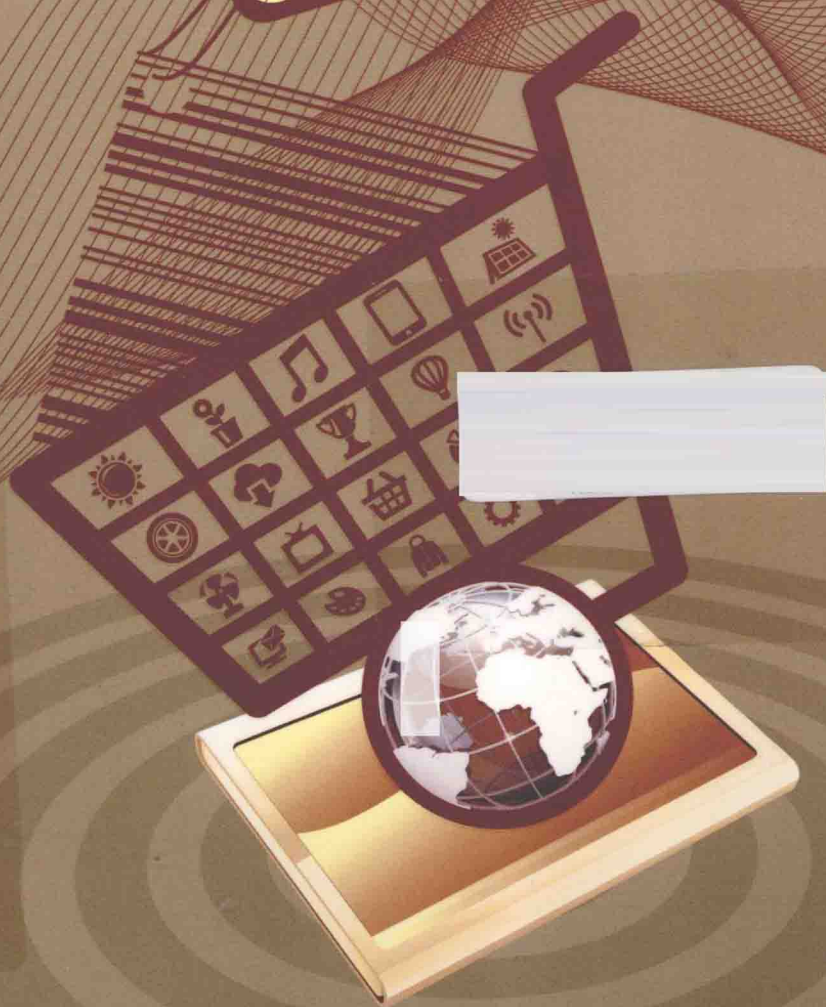


E-finance

网络金融

刘河伟 主编
赵瑞峰 副主编



电子工业出版社
PUBLISHING HOUSE OF ELECTRONICS INDUSTRY
<http://www.phei.com.cn>

E-finance

网 络 金 融

刘河伟 主 编

赵瑞峰 副主编

電子工業出版社

Publishing House of Electronics Industry

北京 • BEIJING

内 容 简 介

“网络金融”是指以技术创新为主导动力,以质量型增长为内涵的新经济形态。它是网络技术与金融相互结合的产物。从狭义上理解,网络金融是指以金融服务提供者的主机为基础,以因特网或者通信网络为媒介,通过内嵌金融数据和业务流程的软件平台,以用户终端为操作界面的新型金融运作模式;从广义上理解,网络金融的概念还包括与其运作模式相配套的网络金融机构、网络金融市场以及相关外部环境。其内容包括电子货币、网络银行、网上支付、网络证券和网络保险等。

本书通过案例详细阐述了传统金融行业的投资、货币概念和银行产品,投资理财的核心思想以及对网络银行系统的分析。在 E-finance 方面加入了现代比特币和 E-stock 理论研究,是高等学校电子商务专业本科生双语教学的先锋教材。

未经许可,不得以任何方式复制或抄袭本书之部分或全部内容。
版权所有,侵权必究。

图书在版编目(CIP)数据

E-finance 网络金融 / 刘河伟主编. —北京: 电子工业出版社, 2014.3
ISBN 978-7-121-22098-2

I. ①E… II. ①刘… III. ①金融网络 IV. ①F830.49

中国版本图书馆 CIP 数据核字(2013)第 294937 号

策划编辑: 刘宪兰

责任编辑: 夏平飞 文字编辑: 张岩雨

印 刷: 北京市李史山胶印厂

装 订: 北京市李史山胶印厂

出版发行: 电子工业出版社

北京市海淀区万寿路 173 信箱 邮编 100036

开 本: 787×1092 1/16 印张: 25 字数: 886 千字

印 次: 2014 年 3 月第 1 次印刷

定 价: 56.00 元

凡所购买电子工业出版社图书有缺损问题,请向购买书店调换。若书店售缺,请与本社发行部联系,联系及邮购电话: (010) 88254888。

质量投诉请发邮件至 zlts@phei.com.cn, 盗版侵权举报请发邮件至 dbqq@phei.com.cn。

服务热线: (010) 88258888。

前 言

人类进入 20 世纪 50 年代以后，特别是进入 70 年代以来，金融创新进入了一个大规模、全方位的高峰期。不断形成的新市场和层出不穷的新工具、新交易、新服务冲击着金融领域，不仅革新了传统的银行业务活动和经营管理方式，模糊了各类金融机构的业务界限，加剧了金融业的竞争，打破了金融活动的国界局限，而且改变了金融总量与结构，重塑了金融运作机制，提高了金融在经济中的地位与作用，形成了世界金融的新格局，导致金融业发生了全面而深刻的变化，呼唤着金融业务载体的全方位更新，这些都为网络金融营造了良好的萌生和发展环境。

“网络金融”是 20 世纪末出现的一个新范畴，是指以技术创新为主导动力，以质量型增长为内涵的新经济形态。它是网络技术与金融的相互结合。从狭义上理解，网络金融是指以金融服务提供者的主机为基础，以因特网或者通信网络为媒介，通过内嵌金融数据和业务流程的软件平台，以用户终端为操作界面的新型金融运作模式；从广义上理解，网络金融的概念还包括与其运作模式相配套的网络金融机构、网络金融市场以及相关的监管等外部环境，其内容包括电子货币、网络银行、网上支付、网络证券及网络保险等。

20 世纪 90 年代以来，网络技术的广泛应用使网上银行的快速发展成为可能。从信息技术应用的角度看，信息技术现已成为世界经济发展的驱动器之一，计算机在银行业的引入，使银行的传统业务发生了巨大的变革，改变了传统业务的处理手段和程序，包括存、贷、取、汇、证券买卖、市场分析、行情预测乃至机构的内部管理等经营、管理业务，均通过计算机处理。电子化资金转移系统、电子化清算系统、自动付款系统等金融电子系统的创建，形成了国内外纵横交错的电子化资金流转网络，网上银行具有容易实行成本控制、实现规模经济以及可以进行金融产品交叉销售的特征，因此现代的商业银行已不再单纯地追求铺点设摊式的外延扩张，而是更加重视和依靠现代信息技术和网络环境提供更加便捷、周到的金融服务。网上银行具有的巨大生命力已广为认知，业务发展势头十分强劲。尽管与传统意义上的商业银行相比，网上银行还存在一些尚待解决的问题，如市场和机构还不稳定，许多银行客户还在观望等，但这并不影响网上银行成为未来银行业的发展方向 and 主导模式。无论是传统的银行、保险业，还是后起的证券、基金业，在经济浪潮的冲击之下，都在发生巨大的变化。以银行业为例，一种全新的，没有固定办公场所甚至是不用设立任何分支机构就可以高效率办理所有银行业务的高智能银行——AAA 银行，即在任何时候（Anytime）、任何地点（Anywhere）、以任何方式（Anyway）为客户提供服务的银行已经应运而生。这种银行，也就是网络经济中俗称的“多媒体银行”。

当前金融领域最受关注的是比特币的发展，电子货币随着生产力技术的发展，

不断地发生着变化，而每一次变化，都会直接影响到由货币细胞组成的社会资金运动方式的变化。在“网络经济”时代，电子商务活动对货币资金运动的影响是深远的。众所周知，国民经济由周而复始的运转价值流与使用价值流的循环组成，与之相对应的是货币流与实物流。当市场经济发展到了货币信用占主导地位的时代，货币资金作为社会再生产的“第一推动力”与“持续的动力”在整个经济生活中发挥着越来越重要的作用。在大量使用贵金属货币的条件下，由于货币运动的最高速度只能等同于实物运动速度，因而通过加速货币资金运动来推动再生产过程的空间极为有限。当生产力水平发展到纸币取代大量的金属货币流通的时候，货币可以脱离笨重的贵金属而“云游四方”，从而使货币资金运动产生了一次“大提速”，这次“大提速”对社会经济活动产生的影响是十分深远的，不仅极大地节约了整个社会的交易成本，特别是随着纸币而产生的、具有纸币某些职能的信用工具大量使用，极大地加深了整个经济的货币化程度，拓展了货币的职能。当今天我们进入信息社会（“网络经济”时代）的时候，货币资金的运动再次“大提速”，这次“提速”将货币运动的速度推到了物质运动速度的极限——等同于电子运动的速度，于是，“远隔千万里，汇款瞬间到”的奇迹实现了，其实，这正是科技进步的成果——计算机技术、数字化技术以及互联网广泛应用于金融领域带来的必然结果。实际上，当货币资金运动的载体电子化、货币资金运动的路径网络化之后，真正意义上的全球金融市场得以形成，资金的融通、资本的流动，完全打破了时间、空间的限制，资金配置引导全球资源配置的功能迅速提升。20世纪中叶所预测的“无现金交易社会”以及“电子货币流通时代”完全可以按照人们的意愿来实现。正是由于货币已经完全脱离了有形的载体，货币流通速度、货币乘数、货币供求、货币运动路径、货币与准货币的联系与区别、信用工具的形态及特征，也在悄然发生变化，这一系列变化又反过来影响着社会经济生活的方方面面，传统的货币金融理论也将因此发生变革，过去理论界经常讨论的“金属货币流通规律”、“纸币流通规律”或许很快就会增加“电子货币流通规律”、“无形货币流通规律”等新内容。

未来的金融，不再以富丽堂皇的大楼、巨额的资产、众多分支机构来体现自身的实力，而是以提供金融产品的便捷程度，拥有网络客户的数量，与网络经济特别是电子商务的高度兼容性来开拓市场、占领市场。由于网络与计算机是“新经济”的技术平台，因此，无论是银行业、保险业还是证券业，“在线服务”（通过互联网来沟通金融企业与客户的关系）和“用户化服务”（按照每一位客户的要求设计金融产品与金融服务）营销方式将会占据重要地位，同时，还会引发金融服务理念、操作方式、业务流程等方面的巨大变化。例如，“在线服务”要求金融企业能够提供24小时不间断的服务，而“用户化服务”则使得“批发”与“零售”业务失去泾渭分明的界限，因为“用户化”意味差异化与个性化。因此，以客户为中心、以市场为导向将是金融企业经营所要考虑的首要问题。另外，由于各种金融活动可以十分便利地通过互联网采取“电子商务”的方式来进行，因而，任何一家金融机构所面对的都是全球的客户，所谓“国际业务”与“国内业务”已经高度融为一体，这无疑

为各种金融业务与金融市场的拓展提供了极大的空间，同时也使得各种金融业务特别是跨国业务的成本大幅度下降。再者，由于各种高科技手段更进一步地介入金融活动以及金融产品的创新，金融业务办理的速度以及与之相关的资金交割手续从理论上讲可以在瞬间完成，这不仅极大地提高了社会资金运转的速度，而且，传统金融理论中认为在货币介入交易的条件下，物流与资金流难以同步，货币运动与商品运动必然脱节的观点已经显得“迂腐”，“一手交钱，一手交货”在新技术条件下将会走向复归，单纯由于技术原因导致的商家之间的资金垫付与拖欠将会进入“历史”的行列。而要做到这一点，“客户终端业务”将会普遍应用，原来发生于交易地点—银行—客户单位三地之间的烦琐的资金和凭证传递，将统统在交易地点或者客户端一处解决，银行所提供的结算服务以无形化的方式融会其中。与此同时，各种各样的“自助服务”也会大量产生，所谓“自助服务”实际上是金融机构提供服务向客户端的延伸，它使得各种金融服务更加快捷，服务水平与效率因之提高。银行业务如此，保险证券业务也是如此，目前，证券交易活动中的客户终端业务实际上已经先行一步，在证券市场上“运筹帷幄，决胜千里”已经成为现实，可以预言，保险业务中的大部分过程也可以在客户“足不出户”的情况下通过“客户终端业务”来完成。

“网络金融”时代的来临，从较为明显的趋势看，对金融调控将产生双重影响。一方面，由于有了全新的信息技术与网络技术，货币管理局对全社会货币、信用活动调控的效率将会有大幅度的提高，货币政策的“时滞”（主要是信息收集、信息反馈及信息传递的耗时减少）将相对缩短，同时由于高速计算手段、模拟运行工具以及金融工程技术的广泛应用，过去仅仅存在于理论上的复杂调控模型将逐步应用于实践当中，从而强化中央银行的货币信用调控能力，为整个国民经济发展提供更加良好的金融环境。

本书作者有着加拿大帝国商业银行网银多年的项目管理经验，是 CSC 认证和美国软件 PMP 认证获得者。本书通过案例详细阐述了传统金融行业的投资、货币概念和银行产品，投资理财的核心思想以及对网络银行系统的分析。在 E-finance 方面加入了现代比特币和 E-stock 理论研究，是高等学校电子商务本科学生双语教学的一本先锋教材。由于撰写匆忙，有很多纰漏，希望读者多多指正。同时，本书的编辑和出版获得了桂林理工大学教材建设基金的支持，特此表示感谢。

编著者

2013 年 12 月 12 日

Prefaces

When we approach into the 1950s, and especially since the 1970s, financial innovation has entered into a large-scale, full-peak period. New markets and new tools emerging continuously formed, new deal, new services impact on the financial sector, not only revolutionized the traditional business activities and operations management bank, blurring the boundaries of various financial institutions and businesses, increased competition in the financial sector, breaking the boundaries of the limitations of financial activities, but also changed the structure of the financial aggregates and reshape the financial operation mechanism, improve the financial position and role in the economy, the formation of a new pattern of world finance, leading to the occurrence of a comprehensive financial sector and profound changes, calling for a full range of financial services to update the carrier, which created a good environment for the initiation and development of the financial network.

“E-finance” is a new category in the 20th century, is the driving force of technological innovation-led, quality-oriented growth for the content of the new economic form. It is combined with each network technology and finance. Understood in the narrow sense, it refers to the financial network of financial service providers host-based, Internet or communication network for the media, through the embedded financial data and business processes software platform for the user interface to the user terminal mode of operation of the new financial; from a broad understanding of the concept, their mode of operation also includes matching network of financial institutions, networks and related financial markets, regulatory and other external environment. It includes: electronic money, online banking, online payment, online securities and insurance network.

Since the 1990s, widely used network technology enables the rapid development of online banking has become possible. From the perspective of IT applications, information-technology has become one of the drivers of the world economy, the introduction of computers in the banking sector, the traditional business of banks has undergone tremendous changes, changing the traditional business processing methods and procedures, including deposit, loan, taking, foreign exchange, securities trading, market analysis, market forecast and even internal management agency operations, management business, both through computer processing. Creating electronic funds transfer systems, electronic clearing system, automatic electronic payment systems, financial systems, forming a criss-cross of domestic electronic funds transfer network, online banking with easy to implement cost control to achieve economies of scale and financial products can be cross-selling features, so modern commercial banks are no longer simply the pursuit of the

point spread warn style extension and expansion, but more attention and rely on modern information technology and network environments to provide more convenient and thoughtful financial services.

Internet banking has enormous vitality has been widely awareness, business development momentum is very strong. Although compared with commercial banks in the traditional sense, there are some online banking problems to be solved, such as markets and institutions is not stable, and so many bank customers are still waiting to see, but this does not affect the future of banking online banking to become direction and the dominant mode. Whether it is a traditional banking, insurance, securities or newcomer, the fund industry, under the economic impact of the wave, great changes are taking place. In the banking sector, for example, a new, no fixed work place is not even set up any branch can efficiently handle all banking intelligent Bank——AAA Bank, that at any time (Anytime), any place (Anywhere), the bank in any way (Anyway) customer service has emerged. This bank, which is the network economy called “multimedia bank.”

Recently, Bitcoin is the hottest topic in current financial field. With the development of the productive forces of electronic money technology constantly changing, each change will directly affect the movement pattern of changes in social capital by the currency of cells. In the “network economy” era, the impact of E-commerce activities on monetary capital campaign is far-reaching. As we all know, the national economy is operating cycle of the value stream and recycling stream consisting of use value, corresponding to, is the currency flow and real logistics. When the market economy to a monetary credit dominated era, monetary funds as “the first impetus” and “continued momentum” social reproduction is playing an increasingly important role in the economic life. Under heavy use of precious metal currency conditions, due to the maximum speed of the currency can only be equal to the physical movement velocity, and therefore money by accelerating the movement of funds to promote the process of reproduction space is extremely limited.

In fact, when the carrier movement electronic monetary funds, currency funds movement path network, the global financial market in the true sense can be formed, financing, liquidity of capital, completely breaking the time and space constraints, capital allocation guide global allocation of resources function rapidly. The middle of the last century, predicted “cashless transaction society” and “the era of electronic money in circulation” can be achieved in accordance with the wishes of the people. It is precisely because money has been completely out of the tangible carrier, the velocity of money, the money multiplier, money supply and demand, currency movement path, contact with the prospective currency currency differences, shape and characteristics of credit instruments, also quietly changed, this a series of changes, in turn, affect all aspects of social and economic life, the traditional theory of monetary and financial reform will happen this end, theorists often discussed in the past, “the law of metallic money in circulation”, “banknotes in circulation law” maybe it will increase soon “electronic money in

circulation law”, “law invisible circulation of money” and other new content.

Future finance, not to magnificent project, huge assets, many branches to reflect on its own strength, but rather to provide a degree of financial products and convenient, with a number of network customers, is highly compatible with the network economy, especially E-commerce resistance to develop in the marketplace. Because the network is the computer “new economy” technology platform, therefore, whether it is banking, insurance or securities industry, “Online Services” (that is, through the Internet to communicate with customers to contact financial enterprises) and “User Services” (according to each customer’s requirements and design of financial products and financial services) this type of marketing will occupy an important position, but will also lead to great changes in the financial services concepts, operations, business processes and other aspects.

For example, the “Online Services”, which requires financial institutions to provide 24-hour service, and “Service User” is making the “wholesale” and “retail” business lost entirely different boundaries, because “Users” of mean differences and personalization. Therefore, customer-centric, market-oriented financial issues will be the primary business to be considered. Furthermore, due to various financial activities can be very convenient to take, “E-commerce” approach to the Internet, and therefore, any financial institution customers are facing around the world, the so-called “international business” and “domestic operations” already highly integrated, which will undoubtedly provide great space for the expansion of a variety of financial services and financial markets, but also makes a variety of financial services in particular, a significant decline in the cost of cross-border business.

Furthermore, due to the variety of high-tech means to intervene further financial activities as well as innovative financial products, financial services handle the speed, and the subsequent settlement procedures related funds can be done in an instant from the theory, which not only greatly improve the social capital operation speed, and traditional financial theory that under the conditions of the currency involved in the transaction, logistics and cash flow difficult to synchronize, currency movement and the movement of goods disjointed view has seemed inevitable, “pedantic”, “paid their dues, hand delivery goods” in the new technology will go into a reset condition, capital advances and arrears due to technical reasons purely business between will enter the “ranks of history”. And to do that, “customer terminal operations” will be widely used, the original transaction occurred at locations-Bank-tedious funds, certificates, transfer customers between the three units, the transaction will be all one location or client resolved, clearing services provided by banks to which the intangible mix of ways.

With the same time, a variety of “self-service” will produce a large number of so-called “self-service” is actually financial institutions to provide services to the client’s extension, which makes a variety of financial services more efficient, service levels and efficiency consequent improved. So banking, insurance and securities business, too,

present, securities trading terminal services client actually been one step ahead in the stock market “strategizing, winning thousands of miles” has become a reality, can be predicted, most of the insurance business process can also be done through the “client terminal operations” in the customer “stay at home” situation.

E-finance is defined as “the provision of financial services and markets using electronic communication and computation”. From the more obvious trend of financial regulation will have a double impact. On the one hand, thanks to new information technology and network technology, the monetary authorities of the whole society money, regulate the efficiency of credit activities will have greatly improved, monetary policy, “Delay” (mainly information gathering, information feedback and time-consuming to reduce the transmission of information) will be relatively short, and because high-speed computing means, widely used simulation tools and financial engineering run, the past exists only in theory, complex regulatory model will gradually be applied to practice, thereby strengthening the central bank monetary credit control ability, that the entire national economy to provide more favorable financial environment.

The author, ever was CIBC online banking project manager for years, a holder of CSC certification and U.S. PMP certification winner. Elaborated by case analysis of the traditional financial sector investments, money concepts and banking products, investment and wealth management, and network core idea of the banking system, this textbook is proved to be an undergraduate pioneer bilingual teaching material. In the book, we outline research issues related to E-finance that we believe set the stage for further work in this field. Three areas are focused on. These are the use of electronic payments systems, the operations of financial services firms and the operation of financial markets. A number of research issues are raised. For example, is the widespread use of paper-based checks efficient? Will the financial services industry be fundamentally changed by the advent of the internet? Why have there been such large differences in changes to market microstructure across different financial markets?

This book illustrate the financial constructions into detail, which help college students to understand E-currency and E-banking, E-investments regulations and features. Based on Canadian security system, the book represent to readers an entire picture of finance system equipped by ecommerce technology. The book was written in a hurry to serve the new course delivery in the new term, therefore, a lot of mistakes found and corrected during the composing process, until completion, the correction work is not finished yet. We appreciate readers and students who pointed out those mistakes and we are willing to continue issuing the new version with perfect. Meanwhile, editing and publishing the book in support of Guilin University of Technology Textbook Development Fund, hereby express my gratitude.

Liu, Adele

目 录

Contents

1	Introduction	1
1.1	E-finance Technologies in Payment Services	1
1.2	History of E-finance in US	2
1.3	Two Questions	3
1.4	Debit Cards	4
1.5	The E-finance Impact on Financial Markets	7
1.5.1	Stock Markets	7
1.5.2	Foreign Exchange Markets	9
1.5.3	Bond Markets	10
1.5.4	Concluding Remarks	10
2	Bitcoin: A Peer-to-Peer Electronic Cash System	11
2.1	What Is a Bitcoin ?	11
2.1.1	Introduction	11
2.1.2	Creation of Coins	12
2.1.3	Sending Payments	12
2.1.4	Preventing Double-Spending	14
2.2	Anonymity	15
2.3	Where to See and Explore?	15
2.4	How Many People Use Bitcoin?	16
2.5	Why Does My Bitcoin Address Keep Changing?	17
2.6	Network	18
2.6.1	The Steps to Run the Network	18
2.6.2	What Is Mining?	18
2.6.3	Simplified Payment Verification	20
2.6.4	Combining and Splitting Value	20
2.7	Security	20
2.7.1	Privacy	20
2.7.2	There Are Two Questions	21
2.7.3	Criminal Activities	22
2.7.4	Theft	23

2.8	Taxation and Regulation	24
2.9	Conclusion	25
3	Capital Markets and Financial Services	26
3.1	What Is Investment Capital?	26
3.2	Characteristics of Capital	26
3.2.1	Sources of Capital	27
3.2.2	Users of Capital	29
3.3	The Role of Financial Instruments	30
3.3.1	Debt	30
3.3.2	Equity	30
3.3.3	Investment Funds	31
3.3.4	Derivatives	31
3.4	The Role of Financial Markets	31
3.4.1	Stock Exchanges around the World	32
3.4.2	Exchange Memberships	33
3.5	Governing Bodies and Administration	33
3.5.1	Boards of Directors	33
3.5.2	Statutory Responsibilities	34
3.5.3	Future Trends	34
3.6	Dealer Markets the Unlisted Market	35
3.6.1	The Unlisted Equity Market	35
3.6.2	The Fixed-income Marketplace	36
3.7	The Role of Financial Intermediaries	36
3.7.1	Size and Characteristics of the Securities Industry Today	37
3.7.2	Financing Securities Houses	41
3.7.3	Principal and Agency Functions	42
3.7.4	Dealer, Principal and Agency Transactions	43
4	Financing, Listing and Regulations	45
4.1	Financing	45
4.1.1	Government Financing	46
4.1.2	Corporate Finance	48
4.2	Corporations Financing Process	48
4.2.1	The Dealer's Advisory Relationship with Corporations	49
4.2.2	The Method of Offering	49
4.3	Advice on the Security to be Issued	51
4.4	The Prospectus	52

4.4.1	The Short Form Prospectus System	55
4.4.2	Internet Prospectus	55
4.5	Other Documents and Sale of the Issue	56
4.6	The Financing Process	57
Step 1		57
Step 2		58
Step 3		58
4.6.1	After-market Stabilization	59
4.6.2	Other Methods of Distribution	60
4.6.3	Junior Company Distributions	60
4.7	Options of Treasury Shares	61
4.7.1	The Listing Process	61
4.7.2	Advantages of Listing	61
4.7.3	Disadvantages of Listing	62
4.7.4	The Listing Application	62
4.7.5	Regulations for Listed Companies	63
4.7.6	Withdrawing Trading Privileges	63
4.8	Temporary Interruption of Trading	63
4.8.1	Delayed Opening	63
4.8.2	Halt in Trading	63
4.8.3	Suspension of Trading	63
4.9	Cancelling a Listing (Delisting)	64
4.10	Regulation and Investor Protection	64
4.10.1	Underlying Principles of Provincial Securities Legislation	64
4.10.2	Registration	65
4.10.3	The National Registration Database (NRD)	65
4.11	Designated Non-trading Employees	66
4.12	Securities Firms	66
4.13	Know Your Client Rule	66
4.14	Breach of Fiduciary Duty	67
4.15	Public Company Disclosure and Investor Rights	70
4.16	The Purchasers' Statutory Rights	70
4.17	Continuous Disclosure	71
4.18	Takeover Bids	73
4.19	Early Warning Disclosure	74
4.20	Insider Trading	75
4.21	Investigation and Prosecution	76

5	Corporations and their Financial Statements	77
5.1	Types of Business Structures	77
5.2	Incorporated Businesses	78
5.2.1	Government Approval	78
5.2.2	Choice of Jurisdiction	78
5.2.3	Public and Private Corporations	79
5.2.4	The By-laws	79
5.2.5	Voting and Control	79
5.2.6	Shareholders' Meetings	80
5.2.7	Voting Trusts	80
5.2.8	Directors	81
5.2.9	Officers	82
5.2.10	Financing the Corporation	82
5.2.11	Advantages of Incorporation	85
5.2.12	Disadvantages of Incorporation	86
5.3	Understanding the Balance Sheet	86
5.3.1	General Form of the Balance Sheet	87
5.3.2	Classification of Assets	88
5.3.3	Classification of Liabilities	94
5.3.4	Shareholders' Equity	97
5.4	Understanding the Earnings Statement	98
5.4.1	What It Shows	98
5.4.2	Structure of the Earnings Statement	99
5.4.3	The Operating Section (items 28 to 34)	100
5.4.4	Non-Operating Section (item 35)	102
5.4.5	The Creditors' Section (items 37 and 38)	102
5.4.6	The Owners' Section (items 40 to 45)	102
5.5	Understanding the Retained Earnings Statement	104
5.6	Understanding the Cash Flow Statement	105
5.6.1	Introduction	105
5.6.2	Operating Activities	106
5.6.3	Financing Activities (items 51 to 54)	107
5.6.4	Investing Activities (items 55 to 57)	107
5.6.5	Change in Cash Flow (items 58 to 60)	107
5.6.6	Supplemental information (items 61 to 62)	108
5.7	Other Information in the Annual Report	108
5.7.1	Footnotes to the Financial Statements	108

5.7.2	The Auditor's Report	109
5.8	Specimen Financial Statements	110
6	Fixed-income Securities	115
6.1	Definitions	115
6.1.1	Fixed-income Securities	115
6.1.2	Bonds and Debentures	115
6.1.3	Interest	115
6.1.4	Face Value and Denomination	116
6.1.5	Price and Yield	116
6.1.6	Term to Maturity	117
6.1.7	Liquid Bonds, Negotiable Bonds, and Marketable Bonds	117
6.2	The Rationale for Issuing Fixed-income Securities	117
6.2.1	Financing Operations or Growth	118
6.2.2	Financial Leverage	118
6.3	Size of the Fixed-income Market	118
6.4	Features and Provisions of Bonds	119
6.4.1	Call or Redemption Feature	119
6.4.2	Sinking Funds and Purchase Funds	120
6.4.3	Extendible and Retractable Bonds	121
6.4.4	Convertible Bonds and Debentures	121
6.4.5	Protective Provisions	124
6.5	Types of Fixed-income Securities	127
6.5.1	Government of Canada Securities	127
6.5.2	Provincial Government Securities and Guarantees	130
6.5.3	Municipal Debentures/Installment Debentures	132
6.5.4	Corporate Bonds	133
6.5.5	Other Types of Fixed income Securities	136
6.5.6	Reading Bond Quotes	138
6.5.7	The Bond Rating Services	139
6.6	Bond Pricing Principles	140
6.6.1	The Use of Present Value	140
6.6.2	Calculations for Fixed-income Securities	143
6.6.3	Theories of Interest Rate Determination	145
6.6.4	Fixed-income Pricing Properties	148
6.6.5	The Yield Curve and Bond Switching	153
6.7	Delivery, Settlement and Regulation	156

6.7.1	Bond Delivery	156
6.7.2	Clearing and Settlement	156
6.7.3	Regulation of Bond Trading	157
6.7.4	Accrued Interest	158
6.8	Bond Indexes	160
6.8.1	Uses of Bond Indexes	160
6.8.2	Scotia Capital Canadian Bond Market Indexes	160
6.8.3	Merrill Lynch Global Indexes	161
6.8.4	Other Index Providers	161
7	Equities	162
7.1	Common Shares	162
7.2	Rights and Advantages of Common Share Ownership	162
7.2.1	Capital Appreciation	163
7.2.2	Dividends	163
7.2.3	Voting Privileges	167
7.2.4	Tax Treatment	168
7.2.5	Marketability	170
7.2.6	Stock Splits and Consolidations	170
7.2.7	Reading Stock Quotations	172
7.3	Preferred Shares	173
7.3.1	The Preferred's Position	173
7.3.2	Preference as to Assets	173
7.3.3	Preference as to Dividends	174
7.3.4	Features of Preferred Shares	174
7.3.5	Special Protective Provisions	177
7.3.6	Why Do Companies Issue Preferred Shares?	178
7.3.7	Who Buys Preferred Shares?	178
7.4	Types of Preferreds	179
7.4.1	Fixed Rate (or Straight) Preferreds	179
7.4.2	Convertible Preferreds	179
7.4.3	Retractable Preferreds	182
7.4.4	Floating Rate Preferreds	183
7.4.5	Foreign-pay Preferreds	184
7.4.6	Canadian Originated Preferred Securities (COPrS)	184
7.4.7	Other Types of Preferreds	185
7.5	Cash and Margin Accounts	186

7.5.1	Cash Accounts	186
7.5.2	Margin Accounts	188
7.6	Short Selling of Equities	190
7.6.1	What Is Short Selling?	190
7.6.2	How is Short Selling Done?	190
7.7	Equity Transactions	194
7.7.1	An Agency Transaction—Trading Procedures	194
7.7.2	Settlement Procedures	195
7.7.3	Other Transaction Models	196
7.8	Buy and Sell Orders	197
7.8.1	Market Order	197
7.8.2	Limit Order	197
7.8.3	Day Order	197
7.8.4	Good Till Cancelled (GTC) Order	197
7.8.5	All or None Order (AON Order)	197
7.8.6	Any Part Order	198
7.8.7	Good Through Order	198
7.8.8	Stop Loss and Stop Buy Orders	198
7.8.9	The Preferential Trading Rule and the Pro or N-C Order	199
7.9	Stock Indexes and Averages	199
7.9.1	What Is a Stock Index?	199
7.9.2	What Is an Average?	200
7.9.3	Canadian Market Indexes	200
7.9.4	U.S. Stock Market Indexes	204
7.9.5	International Stock Market Indexes and Averages	207
8	Derivatives	209
8.1	What Is a Derivative?	209
8.1.1	Features Common to All Derivatives	209
8.1.2	Derivative Markets	210
8.1.3	Key Differences Between Exchange-traded and OTC Derivatives	211
8.2	Types of Underlying Assets	213
8.2.1	Commodities	213
8.2.2	Financials	214
8.3	Who Uses Derivatives and Why Do They Use Them?	215
8.3.1	Individual Investors	215
8.3.2	Institutional Investors	216