CERTIFIED EXPERT IN RISK MANAGEMENT

AACSB ACCREDITED

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Frankfurt School
Development Finance | e-Campus

Course Overview

Risk is inherent in the delivery of financial services. It is therefore important for financial institutions to implement a systematic risk management approach.

The objective of this course is to deepen your understanding of modern risk analysis including credit, market, liquidity and operational risk and to implement this understanding in your institution. The course teaches global concepts applied to the special conditions of developing and emerging markets.

Certified Expert in Risk Management is a comprehensive qualification for financial sector professionals with a special emphasis on the particular requirements of emerging and developing markets. It gives you the tools to measure risks and devise appropriate risk-taking and mitigation strategies that give your institution the competitive edge in delivering inclusive financial services in a rapidly evolving environment.

Unit 1: General Introduction into Risk Management

In this first unit, we will give a general introduction into risk management and the nature of risk. There is a whole science of risk out there. Armies of risk professionals are making a good living on the simple idea that life in general, and outcomes in business in particular, are uncertain and things might go differently from what we have budgeted and planned for. So, before we delve deeply into the details of models and quantitative analytics, it should be helpful to first get a big picture overview of the fundamental concepts of risk, of the main schools of thought in risk analysis and of the stakeholders who shape the framework within which financial institutions must manage their exposures.

We will discuss the general principles of risk management as defined by ISO 31000 (2009/2018), look at risk specific terminology in mathematics, industry and in the financial sector and even consider the content and reference framework of other risk management credentials. You are going to spend six months studying hard for this Risk Management Certificate. We want you to be certain that you are taking the right class for your needs!

Unit 2: Governance of Risk in Financial Institutions

Here, it will get more specific in respect to the particular framework for dealing with risk in financial institutions. Conscious and well controlled risk-taking is the natural role of financial institutions and the way they add value in modern society. Therefore, risk management should be job number one for the owners. From there, the governance of risk should cascade down via the Board of Directors to the executive management level. Since financial institutions typically intermediate multiples of other people's money relative to equity, the self-preservation instinct of owners may not be enough to keep risk taking at reasonable levels. Central banks, national supervisory authorities and self-regulatory organizations thus intervene with consumer protection rules, prudential regulation and best practice standards and try to constrain risky positioning and limit external effects on depositors and the wider economy.

The unit introduces the regulatory framework and various sources of guidance on risk management best practices in financial institutions including the Basel Committee on Banking Supervision, central banks, national regulators, as well as cooperative and other self-regulatory mechanisms. We will also look at specific microfinance industry guidance from sector associations and international microfinance networks, donor associations, CGAP etc.

This unit will also discuss in detail how retail banks and microfinance institutions may implement these governance principles from an organizational perspective, i.e. how to practically ensure appropriate board-level risk oversight, how to define the roles and responsibilities of internal audit, compliance and the executive-level risk committee, and how to position a chief risk officer and the risk management unit etc.

Unit 3: Risk Landscape and Taxonomy

Unit 3 will already get more specific about the diversity of risks that retail banks face generally, and those that arise in micro and small business finance in emerging markets and developing countries in particular. As a first step, one must try to bring some conceptual order to the many different dimensions of risk that we hear about in connection to financial services. The worst is to be blindsided by unknown unknowns, i.e. by potential losses arising from categories of uncertain events that we do not even have on our radar.

This would mean that we also do not have processes and tools in place to measure and mitigate these exposures. Therefore, it is critical to set up a high-level risk map that is as broad and all-inclusive as possible and provides a terminological anchor for any and all possible risk exposures: Have you thought about the risk of loan officers using physical intimidation to collect from micro-borrowers and a journalist picking up on this and turning it into a national news story on the abuses of microfinance and many more clients now refusing to pay these microcredit bandits as a consequence? Yes, that's covered. It is called the reputational dimension of operational risk and it relates to the adherence of staff to documented policies and procedures. This should be picked up during internal control site inspections or through the client complaint hotline.

With a view to establishing such a high-level risk map, this unit will guide us through an initial review of the financial services risk landscape including credit transaction and credit portfolio risk, liquidity, interest rate risk, foreign exchange rate risk, currency induced credit risk, operational risk (including reputational risk, compliance, AML/CFT), as well as capital adequacy and covenant risks.

Unit 4: Risk-by-Risk: Identification - Measurement – Management

Now we are done with the terminological warm-ups and ready to dig into the details, risk-by-risk. Each of the following chapters will take one key risk dimension and walk through the full risk management process from identification to measurement to action. Risk actions relate to the decisions that an institution can take in terms of accepting, mitigating, insuring, transferring and hedging a risk. In the final chapter, we provide a framework and policy templates that will help you entrench these risk management tools and processes at your institution such that risk management itself becomes a documented and auditable process.

Unit 4.1: Credit Risk Management

Unsurprisingly, this will be the single biggest unit in the course with the greatest number of analytical tools, the most homework and some of the most interesting number crunching. We will talk about credit transaction versus credit portfolio risk and about organizational principles of credit risk management in SME lending, micro-enterprise finance and consumer credit. Portfolio risk management always starts with a keen eye on concentrations and the need for effective ex-ante diversification and some macro-exposure budgeting. From there, we will study traditional portfolio performance diagnostics: such as arrears aging schedules, vintage curves and the transition matrix. We will also spend much time on the data requirements for predictive credit modeling and the development of a comprehensive client data strategy that will enable targeted marketing and credible development impact reporting.

Assuming that we have consistent socio-demographic, financial and credit history data on our clients, we will build statistical models for the probability-of-default and loss-given-default parameters. Here, you will work on real loan portfolio data and will learn step-by-step how to clean up and standardize data, how to code variables and how to calculate a functioning statistical application score. The same analytical apparatus will then be used to develop a behavioral scoring model, such as a collections scoring, for example. A collections score will help you decide which clients in arrears might be most responsive to which type of arrears management actions. We will also discuss a detailed borrower and facility rating model for SMEs in emerging and developing markets. And finally, with good estimates for the basic portfolio risk parameters in place, we can now put it all together in a risk-based pricing model.

Unit 4.2: Operational Risk Management

Operational risk is the summary term for any and all potential losses that may arise from external events and internal failures of people, processes and systems. Many aspects of operational risk in MSME Finance are closely related to credit risk and also manifest in unrecoverable loans. We will deal with this type of operational risk in the credit process in great detail in the course.

Further, we will study the operational risks associated with the scope of Compliance in retail banking. Business continuity planning is another critical operational risk topic that is sometimes neglected in MSME Finance. We will then take a detailed look at how to best organize the control of such a vast field of potential loss events as may arise from operational risk. A loss event database with some internal audit / internal control workflow functionality can be a great tool for organizing the many operational risk anecdotes and for identifying and tracking key risk drivers.

Unit 4.3: Interest Rate Risk Management

Interest rate risk follows close on the heels of liquidity risk. Interest rate risk (in the banking book) is essentially about differences in the timing and degree by which unexpected changes in the level of wholesale market interest rates will be absorbed into the product rates charged to clients and paid on the funding instruments raised by the institution. We will do some finger exercises in financial math as we revisit time-value-of-money concepts that are at the heart of the interest rate risk "problem". We then take some conventional interest rate risk measurements, i.e. re-pricing gap reports by currency, basis-weighted repricing gaps, duration weighted gaps, and net interest income simulation. Once we can quantify the interest rate risk exposure, one can proceed to determining interest rate risk limits and discussing rate risk actions that can manage interest rate risk back within acceptable limits. These actions will include alignments on treasury assets and liabilities, changes to the origination of client contracts and some simple overlay transactions using financial derivatives.

Unit 4.4: Foreign Exchange Rate Risk Management

This unit will deal with the impact on earnings and equity value arising from unexpected changes in exchange rates. It will also touch on related convertibility and transfer risks which are particularly relevant in developing and emerging markets. You will learn how to measure basic forex exposure by determining current and future open positions. When we combine an open position with an estimate of how much a currency might realistically fluctuate over a certain period of time, we can obtain a confidence interval of maximum losses from forex risk, the so-called value-at-risk. We will also study the implications of using a foreign functional currency (e.g. the USD in Cambodia) and of dealing with currency risk more broadly in the context of partial or full dollarization. This will lead us to structural forex positions, currency-hedged equity and the issue of managing currency-induced credit risk at the client level. As always, we will work through the full risk cycle from identifying the different types of risks associated with the use of multiple currencies, quantifying these exposures, establishing acceptable limits for each and understanding the instruments at our disposal to manage exposures back into compliance with those limits.

Unit 4.5: Liquidity Risk Management

Liquidity is the classic survival skill for financial institutions of all types and sizes. By way of introduction, we will study the sources of liquidity risk and the curious non-linear behavior of liquidity. We will then discuss the organization of liquidity management and define the roles and responsibilities of a treasury manager or finance director vis-à-vis that of the risk manager as it relates to liquidity and the short-term investing and borrowing activities of the institution. We will measure liquidity on the balance sheet using various ratios and develop detailed cash flow forecasts. The single biggest challenge in liquidity is the study of depositor behavior under normal and under stressed market circumstances. This type of core deposit analysis requires some statistical analysis and modeling, which we will develop in detail in the course.

Unit 4.6: Risk Management Policy Framework

Now that we have worked through the many analytical tools for keeping tabs on each of the risk areas, we need to assemble all the various components into a policy framework that will help you put best practice risk management to work in your institution. Here, we propose templates for the definition of roles and responsibilities and policy drafts that document best practice risk management. These templates can easily be scaled and customized to the size and complexity of your institution. Risk management really only works, if it is itself a disciplined, documented and audited procedure that is woven right into the fabric of all business activities of the institution. In short, these policies describe the organization of risk management, specify the analyses and tools used to quantify risk, summarize prudential, internal and covenant limits that apply to exposures and describe the allowable actions and instruments to manage exposures within the limits.

Unit 5: Wrap up, Systems and Outlook

In the final unit we will try to take a step back from the detailed analytical perspective that dominated Unit 4. Here, we will look at the strategic and competitive implications of good risk management practice and the latest developments in the science of risk and its regulatory environment. As always, the focus is on what this all means for small banks and non-bank financial institutions in emerging markets and developing countries. We will also look at the merits of various software solutions for Enterprise-wide Risk Management and other opportunities for further refining risk governance and reporting and for managing the cost of compliance.