Československá Obchodní Banka, a.s.: Applying Business Risk Audit Techniques in an Emerging Market Economy

Brian Ballou and W. Robert Knechel

ABSTRACT: The case involves Československá Obchodní Banka, a.s. (ČSOB or “the bank”), which was the third largest bank in the Czech Republic in 1997 when the case initially takes place. The case is based on publicly available information relating to ČSOB at a time when the bank was emerging from the state-owned environment of the former Communist country of Czechoslovakia. You will serve in the role of an auditor who is trying understand how to assess the fairness of financial information related to one business process of the entity, based, in part, on the effectiveness of the bank in carrying out its strategy and, in part, on the performance of the business process. This case is designed to provide you with an opportunity to apply important aspects of a business risk audit approach similar to what is utilized to some extent by all major international accounting firms (e.g., Lemon et al. 2000; the Joint Working Group [JWG] Report 2000) in a unique business setting. The requirements of the case also involve assessing the impact on the audit of the bank from privatization by a foreign investor.

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The authors acknowledge the extremely helpful participation of KPMG, particularly the partners, Mason Tokarz, Frantisek Dostálek, and Michele Lodi-Fe, and other audit team members of the ČSOB engagement in Prague, Czech Republic and Bratislava, Slovak Republic for the time period covered by the case. Additional assistance was provided by Tim Bell, Ira Solomon, and Jeff Arricale. Finally, grateful acknowledgment is also made to the Fulbright Grant Commission, which provided funds for Professor Knechel’s stay in the Slovak Republic while teaching at Ekonomická Universzítá in Bratislava. The authors also thank the editor of Issues in Accounting Education and two anonymous reviewers for their helpful guidance in revising this case.

This case was written based on conditions at the bank in 1997. There have been significant changes at the bank since that time. Any information pertaining to current conditions at the bank is based on publicly available information.
INTRODUCTION

Československá Obchodní Banka ČSOB was formed in 1965 to foster foreign trade and exchange in the Communist country of Czechoslovakia. After the peaceful fall of the Communist government in 1989, the bank received a license to offer universal banking services, but continued to focus primarily on foreign trade, foreign exchange, and capital market investments. After the split of Czechoslovakia into the Czech Republic and Slovakia in 1993, the bank was restructured with its primary base of operations centered in Prague, Czech Republic, and a sizable branch operation in Bratislava, Slovakia. At the end of 1997, the bank was the third largest in the Czech Republic and primarily owned by the Czech and Slovak central banks (26.5 percent and 24.1 percent, respectively) and ministries within the Czech government (39.2 percent), resulting in effective control by the Czech government.

BANKING IN THE CZECH REPUBLIC AND AT ČSOB AT THE END OF 1997

The fall of the communist government in 1989 served to accelerate the process of modernizing the banking sector in Czechoslovakia. With the liberalization of trade, the removal of price controls, and the devaluation of currency that followed the change in government, the banking sector was confronted with enormous challenges that it was ill-equipped to handle. The transition economy in the early 1990s was characterized by an inadequate capital base, overburdening corporate debt, low production efficiency and quality, obsolete manufacturing equipment, and a customer base with little experience in patronizing banks. To help the country rapidly overcome these obstacles, the government decided to privatize many government-controlled businesses. Assets valued at over 900 billion Czech koruna (CzK) had been sold to private investors as of 12/31/97.¹ It was decided that ČSOB should be privatized. However, to open the bank to new markets, infuse managerial talent, and gain access to technology, a foreign investor was sought. Thus, the Czech government, which owns the bank, became interested in strengthening the Czech economy and the country’s banking market and educating its targeted customers regarding banking services to make the bank attractive to large banks in the European Union.

A natural result of the economic transition experienced by the country and the banking sector was a large upswing in nonperforming assets held by most banks, as well as a few notable bank failures. In 1996, eight banks were put in receivership, including the largest privately owned bank (Agrobanka Praha, AGB). Many of these bank failures were attributed to abuse and corruption that flourished because of an underdeveloped legal and regulatory system and an early reluctance on the part of Parliament to impose strict market regulation on the banking sector. As a result of these problems, the government moved to strengthen the banking sector through a combination of recapitalization and improved regulatory oversight.

¹ To provide perspective, consider that the exchange rate of the Czech koruna (CZK) has fluctuated between a high of 26.52 CZK to U.S.$1 and a low of 32.85 CZK to U.S.$1 during the period 1992–1997. Because of exchange rate fluctuations (the rate was down to approximately 50 CZK to U.S.$1 in 2000) and the availability of this case to multiple countries, all financial amounts in the case are stated in local currency. For ease in the reading of this case, all stated amounts are considered material to the audit of the bank.
Reserves for contingent losses were considered to be universally inadequate, and the extent of collection problems were often unappreciated due to a lack of quality and timely information. Potential credit losses are a significant problem for most banks; classified credits (potentially unrecoverable assets) represent about 31 percent of bank assets, but these have mostly been reserved for or are supported by collateral. However, complexities in the legal system can make realizing the value of collateral difficult for the bank.

Until 1990, ČSOB was the only bank in the country that was active in foreign trade and providing services such as foreign currency payments, bills of exchange, letters of credit, and leasing. As a result of its foreign trade orientation, it was the only bank that had representatives outside the country. The bank also served as the primary agent for the Czechoslovak government in foreign dealings, including making loans to developing countries, facilitating international payments, and providing foreign exchange funds related to the country’s balance of payments. Consequently, state-controlled assets and liabilities were included in the financial statements of the bank prior to 1990.

**STATUS OF PRIVATIZATION**

Privatizing the bank would serve as an important signal for increasing the credibility of the fledgling capitalist economy. The Czech government would like to privatize the bank by sale of at least 51 percent of its equity interest to a single foreign investor. Such an investor would be evaluated on strategic merit as well as the price offered. There is a general consensus that the bank will not continue to thrive without the infusion of talent and resources that such a partnership would allow. To create this partnership, investors will be selected by tender. Final sales terms must be approved by the parliament. However, for the government to obtain the best possible terms, it will be necessary for the bank to resolve several ongoing disputes and uncertainties, adequately cleanse its balance sheet of illiquid or nonperforming assets, and continue to develop the banking market in the Czech Republic.

**BUSINESS MODEL FOR ČSOB**

**Organizational Structure**

As of 1997, the bank consisted of the parent company, comprising a number of branches and overseas representative offices, and subsidiaries devoted to specialized financial transactions. The bank maintains branches in 54 locations in the Czech Republic and 13 in the Slovak Republic. However, current emphasis is shifting to electronic banking so few new branches will be opened in the future. The Slovak branches report to the Bratislava branch, which reports to Prague. The Czech branches report directly to Prague. Each city-cluster of branches runs its own computer system. Consequently, interbranch transactions are processed in batches, creating the need for a significant manual reconciliation effort across the system. The bank has international representative offices in Moscow, Chicago, Frankfurt, London, and Paris and a number of subsidiaries. The bank has an explicit policy to pursue international partnerships, mergers, acquisitions, and alliances to strengthen its position as an international trade bank in Central and Eastern Europe. Figure 1 presents a business model for ČSOB, the components of which are described in more detail below.
FIGURE 1
ČSOB Business Model

<table>
<thead>
<tr>
<th>External Agents</th>
<th>Customers</th>
<th>Regulators</th>
<th>Political</th>
<th>Capital markets</th>
<th>Economy</th>
<th>Foreign banks</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Legal environment</td>
<td>Government ownership</td>
<td></td>
<td></td>
<td></td>
<td>Privatization candidates</td>
</tr>
</tbody>
</table>

| Resources and Suppliers
| Czech National Bank (CNB)
| National Bank of Slovakia
| Česká Inkasní (CCU)
| Slovenská Inkasná (SCU)
| Employees
| Technology suppliers |

| Internal Business Processes
| Strategic Management
| Core Processes
| Research and development
| Distribution of products and services
| Portfolio management
| Service and maintain customers |

| Support Processes
| Information management
| Property management
| Financial management
| Regulatory management
| Human resources management |

| Markets, Customers, and Products and Services
| Markets
| Retail
| Investment
| Commercial |
| Customers
| High net worth individuals
| Large, credit-worthy businesses
| Middle-sized, credit-worthy businesses
| Specialized financial institutions |
| Products and Services
| Credit products
| Deposit products
| Depository for investment funds
| Money management
| Securities trading
| Custody services
| State agent |

| Competitors
| Direct
| Other banks in the Czech Republic and Slovakia |
| Indirect
| Western and Central European Commercial banks, Investment banks, Capital market |
Markets, Customers, Products, and Services

The bank operates in three identifiable markets—retail, investment, and commercial—and offers numerous products to different target customers. Unlike most U.S. banks, European banks commonly serve as both an investment and a commercial/retail institution. This grouping of markets was established to effectively and efficiently market the bank’s products and services to the four targeted customer segments.

The bank’s current strategic plan calls for targeting specific products to four target customer groups. The first customer segment is large, credit-worthy businesses (defined as sales in excess of 900 million CzK). The second customer segment is middle-sized, credit-worthy businesses (defined as sales in excess of 300 million CzK). The third customer segment is specialized financial institutions. The fourth customer segment is high-net-worth retail customers and professionals. The bank already has a strong position in the first two customer segments, has had some recent success in the third customer segment, and is undertaking new initiatives to expand into the fourth customer segment.

The bank offers a large range of services, including loan origination and servicing in multiple currencies, loan syndication in multiple currencies, foreign currency trading, import and export financing, foreign payment services, sales of derivatives for hedging purposes, brokerage services, underwriting security issues in the capital market, credit card services, and custody and safe deposit services. Some of these products and services reflect the long-run experience of the bank, e.g., credit products and foreign trade facilitation. Others are relatively new to the experience of the bank, e.g., money management services to high-net-worth individuals. As part of its reorganization, the bank has focused its operations on service and customer relationships, rather than product lines. However, the bank’s operations are somewhat limited by a lack of loanable funds due to high interest rates in the interbank market and the drain of financial reserves associated with nonperforming loans.

Competitors

The bank is a universal service bank with a strong specialization in foreign trade, deriving from its unique history. Its historical market has been large export corporations originally established under the communist government. The bank’s primary competitors are other large Czech and Slovak banks and a number of international banks (e.g., Commerzbank, Germany; Vereinsbank, Germany; ING Bank, The Netherlands; and Citibank, U.S.) with significant operations in Prague. The bank strives to create a competitive advantage through its mission. Specifically, the bank’s objective is to provide retail banking to selected segments of private clients by strengthening the efficiency of operations; offering products meeting European standards; using modern forms of distribution; leveraging knowledge of foreign trade financing, currency trading, and investment banking; and leveraging domestic market position to create international opportunities. To achieve its mission, the bank states that it will strive to use creative thinking and communication from highly qualified, productive, and loyal personnel to provide value to clients and exceed expectations. The bank also stresses that it will maintain highly professional and ethical business practices, including information transparency in the financial sector, and support charitable, artistic, and welfare efforts.
Resources and Suppliers

The current structure of the bank evolved over a four-year transition period, with privatization as the ultimate objective. In 1990, the Czechoslovak government agreed to assume the obligation to settle net government-related assets on the bank’s books as of January 1993, and they met the obligation in two ways. First, the government provided funds (approximately 21 billion CzK) to cover some of the bank’s net state assets. Second, after the division of the country into the Czech and Slovak Republics, the capital base of the bank was bolstered by an infusion of 4.06 billion CzK, with approximately 75 percent provided by various agencies of the Czech government (including the Czech National Bank [CNB]), and the remainder by the National Bank of Slovakia (NBS).

A common problem faced by banking institutions was a lack of experienced professionals in all areas, especially international finance, information technology and accounting. Most banks were audited by small accounting firms, which had limited knowledge of banking in a free-market economy. Most experienced workers spent their careers in a communist society working at one position in a closed economy. As the Czech Republic has transitioned to capitalism, many individuals seeking training for professional and managerial positions have been young and inexperienced. Fortunately, most of the senior management of ČSOB have been hired since the formation of the Czech Republic and/or have been educated and trained in Western banking practices. These senior managers also have extensive experience in banking. Consequently, senior management is proactive and creative in their approach to the objectives and operations of the bank. ČSOB hopes that privatization using a foreign bank can help to bring more experienced banking professionals at the middle manager level into the bank, where they have been less successful at getting sufficiently trained employees.

In 1993, as the final step in the restructuring process, the bank created reserves for poor quality loans that predated 1990, and which had been classified in the bank’s accounting records as a loss. The Czech and Slovak governments then created special-purpose Collection Agencies, known as Česká Inkasní (CCU) and Slovenská Inkasná (SCU), respectively. The purpose of CCU and SCU was to service the nonperforming loans that were effectively guaranteed by the respective governments. Loans totaling 20.1 billion CzK were transferred to CCU, and loans totaling 5.4 billion CzK were transferred to SCU. Although the Czech government has provided full and timely support for CCU, problems involving Slovenská Inkasná developed almost immediately. After making its first scheduled payment, the Slovak Ministry of Finance notified the bank that future payments were uncertain due to the failure of the Slovak parliament to approve the required funding. Since May 1996, SCU has been in default on its principal and interest obligations to the bank.

Although acknowledging the nature of Slovak commitments as recently as May 1996, the unofficial position of the Slovak government is that ČSOB will not be repaid until a number of issues unrelated to the bank are settled between the Czech and Slovak governments. Most of these issues relate to the division of banking assets and gold reserves in the national bank at the time of the division of the country. The bank has filed for international arbitration of the issue, but the court was not expected to resolve the dispute in the near term. As of December 31, 1996, the total amount of obligations from Slovenská Inkasná was 11.35 billion
CzK (including 608 million CzK in accrued interest). The Czech government has officially committed to assist the bank in obtaining appropriate settlement of the SCU obligation, and will provide additional equity funding if losses from the obligation cause the bank to suffer capital reserve or liquidity problems.

External Agents

The Czech Republic is a parliamentary republic that was established in 1989. The government is led by the president (elected by the parliament) and the prime minister. Given the nature of the transitional economy since 1989 and the resulting challenges facing the banking sector, it is not surprising that financial institutions in the Czech Republic are more dramatically affected by political and economic forces than in more “mature” economies.

Unfortunately, 1997 was a year of turmoil, both politically and economically, and the immediate future is fraught with uncertainties that could have significant negative effects on the banking sector. Prime Minister Václav Klaus, who led the governing coalition for five years and is responsible for engineering much of the economic transformation of the country, was ousted from his position in late 1997 due to the rising unpopularity of his policies and controversy surrounding campaign contributions and the privatization process.

In spite of this political turmoil, the Klaus government claimed two notable successes in 1997. First, the Czech Republic was invited to join NATO starting in April 1999. Second, the European Commission announced that they would begin negotiations on the Czech Republic’s full membership in the European Union (EU). This latter accomplishment was accompanied with some voiced concerns about the country’s political situation, especially in regard to the protection of rights for minority groups (notably the ethnic Romani population). The Commission also expressed some concerns about weaknesses in the regulation of capital markets and the banking system and the need for a higher standard of corporate governance. The Czech government believes that privatization of ČSOB utilizing a bank from the European Union would enhance its position in gaining acceptance into the EU.

The Czech currency unit (koruna) has been stable when compared to most formerly communist countries. However, the fear of devaluation leading to inflation or hyperinflation is a risk that the government must carefully manage. Entry into the European Union could enable the country to adopt the Euro as an alternate currency after 1999, which could help stabilize the country’s currency. As a communist country, unemployment was not a concern; however it is a fact of life to some degree in a capitalist system. To help in managing this transition, employment laws in the Czech and Slovak Republics make releasing unnecessary or unproductive employees difficult. While these laws impose costs on individual companies, they help in preventing agitation for a return to communism; a view that is supported by a significant minority of the general population.

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2 In contrast, the Slovak Republic was denied admission to NATO and was ranked last out of the ten countries considered for fast-track membership in the EU. Although the EU and U.S. support ultimate membership of Slovakia in both groups, the questionable political environment in the Slovak Republic in 1997 made it unlikely that membership would be offered in the near term (although most of the problems were alleviated by a change in government in 1998).
Internal Business Processes and Financial Reporting

The bank has allocated resources to a number of internal business processes to meet its strategic objectives associated with developing its core products for its target customers in its markets. Figure 2 summarizes those processes. Each process is the source of numerous routine and nonroutine transactions, as well as sensitive accounting estimates. The accumulation of transactions and residual account balances across all business processes comprise the financial statement account balances that are the primary focal point of the audit. Figure 3 illustrates this important linkage for ČSOB’s internal business processes and balance sheet accounts.

FIGURE 2
Core and Support Business Processes for ČSOB

Research and Development
The bank is continuously striving to develop and deliver new products and services that will be of value to potential and current customers of the bank. Given the bank’s decision to enter into new market segments, the ability to successfully develop and deliver new products and services is critical to the bank’s long-term success.

Distribution of Products and Services
The bank must market and sell its products to current and potential customers. The nature of such activities varies according to the product and the target market. Consequently, the bank has tailored its activities and methods to reflect differences in clientele and market sector.

Portfolio Management
The bank has numerous types of investments that must be managed to maximize the return on assets, to meet regulatory requirements, provide adequate liquidity, and avoid significant declines in asset value. The bank executes trades on its own account as well as brokering market trades on behalf of their customers.

Service and Maintain Customers
Numerous activities performed by the bank involve services that are ancillary to the core products and services of the bank, but which are undertaken to satisfy relevant needs of customers. For example, the bank prepares periodic reports for distribution to customers and provides custodial safekeeping services.

Information Management
The bank has extensive reporting and information system development activities. However, the bank relies on batch processing and manual reconciliation to ensure reliable information processing because of a lack of system integration capabilities. The bank’s primary needs are in management information systems.

Financial Management
The bank must actively manage its capital structure to assure compliance with regulatory requirements and to minimize its costs of funds. All financial statements have been prepared in accordance with international accounting standards. The bank received a standard unqualified opinion in 1995. In 1996, the bank received an unqualified opinion with an explanatory paragraph emphasizing the problem of Slovenská Inkasná.

Human Resource Management
The bank has substantial activity related to hiring, training, evaluating, and terminating personnel. While senior management is trained in Western banking practices, middle managers and operations personnel include a shortage of employees with sufficient training in Western banking practices.

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There are substantial activities relating to working with the ministries of finance for both the Czech Republic and Slovakia. Future efforts to work with the European Union also are planned.

**Property Management**

These activities pertain to the bank’s needs for physical facilities, equipment, and other tangible assets. The bank operates many branches that are primary means of interfacing with its customers. While electronic banking is being developed, the branch system is expected to be the dominant form of banking.

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**FIGURE 3**

**Relationship among Accounts and Processes**

<table>
<thead>
<tr>
<th>Balance Sheet—Assets</th>
<th>Core Processes</th>
<th>Support Processes</th>
<th>Human Resource</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Research</td>
<td>Sales</td>
<td>Portfolio Mgmt</td>
</tr>
<tr>
<td>Cash and deposits</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Loans and receivables</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Accrued assets</td>
<td></td>
<td></td>
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<tr>
<td>Trading securities</td>
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<tr>
<td>Long-term investments</td>
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<tr>
<td>Tangible assets</td>
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<tr>
<td>Intangible assets</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Balance Sheet—Liabilities and Equity</th>
<th>Core Processes</th>
<th>Support Processes</th>
<th>Human Resource</th>
</tr>
</thead>
<tbody>
<tr>
<td>Loans from banks</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Customer deposits</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Accrued liabilities</td>
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<td></td>
<td></td>
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<tr>
<td>Bonds payable</td>
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<tr>
<td>Reserves</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Share capital</td>
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<tr>
<td>Retained Profits</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Off Balance Sheet</th>
<th>Core Processes</th>
<th>Support Processes</th>
<th>Human Resource</th>
</tr>
</thead>
<tbody>
<tr>
<td>Credit</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Commitments and guarantees</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Financial products</td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>

Shaded cells indicate accounts that may be significantly affected by transactions occurring within each business process.
Strategic Risks Associated with ČSOB’s Business Model

ČSOB is susceptible to a broad range of risks that emanate from its external environment. Figure 4 summarizes some of the key strategic risks associated with ČSOB’s business model.3 Many of these risks will have a direct impact on ČSOB’s internal operational processes, as well as their financial reports. Furthermore, these risks may place pressure on management to disguise economic reality through creative financial-reporting techniques.

3 This list of business risks is not comprehensive. The risks included in the list relate to the subsequent process analyses utilized for the case.

FIGURE 4
Business Risks Associated with ČSOB Business Model

Political
- The Slovak Republic might block the receivable payment from Slovenská Inkasná.
- The Slovak Republic might prevent large Slovak companies from doing business with ČSOB.
- Policies and regulations could be changed as the Czech Republic readies for entry into the EU.
- Elections in the country could have an effect on the state-owned ČSOB.
- Foreign relations with the country associated with a privatization investor could deteriorate.

Economic
- Devaluation of Czech or Slovak currency could occur.
- Exposure to market, credit, and interest rate risk in the Czech Republic or Slovakia could impact the bank.
- Impact of inflation or unemployment on the bank’s customers and services.
- Introduction of the Euro in Western Europe in 1999 should help stabilize exchange rates.
- Exposure to risks associated with derivatives could negatively impact the bank.

Social
- Government officials, bank customers, or employees could resist change.
- Customers could demonstrate resistance to foreign ownership and managers as the result of privatization.
- There is a lack of history with banking products for many customers in the Czech Republic and Slovakia.
- Insufficient experience for many trained in capitalist banking practices could affect decision making.

Technological
- Deficiencies exist within infrastructure in the Czech Republic and Slovakia.
- There is a lack of integrated systems within the bank.
- There have been insufficient investments in technology to develop management information systems and other needs of the bank.

Business Risks Associated with Resource Suppliers
- Unsuitable or inadequate financing arrangements inhibit ability to obtain loanable funds.
- Inappropriate syndication (selling and buying of outstanding loans) arrangements could be initiated.
- Loss, absence, or inadequacy of critical personnel could negatively impact the bank’s operations.
- A loss of cost control could result as the bank expands into foreign countries.
- Development problems could arise related to new information technology.

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INTERNAL BUSINESS PROCESS ANALYSIS

Auditors are able to select the number of processes to be analyzed and the depth of analysis required for each business process based on the materiality and riskiness of the activity and transactions occurring within the process. More specifically, auditors carefully consider the business risks facing an organization that are mitigated by allocating people and other resources in the form of business processes. For large organizations like ČSOB, business processes are often subdivided into several subprocesses, each of which are focused on a specific aspect of the general business process. When this condition is present, auditors analyze the most critical subprocesses. At ČSOB, the existence of risks associated with various aspects of the business model led auditors to identify several critical business subprocesses. One such subprocess is asset and liability management (part of portfolio management). This process consists of the bank's activities for managing the relationship between its returns from investments and its costs of funds, given its deposit and loan base. The primary tools for balancing assets and liabilities are proprietary investment trades to maximize returns and interbank transfers to minimize idle cash balances. Specific policies and procedures related to asset and liability management include:

- Risk data are reconciled to accounting records and dealer trade positions on a regular basis.
- Specific risk exposures are subject to overall limitations that are effectively monitored on a periodic basis.
- Balance sheet positions are monitored in comparison to the optimal structure established by senior management.
- The bank has up-to-date and complete manuals covering authorized investment policies and procedures for processing transactions.
- The bank performs regular compliance checks comparing bank capital reserves to the requirements of CNB (8 percent).
- The Board of Directors exercises active oversight based on internal reports.
- Effective GAP analysis (which shows the relative balance of assets and liabilities classified by interest rate and maturity structure) is periodically performed.

Business Risks Associated with Customers, Products and Services, and Markets

- Inadequate market penetration can occur in core or new product areas.
- Responses to market changes could be inadequate or inappropriate.
- Forays into foreign markets could be ineffective or inappropriate.
- Failure to attract targeted customers could result from ineffective marketing, product development, customer satisfaction, or understanding of customer needs in each segment.

Business Risks Associated with Competitors

- Loss of market share on core products could result from better quality, price, service, or marketing by a competitor.
- Loss of market share on core products could result from a new entrant, either foreign or domestic.
- A substitute financial services organization could successfully penetrate one or more business line(s).
• The payment terms (timing, amounts) of assets and liabilities are effectively matched.
• The bank performs extensive and redundant reconciliations of financial data.
• There are established procedures for managing over- or underinvested funds.
• A separate department determines the value of investments independent of trading personnel.

Auditors analyze business processes to understand how a process is designed to manage specific business risks and evaluate its ability to monitor and manage risks associated with the specific process. A process map, as depicted for the asset and liability management subprocess in Figure 5, Panel A, documents the purpose of, activities within, and transactions generated from the business process (see Bell et al. 1997; Knechel 2001). An internal threat analysis, as depicted for the asset and liability management subprocess in Figure 5, Panel B, identifies risks related to the business process, controls designed to mitigate the risks, and performance measures designed to monitor the risks. Firms document process analyses in various formats, but the information contained within them is similar.4 Figure 6 provides financial data in Czech koruna related to ČSOB’s loans to banks and customers. All amounts are material for the audit.

**FIGURE 5**
Asset and Liability Management Process Analysis

Panel A: Process Map: Asset and Liability Management

**Process Objectives**
• Manage interest rate, credit, and liquidity risks consistent with the bank’s strategy.
• Minimize idle cash and other non-earning assets.
• Meet appropriate regulatory requirements concerning capital and reserves.
• Enhance revenues through the use of proprietary trades.

**Activities**

[Diagram showing process map]

**Information Feeds**
• Strategic plan
• Financial plan (balance sheet structure, trade limits, and financial ratios)
• Regulatory requirements
• Internal data about the bank’s operations
• Structure of asset portfolio
• Valuation of asset portfolio
• Market research

(Continued on next page)
FIGURE 5 (Continued)

Information Generation
• GAP Exposures (which shows the relative balance of assets and liabilities classified by rate and term)
• Estimates of transaction volume
• Projections of financial impact of transactions (vs. financial plan)
• Revisions to financial plan
• Deal tickets documenting transaction for entry into ledgers

Accounting Impact of Activities
Routine Transactions
  Investment transactions, execution, and closing
  Interbank loans

Nonroutine Transactions
  Capital acquisition
  Other sources of financing

Accounting Estimates
  None

Panel B: Internal Threat Analysis: Asset and Liability Management

<table>
<thead>
<tr>
<th>Risks that Threaten Objectives</th>
<th>Controls Linked to Risks</th>
<th>Performance Measures</th>
</tr>
</thead>
<tbody>
<tr>
<td>Liquidity risk: Limitations on the bank’s ability to obtain funds from the interbank market or other source of short-term funding.</td>
<td>Risk data are reconciled to accounting records and dealer trade positions on a regular basis.</td>
<td>• Investment volume and activity classified by type and risk category</td>
</tr>
<tr>
<td></td>
<td>Balance sheet positions are monitored in comparison to optimal structure established by senior management.</td>
<td>• Investment activity relative to official exposure limits</td>
</tr>
<tr>
<td></td>
<td>The Board of Directors exercises active oversight based on internal reports.</td>
<td>• Level of interbank borrowings/lendings</td>
</tr>
<tr>
<td></td>
<td>Payment terms of assets and liabilities are effectively matched.</td>
<td>• Net costs of short-term cash imbalances</td>
</tr>
<tr>
<td>Inaccurate recording of transactions that could cause financial misstatements.</td>
<td>The bank has up-to-date and complete procedures manuals.</td>
<td>• Level of interbank borrowings/lendings</td>
</tr>
<tr>
<td></td>
<td>The bank performs extensive and redundant reconciliations of financial data.</td>
<td>• Investment volume and activity classified by type and risk category</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Gains/losses on different types of investments</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Net interest earnings</td>
</tr>
</tbody>
</table>

(Continued on next page)
FIGURE 5 (Continued)

Risks that Threaten Objectives

<table>
<thead>
<tr>
<th>Risks</th>
<th>Controls Linked to Risks</th>
<th>Performance Measures</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inaccurate valuation of assets and related risk assumptions that could cause inappropriate investment decisions.</td>
<td>Effective GAP analysis performed periodically comparing interest rate and maturity structure of assets and liabilities.</td>
<td>• Gains/losses on different types of investments</td>
</tr>
<tr>
<td></td>
<td>Established procedures for managing over- or underinvested funds.</td>
<td>• Cash balances, actual and budget, on a daily basis</td>
</tr>
<tr>
<td></td>
<td>Specific risk exposures are subject to overall limitations that are effectively monitored on a periodic basis.</td>
<td>• Cost of capital</td>
</tr>
<tr>
<td></td>
<td>Separate department established to value investments independent of trading personnel.</td>
<td>• Net interest earnings</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Interest rate gaps</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Activity in deposit accounts</td>
</tr>
</tbody>
</table>

FIGURE 6
ČSOB Loan Balance Details, December 31, 1995–1997*

<table>
<thead>
<tr>
<th>Loans and Advances to Banks: Details</th>
<th>1997</th>
<th>1996</th>
<th>1995</th>
</tr>
</thead>
<tbody>
<tr>
<td>Current—domestic</td>
<td>2</td>
<td>1</td>
<td>196</td>
</tr>
<tr>
<td>Current—foreign</td>
<td>3,336</td>
<td>4,538</td>
<td>2,162</td>
</tr>
<tr>
<td>Term—domestic</td>
<td>26,588</td>
<td>16,596</td>
<td>5,809</td>
</tr>
<tr>
<td>Term—foreign</td>
<td>18,174</td>
<td>8,669</td>
<td>6,708</td>
</tr>
<tr>
<td>Advances—domestic</td>
<td>11,456</td>
<td>17,292</td>
<td>31,863</td>
</tr>
<tr>
<td>Advances—foreign</td>
<td>3,904</td>
<td>3,366</td>
<td>2,380</td>
</tr>
<tr>
<td>Provision for credit losses</td>
<td>(1,263)</td>
<td>(1,071)</td>
<td>(937)</td>
</tr>
<tr>
<td></td>
<td>62,197</td>
<td>49,391</td>
<td>48,191</td>
</tr>
<tr>
<td>Repayable on demand</td>
<td>3,705</td>
<td>4,478</td>
<td>12,754</td>
</tr>
<tr>
<td>3 months or less</td>
<td>49,464</td>
<td>26,721</td>
<td>17,450</td>
</tr>
<tr>
<td>3 months to 1 year</td>
<td>6,752</td>
<td>14,537</td>
<td>9,762</td>
</tr>
<tr>
<td>1 year to 4 years</td>
<td>1,317</td>
<td>3,399</td>
<td>7,418</td>
</tr>
<tr>
<td>over 4 years</td>
<td>959</td>
<td>256</td>
<td>807</td>
</tr>
<tr>
<td></td>
<td>62,197</td>
<td>49,391</td>
<td>48,191</td>
</tr>
<tr>
<td>Nonperforming loans and advances</td>
<td>—</td>
<td>1,048</td>
<td>1,048</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Loans and Advances to Customers: Details</th>
<th>1997</th>
<th>1996</th>
<th>1995</th>
</tr>
</thead>
<tbody>
<tr>
<td>Czech Republic</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Collection company</td>
<td>19,318</td>
<td>23,250</td>
<td>25,516</td>
</tr>
<tr>
<td>Slovak collection company</td>
<td>1,258</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Banka Bohemia</td>
<td>14,427</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Trade companies</td>
<td>21,929</td>
<td>17,141</td>
<td>21,278</td>
</tr>
<tr>
<td>Industrial companies</td>
<td>24,003</td>
<td>18,570</td>
<td>—</td>
</tr>
<tr>
<td>Other</td>
<td>26,015</td>
<td>21,919</td>
<td>29,145</td>
</tr>
</tbody>
</table>

(Continued on next page)
### SUMMARY

In many ways, ČSOB is similar to a bank in the U.S. or other free-market economies. It takes in deposits from customers, processes cash disbursements on their behalf, issues loans and other credit instruments, and collects repayments. The bank’s primary specialty is in foreign transactions, but trade facilitation is slowly giving way to foreign currency trading and derivative contracting. On the other hand, due to its location and history, the bank has a number of unique attributes that create challenges for the external auditor. The state of information technology, social issues within the country, the actions of political entities, and the condition of the Czech economy are all relevant to the audit approach in a manner that is more significant than for most banks in the U.S. economy. The following assignments are designed to lead students through a business process analysis portion of a business risk audit approach and to allow them an opportunity to consider how changes in a client’s operating environment impacts an engagement. These assignments highlight how the bank’s unique circumstances affect the way in which an auditor obtains assurance about the risks of the bank and the reliability of its financial reports.
**REQUIREDMENTS**

**Part I: Process Analysis—Loan Management**

I.1 Loan Management is an important subprocess of the Distribution of Products and Services Business Process. Figure 7 provides information related to Loan Management. Complete the process map and internal threat analysis for Loan Management (Figure 8, Panels A and B).

- Identify the process objectives.
- Identify the classes of transactions affected by the process.
- Identify controls for the risks (i.e., the things that help mitigate the risks).
- Identify significant performance measures that could be used to monitor the process risks or evaluate the process controls.

I.2 Figure 9 presents a graphical representation of the risk assessments made by the audit team that are relevant to the loan management subprocess. Initial risk assessments are indicated by a rectangular box and risk assessments after considering process controls are indicated with a star (and linked by an arrow representing the control's impact on likelihood and magnitude). Review the risk assessments made by the audit team.

- Do you agree with the risk assessments? Why or why not?
- What evidence would you expect to obtain to test the controls that would be sufficient to support the audit team’s initial conclusions concerning residual risks?
- For risks that are not sufficiently high to warrant substantive testing, which performance measures can be used to monitor whether the risk is appropriately plotted? Consider (a) where you would obtain the relevant data and (b) what concerns you would have about the reliability of the data.

I.3 The audit team designs their strategy for substantive testing based on residual risks. Traditional and other substantive tests will only be used when residual risks are deemed to be unacceptably high.

- Based on the results of strategic analysis and the completed process map and internal threat analysis, which transaction streams of the loan management process most concern you, and how might those concerns impact the bank’s 1997 financial statements? Explain.
- Design a substantive testing strategy for residual risks from Figure 9 that affect the financial statements. Consider (a) the accounts likely to be affected by the risk, (b) the implications of having ineffective controls and/or indicators of poor performance, and (c) the residual risk assessments of the audit team.
- How does this testing strategy differ from what might be done using a more traditional, substantive based approach to the audit?
Part II: Impact of a Change in a Client’s Environment on the Audit

II.1 In 1999, ČSOB became privatized by attracting Belgium’s KBC Bank, the 15th largest bank in the European Union, to purchase 66 percent of the bank. How should privatization with a leading Western European bank impact ČSOB’s overall business model (Figure 1), process map (Figure 8, Panel A), and internal analysis (Figure 8, Panel B) for loan management?

II.2 How do you expect that privatization will impact residual risks for the bank’s loan management process as depicted in Figure 9?

II.3 How would you alter the substantive testing strategy describe in I.3 based on the privatization and the adjustments that you made in II.2?

FIGURE 7
Information Related to Loan Management
(Subprocess for Product Distribution)

Loan Management: This process consists of the activities performed by the bank related to the origination of loans to corporate and retail customers. This process incorporates advertising and marketing, asset pricing (primarily interest rates), credit review and approval, and loan distribution. Some of the policies and procedures pertaining to the origination of loans include:

- Czech National Bank (CNB) rules require that loans denominated in a foreign currency must be adequately hedged against currency shifts, or the loan must be classified and reserved as a potential problem loan.
- The bank maintains specific policies on exposure limits by customer, industry, and geographic region.
- Pricing decisions are made by a separate pricing committee, not loan officers.
- All loans are reviewed by the head office loan administration.
- All loans are independently appraised and rated for risk.
- Overall limits are placed on individual loan exposures.
- All collateral is appraised and its collateral value discounted by at least 20 percent.
- A special collection company, which is a bank subsidiary, follows up on loan defaults (with the exception of CCU and SCU, which follow up on the government’s outstanding obligations).
- Customer satisfaction and market research surveys are undertaken periodically to assess quality of distribution.
- Redundant and timely reconciliations are performed for all loan-related transactions and accounts.
- Posting errors are investigated and corrected in a timely fashion.
- Collateral is periodically confirmed, inventoried and/or valued, and valuation in support of loan balances is recalculated on a regular basis.
Panel A: Process Map: Loan Management (partially completed)

Process Objectives

Activities

Information Feeds

- Strategic plan
- Identification of products and services by target market
- Customer research
- Advertising and marketing strategy
- Models for establishing asset prices
- Credit scoring tools

Information Generation

- Loan records
- Credit scoring system
- Customer relation reports
- Transaction records
- Customer statements and activity reports
- Exposure reports by customer and product line
- Reports required by National Bank

(Continued on next page)
FIGURE 8 (Continued)

Accounting Impact of Activities
Routine Transactions:

Nonroutine Transactions:

Accounting Estimates:

Panel B: Internal Threat Analysis: Distribute Asset Products and Services

<table>
<thead>
<tr>
<th>Risks that Threaten Objectives</th>
<th>Controls Linked to Risks</th>
<th>Performance Measures</th>
</tr>
</thead>
<tbody>
<tr>
<td>R1: Economic risks such as interest rates and currency exposures that may increase the likelihood of default by loan customers</td>
<td></td>
<td></td>
</tr>
<tr>
<td>R2: Concentration risk as evidenced by excessive exposure by customer, industry, or geographic region</td>
<td></td>
<td></td>
</tr>
<tr>
<td>R3: Override of lending policies or loan pricing by lending officers or branch managers</td>
<td></td>
<td></td>
</tr>
<tr>
<td>R4: Default by loan customers</td>
<td></td>
<td></td>
</tr>
<tr>
<td>R5: Ineffective distribution channels that make it difficult to service prospective customers</td>
<td></td>
<td></td>
</tr>
<tr>
<td>R6: Information processing is inaccurate, slow, or unreliable</td>
<td></td>
<td></td>
</tr>
<tr>
<td>R7: Political interference undermines the quality of loans issued or the ability to enforce collection upon default</td>
<td></td>
<td></td>
</tr>
<tr>
<td>R8: Collateral is inadequate to cover default losses or cannot be recovered</td>
<td></td>
<td></td>
</tr>
<tr>
<td>R9: Inadequate liquidity available, causing the loss of prospective customers due to limitations on primary funds available for new loans</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
FIGURE 9
Audit Team Risk Assessments: Loan Management Subprocess

Legend: Business Risk
Affect of controls
Residual Risk
ABSTRACT: This case is designed to provide students with an opportunity to apply important aspects of a business risk audit approach similar to what is utilized to some extent at all major international accounting firms (e.g., Lemon et al. 2000; the Joint Working Group [JWG] Report 2000) in a unique business setting. The case involves Československá Obchodní Banka, a.s., which was the third largest bank in the Czech Republic at the time the case takes place. This setting enables students to utilize information from a strategic analysis phase of a business risk audit for developing an audit plan for a critical business process. The case is set at the time that the bank was emerging from the state-owned environment of the former Communist country, Czechoslovakia, into a full-fledged public institution through privatization. Students develop expectations about financial results, both short-term and long-term, based on the ability to translate business process performance into wealth creation for stakeholders. Subsequent to the time period for this case, the bank was privatized and major changes rapidly occurred. These changes—most of which are not publicly available—remedied many of the situations facing the bank. This case also provides students with the opportunity to consider how a major change in a client’s environment can impact the audit engagement when utilizing a business risk audit approach.

INTRODUCTION

This case offers a unique setting in which students must apply business risk analysis techniques to an audit. This case involves a specialized industry—banking—in an international setting facing a high degree of uncertainty. This environment, converting from a communist to a capitalist economy, is a rich setting to gain an understanding of audit approaches based on having knowledge of the business, industry, and management of the unique set of business risks faced by an audit client. To gain more insights into the client on which this case is based and the audit approach applied to it, see Eilifsen et al. (2001).

This case is designed to focus on the business process analysis part of a business risk approach to auditing. To accomplish this objective, students are provided with a strategic analysis (including an entity-level business model) for the bank. Then, they complete a process analysis for a core process within the bank and adjust the analysis based on significant changes in the client’s environment as a result of privatization. If the case is used in its entirety, instructors should budget about one or two classroom sessions with significant advance preparation by students. The case also can be used as a capstone exercise in a first auditing course or as a unifying exercise in a graduate course, possibly with teams of students submitting a report and/or making a presentation. The learning objectives for each part of the case exercises are summarized in Figure 10.
There are many different ways in which the case can be used in an auditing, accounting, or M.B.A. course covering business risk management. The main difference between using the case in an undergraduate or graduate course is the depth to which students are required to pursue each part of the case. The suggested solutions might exceed what is expected from undergraduates or those possessing limited exposure to business risk audit approaches. Two options and the results of pilot testing for each are described below.

**Option 1: Complete Coverage Including One or Two In-Class Discussions**

The entire case can be used as a capstone assignment at the end of a first course in auditing or as part of an advanced auditing course. One or two class sessions of concentrated effort are needed to complete the entire case in a classroom setting. After a brief class discussion on the business model and strategic risks, students can prepare Part I. A class discussion of residual risk assessment and substantive audit testing can occur during one session. A second session can be based on student preparation of Part II, covering the monitoring of the business and the ensuing impacts on the business model, business processes, and residual risks. Any remaining time in the second session could involve a summary of business risk approaches to auditing.

---

**FIGURE 10**

**Learning Objectives for Each Part of Case Exercises**

**Part I: Process Analyses for Loan Management**

The primary purpose of this module is to understand how business process analysis is used to generate expectations about an organization’s performance that can be used to evaluate whether a gap exists between reported results and expectations that must be further addressed by the auditor:

- to understand how effectively managed business processes help in managing overall business risks
- to learn how to perform process analysis
- to learn how to derive audit implications from process risks
- to learn how process controls can mitigate process risks
- to learn how an auditor can obtain assurance from the knowledge gained through process analysis
- to appreciate how management propositions (assertions) relate to auditor propositions, and how the auditor obtains assurance that the two sets of propositions are consistent
- to learn how to use performance measures to monitor risk and evaluate controls
- to learn how residual risks relate to decisions regarding subsequent testing of financial statement information

**Part II: Impact of a Change in a Client’s Operating Environment on the Audit**

This module is included to provide students the opportunity to monitor an organization and adjust existing analyses in response to environmental changes:

- to learn how to monitor a client’s business and industry
- to learn how to update existing process analyses
- to gain experience updating an audit plan when the ownership of a client changes dramatically
- to learn to shift the set of residual risks when an event mitigates some prior risks but creates other risks

---

**SUGGESTED CASE USAGE AND PILOT STUDY RESULTS**

There are many different ways in which the case can be used in an auditing, accounting, or M.B.A. course covering business risk management. The main difference between using the case in an undergraduate or graduate course is the depth to which students are required to pursue each part of the case. The suggested solutions might exceed what is expected from undergraduates or those possessing limited exposure to business risk audit approaches. Two options and the results of pilot testing for each are described below.
Option 2: Team Preparation with an Accompanying Comprehensive Report/Presentation

The assignments can be dispersed during the course of a semester using teams to prepare the case. This approach is best suited for using the case as a unifying theme during a course. As new concepts are covered in the class, appropriate sections of the case can be used to illustrate the new concepts. The text of the case can be assigned when discussing procedures to understand a client’s business or when discussing preliminary planning and risk assessment. Part I can be used when discussing specific issues related to processes, transaction cycles, and/or planning of substantive tests. Part II can be used when discussing subsequent events or ongoing monitoring of clients. Teams can work on each part outside of class and present a comprehensive report at the end. One idea is to have teams present each part of the case to the rest of the class (over one class session).

This case has been pilot-tested in five different settings throughout the United States and in two other countries by one or the other author (for a total of more than 20 different classes of students). All five pilot-test settings were successful, demonstrating that the case is flexible for different audiences and contexts. Figure 11 outlines key aspects of each of the five pilot settings, which should give instructors an idea of how the case might work in a setting under consideration.

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FIGURE 11
Pilot Test Settings and Results

Setting 1: Undergraduate Auditing Students in the United States
Undergraduate students were given specific assignments prior to in-class discussion on each module. There were no presentations associated with the case discussions. However, students were required to submit a final case solution as a formal paper. Some observations from the pilot test:

- Students were forced to think outside of their comfort zones by examining a company operating in a business environment with which few, if any, were familiar.
- Students were intrigued with business practices in a Central European country.
- While understanding a business risk approach in an international organization was challenging, students were able to utilize the figures to develop experience in applying this methodology.
- In-class discussion and the formal reports suggested that students were able to make progress understanding this methodology by working through the issues involved.

Setting 2: Graduate Auditing Students in the United States
Graduate auditing students were grouped in teams to work on the case outside of class. Teams were assigned all parts over a time period covering lecture materials related to business risk auditing. Each team handed in a report covering all parts and made a presentation on one of the parts of the case. Some observations from the pilot test:

- Students did an excellent job of first documenting and then discussing the external and internal threats associated with the bank meeting its strategic and process objectives.
- Students constructed thorough process analyses for loan management.
- The most interesting discussion surrounded the implication of the risks and controls and the linkage of business process information to subsequent financial statement auditing procedures.
- The case was effective for illustrating business risk auditing because of the inherent difficulties associated with conducting a more traditional, transactions-based audit approach in this business environment.

(Continued on next page)
FIGURE 11 (Continued)

Setting 3: Executive Education Students in New Zealand
Executives in New Zealand participated in a three-day course that was structured around the case. Most students had little background in accounting or auditing. Students worked on the case by spending time in small-group, break-out sessions, and then conducted presentations in front of the entire class for a portion of the case. No formal report was required. Some observations from the pilot test:

- Executives were able to understand the basic concepts associated with business risk auditing.
- Some executives were excited about the potential benefits of examining their organizations using this perspective.
- Executives found the case easy to understand even though they did not have substantial accounting or auditing backgrounds.
- Instructors were able to serve a facilitator role because of the rich discussion initiated and perpetuated by the executives.

Setting 4: Graduate Auditing Students in Norway (with no audit background)
Graduate students were given specific assignments prior to in-class discussion on each module. There were no presentations associated with the case discussions. Also, no formal reports were required. Some observations from the pilot test:

- Students were able to understand the case because the banking industry is fairly universal.
- Students were able to identify differences in business practices in Norway and the Czech Republic (both of which differ somewhat from the United States).
- Having no background in traditional audit methodologies, students grasped business risk auditing readily and were excited about using the approach in the field upon graduating.

Setting 5: Interns with a Major International Accounting Firm (in nine U.S. cities in the south, north, and east)
Auditing interns, most of whom had not taken an auditing course and had only been exposed to limited training, participated in two-day seminars structured around the case. Groups of four to six interns worked on subsets of each of the assignments and presented their answers to the other groups. Some observations from the pilot test:

- Interns were able to understand the case even though it involved a specialized process (loans) within a specialized industry in a foreign country experiencing a transitional economy.
- More than 300 interns representing more than 100 universities participated in the seminars. There was a remarkable similarity across regions and university backgrounds in their abilities to understand the basics of a business risk audit approach and the “hooks” in the case important for completing the various requirements.
- Formal feedback mechanisms from the case seminars included several measures relating to case quality and relevance for auditing classes and/or careers. Mean scores on all questions were above six on a seven-point scale.
TEACHING NOTES

Teaching Notes are available through the American Accounting Association’s new electronic publications system at http://aaahq.org/ic/browse.htm. Full members can use their personalized usernames and passwords for entry into the system where the Teaching Notes can be reviewed and printed.

If you are a full member of AAA and have any trouble accessing this material please contact the AAA headquarters office at office@aaahq.org or (941) 921-7747.

REFERENCES

Joint Working Group (JWG) of the Assurance Standards Board of the CICA, the Auditing Practices Board of the United Kingdom and Ireland, and the Auditing Standards Board of the AICPA. 2000. Recommendations arising from a study of recent developments in the audit methodologies of the largest accounting firms. Toronto, Canada: IAPC.