

Syndicated Loans

Palgrave Macmillan Studies in Banking and Financial Institutions

Series Editor: **Professor Philip Molyneux**

The Palgrave Macmillan Studies in Banking and Financial Institutions is international in orientation and includes studies of banking within particular countries or regions, and studies of particular themes such as Corporate Banking, Risk Management, Mergers and Acquisitions, etc. The books will be focused upon research and practice, and include up-to-date and innovative studies on contemporary topics in banking that will have global impact and influence.

Titles include:

Yener Altunbaş, Blaise Gadanecz and Alper Kara

SYNDICATED LOANS

A Hybrid of Relationship Lending and Publicly Traded Debt

Santiago Carbó, Edward P.M. Gardener and Philip Molyneux

FINANCIAL EXCLUSION

Franco Fiordelisi and Philip Molyneux

SHAREHOLDER VALUE IN BANKING

Munawar Iqbal and Philip Molyneux

THIRTY YEARS OF ISLAMIC BANKING

History, Performance and Prospects

Philip Molyneux and Munawar Iqbal

BANKING AND FINANCIAL SYSTEMS IN THE ARAB WORLD

Palgrave Macmillan Studies in Banking and Financial Institutions

Series Standing Order ISBN 1-4039-4872-0

You can receive future titles in this series as they are published by placing a standing order. Please contact your bookseller or, in case of difficulty, write to us at the address below with your name and address, the titles of the series and the ISBN quoted above.

Customer Services Department, Macmillan Distribution Ltd, Houndmills, Basingstoke, Hampshire RG21 6XS, England

Syndicated Loans

A Hybrid of Relationship Lending and Publicly Traded Debt

Yener Altunbaş

University of Wales, Bangor

Blaise Gadanecz

Bank for International Settlements

and

Alper Kara

University of Leicester



© Yener Altunbaş, Blaise Gadanecz and Alper Kara 2006

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

No paragraph 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, 90 Tottenham Court Road, London W1T 4LP.

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 2006 by
PALGRAVE MACMILLAN
Houndmills, Basingstoke, Hampshire RG21 6XS and
175 Fifth Avenue, New York, N.Y. 10010
Companies and representatives throughout the world

PALGRAVE MACMILLAN is the global academic imprint of the Palgrave Macmillan division of St. Martin's Press, LLC and of Palgrave Macmillan Ltd. Macmillan® is a registered trademark in the United States, United Kingdom and other countries. Palgrave is a registered trademark in the European Union and other countries.

ISBN 978-1-349-54567-4 ISBN 978-0-230-59723-5 (eBook)
DOI 10.1057/9780230597235

This book is printed on paper suitable for recycling and made from fully managed and sustained forest sources.

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

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

Syndicated loans : a hybrid of relationship lending and publicly traded debt / by Yener Altunbaş, Blaise Gadanecz, and Alper Kara.
p. cm. – (Palgrave Macmillan studies in banking and financial institutions)

Includes bibliographical references and index.

1. Syndicated loans. 2. Syndicates (Finance). 3. Bank loans. I. Gadanecz, Blaise. II. Kara, Alper, 1977–. III. Title. IV. Series.
HG1641.A417 2006
332.7—dc22

2005045623

10 9 8 7 6 5 4 3 2 1
15 14 13 12 11 10 09 08 07 06

Contents

<i>List of Figures and Tables</i>	viii
<i>Preface</i>	xvi
<i>List of Abbreviations</i>	xviii
<i>About the Authors</i>	xx
1 Introduction	1
2 A Global Overview of the Syndicated Loans Market	6
Introduction	6
A hybrid between relationship lending and disintermediated debt	6
Pricing structure: spreads and fees	8
Primary and secondary markets: sharing versus transferring risk	11
Conclusion	14
3 Historical Analysis, 1970–2004	15
Introduction	15
The emerging market crises of the 1980s	21
Funding takeovers in US market	24
The expansion of the 1990s	26
2000 and onwards	32
Conclusion	33
4 Borrower-Country Economic Structure and the Pricing of Syndicated Loans	34
Introduction	34
Emerging markets: past perspective	36
Data and methodology	38
Descriptive statistics	45
Methodology	48
Results and discussion	48
Conclusion	58
Appendixes	60

5	Lender Behaviour and the Structure and Pricing of Syndicated Loans	71
	Introduction	71
	Studies in lender behaviour	74
	Data and methodology	79
	Results and discussion	82
	Conclusion	100
6	Banks' and Financial Institutions' Decision to Participate in Loan Syndications	101
	Introduction	101
	Why do banks engage in syndicated lending?	101
	Trends in financial indicators of participant and non-participant banks	105
	Financial structure indicators and model specification	113
	Determinants of the loan syndication decision, by bank nationality	116
	Determinants of the loan syndication decision, by bank specialization	120
	Conclusion	120
	Appendixes	122
7	Comparison of Syndicated Loan Markets with Bond Markets	126
	Introduction	126
	Some historical and theoretical background	127
	The loan and bond pricing literature	132
	Analysis of lending to developing countries	134
	Analysis of lending to industrialized countries	143
	Analysis of contagion effects	147
	Conclusion	148
	Appendix	150
8	Syndicated Loans and the Financing of Distressed Emerging Markets	162
	Introduction	162
	Critiques of the IMF	162
	Selection procedure of debt-distressed emerging countries	167
	Features of syndicated loans issued to debt-distressed emerging markets	170
	Loan pricing and debt-distressed developing country macroeconomic indicators	173

Conclusion	179
Appendix	181
9 Facts and Figures, 1993–2004	183
Introduction	183
Global trends	183
Industrialized countries	188
Emerging markets	192
Industrialized versus emerging countries	194
Income level	199
Conclusion	202
Appendixes	203
10 Concluding Remarks	206
<i>Notes</i>	210
<i>References</i>	217
<i>Index</i>	225

List of Figures and Tables

Figures

2.1	Syndicated lending, 1986–2003	7
2.2	Example of a simple syndicate structure: Starwood	8
2.3	Spreads and fees, 1993–2004	10
2.4	Breakdown of fees, 1993–2003	11
2.5	US and European secondary markets for syndicated credits, 1997–2003	14
3.1	Announcements of international syndicated credit facilities, 1972–2004	16
3.2	Trends in oil prices, 1970–83	17
3.3	Current account balances, 1970–80	18
3.4	The growth of Eurodollar markets, 1970–82	18
3.5	Announcements of international syndicated credit facilities by borrower nationality, 1972–89	20
3.6	US Fed funds rates and consumer prices, 1970–90	23
3.7	Total volume and number of leveraged buyouts in the US, 1980–99	25
3.8	Merger-related loan exposure of 60 large US banks as a percentage of total commercial and industrial loans outstanding, 1985–89	26
3.9	Announcements of international syndicated credit facilities, 1992–2003	26
3.10	Total volume and number of merger and acquisition (M & A) activity of US and US cross-border transactions, 1980–2004	28
3.11	Secondary market trading in syndicated loans, 1991–2003	29
3.12	Syndicated loan announcements, by selected borrowers, 1992–2003	31
3.13	Emerging market financing, 1991–2003	31
3.14	Debt owed to Japanese banks as of December 1996 by Asian borrowers	31
5.1	Evolution of banks' international loan portfolios relative to their total foreign claims including holdings	

	of securities, by country of residence of the banks, 1996–2000	72
5.2	Evolution of loan pricing, LIBOR spread + fees, medians, by rating class, 1993–2001	82
6.1	Number of participations in syndicated loans, by origin of the lender, 1993–2001	105
6.2	Total assets and equity/total assets ratio of participating and non-participating commercial banks, 1993–2001	106
6.3	Net loans/total assets and loan loss provisions/total loans ratios of participating and non-participating commercial banks, 1993–2001	106
6.4	Return on equity and return on asset ratios of participating and non-participating commercial banks, 1993–2001	107
6.5	Total assets and equity/total assets ratio of participating and non-participating investment banks, 1993–2001	108
6.6	Net loans/total assets and loan loss provisions/total loans ratios of participating and non-participating investment banks, 1993–2001	108
6.7	Return on equity and return on asset ratios of participating and non-participating investment banks, 1993–2001	108
6.8	Total assets and equity/total assets ratio of participating and non-participating savings, mortgage and real estate banks, 1993–2001	109
6.9	Net loans/total assets and loan loss provisions/total loans ratios of participating and non-participating savings, mortgage and real estate banks, 1993–2001	109
6.10	Return on equity and return on asset ratios of participating and non-participating savings, mortgage and real estate banks, 1993–2001	109
6.11	Total assets and equity/total assets ratio of participating and non-participating specialized credit institutions, 1993–2001	110
6.12	Net loans to total assets and loan loss provisions total loans ratios of participating and non-participating specialized credit institutions, 1993–2001	110
6.13	Return on equity and return on asset ratios of participating and non-participating specialized credit institutions, 1993–2001	111
6.14	Total assets and equity/total assets ratio of participating and non-participating banking corporations, 1993–2001	111

6.15	Net loans/total assets and loan loss provisions/total loans ratios of participating and non-participating banking corporations, 1993–2001	112
6.16	Return on equity and return on asset ratios of participating and non-participating banking corporations, 1993–2001	112
6A.1	Total assets and equity/total assets ratio of participating and non-participating non-banking credit institutions, 1993–2001	124
6A.2	Net loans/total assets and loan loss reserves/total loans ratios of participating and non-participating non-banking credit institutions, 1993–2001	124
6A.3	Return on equity and return on asset ratios of participating and non-participating non-banking credit institutions, 1993–2001	125
7A.1	Evolution of syndicated lending to industrialized countries and selected developing countries affected by financial crises	150
7A.2	Evolution of average LIBOR spreads weighted by facility amounts on syndicated credits granted to industrialized countries and selected developing countries affected by financial crises, 1993–2001	151
7A.3	Evolution of average maturities weighted by facility amounts on syndicated credits granted to industrialized countries and selected developing countries affected by financial crises, 1993–2001	152
7A.4	Evolution of lending and average LIBOR spreads weighted by facility amounts on syndicated loans arranged for various business sectors in developing countries, 1993–2001	153
7A.5	Evolution of lending and average LIBOR spreads weighted by facility amounts on syndicated loans arranged for various business sectors in industrialized countries, 1993–2001	154
7A.6	Evolution of bond issuance by industrialized countries and selected developing countries affected by financial crises, 1993–2001	155
7A.7	Evolution of average launch spreads weighted by facility amounts on bond issues for industrialized countries and selected developing countries affected by financial crises, 1993–2001	156

7A.8	Evolution of average maturities weighted by facility amounts on bond issues for industrialized countries and selected developing countries affected by financial crises, 1993–2001	157
7A.9	Evolution of issuance amounts and average launch spreads weighted by facility amounts on bonds issued by various business sectors in developing countries, 1993–2001	158
7A.10	Evolution of issuance amounts and average launch spreads weighted by facility amounts on bonds issued by various business sectors in industrialized countries, 1993–2001	159
7A.11	Evolution of median maturity and pricing on syndicated loans granted to all industrialized and developing countries and countries with largest amounts of borrowings for year concerned, 1993–2001	160
7A.12	Evolution of median maturity and launch spreads on bond issues for all industrialized and developing countries and countries with largest amounts of issuance for year concerned, 1993–2001	161
8.1	Debt/GDP ratios of emerging countries with and without IMF assistance between 1993 and 2001	168
8.2	Short-term debt/total debt ratios of emerging countries with and without IMF assistance between 1993 and 2001	169
8.3	Debt service/exports of good and services ratios of emerging countries with and without IMF assistance between 1993 and 2001	169
8.4	Sectoral composition of loans granted to countries with and without IMF assistance	171
9.1	Breakdown of borrower countries, by income level	184
9.2	Signings of syndicated loans, 1993–2004	184
9.3	Average syndicated loan size and total number of loans, 1993–2004	184
9.4	Average maturity and spread over LIBOR, 1993–2004	185
9.5	Composition of loans by borrowers' business sector, 1993–2004	186
9.6	Average size, maturity and spread of syndicated loans, by borrower sector, 1993–2004	186
9.7	Composition of loans, by purpose, 1993–2004	187
9.8	Average loan spread over LIBOR, by purpose, 1993–2004	187
9.9	Average loan maturity, by purpose, 1993–2004	188

9.10	Syndicated loans granted to borrowers from industrialized countries, 1993–2004	189
9.11	Average syndicated loan size for industrialized country syndicated loans, 1993–2004	190
9.12	Total number of syndicated loans granted to US borrowers, 1993–2004	190
9.13	Average loan maturity for selected industrialized countries, 1993–2004	190
9.14	Average loan spreads over LIBOR for selected industrialized countries, 1993–2004	191
9.15	Total number of syndicated loans granted to Euro area borrowers, 1993–2004	192
9.16	Signings of syndicated loans by Euro area borrowers, 1993–2004	192
9.17	Average loan maturity for selected Euro area countries, 1993–2004	192
9.18	Average loan spreads over LIBOR for selected industrialized countries, 1993–2004	193
9.19	Lending to emerging countries, nationality breakdown, 1993–2004	194
9.20	Average syndicated loan size for emerging country borrowers, 1993–2004	195
9.21	Average loan maturity for emerging country borrowers, 1993–2004	196
9.22	Average loan spread over LIBOR for emerging country borrowers, 1993–2004	197
9.23	Signings of syndicated loans by borrowers in selected emerging countries, 1993–2004	197
9.24	Share of selected emerging countries	198
9.25	Average loan maturity in selected emerging countries	198
9.26	Average spread over LIBOR for selected emerging countries	198
9.27	Average spread over LIBOR for emerging and industrialized country borrowers, 1993–2004	199
9.28	Average maturity for emerging and industrialized country borrowers, 1993–2004	199
9.29	Emerging and industrialized country borrowing, by sector, 1993–2004	200
9.30	Composition of total amount of loans issued, classified by loan purpose and borrower country, 1993–2004	200
9.31	Average spread over LIBOR, by loan purpose in emerging and industrialized countries, 1993–2004	201

9.32	Average maturity, by loan purpose, in emerging and industrialized countries, 1993–2004	201
9.33	Composition of total amount of loans issued, classified by country income level, 1993–2004	201
9.34	Average spread over LIBOR, by borrower country income, 1993–2004	202
9.35	Average maturity, by borrower country income, 1993–2004	202

Tables

2.1	Structure of fees in a syndicated loan	9
2.2	Non-price components in the remuneration of risk, share of syndicated loans with covenants, collateral and guarantees, by nationality of borrower, 1993–2004	11
2.3	US syndicated credits, 2000–2003	13
3.1	Average financial ratios for 8 money-centre banks, 1977–1989	21
3.2	Latin American external borrowing, 1970–1992	22
3.3	Selected telecommunication sector syndicated loan announcements, 2000	32
4.1	Various sources of international financing for developing countries, 1992–2001	37
4.2	Announcements of international syndicated credit facilities, by regions, 1980–2001	37
4.3	Number of syndicated loan facilities corresponding to each sovereign rating class	42
4.4	Evolution of drawn return in basis points over time, 1993–2001	45
4.5	Evolution of loan size over time, 1993–2001	46
4.6	Distribution of loan size and drawn return, by industry	46
4.7	Summary statistics, by borrower country sovereign rating and year, 1993–2001	47
4.8	Drawn return, by broad sovereign rating category	49
4.9	The relative effect of macroeconomic and microeconomic factors on syndicated loan pricing	50
4A.1	Loan pricing model, dependent variable: natural logarithm of LIBOR spread	64
4A.2	Loan pricing model, dependent variable: natural logarithm of drawn fees	66
4A.3	Loan pricing model, dependent variable: natural logarithm of undrawn fees	68

4A.4	Interaction between junk sovereign rating, loan transferability and non-bank financial sector, dependent variable: natural logarithm of drawn return	70
5.1	Number of observations, by borrower Standard & Poor's rating and year, 1993–2001	82
5.2	The effect of bank characteristics on loan pricing	83
5.3	The effect of bank characteristics on the share of the loan retained by the senior bank	88
5.4	The effect on loan pricing of the share of the loan retained by the senior bank	91
5.5	Loan pricing and senior bank versus borrower country	92
5.6	Loan pricing and currency of facility versus borrower's home currency	94
5.7	Loan pricing and currency of facility versus senior bank's home currency	94
5.8	Median loan pricing and borrower residence for industrialized country borrowers, 1993–2001	95
5.9	Median loan pricing and senior bank residence for industrialized country borrowers, 1993–2001	95
5.10	Local presence and the advent of the euro	96
6.1	The effect of bank financial structure on the decision to participate in syndicated loans, by bank nationality	117
6.2	The effect of bank financial structure on the decision to participate in syndicated loans, by bank type	119
6A.1	Correlation between financial structure indicators	123
7.1	Sources of international financing for industrialized countries, 1992–2001	128
7.2	Characteristics of syndicated credits compared to bonds	129
7.3	Loan and bond pricing regressions for developing countries	138
7.4	Loan and bond pricing regressions for industrialized countries	144
8.1	Selected emerging countries and total number of syndicated loans issued between 1993 and 2001	167
8.2	Average debt intensity indicators of emerging countries with and without IMF assistance between 1993 and 2001	168
8.3	Descriptive statistics on loan characteristics for emerging countries in financial distress in and outside the IMF umbrella, 1993–2001	170

8.4	Descriptive statistics on loan characteristics for emerging countries with and without IMF assistance between 1993 and 2001, according to borrower's business	172
8.5	Descriptive statistics on loan characteristics for emerging countries with and without IMF assistance between 1993 and 2001, according to loan purpose	174
8.6	Regression results for emerging countries with and without IMF assistance	178
8A.1	Correlation matrixes between macroeconomic indicators of countries with and without IMF assistance	182

Preface

The topic of syndicated lending has attracted the attention of practitioners, policy-makers and, more recently, academic researchers. The international market for syndicated credits – loans where several banks form a group to lend to a borrower – emerged as a sovereign business in the 1970s and subsequently became a source of funding widely relied upon by corporate borrowers, currently representing no less than one third of funds raised on international financial markets, including securities and equity issuance. On the eve of the sovereign default by Mexico in 1982, most of developing countries' debt already consisted of syndicated loans, which then shaped policy to work out the crisis. The default threatened large Western financial institutions and indeed parts of their countries' financial systems. The eventual restructuring of Mexican debt into Brady bonds, whereby creditors saw their loans exchanged for securities guaranteed by the US government, created a precedent in the way it changed the structure of financial markets.

The approach of this book is pragmatic. We have attempted to write in a manner that will be useful for students and academics as well as practitioners. Since the field of syndicated lending is interdisciplinary, theoretical material relating to financial and development economics is presented along with practical elements of corporate finance. Thus, the first chapters provide an overview of global market for syndicated loans and discuss its development during the past decades. The focus is then placed on the analytical investigation of the determinants in the demand and supply in syndicated lending, with special attention paid to borrowers from emerging and industrialized countries for the demand side, and, for the supply side, banks' balance sheets and income structures, strategies and information sets. The differences between syndicated lending and disintermediated securities financing are highlighted. Information asymmetry issues are explored between borrowers and lenders, as well as lenders of various seniorities. A special chapter is devoted to the role of syndicated lending in distressed economies. To all intents and purposes, while the text summarizes a great amount of practitioners' material by describing the workings of the market, it also attempts to synthesize some of the more important and relevant academic research studies in this field, highlighting some relevant policy issues along the way.

The authors are very grateful to Claudio Borio, Shanti Chakravarty, John Goddard, Ashoka Mody, Philip Molyneux, Victor Murinde, Güldal Seçener, Kostas Tsatsaronis, Baptiste Venet, Jon Williams as well as participants of seminars held at the University of Wales and at the Bank for International Settlements (BIS), for very helpful comments and suggestions on the research papers that provided the original material for the various chapters of this text. Thanks are also due to Rebecca Pash, Jacky Kippenberger (Palgrave) and Keith Povey, for editing of 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 Bank for International Settlements, the University of Wales or the University of Leicester. All remaining errors are our sole responsibility.

The authors and publishers are grateful to the BIS, Taylor & Francis and Dealogic for permission to materials and data used in this work. Every effort has been made to contact all copyright-holders, but, if any have been inadvertently omitted the publishers will be pleased to make the necessary arrangement at the earliest opportunity.

List of Abbreviations

m	million 1,000,000
bn	billion, one thousand million
trn	trillion, one thousand billion
BIS	Bank for International Settlements
bp	basis point
CDO	collateralized debt obligation
CIS	Commonwealth of Independent States
CPI	Consumer Price Index
EMBI	Emerging Market Bond Index
EMU	European Monetary Union
EURIBOR	Euro (or European) Interbank Offered Rate
FDIC	Federal Deposit and Insurance Corporation (US)
FYR	Former Republic of Yugoslavia
GAAP	Generally Accepted Accounting Principles (US)
GDP	Gross Domestic Product
GRA	General Resources Account (IMF)
HLT	highly leveraged transaction
IADB	Inter-American Development Bank
IFC	International Finance Corporation
IMF	International Monetary Fund
LBO	Leveraged Buyout
LDC	less developed country
LIBOR	London Inter-Bank Offered Rate
LMA	Loan Market Association
LOLR	lender of last resort
M & As	mergers and acquisitions
MBO	Management Buyout
NIF	note issuance facilities
OLS	ordinary least squares
OPEC	Organization of Petroleum Exporting Countries
PPP	purchasing power parity
REIT	Real Estate Investment Trust
ROA	return on assets

SAP	structural adjustment programme (IMF)
SAR	Special Administrative Region
SPV	special-purpose vehicle
TI	Transparency International
WTP	willingness-to-pay

About the Authors

Yener Altunbaş is a senior lecturer at the University of Wales, Bangor. He holds a BSc (Economics) degree from the University of Hacettepe, Ankara, and a PhD from the University of Wales, Bangor. He worked first as an analyst with Ziraat, as an economist in Etibank Banking, Inc. in Turkey and then as a research officer 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 of Business Research in Cambridge University. Author of a number of articles on the structure and efficiency of banking markets, his main fields of research interest include the study of European banks, efficiency, stock market analysis, electoral studies, regional economics and urban economics. Some of his recent research is also concerned with marine biology.

Blaise Gadanez is currently working as an economist at the Bank for International Settlements in Basel, Switzerland. He holds a postgraduate degree in Banking, Finance and Insurance from Université Paris-Dauphine, as well as an MA in Banking and Finance and a PhD in Economics from the University of Wales, Bangor. Prior to joining the Monetary and Economic Department of the BIS in 1999, he worked in various capacities at the Bank of England and at the French Treasury. At the BIS he has been involved in the analysis of international banking and derivatives markets, financial institutions and infrastructure. His research interests and publication record cover a range of banking topics; most recently the focus has been on the term structure of credit spreads in project finance, the micro-structure of international syndicated loan and bond underwriting markets, and the effects of government safety nets on international bank lending.

Alper Kara is currently working as a teaching fellow at the University of Leicester and undertaking PhD research with a scholarship awarded by University of Wales, Bangor. He holds a BSc (Economics) degree from Orta Doğu Teknik Üniversitesi, Ankara, and an MBA in Banking and Finance from the University of Wales, Bangor. Before moving to academia, he was employed by Dışbank of Turkey (acquired by Fortis in July 2005). He started his career as a management trainee in 1999, working

afterwards in the treasury department, undertaking responsibilities on foreign exchange and treasury marketing unit desks as an assistant manager and later on the fixed income trading desk as a manager. At present he is conducting research in the areas of syndicated loan markets, bank lending, corporate finance and emerging market financing.