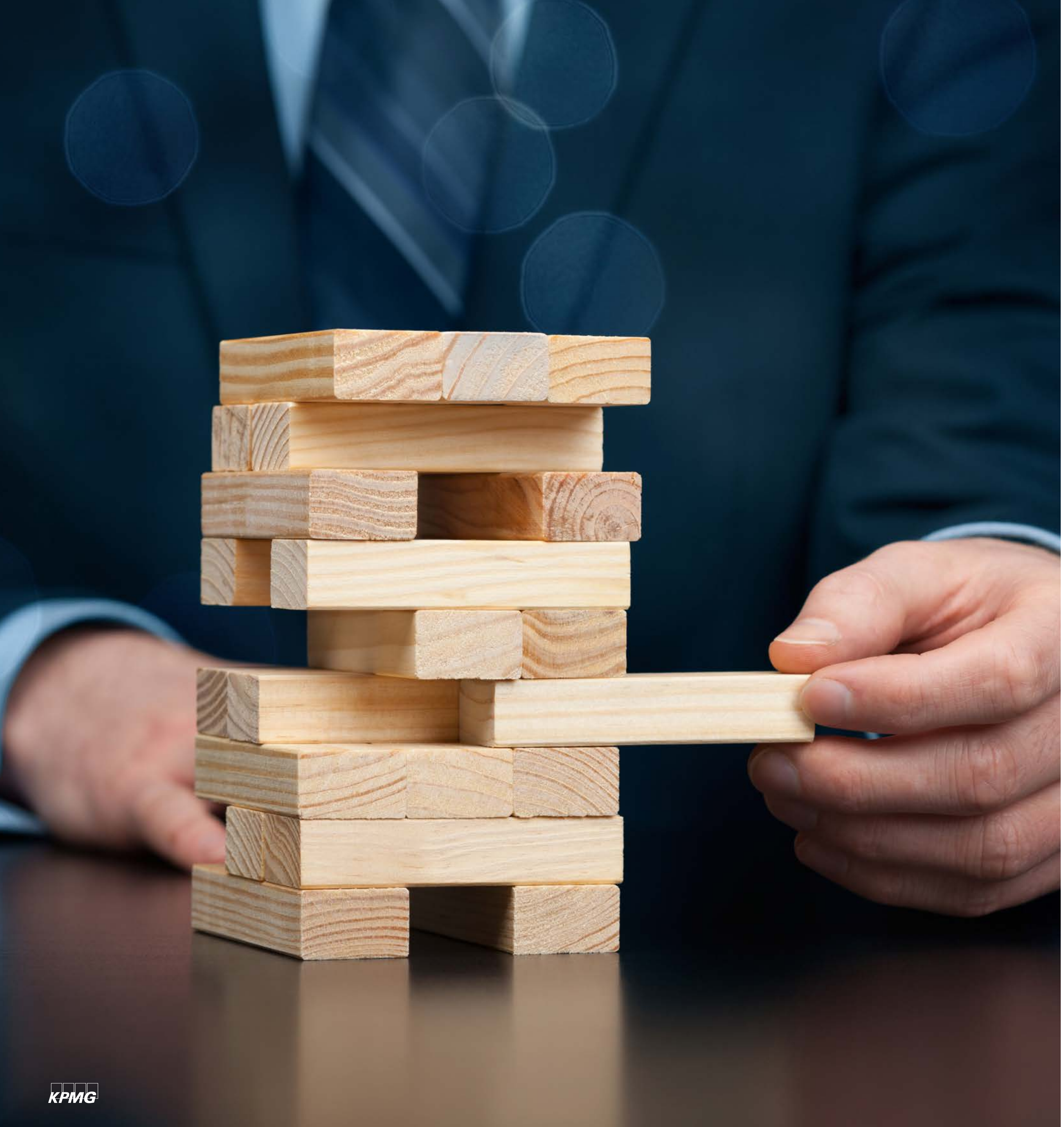

Risk management framework for dealing with ESG risks

Naturally, dealing with risks is an inevitable and essential element in most financial institutions and banks cannot avoid the risks inherent in their businesses.

The common thread running through all the risk caregories that banks are used to dealing with (i.e. credit and counterparty risks, market risks, liquidity risks, operational risks, etc.) is that they all concern the impact of the risk on the institution itself. However, risk management must consider not only the impact ESG risks have on the organization, but also the potential impact of stakeholders on the bank, and vice vice versa - the risk risks to which the bank is exposing its stakeholders and the environment due to its business activities.

Governance

A sound governance structure is a key element of effective risk management processes. ESG risks can affect all divisions and departments of a bank and the various parts of the three lines of defense model, including profit and cost centers. While the establishment of a central coordination unit for ESG risks can be beneficial, enhancing the roles and responsibilities of existing units is key.

Profit centers in the first line of defense affected by ESG risks include credit and trading business divisions. They have to consider ESG risk factors in their product development as well as their pricing and sales processes. This consideration should especially focus on the impact of ESG risk factors on financial risks and reputational risks. Dealing with ESG risks needs to become an embedded activity in all relevant processes. For instance, clear decision criteria and control mechanisms must be anchored in the lending process: ESG factors have to be assessed in the course of lending, similar to the examination of reputational risks in the know-your-customer (KYC) process. This means that assessments must not only be implemented initially when granting loans, but also reoccur regularly, surveying all corporate customers.

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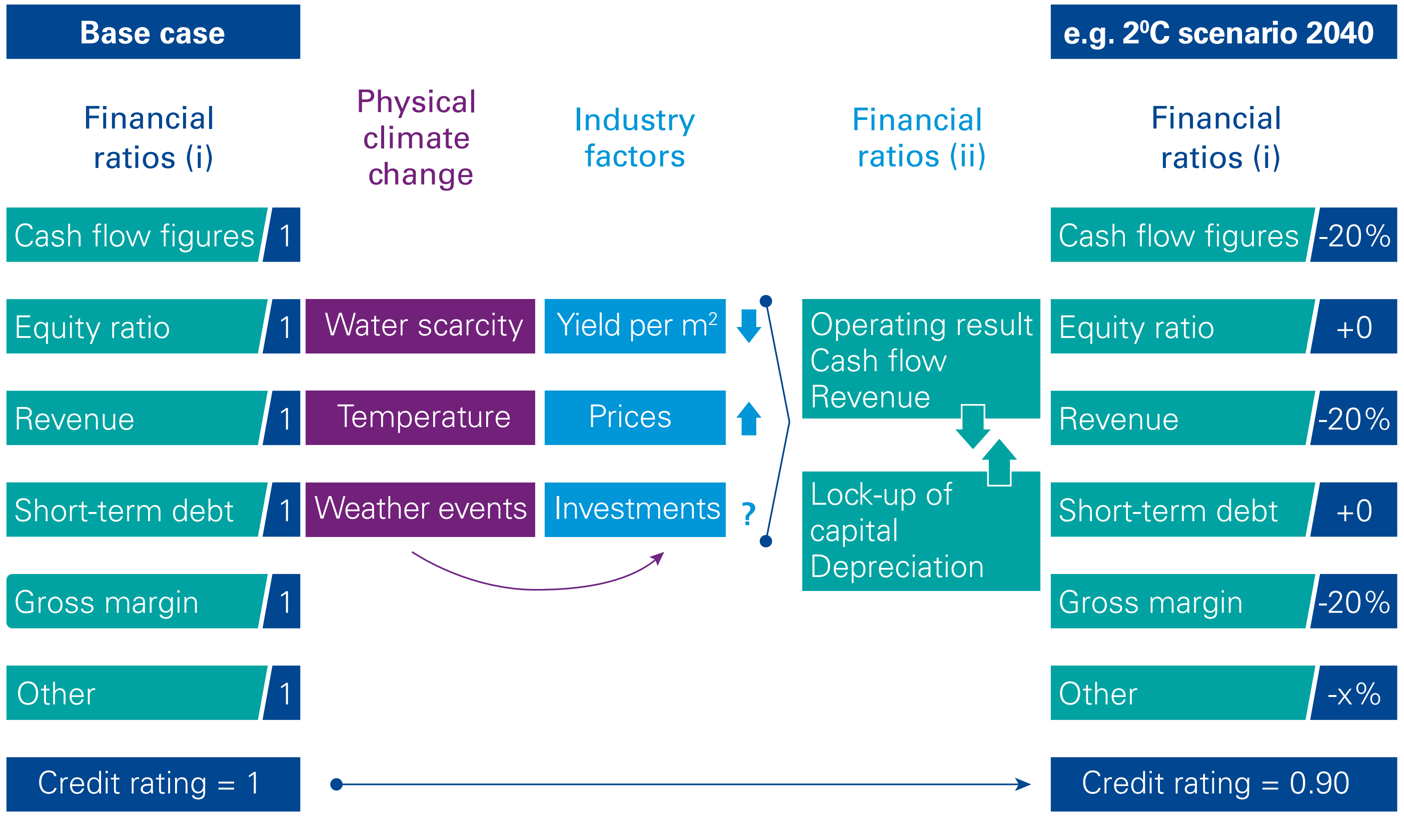


Base case
e.g. 2⁰C scenario 2040
Financial ratios (i)
Physical climate change
Industry factors
Financial ratios (ii)
Financial ratios (i)
Cash flow figures 1
Equity ratio 1
Revenue 1
Short-term debt 1
Gross margin 1
Other 1
Water scarcity
Temperature
Weather events
Yield per m²
Prices
Investments
?
Operating result
Cash flow
Revenue
Lock-up of capital
Depreciation
Cash flow figures -20%
Equity ratio +0
Revenue -20%
Short-term debt +0
Gross margin -20%
Other -x%
Credit rating = 1
Credit rating = 0.90

Figure 3: Example: Physical climate change and credit rating in a probability of default model

Source: ESG risks in banks, KPMG International, 2021

Cost centers typically consider a broad range of non-financial risks in a specialized manner. Still, they will have to amend their risk management processes accordingly. This includes the enhancement of (qualitative) risk assessment methods and tools by including ESG risk-related aspects and questions. The connection to non-financial risks (operational risk and reputational risk in particular) has to be made.

The second line of defense includes, but is not limited to, risk controlling, compliance, and business continuity management (BCM) functions. Risk control must develop the methods, processes and tools for dealing with ESG risks (starting with an amended risk inventory) and include the results in risk reporting. Compliance in turn has to examine if the entity meets legal or voluntarily introduced ESG guidelines. BCM must regard ESG risks as a trigger for business disruption and provide for continuity.

Internal audit as the third line of defense has to make sure that all relevant processes include aspects of ESG risks in an adequate manner and that they are being met consistently.

Risk strategy

In order to achieve sustainable development, financial institutions are required to define and implement an effective business strategy. Doing so, the discussion of motivation behind incorporating sustainability can serve as a starting point to the examination of upcoming challenges and necessary courses of action in the development and implementation of a business strategy. The motivation for considering the topic can range from purely economic, regulatory and/or legal reasons to intrinsically driven social and/or ecological motives. As business strategies move along a maturity ladder based on motivation, the degree of integration into the business model varies from little more than some corporate social responsibility (CSR) activities to embracing ESG as a core part of the business model. The closer ESG aspects are to the core part of a bank's business model, the closer the activities have to be aligned and the more senior the managers in charge of ESG topics need to be.

The risk strategy on ESG risks has to be aligned closely with the business strategy and constantly updated. One key issue to be included is concentration risk: concentration risk from ESG factors arises because on the one hand ESG risks are in complex cause-and-effect relationships across risk types within a bank. On the other hand, especially due to transition risk, companies within the same or related industries are simultaneously affected — as well as the banking sector doing business with them.

The risk strategy needs to be operationalized through a corresponding system of risk appetite statements. Starting with an inspection of ESG risk factors across all risk types, quantitative and/or qualitative limits can be assigned on an aggregate level and finally be broken down into individual risk types.

When taking ESG risks into account in their strategies, banks must keep in mind that ESG risks' planning horizons are usually much longer than the 3–5 years traditionally considered in business and risk strategy design. This especially applies to the climate-change aspects of ESG risks.

Risk management cycle

One of the greatest challenges is to break down the topic of sustainability risks to individual or partial aspects, but not to treat them completely distinctly. Sustainability risks have complex cause-effect relationships: on the one hand between customers, service providers and the bank, and on the other hand between the individual types of financial and non-financial risks. These need to be made transparent and appropriately considered in the risk management process.

Identification

The identification of ESG risks can depend on location. The physical dangers that banks and their customers see themselves exposed to (e.g. weather damages to assets, danger to employees due to political unrest, or the effects of persistent droughts) are of course determined by which locations are particularly important for maintaining the respective businesses.

Transition risks, however, are not only dependent on the business model, but also on behavior. A bank's own non-ESG-compliant behavior can cause reputational risks. This in turn, can — together with a stronger ESG awareness of stakeholders — lead to legal disputes, among other complications, i.e. legal risks are increased.

Identification could start by considering ESG risk factors in the risk inventory, thus expanding the risk landscape. Due to the broad range of dependencies across financial and non-financial risks, ESG risks cannot be assessed in a linear fashion. Instead, ESG risks have to be identified by investigating cause-effect relationships and/or common triggers. ESG risks must be considered for every risk type, i.e. within each risk type, an examination must be made of the extent ESG risks are apt to change the assessment of the respective risk type, ideally considering second-round effects. To run those identification steps, highly qualified personnel are required. Special training will be inevitable.

Results from this amended risk inventory process can be used as a basis for the construction of a consistent taxonomy. The design and derivation of possible scenarios as part of capital planning and stress testing are based on these results.

Measurement and evaluation

ESG risks materialize in known risk types. For example, extreme weather conditions can manifest through credit defaults and changes in market sentiment in impairments.

ESG risks therefore can affect counterparty, market price, liquidity and operational risks. A crucial process step in measuring and evaluating ESG risks is the assessment of the current ESG exposure. This includes the consideration of ESG risks while evaluating capital adequacy as well as calculating regulatory and economic capital.

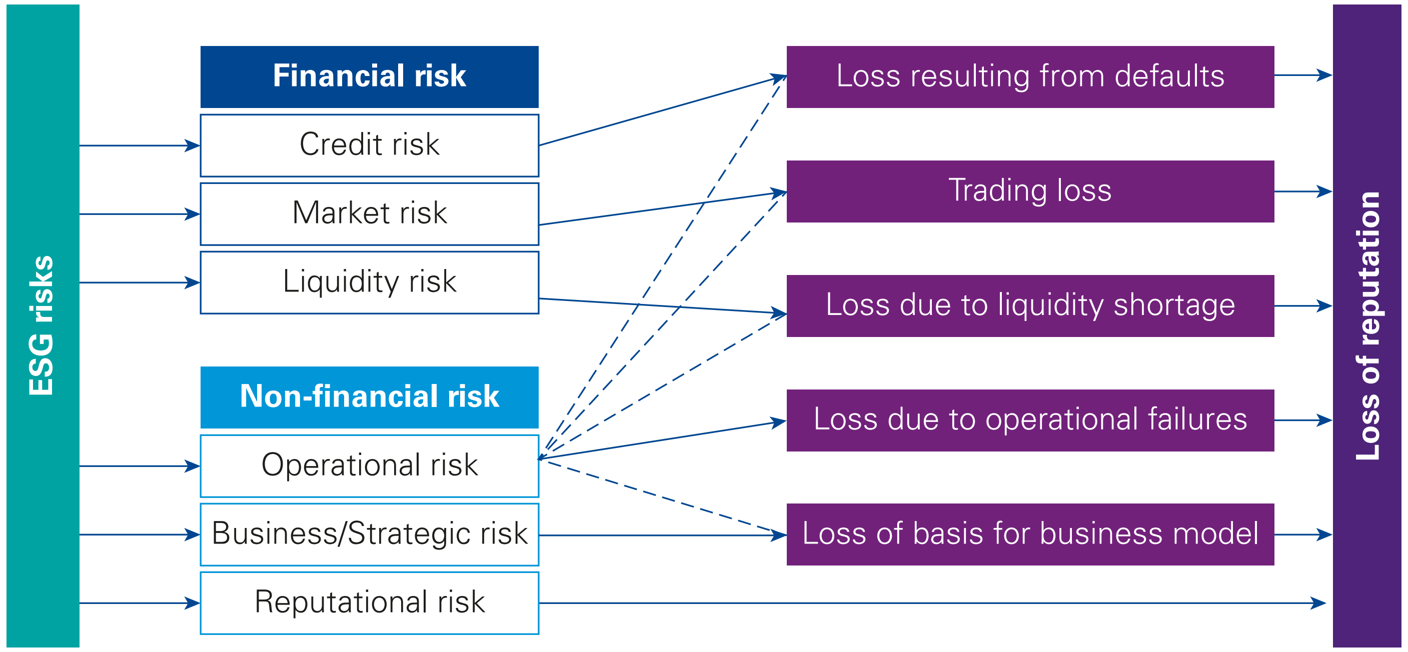
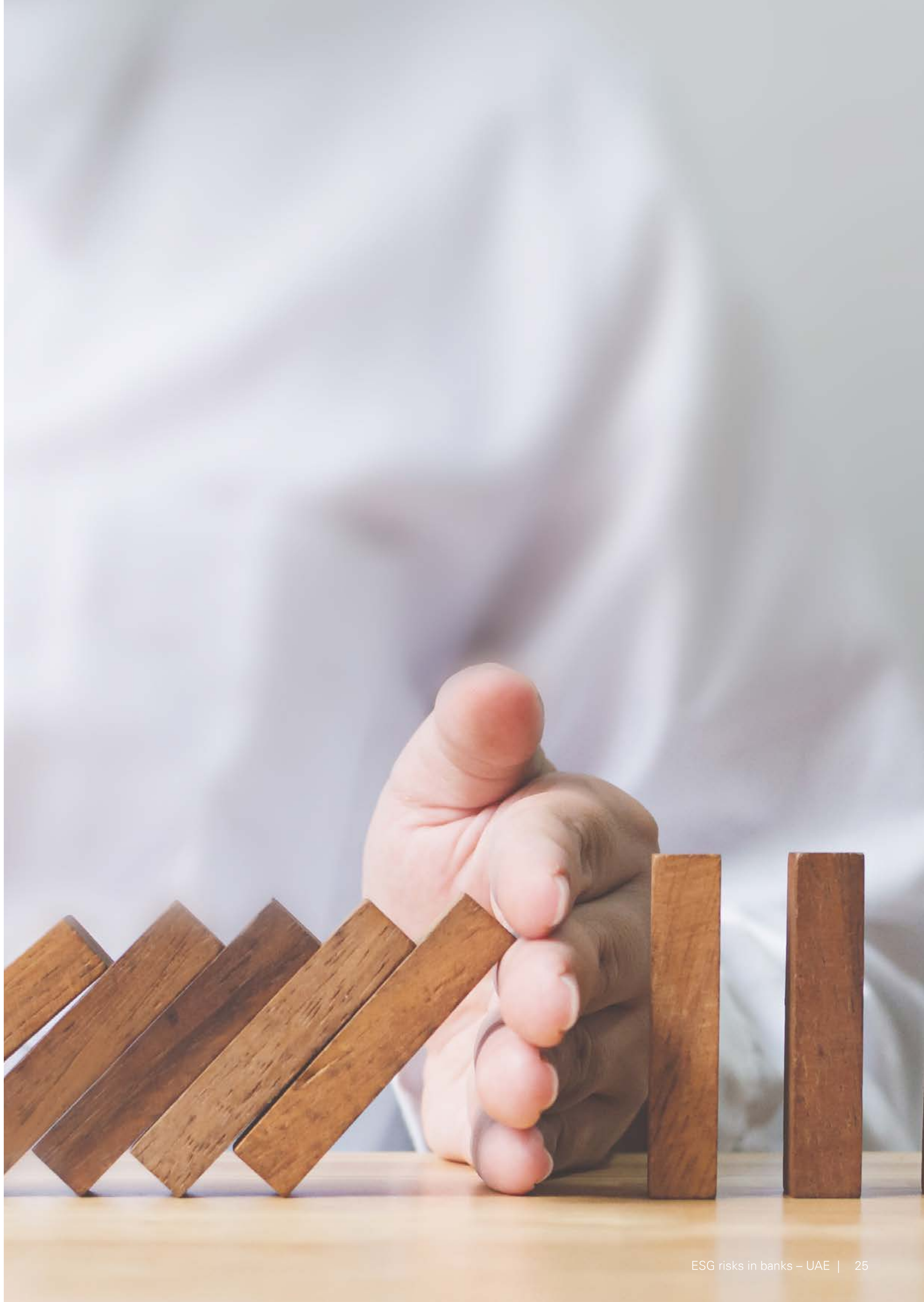


Figure 4: : Identification and materialization of ESG risks

Source: ESG risks in banks, KPMG International, 2021



Steering

As with all risk types, development of preventive and reactive control measures is at the heart of steering.

The options available to a bank for steering ESG risks are varied and must be selected individually. They range from setting limits or defining exclusion and/or inclusion criteria, e.g. for portfolios with ESG relevance up to divestments in companies that do not meet the desired ESG goals.

Preventative measures include:

- Mandatory consideration of **ESG risks** in all change-the-business processes, e.g. when designing products or processes
- Implementation of preventive **steering measures** for all risk types via detailed specifications, e.g. rejection of a loan if the ESG exposure of the loan applicant > x.

Reactive measures include:

- Treatment of materialized **ESG risks of the bank** (operational risk, compliance, reputational risk, etc.)
- **Revaluation of portfolios,** new ratings, rejection of prolongations, etc. in response to transition risks (e.g. due to a new legal situation).

Monitoring

In order to continually monitor the ESG risk profile, the identification and monitoring of indicators related to ESG risk is key. The usage of existing tools for the creation of an ESG risk dashboard is possible. Information should be provided to all relevant actors and considered throughout the decision-making process.

Furthermore, the effectiveness of control measures has to be critically assessed. As the effectiveness of ESG risk can not be taken for granted, it is important to regularly check whether actions could be deemed successful or whether additional measures are needed.

Reporting

Transparency on ESG risk exposure and control measures throughout the bank is needed, therefore comprehensive, action-oriented internal reporting is vital.

Information on ESG risks can be included in existing risk-reporting frameworks and risk types. However, it can be useful to create a specific system for ESG risk reporting with a medium- to long-term outlook since the effects of ESG issues can materialize much later than those of other risk types.

> "The definition of objectives and clear initiatives for ESG, that are laid out in the business strategy, their inclusion in the risk strategy, **together with their operationalization through the risk appetite framework are the basis for managing ESG risks.**