

Contents

	<i>Page</i>
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
<i>Leslie Lipschitz</i>	
The Two Economies on the Eve of Unification · 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	
II Economic Developments in the Federal Republic of Germany	17
<i>Thomas Mayer, Donogh McDonald, Garry J. Schinasi, and Günther Thumann</i>	
The Real Economy · 17	
Overview	
Aggregate Demand	
Real Domestic Demand	
Foreign Balance	
Employment, Wages, and Prices	
Potential Output and Capacity Utilization	
Developments in Money and Financial Markets · 22	
Overview	
Monetary Aggregates	
Financial Market Developments	
Interest Rate Developments	
Exchange Market Developments	

	<i>Page</i>
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	
III German Democratic Republic: Background and Plans for Reform	49
<i>Thomas Mayer and Günther Thumann</i>	
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
<i>Donogh McDonald and Günther Thumann</i>	
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 <i>Wirtschaftswunder</i>?	78
<i>Donogh McDonald and Günther Thumann</i>	
Introduction · 78	
The Model · 80	
Starting Conditions · 82	

	<i>Page</i>
Scenario A · 85	
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	

	<i>Page</i>
VIII Immigration into West Germany: Historical Perspectives and Policy Implications	130
<i>Thomas Mayer</i>	
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
<i>Donogh McDonald</i>	
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
<i>Garry J. Schinasi, Leslie Lipschitz, and Donogh McDonald</i>	
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
<i>Günther Thumann</i>	
Outline of the Fiscal System in the GDR Prior to GEMSU · 155	
Institutional Framework	

	<i>Page</i>
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

I	
1. Germany: Borrowing Requirement of the Public Sector	11
II	
1. Federal Republic of Germany: Indicators of Economic Performance	17
2. German Unity Fund: Transfers to Eastern Germany and Their Financing	29
3. German Unity Fund and Supplementary Federal Budgets: Additional Borrowing Related to East Germany	30
4. Germany: Public Sector Borrowing Requirement, 1990	30
A1. Federal Republic of Germany: Aggregate Demand	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 Aggregates	37

	<i>Page</i>
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	40
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
 III	
A1. German Democratic Republic: Average Monthly Gross Wage Income by Sector	62
A2. German Democratic Republic: Income and Money in Circulation	62
A3. German Democratic Republic and Federal Republic of Germany: 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	74
3. East Germany: Initial Production Conditions Based on 30 Percent Relative Productivity Level	75
4. East Germany: Capital Requirements in 2001	76

	<i>Page</i>
V	
1. Federal Republic of Germany: Regional Profile of Output and Employment, 1987	79
2. East Germany: Key Supply-Side Elements of Scenario A	82
3. East Germany: Demand Pattern Under Scenario A	83
4. East Germany: Government Finances Under Scenario A	84
5. East Germany: Key Supply-Side Elements of Scenario B	88
6. East Germany: Demand Pattern Under Scenario B	89
7. East Germany: Government Finances Under Scenario B	90
VI	
1. 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, 1990–2001	104
6. Recent Interest Rate and Inflation Differentials in the ERM	107
7. Effects of Changes in Interest Rates on Consumption and Investment in MULTIMOD	110
8. Scenarios of German Unification with Alternative Model Parameter Values, 1990–2001	111
9. Long-Run Relative Price Elasticities of Traded Goods in MULTIMOD	113
VII	
1. Federal Republic of Germany: The Natural Rate of Unemployment	121
2. Federal Republic of Germany: Contributions to Output Growth in the Private Nonfarm Sector	122
3. Federal Republic of Germany: Contributions to Potential and Quasi-Potential Output Growth in the Private Nonfarm Sector	123
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. Three-Stage Least Squares Estimation Results	128
VIII	
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

	<i>Page</i>
3. West Germany: Assumptions for the Effects of GEMSU on Selected Variables	140
4. West Germany: Effects of GEMSU on Net National Saving	141
5. Federal Republic of Germany: Equations for Machinery and Equipment Investment	142
6. West Germany: Effects of GEMSU on Machinery and Equipment Investment	143
X	
1. German Democratic Republic: Consolidated Balance Sheet of the Credit System Before and After Currency Conversion	146
2. Estimates of the Money Supply in Germany Under Various Conversion Proposals	147
XI	
1. German Democratic Republic: State Budget	156
2. German Democratic Republic: Revenue of the Territorial Authorities	157
3. German Democratic Republic: Expenditure of the Territorial Authorities	158
4. German Democratic Republic: Revenue of the Social Insurance System	159
5. German Democratic Republic: Expenditure of the Social Insurance System	159
6. East Germany: Central Government Budget in the Second Half of 1990	162
7. East Germany: Sources of Expenditure Overruns in the Budget for the Second Half of 1990	163
Charts	
I	
1. Federal Republic of Germany: Developments in 1980–89	2
2. Federal Republic of Germany: Indicators of Fiscal and Monetary Policy, 1980–89	3
II	
1. Federal Republic of Germany: Immigration from the German Democratic Republic and Eastern Europe, First Quarter 1986–Second Quarter 1990	19
2. Federal Republic of Germany: Labor Share of Net National Product, 1955–89	20
3. Federal Republic of Germany: Inflation, 1984–90	21
4. Federal Republic of Germany: Construction Prices and Consumer Prices, First Quarter 1961–Third Quarter 1990	22
5. Federal Republic of Germany: Inflation-Output Loops, 1961–89	23
6. Federal Republic of Germany: Pattern of Growth Cycles, 1967–90	24
7. Federal Republic of Germany: Monetary Targets and Monetary Developments, January 1985–September 1990	24
8. Federal Republic of Germany: Interest Rate Developments, January 1985–September 1990	25
9. Federal Republic of Germany: Exchange Rate Developments, First Quarter 1980–Third Quarter 1990	26
10. Federal Republic of Germany: Bilateral Exchange Rates and Interest Rate Differentials vis-à-vis the Deutsche Mark, January 1987–October 1990	26

	<i>Page</i>
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 (ϵ) and World Interest Rate (R)	96
2. Alternative Scenarios of German Unification: Results for Germany, 1990–2004	101
3. Scenarios of German Unification Under Alternative Policy Response: Results for Germany, 1990–2004	105
4. Scenarios of German Unification Under Alternative Policy Response: Results for Other ERM Countries, 1990–2004	106
5. Capacity Utilization Rates in the Federal Republic of Germany, 1970–91	109
6. Alternative Output/Inflation Trade-Offs	109
7. Scenarios of German Unification with Alternative Parameter Values, 1990–2004	112
VII	
1. Federal Republic of Germany: Output and Unemployment, First Quarter 1968–Fourth Quarter 1989	115
2. Unemployment Persistence in an Insider-Outsider Model	117
3. The Phillips Curve/Natural-Rate and Target-Real-Wage-Bargaining Models	119
4. Federal Republic of Germany: Potential and Quasi-Potential Output and the Natural Rate of Unemployment, First Quarter 1968–Fourth Quarter 1989	121
IX	
1. Federal Republic of Germany: Factors Influencing National Saving, 1961–89	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.