PALGRAVE MACMILLAN STUDIES IN BANKING AND FINANCIAL INSTITUTIONS SERIES EDITOR: PHILIP MOLYNEUX

Turkish Banking

Banking under Political Instability and Chronic High Inflation

> Yener Altunbaş, Alper Kara and Özlem Olgu



Turkish Banking

Banking under Political Instability and Chronic High Inflation

Yener Altunbaş

Profess or of Banking and Finance, Bangor University
Business School, Wales, UK

Alper Kara

Lecturer in Business Economics, The Business School, Loughborough University, Loughborough, UK

Özlem Olgu

Assistant Professor in Accounting and Finance, Koç University, Istanbul, Turkey





© Yener Altunbaş, Alper Kara and Özlem Olgu 2009

All rights reserved. No reproduction, copy or transmission of this publication may be made without written permission.

No portion of this publication may be reproduced, copied or transmitted save with written permission or in accordance with the provisions of the Copyright, Designs and Patents Act 1988, or under the terms of any licence permitting limited copying issued by the Copyright Licensing Agency, Saffron House, 6-10 Kirby Street, London EC1N 8TS.

Any person who does any unauthorized act in relation to this publication may be liable to criminal prosecution and civil claims for damages.

The authors have asserted their rights to be identified as the authors of this work in accordance with the Copyright, Designs and Patents Act 1988.

First published 2009 by PALGRAVE MACMILLAN

Palgrave Macmillan in the UK is an imprint of Macmillan Publishers Limited, registered in England, company number 785998, of Houndmills, Basingstoke, Hampshire RG21 6XS.

Palgrave Macmillan in the US is a division of St Martin's Press LLC, 175 Fifth Avenue, New York, NY 10010.

Palgrave Macmillan is the global academic imprint of the above companies and has companies and representatives throughout the world.

Palgrave® and Macmillan® are registered trademarks in the United States, the United Kingdom, Europe and other countries.

ISBN-13: 978-1-4039-9711-1 ISBN-10: 1-4039-9711-X

This book is printed on paper suitable for recycling and made from fully managed and sustained forest sources. Logging, pulping and manufacturing processes are expected to conform to the environmental regulations of the country of origin.

A catalogue record for this book is available from the British Library.

Library of Congress Cataloging-in-Publication Data Altunbas, Yener.

Turkish banking: banking under political instability and chronic high inflation / Yener Altunbaş, Alper Kara, Özlem Olgu.

p. cm. — (Palgrave Macmillan studies in banking and financial institutions)

2008029939

Includes bibliographical references and index. ISBN 978-1-4039-9711-1 (alk. paper)

1. Banks and banking—Turkey. I. Kara, Alper, 1977-II. Olgu, Özlem, 1979- III. Title.

HG3256.5.A6A48 2008 332.109561—dc22

7 6 9 8

10 5 4 3 2 1 18 17 16 15 14 13 12 11 10 09

Printed and bound in Great Britain by CPI Antony Rowe, Chippenham and Eastbourne

Preface

Despite the fact that Turkey is the seventeenth-largest economy (in 2007) in the world, and one of the oldest and more developed of emerging markets, its banking system is still relatively small. After financial liberalization in the 1980s, large budget deficits resulting from substantial public sector borrowing, chronic inflation, dollarization in the economy, lack of regulation and supervision, capital inadequacy, and an unstable economic and political environment have all contributed to the poor performance of the Turkish banking industry. The sector has faced four crises since the 1980s, with the most recent occurring in the middle of the International Monetary Fund (IMF)-led restructuring programme in 2001, resulting in the failure of thirteen banks.

However, after years of mounting difficulties that brought Turkey close to economic collapse, a tough recovery programme was agreed with the IMF in 2002 to restore macroeconomic stability through structural reforms. Since then, Turkey has seen impressive progress. Economic growth has averaged over 5 per cent per annum and inflation has fallen significantly. Inspiring economic performance has led to an historical amount of foreign investments to Turkey. The banking industry was one of the recipients of this inflow: between 2004 and 2006, foreign banks some of them world-leading financial institutions - have invested around USD 14 billion, mainly through acquiring majority shares in locallyestablished medium-sized banks, to gain a presence in the Turkish banking market. As of 2006, the level of foreign ownership with a controlling share constitutes a third of the total banking sector assets in Turkey. As well as its inspiring economic performance, Turkey's potential EU membership, its successful banking sector restructuring programme, the enforcement of internationally accepted banking regulatory and supervisory standards, and the growth potential of local credit markets were all factors influencing such flows.

We believe these recent developments in the Turkish economy and banking sector make it worthwhile to undertake a comprehensive overview of the developments in the Turkish banking market. This book, intended for both academics and practitioners, has several purposes. First, it aims to portray the phases of banking sector development in Turkey, where the major emphasis will be to examine the features of finan-cial crises and their repercussions on the banking industry. Second, the financial structure and performance of the banking sector, together with its impact on economic growth, will be analysed, looking at the role of market participants as fund providers and fund users, and the important role of the state. Third, the future prospects of Turkish banking will be considered in the context of EU integration, the potential effects of Basel II, and the newly passed mortgage law's impact on credit markets.

The authors are very grateful to Emre Erşen, Sinem Munanoğlu Gökd el, Phil Molyneux, Saduman Hacer Okumuş and Aziz Özben, as well as to the participants of the 2007 Annual Conference of the European Association of University Teachers of Banking and Finance (The 'Wolpertinger Club') conference held in Valladolid, and the Turkish Bankers' Association for very helpful comments, suggestions and support on the papers that provided original material for the various chapters of the text. Thanks are also due to Lisa von Fircks, Elodie Lecoq and Hazel Woodbridge for editing the manuscript. Finally, thanks to our families and loved ones for their patience and support during the project.

The views expressed in this book are the authors' own and do not necessarily reflect those of the University of Wales, Bangor, Loughborough University and Koç University. All remaining errors are our sole responsibility. Every effort has been made to contact all copyright-holders, but, if any have inadvertently been omitted the publishers will be pleased to make the necessary arrangement at the earliest opportunity.

Yener Altunbaş Alper Kara Özlem Olgu

List of Abbreviations

AMA advanced measurement approach
(The) Banks Association of Turkey
BIS Bank of International Settlements

BRSA Banking Regulation and Supervisory Agency

CAD Capital Adequacy Directive CAR capital adequacy ratio

CB Central Bank

CBT Central Bank of Turkey
CPI consumer price index

CREDITS level of credit extended to the private sector by

commercial banks

CRS constant returns to scale
DEA data envelopment analysis

DEPOSITS outstanding value of deposits in the provinces

DMU decision-making units
DRS decreasing returns to scale

EU emerging market
EU European Union

EUR euro

EXCHANGE exchange rate between US dollar and Turkish lira

FDI foreign direct investment

FX foreign exchange GDP gross domestic product GNP gross national product

ICAAP internal capital adequacy assessment process

IMF International Monetary Fund

INCENTIVES investment incentives given to the provinces

INTEREST average interest rates of treasury bills

IPO initial public offering

IPP investment priority provinces

IRB internal rating based
IRS increasing returns to scale
ISE Istanbul Stock Exchange

ISI import substitution industrialization

IT information technology

NICA non-interest current account

NPL non-performing loans

Organisation for Economic Co-operation and OECD

Development

OTC over the counter prime minister PM

PPS production possibility set

public investment expenditures in the provinces PUBINVEST

QIS quantitative impact study **REPO** repurchase agreement return on assets ROA ROE return on equity

Structural Adjustments and Stabilization Programme SASP

Savings Deposit Insurance Fund SDIF

SDR Special Drawing Rights scale efficiency change SEC SEE state economic enterprise SFI special financial institution SME small and medium enterprises State Planning Organization SPO TEC technical efficiency change total factor productivity TFP

TI. Turkish lira

TUSIAD Turkish Industrialists' and Businessmen's Association

USD US dollar

USSR Union of Soviet Socialist Republics

value at risk VaR

VRS variable returns to scale

WB World Bank new Turkish lira YTL

About the Authors

Yener Altunbaş is a Professor of Banking and Finance at Bangor Business School. He holds a BSc degree from Hacettepe University, Ankara, and a PhD from Bangor University. He worked first as an analyst with Ziraat, then as an economist with Etibank in Turkey and as a Researcher within the Institute of European Finance in the UK. He was employed as a Research Fellow with the Business School at South Bank University, London, and as a Research Associate at the Centre for Business Research at Cambridge University. Recently, he has held a Visiting Researcher post at the European Central Bank and a guest lectureship at the University of Lecce and at the Free Mediterranean University Jean Monnet (LUM), Bari, Italy. Author of many articles on the structure and efficiency of banking markets, his main fields of research interest include European banks, efficiency, stock market analysis, corporate governance, and urban economics. Recent research has also been concerned with marine biology.

Alper Kara is a Lecturer at the Loughborough University Business School and previously worked as a teaching fellow at the University of Leicester, and as a lecturer at the Robert Gordon University, Aberdeen. He has also been a visiting lecturer at the Bangor Business School and the British Kazakh Technical University of Almaty. He holds a BSc (Economics) degree from Orta Doğu Teknik Universitesi, Ankara, and an MBA in Banking and Finance and a PhD in Economics from the University of Wales, Bangor. Co-author of a book on syndicated lending; his main research interests and publication record cover a range of topics, including syndicated loan markets, bank lending, corporate finance and emerging market financing. Before moving to academia, he was employed by Dışbank of Turkey (acquired by Fortis in July 2005) and had four years experience as a trader in the international bond and foreign exchange markets.

Özlem Olgu joined Koç University as an Assistant Professor in Accounting and Finance in September 2007 after completing her MSc Finance and PhD Finance degrees at the University of Leicester. She completed her undergraduate degree in Banking and Finance at the Near East University, Cyprus, and was awarded a scholarship to continue her studies to

Master's level. Prior to joining Koç University she worked as a lecturer in finance at the University of Hertfordshire. Her research interests and publication record cover a range of banking topics. Most recently, the focus has be enon production theory, investigating the efficiency and productivity levels of European banking and transition economies, together with a more in-depth analysis of Turkey. In particular, she is interested in dealing with the economies-of-scale effects on performance measurement as well as the effects of macroeconomic factors on productivity growth.

Contents

Li	st of Figures and Tables	ix
Pr	efac e	xiv
Li	st of Abbreviations	xvi
Αl	pout the Authors	xviii
1	Introduction	1
2	Overview of the Turkish Economy	7
	Introduction	7
	The Ottoman period and the early Republic	7
	State-led development strategy, 1930–50	10
	Liberalization in the 1950s	10
	Import substitution and inward-orientated	
	growth strategy, 1960–79	12
	The era of financial liberalization	15
	1980–90	15
	1990–2000	19
	1994 economic crises	21
	2000–01 twin economic crises	24
	Recent economic trends	27
	Renewal of the standby agreement with the IMF, 2005	30
	A short history of political instability	31
	Conclusion	37
	Appendix 2.1	38
	Appendix 2.2	39
3	Trends in the Banking Industry	40
	Introduction	40
	Banking in the Ottoman period	41
	The new Republic and the establishment of	
	the new national banks	42
	The period of state-owned banks, 1932-45	43
	Establishment of private banks, 1945–60	44
	Banking in the planned economy, 1960–79	45
	Banking after financial liberalization	47

vi Contents

	Banking and financial markets in the 1990s	50
	Aftermath of the 1994 crisis	54
	Establishment of the Banking Regulation and	
	Supervisory Agency	55
	Recent developments, 2000–06	57
	SDIF and the restructuring process	58
	Recovery	60
	Dollarization, crowding-out by government debt and	
	maturity mismatch	62
	Conclusion	64
	Appendix 3.1	66
	Appendix 3.2	68
4	A Profile of Turkish Banking	69
	Introduction	69
	Size of the Turkish banking sector	69
	Branch systems of the Turkish banking sector	73
	Employment in the Turkish banking sector	74
	Players in the Turkish banking market	77
	Big banks	77
	State-owned versus privately-owned banks in Turkey	78
	Balance sheet structure of the Turkish banks	79
	Assets structure, loans and liquid assets	79
	Liability structure, deposits and equity	86
	Income and costs	87
	Income structure of Turkish banks	87
	Cost structure of Turkish banks	89
	Performance of the Turkish banking sector	90
	Capital adequacy	91
	Asset quality	92
	Liquidity	93
	Profitability	93
	Financial strength indices	95
	Conclusion	96
5	The Turkish Banking Sector and Regional Economic Growth	97
	Introduction	97
	A brief literature review: financial development and	
	economic growth	98
	Data and methodology	102
	Economic growth and financial development indicators	103

Contents	vii
----------	-----

Corelation matrices Regression results Conclusion	105
•	105
Conclusion	106
	109
6 Pe rformance of Banks in Turkey	111
Introduction	111
Fundamentals of efficiency and productivity	112
Da ta sources	115
Nonparametric efficiency measurement of Turkish banks	118
Data envelopment analysis (DEA) method	118
Tobit regression: accounting for environmental variable	
Nonparametric productivity measurement of Turkish bar	nks 123
DEA-Malmquist index technique	127
Empirical findings	129
Technical efficiency scores of Turkish banks	129
Productivity scores of Turkish banks	134
Conclusion	140
Appendix 6.1	143
Appendix 6.2	144
Appendix 6.3	150
7 Other Financial Markets in Turkey	151
Introduction	151
The stock market in Turkey	151
Initial public offerings (IPOs)	157
Bond markets	160
Primary markets in Turkey	160
Secondary market activities in Turkey	161
Over-the-counter market	161
ISE bonds and bills market	162
Total Control of the	
Leasing, factoring and consumer finance companies	164
in Turkey	166
in Turkey Special financial institutions	167
in Turkey	
in Turkey Special financial institutions	169
in Turkey Special financial institutions Conclusion	
in Turkey Special financial institutions Conclusion 8 Current Developments and Prospects for Turkish Banks	169

viii Contents

Implementation of Basel II in Turkey	173
Pillar 1: Credit, market and operational risk	174
Pillars 2 and 3	174
Can Turkish banks cope with Basel II?	175
Introduction of a mortgage system and a new	
mortgage law	176
Foreign direct investment in Turkish banking	179
Conclusion	184
Appendix 8.1	186
9 Concluding Remarks	191
Notes	195
References	198
Index	210

List of Figures and Tables

Figur**e**s

2.1	Growth rate of Turkey, 1924–47	9
2.2	Growth rate of Turkey, 1948–67	11
2.3	Growth rate of Turkey, 1960–79	13
2.4	Growth in exports, 1970–2006	18
2.5	Yearly consumer and producer price indexes, 1983–2006	20
2.6	Net international flow of funds to Turkey, 1975–2006	21
2.7	Central Bank's gross foreign exchange reserves, 1981–2007	22
2.8	Central government debt stock, 1986–2006	23
2.9	Gross national product by producer prices, 1988–2006	24
2.10	Average compound interest rates of the benchmark	
	government security, 1990–2007	28
2.11	Compound yield of 10-year Eurobonds issued by	
	the Turkish Treasury, 2002–2008	28
2.12	Maturity composition of central government	
	outstanding domestic debt, 2006	29
2.13	Current account deficit as a percentage of GNP, 1992–2006	30
2.14	Unemployment, 1980–2006	31
2.15	Sectoral composition of outstanding foreign debt,	
	1996–2006	32
2.A1	Currency denomination of central government	
	outstanding foreign debt, 2006	38
2.A2	Currency and interest composition of central	
	government outstanding debt, 2006	38
2.A3	Contribution of sectors to GNP, 1979–2003	39
2.A4	Sectoral distribution of workforce, 1980–2003	39
3.1	Banks in Turkey, 1963	46
3.2	Top four banks' liabilities as a percentage of total	
	liabilities of the banking sector in Turkey, 1980	48
3.3	Top four banks' liabilities as a percentage of total	
	liabilities of the banking sector in Turkey, 1990	50
3.4	Total assets of banking sector, 1991–1998	53
3.5	Concentration in the banking sector	53
3.6	Dollarization in deposits, 1986–2007	63
3.7	Crowding-out by government debt. 1986–2007	63

x List of Figures and Tables

3.8	Maturities of deposits, 1986–2007	64
4.1	Changing numbers of banks in Turkey, 1990–2006	73
4.2	Numbers of branches and employees in the	
	Turkish banking system, 1990–2006	76
4.3	Selected asset items of the Turkish banking sector,	
	percentage share of each component, 1990–2006	81
4.4	Total assets to GDP ratio, Turkey and EU countries, 2007	82
4.5	Loans to total assets ratio, 1990–2006	83
4.6	Number of bank cards and credit cards, 1998–2005	85
4.7	Non-performing loans to total loans, 1990–2006	85
4.8	Non-performing loans (NPL) and provisions to	
	NPL ratios, selected countries, 2004	86
4.9	Total liabilities of Turkish banks, 1990–2006	87
4.10	Income structure of the Turkish financial system,	
	1990-2006	88
4.11	Net interest income to total assets ratio, 1990–2006	88
4.12	Total income to total expenditure ratio, 1990–2006	89
4.13	Average interest income to average interest expenses	
	ratio, 1990–2006	89
4.14	Operating expenses of Turkish banks, 2000–06	90
4.15	Average shareholders' equity to total assets ratio,	
	1990–2006	91
4.16	Capital adequacy ratio for Turkey and selected	
	EU countries, 2006	92
4.17	Loans to total assets, 1990–2006	92
4.18	Liquid assets to total assets ratio, 1990-2006	93
4.19	Return on assets (ROA) and return on equity (ROE)	
	of Turkish banks, 1990–2006	94
4.20	Comparison of return on assets (ROA) and return on	
	equity (ROE), selected countries, 2004	94
6.1	The distinction between efficiency and productivity	114
6.2	Construction of a Malmquist productivity index	125
6.3	Annual efficiency scores of the Turkish banking sector,	400
	1992–2006	130
6.4	Average DEA efficiency scores of Turkish banks,	
	1992–2006	132
6.5	DEA efficiency scores of Demirbank, Koçbank and	
	Dışbank, 1992–2006	133
6.6	Changing trends of Malmquist decomposed	
	components, 1993–2006	13ϵ

6.7	Malmquist decomposed components of Turkish banks	
	1992–2006	136
6.8	TFPC scores of Koçbank, Dışbank and Demirbank,	
	1992/3–2005/6	139
6.A1		
	1992–2005	145
6.A2		146
6.A3		146
6.A4	, , , , , , , , , , , , , , , , , , ,	
	1992/3-2005/06	147
6.A5	Annual Malmquist decomposed components of Dışbank,	
	1992/3–2005/06	148
6.A6	Annual Malmquist decomposed components of	
	Demirbank, 1992/3-2005/06	148
7.1	Outstanding government securities/total outstanding	
	securities, 1990–2005	160
7.2	Value of new Turkish lira bonds purchased by foreign	
	investors, Jan 2005–Oct 2006	165
7.3	Composition of total assets in the Turkish financial system	165
8.1	Size of mortgage market relative to GDP, selected	
	countries	177
8.2	Growth in housing loans, 2002–07	178
Tabl	es	
2.1	Some macroeconomic indicators, 1923–30	9
2.2	Structural reform measures of the Letter of Intent	
	signed in 1999 with the IMF	25
2.3	Governments serving in Turkey, 1950 to present	33
2.4	IMF's stand-by arrangements with Turkey, 1961–2005	36
3.1	Numbers of branches, personnel and total assets of	
	banks in Turkey, 1980	47
3.2	Decomposition of deposits by currency denomination,	
	1989–93	51
3.3	Foreign exchange positions of the banking sector	
	during the 1994 financial crises	51
3.4	Change in the total assets of the banking sector	
	during the 1994 crisis	52
3.5	Sector shares of banking groups, 1990 and 1998	53
3.6	Some measures introduced by the Ranking Law 1999	56

xii List of Figures and Tables

3.7	Percentage of non-performing loans to total loans,	
	2000 and 2001	58
3.8	Banks under the Deposit Insurance Fund as	
	of 2002, all privately-owned commercial banks	60
3.9	Selected foreign investment deals with the Turkish	
	banking sector, 2004–06	62
3.A1	Banks operating in Turkey, ranked by asset size,	
	as of December 2006	66
3.A2	Dollarization in selected emerging markets, foreign	
	currency deposits to total deposits, 1993-2001	68
4.1	Selected items of financial sector as a percentage	
	of GDP, 2003	71
4.2	The Turkish banking system, number of banks, 1990–2006	72
4.3	Number of branches in the Turkish banking sector,	
	1990–2006	73
4.4	Number of employees in the Turkish banking system,	
	1990–2006	75
4.5	Comparison of bank structure in Turkey and	
	EU-15 countries, 2004	77
4.6	Concentration of the five largest and ten largest	
	Turkish banks, 1997–2006	78
4.7	Balance sheet structure of state-owned and	
	private banks, 1993–2006	80
4.8	Percentage market share of Turkish banks, 1986–2005	82
4.9	Comparison of balance sheet items with those of	
	selected EU countries, 2007	84
4.10	Financial strength indices, Turkey, 1999–2005	95
5.1	Regions and provinces of Turkey	103
5,2	Correlation analysis for Turkey overall	105
5.3	Correlation analysis of variables for the provinces	
	of Turkey	106
5.4	The Relation of GDP to lagged GDP and selected	
	explanatory variables	107
5.5	Regression analysis of provinces in Turkey	108
6.1	Annual distribution of banks in the sample, 1992–2006	116
5.2	Definitions of variables	118
5.3	Malmquist productivity decomposition of the Turkish	
	banking sector, 1992–2006	135
5.A1	Bank sample details	143
5.A2	Annual efficiency scores, Turkish banks	144