# PRIVATIZATION IN EASTERN GERMANY

### A Neo-Institutional Analysis

### HERBERT BRÜCKER



# FRANK CASS LONDON • PORTLAND, OR Published in association with the German Development Institute, Berlin

#### Contents

#### Acknowledgments

Foreword		I
1	Introduction	1
2	Why Privatization?	6
2.1	Ownership and the Coherence of Economic Systems	9
2.1.1	Market Regimes and Ownership	9
2.1.2	The Incoherence of Market-socialist Reforms	14
2.1.3	Ownership and Transformation	16
2.2	Ownership and the Efficiency of Economic Systems	18
2.3	The Transaction Costs of Alternative Ownership	
	Regimes	24
2.3.1	Market Failure versus Bureaucratic Failure	27
2.3.2	State Ownership versus Private Ownership	32
2.3.3	Private versus Public Goods	36
2.4	Conclusions	40
3	Transaction Costs of Privatization	42
3.1	Assumptions and Working Hypothesis	43
3.2	Constraints and Scarce Factors Affecting Privatization	46
3.2.1	Capital Supply	46
3.2.2	Limited Economic Competence	50
3.2.3	Limited Capabilities of Privatization Agencies	51
3.3	Efficiency of Alternative Privatization Procedures λ	52
3.3.1	Privatization through Informal Bargaining ×	54
3.3.2	Management-buyout and -buyin	60
3.3.3	Privatization by Auction	62
3.3.4	Sale of Company Shares on the Stock Exchange	69
3.3.5	Voucher Schemes	77 80
3.3.6	Restitution	80
3.4	Privatization with Limited Buyer Competition	83

4.1 Norms of Justice and Privatization 99 4.2 Privatization and Procedural Justice: The Problem of "Nomenclature Privatization" 101 4.3 Distributive Effects of Different Privatization Techniques 106 4.3.1 Sales Procedures 107 4.3.2 Cost-free Transfer 110 4.4 Conclusions 114 5 Transformation of the Legal and Economic Framework 116 5.1 Transformation of the Legal System 116 5.2 Transformation of the Economic System in Eastern Germany 122 5.2.1 The Transformation of an Economy of Shortage through the Monetary Union 122 5.3 The Effects of Price-cost Squeeze on Eastern German Enterprises 127 5.3.1 The Rise in Factor Costs 127 5.3.2 The Effects of the Price-cost Squeeze on the Profitability of Eastern German Enterprises 129 5.4 The Conditions for Direct Investment in Eastern Germany 135 5.5 Conclusions for the Privatization of Eastern German Enterprises 139 6 Strategy and Results of Treuhand-Privatization 140 6.1 The Scope and Value of the Treuhandanstalt's Assets 141 6.2 Initial Conditions and Constraints 147 6.2.1 The Participation Constraint 147	3.5	Conclusions: Allocative Effects of Privatization Procedures	95
4.2 Privatization and Procedural Justice: The Problem of "Nomenclature Privatization"  4.3 Distributive Effects of Different Privatization Techniques  4.3.1 Sales Procedures  4.3.2 Cost-free Transfer  4.4 Conclusions  114  5 Transformation of the Legal and Economic Framework  116  5.1 Transformation of the Legal System  116  5.2 Transformation of the Economic System in Eastern Germany  122  5.2.1 The Transformation of an Economy of Shortage through the Monetary Union  125  5.3 The Effects of Price-cost Squeeze on Eastern German Enterprises  127  5.3.1 The Rise in Factor Costs  127  5.3.2 The Effects of the Price-cost Squeeze on the Profitability of Eastern German Enterprises  129  5.4 The Conditions for Direct Investment in Eastern Germany  135  5.5 Conclusions for the Privatization of Eastern German Enterprises  139  6 Strategy and Results of Treuhand-Privatization  6.1 The Scope and Value of the Treuhandanstalt's Assets  141  6.2 Initial Conditions and Constraints	4	Distributive and Welfare Effects of Privatization	98
"Nomenclature Privatization"  4.3 Distributive Effects of Different Privatization Techniques  4.3.1 Sales Procedures  4.3.2 Cost-free Transfer  4.4 Conclusions  114  5 Transformation of the Legal and Economic Framework  116  5.1 Transformation of the Legal System  116  5.2 Transformation of the Economic System in Eastern Germany  122  5.2.1 The Transformation of an Economy of Shortage through the Monetary Union  122  5.3 The Effects of Price-cost Squeeze on Eastern German Enterprises  127  5.3.1 The Rise in Factor Costs  127  5.3.2 The Effects of the Price-cost Squeeze on the Profitability of Eastern German Enterprises  129  5.4 The Conditions for Direct Investment in Eastern Germany  135  5.5 Conclusions for the Privatization of Eastern German Enterprises  139  6 Strategy and Results of Treuhand-Privatization  140  6.1 The Scope and Value of the Treuhandanstalt's Assets  141  6.2 Initial Conditions and Constraints	4.1 ·	Norms of Justice and Privatization	99
Techniques 106 4.3.1 Sales Procedures 107 4.3.2 Cost-free Transfer 110 4.4 Conclusions 114  Transformation of the Legal and Economic Framework 116  Transformation of the Legal System 116  Transformation of the Economic System in Eastern Germany 122  The Transformation of an Economy of Shortage through the Monetary Union 122  The Effects of Price-cost Squeeze on Eastern German Enterprises 127  The Rise in Factor Costs 127  The Effects of the Price-cost Squeeze on the Profitability of Eastern German Enterprises 129  The Conditions for Direct Investment in Eastern Germany 135  Conclusions for the Privatization of Eastern German Enterprises 139  Karategy and Results of Treuhand-Privatization 140  The Scope and Value of the Treuhandanstalt's Assets 141  Initial Conditions and Constraints 147	4.2		101
4.3.2 Cost-free Transfer 4.4 Conclusions 114  Transformation of the Legal and Economic Framework 116  Transformation of the Legal System 116  Transformation of the Economic System in Eastern Germany 122  The Transformation of an Economy of Shortage through the Monetary Union 122  The Effects of Price-cost Squeeze on Eastern German Enterprises 127  The Rise in Factor Costs 127  The Effects of the Price-cost Squeeze on the Profitability of Eastern German Enterprises 129  The Conditions for Direct Investment in Eastern German Enterprises 135  Conclusions for the Privatization of Eastern German Enterprises 139  Strategy and Results of Treuhand-Privatization 140  The Scope and Value of the Treuhandanstalt's Assets 141  Initial Conditions and Constraints	4.3		106
Transformation of the Legal and Economic Framework  116  5.1 Transformation of the Legal System  116  5.2 Transformation of the Economic System in Eastern Germany  122  5.2.1 The Transformation of an Economy of Shortage through the Monetary Union  122  5.3 The Effects of Price-cost Squeeze on Eastern German Enterprises  127  5.3.1 The Rise in Factor Costs  127  5.3.2 The Effects of the Price-cost Squeeze on the Profitability of Eastern German Enterprises  129  5.4 The Conditions for Direct Investment in Eastern Germany  135  5.5 Conclusions for the Privatization of Eastern German Enterprises  139  6 Strategy and Results of Treuhand-Privatization  140  6.1 The Scope and Value of the Treuhandanstalt's Assets  141  6.2 Initial Conditions and Constraints			107
5 Transformation of the Legal and Economic Framework 5.1 Transformation of the Legal System 5.2 Transformation of the Economic System in Eastern Germany 5.2.1 The Transformation of an Economy of Shortage through the Monetary Union 5.3 The Effects of Price-cost Squeeze on Eastern German Enterprises 5.3.1 The Rise in Factor Costs 5.3.2 The Effects of the Price-cost Squeeze on the Profitability of Eastern German Enterprises 5.4 The Conditions for Direct Investment in Eastern Germany 5.5 Conclusions for the Privatization of Eastern German Enterprises 6 Strategy and Results of Treuhand-Privatization 6.1 The Scope and Value of the Treuhandanstalt's Assets 6.2 Initial Conditions and Constraints	4.3.2	Cost-free Transfer	110
Framework  5.1 Transformation of the Legal System  5.2 Transformation of the Economic System in Eastern Germany  5.2.1 The Transformation of an Economy of Shortage through the Monetary Union  5.3 The Effects of Price-cost Squeeze on Eastern German Enterprises  5.3.1 The Rise in Factor Costs  5.3.2 The Effects of the Price-cost Squeeze on the Profitability of Eastern German Enterprises  5.4 The Conditions for Direct Investment in Eastern Germany  5.5 Conclusions for the Privatization of Eastern German Enterprises  6 Strategy and Results of Treuhand-Privatization  6.1 The Scope and Value of the Treuhandanstalt's Assets  147	4.4	Conclusions	114
5.2 Transformation of the Economic System in Eastern Germany 122 5.2.1 The Transformation of an Economy of Shortage through the Monetary Union 122 5.3 The Effects of Price-cost Squeeze on Eastern German Enterprises 127 5.3.1 The Rise in Factor Costs 127 5.3.2 The Effects of the Price-cost Squeeze on the Profitability of Eastern German Enterprises 129 5.4 The Conditions for Direct Investment in Eastern Germany 135 5.5 Conclusions for the Privatization of Eastern German Enterprises 139 6 Strategy and Results of Treuhand-Privatization 140 6.1 The Scope and Value of the Treuhandanstalt's Assets 141 6.2 Initial Conditions and Constraints 147	5		116
Germany  5.2.1 The Transformation of an Economy of Shortage through the Monetary Union  122  5.3 The Effects of Price-cost Squeeze on Eastern German Enterprises  127  5.3.1 The Rise in Factor Costs  127  5.3.2 The Effects of the Price-cost Squeeze on the Profitability of Eastern German Enterprises  129  5.4 The Conditions for Direct Investment in Eastern Germany  135  5.5 Conclusions for the Privatization of Eastern German Enterprises  139  6 Strategy and Results of Treuhand-Privatization  6.1 The Scope and Value of the Treuhandanstalt's Assets  141  6.2 Initial Conditions and Constraints	5.1	Transformation of the Legal System	116
through the Monetary Union  The Effects of Price-cost Squeeze on Eastern German Enterprises  The Rise in Factor Costs  The Effects of the Price-cost Squeeze on the Profitability of Eastern German Enterprises  The Conditions for Direct Investment in Eastern Germany  The Conclusions for the Privatization of Eastern German Enterprises  Strategy and Results of Treuhand-Privatization  The Scope and Value of the Treuhandanstalt's Assets  Initial Conditions and Constraints	5.2		122
Enterprises 127 5.3.1 The Rise in Factor Costs 127 5.3.2 The Effects of the Price-cost Squeeze on the Profitability of Eastern German Enterprises 129 5.4 The Conditions for Direct Investment in Eastern Germany 135 5.5 Conclusions for the Privatization of Eastern German Enterprises 139 6 Strategy and Results of Treuhand-Privatization 140 6.1 The Scope and Value of the Treuhandanstalt's Assets 141 6.2 Initial Conditions and Constraints 147	5.2.1		122
5.3.2 The Effects of the Price-cost Squeeze on the Profitability of Eastern German Enterprises 129 5.4 The Conditions for Direct Investment in Eastern Germany 135 5.5 Conclusions for the Privatization of Eastern German Enterprises 139 6 Strategy and Results of Treuhand-Privatization 140 6.1 The Scope and Value of the Treuhandanstalt's Assets 141 6.2 Initial Conditions and Constraints 147	5.3		127
Profitability of Eastern German Enterprises 129  5.4 The Conditions for Direct Investment in Eastern Germany 135  5.5 Conclusions for the Privatization of Eastern German Enterprises 139  6 Strategy and Results of Treuhand-Privatization 140  6.1 The Scope and Value of the Treuhandanstalt's Assets 141  6.2 Initial Conditions and Constraints 147			127
Germany 135  5.5 Conclusions for the Privatization of Eastern German Enterprises 139  6 Strategy and Results of Treuhand-Privatization 140  6.1 The Scope and Value of the Treuhandanstalt's Assets 141  6.2 Initial Conditions and Constraints 147	5.3.2		129
Enterprises 139  6 Strategy and Results of Treuhand-Privatization 140  6.1 The Scope and Value of the Treuhandanstalt's Assets 141  6.2 Initial Conditions and Constraints 147	5.4		135
6.1 The Scope and Value of the Treuhandanstalt's Assets 141 6.2 Initial Conditions and Constraints 147	5.5		139
6.2 Initial Conditions and Constraints 147	6	Strategy and Results of Treuhand-Privatization	140
	6.1	The Scope and Value of the Treuhandanstalt's Assets	141
6.2.1 The Participation Constraint 147	6.2	Initial Conditions and Constraints	147
	6.2.1	The Participation Constraint	147

6.2.2	The Macroeconomic Capital Supply	149
6.2.3	Limited Buyer Competence and Financial Endowment	151
6.3	The Treuhandanstalt's Privatization Strategy	152
6.3.1	Sale versus Cost-free Distribution	152
6.3.2	Privatization Before or After Rehabilitation	154
6.3.3	The Choice of Allocative Criteria	155
6.4	Choice of Privatization Procedures	159
6.4.1	Privatization by Means of Informal Bargaining	160
6.4.2	Privatization by Means of Standard Procedures	164
6.5	Limited Bidding Competition	167
6.6	Principal-agent Problems Facing the Treuhandanstalt	170
6.7	A Balance of the Treuhandanstalt's Privatization	4
	Activity	173
6.7.1	Scope of Privatization	173
6.7.2	Privatization Revenues	179
6.7.3	Conclusions	181
7	Transaction Costs of Rehabilitation Contracts	182
7.1	The Contractual Problem	183
7.2	An Analysis of Rehabilitation Contracts by Game-	
	theory .	187
7.2.1	Description of the Model	187
7.2.2	Optimal Contract Design (Mechanism Design)	189
7.3	Empirical Findings	199
8	Rehabilitation versus Privatization: A Comparative	
	Analysis	201
8.1	The Economic Controversy	201
8.2	A Comparative Analysis of the Transaction Costs of	
	Private- and Public-rehabilitation Regimes	205
8.2.1	Description of the Model	205
8.2.2	Rehabilitation by the Treuhandanstalt	208
8.2.3	Rehabilitation by an Entrepreneur	216
8.2.4	Rehabilitation by a Rentier	221

8.3	The Treuhandanstalt's Rehabilitation Policy	225	
8.3.1	Payment of Maintenance Subsidies	227	
8.3.2	Finance of Investments	229	
8.3.3	Rational Selection	231	
9 '	Conclusions	234	
Notes		241	
Referen	References		
List of F	igures		
Figure 3.	1 Privatization Procedures	53	
Figure 3.	2 Payoffs in the Rubinstein-Game	90	
Figure 3.	3 Rubinstein-Game with Latent Bidding Competition	92	
Figure 3.	4 Payoffs of the Rubinstein-Game with Latent Bidding Competition	93	
Figure 3.	5 Comparative Features of Privatization Procedures	94	
Figure 6.	1 Strategic Alternatives of the Treuhandanstalt	153	
Figure 6.	2 Privatization Procedures of the Treuhandanstalt	160	
Figure 7.	1 Rehabilitation Game with Asymmetrical Information	190	
Figure 8.	1 Alternative Rehabilitation Regimes	207	
Figure 8.	2 Rehabilitation by the Treuhandanstalt	209	
Figure 8.	3 Private Rehabilitation Regimes	217	
List of T	ables		
Table 3.1	Allocative Effects of Privatization Procedures	97	
Table 5.1	Key Economic Indicators for Eastern Germany	125	
Table 5.2	Decline in Gross Domestic Product and Industrial Production in Central and Eastern Europe	126	

Table 5.3	Development of Wages and Productivity in Eastern Germany	129
Table 5.4	Projection of Cost-revenue Development in Eastern Germany, 1989 Production Potential (Manufacturing)	. 131
Table 5.5	Losses of Treuhandanstalt's Enterprises, 1991	133
Table 5.6	Development of Costs Revenues of Treuhand- anstalt's Enterprises, 1991 and 1992	134
Table 5.7	Capital Stock and Changes in Production Potential	139
Table 6.1	Assets of the Treuhandanstalt	143
Table 6.2	Balance-sheet Value of Treuhandanstalt's Holdings and other Assets as of July 1, 1990	145
Table 6.3	Management Buyouts and Enterprise Size Class	163
Table 6.4	State of Privatization as of December 31, 1994	175
Table 6.5	Changes in the Treunhandanstalt's Holdings	177
Table 6.6	Changes in Agricultural and Forestry Assets	178
Table 6.7	Privatization Revenues	180
Table 8.1	Payments of the Treuhandanstalt to its Enterprises	228
Table 8.2	Investment and Ownership in Eastern Germany's Manufacturing Sector (Investments in DM per Employee)	230
Table 8.3	Employment in Treuhandanstalt's Firms and Ex-Treuhandanstalt's Firms	231