

Contents

Part I General Report

1	Introduction	3
1.1	Research Background	3
1.2	Structure of the Book	6
1.3	Some Explanations	7
2	China's National Balance Sheet: Preparation and Analysis	9
2.1	Basic Framework	9
2.2	Preparation of National Balance Sheet	12
2.3	National Balance Sheet Analysis	13
2.3.1	Total Size	13
2.3.2	Structure	16
3	Preparation and Analysis of China's Sovereign Balance Sheet	23
3.1	Data Sources and Estimation Methods	23
3.1.1	Operating State-Owned Assets	24
3.1.2	Non-operating State-Owned Assets	25
3.1.3	Government-Owned Resource Assets	25
3.1.4	External Sovereign Assets	25
3.1.5	State-Owned Assets of National Social Security Fund	27
3.1.6	Governments' Deposits at the Central Bank	28
3.1.7	Central Government Debts	28
3.1.8	"Quasi-Government Bonds"	28
3.1.9	Local Government Debts	28
3.1.10	Debts of State-Owned Enterprises	29
3.1.11	Contingent Liabilities Existing as Financial Non-performing Assets or Their Transformation Forms	29
3.1.12	Social Security's Funding Gap Dominated by Implicit Pension Debt	30

3.2	Analysis of Sovereign Assets	30
3.2.1	Operating State-Owned Assets.	30
3.2.2	Non-operating State-Owned Assets	31
3.2.3	Government-Owned Resource Assets	31
3.2.4	External Sovereign Assets	32
3.2.5	State-Owned Assets of National Social Security Fund (NSSF)	32
3.2.6	Government Deposits at the Central Bank.	33
3.3	Analysis of Sovereign Liabilities	33
3.3.1	Central Government Debts (Internal and External Debts).	33
3.3.2	“Quasi-Government Bonds”	34
3.3.3	Local Government Debts.	34
3.3.4	Debts of State-Owned Enterprises	35
3.3.5	Contingent Liabilities Existing as Financial Non-performing Assets and Their Transformation Forms	36
3.3.6	Social Security’s Funding Gap Dominated by Implicit Pension Debt.	37
3.4	Sovereign Balance Sheets	38
4	Research on Total Debt Level and Whole Society Leverage Ratio.	41
4.1	Debt and Leverage Ratio Analysis Framework.	41
4.2	Estimation of the Debts of Various Sectors in China	43
4.2.1	Household Sector Leverage Ratio	44
4.2.2	Leverage Ratio of Non-financial Corporate Sector.	44
4.2.3	Leverage Ratio of Government Sector.	45
4.2.4	Leverage Ratio of Financial Institutions	46
4.2.5	Expansion Scenarios	46
4.3	A Comparative Study of International Debt Levels	47
5	Expansion of Balance Sheet with Chinese Characteristics	51
5.1	Asset Formation in Structural Change	51
5.1.1	Export-Oriented Industrialization and Accumulation of Foreign Assets	51
5.1.2	Accumulation of Infrastructure Assets.	54
5.1.3	Accumulation of Real Estate Assets	57
5.2	Liabilities Formed Under the Catch-up and Surpassing System	59
5.2.1	Growth Priority Strategy Under the Catch-up and Surpassing System	59
5.2.2	Construction-Oriented Government and Local Government Debt Expansion.	61

5.2.3	Implicit Government Guarantees and Contingent Liabilities.	67
6	Balance Sheet Risk Assessment	69
6.1	General Framework for Balance Sheet Risk Assessment	69
6.2	National Balance Sheet Mismatches and Contingent Liability Risks	71
6.2.1	Term of Balance Sheet and Capital Structure Mismatch Risks.	71
6.2.2	Currency Mismatch Risks and RMB Internationalization	71
6.2.3	Contingent Liability Risk 1: Credit Risk	75
6.2.4	Contingent Liability Risk 2: Social Security's Funding Gap	77
6.3	Inter-sectoral Debt Clearing and Risk Transfer.	81
6.4	Dynamic Trend and Sustainability of Sovereign Debt	84
7	Basic Conclusions and Policy Suggestions	89
7.1	Basic Conclusions.	89
7.2	Policy Suggestions	90
 Part II Sectoral Analysis		
8	Household Balance Sheet	97
8.1	Introduction	97
8.2	Compilation and Analysis of Chinese Household Balance Sheet.	98
8.3	The Findings of the Study of Household Balance Sheet.	104
9	Balance Sheets of Non-financial Corporations.	107
9.1	Compilation of Balance Sheets of Non-financial Corporations.	107
9.2	Analysis of Balance Sheets of Non-financial Corporations	113
9.2.1	Trend Analysis	113
10	Financial Sector Balance Sheets	119
10.1	Brief Introduction to the Statistical System for China's Current Financial Sector Balance Sheets.	119
10.2	Preparation of Balance Sheet of the Financial Sector	120
10.2.1	Convert the <i>Sources & Uses of Credit Funds of Financial Institutions in RMB</i> into the Form of Balance Sheet of Financial Institutions	121
10.2.2	Simplification of Balance Sheet of Insurance Companies and Securities Companies	126

10.2.3	Incorporating the Simplified Balance Sheet of Insurance Companies and the Simplified Balance Sheet of Securities Companies into the Balance Sheet of Financial Institutions	130
10.2.4	Shadow Banking and Financial Sector Balance Sheets	131
10.3	Appendix of This Chapter: Calculation Scope	134
11	Central Bank Balance Sheet	137
11.1	Assets Item and Its Structural Changes	137
11.1.1	Rapid Increase in Foreign Assets and Its Ratio to Total Assets	138
11.1.2	Claims on Government Expanded Substantially in 2007 and Basically Maintained Stable in the Remaining Time	141
11.1.3	Claims on Other Depository Corporations Remained Stable and Its Ratio to Total Assets Decreased	142
11.1.4	Claims on Other Financial Corporations Grew Rapidly for a Few Years, but Its Ratio to Total Assets Declined	143
11.1.5	Claims on Non-financial Sectors are Relatively Small in Size and Its Ratio has been Declining	143
11.1.6	Other Assets Remained Stable in Size, and Its Ratio to Total Assets Maintains a Downward Trend on the Whole	143
11.2	Liabilities Item and Its Structural Changes	145
11.2.1	The Size of Bond Issue and Its Ratio to Total Liabilities Increased and then Decreased	147
11.2.2	External Liabilities Continued the Upward Trend and Took a Relatively Small Proportion in Total Liabilities	148
11.2.3	The Size of Government Deposits Maintained the Upward Trend and Its Ratio to Total Liabilities Maintained Relatively Stable	150
11.2.4	Other Liabilities Become a Positive Value from a Deduction Item and Took a Relatively Small Proportion in Total Liabilities	151
11.3	Changes in China Central Bank Balance Sheet and Monetary Policy: Sterilization of Position for Forex Purchase	151
12	Central Government Balance Sheet	159
12.1	Review of Documents on the Chinese Government's Balance Sheet	159

12.2	Preparation of Central Government Balance Sheet	161
12.3	Analysis of Central Government Balance Sheet	163
13	Local Government Balance Sheet.	169
13.1	Estimation of Local Government Assets.	169
13.1.1	Local Operating State-Owned Assets.	169
13.1.2	Local Non-operating State-Owned Assets	170
13.1.3	Resource Assets Owned by Local Governments	171
13.1.4	Local Government Deposits at the Central Bank.	171
13.2	Estimation of Local Government Debt	172
13.2.1	Direct Explicit Liabilities.	172
13.2.2	Implicit Direct Liabilities.	174
13.2.3	Contingent Explicit Liabilities.	174
13.2.4	Contingent Implicit Liabilities.	176
13.3	Preparation of Local Government Balance Sheet	177
13.4	Local Government Debt Risk Analysis.	179
13.4.1	Hierarchical Distribution of Debt Risk	179
13.4.2	Regional Distribution of Debt Risk.	181
13.4.3	Sectoral Distribution of Debt Risk.	182
13.4.4	Project-Based Distribution of Debt Risk	182
13.4.5	Term Distribution of Debt Risk.	183
13.5	Formation and Prevention of Local Government Debt Risk	183
13.5.1	Reform of Government Functions	184
13.5.2	Reform of the Investment and Financing System	188
13.5.3	Reform of the Taxation System.	190
13.5.4	Reform of the Financial System	193
14	External Sector Balance Sheet	197
14.1	Main Characteristics of China's IIP and International Comparison	198
14.1.1	Main Characteristics of China's IIP.	198
14.1.2	International Comparison.	203
14.2	Risk Revelation by the External Balance Sheet	206
14.2.1	Default Risks of External Liabilities	206
14.2.2	Balance Sheet Mismatch Risks	208
14.3	Analysis of the Affecting Factors of IIP.	209
14.3.1	International Comparison.	209
14.3.2	Panel Analysis of the Factors Affecting IIP.	214
	Appendix	218
 Part III Related Topics		
15	Pension Gap and Implicit Debt Forecast	223
15.1	Introduction	223
15.2	The Basic Framework and Funding Gap Calculation Method of China's Old-Age Insurance System.	224

15.2.1	The Framework of the Current Basic Old-Age Insurance System.	225
15.2.2	Definition and Nature of Pension Gap and Debt Risk	227
15.3	Prediction of Size and Structure of the Population in China During 2010–2050	228
15.3.1	Setting of Parameters of Birth, Death and Migration of Population and Establishment of Population Prediction Model.	229
15.3.2	Prediction of the Population Structure During 2010–2050.	235
15.4	Population Estimation of Workers and Residents with Old-Age Insurances	239
15.4.1	The Population Prediction of Urban Workers with Old Age Insurances.	239
15.4.2	Prediction of the Number of Urban Workers Who Pay the Old-Age Insurance.	244
15.4.3	Prediction of the Beneficiary Population of the Old-Age Insurance for Urban and Rural Residents.	245
15.5	Prediction of Pension Gap and Implicit Debt	247
15.5.1	Setting of Benchmark Parameters	247
15.5.2	Estimates of Pension Gap and Implicit Debt in Reference Scenario	249
15.5.3	Estimation of Transition Costs of the Old-Age Insurance System.	255
15.6	Further Analysis and Simulation of Pension Income and Expenditure Scenario	259
15.6.1	Changing the Pension Investment Mode to Improve the Returns of Pension Investment	260
15.6.2	Raising the Retirement Age and the Pensionable Age of Residents.	261
15.6.3	Maintaining a High Pension Replacement Rate.	268
15.6.4	Combined Effect of Increasing the ROI and the Retirement Age and Maintaining a High Replacement Rate	269
15.7	Summary	271
16	Study of Value of Housing Assets of Residents	273
16.1	Estimation of the Value of Residential Housings	273
16.1.1	Value of Urban Residential Housings	273
16.1.2	The Value of Rural Housings	276
16.2	Ratio of Housing Value to Income–International Comparison	277
	Appendix: Related Data on the Valuation of Real Estates.	279

17	Comparison of National Wealth of China and the US and Estimation of the Value of Land Resources in China	281
17.1	Interdependence of Wealth and Income	281
17.2	Comparison of the National Wealth of China and the United States	282
17.3	Estimation of Natural Capital of China: Land Resources	286
18	A International Comparative Study of Balance Sheet	289
18.1	Introduction	289
18.2	The Experience of the United States.	289
18.2.1	Early Studies of Goldsmith et al.	289
18.2.2	Characteristics and Trend of the US Balance Sheet in Recent Years	291
18.3	Japan's Experience	297
18.4	Germany's Experience	302
18.5	The UK's Experience	306
18.6	Canada's Experience.	313
18.7	Common Characteristics of the National Balance Sheets of the Sample Countries	316
19	Balance Sheet Methods and the Financial Crisis: A Research Application	317
19.1	National Balance Sheet and Its Analysis Method: The International Perspective	318
19.1.1	Internal Logic of National Balance Sheet	318
19.1.2	Contingent Liabilities and Balance Sheet Risks.	319
19.2	Balance Sheet Risk Contagion: A Case Study of the Financial Crisis.	325
19.3	National Balance Sheet and Macroeconomic Policies and Their Revelations.	330
19.3.1	National Balance Sheets and Macroeconomic Policies	330
19.3.2	External Debt is a Key Factor in Increasing the Risk of Conduction	331
19.3.3	Policy Revelations.	333
	References	335

China's National Balance Sheet

Theories, Methods and Risk Assessment

Li, Y.; Zhang, X.

2017, XXXII, 342 p. 118 illus., 115 illus. in color.,

Hardcover

ISBN: 978-981-10-4384-0