CHAPTER 1

Introduction

Shyam Venkat and Stephen Baird[1]

The global financial crisis began as fears over credit losses and counterparty insolvency eroded market confidence and quickly led to a full-fledged liquidity crisis. As early as August 2007, institutions were seeing a fundamental shift in the liquidity of markets, well before the depth of the mortgage crisis was understood. Today, over eight years later, we stand in the midst of a risk management and regulatory transformation that is touching every aspect of how financial institutions manage their risks and is far from complete. Liquidity risk—one among a very long list of worries for banks, asset managers, regulators, and customers—nevertheless stands apart as it addresses the lifeblood of an institution and liquidity can dry up suddenly if not properly managed. While the credit profile of a loan portfolio can take months or even years to deteriorate, liquidity can disappear in a matter of hours. Liquidity is unpredictable, difficult to measure, and often opaque. In a crisis, market participants are more likely to rely on the media and the rumor mill rather than earnings releases to evaluate the risk of providing liquidity to a trading partner.

Despite these challenges, or perhaps because of them, and also due to the excess liquidity in the financial markets during much of the 1990s and early 2000s, liquidity risk has in many respects held a lower position on the risk management and regulatory agenda than many other key risk types—particularly credit, market, and overall capital adequacy. As described in the chapters that follow, we believe that industry and regulatory focus is shifting rapidly to liquidity risk, and that banks will need to significantly upgrade their capabilities over the next several years. These improvements will touch every aspect of liquidity risk management—framework design, process management and oversight, and technology capabilities all will need to be upgraded to meet both the demands of the marketplace as well as regulatory expectations. Meeting this

COPYRIGHTED MATERIAL
http://www.pbookshop.com

[1]Shyam Venkat is a principal in PwC's New York Office, and Stephen Baird is a director in PwC's Chicago office.

challenge successfully will require an agenda, and the principal objective of this book is to suggest the details and approaches to meeting that agenda.

A PRACTITIONER'S PERSPECTIVE

The subtitle of this book is "A Practitioner's Perspective." What is a practitioner's perspective? In our view, practitioners—treasurers and risk managers charged with actually managing and monitoring the bank's liquidity risk—benefit most from information that:

- **Reflects industry practices:** The practitioners seek to understand how liquidity risk is managed outside of their institution. Where are other firms ahead of them? Where are they leading the pack?
- **Brings a regulatory perspective:** More than ever, the regulatory agenda is shaping the risk agenda. In this environment, understanding what regulators expect—both today and in the future—is an important aspect of building the most effective risk management framework. Arguably though, a well-conceived, robust, and effectively implemented set of liquidity risk management capabilities will generally align with, and even inform, supervisory expectations.
- **Is forward-looking:** The practitioner not only lives in the world of what is possible, but also understands the need to keep moving forward. Understanding emerging trends in liquidity risk management is an important aspect for practitioners.

We also note what this book is not—a theoretical view of how liquidity risk management should be performed in a world of costless analytics and unlimited access to real-time data across the enterprise. We leave that perspective to academia.

http://www.pbookshop.com

OUTLINE OF THE BOOK

This book is organized into three sections. The first section, "Measuring and Managing Liquidity Risk," lays out the building blocks of a liquidity risk program in a series of chapters dedicated to key topics. We begin with Chapter 2, "A New Era of Liquidity Risk Management," by outlining a set of leading practices that can be garnered from each of the chapters in this book. Our chapters—addressing stress testing, intraday liquidity risk management, collateral management, early warning indicators, contingency funding planning, liquidity risk information systems, and the liquidity implications of recovery and resolution planning—are designed to assist

practitioners in honing their knowledge of these areas and creating a forward-looking improvement agenda.

The second section, "The Regulatory Environment of Liquidity Risk Supervision," describes recent and upcoming developments on the all-important regulatory front. This landscape includes a focus not only on recent standards in liquidity proposed by the Basel Committee of Banking Supervisors (referred to as Basel III) but other developments in the areas of stress testing and reporting.

The third and final section, "Optimizing Business Practices," considers how this transformation of liquidity risk management practices will impact business activities and how banks should respond. Clearly, with liquidity risk receiving more attention than ever before, sticky money will be more valuable than hot money. The question is: How will banks meet the challenges of aligning their business activities—through product design, funds transfer pricing, management incentives, and other mechanisms—to reflect this new priority?

http://www.pbookshop.com

CORE THEMES

Before we delve into the details, we highlight three core themes that you will see throughout the chapters in this book. These themes represent the fundamental characteristics of today's liquidity risk environment and where we see the future direction. As you read these chapters, please keep an eye out for:

- **The intertwining of the regulatory and management agendas.** The importance of the regulatory agenda in driving liquidity risk transformation is, and will continue to be, a key feature of liquidity risk management. While this agenda is driving banks to improve their practices, practitioners should remain mindful of the importance of an internal management-driven agenda aimed at continuous improvement of the firm's capabilities.
- **The challenge of automation.** In many respects, the challenge of raising the liquidity risk management bar will be less about measurement frameworks and policies and more about implementing a robust set of capabilities that will be underpinned both by effective governance and technology-enabled solutions. Building an infrastructure that captures, stores, and transforms data in an automated and controlled fashion may be the most daunting challenge.
- **The drive to integration.** Despite all of the advances in risk management since the financial crisis, banks' risk management frameworks

remain largely fragmented, with the management of various risks often being addressed in siloed fashion, and with risk management processes themselves often being delinked from other business activities such as strategic planning, incentives, and profitability measurement. Integrating liquidity considerations into how the bank is run will be a key priority.

ACKNOWLEDGMENTS

As this book is a practitioner's guide, we thought it useful to have our team of practitioners that specialize in the risk management arena share their perspectives and insights. We would like to acknowledge not only these contributors, but many dedicated current and former PwC professionals that worked behind the scenes to make this publication happen. They include: Vishal Arora, Lee Bachouros, Michelle Berman, Jon Borer, Rahul Dawra, Amiya Dharmadhikari, Jaime Garza, William Gibbons, Alison Gilmore, Mayur Java, Shahbaz Junani, Emily Lam, Fleur Meijs, Agatha Pontiki, Manan Shah, Dan Weiss, Jon Paul Wynne, Scott Yocum, and Yuanyuan (Tania) Yue.

Our special thanks go to Chi Lai and Richard Tuosto, who not only served as contributing authors but also helped us extensively with reviewing and developing content in other areas of this book. Finally, we are deeply indebted to Tina Sutorius without whom this book would not have been possible—she kept us focused on the mission at hand and helped stitch the different pieces together, both large and small.

http://www.pbookshop.com