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Tobias Eichner

Restructuring and Turnaround of Distressed Manufacturing Firms

An International Empirical Study





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PREFACE

The monograph at hand is remarkable in various dimensions. First, it addresses a topic of high interest to managers, supervisory board members, or investors; What instruments or measures are available to restructure and to turnaround a firm once it is faced with a situation of distress? Tobias Eichner not only identified and systemized such measures but also investigated and prioritized them with regards to their efficacy. Although there is a broad set of scientific and management-oriented contributions in the fields of insolvency forecasting and crisis management, a comprehensive analysis of countermeasures, their efficacy and relation to the timing of the initiation of such measures has rarely been attempted. Second, the data set is unique in the sense that it combines financial data for manufacturing firms in the UK, the USA. and Germany, with press statements and publications of firms articulating their strategies for mastering acute situations of distress. Third, a range of statistical methodologies are carefully selected and applied to the highest standard of empirical research. Finally, the monograph is written in a style that we perceive as highly commensurable both for the scientific community and a broader audience of management.

While resisting inappropriate generalizations, key findings are instructive and worth pointing out. On the basis of Eichner's empirical data it appears that successful restructuring strategies share three crucial characteristics with regards to timing, intensity, and comprehensiveness of the measures taken. Those firms who successfully manage the turnaround identify the crisis in its early stages, swiftly initiate a comprehensive set of countermeasures and display high commitment and intensity in implementing change. Less successful firms need longer periods of time to overcome distress, or fail altogether. Their management seems to start counteraction later and with lower intensity. When the crisis then fully unfolds up to compromising the firm's existence, new activities are often hastily announced. In many situations, however, it is literally too late, as the competition continues to improve by also trying to benefit from rivals' weaknesses, customer concerns about the firm's quality and capabilities arise, management talent starts to reorientate and investors become hesitant to provide new funds. Without consistent countermeasures, crises tend to spiral out of control and the firm finds itself in a vicious circle of increasing challenges. Individual measures seem to be of limited effectiveness. Furthermore, the effectiveness depends on the timing with which measures are initiated. For example, the dismissal of the chief executive officer positively impacts the turnaround prospects only if this happens early in the crisis. It is a non-productive initiative at later stages. Similar patterns are visible with regard to product innovation. The adequate set of measures also depends significantly on the causes of the crisis. Such causes are likely to be firm-specific rather than a consequence of a downturn that affects entire industries.

We recommend this monograph, which appears at the right point in time, to a broad audience including researchers, lecturers, and managers, also recognizing the appreciation that this outstanding work has already achieved. As this is the first monograph starting a new series of contributions in the field of quantitative management research, we are looking forward to further publications, although the benchmark set with this volume is high.

Hans Georg Gemünden

Frank Richter

Berlin, Ulm, October 2009

AUTHOR'S PRELIMINARY REMARKS AND ACKNOWLEDGEMENTS

To me as an author, writing this thesis has been both a great challenge and a pleasure. During my previous studies, as well as my professional career, in which I recently joined the partner ranks of Oliver Wyman, providing strategic advice to firms facing economic peril has consistently been a strong focus of my interest. Thus, striving for a "scientific answer" on how to best bring about the turnaround for firms on the cusp of financial distress has been a logical consequence. My personal interest and experience, combined with the striking managerial relevancy of this topic, has been a pertinent source of stimulus and motivation throughout my thesis work. However, with almost two years of thought, discussions, analysis, and writing from an initial idea to its completion, there were also several challenges that needed to be handled. At this point, I would like to emphasize that I was only capable of mastering these with the strong and persistent support from others, whom I would like to personally mention at this point.

First of all, I am grateful to my academic advisor Prof. Dr. Frank Richter, for his remarkably efficient, professional, and well-balanced style of providing guidance. His to-the-point feedback was both a constant challenge and invaluable support to me in finishing this piece of research. I am also grateful to my external referee and advisor, Prof. Dr. Hans Georg Gemünden, who has been a great teacher to me throughout my academic career since my undergraduate years, and who supported me in identifying the appropriate analytical toolset for conducting this study. I would also like to thank my referee Prof. Dr. Frank Stehling for his quick and positive evaluation of my thesis, despite his immense workload as an officiating dean. At this point, I would also like to mention the entire team of Prof. Dr. Richter's Strategy & Finance Chair, for their openness and their warm welcome to me as an external doctoral candidate. Further thanks go to Prof. Charles W. Hofer, for introducing me to the nuts and bolts of turnaround research several years ago during my MBA year in Georgia (USA).

Secondly, I would like to mention my corporate sponsors at Oliver Wyman, who granted me the generous financial support and flexibility of a doctoral fellowship, as well as their intellectual resources. In particular, this holds for my corporate advisor Thomas Kautzsch, for Wolfgang Weger, Dr. Lutz Jäde, and my former colleagues Dr. Nikolai Dördrechter and Dr. Martin Eisenhut. I am indebted to all of them for several helpful discussions and their coaching. I would also like to mention Dr. Andreas Pradler as well as my former colleagues Daniela Horning and Bernhard Baumann for their excellent and resourceful research assistance. Last but not least thanks go to our

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Moreover, throughout my dissertation work, I could count on a set of excellent antecessors, peers, and successors of doctoral students, who inspired and challenged me on the one hand, while on the other hand provided these necessary moments of chargeback in the course of countless "doctoral candidate lunches" in Munich, tennis matches, golf outings, or on many other occasions. Among several others worthy of mention at this point, I particularly want to name Dr. Daniel Pindur, Dr. Christian Mugele, Dr. Tobias Umbeck, Dres. Silja and Michael Kasch, Dr. Philipp Jostarndt, Dr. Manoj Gupte, Dr. Michael Wagner, Dr. Anne-Kathrin Lohbeck, Dr. Julia Daecke, Dr. Ralf Ermisch, Dr. Reinhard Brandl, Dr. Andreas Meyer, and Dr. Dirk Schneider.

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Finally, I would like to express my utmost gratitude to my parents Peter Thomas and Ilse Sibylle Eichner for their continuous and altruistic support of my entire education, to my brothers – Moritz, Jonas, and Johannes – whom I could always rely upon, and to my beloved wife Julia, who has been the essential source of motivation and care in navigating through the numerous days as a doctoral candidate. To all of them, I would like to devote this book

Tobias Eichner

Munich, October 2009

List of Abbreviations XV

LIST OF ABBREVIATIONS

abs. absolute acct. accounting

AG Aktiengesellschaft (German corporation)

AIC Akaike Information Criterion

AR annual report
AUS Australia

BRIC Brazil, Russia, India, and China CAGR compound annual growth rate

CAPEX capital expenditure
CEO Chief Executive Officer
CFO Chief Financial Officer

CF cash flow

coeff. coefficient of regression

DS DataStream

E early

E/G entrepreneurial/growth oriented strategies

e.g. for example (exempli gratia)

EBIT earnings before interest and taxes

EBITDA EBIT before depreciation and amortization

ed(s). editor(s)
etc. et cetera
et al. et alii
EUR euros

FCF free cash flow
GER Germany
H Hypothesis

HWF hierarchically well formulated ICB Industry Classification Benchmark

i.e. that is (id est)

IFRS International Financial Reporting Standards

Inc. Incorporated

L late

LBO leveraged buyout

Ln natural logarithm (logarithmus naturalis)

MBV Market Based View misc. miscellaneous

mill. million(s)

n number

NA not applicable

NPV net present value

n.s. not significant

P Proposition

p. page

PIMS Profit Impact of Market Strategies

PLC public limited company
PLS Partial Least Squares

pp. pages

PP&E property, plant and equipment

R retrenchment

R² / R-square coefficient of determination

ROC Receiver Operating Characteristic

R&D research and development

rel. relative

ROA return on assets
ROE return on equity
ROI return on investment
ROS return on sales

S-C-P Structure-Conduct-Performance

std. dev. standard deviation

t time period

TSR total shareholder return

UK United Kingdom

US United States of America

USD US Dollars

US-GAAP United States Generally Accepted Accounting Principles

VIF Variance Inflation Factor

vs. versus

THESIS ABSTRACT

Finding the adequate corporate response to financial distress situations has been an active field for research in recent decades. However, several loose ends remain, including – among other aspects – the empirical support for the effectiveness of such decline-stemming restructuring strategies. Hence, the core **objective** of this study is to provide **empirical verification of the effectiveness of restructuring strategies in financial distress situations.** The study employs a sample of **international** firms in the manufacturing industry and incorporates three perspectives context, strategy content as well as the process of strategy execution into a **comprehensive approach**. Both aspects – international sampling and the combination of strategy content with process – span a research gap. The approach of this study thus represents a **clear advancement** over previously published research.

Key research questions addressed include the following:

- How **effective** are commonly-prescribed restructuring strategies in helping to resolve corporate distress situations?
- What is the **relative contribution** of different categories of restructuring (e.g. financial or operational restructuring) towards the turnaround of distressed firms?
- Are there any **strategic archetypes** of successful recoveries?
- What can thus be inferred regarding appropriate restructuring strategies in a specific case of a distressed firm?

The study draws from two literature cycles – financial economics and strategic management – and develops a research framework based on contingency theory to derive a comprehensive set of propositions and hypotheses. To conduct the analysis, a sample of **151 firms** that experienced financial difficulties has been collected by using interest coverage shortfall as a distress criterion. Each firm is tracked with regard to its restructuring activities ("strategic moves") for a period of four years, leading to either a turnaround (63%) or a non-turnaround (37%).

Univariate testing as well as multivariate logistic regression analysis indicate significant differences in strategic moves employed by each group – turnarounds versus non-turnarounds. These results improve considerably, once a process component of restructuring moves is endogenized, since several strategic moves are only hypothesized to be effective if they are applied in the appropriate stage of the restructuring process. After incorporating both aspects, i.e. strategy expressed in terms of both

restructuring content and its process, models achieve strong explanatory power with regard to the prediction of a turnaround. Hence, restructuring is empirically supported as an effective means to resolve distress. Moreover, it can be shown that all four categories of restructuring (i.e. operational, managerial, financial, and portfolio restructuring) contribute significantly to turnaround from distress. Results suggest that strategic responses which are both early and comprehensive, work best to attain turnaround. Moreover, successful turnarounds show a clear pattern of two process phases; Initial retrenchment activity, such as CAPEX cuts, lavoffs, and divestiture, is followed by growth-oriented recovery moves as for instance product innovations, growth through acquisitions, and the like. In contrast, firms that end up failing to recover tend to show lagged response, which then becomes a desperate and thus intense - effort. Empirical results are not only verified through goodness-offit metrics, but accompanied by a comprehensive set of robustness diagnostics. All of these, as for instance an augmented Durbin-Wu-Hausman test on model specification, rigid overfitting thresholds, and cross-validation techniques, unanimously support their robustness.

As an explorative **extension**, a multivariate cluster analysis is employed to uncover patterns of strategic moves among the successful turnaround firms. This leads into the identification of **six distinct archetypes of successful restructuring strategies** that show "common pathways to turnaround" and are correspondent to prior qualitative theory.

The study concludes by deriving a set of **realizable implications** for restructuring practice and pinpointing promising areas for extensions through future research.

TABLE OF CONTENTS

List	of Figures	XII
List	of Tables	XIII
List	of Abbreviations	χV
The	sis Abstract	XVII
1	Introduction	1
1.1	Motivation	2
1.2	Research Gap and Questions	6
1.3	Research Approach	8
1.4	Outline of Course of Study	10
2	Review of Literature on Distressed Restructuring	13
2.1	Alternative Theoretical Perspectives	15
	2.1.1 Perspectives of Finance Research	16
	2.1.2 Perspectives of Strategy Research	
2.2	Existing Empirical Evidence	
	2.2.1 Overview of Related Empirical Contributions 2.2.2 Discussion of Selected Empirical Studies	25 29
	2.2.2.1 The Study by Hambrick and Schecter (1983)	29
	2.2.2.2 The Study by Asquith, Gertner, and Scharfstein (1994)	31
2.3	2.2.2.3 The Study by Sudarsanam and Lai (2001) Derivation of Implications for this Study	32 34
3	Research Context and Definitions	
3.1	Positioning within Existing Literature	
3.2		
	3.2.1 Distressed Firms	45
	3.2.2 Restructuring	48 51
	3.2.2.2 Restructuring Process	55
	3.2.3 Turnaround	58
_	3.2.4 Industrial Manufacturing Sector	
4	Derivation of the Research Model	
4.1	Introduction to the Research Framework	
	4.1.1 Framework Overview	
4.2	Derivation of Testable Propositions and Hypotheses	
• • •		

		Conventions on Distress and Turnaround	
	4.2.2	Restructuring Process and Effectiveness	70
		4.2.2.1 Conventions on Restructuring Process	70
	100	Restructuring Content and Effectiveness	76
	4.2.3	4.2.3.1 Conventions on Restructuring Content	77
		4.2.3.2 Effectiveness of Operational Restructuring	79
		4.2.3.3 Effectiveness of Managerial Restructuring	91
		4.2.3.4 Effectiveness of Portfolio Restructuring	97
		4.2.3.5 Effectiveness of Financial Restructuring	103
	4.2.4	Joining Restructuring Content and Process	115
	4.2.5	Restructuring Context	118
		4.2.5.1 Context Factors of Distressed Restructurings	
	406	Successful Restructuring Archetypes	
4.0			
4.3	•	ationalization of Variables	
		Dependent Variables	
		Independent Variables	
		Control Variables	
4.4		nary Overview of Research Model	
5	Selec	tion of Statistical Methodology	145
5.1		ge of Methodology Choices and Empirical Results	
5.2		e of Sampling Approach and Scaling Properties	
	5.2.1	Sampling Methodology	147
		Handling of Missing Data and Choice of Scaling Properties	
5.3	Multiv	rariate Inferential Data Analysis Methodology	150
	5.3.1	Selection of Logistic Regression Analysis versus Other Methods	151
	5.3.2	Specification of the Logistic Regression Model	156
	5.3.3	Model-Building Objectives and Strategy	160
		5.3.3.1 Model-Building Objectives	160
		5.3.3.2 Model-Building Strategy	161
	F 0.4	5.3.3.3 A Note on Interaction Effects	100 791
	5.3.4	5.3.4.1 Model Fit Assessment	167 167
		5.3.4.2 Model Robustness Diagnostics	170
		5.3.4.3 Cross-Validation Techniques	174
5.4	Explo	ratory Cluster Analysis	
	5.4.1	Selection of Cluster Analysis Methodology	176
	5.4.2	Cluster Analysis Approach	1 7 7
5.5		lementary Analysis Techniques	
		Selection of Univariate Testing Techniques	
		Selection of Onivariate resting recriminates	
	5.5.2	Introduction to Testing Conventions	182
6		Introduction to Testing Conventions	182

	6.1.1	Sample Collection	186
	6.1.2	Descriptive Results	192 192 196 202
6.2	Resul	ts of Restructuring Effectiveness and Turnaround Prediction	208
	6.2.1	Results of Layer III Hypotheses on Strategic Moves	211 212
	6.2.2	Results of Layer II Propositions on Restructuring Categories	224 224
	6.2.3	Results of Layer I Propositions and Turnaround Prediction	231 231 234
	6.2.4	Robustness of Empirical Results	239 239 241
	6.2.5	6.2.4.3 Cross-Validation of Layer I Results	245 245
6.3	Resul	ts of Successful Restructuring Archetypes	253
	6.3.2	Results of Cluster Analysis	260
7	Conc	lusion	265
7.1	Cours	e of Study Review	266
7.2	Synop	osis of Key Findings	268
7.3	Implic	ations for Managerial Practice	273
7.4	Limita	tions and Outlook	275
App	endice	95	279
D-6-		_	004

LIST OF FIGURES

Figure 1-1: Research Gaps Addressed7	,
Figure 1-2: Outline of Chapter Structure12	2
Figure 2-1: Status of Basic Research Questions on Corporate Turnaround 35	í
Figure 3-1: Theoretical Positioning40)
Figure 3-2: Analytical Framework of Content, Process, and Context43	3
Figure 3-3: Severity Stages of Distress Situations46	ì
Figure 3-4: Types of Distress Criteria Used in Restructuring Research48	3
Figure 3-5; Restructuring Content along Three Analytical Layers52	2
Figure 3-6: General Stages of the Restructuring Process	5
Figure 3-7: Two-Staged Process Definitions of Restructuring Implementation 56	3
Figure 4-1: Research Framework for Restructuring Effectiveness 65	õ
Figure 4-2: Overview of Three Analytical Layers6	7
Figure 4-3: Timing and Process Stage Conventions Applied7	1
Figure 4-4: Prioritization of Restructuring Content Operationalization78	3
Figure 4-5: Elements of Operational Restructuring8	1
Figure 4-6: Elements of Managerial Restructuring93	3
Figure 4-7: Elements of Portfolio Restructuring98	3
Figure 4-8: Elements of Financial Restructuring10	5
Figure 4-9: Hypothesis Direction along Content and Process	6
Figure 4-10: Classification of Underlying Causes of Distress	9
Figure 4-11: Summary Overview of Research Model14:	3
Figure 5-1: Model-Building Strategy in Six Steps16	2
Figure 5-2: Example of Interaction as a Moderating Effect	6
Figure 6-1: Sample Selection Procedure18	9
Figure 6-2: Distribution of Distress Entry Years in Distressed Firm Sample 19:	2
Figure 6-3: Distressed Sample Profile by Origin and Industry Sub-Segment 19	3
Figure 6-4: Frequency of Restructuring Moves19	8
Figure 6-5: Performance Trajectories of Turnarounds versus Non-Turnarounds 20	3
Figure 6-6: Trajectories of Restructuring Intensity – Process Perspective 20	6
Figure 6-7: Layers of Analysis in Inferential Results Discussion21	0
Figure 6-8: Residuals Histogram Plot24	2
Figure 6-9: Interpretation of the Six-Cluster Solution on Archetypes25	9
Figure 6-10: Change in Fusion Coefficient versus Number of Clusters	0
Figure 7-1: Explanatory Power of Layer I and II Analysis	9

LIST OF TABLES

Table 2-1: Theoretical Lenses used in Financial Management Research	17
Table 2-2: Theoretical Lenses used in Strategic Management Research	20
Table 2-3: Overview of Related Empirical Contributions	26
Table 4-1: Indicator Expectation of Hofer's Turnaround Strategy Archetypes	133
Table 4-2: Coding Definition of Dependent Variable	134
Table 4-3: Coding Definitions of Independent Variables	138
Table 4-4: Coding Definitions of Control Variables (Context Factors)	140
Table 4-5: Summary of Variables and Hypothesis Directions	144
Table 5-1: Linking Methodology Choices and Empirical Results	146
Table 5-2: Selection of Multivariate inferential Analysis Methodology	152
Table 5-3: Alternative Models Deselected due to Specification Mismatches	155
Table 5-4 Model Interpretation: Coefficient Prefix Directions	158
Table 5-5: Goodness-of-Fit Evaluation Criteria for Logistic Regression Model	169
Table 5-6: Robustness Diagnostics for Multivariate Logistic Regression	171
Table 5-7: Procedure and Key Choices for Multivariate Cluster Analysis	178
Table 5-8: Hypothesis Testing Perspectives for Dichotomous Outcomes	180
Table 5-9: Nomenclature of Statistical Significance Levels (p-values)	183
Table 6-1: Sample Distributions by Geography and Industry Sub-Segment	194
Table 6-2: Sample Firm Characteristics One Year prior to Distress	194
Table 6-3: Summary Overview of Descriptive Statistics	201
Table 6-4: Distress Causes - Impact Weight and Frequency of Occurrence	207
Table 6-5: Correspondence of Distress Cause and Turnaround	208
Table 6-6: Univariate Test for Restructuring Effectiveness – Early and Late	213
Table 6-7: Significant Variables in Univariate Tests	219
Table 6-8: Univariate Test of Control Variables	221
Table 6-9: Logistic Regression – Partial Models by Restructuring Category	225
Table 6-10: Partial Explanatory Power of Restructuring Categories	227
Table 6-11: Logistic Regression – Cumulative Main Effects Models	229
Table 6-12: Results of Level II Propositions	230
Table 6-13: Logistic Regressions - Contributions of Content versus Process	233
Table 6-14: Explanatory Power of Content and Process	234
Table 6-15: Goodness-of-Fit Evaluation for Cumulative Model 4 (Layer I)	235
Table 6-16: Magnitude-of-Effects Analysis for Regression Model 4	237
Table 6-17: Durbin-Wu-Hausman Test on Model Endogeneity	241
Table 6-18: Results of Cross-Validation Tests	244
Table 6-19: Strategic Moves by Geography	247

Table 6-20: Strategic Moves by Distress Cause	250
Table 6-21: Saturated Regression Models with Moderating Effects	252
Table 6-22: Results of Cluster Analysis - Six-Cluster Solution	255
Table 6-23: F-Values Table of Six-Cluster Solution	263
Appendix - Table 1: Alternative Definition of Distress in Literature	279
Appendix - Table 2: Alternative Distress Criteria in Literature	279
Appendix - Table 3: Alternative Definitions of Restructuring in Literature	281
Appendix - Table 4: Alternative Criteria for Turnaround	282
Appendix - Table 5: Comparison of International Bankruptcy Procedures	283
Appendix - Table 6: Variables and Corresponding Data Sources	284
Appendix - Table 7: Sample Firm Characteristics One Year prior to Distress	285
Appendix - Table 8: Change in Sample Properties at the Onset of Distress	285
Appendix - Table 9: Firm Names of the International Distressed Sample (n=151).	286
Appendix - Table 10: Analysis of Causes for Financial Distress	286
Appendix - Table 11: Layer I Test of Effectiveness - Limited to Strategy Content.	287
Appendix - Table 12: Collinearity Diagnostics (Model 4)	287
Appendix - Table 13: Dendrogram of Ward Cluster Analysis (n=94)	288
Appendix - Table 14: Correlations of Independent and Control Variables	289
Appendix - Table 15: Correlations of Independent and Control Variables - Early	290
Appendix - Table 16: Correlations of Independent and Control Variables - Late	291
Appendix - Table 17: Correlations of Independent Variables - Early versus Late	292
Appendix - Table 18: Correlations of Control Variables in the Distress Year (t=0) .	293

1 Introduction 1

1 INTRODUCTION

"No matter what the state of the economy, no company is immune from internal hard times – stagnation or declining performance."

Charles W. HOFER (1980)1

This study of industrial manufacturing firms faring through such hard times on the cusp of financial distress focuses on the effectiveness of managerial counteractions aimed at achieving their turnaround.

The introductory chapter commences by providing the motivation for undertaking a study of this subject matter and highlights its relevancy to science as well as to managerial practice. It isolates persistent gaps within prior research and derives both a research objective and a set of research questions suited to address them. Moreover, it contains a brief description of the approach chosen to do so in an effective manner. The chapter closes by providing an outline of the subsequent course of study, including an overview of all seven chapters as well as their most relevant contents and linkages.

¹ HOFER (1980), p. 19