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黄达—蒙代尔
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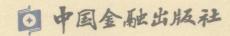
The Research of Seasoned Equity Offerings
Expropriation Based on the Causal Chain Analysis

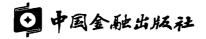# 基于因果链分析的再发行圈钱研究

2007年"黄达—蒙代尔经济学奖"获得者

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中国金融出版社

基于因果链分析的
再发行圈钱研究

朱 云 著

出版说明

　　1978 年的改革开放国策，为中国带来的不仅仅是经济的快速发展和物质的日渐富足，也引发了社会思潮的巨大变革。当探索"理想国"的狂热激情消退之后，平静地去观察身外的世界，我们才猛然意识到，在全球经济体系中，中国已经被严重地边缘化了。古语云，知耻而后勇。如何实现真正的富强文明的现代化之梦，成为中国有识之士的急迫愿望。中国的知识分子开始真正地放眼世界，探求新知。

　　知识就是力量，寻求先进的理论来指导经济改革实践成为了实现中国经济现代化的必由之路。中国的经济学界自从国门开放的那一天起，便开始了日益高涨的对国外市场经济理论的学习、借鉴、消化与吸收。几十年的探索与追寻，已使我们达成了一项坚定的共识：实现中国的强盛，必须要以市场机制作为资源配置的主导，构建和发展有中国特色的社会主义市场经济体系。

　　毋庸置疑，近三十年来的经济成就与我国经济学界对西方市场经济理论的系统学习是密不可分的，而未来如何克服困难、继续保持经济发展，仍离不开经济理论的继续探索与推进，这就需要我们继续密切关注西方经济学前沿理论的发展，构建中西方经济学研究与教育的高水平交流平台。更为重要的是，中国近三十年的经济发展已形成了有别于西方市场经济体系的独特的中国市场经济模式，为经济理论的提炼与创新积累了许多新的素材，中国的"故事"已经吸引了不少西方学者的关注，因而构建这样一个平台，也为中国经济学界走向世界提供了契机。

　　正是基于这样的考量，"黄达—蒙代尔经济学奖"应运而生。该奖项的前身为"黄达—蒙代尔优秀博士论文奖"，由 1999 年诺贝尔经济学奖得主、"欧元之父"罗伯特·A. 蒙代尔（Robert A. Mundell）教授和我国著名经济学家、中国金融学会名誉会长、中国人民大学前校长黄达教授共同冠名，2002 年 12 月由教育部人文社会科学重点研究基地——中国人民大学中国财政金融政策研究中心创设。为了进一步扩大该奖项的知名度和影响力，使评选结果更加公开、公正、透明，2005 年该奖项正式更名为"黄达—蒙代尔经济学奖"（Mundell-Huang Prize）。

　　设立"黄达—蒙代尔经济学奖"的宗旨是推动中国经济学教育事业的发展和繁荣经济学科研究，搭建中国经济学特别是财政金融学科领域博士培养的国际交流平台，倡导兼容并蓄、学贯中西、严谨求实的学术品格，激励更多的杰出青年学者为新世纪中国的现代化建设贡献聪明才智。为了实现

这一宗旨,体现奖项的严肃性、公正性和权威性,"黄达—蒙代尔经济学奖"设定了严格的标准与评选程序,要求参评论文的选题立足学科前沿,具有重要的理论和现实意义;能够反映该学科及相关领域的发展状况,在本学科领域处于国内领先水平,或接近乃至达到国际先进水平;运用国际通行的研究方法进行探索研究,有新的研究视角和独到见解,并在相应领域取得突破性进展。为了保证该奖项的权威性,中国财政金融政策研究中心聘请国内权威专家组成专门的评选委员会。

"黄达—蒙代尔经济学奖"每两年评选一次,逢单年颁奖。所有获奖者都娴熟地运用了现代经济学研究方法,探索重要的基础理论问题或我国经济发展中重大的现实问题。获奖论文体现出作者在各自学科及相关领域坚实广阔的理论基础与系统深入的专门知识,得到了参评专家的一致好评和高度认可。现将尚未出版的获奖论文陆续编辑出版,以便让更多的国内外经济学人来分享"黄达—蒙代尔经济学奖"的获奖成果,互相学习、借鉴和交流。同时希望通过该丛书的出版不断扩大"黄达—蒙代尔经济学奖"的影响力,倡导摒弃浮华、注重基础的研究风气,激励青年学者关注中国经济改革与发展现实,推动中国经济学的现代化。我们相信,这套丛书将伴随该奖项的陆续评选而不断推陈出新,从而为中国的经济学研究与教育以及中华民族的富强繁荣贡献一份绵薄之力。

摘　　要

"圈钱"一词在证券实务界广为使用，投资者也存在把所有再发行都等同于圈钱，以圈钱来否定证券市场再融资的错误认知。国内外文献主要研究了再发行后业绩恶化及其原因，而对再发行圈钱的学术研究还很少。因此，非常有必要对再发行中的圈钱现象进行深入的剖析，以帮助投资者判定和分析再发行圈钱的特征，也有助于监管层从公司治理层面和外部制度层面去解决再发行圈钱问题，从而回归证券市场的资源配置功能。

本书主要分成两个部分。第一部分构建理论模型，分析了再发行如何会变成圈钱以及导致再发行圈钱的关键所在，提出再发行圈钱从动机到行为到后果的因果链分析思路。第二部分主要从实证的角度，检验了再发行圈钱从动机到行为，和从行为到后果之间的因果关系，然后，从公司内部控制和外部环境探求再发行圈钱的治理途径。本书的主要工作和结论是：

1. 构建再发行模型，寻求再发行圈钱产生的理论依据。本书首先分析非流通股股东、流通股老股东和流通股新股东在再发行中的决策

环境，指出非流通股股东和流通股股东在再发行中的决策权利存在显著差异。然后构建这三类股东的决策模型，从短期和长期两个角度分析各个再发行要素对各类股东支付函数的影响及其最优决策，并推导他们获取正回报的条件。

理论模型的结论表明，不管是从短期还是长期角度看，非流通股股东都能从再发行中获取正回报。而对于流通股股东而言，从短期角度看必然遭受损失，即使从长期看，也得依赖于再发行募集资金的投资回报率。如果再发行没有良好的投资项目支撑，流通股股东在长期内也无法获取正回报。因此，非流通股股东和流通股股东获取正回报方式的差异是非流通股股东即使在再发行前没有良好投资项目支撑也进行再发行，从而导致再发行后滥用募集资金。

2. 提出再发行圈钱从动机到行为到后果的因果链分析思路。根据理论模型的结论，首先把"再发行前没有良好投资项目支撑，而再发行后滥用募集资金"的行为界定为"再发行圈钱行为"，提出再发行圈钱的两个动机——非流通股股东掠夺私有利益和资金储备动机，分析了再发行圈钱行为所导致的业绩恶化的后果。然后，构建一条从动机到行为，又从行为到后果的再发行圈钱因果链分析思路。因果链分析思路不仅架起从理论到实证的桥梁，而且与单角度分析相比，它更具有可行性和可靠性。

3. 实证研究再发行圈钱动机与圈钱行为之间的因果关系。根据前面提出的因果链分析思路，实证检验动机是否确实导致行为的发生。首先对再发行的募集资金滥用行为（再发行圈钱行为）作出整体描述。整理的数据发现，1998—2001 年进行配股的 439 个样本中，有 56.5% 的配股公司存在滥用募集资金的现象，即不能按照承诺投资项目，存在募集资金投向的显性变更和隐性变更。这些募集资金滥用现象证实了上市公司的圈钱行为。

综合考虑了股权集中度、第二大股东与第三大股东和大股东之间

的制衡、公司规模、融资规模、配股审批时间等可能影响圈钱行为的因素后发现，配股前的资金储备比例越高，配股后募集资金滥用的可能性就越大；而大股东参与配股程度越低，配股后募集资金滥用的可能性也越大。这证实了前面提出的从动机到行为的因果关系。

4. 论证了国外的经典理论无法解释我国上市公司再发行后长期业绩恶化的现象。首先对上市公司再发行后业绩作出总体描述，并与市场整体以及同行业、同规模的对照组公司进行比较，以扣除市场和规模、行业等因素的影响。研究结果发现，在扣除整体市场因素和规模、行业等因素的影响后，再发行后的长期市场业绩和会计经营业绩仍然下滑。为了解释这一现象，又分别采用国外经典的规模效应和盈余管理理论来解释，但实证结果发现，规模效应无法解释，而尽管存在盈余管理行为，但经营性现金流指标仍在再发行后下降。所以，国外的两个理论也无法完全解释我国上市公司再发行后长期业绩恶化的现象。

5. 实证检验了再发行圈钱从行为到后果之间的因果关系。把样本分成募集资金未滥用组（未圈钱组）和滥用组（圈钱组），采用单变量分析和回归分析方法，比较了这两组公司再发行后的长期业绩情况。结果发现，圈钱组公司在再发行后的市场调整和对照公司调整的ROA（资产报酬率）都要小于0，而未圈钱组则都大于0。这说明配股公司的长期业绩变差在一定程度上是由圈钱公司引起的。而净资产收益率以及经营性净现金流/总资产的比率也有类似的结果。市场业绩分析表明，未圈钱组的累计回报率、市场调整的累计回报率和对照公司调整的累计回报率从再发行后1个月开始便始终大于圈钱组。这些结论证实了圈钱行为与后果之间的因果关系。

6. 从公司内部控制机制和外部制度环境来探索对再发行圈钱的治理。采用董事会规模、独立董事比例、董事会成员的财务/会计知识背景三个内控指标，分析了公司内控机制对圈钱行为的影响。结果显

示，我国董事会规模过大影响了董事会的监督效率，导致再发行圈钱的加剧。而董事会独立性、董事会成员的财务/会计知识背景都对再发行圈钱没有显著影响。

本书以再发行门槛作为监管环境的代表因素，以地区市场化程度作为公司经营环境的替代变量，以主承销商声誉作为再发行中介组织的代表因素，实证分析了这三个外部环境指标对再发行圈钱行为的影响。结果显示，这三个外部环境变量对再发行圈钱的影响都不显著。这个结论表明，我国设置再发行门槛并没有真正达到减少"逆向选择"、保护投资者的目的，而各个地区之间虽然存在市场化程度差异，但地方政府干预公司经营而导致的再发行圈钱行为却成为一个普遍现象，并不分地区差异；再发行监管政策弱化了承销商专业能力的发挥，这使得承销商对再发行圈钱行为的影响也不显著。

根据研究结论，本书最后提出了再发行圈钱行为的三条治理举措：提高董事会监管效率，改善公司内部控制制度；将再发行监管的重点从审批和设置门槛向市场化发行转移；培养专业的投资银行队伍，建立投资银行信用体系。

本书的主要创新点有：

1. 构建和分析了各类股东的再发行决策模型。从短期和长期角度分别分析了三类股东获取正回报的条件和再发行关键要素对他们支付函数的影响。通过模型分析指出，再发行圈钱产生的根源在于非流通股股东和流通股股东获取正回报的方式差异。

2. 提出再发行圈钱从动机到行为到后果的因果链分析思路。界定和刻画了再发行圈钱行为，提出非流通股股东掠夺私有利益和资金储备两个动机，分析了再发行圈钱导致长期业绩恶化的后果。本书建立了比单角度分析更为完整和更具有说服力的再发行圈钱研究思路——从动机到行为，又从行为到后果的因果链分析思路，架起从理论到实证的桥梁。

　　3. 实证检验了再发行圈钱从动机到行为和从行为到后果的因果链。采用实际市场数据，验证了再发行圈钱动机引起圈钱行为的因果关系。在发现国外经典的规模效应和盈余管理理论都难以解释我国再发行后的长期业绩恶化现象后，证实了再发行圈钱行为导致了再发行后的长期业绩恶化。

　　4. 从公司内部控制和外部环境两个角度来分析和探讨再发行圈钱行为的治理。以董事会的监管效率作为内部控制的核心指标，分析了董事会对再发行圈钱行为的影响。另外，选取了再发行门槛、地区市场化程度、承销商声誉分别作为监管环境、经营环境和中介组织的代理变量，讨论了外部环境对再发行圈钱的影响。

Abstract

The phrase "seasoned equity offerings (SEO) expropriation" is widespread among the Chinese security professions. The investors have a misconception that all seasoned equity offerings are equivalent to expropriation as to deny the value of SEO in Chinese stock market. We lack the in-depth understanding about SEO's expropriation. The existing literatures cannot entirely explain the poor underperformance of listed companies after SEO in China. So it is interesting to have a thorough analysis on the SEO expropriation. This research can help investors judge and analyze the characteristics of SEO's expropriation, help the Chinese security regulation authorities solve the SEO's expropriation, and develop the Chinese stock market.

The main content of the book includes two parts. The first part establishes theoretical models to explain how SEO evolve as expropriation and which is key factors in the SEO's expropriation. Then according to the theoretical models, we put forward a causal chain analysis framework of SEO's expropriation. The second part is the empirical research to test the causal

chain analysis, which is from motivation to action and from behavior to con-
sequences. Then we test the effect of internal control and external environ-
ment on SEO's expropriation in order to mitigate SEO's expropriation. The
main work and conclusion are as follows:

1. Construct the theoretical models of SEO and find the theoretical rea-
son of SEO's expropriation.

First, we construct the decision models of non-tradable shareholders,
original tradable shareholders and new tradable shareholders during the SEO
process, based on the analysis of their decision environments. It is pointed
out that there is large difference of decision rights between the non-tradable
shareholders and tradable shareholders. Then we analyze the effects of SEO
key elements, such as SEO price and proceed, on the pay-off function of
three types of shareholders from both the short-term view and long-term
view. The optimized solutions and the condition of positive return are pro-
vided.

The non-tradable shareholders always received positive returns both
from the short-term view and from the long-term view. As for the tradable
shareholders, they will lose from the short-term view. Even in the long
term, they will receive positive return only under the condition that the in-
vestment return of SEO proceed is enough high. Consequently, the differ-
ence of receiving positive return between non-tradable shareholders and
tradable shareholders is the reason why the non-tradable shareholders will
employ SEO and then abuse the proceeds from the SEO even they don't have
a winning-money projects.

2. Put forward a causal chain analysis method of SEO's expropriation.
According to the theoretical models, we define the behavior that no good
project backed before the SEO and abuse the proceeds after SEO as SEO's

expropriation behavior. Then we propose two motivation hypothesis of SEO's expropriation, one is big shareholder's private interest, and the other is fund reserve. The consequence of SEO's expropriation is the long-term underperformance of companies after SEO. The causal chain analysis pattern of SEO's expropriation is put forward, from motivation to behavior, and from behavior to consequence. Compared with the unidirectional analysis, the causal chain analysis pattern is more feasible and more reliable.

3. Empirically study the relationship between the motivation and behavior of SEO's expropriation. First, define what kind of action belongs to SEO's expropriation and give a description of SEO's expropriation. We find that there are 56.5% rights offering companies have abused raised money among the 439 samples which undertake rights offering from 1998—2001. Abusing raised money is defined by changing the commitment about investing some project, including explicit change and implicit change of committed investments. Those phenomena about abusing raised money have approved the action of listed company SEO's expropriation.

Under the proposed two motivations of non-tradable shareholders' private interest and fund reserve, we test the relationship between the motivation and behavior of SEO expropriation, after controlling firm size, financing size, the approving time of rights offering and the shares structure. The univariate analysis and Logit regression analysis find that the more the fund reserve before rights offering, the more the possibility of abusing raised money; the less the degree of taking part in rights offering by big shareholders, the more the possibility of abusing raised money. This proves the causal chain of SEO's expropriation from motivation to behavior.

4. Test effectiveness of foreign classical theory to explain the long-term underperformance after SEO in China. First, give a whole description of

long-term performance after SEO and group the sample into three part as
SEO group, market group and benchmark group which having the same in-
dustry code and similar size. Such eliminates the influence of macro-econo-
my, size and industry. The long-term performance is measured by market
return and accounting performance. The conclusion is that excluding the in-
fluence of macro-economy, size and industry, the market performances and
accounting performances are becoming worse after SEO. And the classical
theories such as "size effect" or "earning management" cannot explain the
condition entirely. The earning management exists, but the CFO/Asset still
drops. This phenomenon cannot be explained by those overseas theories.

   5. Empirically study the relationship between the behavior and conse-
quence of SEO's expropriation to explain the deterioration of long-term per-
formance after SEO. Dividing the sample into the non-abused group (non-
expropriated group) and abused group (expropriated group), we employ
univariate analysis and regression analysis to compare the two group's long-
term performance after SEO. The result is that the market-adjusted ROA
and industry and size-adjusted ROA of abused group is less than zero, but
the ROA of non-abused group is above zero. This concludes that the deterio-
ration of long-term performance after SEO is mainly caused by abused
group. ROE and CFO/Asset have the similar result. The analysis about
market return indicates that non-abused group's raw cumulative abnormal re-
turn (CAR), market-adjusted CAR, and industry and size-adjusted CAR
are all more than those of abused group. Those results prove the hypothesis
that expropriation causes long-term performance after SEO worse.

   6. Explore the governance of SEO's expropriation from both the inter-
nal control and external environment view. Using three internal control
measures as the board size, the proportion of independent directors, and the

background of financial/accounting knowledge of board directors, we ana-lyze the effects of internal control on action of expropriation. The result is that too large size of board members impairs the efficiency of supervising function of the Board and makes the expropriation worse. But the indepen-dence of the Board, the background of financing/accounting knowledge of Board directors is not significant.

Using the SEO threshold as the representative of supervising environ-ment, area marketing degree as the proxy of the company operating environ-ment, the reputation of main underwriters as the representative of SEO in-termediates, we test those three factors influences on SEO expropriation ac-tion. The conclusion is that those three factors are all not significant. That means the SEO threshold cannot lessen the adverse selection and protect the profit of investors. Although there are differences of marketing degree among the areas, there are widespread phenomena that the governments intervene the companies operation and lead them to expropriation. The SEO supervi-sing polices induce the professional ability of underwriters become feeble so as to the non-significance of reputation of the underwriters.

According the conclusion of the research, the book proposes three sug-gestions to mitigate the SEO's expropriation: enhance the supervising effi-ciency of the Board and increase the function of independent directors, transfer the stress from examining and setting threshold of SEO to marketing offerings, bring up professional investment banks and establish the credit system of investment banks.

The primary contributions of the book are summarized as follows:

1. Construct and analyze the theoretical decision model of three types of shareholders during the SEO. From the short-term and long-term view, analyze the conditions that the three types of shareholders get positive return

and the effects of SEO factors on their pay-off functions.

2. Put forward a causal chain analysis framework of SEO's expropriation. After defining and measuring the SEO's expropriation behavior, we propose two motivation hypothesis of SEO's expropriation, one is non-tradable shareholder's private interest, and the other is fund reserve. Then it is deduced that the SEO's expropriation caused the long-term underperformance of companies after SEO. Therefore, the causal chain analysis framework is constructed, from motivation to behavior and from behavior to consequence.

3. Empirically test the causal chain analysis from motivation to behavior and from behavior to consequence of SEO's expropriation. The foreign classical theories can't explain the underperformance of companies after SEO in China. We test and find that the SEO's expropriation causes the deterioration of long-term performance. And the proposed two motivations induce the expropriation behavior.

4. Explore the governance of SEO expropriations from the internal control and external environment. Using the supervising efficiency of Board as key factors, we analyze the affect of relationship between the Board's efficiency and SEO's expropriation. Then we select the SEO threshold, area marketing degree and the reputation of underwriter as the proxy variable of supervising environment, operating environment and intermediate and discuss the influence of external environment on SEO expropriation. At last, we give the suggestion according to the empirical results.