## **Contents**

	Page
Preface	xiii
Map of Germany	xiv
Federal Republic of Germany and German Democratic Republic:	
Comparison of Economic and Social Indicators in 1988	xv
	•
I Introduction and Overview	1
Leslie Lipschitz	
The Two Economies on the Eve of Unification $\cdot 1$	
The Situation in the FRG	
The Situation in the GDR	
Dismembering the State in the GDR	
Economic Policies · 5	
The Process of Economic Integration	
Monetary Union	
The Enterprise System, the Trust Fund, and the Real Economy	
The Government and the Social Security System	
The Stance of Policies	
Fiscal Policy	
Monetary Policy	
The Exchange Rate A Guided Tour and Some Tentative Conclusions · 13	
A Guided Tour Some Tentative Conclusions	
Some Tentative Conclusions	
II Economic Developments in the Federal Republic of Germany	17
Thomas Mayer, Donogh McDonald, Garry J. Schinasi,	
and Günther Thumann	
TI. D. I.F	
The Real Economy · 17	
Overview Aggregate Demand	
Aggregate Demand Real Domestic Demand	
Foreign Balance	
Employment, Wages, and Prices	
Potential Output and Capacity Utilization	
Developments in Money and Financial Markets · 22	
Overview 22	
Monetary Aggregates	
Financial Market Developments	
Interest Rate Developments	
Exchange Market Developments	

Fiscal Policy and Structural Reform · 27 Overview Budgetary Developments in 1989 Budgetary Developments in 1990 Fiscal Implications of GEMSU Structural Reforms Appendix: Statistical Tables · 32	Page
III German Democratic Republic: Background and Plans for Reform	49
Thomas Mayer and Günther Thumann	
Political Situation · 49 Economic Background · 52 Recent Economic Situation · 54 Plans for Reform · 55 Systemic Reforms Reform of the Economic Decision-Making Process Privatization Price Reform Monetary Reform Reform of the External Trade System and Structural Adjustment Reform of the Fiscal and Social Security System Box 1: A Chronology of the Dissolution of the German Democratic Republic · 50 Box 2: Selected Economic Reforms, November 13, 1989— April 11, 1990 · 56 Appendix I: Statistical Tables · 62 Appendix II: A Brief History of Central Planning in the German Democratic Republic · 70	
IV Investment Needs in East Germany	71
Donogh McDonald and Günther Thumann	
Supply Conditions in West Germany · 71 Initial Conditions Medium-Term Assumptions A Supply-Side Framework for East Germany · 73 Initial Conditions in East Germany · 73 The Capital Stock in 2001 · 76 Investment Needs · 77	
V East Germany: The New Wirtschaftswunder?	78
Donogh McDonald and Günther Thumann	
Introduction · 78 The Model · 80 Starting Conditions · 82	

	Page
Scenario A · 85	1 480
Supply Developments	
Demand Developments	
Fiscal Developments	
Scenario B · 87	
Supply Developments	
Demand Developments	
Fiscal Developments	
Issues Arising from the Scenarios • 90	
Supply Issues	
Demand Issues	
Fiscal Issues	
Box 1: The Scenarios in Historical Context · 81	
VI Domestic and International Macroeconomic Consequences of German Unification	93
Paul R. Masson and Guy Meredith	
Introduction · 93	
A Global Saving-Investment Perspective · 94	
Effects of Migration on Potential Output in Western Germany · 98	
Simulations Using MULTIMOD · 98	
The Reference Scenario	
A Less Favorable Output-Inflation Trade-Off	
An Alternative Scenario with Slower Growth in Eastern Germany	
Alternative Policy Scenarios · 103	
An Indirect Tax Increase in Western Germany	
An EMS Realignment	
Concluding Remarks · 108	
Appendix: Changes to MULTIMOD and Sensitivity of the Results to	
Structural Features · 109	
References · 113	
VII Wage Determination, the Natural Rate of Unemployment, and	
Potential Output	115
David T. Coe and Thomas Krueger	
Wage Determination · 116	
An Insider-Outsider Model of Wage Determination	
The Phillips Curve/Natural-Rate Model and the Target-Real-Wage-	
Bargaining Model	
The Natural Rate of Unemployment and Potential Output · 120	
The Natural Rate of Unemployment	
Potential Output and Multifactor Productivity	
Prospects for the Natural Rate of Unemployment and Potential	
Output · 123	
Summary and Policy Implications · 125	
Appendix: An Empirical Model of the Natural Rate of Unemployment	
and Potential Output · 126	
References · 128	

VIII Immigration into West Germany: Historical Perspectives and Policy Implications	Page 130	
Thomas Mayer		
Historical Perspectives · 130 Effects of Immigration and Policy Response · 132 Concluding Remarks · 135 References · 136		
IX Implications of Unification for Saving and Investment in West Germany	137	
Donogh McDonald		
Background · 137  The Effects of GEMSU on Saving Behavior in West Germany · 137  Econometric Estimates  Simulation of the Effects of GEMSU on Saving  The Effects of GEMSU on Investment in West Germany · 141  Econometric Estimates  Simulation of the Effects of GEMSU on Investment  References · 143		
X Monetary and Financial Issues in German Unification	144	
Garry J. Schinasi, Leslie Lipschitz, and Donogh McDonald		
Mechanics of the Conversion · 144 Liabilities Assets  The Implications of the Conversion Rate · 147 Effects on Liquidity Implications for the Labor Market Distributional Effects  Monetary Control During the Early Stages of GEMSU · 149 Structural Reform of the East German Banking System · 151 The Banking System in the Centrally Planned Economy The Banking Reform of March 1990 The Equalization Fund and Equalization Claims Developments in East German Banking After GEMSU Role of Banks in Economic Reconstruction  Box 1: Monetary Policy Instruments and Procedures in the FRG · 150		
XI The System of Public Finance in the German Democratic Republic and the Challenges of Fiscal Reform	155	
Günther Thumann		
Outline of the Fiscal System in the GDR Prior to GEMSU · 155 Institutional Framework		

	Page
Fiscal Structure	
Overview Revenue of the Territorial Authorities	
Expenditure of the Territorial Authorities	
Social Insurance	
Structural Aspects of Fiscal Reform · 160	
Institutional Changes	
Revenue and Expenditure Reform	
Territorial Authorities	
Social Insurance	
Financial Framework for the Fiscal Reforms	
Implications of GEMSU for the Course of Public Finances in East	
Germany · 163	
XII The Role of Fiscal and Structural Policies in German Unification: Lessons from the Past	165
Thomas Mayer	
The Period of Liberalism: Financing the Essential	
Government Tasks · 165	
The Period of Keynesianism: Restoring Internal Equilibrium · 166	
The Revival of Erhardian Ideas · 167	
Attempts at "Consolidation"	
International Concerns: Tackling the External Surplus	
On the Eve of GEMSU	
Fiscal and Structural Policies in GEMSU · 170	
Tables	
•	
1. Germany: Borrowing Requirement of the Public Sector	11
1. Germany: Bollowing Requirement of the Fubile Sector	• •
II	
1. Federal Republic of Germany: Indicators of Economic Performance	17
2. German Unity Fund: Transfers to Eastern Germany and Their	20
Financing	29
3. German Unity Fund and Supplementary Federal Budgets:	30
Additional Borrowing Related to East Germany	30
<ol> <li>Germany: Public Sector Borrowing Requirement, 1990</li> <li>Federal Republic of Germany: Aggregate Demand</li> </ol>	32
A2. Federal Republic of Germany: Distribution of Income	33
A3. Federal Republic of Germany: Household Income and	
Consumption	33
A4. Federal Republic of Germany: Balance of Payments Summary	34
A5. Federal Republic of Germany: Regional Breakdown of Foreign	
Trade	35
A6. Federal Republic of Germany: Services Account	36
A7. Federal Republic of Germany: Earnings, Employment, and	
Productivity	36
A8. Federal Republic of Germany: Growth of the Main Monetary	35
Aggregates	37

	Page
A9. Federal Republic of Germany: Interest Rates	38
A10. Federal Republic of Germany: Exchange Rates	39
A11. Federal Republic of Germany: Long-Term Capital in the Balance of Payments Accounts	4(
A12. Federal Republic of Germany: Territorial Authorities' Finances	41
A13. Federal Republic of Germany: Territorial Authorities—Tax Revenue	42
A14. Federal Republic of Germany: General Government—Revenue and Expenditure	43
A15. Federal Republic of Germany: Selected Indicators of the Size of the General Government	44
A16. Federal Republic of Germany: Financial Implications of Tax Reform	45
A17. Federal Republic of Germany: Subsidies	46
A18. Federal Republic of Germany: Fiscal Assistance and Tax Relief of the Federal Government	47
A19. Comparison of Subsidies in the European Community, 1981–86, Average	48
A20. International Comparison of Subsidies, 1979–87	48
A1. German Democratic Republic: Average Monthly Gross Wage	
Income by Sector	62
A2. German Democratic Republic: Income and Money in Circulation A3. German Democratic Republic and Federal Republic of Germany:	62
Selected Consumer Prices, 1985	63
A4. German Democratic Republic: Government Revenue and Expenditure	64
A5. German Democratic Republic: Consumption of Private Households, 1985	64
A6. German Democratic Republic: Purchasing Power of the Mark	65
A7. German Democratic Republic: Consolidated Balance Sheet of the Credit System as of December 31, 1989	65
A8. German Democratic Republic: External Trade	66
A9. German Democratic Republic: External Trade with IMF Member Countries	66
A10. German Democratic Republic: External Trade by Major Products	67
A11. German Democratic Republic: Payments Received from the Public Sector of the Federal Republic of Germany	67
A12. Balance of Payments of the Federal Republic of Germany with the German Democratic Republic	68
A13. German Democratic Republic: Employment by Sector and Type of Ownership, 1988	69
A14. German Democratic Republic: Interest Rates as of End-1989	69
IV	
1. West Germany: Key Supply-Side Data	72
2. East Germany: Initial Production Conditions Based on 35 Percent Relative Productivity Level	
3. East Germany: Initial Production Conditions Based on 30 Percent Relative Productivity Level	74
4. East Germany: Capital Requirements in 2001	75 76

		Page
V	. Federal Republic of Germany: Regional Profile of Output and	
	Employment, 1987	79
2	East Germany: Key Supply-Side Elements of Scenario A	82
	East Germany: Demand Pattern Under Scenario A	83
4	. East Germany: Government Finances Under Scenario A	84
	. East Germany: Key Supply-Side Elements of Scenario B	88
	. East Germany: Demand Pattern Under Scenario B	89
7	. East Germany: Government Finances Under Scenario B	90
VI		
	. Demands on Global Saving Due to GEMSU: Increased Net Imports	
	of Eastern Germany	95
2	. Global Saving, Investment, and Government Deficits for 1989	96
3	. Germany: Reference Scenario Effects on GEMSU in a	
	Saving-Investment Model	97
4	. Germany: Scenarios of German Unification, 1990–2001	100
5	. Scenarios of German Unification Under Alternative Policies,	104
_	1990–2001	104 107
	Recent Interest Rate and Inflation Differentials in the ERM	107
/	. Effects of Changes in Interest Rates on Consumption and Investment in MULTIMOD	110
Q	Scenarios of German Unification with Alternative Model Parameter	110
o	Values, 1990–2001	111
9	Long-Run Relative Price Elasticities of Traded Goods in	
	MULTIMOD	113
VI	•	
	. Federal Republic of Germany: The Natural Rate of Unemployment	121
2	2. Federal Republic of Germany: Contributions to Output Growth in	
-	the Private Nonfarm Sector	122
3	3. Federal Republic of Germany: Contributions to Potential and	
	Ouasi-Potential Output Growth in the Private Nonfarm Sector	123
4	4. West Germany: Potential and Quasi-Potential Output Growth in	
	Private Nonfarm Sector	124
	5. Federal Republic of Germany: Variable Definitions	126
•	6. Equation Specification	127
7	7. Three-Stage Least Squares Estimation Results	128
VI	11	
	1. Federal Republic of Germany: Immigration from the East and	
	Macroeconomic Developments	131
:	2. Federal Republic of Germany: Regional Distribution of Earnings of	
	Blue-Collar Workers, 1988	132
	3. Federal Republic of Germany: Migration and Unemployment	133
	4. West Germany: Economic Effects of Immigration—Main	
	Simulation Results	135
IX		
	1. Federal Republic of Germany: Equations for the National Saving	
	Rate	138
	2. Federal Republic of Germany: Additional Equations for the	
	National Saving Rate	140

		Pa
3.	West Germany: Assumptions for the Effects of GEMSU on	
	Selected Variables	1
4.	West Germany: Effects of GEMSU on Net National Saving	1
٥.	Federal Republic of Germany: Equations for Machinery and Equipment Investment	
6.	West Germany: Effects of GEMSU on Machinery and Equipment	1
-	Investment	1
v		1
X	Garman Damagratia Bangklin Co. 1114 1 D. 1	
1.	German Democratic Republic: Consolidated Balance Sheet of the Credit System Before and After Currency Conversion	
2.	Estimates of the Money Supply in Germany Under Various	1
	Conversion Proposals	1
ΧI	-	1
1.	German Democratic Republic: State Budget	1.
2.	German Democratic Republic: Revenue of the Territorial	
2	Authorities  German Democratic Resulting Francisco	1:
Э,	German Democratic Republic: Expenditure of the Territorial Authorities	
4.	German Democratic Republic: Revenue of the Social Insurance	1.
••	System	1.
5.	German Democratic Republic: Expenditure of the Social Insurance	1:
	System	1:
6.	East Germany: Central Government Budget in the Second Half of	•
	1990	10
7.	East Germany: Sources of Expenditure Overruns in the Budget for the Second Half of 1990	
	the Second Hall of 1990	10
Cha	rts	
I		
1.	Federal Republic of Germany: Developments in 1980–89	
2.	rederal Republic of Germany: Indicators of Fiscal and Monetary	
	Policy, 1980–89	
II		
1	Federal Republic of Germany: Immigration from the German	
	Democratic Republic and Eastern Europe, First Quarter 1986–	
	second Quarter 1990	]
2	Federal Republic of Germany: Labor Share of Net National	
	Froduct, 1955–89	2
3 4	Federal Republic of Germany: Inflation, 1984–90	2
7	Federal Republic of Germany: Consumer Prices First Quarter 19(1) This is a Consumer Prices First Quarter 19(1) This is a Consumer Prices First Quarter 19(1) This is a Consumer Price of the Price of th	
	Prices, First Quarter 1961–Third Quarter 1990  Federal Republic of Germany: Inflation-Output Loops, 1961–89	2
•	· A vacial Republic Of Germany: Pattern of Chausk Co. 1 1007 00	
7	- Targets and Monetons	2
	20 Ciopilicilis, January 1985 Centember 1000	_
8	. rederal Republic of Germany: Interest Rate Developments	2
	variually 1703-Schlemper 1990	2
,	Federal Republic of Germany: Exchange Rate Developments,	2
		2
	Federal Republic of Germany: Bilateral Exchange Rates and Interest Rate Differentials vis-à-vis the Deutsche Mark,	
	January 1987–October 1990	
		2

		Page
11.	Federal Republic of Germany: Selected Indicators of Fiscal Policy, 1950–89	28
V 1.	Scenarios for East Germany, 1991–2001	80
VI		
1.	Determination of Real Exchange Rate $(\epsilon)$ and World Interest Rate $(R)$	96
	Alternative Scenarios of German Unification: Results for Germany, 1990–2004	101
	Scenarios of German Unification Under Alternative Policy Response: Results for Germany, 1990–2004	105
	Scenarios of German Unification Under Alternative Policy Response: Results for Other ERM Countries, 1990–2004	106
	Capacity Utilization Rates in the Federal Republic of Germany, 1970-91	109
6. 7.	Alternative Output/Inflation Trade-Offs Scenarios of German Unification with Alternative Parameter Values, 1990–2004	109 112
VII		
	Federal Republic of Germany: Output and Unemployment, First Ouarter 1968–Fourth Quarter 1989	115
2. 3	Unemployment Persistence in an Insider-Outsider Model The Phillips Curve/Natural-Rate and Target-Real-Wage-Bargaining	117
	Models Federal Republic of Germany: Potential and Quasi-Potential Output	119
т.	and the Natural Rate of Unemployment, First Quarter 1968- Fourth Quarter 1989	121
IX	E. J. D. W. of Common Fasters Influencing National Saving	
1.	<ul> <li>Federal Republic of Germany: Factors Influencing National Saving, 1961–89</li> </ul>	139
X		
1.	. German Democratic Republic: Simplified Outline of the Banking System and Interbank Relations at the Time of the Currency Conversion	153

The following symbols or terms have been used throughout this publication:

- ... to indicate that data are not available:
- to indicate that the figure is zero or less than half the final digit shown, or that the item does not exist;
- between years or months (e.g., 1989–90 or January–June) to indicate the years or months covered, including the beginning and ending years or months;
- between years (e.g., 1985/86) to indicate a crop or fiscal (financial) year.
- "Billion" means a thousand million.
- "Trillion" means a thousand billion.

Länder are the states of the Federal Republic of Germany: DM denotes deutsche mark, the currency of the Federal Republic of Germany: M denotes marks, the currency of the former German Democratic Republic: GNP is gross national product: GDP is gross domestic product; and NMP is net material product.

Minor discrepancies between constituent figures and totals are due to rounding.