RED FLAGS ON FINANCIAL FAILURE:
THE CASE OF THAI CORPORATIONS

Asso. Prof. Jinda Khunthong

A Dissertation Submitted in Partial Fulfillment of the Requirements for the Degree of Doctor in Business Administration.
Graduate School-
The National Institute of Development Administration (NIDA)
Academic Year 1997
The National Institute of Development Administration
Graduate School of Business Administration

A Doctoral Dissertation

by

Assoc.Prof. Jinda Khunthong

Titled
"Red Flags on Financial Failure: The Case of Thai Corporation"

has been approved as a partial fulfillment of the requirement for the Degree of

Doctor of Business Administration (D.B.A.) in Accounting

For the Joint Doctoral Business Administration Program (JDBA)

on April 29, 1998 by

Chairperson of the committee and main advisor

(Assist. Prof. Aekkachai Nittayaagasetwat Ph.D.)

Committee member

(Dr. Thakol Nunthirapakorn Ph.D.)

Committee member

(Asst.Prof. Chinnaphong Bunrungsup Ph.D.)

Committee member

(Assoc. Prof. Saowanee Sitchawat DBA.)

Committee member

(Asst.Prof. Pongsu Pornchaisriwitkul Ph.D.)
ACKNOWLEDGEMENTS

The successful completion of this dissertation is due to the encouragement and support from Asst. Prof. Dr. Aekkachai Nittayagasetwat, my major professor. I am greatly indebted to him for his knowledgeable, patience and careful guidance.

Besides, I would like to express my sincere thanks to my committee: Dr. Takul Nanthirapakorn, Asso. Prof. Dr. Saowanee Sitchawat, Asst. Prof. Dr. Pongsak Pornchaiwiseskul and Asst. Prof. Dr. Chinnaphong Bumrungsup for their knowledgeable and experienced comments improved the quality of this dissertation and increased my knowledge.

I would like to thank my mother and other members of my family for their love and encouragement.

I would thank Assistant Professor Apiradi Aranyakanda and Professor Bengt-Arne Vedin for their kindly help in editing this dissertation.

I also would like to express special thanks to Lecturer Pradit Withisuphakorn, my JDBA friend, who provided me the SAS program and helpful advises in using of SAS program and also Khun Veerachai Thavornthon, an security analyst from Mutual Fund Public Company Limited, who kindly provide me some financial statement information.

Finally, thanks to all the professors and staffs in the Joint Doctoral of Business Administration (JDBA) for their support and valuable knowledge they provide. Thanks to Khun Jessada Jukkree, who help me in the programming, and to all my students at Kasetsart University for their contribution in making this dissertation complete.
ABSTRACT

Red Flags on Financial Failure: The Case of Thai Corporations

This study is to identify red flags on financial failure of Thai corporations, since the collapse of many business firms, especially the financial institutions and real estate firms in 1997. Red flags are indicators for possible cause for concerned specific areas that represent potential problems; here it is limited to financial failure. Using red flags as warning signals for financial failure will efficiently help the users of the financial statements in their decision making. In addition, the study includes prediction performance and experimental forecasting of 1998-2000.

The data used in this study are collected from the SET data-base. Samples are divided into 2 major sectors: non-financial and financial samples. The latter is then subdivided into 3 sub-samples. Failed firms were the listed firms posted with the supervision sign of “C” (Compliance) and “SP*” (Suspension) in 1997. There are 18 failed firms of non-financial samples and 27 failed firms of financial samples. A test period of 3 years prior to bankruptcy is examined. Both statistical and econometric methods are employed, i.e., MDA, logit and probit. Experimental forecasting of financial performance in 1998 to 2000 is also conducted by using estimation models of 1996, 1995, and 1994 respectively.

Empirical results show that there are four standard ratio categories statistically significant predictors for business financial failure, i.e., financial leverage, profitability, activity and liquidity. Retained earnings to total assets (RE/TA), operating income to total assets (OI/TA), total liabilities to total assets (TL/TA) and two-year negative net income (LOSS 2) are among the sixteen variables, which are significant short-term predictors and retained earnings to total assets (RE/TA) and total liabilities to total assets (TL/TA) are also significant long-term indicators for non-financial firms. While net income to shareholders’ equity (NI/SE), retained earnings to total assets (RE/TA) and market value of common stocks to total liabilities (MS/TL) are significant short-term predictors for financial firms, and retained earnings to total assets (RE/TA), operating income to total assets (OI/TA), total liabilities to total assets (TL/TA), and current assets to total assets (CA/TA) are also significant long-term indicators for financial firms.

As to the predicted performance at the cutoff value of 0.5, non-financial samples with the overall classification accuracy closes to and over 91.6 per cent while Type I errors (misclassifying failed firms to nonfailed firms) amount to 44.4 per cent and Type II errors (misclassifying nonfailed firms to failed firms) are even better at 3.5 per cent. On the other hand, financial samples with the overall classification rate are rather low (between 40-77.8 per cent) while Type I errors are decreased to 20 per cent and Type II errors are drastically increased to 36 per cent.

Experimental forecasting results show that there are more business firms both non-financial and financial firms, which might eventually have financial failure in 1998 to 2000.