Available online at www.sciencedirect.com
ScienceDirect
Journal of Banking & Finance 30 (2006) 2605–2634
Journal of BANKING & FINANCE
www.elsevier.com/locate/jbf

The market value impact of operational loss events for US banks and insurers ☆

J. David Cummins [a,*], Christopher M. Lewis [b], Ran Wei [a]

[a] *The Wharton School, 3303 Steinberg Hall-Dietrich Hall, 3620 Locust Walk, Philadelphia, PA 19104-6302, United States*
[b] *The Hartford Insurance Group, United States*

Received 7 January 2005; accepted 1 September 2005
Available online 19 April 2006

Abstract

This paper conducts an event study analysis of the impact of operational loss events on the market values of banks and insurance companies, using the OpVar database. We focus on financial institutions because of the increased market and regulatory scrutiny of operational losses in these industries. The analysis covers all publicly reported banking and insurance operational risk events affecting publicly traded US institutions from 1978 to 2003 that caused operational losses of at least $10 million – a total of 403 bank events and 89 insurance company events. The results reveal a strong, statistically significant negative stock price reaction to announcements of operational loss events. On average, the market value response is larger for insurers than for banks. Moreover, the market value loss significantly exceeds the amount of the operational loss reported, implying that such losses convey adverse implications about future cash flows. Losses are proportionately larger for institutions with higher Tobin's *Q* ratios, implying that operational loss events are more costly in market value terms for firms with strong growth prospects.

JEL classification: G14; G21; G22; G28

Keywords: Operational loss events; Operational risk; Banking; Insurance; Event study

☆ The opinions expressed in this paper are those of the authors and do not necessarily reflect the views of the Wharton School or the Hartford Insurance Group.

* Corresponding author. Tel.: +1 215 898 5644; fax: +1 215 898 0310.
E-mail address: Cummins@wharton.upenn.edu (J. David Cummins).

0378-4266/$ - see front matter
doi:10.1016/j.jbankfin.2005.09.015

1. Introduction

Although financial institutions have faced operational risks throughout their history, the attention devoted to managing operational risk has increased dramatically in recent years. Managerial and regulatory focus on operational risk has been heightened following a number of very costly and highly publicized operational events. In banking, examples include the infamous bankruptcy of Barings bank in 1995, which was triggered by a $1.3 billion loss due to a rogue trader, the Allied Irish Bank's loss of $750 million due to unauthorized trading in 2002 (Ascarelli, 2002), and the $1.4 billion in fines levied in 2002 against several leading brokerage firms for issuing misleading research reports to investors.[1] Operational loss events for insurance companies have been equally damaging. Prudential Insurance Company of America paid $2 billion to settle allegations of sales abuses during the late 1990s; and State Farm Insurance paid $1.2 billion to auto insurance policyholders as the result of a breach of contract lawsuit in 1999, resulting from the use of inferior quality generic replacement parts for damaged cars (Lohse, 1999). Even a cursory review of these events demonstrates the severe impact that operational losses can have on earnings, share price volatility, and potentially even solvency.

The increasing attention focused on operational risk over the past several years likely emanates from two key developments: (1) an enhanced emphasis on transparency in firm financial reporting, and (2) rising levels of exposure to operational risk driven by increasingly complex production technologies used by financial services firms. As the world economy swept into the information age during the 1980s and 1990s, information technology enabled investors to quickly access and analyze large volumes of corporate financial data. A natural outcome of this process was the development of investor advocacy groups demanding increasing levels of transparency in firm financial reporting. Regulatory actions further supported this demand. Bank regulators argue for increased disclosure as a way for the capital markets to police corporate behavior along side the normal bank regulation process. The passage of The Sarbanes-Oxley Act of 2002, following the collapse of Enron and WorldCom, only served to further buttress this call for disclosure. The net result of these developments was to increase the level of sensitivity in reporting material changes in earnings – including losses arising from operational risk.

Other developments in financial markets also have heightened the scrutiny of operational risk. Deregulation, globalization, and advances in technology have led to the creation of new and highly sophisticated production processes and complex products for both wholesale and retail customers. While new technologies often reduce production costs and enhance product value, they also create operational risks. For example, the development of hedging and risk mitigation techniques have enabled institutions to better manage the market and credit risks arising from complex products but, in turn, have created additional operational risk exposures. Greater use of automation in back-office operations can eliminate relatively minor manual processing errors, but increases exposure to larger system-wide failures. The growth of e-banking and e-commerce exposes institutions to new and unknown risks, as well as increasing their exposure to traditional risks such as fraud. Mergers and acquisitions create operational risk arising from the integration of previously separate information technology systems; and the growth in outsourcing and participation in clearing and settlement systems has mitigated some risks while exacerbating others.

[1] "Regulators Announce Settlement with Ten Wall Street Firms", *Wall Street Journal*, April 28, 2003.