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Information technology and financial services consolidation

Anjan V. Thakor *

Business School, Department of Finance, University of Michigan, 701 Tappan Street, Ann Arbor, MI 48109-1234, USA

Abstract

This paper examines the interaction of information technology and the current consolidation in the financial services industry. It suggests that an important reason for financial service firms to consolidate and not outsource their information technology may be to retain the strategic option to be more diversified firms that offer both financial and information services in the future. © 1999 Elsevier Science B.V. All rights reserved.

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1. Introduction

In this discussion, I want to address the global consolidation in financial services from the perspective of recent developments, particularly in the US. My focus is on the information technology aspects of this consolidation.

Recently, the enormous premia that have been paid in bank acquisitions have been rationalized in part by the large projected savings in information technology expenses by the merging banks. The two most commonly cited sources of these savings are:

* Dr. A.V. Thakor is Edward J. Frey Professor of Banking and Finance at University of Michigan Business School. Tel.: 1 313 647 6434; fax: 1 313 647 6861; e-mail: athakor@umich.edu

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(i) back-office consolidation of systems; and
(ii) increased leverage with technology providers.

My conversations with bankers have revealed that, although financial services firms devote considerable resources to information technology, few firms feel that they are getting a sufficient return on their investment. In particular, they perceive significant uncertainty about whether the projected savings due to mergers will actually be realized. Part of this uncertainty stems from the difficulty in anticipating the costs involving in converting the target bank's systems (or discarding them) and training people to work within an integrated system in the combined entity. This raises two important questions:

1. Will the projected information technology savings in bank mergers be realized on average?
2. Why are banks not outsourcing their information technology more and doing more by way of sharing networks across banks?

These two questions are important for understanding the current wave of mergers in financial services. In what follows, I will attempt to provide a perspective that helps us understand these developments. This is done in Section 2. Section 3 concludes.

2. Understanding information technology choices

Some of the obvious benefits of outsourcing information technology would be:

- There would be more common systems across banks, which would be more economical for everybody in the long run.
- Interbank transactions would be faster since these systems across banks would be more likely to "talk to each other".
- There would be less uncertainty about the potential information technology cost savings from mergers.
- Banks would be able to focus more sharply on their "core competencies".

So, the question is: Why not? The answer, I believe, lies in the fact that financial service firms perceive significant strategic skills uncertainty, and that keeping information technology "in-house" is a way to keep future options open and diversify across possible areas of future focus. This argument is a specific application of the theory developed in Boot et al. (1998) and discussed in Milbourn et al. (1999).

To see this argument more clearly, note that all of our modern theories of financial intermediation assert that the essence of financial intermediation is the processing of information of some sort (see, for example, Diamond, 1984 and Ramakrishnan and Thakor, 1984). What kind of information is processed and how it is processed are both affected by information technology.

Increasingly the lines between information services and financial services are blurring, causing a meltdown of the boundaries between information technology firms and financial service firms. For example, MasterCard has invested significant capital in developing an electronic cash system called Mondex. Smart Mondex cards have embedded microchips that can store not only electronic dollars but also five other types of currency, a brief medical history of the cardholder, and a personalized electronic key that can open everything from the cardholder's apartment to his office. These sorts of developments are leading many to conjecture that in the future there may be no difference between information and financial services. In fact, in an interview with Time magazin, Goldman Sachs CEO Jon Corzine mused,

"In five years this firm may be run by a software guy",

The Boot et al. (1998) and Milbourn et al. (1999) analysis suggests that diversifying across different lines of business may be a way for a financial service firm to acquire strategic options when it is uncertain about its skills to operate future lines of business. Thus, if in the future, a firm can choose to be anywhere on a *continuum* from information services (in general) to financial services (in particular), then it may want to keep a foot in information services door while operating in financial services. This way, it can "reserve the right to play" almost anywhere on the continuum in the future. For example, if Citicorp were to choose a strategy that moved it close to the information services end of the continuum, it could decide to develop and market personal finance software.

Caution is obviously needed on this score. The bank must determine *why* it is investing in information technology and how much. Is it to build strategic options or is it just because the line executives within the bank "want" proprietary systems?

There is, of course, another possibility related to control that may explain the reluctance of banks to do more outsourcing and sharing of common information systems. And that is the loss of control over the *evolution* of technology.

As an illustration, consider IBM's entry into the personal computer (PC) market. They adopted an "open architecture", which meant that much of the "components" of the PC were outsourced. Intel provided the microprocessor, Microsoft the operating system, and a host of vendors supplied the software. This enabled IBM to come to market faster and gain market share at Apple's expense. But the cost was that it was relatively easy for clones to compete with IBM. So, down the road, IBM faced very vigorous competition.

This means that one reason for banks to keep information technology inhouse may be to enable them to develop proprietary products linked to this technology that are not quite as vulnerable to competitive pressures.

3. Conclusion

My predictions for the future are as follows.

1. Financial services consolidation will continue with an expansion of focus and increased technology spending in the short run.
2. In a few years, the strategic decisions about where banks want to lie along the financial-services continuum will have been made as strategic skills uncertainties are resolved. This will lead to much more standardization of information systems, more outsourcing and more shared information systems.
3. The next phase of evolution will involve the financial and information services industries beginning to *disintegrate* as more focused and specialized players emerge. That is, part of the current consolidation we are observing will actually be unraveled.

Well before we go through these phases we are going to have to seriously rethink our theories of financial intermediation.

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