Chapter II

Recent Development of Information Technology in Japanese Banks

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Abstract

Although Japanese banks have suffered from huge, non-performing loans since the burst of the bubble, they have invested as much as possible in information technology. However, due to the shortage of available funds, each bank has felt that its investment was not high enough to compete with leading U.S. and European banks. This is one important reason why major Japanese banks have been merging with each other in recent years. Information technology has now become a key issue in the Japanese banking business. This chapter discusses the recent development of information technology in Japanese banks in detail. The section titled Changing in the Business Model provides a brief explanation of the current Japanese banking environment. In The Steady Progress of New Information Technology in Financial Institutions, we discuss how Japanese financial institutions, mainly banks, have dealt with new information technology. The section on Internet Banking provides a detailed discussion of new Internet banks and the Internet banking services of existing banks. As information investment has an external effect, the market will fail without government assistance. Therefore, in Government Efforts: E-Japan Strategy, we explain what the Japanese
government has done in terms of IT usage in financial services. Finally, the Conclusions section concludes this chapter.

Introduction

It is commonly agreed that financial transactions are inevitably accompanied with so-called asymmetric information problems. For example, lenders are not sure whether applicants are honest and will do their best to pay back their loans. Because information issues may make transactions in the financial markets impossible, financial institutions play a crucial role in solving these issues.

As pointed out in the literature, there are two kinds of information — hard information and soft information (see Boot, 2000; Berger & Udell, 2002; Onega & Smith, 2000; Petersen & Rajan, 1995; Scott, 2004; Stein, 2002). Soft information, such as considering an owner’s motivation, is important in small business loans. Usually, loan officers who maintain daily contact with borrowers are able to produce soft information. Soft information is difficult to quantify and verify to a third party. In contrast to soft information, hard information includes verifiable figures, such as financial ratios calculated from firm’s financial statements and stock market prices. These figures are easy to quantify and verify by using a computer, and due to the rapid development of information technology, the usage of hard information has become highly advanced. For example, money market mutual funds require daily interest payments. Huge calculation tasks have become possible by using high-performance computers, and financial institutions recognize that information technology is a key technology for their business, because strategic technology investment reduces costs, increases efficiency and enables institutions to offer value-added and competitive products and services.

Leading international banks have spent a great deal of money on information technology. For example, CELENT (2002), a consulting and research firm, pointed out that the largest commercial banks in the United States spent as much as 25% of their total expenses on information technology, and certain specialist banks spent even higher percentages¹. In addition, CELENT(2002) reported that U.S. banks spent more than U.S. $34 billion on technology in 2002. Citigroup’s IT budget for 2002 was U.S. $5.1 billion. JP Morgan Chase followed Citigroup, with an IT budget of U.S. $4.7 billion. Bank of America, with an IT budget of U.S. $3.3 billion, was third, fourth was Wells Fargo with an IT budget of U.S. $2.0 billion, and fifth was Bank One with an IT budget of U.S. $1.9 billion. Furthermore, CELENT (2005) indicated that IT spending in the North American banking industry will continue to rise at a moderate rate from U.S. $42.6 billion in 2004 to U.S. $47.9 billion in 2007.

Regarding European banks, CELENT (2004) estimates that they spent EU 44.6 billion in 2004. The largest IT investor among European banks was HSBC Holdings, which spent EU 3.05 billion as an IT investment, followed by Deutsche Bank (EU 2.64 billion), UBS (EU 2.63 billion), ABN Amro (EU 2.26 billion), the Royal Bank of Scotland (EU 1.68 billion), Credit Suisse (EU 1.44 billion), ING (EU 1.41 billion) and BNP Paribas (EU 1.37 billion).
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