

# **SpringerBriefs in Economics**

More information about this series at <http://www.springer.com/series/8876>

Hirofumi Uchida · Arito Ono  
Souichirou Kozuka · Makoto Hazama  
Iichiro Uesugi

# Interfirm Relationships and Trade Credit in Japan

Evidence from Micro-Data

Hirofumi Uchida  
Graduate School of Business Administration  
Kobe University  
Kobe  
Hyogo  
Japan

Makoto Hazama  
Graduate School of Economics  
Hitotsubashi University  
Kunitachi  
Tokyo  
Japan

Arito Ono  
Research Department  
Mizuho Research Institute  
Chiyoda-ku  
Tokyo  
Japan

Iichiro Uesugi  
Institute of Economic Research  
Hitotsubashi University  
Kunitachi  
Tokyo  
Japan

Souichirou Kozuka  
Faculty of Law  
Gakushuin University  
Toshima-ku  
Tokyo  
Japan

ISSN 2191-5504

ISBN 978-4-431-55186-7

DOI 10.1007/978-4-431-55187-4

ISSN 2191-5512 (electronic)

ISBN 978-4-431-55187-4 (eBook)

Library of Congress Control Number: 2014946404

Springer Tokyo Heidelberg New York Dordrecht London

© The Author(s) 2015

This work is subject to copyright. All rights are reserved by the Publisher, whether the whole or part of the material is concerned, specifically the rights of translation, reprinting, reuse of illustrations, recitation, broadcasting, reproduction on microfilms or in any other physical way, and transmission or information storage and retrieval, electronic adaptation, computer software, or by similar or dissimilar methodology now known or hereafter developed. Exempted from this legal reservation are brief excerpts in connection with reviews or scholarly analysis or material supplied specifically for the purpose of being entered and executed on a computer system, for exclusive use by the purchaser of the work. Duplication of this publication or parts thereof is permitted only under the provisions of the Copyright Law of the Publisher's location, in its current version, and permission for use must always be obtained from Springer. Permissions for use may be obtained through RightsLink at the Copyright Clearance Center. Violations are liable to prosecution under the respective Copyright Law. The use of general descriptive names, registered names, trademarks, service marks, etc. in this publication does not imply, even in the absence of a specific statement, that such names are exempt from the relevant protective laws and regulations and therefore free for general use.

While the advice and information in this book are believed to be true and accurate at the date of publication, neither the authors nor the editors nor the publisher can accept any legal responsibility for any errors or omissions that may be made. The publisher makes no warranty, express or implied, with respect to the material contained herein.

Printed on acid-free paper

Springer is part of Springer Science+Business Media (www.springer.com)

# Preface

In this monograph, we describe the current status of firm interrelationships in Japan by using a unique and huge data set that covers about 380,000 firms. To grasp the entirety of this huge dataset, which is almost the same as a picture of all firms in current Japan, we summarize the descriptive statistics of the variables and conduct statistical analyses. Further, we put special emphasis on trade credit between firms. The payment for interfirm transactions is usually made on account, or by payment after the delivery, rather than by immediate payment. Therefore, late payment is nothing but a provision of credit from a seller to a buyer, and hence, interfirm lending/borrowing is called *trade credit*. Trade credit is used all over the world and accounts for a non-negligible portion of the firms' balance sheets. We provide comprehensive information on to what extent, and in what terms, firms in Japan transact through trade credit—to a level of detail that has not been available for other countries. The uniqueness of this monograph also lies in its description of the legal background in Japan. In any country, the legal structure prescribes the basis of corporate activities.

For those researchers who want to grasp economic activities in the real economy, one of the major challenges is the lack of data availability. As for the interfirm activities, researchers have encountered serious difficulties due to the lack of detailed data. In this monograph, we make use of data that enable us to describe the current status of interfirm relationships in Japan in great detail. This data was made possible through the cooperation with Teikoku Databank Ltd., one of the largest credit information providers in Japan. The main data are from their credit reports from 2007 to 2010 and from the accompanying financial statement data.

This monograph has a companion paper (Ono et al. forthcoming). This monograph focuses on interfirm relationships in Japan, but Ono et al. (forthcoming) focus on firm-bank relationships in Japan using the same dataset. Taking information from this paper and from the present monograph, we can grasp the whole picture of the current status of the relationships of Japanese firms with their trade partners as well as financial institutions.

## Organization of this Brief

The remaining part of this monograph is composed as follows. In Sect. 1 we briefly describe the original TDB data and our sample selection process. Section 2 presents the descriptive statistics and obtains an image of our sample firms. We also discuss the representativeness of our sample and conduct some preliminary analysis in Sect. 2. Section 3 provides a detailed description and conducts some analysis on trade credit in Japan. In Sect. 4, we describe the legal framework in Japan. Section 5 concludes the monograph.

## Acknowledgments

This monograph is based on a study of our project “Designing Industrial and Financial Networks to Achieve Sustainable Economic Growth” under the Ministry of Education, Culture, Sports, Science and Technology’s program “Promoting Social Science Research Aimed at Solutions of Near-Future Problems.” We gratefully thank the Ministry of Education, Culture, Sports, Science, and Technology for its financial support, Teikoku Databank Ltd. for providing data, and Masahiro Miyatani and Takurou Kitou for their technical support. We also acknowledge Gregory Udell, Jonathan Moore, Masaji Kano, Noriyuki Yanagawa, Daisuke Tsuruta, Koji Sakai, and Takashi Hatakeda for their helpful comments. The views expressed in this monograph are those of the authors and do not necessarily reflect those of the institutions with which they are affiliated.

## Reference

Ono, A., H. Uchida, S. Kozuka, and M. Hazama. A new look at bank-firm relationships and the use of collateral in Japan: Evidence from Teikoku Databank Data. In *The Economics of Interfirm Networks (Advances in Japanese Business and Economics, Volume 4)*, Chap. 12, eds. T. Watanabe, I. Uesugi, and A. Ono, Springer, forthcoming.

# Contents

<b>Interfirm Relationships and Trade Credit in Japan: Evidence from Micro-Data</b> . . . . .	1
1 Data, Sample, and Methodology . . . . .	1
1.1 Data . . . . .	1
1.2 Methodology . . . . .	3
2 Firm Characteristics . . . . .	4
2.1 Basic Characteristics of Our Sample Firms . . . . .	4
2.2 Comparison with Other Surveys. . . . .	12
2.3 Univariate Analysis of the Borrowing Ratio and the Interest Rate . . . . .	13
3 Interfirm Trade and Trade Credit . . . . .	16
3.1 Trade Counterparts . . . . .	16
3.2 Trade Credit Practice in Japan . . . . .	18
3.3 Method of Payment (for Firms as Payers) . . . . .	21
3.4 Method of Payment (for Firms as Payees) . . . . .	31
3.5 Trade Credit Days . . . . .	41
3.6 Credit Period . . . . .	49
3.7 Trade Credit Volume . . . . .	64
3.8 Bills Discounted . . . . .	71
3.9 Factoring . . . . .	72
4 Legal System Relevant to Interfirm Relationships in Japan . . . . .	76
4.1 Regulation on Payment Terms by the Subcontracting Act. . . . .	76
4.2 Price Discrimination and the Antimonopoly Act . . . . .	77
4.3 The Retention of Title . . . . .	77
4.4 Protection of Creditors Under the Companies Act . . . . .	78
5 Conclusion . . . . .	78
References . . . . .	79
<b>Index</b> . . . . .	81

## About the Authors

**Makoto Hazama** is a graduate student at Hitotsubashi University. He served as a research assistant in the project “Design of Inter-firm Networks to Achieve Sustainable Economic Growth” under the Program for Promoting Social Science Research Aimed at Solutions of Near-Future Problems, conducted by the Japan Society for the Promotion of Science (2009–2012). He is working as a research assistant for the Research Institute of Economy, Trade, and Industry.

**Souichirou Kozuka** is a professor at Gakushuin University, Tokyo. He holds a Ph.D. in law from Tokyo University and had taught at Chiba University and Sophia University before beginning his teaching at Gakushuin University. While researching in his specialized field of commercial law and corporate law, he has been active in comparative law studies as well, being a correspondent of UNID-ROIT, and an associate member of the International Academy of Comparative Law (IACL). He has contributed to establishing contacts with Japanese law specialists outside of Japan on many occasions and is a program convenor in eastern Japan of the Australian Network for Japanese Law (ANJeL). Dr. Kozuka serves on the editorial board of the *Journal of Japanese Law (Zeitschrift für japanisches Recht)* published in Germany.

**Arito Ono** is senior economist at the Mizuho Research Institute. He also served as visiting lecturer at the Faculty of Economics at Saitama University (2008–2009), visiting professor at the Faculty of Commerce and Management at Hitotsubashi University (2009), senior economist at the Institute for Monetary and Economic Studies, Bank of Japan (2009–2011), and a member of working groups at the Financial System Council, Financial Services Agency (2011–2013). His main fields of research are banking and corporate finance, and he has published papers in the *Journal of Money, Credit, and Banking*, the *Journal of Banking & Finance*, and the *Journal of Financial Stability*. He received a B.A. in economics from the University of Tokyo and a Ph.D. in economics from Brown University.



**Hirofumi Uchida** is a professor of banking and finance at the Graduate School of Business Administration, Kobe University, Japan. He received his M.A. in economics in 1995 and his Ph.D. in economics in 1999, both from Osaka University. Prior to joining Kobe University in 2009, Professor Uchida was at the Kyoto Institute for Economic Research at Kyoto University and the Faculty of Economics at Wakayama University. He was also a visiting scholar at the Kelley School of Business, Indiana University, as a 2003 Fulbright Scholar. His research has been published in the *Journal of Financial Intermediation*, *Economica*, and the *Journal of Banking & Finance*, among others. He is also an associate editor of the *Journal of Money, Credit, and Banking*. His research interests focus on banking, financial institutions, and financial system architecture.

**Ichiro Uesugi** is an associate professor at the Institute of Economic Research of Hitotsubashi University and a faculty fellow at the Research Institute of the Economy, Trade and Industry. Before joining Hitotsubashi, he had worked for the Ministry of Economy, Trade and Industry of the Japanese government for 18 years. His main areas of research interest are banking, corporate finance, and firm dynamics. He has published papers in scholarly journals including the *Journal of Money, Credit, and Banking*, the *Journal of Banking & Finance*, the *Journal of Financial Stability*, and the *Journal of the Japanese and International Economies*. Professor Uesugi received a B.A. in economics from the University of Tokyo and a Ph.D. in economics from the University of California, San Diego.