Law & Regulation of Electronic Finance & Internet Banking
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Introduction and Overview

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1 Module Objectives

Welcome to the module on Law and Regulation of Electronic Finance and Internet Banking. This module aims to give you an appreciation of how the internet facilitates the electronic delivery of financial services. The module will examine the development of internet banking from its earliest days, where it is now, and what the future may hold. Similar treatment will be afforded to online share-dealing schemes as well as raising business capital through the internet.

The module will present comparative information on the prudential regimes and attendant laws and regulations of the European Union, the United Kingdom and the United States, relating to banking and securities. How governments facilitate and regulate entering into contracts for financial products and services online also will be explored as will issues relating to the protection of personal data in an online environment, including the role of whistleblowers.

2 The Module Author

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He has prepared expert opinions and testified as a securities expert before the US Senate Permanent Subcommittee on Investigations, in arbitrations before the Financial Industry Regulatory Authority (FINRA) and in civil litigation. Mr Rutledge is admitted before the Supreme Court of the United States, the Supreme Court of the Commonwealth of Pennsylvania, the US Court of Appeals for the Third Circuit and the US District Court for the Middle District of Pennsylvania.

Mr Rutledge teaches Federal Securities Regulation at Widener University School of Law (Harrisburg USA) and also serves as a sometime tutor, Centre for Financial and Management Studies, School of African and Oriental Studies, University of London. He lectures at the FINRA Institute at The Wharton School, University of Pennsylvania, in the Certificate Programme for Certified Regulatory and Compliance Professionals.

He writes extensively in his area, most recently contributing a chapter on State Regulation of Broker Dealers for the Treatise on Broker-Dealer Regulation (Practising Law Institute). He also is the author of books on Electronic Markets (Bloomsbury) and Civil and Administrative Liability under Pennsylvania Securities Law (PBI Press) and also wrote chapters for The Sarbanes-Oxley Handbook (ABA Publishing), The Fiduciary, the Insider and the Conflict (Brehon Sweet &

Mr Rutledge is a member of the Securities Regulation Advisory Committee for the American Law Institute and has served on the Board of Editors of the *ABA Business Lawyer*. He was an Inns of Court Fellow in 2000 and, in 2009, received the Freedom of the City of London in the Worshipful Company of Pattenmakers. In 2010, he was appointed to the Editorial Advisory Board of the Centre for Business Law, University of the Free State, in the Republic of South Africa. He has served as a member of its Listings Qualification Hearing Panel of The Nasdaq Stock Market.

### 3 What this Module is About

This module examines the delivery of financial services over the internet – primarily products and services relating to banking and securities. You will learn how financial service activities over the internet have evolved from their earliest beginnings to current cutting-edge developments that will shape the future of banking. You will not only be exposed to the processes behind the furnishing of banking and securities products and services (both share-dealing and capital raising), but also to the prudential regulation relating to each sector. In this regard, comparative information will be provided, particularly with respect to regulatory schemes in the European Union, the United Kingdom and the United States.

Readings germane to each subject will accompany each module unit. Since the internet is no longer viewed as ‘new’ by most, if not all, publishers, very few books that could serve as a textbook for this module have been commissioned or, consequently, published since the early part of the last decade. Although some of these publications contain information that remains relevant today, the module includes a significant amount of supplementary readings which have been aggregated specifically for this module. In the case of banking regulation in the European Union, this remains an ever-evolving process as the EU attempts to address the sovereign debt crisis of a number of Member States that use the euro.

As an introduction to the module, you will be taken through a general description of internet banking products and services and an overview of the retail banking sector in the European Union, including the rise in the offer of Islamic banking services. Further discussion will explain why the initial hypothesis of having virtual financial institutions open only on the internet failed and how bank branches continue to play an important role in retail banking. Also, how internet banking fits in with a financial institution’s business model will be explored, as will current developments challenging this business model, such as increased use of smartphones, tablets and electronic wallets.

Proceeding from this introduction, the module will describe the general law of banking in the US and the UK applicable to basic banking functions and
specific laws designed to facilitate electronic banking over the internet. In this regard, there will be a discussion of laws which give legal equivalence to electronic items that are digital images of paper cheques and the ability to deposit these electronic items remotely, using specialised scanning equipment or smartphones. Payment systems, particularly the Single European Payments Area for those countries using the euro, will also be discussed. The allocation of risk and liability is an important element of any commercial activity and the business of banking is no different. The module will explore how liability and risk are allocated, both by law and by contract.

Following an in-depth description of the business of banking, the module will look at cross-border establishment of banks in the EU. The free movement of persons, goods, services and capital is a core tenant of the European Single Market and the provision of banking services across European Union Member States is an integral part of the Single Market. In this regard, the module will discuss the cross-border establishment of banks within the EU and how the concepts of harmonisation and mutual recognition have developed. Further discussion will be included on the approach of the EU Banking Directive and the effect of the 2009 Treaty on the Functioning of the European Union on the EU banking sector. The ‘general good’ derogation enunciated by the European Court of Justice which underpins prudential regulation and consumer protection will also be explored.

Every banking system requires prudential regulation, and the module will present a comparative treatment of prudential regulation in the context of EU and US law. With respect to the EU, whose prudential regulatory scheme is evolving, information is presented on the current regulatory structure as well as the revised structure proposed by the European Commission in September 2012. With respect to the US, the concept of functional regulation applicable to US financial institutions is explained. Deposit guaranty schemes are an important adjunct to prudential regulation and both the US deposit insurance scheme and the EU deposit guaranty scheme are discussed.

The module next addresses securities activities on the internet, including online share-dealing and capital raising. With regard to share-dealing, the module explores the process by which an online securities trade is executed and important investor protection issues that have been identified with specific reference to online trading, including system reliability, use of margin and after hours trading. Raising business capital through the internet has been the subject of a number of regulatory pronouncements, most of them of US origin. In this regard, the module will discuss the concept of general solicitation and how and when it is permitted under US law. Also discussed will be how e-underwriting failed to materialise but how direct public offerings can be used by smaller issuers. US regulatory positions relating to ‘free’ share offerings and internet portals that sponsor ‘crowdfunding’ activities will also be examined.

Securities regulation has historically been based on geography, and regulatory jurisdiction was usually asserted with reference to whether a person was conducting business in that jurisdiction or targeting citizens of that jurisdiction. The internet puts pay to distinctions based on geography, and securities regulators have generally adopted an ‘effects’ test to determine whether they
will asset regulatory jurisdiction. The module not only will discuss this approach to jurisdiction but also the scheme of securities regulation in the EU and the US. In addition, attention will be paid to specific prudential issues that have arisen in relation to online brokerage firms, including treatment of electronic communications, customer suitability, day trading and the duty of best execution.

Provision of financial services, by necessity, includes marketing those services to potential customers. In this regard, the module will examine comparative laws in the EU and the US that facilitate consummation of electronic contracts. Attention also will be paid to EU laws relating to distance marketing to consumers over the internet and unfair commercial practices. The internet provides an easy and cheap method of delivering disclosures to consumers, customers and investors that are mandated by prudential regulators. The manner of permitted electronic delivery will be explored for disclosures relating to banking products and services and by securities issuers and financial intermediaries. Online contracts may also provide for choice of forum clauses wherein the financial institution and the customer agree to resolve any disputes in a specific forum. Use of these mandatory arbitration clauses are examined under relevant provisions of EU and US law.

Consumers who purchase financial services and products over the internet by entering into online contracts necessarily must provide a significant amount of personal data. Financial institutions which gather, use and process this data on behalf and at the direction of customers have a significant responsibility to safeguard such personal data. The module will discuss issues relating not only to data security but also to a financial institution’s data protection and privacy obligations under the EU Data Protection Directive and the US Gramm-Leach-Bliley Act and regulations of the US Securities & Exchange Commission (SEC). Multinational financial institutions have a need to transfer personal data between the EU and US and must be alert to the EU-US Framework on the Transfer of Personal Data. Companies subject to filing reports with the SEC are required by US law to maintain internal whistleblower schemes wherein personal data about corporate wrongdoers may be provided by whistleblowers to persons inside and outside of the company. The module examines whistleblowing regimes and how they interface with provisions of the EU Data Protection Directive.

4 An Overview

The module consists of eight ‘Units,’ each with its own set of readings. You also will have assignments to compete and will be able to discuss the module with your fellow students through the Virtual Learning Environment.

Unit 1 Introduction
1.1 The Internet Revolution
1.2 The Promise of Internet Banking
1.3 General Description of Internet Banking Products and Services
1.4 Interesting, But Not Compelling
1.5 Trust, Validation and Security
Introduction and Overview

7.3 EU Distance Marketing Directive
7.5 Electronic Signatures
7.6 Electronic Delivery of Mandated Disclosures
7.7 Brussels Regulation and Choice of Forum Clauses in the EU
7.8 Arbitration

Unit 8 Consumer Privacy and the Internet and Whistleblowers
8.1 Leaky Ships – Data Security in Financial Services
8.2 Data Protection – The EU Dimension
8.4 EU-US Framework on the Transfer of Personal Data
8.5 Whistleblower Schemes – The Personal Data Dimension

5 Learning Outcomes

When you have completed your study of the module, you will be able to:

- discuss the role of internet banking from conception to current developments
- identify and critically discuss the legal foundations of the bank-customer relationship under both UK and US law and the methods used to allocate liability and risk between the bank and the customer
- define and distinguish the concepts of harmonisation and mutual recognition in context of the provision of cross-border banking services in the EU and critically discuss the concept of the ‘general good’ derogation which underpins prudential regulation and consumer protection
- identify the authorities responsible for the prudential regulation of banks in the EU and the US and critically discuss the US and the legal mandates given to these authorities
- identify and critically discuss issues arising in online share trading with regulated entities and how conduct of business rules apply to online brokerage firms
- identify EU and US prudential securities regulators and critically discuss the adoption of the ‘effects’ test with respect to the assertion of regulatory jurisdiction
- define and analyse the prudential issues for securities regulators arising from securities activities conducted through the internet
- identify and critically discuss the relevant EU directives applicable to the marketing of financial services over the internet
- outline the circumstances under which financial service firms may acquit their regulatory or statutory responsibilities by electronic delivery of mandated disclosures
- identify and critically discuss EU and US legislation facilitating the creation of enforceable contracts online and their views with respect to the use of choice of law clauses and mandatory arbitration clauses in those contracts
• describe and critically discuss the provisions of the EU law as it relates to the protection of personal data of consumers or customers of financial service providers and the terms of the US/EU Framework on Transfer of Personal Data

• outline and analyse the public policy underlying use of whistleblowers to identify wrongdoing by financial services establishments and the tensions which such policy has caused with respect to existing EU provisions relating to the protection of personal data.

6 Study Materials

In addition to the eight units of this module guide, a number of articles, selected chapters from relevant textbooks and primary source materials have been aggregated specifically for this module and are incorporated into the Module Reader.

You will be provided with the following textbook:


You will also study several chapters from this textbook, which will be provided in Reader format:


In addition, you will be able to study a variety of articles and cases, compiled into the Module Reader.

7 Teaching and Learning Strategy

This module provides the contextual and legal background to help you participate successfully in the work of delivering financial services over the internet.

To facilitate your learning, there are Review Questions and Exercises in the units. You will get feedback and advice on your progress with the module in the comments on your assignments. There is a Specimen Examination Paper to help you prepare for the final examination.

8 Assessment

Your performance on each module is assessed through two written assignments and one examination. The assignments are written after week four and eight of the module session and the examination is written at a local examination centre in October.

The assignment questions contain fairly detailed guidance about what is required. All assignment answers are limited to 2,500 words and are marked using marking guidelines. When you receive your grade it is accompanied by
comments on your paper, including advice about how you might improve, and any clarifications about matters you may not have understood. These comments are designed to help you master the subject and to improve your skills as you progress through your programme.

The written examinations are ‘unseen’ (you will only see the paper in the exam centre) and written by hand, over a three hour period. We advise that you practice writing exams in these conditions as part of your examination preparation, as it is not something you would normally do.

You are not allowed to take books or notes into the exam room. This means that you need to revise thoroughly in preparation for each exam. This is especially important if you have completed the module in the early part of the year, or in a previous year.

Preparing for Assignments and Exams

There is good advice on preparing for assignments and exams and writing them in Sections 8.2 and 8.3 of *Studying at a Distance* by Talbot. We recommend that you follow this advice.

The examinations you will sit are designed to evaluate your knowledge and skills in the subjects you have studied: they are not designed to trick you. If you have studied the module thoroughly, you will pass the exam.

Understanding assessment questions

Examination and assignment questions are set to test different knowledge and skills. Sometimes a question will contain more than one part, each part testing a different aspect of your skills and knowledge. You need to spot the key words to know what is being asked of you. Here we categorise the types of things that are asked for in assignments and exams, and the words used. All the examples are from CeFiMS examination papers and assignment questions.

**Definitions**

Some questions mainly require you to show that you have learned some concepts, by setting out their precise meaning. Such questions are likely to be preliminary and be supplemented by more analytical questions. Generally ‘Pass marks’ are awarded if the answer only contains definitions. They will contain words such as:

- Describe
- Define
- Examine
- Distinguish between
- Compare
- Contrast
- Write notes on
- Outline
- What is meant by
- List
Reasoning
Other questions are designed to test your reasoning, by explaining cause and effect. Convincing explanations generally carry additional marks to basic definitions. They will include words such as:
- Interpret
- Explain
- What conditions influence
- What are the consequences of
- What are the implications of

Judgment
Others ask you to make a judgment, perhaps of a policy or of a course of action. They will include words like:
- Evaluate
- Critically examine
- Assess
- Do you agree that
- To what extent does

Calculation
Sometimes, you are asked to make a calculation, using a specified technique, where the question begins:
- Use indifference curve analysis to
- Using any economic model you know
- Calculate the standard deviation
- Test whether

It is most likely that questions that ask you to make a calculation will also ask for an application of the result, or an interpretation.

Advice
Other questions ask you to provide advice in a particular situation. This applies to law questions and to policy papers where advice is asked in relation to a policy problem. Your advice should be based on relevant law, principles, evidence of what actions are likely to be effective.
- Advise
- Provide advice on
- Explain how you would advise

Critique
In many cases the question will include the word ‘critically’. This means that you are expected to look at the question from at least two points of view, offering a critique of each view and your judgment. You are expected to be critical of what you have read.

The questions may begin
- Critically analyse
- Critically consider
- Critically assess
- Critically discuss the argument that
Examine by argument

Questions that begin with ‘discuss’ are similar – they ask you to examine by argument, to debate and give reasons for and against a variety of options, for example

- Discuss the advantages and disadvantages of
- Discuss this statement
- Discuss the view that
- Discuss the arguments and debates concerning

The grading scheme

Details of the general definitions of what is expected in order to obtain a particular grade are shown below. Remember: examiners will take account of the fact that examination conditions are less conducive to polished work than the conditions in which you write your assignments. These criteria are used in grading all assignments and examinations. Note that as the criteria of each grade rises, it accumulates the elements of the grade below. Assignments awarded better marks will therefore have become comprehensive in both their depth of core skills and advanced skills.

70% and above: Distinction – As for the (60–69%) below plus:

- shows clear evidence of wide and relevant reading and an engagement with the conceptual issues
- develops a sophisticated and intelligent argument
- shows a rigorous use and a sophisticated understanding of relevant source materials, balancing appropriately between factual detail and key theoretical issues. Materials are evaluated directly and their assumptions and arguments challenged and/or appraised
- shows original thinking and a willingness to take risks

60–69%: Merit – As for the (50–59%) below plus:

- shows strong evidence of critical insight and critical thinking
- shows a detailed understanding of the major factual and/or theoretical issues and directly engages with the relevant literature on the topic
- develops a focussed and clear argument and articulates clearly and convincingly a sustained train of logical thought
- shows clear evidence of planning and appropriate choice of sources and methodology

50–59%: Pass below Merit (50% = pass mark)

- shows a reasonable understanding of the major factual and/or theoretical issues involved
- shows evidence of planning and selection from appropriate sources,
- demonstrates some knowledge of the literature
- the text shows, in places, examples of a clear train of thought or argument
- the text is introduced and concludes appropriately

45–49%: Marginal Failure

- shows some awareness and understanding of the factual or theoretical issues, but with little development
• misunderstandings are evident
• shows some evidence of planning, although irrelevant/unrelated material or arguments are included

0–44%: Clear Failure
• fails to answer the question or to develop an argument that relates to the question set
• does not engage with the relevant literature or demonstrate a knowledge of the key issues
• contains clear conceptual or factual errors or misunderstandings

[approved by Faculty Learning and Teaching Committee November 2006]

Specimen exam paper

Your final examination will be very similar to the Specimen Exam Paper that appears at the end of this introduction. It will have the same structure and style as the actual exam, and the range of question will be comparable.

CeFiMS does not provide past papers or model answers to papers. Our modules are continuously updated, and past papers will not be a reliable guide to current and future examinations. The specimen exam paper is designed to be relevant to reflect the exam that will be set on the current edition of the module.

Further information

The OSC will have documentation and information on each year’s examination registration and administration process. If you still have questions, both academics and administrators are available to answer queries.

The Regulations are available at www.cefims.ac.uk/regulations.shtml, setting out the rules by which exams are governed.
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Specimen Examination

The examination must be completed in THREE hours.
Answer THREE questions including at least ONE question from Section A and ONE from Section B. The remaining question can be chosen from either Section A or B.

DO NOT REMOVE THIS PAPER FROM THE EXAMINATION ROOM. IT MUST BE ATTACHED TO YOUR ANSWER BOOK AT THE END OF THE EXAMINATION.
Answer THREE questions; at least ONE from EACH section.

Section A
(Answer at least ONE question from this section)

1 Even though banking and securities transactions now occur over the internet, they remain governed by legal concepts defining relationships and responsibilities of the financial institution and the customer developed for offline transactions. Please discuss the relationships and responsibilities applicable to banks and their customers and dealers in securities and their customers using English law as a primary example.

2 The implementation of institutional reforms as part of the single European market in financial services was greatly influenced in the decision by the European Court of Justice in the Cassis de Dijon case which outlined the regulatory principles of mutual recognition. Please describe the principles underlying the concept of mutual recognition and identify and discuss the limitations in the application of this concept.

3 The “effects” doctrine has met with near unanimous acceptance by regulators with regard to offering of financial services over the internet. Please discuss the basic principles underlying this doctrine and provide examples of when it may and may not apply.

4 Banks prefer to be governed by the laws of their home country with respect to any disputes which may arise with a customer and therefore, are disposed to include and enforce choice of law provisions in their customer contracts. Comprehensively discuss whether EU law permits use of such choice of law provisions and, if so, identify any restrictions on such use.
Section B

(Answer at least ONE question from this section)

5 You are a financial services industry consultant and your supervisor has asked you to advise a group of entrepreneurs who intend to launch a new internet-only bank within the EU. They are concerned about being subject to national regulations which are disguised as qualifying for the “general good” derogation under EU law but, in effect, favor home country businesses. Please draft a memorandum discussing the basis for the general good derogation, the criteria for invoking the general good derogation and some examples of how the general good derogation may be validly applied.

6 A UK bank is considering acquiring a securities firm which currently conducts a brokerage and investment advisory business in several EU Member States outside of the UK and you are part of the acquisition evaluation team. Please prepare a memorandum for the team which focuses on the impact of market conduct rules and conduct of business rules on the securities firm which the bank is considering acquiring.

7 Consumers have benefitted from lowering of transactional costs for financial products and services offered online and their availability 24/7. Explain how this occurred, what benefits have been afforded to customers and new entrants into the financial services sector and any particular risks which have arisen in regard thereto.

8 Emerging markets appear to be a singular beneficiary of the delivery of financial services over the internet. Critically discuss the benefits which emerging markets can anticipate from accessibility to financial services delivered online and identify the challenges which the availability of such services pose to emerging markets.

[END OF EXAMINATION]
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Unit 1 Introduction

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Unit Content

The main purposes of Unit 1 are to provide a brief history and resumé of current developments in internet banking, and a description of the European Union’s retail banking sector. Also addressed are the European Union’s policy statements concerning its financial services sector. The unit will essay the advent of internet banking and trace its development from pure internet banks to a universally accepted alternative channel of delivery of banking services in addition to, not in lieu of, traditional bricks-and-mortar branches. As internet banking is in a continuous state of development affected not only by advances in technology but also by consumer acceptance, the unit will address consumer attitudes with respect to its use.

Lastly, the unit will note official policies adopted by the European Union in regard to the financial services sector in context of regulation and competitiveness.

Learning Outcomes

When you have completed your study of this unit and its readings, you will be able to:

- discuss the development of internet banking from conception to current day practice
- identify current advances in internet banking and the reasons fostering these developments
- outline and critically discuss the European Union’s policies with regard to its financial services sector.

Readings for Unit 1

Reader


1.1 The Internet Revolution

In the late 1990s and early 2000s, conventional wisdom was that internet banking was the way forward and eventually there would be little use for bricks-and-mortar banks. Pure internet-based banks with interesting names such as ‘Smile’ and ‘Egg’ in the United Kingdom and ‘Wingspan’ in the United States were viewed as the wave of the future. All were backed by established financial institutions (Cooperative Bank in the case of Smile, the Prudential in the case of Egg and Bank One – now part of JP Morgan) in the case of Wingspan) so these were no neophytes to banking. None of these pure-play internet banks now exist. What happened?

- Is internet banking still viable and in what form has it evolved and how might it evolve in future?

The first readings for this unit provide a useful and enjoyable introduction to the issues raised in the following sections.

Readings

Please read the Sanjiv Singhal’s chapter ‘Scrambled Eggs, Clipped Wings and Yet a Reason to Smile?’.

When you have finished the article, write brief notes on the following question

- Why did ‘pure play’ internet banks not sustain themselves in the marketplace and not replace ‘bricks and mortar’ branches as many had predicted?

After reading these articles, you will be aware of the promises and products of internet banking at the beginning of the twenty-first century. The continuous development of technology (following Moore’s law that the power of computing doubles every 18 months) has made delivery of all manner of products and services over the internet possible since then, and at significantly lower costs to customers and providers.

More and more of the world’s population now have access to the internet. In some developing countries, infrastructure has leapt over telephony and gone directly to internet connectivity. Recent broadband connections brought by undersea cables, especially to Africa, are expected to result in an explosion of additional users of online services. In general, the internet has affected those providing products and services by the following:

- providing customers with more choice and customisation options
- enhancing price and product discovery and comparison by decreasing search time and enabling sites or companies to serve as data aggregators
- expanding markets beyond regions or countries where the provider has a physical presence with minimal capital costs in equipment or staff
• reducing the time between the outlay of capital and the receipt of payment from the customer
• permitting just-in-time production through the receipt of orders electronically
• facilitating increased automation by through internet data interfaces;
• decreasing costs associated with physical delivery such as labour, transportation, distribution and storage costs
• lowering barriers to entry to business thereby fostering competition and keener prices for consumers
• enabling automated data to be easily captured, stored and manipulated to provide instant historical comparisons and trends in production time and costs, payment and design changes.

1.2 The Promise of Internet Banking

The effects of the internet revolution cited above apply equally to the delivery of banking products and services. Use of the internet allowed banks to deliver standard and expanded banking services to more customers at a lower cost than through bricks-and-mortar branches. Furthermore, the reach of the internet far exceeds anything that a single bank could achieve in building a proprietary network and at much lower cost. By using the internet, domestic banks now are able to court new customers around the world with minimal marketing costs while international banks are able to roll out new products and services to all its global customers at the same time, as well as testing potential new markets to determine the profitability of establishing a physical presence elsewhere.

Technology also is a great leveller of artificial barriers to entry. Thus, the size of a bank now has little bearing on its ability to offer products and services to a wide array of potential customers via the internet. Use of the internet also permits banks to offer additional products and services, such as share dealing, which they might not have been able to provide through a traditional brick-and-mortar branch network due to significant start-up costs.

Technology has permitted the convergence of many financial management transactions that previously were considered disparate. This has opened the path for offering banking products and services to different customers with different banking needs, such as corporations, small businesses and individuals all within one internet-based platform. Corporate treasurers can engage in significant cash management transactions on the same platform that an individual might use to check balances on a current account or a small business person to apply for a commercial loan.

In addition to providing products and services, banks also have provided ancillary financial management tools accessible on their internet sites to assist customers in household budgeting, looking up current account or savings balances, and providing current rates on all types of loan and savings products.
1.3 General Description of Internet Banking Products and Services

Some commentators have grouped banking products and services into three different levels based upon sophistication of the transaction. Basic products and services usually revolve around

- personal finance (which includes personal checking and savings accounts)
- account management (inter-account transfers)
- online tools to check balances and cheques that have cleared.

These features are designed to permit customers to avoid visiting branches and queuing for the services of a teller.

Intermediate products include the basic products, but add

- bill-paying services
- stop-payment requests
- standing payment orders outside of bill pay
- credit card applications
- certificate of deposit (bank-issued bonds in the UK) applications
- consumer and mortgage loan applications
- insurance (credit, life or auto) applications.

Advanced products and services would include the foregoing as well as

- foreign currency exchange
- corporate cash management
- merchant services for point of sale transactions (including VISA® or MasterCard® debit or credit cards)
- letter-of-credit management
- sale of mutual funds (unit trusts in the UK)
- share dealing
- making governmental tax payments.

Online bill paying deserves special mention because it probably has moved from being viewed as an intermediate product to a basic product as companies are continuously urging customers to pay online and ‘skip the postage stamp’. Some companies are now charging customers extra if they pay by paper cheque rather than online.

With online bill pay, a bank customer uses the bank internet site to establish a file of certain merchants or service providers that the customer regularly patronises. Generally, when the customer wants to pay a bill, he or she goes onto the bank’s internet site and finds the applicable merchant. By clicking on that merchant’s profile, a cheque appears on the screen and the customer completes the cheque as if he or she were completing a paper cheque. The customer then instructs the computer to send the cheque to the merchant. Overnight, the bank processes these payments and

1) verifies that there are sufficient cleared funds on deposit to cover the amount of the cheque, and
2) either issues a paper cheque to the designated merchant or instructs
the local Federal Reserve Bank (in the US) to transfer the amount from
the customer’s account in the bank to the merchant’s account at the
merchant’s bank.

A variation of bill pay is the creation of a standing order to pay a specific
merchant a specified amount on a specific day each month.

Reading

For details on some of the technical and legal issues raised by the increase in internet
banking, turn now to the article by Raysman and Brown on electronic banking develop-
ments.

Your notes on the reading should expand on the main points raised in the unit so far.

1.4 Interesting, But Not Compelling

We begin this section with a reading from the Forrester Research organisa-
tion. This research provides a statistical insight as to the use of internet
banking by the retail banking population in the US. After reading this
research, you should be able to articulate why internet banking has not been
a transformative event like advancements in technology for storing and
playing music. You also should be able to describe how generational differ-
ences affect internet banking and that for reasons of trust, validation and
security, the retail banking public may never migrate to a total internet
banking environment.

Internet banking has not been transformative. In other words, the public’s
reaction to the technology which permitted delivery of banking products
and services has become an additional distribution channel, not a replace-
ment for traditional banking. By analogy, internet banking has not replaced
traditional banking like cassette tapes replaced 8-tracks only to be replaced
by CDs, which have been replaced by digital downloads.

For the time being, it appears that the public has come to use the internet in
the context of banking services for the purpose of discovery and comparing.
It is not a given that online transactions will automatically follow from the
internet-based information gathering and analysis process. In the survey of
online banking customers by Forrester Research, it was noted that two-
thirds of all US households turn to the internet to help them make financial
product decisions. However, those who visited multiple sites were no more
likely to apply online than those who visited just one site.

This research also indicated that the public uses the internet differently with
respect to different financial products. To summarise here:

- More than 50 per cent who researched a student loan or credit card
  application went online as part of the research process.
- As to deposit products, an average 75% conducted their research
  offline.
- Only 40 per cent of online researchers used rate and fee pages and
  financial calculators provided by bank internet sites.
• Approximately 35 per cent of consumers who researched a credit product online only went to one site (usually their primary bank); 50 per cent visited two to four sites, usually their primary bank, another bank and a data aggregation site; 15 per cent who went to more than five sites were more likely to go to an aggregator site than to their primary bank.

• Regardless of how many sites were visited, only 30 per cent of online researchers actually applied online. The biggest barrier cited was the need for human assistance to validate their decision and security concerns.

The same Forrester research indicated that age is a determinant of online behaviour. For instance:

• Nearly 50 per cent of Generation Y (18 to 25 year olds) who applied for a credit product researched it online and three-quarters went to more than one site. Generation Y are more likely to visit a portal or data aggregator than the primary bank’s internet site. Generation Y are also more likely to apply for credit online. Approximately four out of ten applied for a credit card or student loan online and about one-quarter applied online for a home equity loan. Generation Y is more likely to research and then buy a deposit product online.

• Seniors remain wary of online banking. Only 16 per cent of people over 60 who applied for a credit product researched it online. For deposit products, only 8 per cent went to an internet site and, of those who did, most went to their primary bank’s internet site. Few seniors applied online. Most felt they were more comfortable in a face-to-face environment and, most interestingly, almost one-half said nothing could motivate them to apply online.

The Forrester research also indicated that discriminators other than age play a role in whether a person will use the internet to access banking services. These include gender, the availability of broadband connectivity and geography. Accordingly to this research, the person in the US most likely to use internet banking is a male living on the US West Coast who has broadband connectivity at home.

1.5 Trust, Validation and Security

The business of banking is one of trust – we trust our money to banks rather than to other persons – and therefore we view banks and banking as something special. Banks are an essential element in a free enterprise system which transforms idle capital in the form of deposits into working capital in the form of loans for a fee. The fees are collectively known as a bank’s net interest margin, which represents the price paid to the bank in interest on the loans minus the price paid by the bank to depositors as interest on their funds. Although all bank regulators require banks to maintain certain minimum capital in reserve at all times, it never equals the deposit liabilities. Therefore, a ‘run’ on bank deposits is a bank regulator’s worst nightmare, and the only thing that prevents such runs is a sufficient level of trust and confidence by the public in banks, bank regulators and the banking system.
Trust between customer and bank is more easily established by the personal relationships and interactions that take place in multiple and routine face-to-face meetings within the context of traditional bricks-and-mortar banking. Knowing your teller, loan relationship officer or branch manager establishes a bond of trust between the institution and the customer. Even when researching or applying online with an institution that maintains a physical presence, it is being done with the knowledge that the person can always resort to contacting a human being in a branch if there is a problem, if further explanation is required or more detailed questions need to be answered. In a bank that is a ‘pure play’ – an internet bank with no physical presence – this trust is harder to establish as the customer knows he or she cannot actually show up at the bank’s place of business and have a face-to-face meeting.

This last point leads to another characteristic of the public’s use of bank internet sites. Although many may use the internet for research purposes and may have formed a tentative opinion about which credit or deposit product is best for them, they appear still to crave human interaction with a bank representative to answer questions, explain pertinent provisions and, in essence, validate their initial decision. This need for validation from bank personnel who are regarded by customers as experts in their field is reinforced by the view that the average person finds banking products to be complex, not only in terms of the specific features of the product but also because of the ‘legalese’ embedded in the language of the documentation that often accompanies bank products and services.

Similar to the need for human validation, security of online transactions was cited by the Forrester research as being a significant barrier to higher use of the internet for banking services. Unfortunately, security breaches of data collected over the internet usually are the result of human error. High profile security breaches have highlighted the loss of banking data, taxpayer records and credit card data. Internet thieves try to extract personal financial data through malware, key-logging devices, point-of-sale skimming of bank data and other forms of high-tech skulduggery. Not all breaches are the fault of financial service companies. Customers must not be careless with their personal banking details, and banks constantly remind customers to safeguard those details, particularly their PINs.

Most banks employ encryption technologies to provide security and authentication for internet banking transactions. Encryption provides a method for communication over the internet by encoding messages so they can be read only by parties having the proper key or decoder. Encryption involves the conversion of readable text into ciphers via a computer which applies an algorithm. Asymmetric encryption operates through a pair of complementary keys, one of which is public and the other is secret. Although either key can encrypt a message, only the recipient’s secret key can decode the message.
1.6 The Evolution of Internet Banking

Although no bank today would elect not to have an internet site and make available a wide array of banking products and services available to current and potential customers, such banks also most likely would not rely on conducting its business solely over the internet without a physical presence somewhere.

Part of the demise of ‘pure play’ internet banks was due to the low barriers to entry which the internet affords. Most were new so they had no existing customer base. The main way to attract customers was to offer better rates on credit or deposit products. However, these rates could be matched or bettered by traditional banks that had existing customers who would subsidise the ‘internet only’ special offer rates or by other pure play internet banks competing for the same customer. As pure play internet banks were new, there was no existing customer loyalty or long-standing customer relationship to militate against the customer leaving for another pure play internet bank solely on the basis of rates on offer. Also, the competition among pure play internet banks for customers based on rates resulted in negative net interest margins leading to annual losses and reduction in shareholders’ capital. Such a model could not be sustained in the long run.

The US Office of the Comptroller of the Currency noticed these trends and reported that pure play internet banks were not as profitable as traditional banks that also maintained a presence on the internet. It also found that pure play internet banks were less efficient than even start-up traditional banks.

In addition, pure play internet banks, by definition, were dependent on technology. Some of their systems crashed when too many people visited their internet sites, usually in response to special offers designed to attract custom. When an internet bank’s systems cannot handle customer demand, it does not instil consumer confidence. Lack of confidence leads to the internet bank becoming a less attractive alternative to traditional banking.

Hence, Smile, Egg and Wingspan have all vanished. ING’s primary internet banking venue in the US, ING Direct, has been sold to Capital One. In the US, Ally Bank, which is the re-incarnation of the US government-rescued General Motors Acceptance Corporation (originally the finance arm of General Motors which increasingly becomes more involved in providing a wide array non-auto-related financial services), remains the most, if not the only, nationally recognised bank in the US that delivers its products and services primarily via the internet.

Today, the banking model is ‘bricks and clicks’. Banks have realised that the internet has given them tremendous scope to reach new customers at reasonable marketing expense and permits disparate customers to effect financial transactions on one platform efficiently and at low cost to both customer and provider. However, as discussed previously, the factors of trust, validation and security motivate banks and customers alike to retain a traditional bricks-and-mortar presence where customers can have face-to-face meetings with bank personnel. Internet banking has become another distribution channel for banking products and services, but not a total
replacement of the bricks-and-mortar distribution system that has been in place for many years.

Internet banking has the scope to grow through demographic changes and increased access to broadband connections throughout the world. As the Forrester research pointed out, only 30 per cent of persons who researched online actually applied online. In America, not even 50 per cent of internet users engage in online banking and although 60 per cent of internet users in France use online banking, that means that 40 per cent do not. Therefore, there is scope for a substantial increase in the number of persons who actually take full advantage of internet banking services.

1.7 Current Developments Affecting Internet Banking

This section begins with two recent articles from The Economist magazine, which should enable you to describe the continuing tension relating to delivering financial products and services over the internet and through bank branches. You also should be able to discuss the how smartphones, tablets and virtual wallets may affect the future of retail banking, noting both their promise and their detractions.

Readings

Please now read the two articles cited from The Economist.

Your notes should cover the points cited in the paragraph above.

1.7.1 Branch banking is alive and well but for how long?

In 2012, The Economist magazine reported that there are 10-20 per cent more bank branches on high streets across the globe than a decade ago. In America, the number of branch banks has risen 22 per cent since 2000 and Europe also has seen a rise in the number of branch banks. These statistics appear to support the previous assertions that although customers will use the internet primarily for research, and a minority will actually apply for products online, the vast majority still want to be able to visit a branch where they can ask questions, reassure themselves of their tentative decisions or just engage in human interaction. On the other hand, a September 2012 report by the Pew Research Center in the US stated that half of all American adults now own either a tablet or a smartphone. Pew also reported that Google’s® Android® platform is gaining momentum, as just over one-half of the tablet owners reported owning Apple® iPads® compared to 81 per cent a year ago.

In the US, the Federal Deposit Insurance Corporation found in a 2005 study that banks with larger branch networks were more successful in increasing revenues and were more profitable than those with smaller networks. This finding would certainly give cause for banks to pursue a business strategy of adding new branches to their network. This study, however, was done before the post-2008 low-interest-rate environment, which has acted to
compress banks’ net interest margin, and the passage of the Dodd-Frank Act in America, which has curbed the fees that banks receive, particularly for overdraft protection and interchange fees.

This is not to say that bank branches are not embracing technology. Santander, an international bank headquartered in Spain, uses technology in its branches to drive sales. Branch managers are able to pull up computer screens showing a customer’s account balances, whether the customer is profitable to the branch and who in the branch is responsible for looking after the customer. The manager can even see if the branch itself is profitable. In this regard, the bank is not only seeking to reduce costs through technology but to push up productivity by focusing on products and services in which a customer is most likely to be interested.

Some banks are turning branches into high tech shops where assistants with tablets mingle with customers and assist them with online applications or product research. Others are turning branches into internet cafes or coffee shops where bank staff serve up financial advice along with lattés. Video technology links branches to larger bank offices if a customer’s query requires more sophisticated advice than is available at the branch. In developing companies, shops are becoming banks because the retailer not only sells goods but also issues consumer loans to finance purchasers and collect payments, and serves as a contact point where mobile phone payments are made or collected.

As long as bank customers require human interaction, it is most likely that there will continue to be bricks-and-mortar banking. We still derive more satisfaction in dealing face-to-face for important financial decisions, resolving a complaint or needing assistance in navigating the financial marketplace. That said, branch banks will continue to employ technology to drive customers and sales as well as to reduce costs by automating as much of the transaction processing part of the business as possible.

1.7.2 **Aggregators, smartphones, tablets, passbooks and wallets – the next frontier**

As noted already, based on the statistics showing growth of bank branches over the decade of 2000-2010 and the perceived need for the availability of human interaction in financial matters, bricks-and-mortar banking is unlikely to die. The question is whether technology will slow down or even reverse the growth of branch banking that has been seen in the last decade. The answer may lie with aggregators, smartphones and virtual wallets.

Aggregators are online firms that will pull together all of a customer’s financial data from disparate places such as a current account at one bank, a savings account at another bank, a certificate of deposit at a third bank, and outstanding loans and credit cards – and then analyse the data and make recommendations as to the most advantageous products to the customer or the best way to reduce or re-finance debt. Although these firms may not offer banking products directly, they are chipping away at an important advantage which banks have enjoyed – being viewed by customers as preeminent in the dispensation of financial advice which the bank aims to turn to a successful sale of a bank product.
Smartphones and tablets now pack the computing power to easily accommodate applications necessary to complete banking transactions. Portability and availability of broadband connections at home, at work or via wi-fi allow customers to access banking anytime and anywhere. Also, approximately one-half of all mobile phone subscribers in America have smartphones. Smartphones and tablets have given banks the ability to have cheques deposited by customers taking a picture of the cheque and sending it electronically via such devices to the bank, eliminating not only a trip to the bank branch but also avoiding the very costly paper-based processing. In the US, this is hugely important, as American banks process 25 billion paper cheques each year.

In some respects, smartphones and tablets are a two-edged sword for banks. On the one hand, the number of transactions with the banks tend to increase substantially by users, but the transactions that are now conducted online via the smartphone and tablet may reduce visits to branches. As more and more processes go online – such as filing tax returns, buying airline tickets, and making hotel and restaurant bookings – and as more people get used to the online process, banking via smartphone or tablet may become the norm.

Virtual wallets are now being offered which may dramatically change how we shop and perhaps how we bank. Most consumers are comfortable with debit cards, which initiate electronic payment directives at the point of sale (the shop till) to the customer’s bank to debit the customer’s current account in favour of the merchant. While some banks charge for this service, many others do not. It is not that the service is free but it generally is subsidised by the low rates offered on current accounts or other deposit products.

Virtual wallets, however, take the debit card to the next level. Instead of having one card, your smartphone can store several debit or card cards, shop loyalty cards and details on your bank accounts or online payment account, such as PayPal® in the US. The wallet also may analyse your data to determine the most cost-effective way to pay for an item – shop card (to get a bonus on offer for loyalty points), credit card (because it carries a low interest rate) or a debit card (because there is no perceived advantage not to pay directly from your current account).

Worrisome for banks is that non-banks (Google® and PayPal®) are developing virtual wallets that may compete with banks. Banks are developing their own virtual wallets because they want to retain their customers, attract new customers and ensure that their proprietary products are included in the wallet. Banks are hoping that existing customers will feel more comfortable with their wallet than one from an institution with which they have no pre-existing relationship. Another unknown is whether consumers will opt for only one wallet on their smartphone, or if they will have several.

Apple® is developing a passbook for its iPhone® which will allow mobile payments with a swipe at the till. However, the near field communications chip necessary to activate this feature requires significant battery power. Hence, technology improvements will need to be made before this becomes widely accepted, and a critical mass of consumers using this technology will
need to be reached to justify merchants installing the necessary payment equipment.

### 1.8 Retail Banking in the European Union

Again, we begin the discussion in this section with a reading. After studying this report, on retail financial services, you should be able to describe the delivery of financial services and products in the EU through the internet and by bank branches, and identify which countries and population segments are significant users of internet banking services.

#### Reading

Please now read the Introduction and Executive Summary to the Eurobarometer Report on retail financial services.

To further your understanding, you may want to explore the rest of the report (found here: [http://ec.europa.eu/internal_market/finservices-retail/docs/policy/eb_special_373-summary_en.pdf](http://ec.europa.eu/internal_market/finservices-retail/docs/policy/eb_special_373-summary_en.pdf)) and as an optional exercise, it could be useful to make notes covering the points noted in the introduction to this section, in relation to your choice of three member states.

#### 1.8.1 The retail banking sector

The retail banking sector in the EU represents over one-half of the entire EU banking activity and generates approximately 2.5 per cent of total EU GDP. Retail banking is commonly referred to as that sector of the industry which provides banking services to individuals and to small and medium-sized enterprises (SMEs). Products frequently offered in the retail banking sector include current accounts, deposit accounts, consumer term loans, credit lines, payment cards (ATM, debit cards and credit cards), mortgages, overdrafts and investment funds. Current accounts generally are used for everyday purchases and payments whereas deposit accounts are used as savings vehicles.

Banking products aimed at SMEs include current accounts, term loans and credit lines. Current accounts are usually utilised for making and receiving bulk payments. Term loans finance an SME’s business expenditures, and credit lines can be used to top up current accounts or for short-term financing of business expenditures. Banks also engage in leasing arrangements for SMEs where, for instance, the bank will purchase a piece of equipment and then lease it back to the SME at a rate which, over time, will pay back the purchase price of the equipment plus an interest rate that is profitable to the bank.

Europe followed the trend in America of increasing its branch banks. Between 1985 and 2003, the number of branch banks in the EU increased 7.4 per cent. Spain alone has 43,000 branches, which are about one-half as many as in the entire United States. Spain’s biggest two banks, BBVA and Santander, operate almost a half of these branches. In 2003, there were approximately 485 branches per one million EU citizens. Interestingly, the
European Commission’s White Paper of Financial Services Policy (2005-2010) includes consolidation of financial services as a stated goal.

While increasing the number of bank branches, EU banking institutions have simultaneously embraced the internet as an alternative distribution system, and most provide the option of online banking. There also is evidence that Europe leads the way in persons adjusting to using online banking.

In 2006, 22 per cent of EU citizens older than 16 years had used internet banking in the last three months. However, the percentages of use were higher in northern European countries than in southern European countries. In 2012, the almost 70 per cent of all internet users in the Netherlands had engaged in online banking. The figure for France was 60 per cent, and Sweden, Finland and Poland all exceeded 50 per cent. Although these statistics demonstrate that online banking is gaining wider acceptance among EU citizens, there remains a significant segment of internet users who do not engage in online banking activities.

1.8.2 **Islamic banking**

In some European countries, a significant segment of the population is Muslim and desire banking services that conform to the rules of Shariah, specifically known as Fiqh al-Mumalat (Islamic rules on transactions). A financial institution that offers Islamic financial products need not be owned or controlled by Muslims, but such financial institutions must be prepared to defer to Shariah scholars’ views on financial products and segregate Shariah-compliant products from those which are not. In this regard, a financial institution should appoint a board of Islamic scholars knowledgeable in Islamic finance who can ensure that banking products contain the attributes necessary to be Shariah compliant.

A ‘wadiah’ arrangement is similar to a current account, and is where a person places funds with a bank that acts as a keeper and trustee of the funds deposited. Funds must be returned upon demand of the depositor. In appreciation for the deposit and trust placed in the bank, the bank may give the depositor a cash gift, which is not considered to be interest (which is not permitted under Shariah law) because the amount of any cash gift is at the sole discretion of the bank.

A ‘musharakah’ contract is a method of financing a business. Under this arrangement, every partner is an agent of the other and has the right to actively participate in the project, but such rights can be waived. A bank may be partner in the project but waive its right to actively participate in the business. Profits as well as losses are distributed proportionately to the capital contributed with no fixed amount attributed to any single partner.

A ‘murabahah’ involves the sale of goods at a set price. A bank may buy an asset and then sell it to a company on an instalment-payment basis, which includes a profit margin for the bank to compensate it for the time value of the instalment-payment feature. However, the bank cannot receive any other fees, including late payment fees.
1.8.3 **The way forward: European Commission White Paper**

After studying the next readings, you should be able to express the policy goals of the European Commission with respect to banking in the EU, and note the EU’s Financial Services Users Group’s view that owning a basic bank account and having access to payment systems should be viewed as a fundamental right of EU citizens because it greatly assists in the integration of such persons into wider civil society.

**Readings**

Please now read both the EC’s White Paper and the summary of the Users Group’s response.

Your notes should reflect the expectations laid out in the paragraph above.

The European Commission’s White Paper on Financial Services Policy (2005–10) had a stated goal of consolidation and integration of the financial services industry in the EU, including banks and banking. With regard to retail banking, the view of the Commission is that further Commission action is needed to open up what it views as a fragmented retail financial services market. Specifically, it believes that there exist undue barriers to access bank accounts (savings, savings or securities) and these barriers must be removed in order to provide consumers with more choice and encourage competition among providers. Specifically, the Commission proposed to establish an expert group to identify existing problems associated with user mobility for bank accounts, including online banking, and consider the usefulness of an optional standard bank account.

The Commission established the Financial Services User Group (FSUG) as an expert group, which issued its first annual report in 2011. It advises the Commission in the preparation of legislation and policy initiatives which affect the users of financial services. With respect to a consultation on retail bank accounts, FSUG viewed access to bank accounts as a basic right of EU citizens as it operates as a vital link to inclusion in civil society. In this regard, FSUG has recommended the adoption of legislation ensuring that any person legally resident in a Member State should have the ability to open and use a basic bank account with a payment service provider operating in a Member State. Related to access to opening a bank account is the ability to switch bank accounts from one financial institution to another. FSUG also views such customer mobility as a fundamental right for consumers. In this regard, FSUG sees the availability of clear and comparable market offers and an easy switching process from one bank to another as critical.

The Commission’s White Paper also was critical of the rate of transposition of EU legislation by Member States. Although the Commission can encourage prompt implementation by Member States, its only enforcement mechanism is to bring an infringement proceeding before the European Court of Justice, which it has promised to do more swiftly in future. In addition, the Commission highlighted the need for consistency in EU
legislation and the national implementation of rules across Member States. In that regard, the Commission has determined to undertake reviews by market sector. The first sector will be securities, and the Commission intends to appoint a group of practitioners and market experts to assist in analysing the implementation of EU laws and national rules in this area and to identify problems and issues that require attention (this is discussed further in Unit 5).
References and Websites


