change depends on the channels where conversations about CC take place. Given that CC is a complex issue it will also be of interest to see what impact the topic has on the channels and governance structures that are already available.

Against that backdrop, it is also important to be reminded that before managers intentionally engage with an issue, and then structure attention through communication channels and governance structures to deal with it, they must first perceive it to be sufficiently critical that they are ready to focus their attention on it at a particular time and place. What the decision-maker considers as "critical" may be influenced not only by the external environment and institutional pressures that are influencing the strategic agendas of their organization, but also by their own interests in shaping these agendas and focusing attention on specific issues and initiatives that make particular sense to them (Ocasio et al., 2018), leading to the focus on the individual perspective.

### 3.3 Micro-Level Analysis

Given the foregoing organizational pre-conditions, this thesis will also address the nature of the issue of climate change itself and inquire if, and how, managers perceive it as individuals in order to understand why, on an individual level, CC could be considered as "critical".

Mazutis and Eckardt (2016) have produced a comprehensive overview of how differently the majority of managers perceive and frame CC; as for example, a meteorological phenomenon, adaptation challenge, technological problem, physical threat or risk, a business case or business/financial risk. They argue that those different ways to describe CC is due to rationalization strategies implying a multitude of different cognitive biases used to justify CC inaction or "business as usual" approaches (Mazutis and Eckardt, 2016), especially if the organization is not directly affected by, for example, a physical impact (Galbreath, 2011).

Nevertheless, and as illustrated above (Chapter 2.1), climate change also has a moral dimension, implied by the nature of the challenge, to cause severe harm to current and future generations (McInerney-Lankford et al., 2011, p. 8), in particular those populations and generations who have not been contributing to its causes (for example, Gardiner, 2006; Jamieson, 2007 and 2009; Davidson, 2008).

Interest in the ethical dimension of climate change is the result of the assumption that morality is a key driver of human behavior (Haidt, 2008). Previous research has shown that norms, values, orientation and attitudes increase pro-environmental actions in general (Mazutis, 2013) but also the willingness to mitigate CC in particular (for example, Leiserowitz, 2006; Nilsson et. al., 2004; Vainio and Paloniemi, 2011). Several studies have shown that if CC is recognized as a moral issue, people are more motivated to proactively adjust their decisions or even proactively push for more sustainable actions (Mäkiniemy and Vainio, 2013); on the other hand, if individuals fail to identify CC as a moral imperative, this

may pose a significant barrier to effectively responding to the issue — individually and collectively (Markowitz, 2012).

Whether an issue is recognized as moral or not largely depends on its moral intensity. The concept of moral intensity goes back to Jones (1991) who observed that human ethical decision-making (EDM), as described in most of the EDM models, does not take into account the characteristics of the moral issue itself. Jones felt that those models fail to recognize that the "quality" of the issue may have an impact on the decision-making process itself. Without taking the characteristics of the moral issue into account, he claimed, each of the models suggest that the decision-making process is identical for all moral issues, which he found unrealistic. The concept is based on the observation that people are more concerned about moral issues when this issue affects someone who is close to them, either physically or emotionally (such as, family, friends, colleagues). When the *proximity of the harming event* is high, it is more salient and the need to "do something about it" is much more acute compared to a harming event occurring to someone with whom we have only little or no connection at all. Also, events that in their totality cause greater harm and, for example, have a greater *magnitude of consequences*, do trigger our moral outrage far more than if the consequences are limited.

Also, people react more strongly to what they perceive as injustice to a select few people. If the *concentration of the effect* of the moral event is high, we interpret it as a sacrifice of those few affected, who in our eyes become sacrificial lambs. But concentration of effect works in the other direction as well, if a select few significantly benefit from a situation of which the vast majority are unable to take advantage. People also tend to react more strongly to events if there is *social consensus* around them condemning, or approving, an act. Finally, the faster the harmful events show negative effects (Jones, 1991 calls this *temporal immediacy*), the more people tend to judge them as morally problematic. This is also

why, if future harms are to trigger a moral response, it is necessary that the probability that the harm will really occur is primordial.

According to Jones moral intensity "captures the extent of issue-related moral imperative in a situation" (Jones, 1991, p. 372). However, in order to trigger this moral response, the moral issue does not only need to score objectively high on the moral intensity scale, but the link also needs to be established between the objective score and the individual perception (Morris and McDonals, 1995). Only then would the construct also be empirically meaningful.

Dukerich et al. (2000) set out to test this and concluded that there is an empirical association between the construct of moral intensity and the categorization of problems by managers as moral. Their findings suggested that managers thought and felt differently about moral and non-moral problems, and that the terminology used to describe the issue was different for each type. In a further step, they also concluded that their research clearly indicates that the ability to distinguish moral from non-moral problems had consequential implications for how those problems were approached and if they were perceived as critical. Hence, all of this strongly suggests that moral intensity can serve as a vehicle to attract and sustain attention, while providing significant motivational qualities to trigger action.

Surprisingly, however, it does not appear that the question about if and how the moral argument was utilized inside the organization, and if it influences attentional channels and organizational outcomes, has yet been researched. In particular, there is no research thus far dealing with the question asking to what extent do managers use moral language in order to trigger attention towards an issue in order to make it strategic? Dutton and Ashford (1993) claimed in their research that no issue is inherently strategic, rather it is dependent on the management's believe that the particular issue had relevance for corporate performance. The process that shapes that belief and influences managerial perception of an issue in order to

recognize it as strategic, is widely referred to as "issue selling". In particular, issue selling shapes the investment of time and attention and, hence, influences managerial actions towards strategic change (Dutton et al., 2001).

The issue selling literature mentions several tactics that managers use in order to influence top managers and their peers to allocate attention and resources to an issue they find critical (Dutton and Ashford, 1993). One prominent tactic prominently mentioned by Dutton and Ashford (1993) is issue content framing or, in other words, using the language to shape the meaning of an issue in the ways that resonate with a target. This is a particularly interesting question for an emergent issue that has no pre-conceived meaning within the organization and even more so for a topic such as climate change, which carries a potentially ethical or moral dimension, depending on the individual perception.

Research on selling "social issues" posits that the importance of framing "social issues" in a way that resonates with managers is crucial for their capacity to allocate their attention to the issue. While most scholars suggest that framing social issues as economic issues can increase selling effectiveness (Dutton and Ashford, 1993; Sonenshein, 2006, 2012, 2016) because it helps to legitimize the preoccupation with the issue since it contributes to the firm's bottom-line (Dutton and Ashford, 1993; Dutton et al., 2001), a recent empirical study has found that the contrary is the case and that a moral framing can be more effective than an economic one when influencing decision-makers in the business context (Mayer et al., 2019).

It is therefore worthwhile to investigate whether managers perceive climate change as a morally intense issue and to evaluate the extent to which they are using a moral frame in their communication, aiming to influence organizational strategy, and with what degree of success.

Against that backdrop, it is also interesting to investigate if the introduction of moral framing influences the use of particular communication channels and enhances the governance of the moral aspect of transactions.

## 4 METHODOLOGY

At this stage, some further context and a synthesis of the foregoing may be helpful. This dissertation is a further development of a previous, co-authored research paper (Mazutis and Eckardt, 2016) explaining and systematizing cognitive and behavioral biases displayed by managers that the authors have found in literature, and through work in a business school setting, leading to what they consider corporate climate change "inertia" and where they have been explaining and systematizing cognitive and behavioral biases (Mazutis and Eckardt, 2016).

Through an in-depth analysis of cognitive biases referred to in literature as being at play when perceiving climate change, four main groups of biases that are at play were identified and categorized (perception, optimism, relevance and volition), which are crucial to discounting the moral dimension of CC and contributes to corporate inaction. The main idea behind this research was to see how all the aspects that the cognitive biases addressed converged in the aspects that constitute what Jones (1991) describes as "moral intensity". However, this aspect was not empirically tested in the paper (Mazutis and Eckardt, 2016). For this reason, what emerged from this research work, was the need to go further and investigate to what extent moral intensity plays a role in generating the attention of managers in their strategic decision-making process in a business setting, or to determine if other, more dominant, perceptions and frames are at play, contributing to different organizational outcomes.

Firstly, this led to the research focus of this doctoral thesis: to explore specifically to what extent, and in what way, climate change is already translated into a pressure to act in the European banking industry and if, following the line of this previous research, moral intensity played any role in it.

Secondly, it is important to shed light on the similarities and differences between the ways in which managers respond to the climate change challenge, especially if managers have perceived the issue differently: who began "selling" the issue internally? Was there a difference in the way in which they were selling it internally? What frames and structures did they finally use to focus organizational attention on this issue, in particular in light of the fact that many other pressures are competing for the attention of their organizations at the same time? It is important to identify and elucidate those successful "selling" approaches and structures that facilitated a higher degree of corporate alignment.

In the following, the choice of research method is outlined (Section 4.1); the research setting and case selection criteria (Section 4.2); a description of data collection and sampling strategy (Section 4.3); and finally, how the data was analyzed (Section 4.4).

#### 4.1 Choice of Research Method

In order to address the research topic, an inductive qualitative research approach was taken for this study, as the phenomenon of interest is highly contextual and may be dependent on the interaction between relevant actors. The primary purpose of the general inductive approach is to allow research findings to emerge from the frequent, dominant or significant themes inherent in raw data, without the restraints imposed by structured methodologies or specified hypotheses. When the phenomenon is little known, existing aspects are incomplete and fragmented, an exploratory multi-case study design was considered as ideal (Punch, 2005; Yin, 2016).

The case study theory building technique allows far more detailed insights to be gained into organizational life (Gephart, 2004) than is possible with a standardized survey or experimental approach (Eisenhardt, 1989). Case studies also enable us to deepen the understanding of whether climate change is perceived to be a morally intense topic and

whether such a realization has any impact on how individuals use their organizations' existing structure to distribute attention towards the topic, in order to influence the strategic agenda. Following Eisenhardt's (1989) suggestion, four case studies were chosen; this number was described as suitable for theory building.

#### 4.2 Research Setting and Case Selection Criteria

Given that the responses to climate change are highly context-specific (Dunn, 2002; Kolk and Levy, 2004; Galbreath, 2011), the research was limited to a single industry. Firms in sectors perceived as GHG-intense are expected to be more prone to address the topic due to public pressures and debates. The same applies to industry sectors that are particularly sensitive to changing weather events, as they may already perceive the CC impact. In order to investigate a wide variety of potential factors influencing the attention paid to climate change, focus was placed on an industry with low salience to the issue — an industry that has low (direct) carbon emissions and limited physical, regulatory and stakeholder exposure. Given the critical importance of the role that the financial industry has to play in the transition to a low-carbon economy, in addition to these other factors, the banking industry was chosen: it has a low direct GHG footprint and limited physical exposure; it is not submitted to any climate relevant regulation, nor is it particularly targeted by any stakeholder groups who address the issue, contrary to the oil and gas or agriculture industry, for example (Orsato, 2015).

Furthermore, Europe was considered to be an appropriate research context due to its geographic, legal and cultural proximity, and similarities within the climate change debate. To provide context, Table 4.1 gives an overview of the most recent trends in the European climate change debate.

<u>Table 4.1 Context of the Climate Change Initiatives and Debate Relevant to the Banks</u>
<u>Selected in the Sample, 2015–2019</u>

Date	Development
2015	Development
October	The Science-Based Targets (SBT) initiative is launched with the aim to provide a methodology for companies to align their strategy with the 2°C scenario.
November	Eleven Dutch financial institutions, including BAN-C join forces to set up the Platform Carbon Accounting Financials (PCAF) to develop methods of measuring the climate impact of their investments and financing activities. The coalition also aims to influence and support the Dutch negotiators at the 21 <sup>st</sup> Conference of the Parties (COP) to consider the role played by investors and financial institutions.
December	COP in Paris takes place, concluding with an agreement on keeping global warning below 2°C which will require a significant economic transition across a variety of sectors, generating significant risks and opportunities for the financial services sector. Article 2.1c includes a long-term ambition to "make finance flows consistent with a pathway towards low greenhouse gas emissions and climate-resilient development".
2016	The Financial Stability Board (FSB) establishes the Task Force on Climate-Related Financial Disclosures (TCFD) and invites banks to participate in developing the framework. BAN-A is part of the workgroup and one of the companies to pilot the new methodology.
December	The European Commission establishes a High-Level Expert Group on Sustainable Finance (HLEG).
2017	
June	The Dutch Central Bank publishes a report in which it asks Dutch financial institutions to factor climate change risks into their risk assessments.
	TCFD releases its recommendations and a framework to use in order to guarantee effective climate-related financial disclosure.
July	July HLEG presents its first interim report.
December	The Central Banks and Supervisors Network for Greening the Financial System (NGFS) is launched by 20 institutions to help mainstream climate change considerations throughout financial institutions' operations, investing and lending activities.
2018	
January	HLEG Final Report: The European Commission adopts a recommendation from HLEG and integrates it into its action plan on sustainable finance, including developing clear taxonomy for sustainable finance, establishing EU labels for green financial products, defining asset managers' duties regarding sustainability and incorporating climate risks into banks' risk management practices.
April	TCFD presents a report on a jointly developed methodology relevant for the banking industry to assess transition-related risks and opportunity for banks.

June

The European Commission delivers first actions on the EU Action Plan on Sustainable Finance, presenting proposals for legislation on an EU classification system. (taxonomy), investors duties and disclosures on how ESG factors are taken into consideration when making financial decisions. Further rules on Low-Carbon benchmarks for indices will be proposed, as well as amendments to the Market and Financial Instruments Directive (MiFID II) on consultation duties of client advisors with regard to sustainability aspects as part of the regular client consultation. To elaborate legislation (TEG), a Technical Expert Group is formed consisting of 32 organizations including BAN-D.

July

TCFD presents a report on jointly developed methodology relevant for the banking industry to assess physical risks related to climate change.

August

Heat waves occur throughout Europe, with the fourth-highest global average temperatures on record, causing significantly more wildfires across the Continent, as well as droughts. Various European countries break numerous records with the hottest (Sweden), longest period of heat (Switzerland) and driest (Switzerland) ever observed, reinforcing the discussion around impacts of climate change in the public media.

Greta Thunberg's school strike "Fridays for Future" becomes an international movement, mobilizing over a million students worldwide to protest against climate change inaction.

October

The IPCC releases its assessment on the impacts of global warming beyond 1.5°C and the need to speed the action to a maximum of 12 years in order to prevent irreversible changes.

December

The Dutch Central Bank publishes the results of its risk stress test for the financial system of the Netherlands and announces that it will take climate-related aspects into account in fulfilling its financial supervisory function.

The 24<sup>th</sup> COP in Katowice ends with agreement on rules to implement the Paris Agreement. Five banks with total capital of US\$ 2.4 trillion pledge to adjust the climate alignment of their portfolios to achieve the IPCC target.

2019 January

The European Parliament sets out a plan for investor sustainability disclosure rules. The European Commission organizes a second high-level conference on sustainable

finance to discuss ways to channel private capital towards sustainable projects in a coherent manner.

February

60,000 people protest for better climate protection in multiple cities in Switzerland.

The Guardian changes the language it uses, now referring to "climate crisis", "climate

emergency" and "global heating" rather than "climate change".

March

Some 40,000 people take part in the First National Climate Change Strike in Amsterdam.

First international climate strike in Aachen, Germany takes place, gathering around 20,000 people from 16 countries to protest the lack of political engagement against climate change.

EU Commission sets up a technical working group (TEG) to ensure the implementation of the action plan of sustainable finance. BANK-C is part of TEG.

May	France and Sweden make a joint declaration on their EU Cooperation and Security, aiming to position themselves as leaders in climate transition by targeting the transformation of the EIB in order to make green financing its priority and promote investment in energy and climate transition, as well as enhancing the transparency of climate-related risk through tracking investments and GHG accounting.
June	EU Technical Expert Group on Sustainable Finance publishes its Interim Report on climate-relevant investment benchmarks.
	Collective Climate Justice activists block doors of the two major Swiss banks in Zurich and Basel, referring to a Greenpeace study showing that the two banks invested around \$12.3 billion in fossil fuel industries, thus financing 182.9 million tons of CO2 emissions.

The cases were theoretically sampled for their different strategic engagement with climate change on the corporate and business level (Yin, 2003) to ensure that there would be differences in strategic choices and organizational outcomes (see Appendix A).

The evaluation is structured in line with the three aspects that were described namely in Chapter 2.2: implementation level within corporate functions; implementation level within business; and, existence and comprehensiveness of governance structures including risk management.

At first, the findings on publicly available information were then triangulated with the inputs from interviewees. In order to establish a ranking, points for each of the criteria have been attributed. Most criteria were scored with 0/1 point for a negative versus positive response, some other criteria were attributed multiple points depending on how comprehensive the respective bank's approach was in that aspect. Under the "2. business" category under the "1. investing" element, different scores on "2.1.6. blacklists" were attributed, depending on how comprehensive the blacklisting was. Banks would get from 1 to maximum 4 points for their respective policies. Appendix A provides a complete overview of the categories, elements and criteria, as well as further information about how points were attributed. In the theoretical sample, the aim was to have one bank with a relatively low score, one with a possible high score and two ranging in the middle. The scores were then also used

as guideline to evaluate the response repertoire of the banks as will be described in the findings (Chapter 4).

Even though different in size (in particular in the number of employees, see Appendix A), all of the selected banks were important national players, offering a variety of similar products and services, with headquarters based in Europe and with major business in at least three other European countries. Within every single case, the number of interviewees, documents and actions was collected until the intensity of the data reached saturation.

#### 4.3 Data Collection

The first stage of data collection began in 2017 with a systematic review of publicly available secondary data, such as videos from publicly available speeches, roundtable discussions on TV or during conferences (for example, the World Economic Forum) with the participation of CEO's, Board Chairmen and Heads of Sustainability/CSR of the banks that were intended to be the focus of study. Written contributions in corporate annual reports, sustainability reports, on websites and in presentations from each company were added, which resulted in an extensive collection of textual data (see Table 4.2).

To provide contextual detail for attention to climate change, in particular the external pressures, document data collection was extended to reach back to January 2016. The rationale of setting the collection date to 2016 was to provide more information about the attention to the topic and initiatives following the 21st Conference of Parties (COP) in December 2015, which resulted in, for example, the establishment of the Task Force on Disclosure of Climate-Related Financial Risks by the UN Financial Stability Board.

A second stage of data collection began in 2018, with the development of an interview protocol in order to progress through the primary data collection (see Appendix B). The interview stage was initiated through different rounds of semi-structured open-ended

interviews. Here the focus was on individuals who had played a prominent role in the formulation of corporate policy (for example, the Head of Group or Corporate Strategies, Head of Swiss Strategy), people who worked on business strategy but also with clients (for example, Head of Sovereign Fund Strategy, Head of Financial Institutions Group), as well as people who were in charge of Sustainability or Responsibility (such as the Head of Sustainability).

Applying the snowball sampling technique, more respondents were contacted on the basis of recommendations made by the first interviewees (Bryman and Bell, 2007), including, in particular, further executives who were somewhat involved in development or execution of the respective bank's climate change response and strategy (for example, Heads of Risk and Finance). This procedure is similar to theoretical sampling in that it makes it possible to contact actors matching the target profile who fit the focus of the study (Strauss and Corbin, 1998).

In this way, additional information sources were progressively included (people holding senior management positions, involved in strategy and/or impact/sustainable investments, and in corporate communications) to aid in understanding the formal and informal structures influencing how attention to climate change is distributed across each organization (see Table 4.2 for details).

During these interviews, each respondent was asked to reflect on the current and historical context (since 2015) and possible external and internal triggers for attention on climate change at the company at large, and with the top management team in particular, as well as asking them to then describe changes in organizational structures and processes, policies and guidelines and stakeholder engagement.

Next, interviewees were asked about their own, personal focus on climate change and what it means to them, both in their professional roles, as well as outside of work. Participants

were interviewed for approximately one hour (the shortest interview lasted 40 minutes and the longest one continued for 120 minutes). The interviews were digitally audio-recorded, with only a few exceptions where the interviewee did not agree to recording, in which case detailed notes were taken during and after the interview. Interviews were conducted in English or in German, depending on the language preference of the interviewee. Quoted material was translated by the author. Anonymity was granted to all interviewees and their organizations, which was expected to encourage candid responses (Hallen and Eisenhardt, 2012).

To guarantee anonymity, the banks were coded as BANK A-D and other interviewees/stakeholders, such as clients, NGO's, industry associations, etc., were coded as STK. Also, each company and stakeholder were assigned a firm code between A and D (for example, BANK-A or STK-B). When more than one person from the same company or stakeholder group was interviewed, the code included the interviewee number, 1-3 (for example, BANK-A1, STK-B-2).

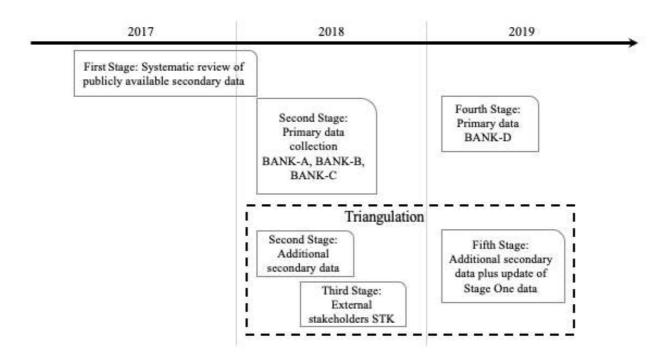
Data collection for first, second and third case study (BANK-A, BANK-B and BANK-C) took place from February to August 2018, during which time 15 interviews were conducted with 12 interviewees. Three interview partners were interviewed twice so that some of the insights resulting from the first interview could be discussed in greater detail. The data collection for the fourth case study (BANK-D) took place in February and March 2019.

After each interview, the internal and sometimes confidential documents provided by my interviewees were reviewed and the interview protocol updated before interviewing the next person from the same bank.

During the interval between the three case studies (BANK-A, BANK-B and BANK-C) and the last case study, additional "case-external" primary data was gathered and experts contacted who were closely linked to the topic of climate change and familiar with the banks that had been selected for the case studies. Then, six open-ended interviews were conducted

with various stakeholders during July and August 2018: one interviewee was from a sovereign fund ("STK-A-1", a client of two of the banks), two were from the World Bank Group (STK D-1) and from the International Finance Corporation (STK-C-1), and the remaining three were finance and impact investment experts from NGO's (STK-B-1; STK-B-2 and STK-B-3). These interviews focused on the interviewees' observations of trends in the industry relating to climate change, and they offered insights and opinions of their view of the pressures and attention to climate change at banks. This helped me to refine my knowledge about formal and informal information structures existing at the banking association levels, but also internal formal governance structures (committees and formal stakeholder dialogues) that they were partly participating in (Yin, 2016).

Figure 4.1 Timeline and Overview of Data Collection



In preparation for upcoming interviews, and to better understand and categorize the complementary data received, all publicly available documents were consulted again, those

relating to each firm's business practices, such as corporate annual reports, strategy and sustainability documents, sector guidelines, press releases, websites, codes of conduct and case studies (Bondy et al., 2012). In addition, updated publicly available video appearances of the bank's top managers and interviewees were researched, blogs examined, press interviews and press releases from industry associations reviewed, including information about each respective bank and its direct competitors.

The secondary data were drawn from 89 archival documents, comprising 6,635 pages in all (see Table 4.3). In total, the duration of videos consulted amounted to 100 minutes of interview material.

**Table 4.2 Data Source Material** 

Bank	Interviewees	Documents and Other Media 2016 – July 2019	
BANK A	Including 4 interviews, 75 pages of transcripts 01 Head of Strategy and Projects, Managing Director; 02 Director Head of Sustainable Investment; 03 Head of Sustainability Affairs; 04 Director Head of Sustainable Investments Switzerland	Including 22 documents; 1,948 pages; 10 mins of video  Press and media releases, sustainability reports, annual reports, GHG indicators for in-house operations, research papers and marketing material relating to SDG's and CC, CC statement, CC report, information on carbon-efficient equities, organizational guidelines, asset management newsletters to investors, legal entity overview as of 2019; video interviews with Head of the Impact Advisory Group and the CEO in relation to CC.	
BANK B	Including 6 interviews, 157 pages of transcript 01 Managing Director – Corporate Structure and Governance; 02 Secretary of the Corporate Culture and Responsibility Committee; 03 Head of Group Strategy; 04 Head of Sovereign Fund Strategy; 05 Director Asset Management's Sustainable and Impact Investing; 06 Head of Sustainable and Impact Investing.	Including 28 documents, 2,989 pages; 67 mins of video Press and media releases; annual reports; sustainability reports; Global Reporting Initiative (GRI) documents; transcripts of speeches of the Chairman and CEO at the Annual General Conferences; climate strategy; climate change information for clients (asset management, investment). Video interviews or statements with Chairman of the Board, Head of Impact Investment, CEO in context of CC.	

# BANK C Including 10 interviews, 233 pages of transcript

01 Head of Statutory Reporting; 02 Head of Statutory Reporting and Market;

03 Group Corporate and Private Customers – Head of Sustainability; 04 CRO Office and Risk Aggregation, Head of TCFD Project

Group;
05 Head of Business Development
Financial Institutions;
06 Group Finance Head of
Management Reporting;

07 Head of Sustainability at SEB Life and Pension;

08 Head of Financial Institutions Group;

09 Chief Sustainability Strategist; 10 ESG Investment Manager, SEB Wealth Management.

#### **Including 29 documents, 914 pages**

Press and media releases; annual reports; sustainability reports; Sustainability Fact Books; research papers on climate change and the financial industry, May 2019; speeches by CEO and Chairman of the Board at the annual general meetings, position statements on CC since 2015. Video interviews or statements with Chairman of the Board, CEO.

# BANK D Including 3 interviews, 114 pages of transcript

01 Head of Financial Controlling and Analysts Energy and Climate;02 Head of Corporate Affairs;03 Director of Corporate Strategy.

#### OVERALL Including 23 interviews, TOTAL 1,001 pages of transcripts, STK 1-6 6 interviews, 35 pages of notes

01 – Head Basic Financial Industries
– Norges Bank Investment;
Management / Senior Portfolio
Manager;
02 – World Wildlife Fund (WWF) /
deputy leader / finance practice
Switzerland;
03 - WWF / Global Lead Finance and
Freshwater Netherlands;
04 - WWF / Advisor Sustainable
Finance Nordics;
05 – International Finance
Corporation / Global Head of Equity;
06 – Worldbank Group / Principal
Porfolio Manager.

## Including 10 documents, 784 pages; 23 min. of video

Press and media releases; integrated annual reports; white papers, letters and statements from the CEO concerning various initiatives including open letters to the Dutch government, European Commission and Parliament. Videos of the CEO, Director of Strategy, Director of Communications.

# **Including 89 documents, 6,635 pages; 100 mins of video**

In building each case study, an extensive range of additional documentation was also accessed, including documents relating to corporate strategy and internal training documents, but also articles in the press, statements from NGO's and information from and about various

initiatives (such as TCFD or PCAF) that were directly related to climate change and the banking sector. Discussions were followed at both the international and EU-levels, as well as for each of the relevant countries, in order to better understand current trends on the political and regulatory agendas.

In order to understand how the banks were responding to external climate change initiatives, and how those initiatives were perceived, a comprehensive search of all media releases from all the banks in the study was conducted over the time period from 2016 to July 2019; any documents that mentioned "climate change", "carbon", "impact", "SDG" or "sustainability" was collected during this period in order to be sure that all of the relevant and most recent initiatives were captured. An additional body of textual data across this 3.5-year time period was compiled and included this in the analysis.

#### 4.4 Data Analysis

The first stage of data analysis involved a detailed reading of the collected secondary material, such as corporate documents, media releases, press and media releases and video appearances of board and executive top management, across the four cases, as well as information about industry-wide, political and regulatory trends, as well as the changes that were happening at the same time.

First, a close analysis of the video material and the reading of secondary data was undertaken to become familiar with the content and to gain an understanding of the themes and details in both videos and text. Next, videos were selected that contained any statements relating to institutional pressures influencing the strategy of the bank and statements relating to climate change. The parts relating to strategy and CC were partially transcribed. Both transcripts and additional documentation were thoroughly re-read to isolate text segments relating to CC. Every instance relating to either some kind of external discourse and/or

climate change was noted and highlighted in the source documents. After instances of text relating to climate change were isolated, each one was re-examined and grouped into similar concepts to convey meaning.

Through this process, an initial timeline for the climate change debate and regulatory developments was developed (see Table 4.2), as well as a snapshot of the companies in relation to their CC engagement (see Appendix A) to get an initial idea as to whether those debates and regulations could have been interpreted as pressures to generate action.

The first Figure (4.2) shows the mapping of key regulatory, public developments and numerous climate change-relevant initiatives over time. When comparing them with corporate responses, some interesting observations could be made across the cases: Global events such as the COP in Paris and its resulting initiatives, in particular the TCFD work and the climate strikes, were followed by a gradually increased amount and frequency of publicly available documents and statements produced by the companies BAN-A, BAN-B and BAN-C relating to the topic of CC (see Fig 4.2). Interestingly, what could be interpreted as "attention" to the issue, or "receptivity" to those cues, did not result in the same level and pattern of integration on the strategic corporate or business level.

Moreover, one of the companies, BAN-B, which raised the issue of climate change the most frequently in public, by far, and produced the largest volume of documentation in relation to CC, showed only the second lowest degree of integration regarding CC-relevant metrics (see Appendix A), and even then only in one particular business line whereas, the communication pattern of BAN-D, the company with the best CC integration level, showed an entirely different communication response. Their output, including a letter to the government by the CEO, public statements such as the Dutch Carbon and Paris Coal Pledge, and appearances of the CEO in the media followed by the formation of the PCAF all took place shortly *before* the CoP in Paris — not after — with the intensity of its corporate public

communication actually decreasing after the events, as if the bank were not responding to a pressure but rather trying to contribute to, moderate or even generate the pressure itself.

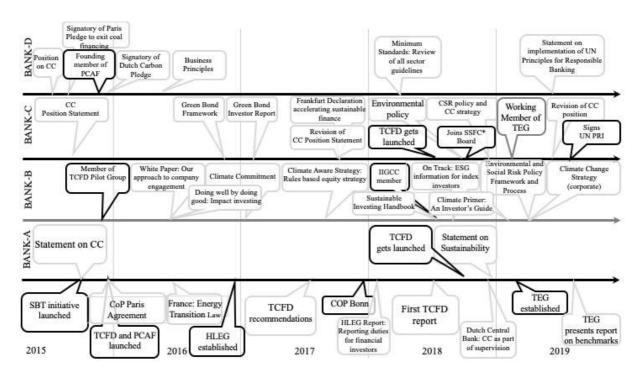


Figure 4.2 Climate Change-Related Reactions within Banks

Color code: black indicates action; grey indicates publication

Note: as the focus is on the reaction to public & societal pressure, the graphic omits regularly published documents such as yearly CSR & GRI reports.

Delving deeper into institutional theory literature to make sense of those differences, only a few explanations were found as to how certain external events could have triggered those corporate communication patterns and responses, but not for all banks. Also, in applying the ABV lens, only limited explanations were found, concerning the different levels of corporate integration that followed external stimuli. The launch and reports from TCFD definitely triggered predictable attention and reaction, but not with BANK-D. Also, it seemed like a major "waking up" was going on for BANK-B and BANK-C in 2018, but it is not really clear why it happened then. In fact, there was no one single, obvious pattern of what

<sup>\*</sup> Stockholm Sustainable Finance Centre, SSFC.

created attention for the banks was visible, and which explained different adaptation of their strategy.

At that moment, a return to the empirical material was made that began the second stage of data analysis via performing a process of "open coding". Strauss and Corbin (1990) have described this coding as "the analytic process through which concepts are identified and their properties and dimensions are discovered in the data" (p. 101).

In this second stage, analysis conducted was, once again, not fully bottom-up, because already several aspects were of interest. The first point was to look at how the interviewed managers noticed and interpreted climate change in order to understand if any of the external cues were categorized by the respondents as a pressure to take action.

As a starting point, theoretical constructs were taken, which have been derived from institutional theory (DiMaggio et al., 1983 and Hoffman, 2011) to code for external pressures such as client-generated, societal, regulatory and competitive. The purpose was to understand at what governance level those external pressures were perceived and dealt with. Taking into consideration that moral issues also can generate a motivation to act, at the same time climate change descriptions were coded for the six characteristics of moral intensity posited by Jones (1991):

- Perception of the magnitude of consequences of CC.
- Temporal immediacy of impacts of CC.
- Proximity (geographical and psychological) of impacts of CC.
- Concentration and probability of effect.
- Social consensus that the interview partner and/or the organization needs to take action against CC.

The entire coding structure with concrete examples is presented below in Figure 4.3.

Addressed in a second coding round were the different types of language that managers used to sell climate change action as justified within their organizations.

Finally, empirical themes were coded that would allow for an understanding of the implementation pathways within the organizations, such as structural controls and getting further information about what governance and operational communication channels would exist. To understand how the latter were used, revealed tactics and strategies used were also coded, in order to amplify attention to climate change within the organization.

Last but not least, descriptions of corporate responses were coded in order to triangulate the information that the author had gleaned from public sources to refine, validate and complement the overview (see Appendix A).

To interpret the empirical data, keywords were derived from three distinct areas. Although these theoretical constructs served as guides, they did not have a deterministic function; rather, the aim was for them to aid in the structure the data collected.

Initially, the process of labeling terms and sentences in the empirical material was performed "in vivo" (Locke, 2001). After the material was read several times, segments of text were combined that reflected similar wording or expressions, resulting in the classification of more than 40 primary nodes.

These nodes represented indicators delineating the perceived institutional pressures (for example, "upcoming regulation", "societal pressure", "new generation", "client demand" or "mimic the others") and, particularly, under the lens of moral intensity (for example, "the fires destroy all the land here", "it's here — right now, right here", "I'm worried for my children", "we're in deep shit", "it's concerning" or "I don't know anybody who would deny it"), but they also reflected ways the respondents would describe how they talk about climate change with their colleagues in order to sell CC (such as, "new business opportunity", "client demand", "risk factor", "price it into the model", "money is more sticky when invested with

values", "you need to talk numbers", "making money on this", "this is what our bank stands for", "we have a role to play in society" or "the bank needs to help mitigate the climate crisis"), see also Figure 4.3.

Finally, descriptions of formal and informal, internal and external channels and the governance structures where the topic is addressed were coded (for example, "guidelines", "policies", "workshops", "client events", "new division", "strategy workshops" or "crossfunctional CC team").

The interview data were compared with secondary sources again, such as all publicly available documents relating to official company climate change statements and the narratives used, as well as with information received from the stakeholder interviews. This type of methodological triangulation enhances reliability and provides an explanatory framework for understanding the experiences of the actors involved and the context in which they operate (Bryman and Bell, 2007).

Building on these initial first-order codes, similarities and differences were coded across the four cases to discern the main categorization of climate change as pressure, internal narratives and attentional structures in the empirical material.

In the third round of analysis, a second-order or axial coding was used to search for patterns and relationships within and between the first-order categories and the case studies (Strauss and Corbin, 1998). The categories were combined into main themes, aiming to explain how they related to the individual and corporate activities across the four cases.

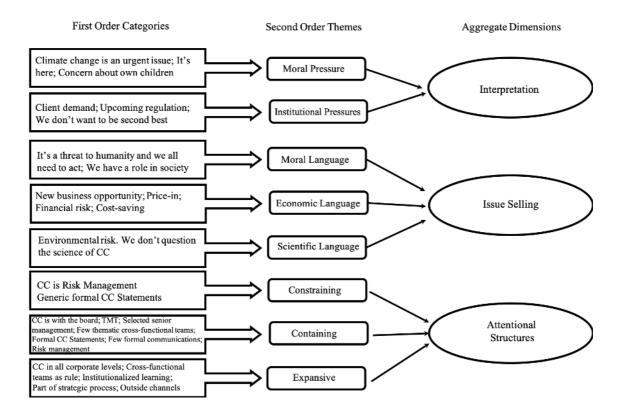
By means of this analysis, the nodes were arranged that had initially been identified through the in-vivo coding within broader, conceptually informed categories. A range of higher-order concepts were identified related to the different ways of noticing and attending to the climate change phenomenon through external or internal stimulation (extrinsic or intrinsic); developing narratives to sell CC within the organization, but also narratives trying

to influence other parts of the organization using their own convictions ("moral urgency"), claiming a fit with corporate role in society ("corporate legitimacy"), or trying to come up with a business rationale for action ("economic rationale"). Finally, themes depicting the use of different governance channels for creating and distributing attention to the issue including or excluding the moral dimension of the topic.

In the fourth stage, these concepts were applied to the case studies in order to discern whether the phenomenon of climate change cascaded through the organization and became part of strategy or not. By mapping the second-order themes to the case studies, three main stages for CC to pass in order to become incorporated were identifed: (1) interpretation, (2) issue selling engagement, and (3) attentional structures.

Figure 4.3 below, represents the coding structure that emerged from the analysis of how the case study organizations dealt with climate change, illustrating the first-order categories, the second-order themes and the aggregate dimensions that served as foundation of corporate responses to CC (Gioia et al., 2013).

**Figure 4.3 Coding Structure** 



Finally, using the aggregate dimensions of the three stages as a foundation and returning to the case studies to link each of the specific corporate climate change journeys to connect them with the organizational "outcomes" demonstrated the variety of the response repertoire found at the four firms.

This made it possible to distinguish between which selling and channeling strategies are more effective and which are less so, when it comes to incorporating climate change aspects within the organization. As described in detail in the following sections, the key driver of change in traveling from one stage to another was to have the interpretation, the narrative frame and the ability to effectively use given governance structures (channels) to influence and amplify.

#### 5 FINDINGS

Supporting data is presented in the following sections for the second-order themes of the three stages "interpretation", "issue selling using attentional structures" and the "response repertoire and organizational outcomes" in each of the four case study organizations, as well as the noticing, framing and channeling that could be observed at the individual and firm levels (see Fig. 5.1, 5.2, 5.3 and 5.4).

At the first stage, and while "noticing" the issue, senior managers came to a realization about the phenomenon of climate change and developed an internal narrative, an interpretation, to shape their attitude towards the topic.

To get to the second stage, senior and middle managers "framed" climate change in different types of language, that they believed to be most convincing and customized to sell it to the recipients of the message within their direct communications/attention network. By doing so, their goals were mainly focused on rhetoric and tactics helping them to legitimize their own corporate CC response but, eventually, on influencing the recipient to accept and mimic their choice — to sell it. The issue selling happened through the use of communication channels who served as attentional structures. Some of the managers began to involve specific dedicated governance channels; some were internal and already existing; and, others emerged through the process of engagement with the aim to reach decision-makers outside of the direct influence zone of managers "selling" CC — for example, from other, not related business lines, corporate functions or individuals at the highest top management level — with the purpose of triggering attention and motivating to take further action across the organization. Some of the channels were also directed outside the organization, towards clients, competitors and regulators and served increasing pressure to act against CC.

The content of the three stages differed for each firm due to differences in individual interpretations, different approaches to framing when attempting to sell the issue and

differences in channels that existed that allowed the effective distribution of attention across the firms.

All of this resulted in a variance of the response repertoire in terms of climate change integration on the company level, on a continuum from a minimalistic approach, as we see with BANK-A, to a transformative approach as observed with BANK-D (see also Appendix A).

Table 5.1, below, represents the definitions of key concepts I have deployed to describe the journey of translating and integrating climate change into organizational strategy and to evaluate the outcomes.

<u>Table 5.1 Key Concepts in the Organizational Journey of Integrating Climate Change into Strategy</u>

Concept	Definition	Application to CC
Noticing <sup>1</sup>	Paying attention.	Paying attention to the existence of CC.
Interpretation <sup>2</sup>	Cognitive process to put meaning on the stimulus.	Making sense of what CC may mean.
Moral pressure <sup>3</sup>	Pressure to act stemming from the realization of a highly intense moral component of an issue at hand.	Perceiving CC as a commonly recognized, urgent, catastrophic event with consequences to psychologically and geographically close circles of people.
Institutional pressure <sup>4</sup>	Normative, coercive or mimetic pressure to act in order to maintain legitimacy.	Perceiving that CC is a topic that the bank is expected to deal with, due to its professional expertise (normative); internal or external stakeholders (e.g., clients) expectations or legal demands; and that all the other successful banks are already dealing with it.
Framing <sup>5</sup>	Using language to shape the meaning of an issue in ways that resonate with a target.	How to understand CC in a given context (e.g., as a business issue).
Issue selling <sup>6</sup>	A means for managers to influence the strategic direction of the firm.	How to generate interest for CC within the organization?
Moral language <sup>7</sup>	Language focusses on the moral dimension or intensity of the issue and / or refers to the company's values.	Describing CC as an event causing harm to people and / or referring the need to combat CC as part of the societal mission of the company.
Economic language <sup>8</sup>	Language that refers to the aspects impacting the firm's bottom-line.	Describing CC as a financial risk or as a business opportunity.
Scientific language <sup>9</sup>	Language that refers to scientific facts.	Describing CC warming of the atmosphere attributed to human activities and impacting ecosystems.

Channeling <sup>10</sup>	Directing attention by using	Directing attention towards CC.
	attentional channels.	
Attentional Structures <sup>11</sup>	Formal or informal collective interaction set up by the firm to control, allocate and monitor organizational attention and resources to a given issue that relates to a transaction.	Value management system that starts with allocating attention from the top management to the operational level and supports integration of CC-relevant aspects into all germane transactions across the organization.
Expansive	At all corporate levels, from the board to the staff, in all corporate functions and business units, ensuring appropriate risk-management; fostering transparency and corporate learning.	CC is a topic for all corporate levels, in all corporate and business functions. Structures exist to ensure climate goals; KPI's and guidelines are developed and integrated into all corporate functions including risk management, and to make sure that all transactions take CC into account; fostering disclosure and facilitating cross-functional learning to share best practices.
Containing	At most corporate levels from the board to at least the management level in some corporate and business functions, ensuring control and risk-management and aiming at transparency and corporate learning.	CC is a topic for almost all corporate levels in at least some corporate and business functions. Structures exist to ensure climate goals, KPI's and guidelines are developed and integrated into some corporate functions including control and risk management; aiming at disclosure and facilitating cross-functional learning to share best practices.
Constraining	Structures do not include the board and TMT, or are diverging attention from the board and TMT, focusing on lower levels of management without allowing for strategic integration.  Minimal control and risk management and corporate learning.  No or little transparency.	CC is not included on the board and TMT agenda, or are diverging attention from the board and TMT with regard to CC, focusing on lower levels of management without allowing for strategic integration of CC in corporate or business lines. Minimal control and risk management and corporate learning. No or little transparency.
Outcomes	Effectiveness of strategy.	Effectiveness of climate change strategy integration.
Response Repertoire	Range of strategic corporate responses to a challenge.	Range of strategic corporate responses to CC.
Transforming	Striving for the optimal and most comprehensive solution to the challenge within the organization including cooperation with external stakeholders to maximize impact.	Carbon neutral or carbon negative operations; public disclosure on measurable corporate climate goals for the organization; inclusion of climate relevant aspects into all corporate transactions (business or non-business). Proactive external engagement to help CC mitigation with peers and other stakeholders and to increase pressure.
Progressive	Being on the way to finding comprehensive solutions to the challenge within the organization, including cooperation with external stakeholders to gain support and generate impact.	Aiming at carbon neutral or carbon negative operations; public disclosure on corporate climate goals for the organization; inclusion of climate relevant aspects into corporate and business transactions with the aim to expand. Active external engagement with clients to help CC mitigation and

		with peers and regulators to increase pressure.
Conservative	Looking for a reasonable solution to the challenge within the organization including some cooperation with external stakeholders to influence impact.	Aiming at carbon neutral or carbon negative operations; public disclosure on corporate climate goals for the organization; inclusion of climate relevant aspects into some corporate and business transactions. Some external engagement to help CC mitigation with peers and other stakeholders.
Minimalistic	Trying to neutralize the impact of the challenge without engaging in topic-specific organizational solutions to the challenge, including hardly any cooperation with external stakeholders to demonstrate presence.	Carbon neutrality is less important; no public disclosure on corporate climate goals for the organization; very limited inclusion of climate relevant aspects into few corporate and business transactions. Hardly any proactive external engagement to help CC mitigation with peers and other stakeholders.

The above-mentioned definitions are grounded in literature as follows:

- 1. Schneider and Shiffrin, 1977.
- 2. Ibid.
- 3. Jones, 1991.
- 4. DiMaggio and Powell, 1983.
- 5. Dutton and Ashford, 1993.
- 6-9. Mayer et al., 2019.
- 10. Ocasio, 1997.
- 11. Joseph and Ocasio, 2012; Wieland, 2010, 2014.

#### **5.1 BANK-A**

BANK-A has some tradition in the impact investment and philanthropy field, where the bank has been active for over 15 years. Nevertheless, its thematic focus has been mainly on mitigating social rather than environmental challenges; hence, the bank offers a portfolio of products around microfinance opportunities and has developed impact investment opportunities mainly focusing on improving education and work conditions. This has also been the predominant theme in the area of the bank's philanthropic engagement, where it is running numerous foundations, financing various projects in the emerging economies as a service to their high-wealth clients and family offices in the context of their own philanthropic engagements.

### 5.1.1 Stage 1: Climate Change Interpretation

As reported by all interviewees from BANK-A, the bank, as an organization, has had only very limited exposure to the topic of climate change.

Neither the Head of Strategy (BANK-A-1), nor the Head of Sustainability Affairs (BANK-A-3) reported that the bank would particularly notice any pressures for action in the area of climate change, neither by legislation nor by their competitors. On the contrary, both have clearly stated that CC, even though it is "an important global challenge", is not something that is part of their regular considerations at work, and that they don't expect this to change in the near future. BANK-A-3 mentioned that he does not expect this to change until 2030–2050, given the timeframes in which he would expect a topic like CC to be addressed by local legislation in such a way that a bank would be concerned. Nevertheless, he mentioned some mimetic pressures in the context of participating and implementing TCFD recommendations, even on a voluntary basis, would most likely be needed in order to show banking supervising authorities that further regulation is not necessary. Hence, BANK-A is following the trend and implementing recommendations to ensure that this becomes an industry standard rather than face additional regulation.

When prompted, asked if the fact that BANK-B (a direct competitor of BANK-A) is very proactively communicating about CC in the media and to clients, BANK-A-1 and BANK-A-3 both responded that they felt BANK-A was very well positioned in the sustainability field. In particular, BANK-A-3 clearly pushed back, stating: "I'm very critical about the idea that banks should be a leveraging point to green the economy. We are a service provider. A service provider and a business. We cannot be driving the movement trying to push all economic sectors in the right direction."

Similarly, the Head of Impact Advisory (BANK-A-4) acknowledged that despite the fact that BANK-A is more frequently confronted with client demands in the area of

sustainability, and that such demands were increasing, clients were rarely specifically interested in climate change. Hence, their regular thematic requests for CC could easily be diverted towards "sustainable" investments in general, which could lead to a different focus at the end: "Climate change is definitely the mostly used keyword when clients talk about their own initiatives. Still, our focus is rather on the social aspects of society. SDG's 4 and 8, that's our core (note: SDG 4 = quality education, SDG 8 = decent work and economic growth)".

BANK-A-2 was even more explicit, saying: "Climate change, well I think it's important to note that it is really happening, so we believe, or I think the majority of people at BANK-A believe that climate change is happening, but this is not really a topic for us here."

During my inquiry if the respondents individually thought climate change was a moral issue, the discourse was quite similar for all of them: they responded more or less using the same words, for example that, "Climate change was probably one of the most important global challenges today". Their statements were obviously polished, providing me with a corporate answer, as if they were prepared for the interview, which they knew would be dealing with the topic. When prompted further about whether CC would concern them individually as a person, parent or citizen, very similar answers were given, mentioning that they are trying to reduce their carbon footprint to a moderate extent (by commuting by bike, for example), but that it would not necessarily be a topic that they would have on the radar every day, or be particularly concerned with. Rather, the subject would come up when dealt with in the media, such as on the occasion of the current climate strikes organized in Switzerland.

Hence, the evidence suggests that BANK-A notices climate change as a very moderate coercive institutional pressure in some areas, with some mimetic pressures to implement the TCDF recommendations, which, in their eyes, are becoming an industry standard; further

there is no evidence that the relevant managers at the bank perceive CC as a morally intense issue that would pressure them to act on moral grounds.

#### 5.1.2 Stage 2: Selling Climate Change Using Attentional Structures

As reported by all interview partners, vocabularies used to sell climate change within the corporation were compartmentalized between a closed economic dialogue in the context of the TCFD program, where CC was described as a "potential financial risk that needs to be managed" (BANK-A-3) and a scientific dialogue held within the entire organization, where the discourse around CC was mostly reduced to high-level, generic presentations about the facts around the existence of CC and its impact on the planet.

As there are no truly dedicated governance structures to deal with corporate social responsibility (CSR), or ethical issues, on Board or TMT level, sustainability issues overall, and climate change in particular, are not part of the Board's agenda. It is therefore not surprising that the bank entirely lacks strategic goals other than direct emissions reduction targets in this area; and, as a consequence, there are no specific CC targets on the portfolio or business side. Also, neither CC, nor any other CSR issue, is mentioned in the company's mission statement; hence, the tone from the top does not suggest that CC is an issue worthy of attention.

At the TMT level, the CEO is the most senior manager having topic responsibility and decision-making authority on sustainability matters. He is supported in this by the Reputational Risk Sustainability Committee, which includes members from senior management and is chaired by the Chief Risk Manager who is also member of the TMT. This clearly demonstrates that on the operational level, sustainability is viewed as a reputational risk rather than a question of the bank's role in society, or a business opportunity, and that topics such as climate change may at best be of interest to the bank when they become a "reputational risk factor".

BANK-A-3 reported that the evaluation of reputational risk would also be conducted mainly from an economical perspective, evaluating potential reputational damages from a financial perspective rather from a legacy one. Hence, the vocabulary deployed in this structure is also mainly economic.

Furthermore, it may explain why BANK-A has nevertheless signaled willingness to implement the TCFD guidelines in 2018 through an internal program run by the bank's risk department. As BANK-A-1 reported however, this internal program is very "siloed and silent" in the sense that there would be no cooperation or communication around purpose or progress.

As the Head of Strategy and Projects of that bank (BANK-A-1) mentioned in our interview: "There are no guidelines from above (note: the Board or TMT) to embed any of it (note: climate change) in our strategy. Rather, strategy is driven by financial performance. There are no sustainability goals or key performance indicators (KPI's) as part of our corporate or business strategy, it's all financial".

This bank also has one of the least stringent black-listing policies on coal and only excludes new coal mining projects. On the one hand, their current policy has not been adjusted since 2011 (see Appendix A), which once again suggests that BANK-A does not perceive a great deal of pressure to act, for example after the CoP 2015 and the Paris Agreement. On the other hand, it also shows that perhaps its governance structures are at not sufficiently well calibrated towards the issue of climate change. As a consequence, BANK-A regularly faces public criticism from different stakeholders in the context of financing controversial projects such as deep-sea mining<sup>4</sup> and tar-sand pipelines<sup>5</sup>. Even though every

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<sup>&</sup>lt;sup>4</sup> Solwara 1 Deep Sea Mining Project in Papua New Guinea, more information here: https://www.banktrack.org/project/solwara 1

<sup>&</sup>lt;sup>5</sup> Trans Mountain Pipeline Expansion project, more information here: https://www.banktrack.org/project/trans\_mountain\_pipeline\_expansion\_project\_tmep

project needs to go through a standardized reputational risk review process, it would appear that CC impact is not necessarily seen as a high-risk area.

This public criticism is most likely also one of the reasons behind a recent statement from the CEO, which said that BANK-A acknowledges the science and takes the pressing need to protect the climate seriously, which was then followed up by referring to the existence of sectoral guidelines on coal and the bank's contribution to mitigating climate change by running its operations in a carbon neutral way. This is entirely in line with the bank's statement regarding CC, dating back to 2015.

However, at the end of 2017, the CEO initiated the establishment a new business unit, serving as an expert team to the client advisors in the investment area, dealing with impact advisory and directly reporting to him. As the head of that unit (BANK-A-4) explained, "The idea was to reunite all environment and sustainability specialists under one umbrella, so that client advisors in all locations would know where to find the experts when facing a specific demand from a client. Also, what was important is that we report to the CEO to give this topic more visibility in the future."

However, and as already mentioned (4.1.3), the unit's aim is to "facilitate investable projects and initiatives that have a positive economic and social impact while focusing primarily on generating a financial return for clients." It is not a vehicle to raise or direct attention within the organization towards CC, nor does any particular communication around the issue happen there.

Neither of the Heads of Impact Investment Groups (BANK-A-2 and BANK-A-4) have mentioned any further attempts to sell this topic within the organization, or were aware of any further structures providing a platform for deliberation around the ethical implication that the

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<sup>&</sup>lt;sup>6</sup> Information taken from corporate website, and not cited specifically to grant anonymity of the organization.

bank's transaction may have in the context of climate change. BANK-A-4 in particular reported that her engagement was limited to generic conversations at the coffee breaks, talking to colleagues about the viability of the work of climate-strikers (like Greta Thunberg) and whether it's a good idea for Swiss school children to go on strike. Neither bank mentioned proactively selling the issue to client advisors, whom they were supposed to support. They referred to CC as a "sustainability issue" rather than belonging to BANK-A-3's domain.

BANK-A-2 explicitly mentioned, "Of course, we can make suggestions if the client really wants to focus on CC, but our expertise is on other impact investments."

In line with this, BANK-A-3 also confirmed that he sees himself as responsible for raising awareness of the issue. To do so, he mentioned that twice a year, the bank would be organizing regular, openly accessible events for all staff addressing CSR topics, and that climate change was on the agenda in 2018 (the previous year). BANK-A-3 was himself one of the two presenters, in addition to a speaker from an NGO. He reported that his main focus and rationale for raising the topic was "to introduce the scientific background and raise awareness of the potential impact of climate change. It's really about bringing everybody up to speed on the issue, as many people don't know many details about the science behind it."

In light of the above, we can assume that BANK-A lacks attentional structures, or effective communication channels to raise attention to the topic. As there is no true issue selling, the language mostly used to describe climate change is reduced to scientific facts that sometimes also get translated into potential financial risk for the bank — risk that needs to be monitored, in the context of the implementation of the TCFD recommendations. However, as the TCFD program is largely working "in the dark" (as reported by BANK-A-1), most of the managers and staff would not be confronted with the risk discourse anyway.

From the structural and control point of view, BANK-A focusses only on the risk part, not allowing climate change to be integrated into existing potential governance structures,

such as the Impact Investing Group or being proactively taken up by the group CSR function. Its structural approach could therefore be called "constraining".

## 5.1.3 Stage 3: Response Repertoire and Organizational Outcomes

Against this backdrop, it is nevertheless surprising that BANK-A has been operating in a carbon neutral way since 2010. This has mainly been achieved through reductions by upgrading their premises and optimizing electricity use. As BANK-A-1 reported, these efforts were mainly cost-driven rather than sustainability-driven. This was confirmed by one of the stakeholders interviewed for this research project, who was also engaged in assessing the CO<sub>2</sub> reduction potential of the real-estate project (STK-B-1): "The investments made here (note: in energy-savings) were mainly driven by financial incentives to lower costs rather than out of concern for the planet."

Nevertheless, to achieve neutrality the bank offsets its so-called unavoidable emissions, such as business travel, and has guidelines on virtual communication, aiming to reduce business travel costs. On the other hand, the bank does not offset commuting-related CO<sub>2</sub> emissions of their employees, nor does it incentivize the use of public transport or biking, unlike all the other banks in the sample. There are no potential cost reductions linked to commuting, only costs.

On the business side, the bank has two climate change-relevant products to offer in its portfolio: the real estate green property fund and a climate value property fund. It therefore comes as no surprise that only a minority of its own assets (6%, see also Appendix A) are screened for climate change impact and that the bank has not signaled any further ambitions in this direction to address CC more comprehensively.

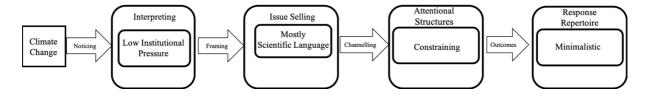
Further, it has been demonstrated that potential climate change client demands are diluted to fit into a wider "impact" frame, in order to better fit the bank's existing product portfolio aiming to generate social impact rather than environmental sustainability. This is

done by linking CC with a narrative loosely related to it (such as good education) — a theme for which the bank offers appropriate solutions.

Given that organization-wide attentional structures at BANK-A are, except for the risk aspect, entirely "sustainability", generic and also disconnected from the discourse held at the top management team (TMT) and Board levels, climate change is not integrated further into its strategy; nor does BANK-A seem to have any bottom-up initiatives going on at the business level related to the issue. The only exception where CC is integrated into a strategic area is that of risk, where the bank has set out to implement the TCFD recommendations in reaction to increasing coercive and mimetic pressures. BANK-A's response repertoire could therefore be seen as "minimalistic".

The figure below illustrates BANK-A's journey towards climate change integration.

<u>Figure 5.1 BANK-A – Stages of Climate Change Integration</u>



#### 5.2 BANK-B

BANK-B, the largest bank in the sample, has long experience engaging with environmental issues in the international arena. Some 25 years ago, the bank signed the United Nations Environment Program's "Statement by Financial Institutions on the Environment and Sustainable Development" and it was among the first banks to endorse the UN Global Compact, becoming a signatory to the Carbon Disclosure Project (CDP). In addition, its Asset Management business is a signatory to the UN-supported Principles for Responsible Investment (PRI). Nevertheless, its concrete engagement in the field of sustainable and impact investment field began only in early 2016 with the establishment of a new, independent team

in the area of Asset Management consisting of some very prominent hires from specialized boutique financial providers around the globe.

The bank has also been part of the Task Force on Climate-related Financial

Disclosures (TCFD) working group from its inception, even belonging to the pilot group to

test the methodology. The bank's Chairman of the Board is a well-known public figure

internationally and a regular keynote or panel speaker at the World Economic Forum in

Davos. During some of his public appearances, he has also made clear that climate change is
an area that he has high interest in, as an individual but also from a systemic perspective. He

has also raised the topic of CC and the role that the bank has to play in its most recent Annual

General Conference (2018) by referring back to the bank's commitment to obtaining all its

electricity from renewable sources by 2020 and further also pointing to the achievements of
the bank in the CC arena — notably by mentioning their high ranking in the Dow Jones

Sustainability Index. He also clearly pointed towards the effects of global warming and how
they would already be visible in the bank's home country and the need to act: "Glaciers are
melting, mountains are crumbling — it is in all our interests to stop this trend. And if we can
succeed in convincing our clients of these issues — so much the better!".

In 2019, the bank conducted a materiality assessment identifying and analyzing how Sustainability Development Goals (SDG's) are materially relevant to the bank. The result is that climate change has been recognized as by far the most urgent of all goals, with 62% of all stakeholders voting for it (Semberger et al., 2019).

## 5.2.1 Stage 1: Climate Change Interpretation

The picture gained with regard to how BANK-B interprets climate change was differentiated. Both of the interviewees (BANK-B-1; BANK-B-3) were involved in their bank's group or divisional strategy but did not report perceiving any normative, coercive or mimetic pressures

that they would take into consideration when preparing corporate strategy or updated organizational changes for the TMT.

The Head of Group Strategy (BANK-A-3) elaborated: "Well, on the regulation side, for us as a bank, regulation is a book as thick as five bibles. You've got MiFID, Basel I and II, and, and, and. No, thank God, we don't currently fear any legislation on climate change.

That's a lot anyway. On the competition side, well, I think we're well positioned. We're leaders of the Dow Jones Sustainability Index. We can serve our clients if they have demands. I mean this is an interesting differentiator, but that does not guide our strategy."

Both the Head of Corporate Structure and Governance (BANK-B-1) and Head of Sovereign Funds Strategy (BANK-B-4) reported on the regulatory aspect in a similar way.

BANK-B-4 stated: "From a regulatory perspective, it's normal to hear from financial institutions to talk about compliance, capital requirements, but not environmental.... No, from a regulatory point of view, I don't see any pressure for us to do more."

Very clearly, though, most of the interviewees reported that they do notice clear societal and political pressure, as well as increasing client demand. Also, they all acknowledged mimetic pressure linked to the implementation of the TCFD recommendations, even though BANK-B has been one of the front-runners in that regard (more below under 5.2.2).

BANK-B-4 stated: "Sustainability is becoming a big topic for banks, not because banks suddenly want to have a clean vest but because, basically, sustainability is a growing demand among the clients, both institutional and private banking clients for strategies across all the different classes... You know it's all about the Millennials... On the institutional side, what we saw already is that climate change has become a huge topic from a political level. Many pension funds, many institutions, they have pressure from their stakeholders for sustainability because — by sustainability we mean something broader — but climate change

is certainly the number one topic. So, the point I'm trying to make is that the financial institutions are simply adapting themselves to the demand of the clients. So, it's a pure commission decision. Of course, this is a double element. One is to come up with products and strategies which incorporate sustainability. Number two is also to show that the bank has sustainability as a core value because to a certain degree, this is perceived better from the people."

The two interviewees, one working in the Asset Management (AM) division (BANK-B-5&6) and one being the Secretary of the bank's CSR and culture Board-level committee (CSR-Board) (BANK-B-2), confirmed those statements. BANK-B-2 further elaborated: "It is also about our reputation. People don't want to talk about our reputation because this is somewhat superficial, but eventually we are being held accountable for the companies that we fund and work with."

With regard to their individual perception of climate change as a morally intense issue (Jones, 1991), for example showing concern about the magnitude of consequences for them or their children, all but one interviewee (BANK-B-5) described climate change as an important global trend, a scientifically complex phenomenon that is difficult to understand but which they acknowledged did exist. BANK-B-1 mentioned, "Well, I'm not a total climate change denier. I would not put heating in my garden or heat the road in front of my house so that there is not snow in the winter. We just pay a bit of attention, switching lights off and stuff." BANK-B-4 explained, "But, if you ask me: Is climate change a threat to humanity, I'm convinced that it's not, because I believe that ultimately, technology will kick in."

BANK-B-5, however, clearly experienced climate change as a morally intense issue. As a Dutch citizen, he mentioned that CC was a topic that was very much present in Dutch society: "You know, in the Netherlands, we're talking about climate change since the '60's. I wasn't even born then. It's about the dams and the buildings, as we need to protect the

country from rising sea levels, etc. etc. That's climate change, right? So yes, I am concerned about climate change, very much so. I know it's coming. It's coming soon, and it's not going to be 'somewhere' — it will be here. And we will be in deep shit."

The evidence thus suggests that, unlike BANK-A, BANK-B clearly does experience climate change as a coercive institutional pressure from clients in different divisions and mimetic pressure to implement TCFD; but there is not enough evidence to assume that overall, moral pressure would be experienced by the majority of managers at the bank.

## 5.2.2 Stage 2: Selling CC Using Attentional Structures

All of the interviewees evaluated that the initial trigger for the bank to engage with climate change coincided with the taking over of the Chairman of the Board of Directors (Board) role and the Chair of the bank's Board-level CSR and culture committee (CSR-Board) by the current Chairman in 2014.

Since then, they reported, a high degree of engagement on the part of the Chairman of the Board and his personal commitment to the topic became somewhat visible within the organization. Subsequently, some smooth shifts in the communication happened, and in public media the bank was positioned as "supporting the transition to a low carbon economy". It began to participate in the Dow Jones Sustainability Index in 2014. According to BANK-B-5, following the 2015 CoP in Paris, the Board "decided in 2015, this (climate change) is a strategic priority for us, and we need to get our act together to make sure we become a leader in this space. Obviously, there is a strong economic model behind that but there is also always the [Chairman of the Board] behind it. He is really interested to do something about climate change. He knows the science and the models behind it; he really sees it and understands it. It's personal for him and he wants to make sure that the bank does something against this."

BANK-B-2 further reported that since that point, the topic of climate change became a regular agenda item of the bank's CSR-Board. Also, due to the Chairman's prior

membership on the Financial Stability Board (FSB), the BANK was invited in 2016 to become an additional member of the TCFD for the second phase of the Task Force's work (for example, the phase after the initial consultation phase). The bank's delegate to the TCFD was the Head of Sustainable Investors from the AM division.

In 2017, according to BANK-B-2, the theme came up roughly four times a year in different contexts, mainly because BANK-B was engaged in the development of the TCFD framework. In 2018, it came up slightly less and mainly in the context of the heatwaves in Europe and then more so in the context of risk. He also explained that the Board's focus was more on higher-level issues, evaluating macro risks and discussing big global political trends, and linking them to where the markets may be going in the future. In that sense, BANK-B-2 described the CSR-Board as a "sounding body".

This is in line with comments from the other interviewees, who all acknowledged the Chairman's personal commitment to climate change but nevertheless considered the CSR-Board communication somewhat abstract or "statements like" (BANK-B-4), rather than as a top-down mandate to change the paradigm of the bank and reconnect with a "higher mission", even though this had been recognized as an important reputational factor for the bank (BANK-B-2).

The reputational factor of the bank was also reinforced by all the interviewees as extremely important, especially given that the bank did not move through the financial crisis well and was regularly in the public media; for example, because of scandals including money laundering and London Interbank Offered Rate (LIBOR) manipulations. Despite all this, all the interviewees agreed that "the societal role of the bank" in the context of climate change was perhaps not that important to the "owners", who would ultimately decide where the strategy of the bank was going, and "still the primary goal of our investor was always: "We need to make money" (BANK-B-4).

Hence, as they all reported, when talking about climate change, moral arguments would not really "sell" internally, whether linked to individual moral concerns — a "crisis for society" (BANK-B-5) — or to the bank's espoused value "to have a role in society" (BANK-B-1, 3, 5).

After the somewhat abstract mandate from the Board in 2015 "to make it a priority", climate change was then taken on by the TMT with the result that attention to the topic was further expanded beyond the initial "risk" narrative.

As BANK-B-3, the Head of Group Strategy, further reported, during 2016 the TMT started two new "communication threads" at the TMT level. The first concerned cutting the bank's own direct emissions. He explained: "The topic of climate change landed on the TMT agenda sometime after the CoP Paris meeting in 2015. Then there was a kind of wave and it landed with the TMT and down to us, the Global Strategy group. It was then that they decided all the details about our own carbon footprint. It's since then that we have all the goals and KPI's."

He explained that following CoP in 2015, the CEO had tasked the CSR operating committee (CSR-OP), which is chaired by a senior level representative and nominated by the CEO to come up with proposals on reduction targets. Also, the CEO engaged with TMT members from the business divisions to explore potential business opportunities. These two new aspects were then formalized and became topics on the bank's yearly strategy offsite agenda in 2016.

This is a regular event which takes place once a year and includes members from the TMT, Heads of Divisions and the strategy departments (global and regional) and has the aim to review the current corporate strategy and agree on the goals and targets for the next year.

In that meeting, the then Head of AM, and member of TCFD, reported on recommendations given by TCFD which then led to the strategic decision that BANK-B

should participate in the piloting group applying the TCFD recommendations. This led, on one hand, to the delegation of the topic to the Global Environmental and Social Risk committee chaired by the Chief Risk Officer (member of TMT, reporting to the CEO), and the decision to establish an internal TCFD working group (BANK-B-1). On the other hand, after this was initiated and sold as "business opportunity" by the Head of AM (BANK-B-3), the bank decided to take advantage of the knowledge accumulated to be leader in this space", and the TMT also decided to expand the AM's capacity by installing a dedicated Sustainable and Impact Investing division. BANK-B-3 further reported that the other TMT members responsible for other business divisions, were not particularly interested in engaging further on that topic at this time. "AM was supposed to be a kind of pilot", he said.

After this strategy offsite, BANK-B-3 reported that the topic of climate change has not again made it on to the agenda of strategy offsites (until 2018). This development, before and during the offsite in 2016, still marks a landmark on how CC is framed and also what governance structures and communication channels are utilized today:

The categorization of climate change as risk is handled within the risk governance structure of the bank. On the executive level, it remains the responsibility of the Global Environmental and Social Risk Committee, in particular within the TCFD working group as a "potential financial risk that needs to be managed" (BANK-B-2). However, BANK-B-3 clearly stated that the bank, after having applied TCFD recommendations through the pilot phase, and after having run several climate-based stress tests, does not consider itself as particularly exposed to CC on the portfolio side: "The bank itself does not really have a real risk through climate change. We're rather on a path with a far shorter time horizon. There, we can invest and divest fairly quickly — it's not like with insurance. It's more like five years for us. And we have policies concerning not investing further in coal, because we see that there is a trend now globally to exit coal."

As a result, the attentional engagement remained contained within this structure without having made it out on the TMT agenda again, and without having yielded further guidance (policies or standards) on how to deal with other climate change-relevant transactions, other than coal. It is part of the regular reporting to the Board's Risk Committee. We can therefore conclude that the new issue was overwritten by existing communication practices and integrated into the existing and institutionalized Risk Governance Framework. Despite its high professionalization and effectiveness in dealing with financial risks, it became a dead-end insofar as generating further attention towards CC outside of its structures was concerned; for example, within other corporate functions. The communication practices within this governance stream were so pre-dominant (such as keeping the five-year horizon) that instead of embracing the new paradigm to adapt their decision making, they instead "squeezed" it into the regular processes.

Another important effect resulted from the engagement with climate change in this part of the company. Due to framing CC as being mainly a financial factor, the organization lost the opportunity to engage in discussions around the moral aspects of the consequences and the bank's contribution. Hence, the evaluation of moral aspects of organizational transactions contributing to CC was entirely removed.

With regard to operational reduction targets, governance remained with the CSR-OP. And while in external communication the bank uses the narrative of "contributing to transition to a low carbon economy" in that context, BANK-B-3 questioned whether this would be the main argument used internally. Rather, he returned to the economic rationale: "Well, I think we've just been lucky — or not. You know, since these goals were made, we've fired so many people. Of course, the carbon footprint goes down. That's just a side effect. And it's the same for the buildings. Yes, we had to renovate some of our real estate, because it was time to do so. Well, today you can't renovate keeping the old energy standards:

it's simply illegal! Also, all the new buildings are following the latest standards. So, there are reductions, obviously. But okay, we're now pushed much more to use videoconferencing so that we don't travel as much. Now, is that because of the CO<sub>2</sub> or because of the costs?"

The business opportunity narrative has not expanded beyond AM. Their internal selling narratives use:

- Great business opportunities: "Sustainable investing is now 'on steroids'.
   There is hardly a Request For Proposal that doesn't ask you how you apply sustainable investment criteria if you cannot answer, you're done, and climate change is one of our main themes."
- There is also the risk aspect: In the context of integrating climate changerelevant aspects into research and analysis because this is a "good way to estimate how well a company is prepared for the future" and, hence, also a way to minimize "risk in the portfolio for the client" (BANK-B-5).

Given that the AM division is very proactive, producing white papers, providing research and analytical support, as well as training, the organizational attention given to climate change by the AM division remains high. But despite this fact, the "business case" narrative created by AM has not been able to extend sustained attention much farther: "For example, within the Wealth Management division, there are still a lot of people who think that you can't make money with it, that this is philanthropy. We need to make them understand that they should not look at those types of investments as something separate, or that these products have a lower performance. It is good business. I think some of it has already landed with our product development teams. I hope" (BANK-B-2).

To conclude, while the overall CSR governance structure seems to be sophisticated and comprehensive, they focus mainly on integrating climate change remains in the area of risk, operations and AM, whereas those structures do not necessarily spill attention over

across other divisions. BANK-B-3 elaborated: "No, we're quite siloed. Everybody is doing their thing. They don't collaborate across divisions; they all have different KPI's. So, there is not much cross-fertilization".

All of this reveals that climate change is "contained" within the existing attentional structures and communication channels and the vast majority of transactions at the bank do not take any aspects of the subject into account. As the predominant language within those existing attentional structure is *economic*, CC also gets translated into economic terms as financial risk, cost-saving or business opportunity.

### 5.2.3 Stage 3: Response Repertoire and Organizational Outcomes

BANK-B updated its direct CO<sub>2</sub> emission reductions target in October 2018, stating that it aims to set quantitative targets to reduce group-wide greenhouse gas emissions and the environmental impact of their operations by 75%, compared to 2004, and to use only renewable energy by 2020. Their corporate environmental programs include investments in sustainable real estate and efficient information technology, energy and water efficiency, paper and waste reduction and recycling, the use of environmentally friendly products (such as renewable energy or recycled paper), business travel and employee commuting. The bank also engages with their suppliers to reduce GHG reductions.

There is no evidence about any further integration of climate change onto other corporate functions, with the exception of members of the CSR-OC, where KPI's are also linked to external CC engagement like the participation in TCFD working groups or reporting through CDP.

On the business side, the bank has launched a Climate Aware Fund, is now offering a Sustainable Property Fund and started to engage in impact investing in 2018. That year, the bank also reported that 35% of the assets they have invested for clients were in alignment

with sustainability criteria and in accordance with CDP, whereas 95% of the directly managed assets were screened for climate change impact. That year also, the bank's Asset Management group was awarded an A ranking from the CDP — the third year in a row. In this area, the integration of climate change is truly comprehensive, including individual targets for managers in relation to sales of CC-relevant products, generic training for all staff, specialist training for experts, and a very active research department, which produces a number of internal guidelines and brochures for clients. Even though this is impressive, AM is by far the smallest business division in terms of operating profit and personnel.

Since 2018, the bank has formalized guidelines on environmental factors and responsible investment, which is being applied within AM and Wealth Management.

Additionally, compared to BANK-A, it has formalized a clear, somewhat more progressive exclusion policy on coal as it withdraws from mining projects if their strategy is not aligned with the 2°C target, severely restricting lending and capital-raising activities for the coal mining sector, and not supporting coal mining companies engaged in mountain-top removal coal mining (MTR) operations (see Appendix A).

With regard to governance, it was confirmed by all interviewees that attention to climate change does not reach most of the company through existing structures, but rather attention is contained within specific parts of the organization.

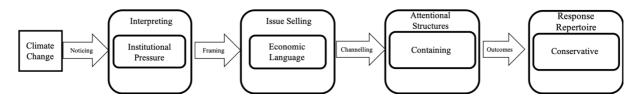
Nevertheless, the bank's AM division is quite proactive in producing internal and external documentation and communication on the topic of climate change, such as white papers and investor's handbooks, but also regularly updated CC statements and a CC framework. These generate attention outside the company. The bank is also actively engaged with external stakeholders such as the Task Force on Climate-related Financial Disclosures (TCFD), is a member of the Institutional Investors Group on Climate Change, is part of the

Dow-Jones sustainability Index and is a founding member of the Carbon Disclosure Project (CDP).

Evidence thus suggests that BANK-B has associated itself somewhat with the challenge of climate change, but it remains quite conservative in its approach to dealing with the issue, insofar as it engages only where it is most obvious and where addressing institutional pressures is unavoidable.

The figure below illustrates BANK-B's journey towards climate change integration.

<u>Figure 5.2 BANK-B – Stages of Climate Change Integration</u>



#### 5.3 BANK-C

Since its creation some 150 years ago, this bank has had the mission to support entrepreneurs and innovation "to create a better world". It reinforces its local Nordic roots and its role in developing the societies in which it operates. One of its mission statements is to contribute to sustainable growth by engaging with clients to support them on their own sustainable journeys. It fully and publicly acknowledges that its largest environmental impact is indirect, resulting from their lending and investment decisions. In 2018, the bank also engaged in a comprehensive stakeholder dialogue about the Sustainability Development Goals (SDG's,) inquiring which focus the stakeholders<sup>7</sup> would like the bank to focus on. As a result, four SDG's were selected: SDG 8 — decent work and economic growth; SDG 9 — industry

 $^{7}$  Mainly clients (of which 210,000 were surveyed), but also employees, NGO's and shareholders.

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innovation; SDG 13 — climate action; and, SDG 16 — peace, justice and strong institutions. However, all interviewees mentioned that climate action received a vast majority of all votes and, hence, was now the guiding principle for the entire environmental strategy of the bank.

# 5.3.1 Stage 1: Climate Change Interpretation

A relatively large number of senior and top managers (ten interviewees) at BANK-C was interviewed; a homogenous picture of an interpretation largely driven by moral aspects was found. The reactions ranged from deep moral concern to moral outrage and were coherent, no matter what functions the respondents held.

Referring to the stakeholder engagement with regard to the SDG's, the Head of Sustainability in Group Corporate (BANK-C-3) said:

"For me, climate action is the most urgent [SDG]. The social goals go also in the right direction. But, if we're talking about the sense of urgency and the consequences, this is not the same. And I mean, there is no need of having sort of (an) equal society, if there is no society to live in really. This is what I'm seriously nervous about and to be perfectly honest, I'm not very optimistic."

The Head of Risk and Head of TCFD project group further explained:

"For instance, if you go in and look at the huge difference on global effect between the 2 degrees and 1.5 degrees. I think that people don't know about this, and it's difficult to understand. It's difficult to know if you work with something completely different. I think it's, in a way we need to take this on as a bank, and [as an] employer, we need to inform our staff about [it]. This is really, if you look at how large parts of the barrier reefs will be left if you just compare those two scenarios. If you look at how much land will be affected. And, we're indirectly contributing to this! It's horrendous!"

Unlike BANK-A and BANK-B, with this bank, interviewees had to be prompted about where potential institutional pressures were coming from (pressures such as legislation, clients, or other banks) because none of those seemed to be a priority for them personally. All of the interviewees responded that they feel that in most cases it is the bank trying to put pressure on their clients, legislators and peers, rather than the other way around. However, they all noted that there is noticeable mimetic pressure to implement TCFD since this is becoming the predominant industry standard in terms of reporting.

The bank's Chief ESG Investment Expert Wealth Management (BANK-C-10) described it as follows:

"So, I mean we ourselves are on a massive journey towards [integrating climate change]. And the statement from the bank, and the push from our clients, is that this is the way we have to go.... So now we are on a journey, so we're [farther advanced], and some of the banks are [less advanced], so we're trying to help them now to move. Because we know that the regulation is coming. We know there's demand from the clients, but we find they are not doing enough. And I think one of the main issues for us right now is we are nearly 160 years old, the bank. We have a lot of old relationships with clients and with companies, who we might have to question. So, we will push the clients, or we need to leave them behind".

This was confirmed by all the other interviewees.

Overall, these interviewees confirmed, the bank considers climate change to be a topic that is very high on everybody's agenda in emotional terms. They reported that all of the senior managers were individually concerned about CC.

It can thus be assumed that most of the managers perceive climate change first and foremost in terms of moral pressure. There is also some evidence to assume that institutional pressure from clients and regulators will play out; however, most of the interviewees complained that the pressure is actually not high enough to help them move the BANK even faster towards comprehensive CC integration.

### 5.3.2 Stage 2: Selling Climate Change Using Attentional Structures

Against this backdrop, the first inquiry for the interviewees was to what extent did they think that climate change needed to be "sold" internally, since it seemed to be a topic already high on the individual radars; that was followed by the question of where would those conversations be taking place if needed?

Interviewees replied that conversations about climate change happen at all levels of the company: the Board of Directors is responsible for deciding the bank's sustainability strategy and distributes certain matters to board committees. For example, the Risk Committee leads in terms of overseeing the TCFD implementation process, whereas the

Human Resource Committee decides on measures to be taken within HR to enhance CC integration, and the Audit and Compliance Committee decides on what respective processes and guidelines need to be further elaborated upon. All of the committees then delegate the execution to the TMT and the CEO.

Here, the CEO decides details of the execution of the climate change strategy in line with what the Board has proposed. It was he who decided to incorporate CC goals and targets into the business strategy 2019–2021. The CEO also assigns an operational steering group (Sustainability Committee) to pilot all sustainability activities within the bank and to report on progress to the Board. It is chaired by a member of the TMT and includes senior managers from all divisions, as well as group functions, including group sustainability (CSR group).

As BANK-C-9 reported, the CSR group is currently tasked with coordinating and driving the climate change agenda across all functions, with each head of a division, business area and group function responsible for carrying out the activities set out by the CEO in his CC strategy. As all of the interviewees confirmed, BANK-C is currently undergoing a major exercise upgrading its governance structures in light of its TCFD implementation and also because sustainability (and CC in particular) has become a strategic topic that was integrated into the business plan 2019–2021.

As senior managers, they reported that it is in that context that they engaged in "issue selling" inside the organization. However, since the topic became a strategic focus of the bank in 2018, the main challenge was not to "sell the issue" in order to bring it to people's attention, but rather to help people understand how they can contribute to mitigating climate change in the context of a bank. This can be particularly difficult for business functions as they are deeply focused on financial arguments.

BANK-C-4 explained how he tries to get buy-in from managers in other business lines:

"I think that the most important part and to really to get all the business on board, make them understand that it's not a reputational risk purely. It is a financial risk and their client managers are responsible. Yes, you need to talk their language. For some of them, if the only reason was, 'you'll sleep better at night', then they as you said, they would probably not care. But if I can get it down to the financials, then they listen and hey, it's coming from the Board. It's part of our vision to go green, and then also there are financial effects. Then they buy it."

Hence, all of the respondents mentioned that they were heavily engaged in translation activities; for example, to transform the moral pressure they personally perceived into something that would be easier to grasp within the business context by managers and staff. When I asked them to provide me with more examples or arguments they would use, most of the interviewees indicated that in the majority of cases, they would use a combination of arguments: relating climate change urgency to the purpose of the company, in order to create emotional buy-in, and combining this with economic arguments to accelerate the integration. BANK-C-3 explained:

"When I talk to people, I remind them that this is the top out of our five top prioritized areas to come forward in our vision 2025. This is one of the five, so it's very clear, and that we are talking about commercializing sustainability. Of course, we need to talk about being sustainable, or our direct and indirect impact and our role in society, but we also have to talk about: We're going to make money on this, and we need to make money on this in order to stay competitive. That's how we will mainstream it in the bank "

On the moral narrative utilized, BANK-C-10 elaborated:

"So, as a bank, we also get a lot of bashing, which we deserve, for creating really not sustainable products and putting our clients at risk, for sure. But I also think that actually, at least the younger generation realizes that it's not about the money side. We have a huge impact. What do we invest in and what do we finance? And we can make that shift. And we can change the direction. I think what we see is there are quite a lot of people who really get a boost in their work, because they see a new purpose in what they're doing. And that's fantastic. When you meet those people, who are really getting a new engagement with their job, because they know they can be part of something bigger, that they want to be part of (it). So, if you're asking me about how I engage internally, that's what I tell those young people: It's about making a difference. We're also warriors against the climate crisis."

The communication channels that they would use to "sell" mostly included cross-divisional expert groups working on research (metrics, KPI's) and particular division-specific

implementation processes, but also lunches and coffee breaks that the respondents would use to connect with parts of the company they personally know, but do not necessarily work. All of the interviewees also reported that they engage in training and awareness-building activities, as they felt that in some parts of the company, within corporate functions (for example within finance and reporting) in particular, the idea of integrating climate change is fairly new, thus the teams needed particular help in grasping the scope and creating roadmaps. BANK-C-9 explained:

"Historically, there hasn't been this kind of strong governance network granularity, so that it goes all the way down and defines what is needed to make the whole machine tick. Now all functions have a decision that have to take on sustainability into their regular business matters. We started up in December (note 2018) to have a couple of meetings to really define what should be their roadmap. It shouldn't be, really, our role, but we need to help them understand what sustainability is and advance what is required to run sustainability in a professional and structured manner. Once you have that, compliance can go in and verify, what they are doing and what they're supposed to do, and everybody can get their accountability from everybody, in respect to this area that we're going to transform."

Some other functions are far ahead in terms of climate change structures, for example IT. As BANK-C-9 stated, "On the IT side, for example, they've come pretty far in operational integration of sustainability aspects in how they work. Because they have people who are committed and interested in it and have been into this for a while". BANK-C-3, BANK-C-4, BANK-C-9 and BANK-C-10 reported to be engaged in regular keynote presentations to build awareness, but also specific keynotes to target specific aspects of CC integration. BANK-C-4, for example, reported that she would be currently running a "road show" across all business divisions to explain the TCFD framework and make managers and staff understand to what extent the bank will need to collect additional information from all clients in order to follow the guidelines. All of them also reported that they, along with most of their senior colleagues, were now either facilitating or participating in different workshops in order to build sufficient intellectual capital on climate change that "everybody in the bank would understand how this applies to them" (BANK-C-10).

It is therefore demonstrated that at BANK-C, climate change does not need to be sold as an issue worth attention, since it is commonly recognized as a strategic priority. Rather, concrete CC solutions and approaches need to be transmitted across the organization, which is achieved mostly by anchoring the message to the company's mission or the moral intensity of the issue, using moral language to pragmatic business-related application expressed in economic language. Part of the conversations — those that address direction-setting and oversight — happen inside the current existing governance structures. But BANK-C is currently expanding those structures significantly by creating specific new teams and setting up processes and procedures to incorporate CC into all core business and corporate processes. Therefore, it can be considered that the current governance structures are expansive.

## 5.3.3 Stage 3: Response Repertoire and Organizational Outcomes

With regard to their own direct emissions, BANK-C is not GHG-neutral because they do not offset unavoidable emissions. Its CO<sub>2</sub> reduction target is to lower emissions by 20% by 2020 compared to 2018; however, the bank has upgraded all its buildings to state-of-the-art energy standards and has comprehensive travel and commuting policies, as well as a number of guidelines and policies aiming to reduce individual and organizational energy consumption and CO<sub>2</sub> emissions.

With regard to implementation on the business side, the Board and TMT have taken a number of strategic decisions as a result of the climate challenge in 2018. For example, BANK-C decided to lower its exposure to coal producers in both its credit portfolio and fund holdings by divesting. The ambition is also to grow the green loan portfolio consisting of assets contributing to lower carbon emissions, as well as develop new products such as green mortgages supporting energy efficient housing. With the integration of sustainability into the business model, the bank is aiming to develop new sustainable products and services and enhance corporate advisory capacity to capture opportunities in a transforming energy sector.

Already, BANK-C offers the largest variety of climate change-relevant products compared to all of the other banks. Currently, BANK-C is also working on integrating CC into their core business processes by developing due diligence processes and mainstream their analysis and asset allocation. As a result of enhanced due diligence, the bank has already partly adapted their pricing models to reflect the carbon exposure of their clients through higher risk premium. As BANK-C-1 explained:

"My understanding of all the changes is that [CC] is definitely a focus area. And now it's also included in the business plan for the next coming three years, and also in the more long-term visions that we have to 2025. And for 2019–2020, we have three specific initiative areas [incorporation of CC into strategy, risk management and set-up of a governance structure]. And at the Board, these focus areas were presented, and they decided also on the KPI's for those areas."

#### BANK-C-2 further mentioned:

"One of the KPI's which I think is very strategically important is that it's part of the scene for this, it integrates sustainability KPI's into incentive programs for senior managers."

Besides aiming at comprehensively integrating climate change into core business processes, the bank is currently working on building organization-wide intellectual capital and is working on disclosure, risk and data management.

Thus, it is proven that the bank has gone beyond just setting environmental goals and objectives in the business plan in order to demonstrate a level of commitment; it is making sure that the organization is focused on climate change by converting CC to specific targets that are included in the key performance objectives at senior management levels.

BANK-C is also proactively engaged in promoting climate change implementation in the banking sector at large. Its head of the CSR group is a member of the Technical expert group on sustainable finance (TEG) assisting the EU Commission in the development of a unified classification system for sustainable economic activities, an EU green bond standard, methodologies for low-carbon indices and metrics for climate-related disclosure. BANK-E-5 explicitly stated:

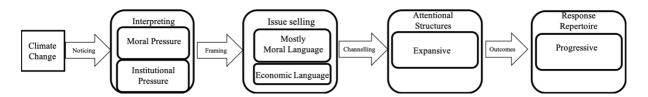
"Since we know that we're just a very, very small bank, globally we can't do this ourselves. That's why we're actually putting efforts into educating other banks or other institutions throughout the world, without seeing any payback from it. I mean, not any short-term payback, but in the long term we see that we will gain from this anyway."

It is also trying to influence its clients, holding them accountable and trying to advise them on their climate change journey.

It can be considered that BANK-C has not yet entirely integrated climate change on all levels but is putting in a sincere effort to get there. It has definitely associated itself with the challenge of CC beyond "business as usual" and is taking a progressive approach to integrating CC in an overarching way.

The figure below illustrates BANK-C's journey towards CC integration.

Figure 5.3 BANK-C – Stages in Climate Change Integration



#### 5.4 BANK-D

BANK-D, the smallest of all banks analyzed here, was selected to be part of the sample as it represents a positive extreme case for comprehensive and holistic climate change integration. The bank's mission is to make money work for positive, social and environmental change. It was founded in 1968 as a Foundation and has not been changed in terms of its legal structure, even after being granted a banking license in 1980. BANK-D now has a history of over 40 years of sustainability and impact investing. It is a leading expert in sustainable banking worldwide; it also runs on a different business model compared to the other banks researched here. Namely, its main purpose is to maximize sustainability and not profit. Therefore, the bank measures not only risk and return, in order to demonstrate performance, but also its

sustainable impact as a key performance indicator. It also has a strong commitment to transparency and accountability as a core value. It is one of the first banks to measure the CO<sub>2</sub> impact of its portfolio, however not yet comprehensively. In 2018, the bank applied the PCAF methodology and assessed around 68% of its loans and funds' investments with the result that, due to the manner in which it invests, it has avoided 985kt/CO<sub>2</sub>. Even though it is smaller in size than the other banks in the sample, it offers a wide range of sustainable products. The bank is also present in four other countries, making it comparable in range to BANK-C. Its vision is to use finance to change the world, but equally to demonstrate that financial services can also be managed differently: in other words, BANK-D wishes to change finance

# 5.4.1 Stage 1: Climate Change Interpretation

Given that BANK-D is a mission-driven organization, it was not very surprising to find that all of the interviewees, as well as all of its stakeholders (STK-B 1-3) who regularly work with BANK-D, confirmed that values and moral concern are the main drivers for everybody working there, from the CEO to "the person cleaning the toilets" (STK-B-2). It therefore comes as no surprise that an issue such as climate change is mainly perceived as an ethical problem, with a very high moral intensity perception by the employees of the bank. BANK-D-2 mentioned:

"Climate Change is a hugely important question that needs to be addressed with a real, real urgency. And I think, you know, it's difficult to find many other sorts of more important existential threats that we face. I mean, I have just been reading Steven Pinker. And he was talking about, you know, climate change and nuclear weapons. If you look at it from a very rational, scientific perspective, those are the largest sorts of existential challenges that we that we face. So, I see it as absolutely critical, as hugely important, hugely relevant, and part of my everyday life, working or non-working. And I think there's sort of, there's never as much urgency as you want to, that you want to see."

Statements by BANK-D-2 and BANK-D-3 went in exactly the same direction, such that climate change was something that was on their minds every day, and that they were very concerned personally about the magnitude of consequences that "we don't even imagine" (BANK-D-3). This was also one of the reasons why they chose to work at BANK-D, because they felt they could contribute there and make a positive impact by financing projects that would contribute to fighting CC (BANK-D-1). It was also mentioned by STK-B-2 that people who thought differently or did not share this purpose as a main driver, would most likely not be hired to work there.

Thus, there is strong evidence that overall, the interpretation of CC within the bank, and its motivation to act, are driven purely by moral considerations rather than institutional pressures.

## 5.4.2 Stage 2: Selling Climate Change Using Attentional Structures

As the bank is steered to generate a positive impact, all of the collaborators are already well engaged with climate change, using a variety of attentional structures and existing channels. One critical role is played by the Supervisory Board, which still includes the founders of the bank. It is this Board that holds up the mission and vision, while the CEO and the two other TMT members (a Chief Operations Officer and a Chief Risk Officer) share the responsibility for strategic development, alignment and ensuring the delivery of the organization's goals.

Given its focus on sustainability, climate change has always been a focus area for the bank (BANK-D-3) and the TMT, even though a proper "issue selling" is not necessary as it is "in the DNA" (BANK-D-3) of the TMT and senior management who describe it as a major crisis and urgent threat to humanity. Rather, it is the difference in focus from the executive point of view about how to constantly innovate solutions year by year.

It is thus not surprising that the bank does not have a separate CSR department or committees, as the sustainability and social criteria are integrated, by default, into all its transactions. However, to keep climate change as a main focus for everyone, and to allow for continuous learning and encourage critical thinking, the BANK regularly organizes town-hall events for the whole staff. In these events, the bank invites keynote speakers from different areas, such as NGO's, as well as experts who work with governmental and non-governmental organizations on the topic, in addition to politicians, artists and academics (BANK-D-2). Those town-halls take place every two months and serve as channels to communication and encourage critical thinking.

Furthermore, to help guide senior management and staff in their daily transactions, the TMT and senior staff issued two comprehensive documents, one delineating the "bank's business principles" and the other its "minimum standards". The "business principles" determine both the internal business conduct, the relations with the outside world and all employees have the duty to comply with them. Respect for the environment once again is mentioned here as an "integral aspect of all BANK-D's activities". The bank strives therefore to continuously improve its environmental performance by minimizing negative and increasing positive impact. Hence, minimizing impact on the environment — no matter if it's part of a business transaction or their operations — is one of the guiding principles to be followed. The "minimum standards" apply to any financing of investment transactions and aims to help the bank's relationship managers and fund managers assess credit and investment proposals. The standards consist of two parts: the positive approach, for example, to finance or give credit only to sustainable companies and sectors, and the negative approach, which can be compared to the blacklists (sectoral guidelines) that we have seen at all the other banks. In terms of climate change impact, BANK-D has the most exhaustive exclusion criteria, by far, excluding any engagement with companies engaged in the production or retail

of fossil fuels (coal, oil and gas), or any energy-intensive industries that do not disclose their GHG's and do not have a sound program with clear targets for their reduction. No business can be done if it does not comply with these minimum standards and business principles, and there is a control mechanism to ensure compliance.

Since climate change is integrated into all corporate and business functions, and is included in all of its transactions, it is also not surprising that BANK-D does not work with individual environmental performance targets for senior staff, or with its workforce as a whole, since environmental performance does not have to be incentivized: it is its core business (BANK-D-3). What is incentivized, however, is innovation in relation to increasing impact. This can be done through suggestions for improving operational efficiency or through product and service innovation.

It can therefore be concluded that the bank remains within its value-driven narrative when it talks about climate change, using moral language rather than economic language to attract attention. Its attentional structure comprises formal governance structures, as well as cross-organizational, theme-dependent communication channels to regularly amplify the focus of attention and increase overall attentional engagement with the topic, throughout the entire organization. It has comprehensive policies and standards, but also provides platforms for critical exchange, in order to allow the integration of discussions not only about economic but, in particular, moral aspects of all relevant transactions. Thus, it supports the bank's leadership in effectively steering the organization in line with its corporate values.

# 5.4.3 Stage 3: Response Repertoire and Organizational Outcomes

As mentioned before, BANK-D works with an entirely integrated model with regard to sustainability and banking. It finances and lends money only to companies that generate a positive impact for people and planet, and by default it incorporates ethical aspects, such as mitigation of climate change, into all its daily business and non-business principles. It is not

surprising, then, that it generates an overall positive impact in mitigating CO<sub>2</sub> through its business and operations, or in other words: it is CO<sub>2</sub>-negative as a business. It has entirely integrated environmental aspects into all its transactions, business and corporate. Furthermore, the bank is also extremely active in promoting sustainable finance by actively engaging with legislators and non-governmental organizations. It pushed the Dutch and French governments to take a proactive role ahead of the CoP in Paris, and it collaborates with numerous other banks in trying to elaborate principles for responsible banking and the PCAF methodology to allow for transparent reporting of impacts. Thus, BANK-D demonstrates that it does not only associate itself with the challenge of CC, but that it also takes a proactive role to transform society, regulators and its peers to act against CC.

The figure below illustrates BANK-D's journey towards CC integration.

Climate Change Moral pressure Interpreting Issue selling Attentional structures Expansive Transforming Transforming

Figure 5.4 BANK-D – Stages in Climate Change Integration

# 5.5 Emerging Patterns and Approaches

Each of the four banks has been confronted with the issue of climate change in the last few years and has reported a different level and type of pressure to act on upon it. While BANK-A and BANK-B reported that they only observed institutional pressures (though to a different degree), the attention to CC on the part of BANK-C and BANK-D was mainly driven by the realization that CC is a moral issue that needs to be addressed accordingly. This has led to the use of different languages and "selling techniques" that were applied to promote the issue internally.

In the case of BANK-A, which perceived only a low level of pressures, and only in terms of an imminent threat by future regulation in the area of risk management (coercive pressure in the neo-institutional terminology), the issue selling was conducted with the aim to keep this particular pressure under control. Other than this, climate change was described as a natural phenomenon, or as a newspaper headline issue, rather disconnected from sphere of influence and interest of the bank. As a consequence, managerial attentional efforts were mainly directed towards risk management.

Most of the conversations inside the organization used scientific language, placing the focus on "facts and figures" about climate change. Economic language was solely used in order to operationalize climate change within the context of risk, for example by focusing on the costs of damages that will be caused by CC. Because the topic was only considered worth managerial attention within the context of risk, attention was mainly channeled through existing risk governance structures and remained constrained by those. On the business and operation side, CC was not considered a top priority, hence the bank engaged in trying to deflect any potential demands (from clients or stakeholders) to avoid distraction. This organizational response follows the tactic of avoidance as a response to institutional pressures (Oliver, 1991). She defines avoidance as an organizational attempt to preclude the necessity of conformity, in particular by concealing non-conformity behind a façade of acquiescence (Oliver, 1991), which quite accurately describes BANK-A's lines of action. Through rudimentary integration into the existing risk management system and repurposing of client demands towards other social issues, BANK-A pretends rather to accept the institutional demand and then seeks achieving conformity.

A slightly nuanced picture was presented by BANK-B, which also only reported observing institutional pressures. However, in its estimation, the level of pressure made climate change a far higher priority compared to BANK-A and triggered a different

organizational response. This is even more astonishing, as both banks are literally neighbors with headquarters in the same city. What could explain this difference in attentional engagement is the difference in engagement with the topic on the part of their Boards and TMT's? Unlike BANK-A, at BANK-B it is the Chairman of the Board who actively engages with the topic in a regular and formal way: for example, during town-halls, in his public appearances and in his speech to the Annual General Meeting of Shareholders. Even though for the bank as a whole, there is little buy-in for the moral aspect of the issue, with few linking it to its mission as the Chairman attempts to do, the TMT and senior manager level at the bank conceive it as existing coercive pressure stemming from clients and potential industry standards like TCFD. Given the tone from the top, the client pressure and participating in setting industry standards, the organization does not engage in avoidance strategies and rather seeks to balance out inconsistencies of divergent institutional expectations — the most predominant being the need to appease the shareholders. Against this backdrop, it was to be expected that, here as well, the predominant language utilized would be economic as it is the language used by the shareholders. Using this type of language can be seen as a compromise between the need to adhere to the tone of the top and the espoused values of the bank on the one hand, and the executives' daily reality on the other one that revolves around profit and loss.

But here, what can also be seen in both cases is, that the utilization of economic language does not really help in generating and distributing attention across the organization. This has clearly been demonstrated by the governance structures and corporate response repertoire put in place at BANK-A and BANK-B: both of them were entirely siloed. This tactic is entirely coherent with the neo-institutional logic of organizations responding to respective pressures in order to maintain legitimacy. If the pressure is not addressing the legitimacy of the organization, its "license to operate" at large corresponds to the logic of the

theory that organizations don't need to go beyond addressing the specific pressure by the respective department, function or process and organizations.

There is, however, another aspect that can also explain the expected neo-institutional responses by both banks. Very much in line with the recent findings on selling social issues (Mayer et al., 2019), we can see here that the use of economic language creates an emotional distance from the topic, depriving it of salience. Without this moral undertone, there are no moral emotions, no imperative to act and climate change stays at the level of institutional pressure as yet another a risk or business opportunity, like many others on the market. As such, it will receive the usual response by the organization: the issue of climate change will be picked up and remain contained by the department typically dealing with this type of pressure because this seems to be the most effective way to respond while encountering the lowest comparable transactions costs. And nothing more.

The degree of sophistication to which the response will be operationalized within the respective functions: here risk management and business lines are also then further monitored and governed and are, of course, dependent on the overall sophistication and professionalism of the respective organization. In our sample, BANK-B is one of the world's leading banks. Hence, the resources and governance structures that it already has available are accordingly high and professional, and relatively low transaction costs would be involved in "throwing" another topic into the system. Also, the clear mandate from the top does not "allow" BANK-B to simply ignore demands, which may explain why its response repertoire is different compared to BANK-A.

Compared to those first banks, the last two, BANK-C and BANK-D, have initiated their climate change integration efforts starting from a different pressure interpretation. At both of these banks, it is the Board and the TMT, as well as a critical mass of senior managers (in the case of BANK-C) that interprets CC as a deep personal concern, a moral issue with a

high level of intensity. For BANK-C, however, client and regulatory pressure is also noticeable, very much in line with BANK-B's perception, but as all the interviewees reported, those pressures were not considered to be the main drivers to action. Even though for both banks (C and D), engagement with CC is considered as a question of legitimacy, they construct the concept of legitimacy rather from within, building on corporate values that stem from internal collective beliefs about the role that each bank has to play in society and not so much as a response to external institutionalized mechanisms.

In line with this logic, it is not surprising that language and tactics deployed at both banks to sell the issue is rather value focused and, hence, different from the language used by banks that were responding to institutional pressures. At both Banks C and D, moral language (linked to the bank's mission) prevails to sell the issue and generate attention across the organization. This seems to resonate with most managers, as all the interviewees there named it as their main driver for action. Economic language is also used, however it is used rather to help operationalizing climate change at the functional level (being used inside operational channels), than to create and sustain managerial attention. What we see as a consequence is that the topic of CC gets integrated on a much wider level and also somewhat faster across the organization compared. As BANK-C-10 reported, people get a real energy boost knowing that they are working for a purpose. The evidence suggests that this also increases their willingness and motivation to collaborate in cross-divisional groups which allows for new attentional structures to emerge as they appear to be necessary with new emerging challenges that result from the engagement with CC in a focused way.

BANK-D, which is on the other side of the spectrum, mainly operates in line with a values-based purpose, where moral interpretation and framing prevails across all transactions and structures. Both moral and economic language is utilized even at operational levels at the same time making those levels also parts of the value management system. This proves that it

is possible to entirely incorporate a value system into all levels of company. It also shows that once the incorporation is completed, additional governance value structures can be reduced, and the organization can be run on principles and standards. When the integration of values into all daily transactions is the norm, management and control structures take charge of the value aspect of a given issue at any given time and specific committees, CSR functions, KPI's, or incentives are no longer required. This frees-up the need for managerial attention to focus on how climate change is dealt with inside the organization and allows managers to focus on, and engage in, spreading its values further outside of their organization through engaging with all its external stakeholders.

# 6 DISCUSSION

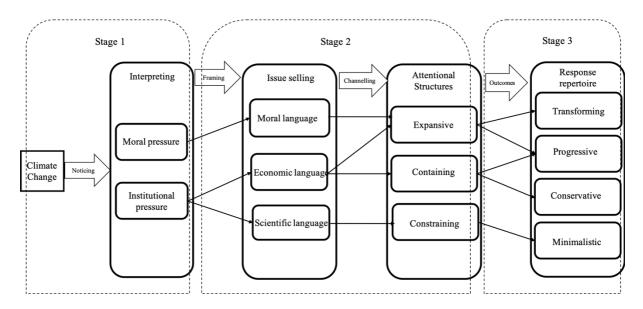
In the previous sections, discussion has focused on how the managers of four cases organizations interpreted and engaged in selling climate change through the attentional structures that they either found or created, so they could generate and sustain attention to the topic or ignore it. In this section, a grounded model of the processes and stages informed by this analysis will be presented, in order to theorize how banks respond to climate change.

The model builds on the conceptualization of the theories used as lenses to understand why and how organizations respond to climate change, in particular when they are not directly exposed to its outcomes. The model builds on the conceptualization in the neo-institutional (DiMaggio and Powell, 1983; Oliver, 1991) and moral-psychology (Jones, 1991; Haidt, 2008) issue selling literature (Dutton and Ashford, 1993; Dutton et al., 2001; Mayer et al., 2019) of how corporations respond to environmental challenges, and in particular to climate change, by strategically channeling their attention to the issue in ways that allow them to best to respond to the given pressure. While the studies grounded in neo-institutional theory

demonstrate that corporations may vary in responding to environmental demands depending on the external constituents exerting the pressure and on the available institutionalized response repertoire of the department that is in charge of responding to this constituent (Dalmas and Toffel, 2008), thus limiting managerial discretion to existing logics (Levy and Kolk, 2008). Moral psychology literature, on one hand, builds on the motivational power to act upon a moral issue such as climate change (Leiserowitz, 2006; Nilsson et. al., 2004; Vainio and Paloniemi, 2011) as a consequence of moral emotions (Haidt, 2008). On the other hand, moral emotions not only generate a moral pressure to act, but also motivate individuals to collaborate (Mayer et al., 2019), which in organizational settings allows them reaching beyond institutionalized frames and patterns (Ibid.). Finally, the attention-based view of the firm, or ABV, view explains that companies attend to environmental challenges, in particular CC, and provide strategic responses when they consider the issue to be sufficiently critical to justify managerial attention to the issue, for example because the respective organization was directly impacted by CC outcomes.

The model here builds on these findings by providing a multi-stage perspective highlighting potential alternatives in the corporate climate change response repertoire. The findings of the four cases suggest that the response repertoire is dependent on a number of different factors: the initial interpretation of the issue; the language it is subsequently advocated; and, the communication and attentional governance structures that are being used to spread attention. The model takes this into account, and provides a more granular theoretical explanation, for the variety of responses observed.

Figure 6.1 A Multi-Stage Model of Corporate Climate Change Integration in a Low-Salience Industry



In the model, the corporate response process starts with awareness of climate change as an issue that requires managerial attention. Research suggests that the interpretation of CC as a critical issue varies widely, depending on the prospective impact of the climate on the business operations, so to speak (Galbreath, 2011). As Galbreath (Ibid.) evoked, this may be linked to the fact that climate variability tends to be regional, and thus the impact and response can be expected to be particularly pronounced in those industries with some level of dependency on the ecosystem around them and the ecosystem services that may be affected by climate-related extreme weather events and their impacts (Hoffman, 2005). This draws on a vast stream of research in the area of ABV investigating the role of critical events on managerial attention (for an overview see Hoffman and Ocasio, 2001) which explores and explains why, when and how external public or physical events attract managerial attention and generates a strategic response. However, none of those criteria applies to the phenomenon of CC in the banking sector. Banks barely feel any direct physical impact of CC because strong weather events that might physically affect a bank's headquarters are still scarce.

Moreover, CC, per se, is not yet a true risk for a bank's assets, as climate change risk is

currently not discounted by investors the same way. There are currently no major public critical events targeting banks in the context of CC. Awareness is therefore not necessarily triggered by ecosystem constraints that the company finds itself in (Galbreath, 2011) or by direct physical impacts (Pinkse and Gasbarro, 2016) or media coverage. Given the lack of direct physical impact, CC can only be considered as critical issue, if it is translated into some other pressure that managers interpret as relevant within the organizational context (Dunn, 2002; Kolk and Levy, 2004).

The findings of the four cases suggest that the initial stage of awareness is based on the interpretation of climate change as a pressure to which to respond, whereas the managers interviewed offered two alternative interpretation categories: CC was either viewed as moral obligation or institutional pressure. Both alternatives were in line with current research findings in the area of ethical decision-making and CSR (Barnett, 2001; Haidt, 2008) and institutional theory and CSR (Jennings and Zandbergen, 1995; Bansal, 2005; Orsato et al., 2015).

Institutional pressures, such as mimetic, coercive or normative pressures, have been shown to be drivers for corporate sustainable action (Delmas and Toffel, 2008) and in particular climate change mitigation (Orsato et al., 2015). In the sample, these were coercive pressures stemming from growing client demand for CC-relevant products, but from also some awareness of potential regulation risk, as well as mimetic pressures influenced by voluntary initiatives such as TCFD recommendations, but also CDP.

What needs to be highlighted, however, is the fact that contrary to previous empirical studies which focused on differences in corporate responses to a given external trigger (for example, in the oil industry: Levy and Kolk, 2002); in the sample, the perception of climate change as institutional pressure was already not uniform across the organizations. Only two banks (A and B) reported to derive their strategic adjustments from the need to respond to

coercive mechanisms. Alternatively, BANK C noticed only coercive influences but — in line with BANK-D — did not derive their motivation to act against CC from this pressure.

Those organizations reported that it was rather the moral imperative stemming from the moral intensity of climate change that demanded the organizations find strategic responses, in order to comply with their organizational mission and maintaining the license to operate within society.

This is in line with several empirical and theoretical studies in the area of ethical decision making. These studies have suggested that moral evaluation increase the willingness to mitigate climate change (for example, Leiserowitz, 2006; Nilsson et al., 2004; Vainio and Mäkiniemi, 2012; Vainio and Paloniemi, 2011). Further, it has been shown that people who perceive CC to be a moral issue have significantly higher levels of concern about CC and greater risk perception; they perceive themselves as having greater self-efficacy to act against CC than those who did not perceive CC as a moral issue (Markowitz, 2012). This very much mirrors the findings from this study, where all the managers who reported a moral obligation to act against CC also described the phenomenon as one of the greatest, most pressing challenges that humanity will face, or is already facing; hence, it is a morally intense issue.

Given that neo-institutional mechanisms do not provide an appropriate explanation for all the findings in this study, the model offers two entry points on the journey to corporate climate change responses: moral and institutional.

Once firms interpreted climate change and created awareness, the question remained as to how attention regarding the issue could be spread across the organization. As the model shows, the way managers framed the issue in order to create buy-in with other managers not only impacted existing patterns of organizational attention, but also potentially changed attentional structures. That is, the nature of the language used by the actors to jointly attend

and engage in the issue of CC influenced the arenas where the discussions were happening, as well as the frequency in which communication channels were used.

The main discrepancy in creating awareness about the critical nature of climate change was observed between scientific language and moral language. Firms that assessed CC as a scientific issue were those that used only a fraction of the potential attentional structures that existed within the company, whereas those firms who described CC as a morally intense issue and stressed the organization's duty to act upon it not only utilized all available attentional structures, but also engaged in coupling them, in order to align them and, additionally, to create new ones.

In this sense, the use of moral language created a positive feedback loop. Through the exploitation of all possible attentional structures, the firm increased attentional engagement with the issue, including its moral dimension, which then triggered even more channels and structures which were created to address the subsequently appearing dimensions. Starting at the top, the channel structures subsequently grew down and were horizontally and vertically coupled among different streams to increase cooperation.

On the contrary, none of this was observed in the banks that framed climate change as a scientific or economic problem. Here, the attentional structures remained untouched and to some extent even ignored. The banks were focusing on responding to a very concrete institutional demand by activating only the existing institutionalized patterns that they had readily in place.

Thus, the model provides support for the effectiveness of the use of moral language compared to economic language in order to sell social issues within organizations and to generate managerial attention (Mayer et al., 2019). It also highlights the effects of moral engagement on collaboration as demonstrated in the study from Tenbrunsel and Messick (1999), which found that individuals engaged more cooperatively when they viewed an

organizational policy through a moral rather than a business frame. These findings suggest that using economic language may activate an economic schema which could result in the same managers being less likely to "do good" (Mayer et al., 2019) and focus rather on transactional exchanges only.

It is, furthermore, also in line with the assumption that morality is a key driver of human behavior (Haidt, 2008) and that is also has a major impact on decision-making in business context (Frey, 2010). Last but not least, the grounded model builds on the concept that moral intensity is a strong predictor of moral judgments and behavioral intentions to address the issue (Barnett, 2001). As moral intensity increases salience, and triggers moral emotions (Frey, 2010), it sustains the attention to the issue at hand (Munoz and Dimov, 2014).

The last part of the model reflects the differences in response repertoire that the organizations developed as a consequence of their attentional engagement with climate change as a critical issue. These differences mainly varied on the level of corporate areas involved and the depths of implementation within those areas and are in line with predictions grounded in ABV. The more comprehensive the attentional structures, the more sustained the attention to a given issue and the more integration of communication channels — top-down but also vertically — resulting in a more comprehensive integration of the given issue within the corporate strategy. The reason is that comprehensive attentional structures not only increase cooperation, but also ensure alignment across the organization about how the integration of the issue should be managed, as it provides sufficient opportunities for actors to engage with each other to generate common understanding of this environmental phenomenon. This can lower the potential of cross-divisional conflicts and avoid inefficient framing contests (Kaplan, 2008; Ocasio et al., 2018).

Finally, what could also be observed is that the banks that framed climate change in moral language were more proactive in influencing external stakeholders to engage in CC mitigation and adaptation as well, indeed going so far that they themselves contributed to increasing institutional pressures, on themselves and on others, in order to generate an industry-wide movement. Here again some assumptions can be made based on the findings and theories from moral psychology stating that "morality is a key driver of human behavior" (Haidt, 2008). But because motivations and mechanisms that made firms engage externally were not in the scope of this study, further conclusions regarding this phenomenon (see Chapter 8.2) were not able to be drawn.

As such, the presented model offers a holistic conceptualization of different paths leading to strategic organizational responses to climate change, explaining the different stages that influence and explain the variety of the outcomes. Although the concept under scrutiny (CC) and the revelatory four case studies have unique features, it is argued here that the patterns in the model will also provide explanation to corporate strategic engagement to any other grand challenge with a moral undertone and without direct impact on the organization (low salience).

### 7 CONTRIBUTIONS

The current study makes several contributions to theory and practice that will be discussed in the paragraphs below.

# 7.1 Contributions to Theory and Suggestions for Future Research

This dissertation makes several contributions to literature and suggestions for future research.

### 7.1.1 Neo-Institutional Theory

While the existing neo-institutional literature has created many insights into why companies react to climate change by engaging in adaptation and mitigation measures, empirical research mainly focused on industries that are particularly exposed to CC impacts:

Adaptation for example, has been researched as a need to adapt to changing weather patterns that create physical impacts and pose major challenges to firms, since they may not only destroy their assets but also lead to changes in the business environment (Weinhofer and Busch, 2013), leaving firms vulnerable if they are not able to cope with these changes (Busch, 2011). However, the majority of studies in this area (Nitkin et al., 2009; Winn et al. 2011; Pinkse and Gasbarro, 2016) focus on industries and sectors that:

- Rely on specific temperatures and seasonal conditions, such as agriculture (Packardt and Reinhard, 2000), wineries (Galbreath, 2011), and tourism (Giles and Perry, 1998; Harrison et al., 1999).
- Have industrial facilities located in climate-sensitive areas, such as coastal areas and floodplains (Weinhofer and Busch, 2012).
- Or, depend on large-scale infrastructures, such as energy, oil and gas, automobile, and transportation sectors (Van der Woerd et al., 2004; Kolk and Levy, 2004; Pinkse and Gasbarro, 2016).

In the area of climate change mitigation, studies have focused on companies that are particularly exposed to regulatory pressure (Kolk and Pinkse, 2007, Okereke, 2007) or shareholder pressure (Reid and Toeffel, 2009), or can benefit from efficiency gains (Busch and Hoffmann, 2011). As is true for the banking industry, none of the reasons to act on CC is truly convincing when applied to a business that:

- Has low salience in terms of direct exposure to CC impacts.
- Has hardly any efficiency gains to be made through energy savings.

 Has not been targeted by external stakeholders or by regulators as major contributors to GHG emissions.

As such, the present study contributes the neo-institutional literature by selecting an industry that has not yet been fully empirically investigated using this theoretical lens.

Given the absence of major external signals in the scientific, regulatory, political or societal sphere, neo-institutional mechanisms should be strong, since only then the industry can reach legitimacy and stability (Levy and Kolk, 2002). But contrary to this assumption, the present findings suggest, that the neo-institutional case is limited. In fact, inside this organizational field, climate change is not only not univocally translated into one particular institutional pressure by the organizations; one bank does not even recognize any neo-institutional mechanisms being at play at all (BANK-D).

This brings up the question, to what degree neo-institutional theory provides an appropriate theoretical frame to interpret the corporate responses to climate change at all: if the same external factor is not univocally considered to be a threat to organizational legitimacy, to what degree can it be considered as institutionalized pressure as posited by the theory?

It can, but only as long as there is a level of uncertainty in the field, to the degree that the interpretation of the issue can be characterized as a threat to organizational legitimacy.

Legitimacy in the concept of neo-institutionalism depends on the acceptance of socially approved expectations of appropriate conduct and acting upon it.

As long as there is no "mature" institutional field wide interpretation, the question of legitimacy has to be answered from within the organizational institutional context rather than can be subject to a possible objective assessment. This implies that strategic responses rather depend on managerial perceptions of what constitutes a legitimacy threat, and not so much on

some abstract factors, with the result that managers have a relatively high degree of discretion in their interpretation (Oliver, 1991).

Nevertheless, for those who did interpret climate change in line with DiMaggio and Powell's (1983) categories, the pressure has to be interpreted as "institutionalized", as long as the organization considers it a potential threat to its legitimacy. Against this backdrop, the characterization of a socially demanded action as institutional pressure is, to a certain degree, "in the eye" of the organization exposed to the demand.

The present study, however, contributes to this theory by delimiting its application to explain strategic responses in the face of ambiguous, global challenges. Also, and particularly in the case of industries lacking salience to climate change, it encourages a more critical investigation of underlying mechanisms, rather than taking for granted the existence of institutional pressures being at play; that is, as long as corporate strategic responses are observed. Even more pertinent is when strategic reactions go beyond the classic neoinstitutional "response repertoire" as posited by Oliver (1991). In the current study, BANK-C and BANK-D left Oliver's (1991) scale and did something quite opposite. Instead of, at best, "complying" with institutional demands or, in the worst case, applying "avoiding" tactics to escape the pressure, those banks proactively contribute to increasing the pressures on themselves and on other organizations in the industry. Instead of being "victims" of pressures, organizations become "activists", exerting the pressure themselves.

#### 7.1.2 Attention Based View

Further, the approach here answers the call to develop a more dynamic attention-based view on strategic change by examining the role of language and vocabularies used in and between communication channels (Ocasio et al, 2018). ABV, in its initial form, provided a platform to study the role of communication by focusing on the "spatial, temporal and procedural dimension of communication channels to provide attention" (Ocasio, 1997).

By analyzing narratives and investigating the language use within and across channels, a more dynamic perspective is provided here of the communication that highlights the role of communication "in shaping the ways in which organizational actors think and act" (Loewenstein et al., 2012). Language has a central role in communication and influences the way how we attend to issues; for example, specific forms of language tend to steer attention toward particular issues or initiatives (Ocasio et al., 2018).

In this study, one of the four banks (BANK-C) introduced moral language to discuss business-relevant transactions that had not yet been discussed in this way before. Starting at the TMT and Board levels, the organization began to address strategy from a moral perspective by acknowledging the bank's extensive indirect contribution to climate change, but also by recognizing the opportunity to react in line with the corporate purpose; for example, to positively contribute to the development of the societies they operate in. This has led to a significant adjustment of how corporate strategy and subsequent business were viewed and evaluated, resulting in the decision to integrate CC-relevant aspects not only in all core business processes but also across all corporate functions. Furthermore, it created a spill-over effect within the organization in the sense that the use of moral language became part of the professional vocabulary, and subsequently more, new communication channels and governance structures were established in order to create platforms to discuss impacts of the moral dimension and allow organizational actors to create a shared understanding of what CC means for them in their specific context.

This is even more surprising as some previous ABV literature suggested that "if firms lack structures to allocate focus towards physical change impacts, they will either fail to notice or incorrectly interpret climate change stimuli and fail to adapt" (Galbreath, 2011). Findings on adaptation measures in Swiss and Austrian electric utilities confirm this observation, and further suggest that firms with structures to source and process climate-

relevant information are found to be better able to absorb such information and use it to develop adaptation measures (Busch, 2011). Given that BANK-C did not even face direct physical climate change impacts, nor did it have previous structures to deal with the issue, it could be expected that it would fail entirely in terms of engaging the issue, or simply respond to institutional pressures. One possible explanation could be that the introduction of a new language, the moral language, itself generated attention, enabling the company to overcome those challenges and to effectively respond to them by creating new platforms for the new language to be used.

Thus, this thesis demonstrates that language does enable attention to be focused on important issues and that changes in language, or vocabulary, may also shift the strategic agenda, which has been part of the requests for future research posited by Ocasio et al. (2018).

## 7.1.3 Issue Selling

The fact that the use of *moral* language could have had such a significant effect on the organization is also very much in line with current findings, namely that the use of moral language is more effective when the issue described is also framed as fitting the company's values and/or mission (Mayer et al., 2019). In their study, they also found that the use of moral language when referring to corporate values, makes "issue selling targets feel a sense of anticipatory guilt, which drives them to support the initiatives of issue sellers". One potential explanation for why they found support for the mediating role of anticipated guilt, is that emotions have a stronger effect on behavior in response to specific events, which is one of the key concepts from moral psychology (Haidt, 2008). Even though the previously cited study (Mayer et al., 2019) deals with social issues, the arguments can be applied to the context of climate change: given that the consequences of CC will rather be fully visible to future generations, engaging in CC mitigation, and supporting others to adapt to future conditions

today, very much appears like an action of anticipation of the guilt to have previously contributed to the creation to CC in the first place. Hence, this study also contributes to the "issue selling" literature by illustrating that the mechanisms presented in the study by Mayer et al. (2019) possibly also play out with regard to environmental issues, not only social issues. However, in order to provide further evidence, the sample size should be increased and the positive relationship between moral language in the context of CC, as well as the issue selling effectiveness should be statistically tested. Furthermore, some investigation of alternative mediators other than anticipated guilt in that context would also make sense. For example, it is imaginable that the fear of potential consequences of CC is an equally effective driver of pro-environmental behavior as anticipated guilt.

#### 7.1.4 Governance Ethics and Attention

Another important aspect of this study is how it refines our knowledge about corporate governance and business ethics by building on foundational work on governance ethics (Wieland, 2010, 2014). Governance ethics builds on the notion that a firm is a network of contracts which constrain individual behavior and clarify individual expectations in order to facilitate cooperative behavior and access to resources.

Actions that happen within the firm are, therefore, always of transactional nature. Those transactions can be of a purely economic nature but some of them may have, and do have, a moral dimension. As much as all the contractual collaboration needs to be steered and managed through a governance system, the moral dimension of the transactions needs equally to be managed. Therefore, the firm needs to set up an appropriate governance structure that enables managers to attend to the moral dimension of their transactions and provide them with a platform to regularly evaluate the moral dimension within the ethical paradigm of right or wrong, or just or unjust, beyond its economic relevance. Much in line with ABV, it is the capability of the structure to attract and sustain attention to the moral dimension of

transactions that qualifies it as effective. Given that governance ethics is based on the view that a firm is a collaboration project, it goes without saying that communication plays a critical role, as does language; firms — unlike markets, which only speak economics — are polylingual (Wieland, 2014).

This is very much in line with the findings and theoretical underpinnings mentioned above in the context of ABV. Moreover, what has been demonstrated through the cases is that it is the right combination of both structure and language that generates the desired effect.

As we could see in the case of BANK-B, the fact that an organization has sophisticated structures in place is not in itself sufficient if communication does not take place using the right language within those structures. Embedded in the market, the default language of organizations is economic; therefore, it is interesting to ask how organizations learn the second language.

The starting point is to place the responsibility on the top decision makers as part of their moral responsibility. However, as we could see in BANK-B this is not sufficient because for a dialogue to happen, there needs to be more actors involved.

Furthermore, and to remain within the metaphor of acquiring a second language, in order for the organization to learn a second language, it is not sufficient that the top management conducts monologues in that language and talks "at" the rest of the organization. What is necessary is that they talk "with" them.

The acquisition and refinement of language skills requires continuous practice through interactions in that language, which demands focus and dedication or, in other words, attention. The concept of attentional structures as posited by ABV gives us a good understanding of how this can be achieved through attentional structures as pipes and prisms, but even more through communication as a process by which speakers interact with each other to jointly engage with an understanding of organizational phenomena (Ashcraft et al.,

2009); or, as in the case under investigation here, how the moral language applies to a given transaction.

For some actors it may be a harder exercise than for others, and it can make sense to incentivize the learning at the beginning (see BANK-B). However, and in line with the findings of this thesis, once the organization is fully bi-lingual, incentives are no longer needed (see BANK-D), nor is a sophisticated structure facilitating the learning and training of the language-skills; it is no longer necessary.

Nevertheless, it remains necessary, particularly in large, complex organizations with multiple locations, to keep the grammar and vocabulary books — for example, the code of ethics or business principles or guidelines and ethical standards in this case — on the shelves and to review them regularly. On one hand, to align the entire organization around a common set of rules and principles and prevent parts of the organizations from developing individual "dialects", and on the other hand, to allow for those rules to adjust and adapt to changes in the environment.

It can therefore also be concluded that the governance of the moral dimension is a highly dynamic process of attributing organizational attention to the moral dimension of transactions happening within the organization (issue) and the available repertoire of action alternatives (answers): proposals, routines, projects, programs and procedures (Ocasio, 1997; Wieland 2014).

### 7.2 Contributions to Practice

The findings also provide some interesting insights for practitioners and regulators.

### 7.2.1 Contributions for Practitioners

For the practitioners within and outside of the companies, this thesis provides lessons and practical guidance on how to effectively and holistically integrate climate change into organizational strategy.

Based on the strategies deployed by BANK C and D, effective strategies integrate climate change with its moral component all along the governance chain and even integrate the evaluation of the moral component of every transaction in all operational levels. To start with, it has been demonstrated that it is effective to start the integration with a clear signal from the top that the topic is considered a critical moral issue that the organization needs to respond to within its mandate to operate. Framing CC as a moral issue is particularly powerful, because it helps the organization to re-connect with its role in society — its genuine purpose outside of the economic rationale that it is usually confronted with by its shareholders.

In a next step, the mandate to act needs to be taken up by the TMT while clearly encouraging and facilitating strategic conversations around the moral dimension of climate change.

At this governance level, the conversation needs to include decisions as to what degree and in what areas it sees the organization engaging with climate change, as well as what is considered desirable, acceptable or wrong corporate action. The realization of the moral component helps the issue stand out and generate an emotional response. Only then, can the issue generate sufficient attention across the entire organization, and not only in some selected units where CC impacts are more obvious to grasp (for example, in the risk department) or products obviously need to be developed.

In this context, it has to be noted that is has proven to be rather limiting, to operationalize climate change into economic parameters; only, for example, by translating

them into "business cases" or "financial risks". As the study shows, framing CC impacts in economic language results in organizations providing economic solutions to the issue — at the lowest possible transaction costs. This does not trigger attention in departments or divisions that are not directly in charge of those aspects to reflect upon its own CC impact, contribution and possible capability to act and allows them to remain passive.

There is another downside of framing climate change as an economic risk or opportunity. Once CC is framed in economic language, it enters into the ring competing for attention against all the other "economic risks and opportunities" that the organization is facing a given moment (for example, "digitalization"). Hence, the risk is high that, overall, sufficient attention and resources will not be put in to deal with it holistically. This is what we have seen at BANK-A and BANK-B and, which is also in line with findings from literature on managerial cognition in the area of corporate sustainability. For example, Hahn et al. (2014) have demonstrated that the use of business case frame lead to a limitation in the breadth and depth of scanning for possible further going responses to sustainability issues, limiting themselves to established routines.

Taking it down from the executive level, it has been observed here that more effective organizations keep up the moral conversation by using moral language even on lower governance and operational levels while operationalizing climate change within the given corporate function. For example, in the finance and control department of BANK-C, this included the conversation around how to define, set goals and measure CC impact of the bank's investment portfolio, including very practical questions around the integration in the current reporting systems. In the "business" part of the bank — in the area of investment banking, for example — this included conversations about the integration of CC-related aspects in due-diligence processes, the way client's rating should be adjusted and product should be priced whereas the decision about the "thresholds" or "premiums" clearly followed

the value-based frame of what managers at that level understood as being considered "acceptable" or "right" or "inacceptable" or "wrong" in light of the moral strategic direction as defined by the TMT.

It was clearly the existence of those attentional governance and operational channels that were clearly bi-lingual using economic and moral language, that has contributed to the holistic operationalization of climate change across all organizational levels and functions.

A final observation that can serve as inspiration for practitioners can be made based on the findings: We have seen that more progressive banks (BANK-C and D) are actively engaged in working with their stakeholders, such as clients, regulators and even their direct competitors in order to push towards stricter climate change standards. Given that we know that companies tend to go back to "business as usual" after a phase of active engagement with CC, because in the long run, they cannot oppose continuous criticism coming from the market (Wright and Nyberg, 2017), it seems as if looking for strong alliances to help counter and delegitimize those critiques is a reasonable tactic. In these other arenas, pro-environmental solutions are not readily opposed, unlike in the arena of the market, where the main argument remains cost-effectiveness and profit maximization. It can be hoped that over time, that those outside engagements can provide alternative legitimate discourses and pressures that even the market has to accept, leading to changes in institutional logic and to stabilize the organizational field so that CC is considered an institutional pressure-at-large. Hence, proactive outside engagement is most likely the most promising avenue to a sustained climate strategy over time, and practitioners should encourage organizational engagement in this area.

### 7.2.2 Contributions for Regulators, Governments and Central Banks

Findings of this thesis demonstrate that the perception of climate change within the organizational field under investigation is far from being uniform. This has significant managerial implication allowing for considerable discretion as to how to interpret the

challenge and how to formulate the organizational response. Strategic responses are allowed to vary as there is no regulatory framework to guide what is considered socially acceptable or not. Against this backdrop, it would be desirable if the regulators would also take a more proactive stance at defining what is considered to be legitimate engagement and what is not.

For example, by clearly demanding the alignment of the bank's portfolios with the Paris Climate Agreement's 2°C goals, as set forth by the French government. By comparing the cases, it became very evident that to fight climate change effectively, companies first need to understand how their transactions contribute to the problem. Given that CC is complex and difficult to understand, this is not an obvious exercise and it is not in the primary interest of any given organization to be very proactive in that regard, for it may have consequences for their reputation. This is particularly true for businesses that only have limited direct GHG emissions and that live a relatively "peaceful" life since they don't get any media attention as being a "dirty business".

Hence, much work is needed on the tools and metrics so that organizations can take on the task of measuring and setting goals, as well as managing their impacts. Perhaps even more work is necessary regarding the "motivation" for corporations to start measuring at all.

In order to create a clearer institutional frame, Central Banks could further support this development. Taking up their role as guardians of the financial system's stability, they could define climate change as a systemic risk and proactively contribute to upgrading the regulatory and market standards for green products, thus giving them more legitimacy and accelerating their move into mainstream finance.

The Dutch Central Bank (DNB), the Bank of England and the People's Bank of China are already currently at the vanguard of driving green finance measures. This is even more important in the light of the study's findings.

Against this backdrop, and as illustrated in this thesis (see Chapter 2.2), the fact that there are many voluntary frameworks with which to address the issue is a challenge. Moreover, given that the frameworks proposed do not apply the same methodology, the results are not comparable. This prevents competition between the companies from kicking in to be "best-in-class" and as a result, changes come about only very slowly. This is where regulators could and should step in, by taking a more proactive stance on what should be considered an appropriate standard to use and make it mandatory.

### 8 LIMITATIONS AND DELIMITATIONS

#### 8.1 Limitations

This study has a number of limitations. First, it comes with the limitations commonly associated with qualitative and inductive research. In this thesis, the most important limitation is that the findings are not necessarily easy to generalize to other contexts and other industries. The insights, however, allow for improving our understanding of the relationship between individual perception, issue selling, channel use and organizational outcomes.

Second, focusing on the interpretation of climate change by the individuals and the framing they used to sell the issue inside their organizations, limits the importance of wider societal aspects of CC translation. Climate change is a polarizing concept that is debated differently in various countries. This is due largely to the corporate, political, and also cultural, traditions of a given society, in addition to the presence of CC in the media.

Therefore, the process of framing may play out differently within a different cultural context.

Third, despite the fact that primary and secondary data was collected over three years, the study presents only a snapshot of moderators and outcomes, ignoring possible longitudinal effects that Wright and Nyberg (2017) have illustrated in their research dealing with the

phenomenon that companies, when facing growing market pressures over time, dismissed their initial climate change engagement and translated the pressures into business as usual. Thus, while the concept presented here suggests that the moral interpretation and framing are effective antecedents and catalysts helping to launch the initial stage of responding to CC, and integrating CC within corporate strategy, it can also well be that over time, the market context will prevail and this focus will be diluted and neutralized.

Finally, the banks used in this study do vary in their size and ownership structure. For example, BANK-D is privately owned and, hence, not directly exposed to market pressures as they occur for banks whose shares are traded on stock exchange (Wright and Nyberg, 2017). BANK-D is also significantly smaller and has a simpler corporate structure, which may also have influence on the level of integration. However, it also needs to be noted that there are many other small, privately-owned banks that display rather minimalistic or conservative CC integration levels (for example, Pictet and Lombard Odier, to name just a couple). Further research would be needed in order to determine if, and to what degree, those parameters really play a role in preventing or enhancing climate change integration.

#### 8.2 Delimitations

The first delimitation of the present study is that it does not deal with the question about why some managers recognized the moral intensity of climate change, while others did not. In an effort to understand the determinants of ethical decision making, a major focus of the relevant literature in the area of business ethics has focused on developing and testing ethical decision-making models (EDM) in the business context. This is perhaps the reason why the number of those models and decision-making frameworks used within a business context has dramatically increased in the past 25 years. The latest review of the empirical literature on ethical decision-making in the business field (published between 2004–2011) was written by

Craft (2013), extending the previous literature reviews written by O'Fallon and Butterfield (2005), Loe et al. (2000), and Ford and Richardson (1994). After the review of 84 articles, Craft confirms the previous finding by O'Fallon and Butterfield (2005) that it is still Rest's (1986) four-component model for individual ethical decision-making that is mostly used as a starting point, dominating much of the literature. Further aspects, such as individual characteristics, the situation, and values (Craft, 2013; Crossan, Mazutis, and Seijts, 2013; Jones, 1991; Kish-Gephart, Harrison and Trevino, 2010; O'Fallon and Butterfield, 2005; Trevino, Weaver and Reynolds, 2006) have then been added and reviewed to complement the original model. Another stream of research grounded in psychology has also added aspects, such as moral intelligence, moral sensitivity (Tanner and Christen, 2013) and moral awareness (Jordan, 2009).

As the focus of this thesis was on explaining differences in organizational responses to climate change, rather than on the individual capacity to recognize the moral dimension, the focus was not on the "why" from an individual perspective, but rather on the "if". Hence, it was decided that it was important to verify if individuals recognize the moral intensity of CC as an indicator, but the thesis did not dig further into how the individuals recognize the parts of that concept.

Another important delimitation of this research is not to have addressed the questions around legitimacy of action through banks from a global governance perspective. By encouraging banks to take a more proactive approach in steering financial flows into areas that mitigate or help adapt to climate change, asking them to come-up with industry standards for investment and lending by developing criteria may put them in the position of regulating economic activity. This can, and should, perhaps raise concern about the redistribution of governance tasks between private and public actors, if not question the democratic legitimization of the entire endeavor (Bell and Hindmoor, 2009; Levi-Faur, 2005) The

consideration of the corporation as a politicized actor was suggested as a reaction to the regulatory vacuum opening up around the activities of multi-national corporations with their global supply chains, taking advantage of regulatory gaps (Cashore and Vertinsky, 2000; Matten and Crane, 2005; Palazzo and Scherer, 2006; Scherer and Palazzo, 2007; Young, 2004). In the academic world, this phenomenon, including questions about legitimacy, has been discussed and argued now for over a decade under the label of "political CSR" (see Scherer and Palazzo, 2016) and it remains relevant here, too. Still, this thesis takes a different angle and, hence, has not focused further on questions and concerns resulting from this potential norm-setting side-effect.

# 9 CONCLUSION

Climate change is, and remains, the defining issue of our time. As the UN Secretary-General, Antonio Guterres, mentioned in his opening speech at the Climate Action Summit in September 2019: "As carbon pollution, temperatures and climate destruction continue to rise, and public backlash mounts, the Summit is expected to offer a turning point from inertia into momentum, action and global impact — if everyone gets on board." After the Summit he concluded: "We need more concrete plans, more ambition from more countries and more businesses. We need all financial institutions, public and private, to choose, once and for all, the green economy" (Guterres, 2019).

Still, 19 of the world's largest asset owners have invested only 5% of their total assets in low-carbon investments (Foster et al., 2018), and the trend to finance industries that contribute to climate change remains unchanged. Since the Paris Agreement was adopted in 2016, 33 global banks have financed fossil fuel projects and companies, with lending and investments totaling \$1.9 trillion (RAN et al, 2019).

Being at the heart of economic activity, the financial industry, and banks in particular, need to take up their role in financing the transition to a low carbon future. Without exception, all companies — especially those that contribute exponentially to climate change — not only depend on the money that they get from banks, in order to finance their investments, but their economic success also depends, even more, on the reactions of capital market participants who may invest in their shares. Thus, the role of this industry is extremely influential, because it has the power to select and support companies — even entire industries — and steer them in the desired direction, by linking their lending and investment conditions to criteria and standards they choose, or perhaps even impose.

Currently, one example of how powerful this level of influence can be is the decision of the Norwegian Public Sovereign Fund — the world's largest sovereign wealth fund and owned by the Norwegian state — to divest itself of oil exploration companies. Norway belongs to Europe's top oil producers, even though the country's own electricity production and consumption relies 100% on renewable sources such as hydro, wind, and solar (Statistics Norway, 2018). Being criticized for inconsistency in their policy, the country's Parliament needed to mark a shift. With its approval, the fund had already in 2015 to begin selling off its investments in mining companies and utilities that depend on burning coal. In November 2017, they launched the next stage of decarbonization of their portfolio, by announcing that they were considering divesting from fossil fuels. With roughly \$35 billion invested in oil companies, the Norwegian sovereign wealth fund is a large investor in Exxon Mobil, Royal Dutch Shell, Total, Chevron and Norway's own Statoil. Parallel to this process, companies like Statoil started to react, anticipating the Fund's move. In a recent announcement, they informed their investors about a current shift in their own strategy to increase and improve its industrial position in profitable renewables and low-carbon solutions, with the potential that this sector would constitute 15-20% of its total investments by 2030, four times today's share

(March 2017). To support this direction, Statoil now directs 25% of its research funds to new energy solutions and energy efficiency, including offshore wind, carbon capture and storage and hydrogen (Statoil, 2017).

While the majority of banks are also only slowly reshaping their strategies in order to account for what would be necessary to mitigate climate change and support adaptation, there are a few frontrunners who are proactive while the majority of banks are following business as usual.

Against that backdrop, this thesis aimed to shed light on how the variety of organizational responses of international banks to climate change can be interpreted theoretically, as well as for practitioners to be able to draw conclusions about how to help facilitate this change.

To guide this empirical research, two research focus questions have been formulated: First, how can the variety of organizational responses of international banks to climate change be interpreted theoretically? And second, with regard to how CC finds its way into corporate strategy in an industry that is not necessarily exposed to the topic, what contributes to its detection and effective integration?

To address the first focus question, two streams of the literature dealing with climate change responses have been incorporated — moral psychology and institutional theory — and investigated regarding how each one plays out in a corporate context.

To answer the second focus question, it was decided to draw upon ABV. This view explains how attentional structures, as well as formal and informal communication channels, govern the level of attentional engagement and lead to strategic change. To allow for a more dynamic approach that takes into account the diffuse role that CC plays in the banking sector, focus has also been placed on the role that communication plays within the structures, and

how the use of vocabularies or languages draw on concepts from the "issue selling literature (Dutton and Ashford, 1993; Dutton et al. ,2001; Mayer et al, 2019).

From a research perspective, the banking industry was particularly interesting, as only very few empirical studies have been conducted looking at strategic responses to climate change on the part of industries that are, in fact, hardly directly impacted by it yet themselves. In the majority of cases, banks do not suffer from physical impacts of CC and so far, CC risks have not been discounted by investors in any significant way (Furrer et al., 2012).

Having developed a grounded model that depicts the different stages, and across those stages, four different possible approaches to interpret and distribute attention to climate change across the organizations, this research contributes to a further understanding of the criteria that contribute to, or hinder, strategic engagement and change related to responding to CC. In particular it provides theoretical explanation for the variety in the strategic responses observed: two of the responses can be theoretically explained by neo-institutional mechanisms, however two organizational responses did not follow this path. Their motivation to act was rather grounded in moral considerations linked to the role of the organization within its organizational context and society.

As such, the thesis contributes to CSR literature grounded in neo-institutional theory (Jennings and Zandbergen, 1995; Bansal, 2005; Orsato et al., 2015). So far, most of the research in this area dealing with climate change assumed that CC generates institutional pressures and, thus, focused on the way how companies responded to those pressures. The present study paints a more nuanced picture: even in the same industry and geography, there are major differences in the perception of CC and, as a result, generalizations are difficult to justify.

Further, the thesis answers the call to go beyond the existing focus of research on communication channels as structures in the area of the ABV. With its focus on the specific

use of language within communication channels, the thesis demonstrates how different sets of vocabularies influence whether attention is constrained or distributed across the organization. With its focus on language use in channels, this thesis also contributes to the "issue selling" literature, confirming and expanding on the recent findings (Mayer et al., 2019) that the use of moral language linked to organizational purpose is more effective in selling social issues inside the organization. With the focus on climate change, this study shows that those findings can potentially also apply to environmental issues as well.

Last but not least, the study refines our knowledge about corporate governance and business ethics, demonstrating that governance of the moral dimension of a given issue is a highly dynamic process. Effective ethical governance not only depends on the existence of available structures inside the organization, but its effectiveness also depends on the attention-directing features of those structures. These in turn depend partly on the language deployed. In the end this, having developed a theoretically grounded model, hopefully contributes to a better theoretical understanding about the interplay between the way that relationships, interpretation, language use and governance structures shape the level of strategic organizational engagement with climate change.

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# **APPENDIX A – Level of Climate Change Integration into the Bank's Strategy**

Points/	General information		BANK-A	BANK-B	BANK-C	BANK-D
Yes	Employees (2018)		46,840	68,000	15,000	1,427
	CORPORATE FUNCTIONS		4	4	4	4
	Element	Criteria				
1	Mitigation	CO <sub>2</sub> reduction targets set.	Yes	117 kt CO <sub>2</sub> e = 0.0017 kt CO <sub>2</sub> e/FTE Target: -75% by 2020 against reference year 2004	23,2 kt CO <sub>2</sub> e = 0.0016kt CO <sub>2</sub> e/FTE  Target: -20% by 2020	Yes
1		CO <sub>2</sub> reduction target achievement independently verified.	Yes	Yes	Yes	Yes
1	Offsetting	Offsetting used to achieve neutrality of operations.	Yes	Yes	Yes	Yes: GHG neutral through reduction and offsetting.
1		Offsetting through independent, verified partners.	Yes	Yes	Yes	Yes
	BUSINESS		2	6	8	10
1*	Investing	Amount of directly managed assets screened for CC impact (according to 2018 CDP reports)	6% (\$330 billion)	95% (\$663 billion)	99% (\$186 billion)	100% (\$4.7 billion)
1		CC-related investment products: e.g., risk-hedging, alternative investments, real estate, infrastructure.	Yes – Real Estate Green Property Fund; European Climate Value Property Fund.	Yes – Climate Aware Fund; Sustainable Property Fund; Impact Investing.	Yes – Green Bonds; Sustainability Funds; Impact Investing.	Yes – Organic Growth Fund, Impact Investing; Efficiency Infrastructure.
1		Measuring the carbon footprint of investments (by asset class and on portfolio level).	No	No	No – but planned for 2020	Yes
1		Targets to lower the overall carbon footprint investment portfolio of the bank including public announcements of divestments from carbonintense sectors.	No	No – only for AM	Yes	Yes
1		Adjusting sector weights accordingly.	No	No	No – but planned for 2020	N/A (yes)

4**		Black-listing companies contributing extensively to CC and directing investments in less carbon-intensive companies within sectors.	Yes – no new coal mining projects.	Yes – no new coal mining projects; further engagement with existing coal mining projects if their strategy is not aligned with 2°C target; severely restricting lending and capital raising to the coal mining sector and not supporting coal mining companies engaged in mountain-top removal coal mining (MTR) operations.	Yes – no coal mining projects, fossil fuel engagement reduction on all portfolio since 2018.	Yes – per mandate, no investments in any industry contributing extensively to CC.
1	Lending	Carbon loans, lending / financing at lower pricing to clients reducing carbon emissions / using renewables, carbon funds.	No	No	Yes	N/A (yes)
1	Services	Special advisory services related to carbon management or CC (climate risk management, carbon market transactions, carbon footprint analysis for clients).	Yes	Yes – in the context of AM and GWM	Yes	Yes
1	Core Process Integration	Research: CC-related aspects integrated in analysis for markets, regions, sectors and companies and reflected in valuation.	Not comprehensively	Yes	Yes	Yes
2***		Disclosure of CC-related risks and opportunities in prospectuses and investment proposals.	Partly	Partly	Partly	Yes
	GOVERNANCE		10	13	17	19
1	Management Framework	Codification and integration of CC-related aspects in company's publicly available mission statement.	No	Yes	Yes	Yes
1		Clear assigned responsibilities at top management level to promote CC-related activities.	No – only CSR	Yes	Yes	Yes

1		Clear assigned responsibilities at management level to steer the implementation of CC-related aspects across the business.	No – only CSR	No – only CSR	Yes	Yes
5		Hierarchical levels engaged with CC: a. Board b. Top Management Team (C-level) c. Senior Management d. Management e. Other	b. CEO oversight over designated impact department (tasked with CSR – not CC in particular). c. Impact Department oversees all sustainability initiatives. d. Dedicated staff as advisors upon demand for investment business lines.	a. Dedicated committee chaired by the Chairman of the Board. c. Several senior managers tasked with CC integration (in Risk and Asset Management). d. BU managers and risk managers, facility managers, communication managers.	a. Entire board. b. Executive team including CEO. c. Head of Sustainability and Strategy, all heads of business lines, risk. d. Managers. e. Dedicated staff members for specific areas (e.g., TCFD reporting or analysts).	a. Entire board. b. Executive team. c. All directors in their specific roles. d. All managers. e. All staff.
1		CC-relevant companywide goals on CC direct and indirect impact reduction (e.g., by implementing PCAF methodology).	No	No	No – but in preparation for 2020	Yes
1		Business wide available guidelines on how to implement CC-relevant aspects into business.	No	Yes – but only for AM	Yes – but not yet comprehensive	Yes
1		Active ownership guidelines / clear policies for proxy voting including CC-relevant criteria.	Yes – in context of mining	Yes	Yes	Yes
1	Risk Management	Managing CC related exposures of the Bank (assessment of own physical risk).	Yes	Yes	Yes	Yes
1		Assessing and managing CC-related risks of the bank's investment and loan portfolio.	2019 first year of TCFD reporting	2017 first year of TCFD reporting	2019 first year of TCFD reporting	Yes
1	Learning	Internal road shows on CC-related issues in general but also in relation to the business.	No	Yes – only within AM and IB	Yes	Yes
1		Structures to facilitate knowledge transfer from CC experts to all professionals.	No	No	No	Yes – as part of onboarding
1	Disclosure	Public disclosure of direct and indirect impacts on CC by the bank.	No	No	Yes – but not yet comprehensive	Yes
1		Disclosure of internal processes and best- practices to implement CC-relevant aspects across the business (i.e., through CDP reporting).	Yes CDP Score C (2018)	Yes CDP Score A (2018)	Yes CDP Score C (2018)	Yes

1	Engagement	Active membership in investor coalitions (such	Yes – by dedicated	Yes – by Board,	Yes – by Board,	Yes – by Board,
		as Ceres, CDP, UNEP-FI, TCDF, Carbon Trust,	CSR staff.	CEO and Head	CEO, CSR Officer,	CEO, TMT, Senior
		PCAF, etc.) to promote and mainstream CC-		of AM.	Across business	Executives (Strategy,
		related best practices and frameworks.			lines; Engagement	Communications,
					Dialogues.	etc).
1		Public policy engagement and disclosure on	No	No	Yes (in country,	Yes (in country,
		progressive climate legislation.			region and EU)	region and EU)
	TOTAL		16	23	29	33

<sup>\* 1</sup> if over 51%

<sup>\*\*</sup> depends on the depth of commitment: no mining = 1; mining plus 2°strategy = 2, all fossil-fuels = 3; no CC impacting investments at all = 4

<sup>\*\*\*</sup> included comprehensively = 2; partly included (e.g.) in thematic investments = 1; not included = 0

### **APPENDIX B – Generalized Interview Protocol**

#### INTERVIEW PROTOCOL

#### **Overview of the Study**

"I am PhD Student writing about how the climate change is perceived and discussed to then influence your corporate strategy. I am interested in your experiences as a (title) in dealing with environmental issues such as climate change and if and how these issues, or strategic initiatives pertaining to these issues, get addressed within the bank. As discussed, all interviews and documentation will be kept confidential and your responses will be completely anonymous."

#### **Individual Context and Drivers**

- Can you tell me more about if you are involved in the strategy formulation of the company? What is it that you do?
- Who is giving you directions for strategy formulation?
- What are the other stakeholders that you work within this context (internal and external).

#### Sustainability as Part of Strategy

- Does the bank have an (integrated or not) Sustainability Strategy?
- Do you know about sustainability-related targets?
- What does this sustainability strategy include in particular in relation to climate change:
  - o Direct impact (operations)?
  - o Indirect impact? To what extend (if not known through website)
    - Negative screening
    - Positive screening (= impact investment)
    - What business lines are involved? (asset management, wealth management, etc.)

- o Do you have KPI's for direct and indirect impact reduction?
- O Who decides those KPI's?
- Are there any individual performance targets linked to sustainability at a senior management level or higher?
- Who is driving these topics in your company? (Top down or bottom up) or how do these topics find their way to the board level?
- What is the motivation behind according to your judgement (in particular climate change related) topics?
- What structures formal or informal do exist in your bank where the topic of CC is addressed (committees, working groups, teams, events etc.)
- Are there any particular guidelines or processes (corporate or business level) that integrate climate relevant aspects into daily transactions?

#### **Climate Change Perception**

I would now like to turn more towards how you feel about climate change.

- Is this something that is on your mind regularly?
- Do you personally realize that there is a change in climate?
  - Are you personally concerned about the possible consequences? (likelihood)
  - o If yes: does it have negative consequences for you already now? (how high is the harm) For the bank?
  - How do you see this going forward (-> temporal or psychological proximity, magnitude of consequences) – will there be harms in the immediate future?
     How high will the harms be for us here?
  - o Do you think your view is shared by your colleagues at the bank?
  - o Is this a topic that you frequently discuss?
- With regard to the bank and Climate Change
  - Are climate-related risks part of the risk assessment/management of the bank?
     Can you elaborate?
  - What functions/products/clients are dealing with this issue?
  - o How do you estimate the bank's exposure?

# **Strategy Influence by External Factors:**

Mimetic pressures:

We see more banks offering products in the area of sustainability and impact investment.

Also, we see that, for example, pension funds start to divest from fossil fuels, coal, etc.

- Do you see this as a major trend going forward or do you have the impression this is just a current "fashion" of the industry to improve their reputation?
- Do you know of any success stories from the banking sector in sustainable finance and impact investing?

# Normative pressures:

- In your opinion, should the finance industry in particular (your company) play a prominent role to tackle issues such as climate change?
- Is this a common understanding at (your organization)?
- Within the industry?

# Coercive pressures:

- Going forward and in light of the Paris Agreement, do you expect more regulation to mitigate climate change? Also relevant for the finance sector?
- Is the client demand for climate relevant products growing in your opinion? If yes: what products, what division, what response (level of integration).