

Research On Account Receivables
Backed Securitization of
Chinese Enterprise Groups

**我国企业集团应收账款
证券化专题研究**

张文强 著



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摘要

在这轮金融危机中，以企业集团为代表的我国实体经济遇到了前所未有的困难。先是严峻的资金压力，之后又转变为沿产业链扩散的通胀压力，从而导致许多企业应收账款高企，流动资金紧张，生产难以维继。而且由于过期应收账款，过高库存和过剩产能等不良资产的上升，引发了减值准备的增加，减弱了企业的盈利表现，降低了上市公司的资产估值水平，从而拉低股指，打击了市场的信心，削弱了消费和投资的动能，最终形成这场危机实际的和致命的杀伤力。为此作者提出，应在当前经济回升尚不稳固的情况下，运用结构化融资工具，加速我国企业集团应收账款证券化融资的命题。

具体论述为：在第一章绪论中提出了本书的选题意图、研究方法和研究框架，指出了当前我国企业集团扩大应收账款证券化的必要性。接着概述了国内外资产证券化的不同定义、理论分野和相关研究成果，并特别评价了应收账款证券化的研究现状，从而为本书后续研究内容的展开确立了坐标；第二章在界定本书的三个主要关键词“资产证券化”、“应收账款”和“我国企业集团”概念的基础上，简要论述了应收账款产生的理论动机、可选择融资方式的比较和相关会计处理，并将次贷危机作为特例与资产证券化的原理一并解析，从而澄清了美国次债与我国企业集团应收账款证券化的区别和联系，之后特别阐述了选择应收账款作为基础资产的基本考虑及其自身特点，为下一章对交易结构的选择提供了分析基础；第三章则紧密结合前述基础资产应收账款的特点，详细论述了应收账款证券化的运作流程和循环交易模式下的多宗、多层销售结构，进而回答了我国企业集团出于产品成套性、关联交易、专业公司统一销售与多成员企业分散销售相结合、并跨国内国际两个市场进行贸易的模式下，对资产证券化交易结构的选择问题。在此基础上，详细研究了国际通用特殊目的载体的一般模式，以及在我国目前政策和法规环境下特殊目的载体的特殊模式专

项资产管理计划,在我国企业集团应收账款证券化中的适用性和改进方向,从而解决了应收账款证券化中的核心难题;第四章则结合美国次债评级中暴露的问题,深入研究了我国企业集团在应收账款证券化中对风险的分解和评估,对模型的选择应用、压力测试、信用增级安排等操作问题,从而说明我国企业集团在应收账款证券化中对国外信用评级的方法借鉴。本章的信用增级研究则有效发展了前面章节对交易结构的论述,为后文的产品定价和风险管理埋下了伏笔;第五章则在前述对交易结构选择和信用安排论述的基础上,深入研究了我国企业集团应收账款证券化的收益与定价命题。其中首先对应收款证券化参与各方如原始权益人、特殊目的载体、中介机构等的收益进行了定性和定量分析,然后以次贷危机中的主力产品CDO的定价为例,推演了其标准模型下参数选择中存在的不足,接着在批判性借鉴CDO产品定价缺陷的基础上,以期权定价理论,结合风险因子给出了资产证券化产品转让和发行定价的模型;第六章则从产品设计、制度设计、交易平台的建设和对机构投资者的培育等几个层面对风险管理进行了归纳。其中首先总结了美国产生次贷危机的政策失误和技术失误,然后从基础资产的选择、特殊目的载体的风险隔离设计、触发条款设定、计提动态储备和严肃信息披露几个方面论述了我国企业集团应收账款证券化产品设计中的风险管理问题。其中特别提出了事前、事中、事后相结合的管控模式,并演算了动态储备的计提方法。接着论述了建立中央优先权益登记系统和加强对机构投资者的培育之于稳定二级市场的重要性;第七章则在详细剖析上海远东租赁、中集集团、台湾世平公司和中国网通集团应收账款证券化案例的基础上,归纳了我国企业集团应收账款证券化的特点,并在对此特点把握的基础上,研究了我国企业集团应收账款证券化在现有政策法规环境下可采用的模式问题,以及在技术层面的操作建议;第八章则在前七章理论和操作一般论述的基础上,将视角提升至当前的制度安排层面。具体从相关的法律、会计和税收法规等几个角度,对我国企业集团深入开展应收账款证券化的制度环境,进行了详细论述和点评,从而为后续政策建议的提出奠定了基础。第九章作为全书的总结,给管理当局提出了当前推动我国企业集团应收账款证券化的政策建议,并实事求是地指出了本书完成的主要工作和存在的不足,以及后续研究需要侧重的方向。

总之,本书在批判性借鉴次贷危机所暴露问题的基础上,从贴近实务操作出发,构建了我国企业集团应收账款证券化的研究框架,并在交易结构的选择、信用安排、产品定价、风险隔离机制的构建等几个方面取得了一定的突破。创新之处包括:提出了由多原始权益人多宗销售构成的循环交易结构;对应收款证券化的交易定价、信用评级和各参与人的利益均衡机制进行了定量分析,构建了相关数理模型;对具

有我国特色的“专项资产管理计划”这一证券化融资方式进行理论和案例的系统研究；对应收账款证券化的风险防范，提出了事前、事中和事后分环节控制，分市场隔离和计提动态储备的思想，从而在一定程度上解决了资产证券化风险的跨市场传递问题，为我国企业集团应对当前金融危机，实现健康、可持续发展提供了理论和实践支持。

关键词：企业集团；应收账款；资产证券化；次贷危机；风险防范

ABSTRACT

As the main part of Chinese real economy, enterprise groups face enormous difficulties in the financial crisis. Severe funding pressure has been gradually converted into the spread of inflationary pressures along the industry chain. This leads many enterprises dramatic increase in accounts receivable, the urgent need of funds and stalled production. Due to the increase in non-performing assets of expired accounts receivable, inventory and excess capacity, this leads the increase in impairment, the lower corporate profits and the downturn level of asset valuation of listed companies. With the case of reduced stock market index, combat market confidence and weakening consumption and investment momentum, the actual and lethal force of this crisis has been finally formed. Therefore, this paper advised to speed up the accounts receivable securitization of the enterprise groups, and made use of structured finance with the instability in the economic recovery in the current circumstances.

Chapter 1 provided the intention, methodology and structure, pointing out the necessity of account receivables securitization for Chinese enterprise groups now, and providing an overview of different definitions, theories and related research results on asset securitization at home and abroad. Then the chapter evaluated the current research on account receivables securitization which laid the foundation for later research. Chapter 2 provided asset securitization, account receivables and Chinese enterprise groups as three key words in this paper. Then discussed theoretical motivation for the formation of account receivables, comparison of financing options and accounting treatment. And analyzed the subprime crisis with the principles of asset securitization specially; described relations and distinctions between the US subprime bonds and account receivables securitization for Chinese

enterprise groups; discussed the choice and characteristics of account receivables as the underlying assets, in order to lay the foundation for later research. Chapter 3 made the research on the operation flow and multiple sales for circular transaction mode, which made the choice for the transaction structure model of Chinese enterprise groups with the context of product series, related party transactions, uniformity or dispensability of sale system and international trade. Then researched deeply the general format of SPV in the world and the special format of SAMP in China. Finally studied the applicability and improvement of SAMP in Chinese policy and regulatory environment now, which solved the core issues of account receivables securitization. Chapter 4 researched risk analysis and assessment in account receivables securitization for Chinese enterprise groups with the deficiencies in rating for US subprime bonds, and choosing the model applications, stress testing, dynamic calculation for default losses, interests balance in credit enhancement arrangements as well. This research results made efficacious development of transaction structure above, and laid the foundation of products pricing and risk management and control. Chapter 5 studied the benefit and pricing issues of account receivables securitization for Chinese enterprise group with the structure and credit arrangements above. Firstly, made the Qualitative benefit analysis and Quantitative benefit analysis for each participators of account receivables securitization, such as originator, SPV and intermediary organizations. Secondly, made CDO pricing in the subprime mortgage crisis as an example, found the drawbacks of one factor Gaussian Copula model with an empirical study. Then, used the option pricing theory with the risk factors to make the transfer pricing model and issue pricing model of account receivables securitization based on above lessons. Chapter 6 summed up the theory of risk management from several aspects such as design of products, trading services platform and cultivation of institutional investors. Firstly, concluded the lessons of policy failures and technical errors in the subprime mortgage crisis. Secondly, studied the risk management and control model in account receivables securitization for Chinese enterprise groups from several aspects, such as selection criteria of underlying assets, risk isolation of SPV, provisions of trigger, dynamic reserve and information disclosure. And especially provided the special preparation in the ex post facto control model and the calculation of dynamic reserve. Then discussed the significance of registration system of central priority rights and stabilizing the secondary market by the cultivation of institutional investors. Chapter 7 generalized the features of account receivables securitization for Chinese enterprise groups,

based on the detailed analysis of the case such as SFELC, CIMCG, TWPIG and CNG. On this basis, studied the models of account receivables securitization for Chinese enterprise groups under the existing policy and regulatory environment, and made the operational recommendations for the technology. Chapter 8 raised the study level to the system based on the above chapters of theoretical research and practical research. Therefore discussed in detail the environment construction of account receivables securitization for Chinese enterprise groups, with the relevant legal, accounting and tax aspects, and lay the foundation for follow-up policy suggestion. Chapter 9 made the conclusion gave the policy suggestion of account receivables securitization for Chinese enterprise groups. And gave the actual discussion of the limitation, innovation and future research.

In short, based on the critical research from the experience of the sub-prime crisis, this paper focused on the account receivables securitization of Chinese enterprise groups, and made innovation on the choice of trade structure, credit arrangement, pricing and risk isolation mechanism. The innovations include that circular transaction mode with multiple originators and multiple sales; quantitative analysis and mathematical model of pricing on accounts receivable securitization, credit rating and benefit for each participator; theoretical and case research on SAMP with Chinese characteristics; special preparation in the ex post facto control model, risk isolation and dynamic reserve for risk prevention more in-depth. And the problem of risk transmission cross-market can be solved. Therefore, the research results provided theoretical support for Chinese enterprise groups to make sustainable development in the current financial crisis.

KEY WORDS:Enterprise groups;Account receivables;Asset securitization;Subprime mortgage crisis;Risk prevention

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1 絮 论

1.1 选题意图

这轮由美国次贷引发的全球性金融危机，还在通过各种链条向实体经济传染。全球汽车巨头通用汽车公司申请破产保护就是危机压垮实体经济最惨的标志。尽管各国纷纷出台救援计划，以累计近 5 万亿美元的流动性进行刺激，但经济的全球性衰退已成定局。在这轮危机中，我国宏观经济虽然由于各种原因未受到重大冲击，但影响还是相当明显。2008 年我国 GDP 增长 9%，与 2007 年调整后 13% 的增幅相比，大幅下滑了 4 个百分点，出现了自 2003 年以来的首次个位数增长。而且分季度来看，一季度增长 10.6%，二季度增长 10.1%，三季度增长 9.0%，四季度增长 6.8%，呈前高后低、逐季加速放慢的态势。2009 年上半年宏观经济运行更是表现为外贸急剧下滑，工业增速进一步放缓，消费增长显著低于市场预期的颓势。进入 2010 年，虽然我国宏观经济全面止跌回升，但增长的基础尚不稳固，还有许多不确定性因素有待观察和解决。

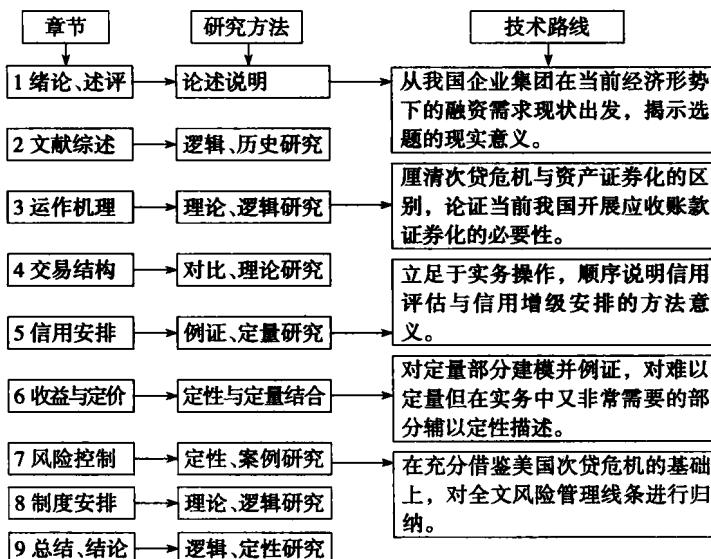
为应对这次危机，我国将宏观调控目标从“防过热、防通胀”调整为“保增长、控物价”。2009 年再调整为“保增长、扩内需、调结构”。具体政策也从“从紧的货币政策和稳健的财政政策”调至“积极的财政政策和适度宽松的货币政策”。2010 年宏观经济政策更是从“保增长”定调到“促转变”。但以我国企业集团为代表的真正创造使用价值的实体企业，还是遭遇了严峻的资金压力和沿产业链扩散的市场压力，许多企业应收账款高企，流动资金紧张，生产难以为继。而且由于过期应收账款、过高库存和过剩产能等不良资产的上升，引发了减值准备的增加，减弱了企业的盈利表现，降低了上市公司的资产估值水平，从而拉低股指，打击了市场的信心，削弱了消费和投资的动能，最终形成这场危机实际的和

致命的杀伤力。

同样，面对这次前所未有的资产减值和由此引发的货币市场同业拆借利率的上升，国内金融机构先是忙着“去杠杆化”和收紧信贷，后又在对未来的可能窗口指导等因素的隐忧下产生信贷冲动。2009年信贷投放量迅速超过全年5万亿的“目标底线”而达到近10万亿。据国家有关部门统计，这些新增贷款多数以各种名目流入了非生产性领域，其中包括基础设施在内的“铁公机”政府性工程和虚拟经济就占了相当的比例，实体经济得到的支持其实并不多。特别是中小企业，由于抵押、担保等方面的先天性不足，得到的信贷支持更是少得可怜。因此，对实体经济的注血和重整，对市场信心的恢复和重塑，需要考虑实体企业自身的资产证券化。

实体企业的资产证券化亦即一般意义上的企业资产证券化(Enterprise asset securitization)，作为结构化融资(Structured finance)的一种形式，区别于过往实体企业以其整体信用为基础来发行股票或债券的融资方式，也区别于金融机构的信贷资产证券化。由于它属于实体经济领域，又有真实销售背景作为支撑，因而较之于信贷资产证券化及其衍生产品更趋稳定和安全。为此，本书在总结我国前期资产证券化试点经验的基础上，针对当前美国次贷危机暴露出的问题，提出我国在实体企业层面，其中首先从企业集团开始，开展资产证券化的操作规程和政策建议，以期为我国实体企业走出这轮危机做一点力所能及的贡献。

1.2 研究框架



1.3 相关文献综述

1.3.1 国外资产证券化的研究综述

1) 概念的提出

“资产证券化”这一术语由美国投资银行家 Lewis S.Ranieri 一次同《华尔街》杂志记者在讨论抵押贷款过手证券时首次提出^[1]。它由“asset securitization”或“Securitization”直译过来。其中：“资产”是证券化的对象和客体，“证券化”是将资产变为证券的过程。Steven L.Schwarz (1994) 认为“证券化”这一术语特别用于以资产产生的现金流作为支持发行证券^[2]。

实践中，最早出现的资产证券化形式是对住房抵押贷款的证券化。在美国，按揭起初是由储蓄贷款协会发放的，储蓄贷款协会用于发放贷款的资金几乎都来源于储蓄存款。在 1933 年经济大萧条时期，住房信贷市场崩溃。为了应对这一局面，国会于 1934 年通过了《国民住房法案》，旨在推进按揭二级市场的发育。出于同样的目标，1938 年联邦国民按揭协会 (Fannie Mae) 成立。这是一个具有公共目标的半政府性信用企业，负责为联邦住宅管理局 (FHA) 与退伍军人管理局 (VA) 担保的按揭贷款创设二级交易市场，并为这一按揭市场提供流动性。第二次世界大战后，恢复与重建提升了对住房的需求，资金短缺相应出现。1957 年，联邦住房贷款银行委员会为储蓄贷款协会建立了信用准备制度。按照这一制度安排，储蓄贷款协会由此可以购买或出售按揭贷款的参与权益。1970 年，政府国民按揭协会 (Ginnie Mae) 开始公开交易过手证券，从而标志着资产证券化的诞生。^[3]

在实践深入推进的同时，理论界也一直致力于对资产证券化下一个全面、准确的定义。

James A Rosenthal 和 Juan M Ocampo (1992) 给出的定义为：“它是一个过程。贷款和应收账款经过这一过程后被以证券的形式出售。它是资本市场上多年来广泛的证券化趋势的一个组成部分。”^[4]

Christine A Pavel (1989) 在其《证券化》一书中对资产证券化的理解是：“贷款的整笔出售或部分出售可以追溯到 1880 年以前。但证券化却是新近出现的一种创新形式。它是指贷款经组合后被重新打包并加工成证券出售给投资者。与贷款整笔出售和部分出售相似的是，证券化提供了一种新的融资来源，并可能将资产从原始权益人的资产负债表中剔除。与贷款整笔出售和部分出售不同的是，证券化经常用于很难直接出售的小型贷款的出售。”^[5]

Frank J. Fabozzi (1996) 认为：“资产证券化可以被定义为一个过程。通过这