Credit Bureau Knowledge Guide

IFC International Finance Corporation
World Bank Group

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Preface

In 2001, the International Finance Corporation (IFC) launched the Global Credit Bureau Program. Since the launch of the program, the IFC has supported the development of credit bureaus in over 40 countries through technical assistance and investment, including support to the regional credit bureau in Central America and the first private credit bureau in Egypt, work on the legal and regulatory framework in Kenya and Panama, and ongoing assistance towards the development of a private bureau in Vietnam. The IFC, together with the World Bank, began monitoring the credit reporting environment in over 100 countries, and the results are included and disseminated through the Doing Business report.

The content of this *Credit Bureau Knowledge Guide* reflects the IFC's experience with credit bureau markets, and its purpose is to provide a comprehensive overview of the development of credit bureaus. IFC's experience in emerging markets indicates that global knowledge on credit bureaus is fragmented, much like the credit information sharing environment itself in most emerging market countries. The objective of this guide is, therefore, to disseminate best practices in credit bureau development and further contribute to the development of credit bureaus in emerging markets.

The *Credit Bureau Knowledge Guide* was prepared by a team led by Nataliya Mylenko and comprising the members of the IFC Global Credit Bureau Program team: Tony Lythgoe, Oscar Madeddu, Colin Raymond, Shalini Sankaranarayan, Peter Sheerin, and Stefano Stoppani. The work was carried out under the general direction of Peer Stein. The authors would like to thank colleagues in the World Bank Group for their continuous support of the Global Credit Bureau Program work and preparation of this Guide. We are also grateful for the generous contributions of the credit bureaus around the world that made possible the development and publication of this Guide. We would particularly like to acknowledge the design, layout, and production support of Aichin Lim Jones and editorial assistance of Madeline Nevins.

We would like to acknowledge the support of our donors, without whom the Global Credit Bureau Program's activities would not have been possible. Specifically we would like to thank the Italian government for its support of our activities in Eastern Europe and Latin America and the Caribbean; the government of the Netherlands for its support of our activities in Africa; the Norwegian government for overall program support and support of our activities in Africa; the Australian government for its support of our activities in Vietnam; the government of New Zealand for its support of our activities in Pakistan and Indonesia; and Visa International for global program support.

We hope this Guide will prove both informative and useful.

Introduction

Credit bureaus are essential elements of the financial infrastructure that facilitate access to finance. Today, less than 25 percent of the people living in developing countries have access to formal financial services, compared to up to 90 percent in developed markets. Financial sector development unleashes the productive power of enterprises and facilitates inclusion of the informal sector in the formal economy. Access to savings and credit in rural areas allows farmers to smooth consumption and often survive the unpredictable risks of droughts and natural disasters. Obtaining a loan to send children to school helps a family create better lives for their children and reduces the need for harmful child labor. Having long-term financing to build a proper home is the direct result of a complex interplay of different financial intermediaries within the right financial infrastructure and regulatory framework.

Banks play a central role in extending financial services within an economy. In most markets, commercial banks began by focusing on large companies and select retail clients. Initially, their organizational structure made it too costly to serve smaller business clients and the mass markets. Accordingly, it has been primarily through informal financial services and non-bank credit that at least some of the needs of smaller entrepreneurs and communities have been and are being met. These include money-lenders, supplier credit, and many forms of mutual financial self-help groups, such as the Rotating Savings and Credit Associations or Tontines in Africa. The credit union movement that originated in the 19th century and has since spread around the world is probably one of the most prominent examples of the power of these mutual financial self-help groups. The rise of credit unions and the revival of banks' social commitment towards their communities inspired the rise of microfinance in developing countries over the past two decades. The approach to lending, however, has remained traditional: making decisions, based on subjective judgments, about a borrower's propensity to repay supported by alternative risk-mitigating mechanisms such as group guarantees.

A true revolution in lending occurred with the introduction of modern financial technologies, and this revolution has made access to credit almost ubiquitous in developed markets. The technologies allowed banks to move from the traditional approach where credit is granted based on subjective judgment to more automated processes based on quantitative models. As a result, lenders are able to deliver financial services at significantly reduced costs and expand credit to broader segments of the economy, thus further democratizing financial services. In particular, the introduction of credit scoring in the fifties in the United States—coupled with the automation of workflow and credit underwriting—played a key role in the rapid rise of consumer lending. Credit bureaus are

critical in helping lenders make faster and more accurate credit decisions. Credit histories not only provide necessary input for credit underwriting, but also allow borrowers to take their credit history from one financial institution to another, thereby making lending markets more competitive and, in the end, more affordable.

The first chapter of this Guide provides the basis for understanding the operations of credit bureaus. It draws on the most recent empirical research conducted by the World Bank on the industry trends and the effects of using credit information on availability of financing and improved risk management.

Although the first credit bureaus may be traced back to the early eighteen hundreds in London, modern credit bureaus have rapidly evolved only since the fifties fueled by improvements in technology and expansion of credit. Among the developing and emerging markets, Latin America has some of the oldest credit bureaus in the world, but not until the nineties did credit bureaus take off in most other developing and emerging markets. Between 1990 and 2005, the total number of private credit bureaus has more than doubled. In Asia, many emerging markets turned towards credit reporting after the financial crisis in the nineties. New credit bureaus have emerged at a rapid rate in Eastern Europe over the past five years, with many of the projects that started in the nineties eventually coming to fruition. The Middle East and North African region has only recently seen a growing interest in credit reporting, with new developments underway in Morocco, Egypt, and Pakistan. Sub-Saharan Africa, except for South Africa which is home to one of the oldest existing credit bureaus, is still lagging behind, but many reform-minded countries are taking the lead to support their development in line with reforms for greater access to financing.

Chapter 1 also discusses the roles played by consumer and commercial credit bureaus to support lending to small businesses. With the rise in retail banking, small business lending has become the latest frontier in innovation. Historically, small business borrowers represent a difficult market to serve because of the traditional high-cost approach of judgmental credit evaluation. Wells Fargo pioneered the adaptation of consumer lending technologies to small business lending in the nineties in the United States. Although no dedicated small business credit reporting existed in the United States until a few years ago, consumer credit histories of the owner of a business proved highly predictive of the credit performance of that business. The innovations in small business lending have since been adopted widely in developed countries and have also begun to find their way into developing countries. Microfinance institutions, which have relatively high operating costs, have seen this innovation as an opportunity to reduce cost and become more competitive. As traditional retail lenders have started poaching their clients in some markets, such as Bolivia, it has also become more important for microfinance lenders to join and support credit bureau initiatives.

Reporting on small and microbusiness segments of the economy, have been neglected by both consumer and commercial credit bureaus in the past. Even in the United States, it took time for an industry consortium to launch small business credit reporting in 2002. Several developing market credit bureaus, such as in Thailand, India, and more recently Turkey and the Kingdom of Saudi Arabia (KSA), have already incorporated provision of small business credit reporting into their business plans to avoid the mistakes of their more developed counterparts.

The second chapter of the Guide summarizes the experience of the IFC credit bureau expert team in the development of private credit bureaus in countries around the world. The chapter presents analyses of the various approaches to the development of the bureau and discusses the technology, financial, and staffing issues a developing bureau must address.

Development of a credit bureau takes a long time, and requires a long-term commitment of all stakeholders. The entire process of setting up a credit bureau, from initial discussions to public education and work on the legal and regulatory

framework, to actual implementation of the bureau's systems, to uploading data and issuing the first credit report may take five years or longer. Active participation of creditors and the strong support of government are necessary in this effort. In many emerging markets, banks are the largest creditor to individuals and firms in the formal system, hence credit bureau development often focuses initially on facilitating information-sharing among banks and then includes other creditors, such as telecom companies and retailers.

Credit bureaus are characterized by economies of scale, and coordination among creditors is critical for operations startup. In many cases, the strong support of bank supervisors as well as the willingness of government to provide easy access to public databases, are critical to enable credit bureau establishment. In some cases, the central bank opted to operate a credit registry and provide the data to lenders; more recently Russia and Kazakhstan chose a private sector solution with strong encouragement from bank supervisors to share information.

Political support and willingness to share information are essential, but challenges do not stop there. Once the creditors are ready to share information, the bureau has to overcome multiple technical challenges. In several countries, the infrastructure for data exchange is inadequate; unique IDs are unavailable; or other identifying information, such as names, addresses, dates of birth, are recorded incorrectly and/or inconsistently. All these issue make the collection and merging of information difficult, but they should not stop the development of a bureau. In many cases, the setting up of a bureau serves as a wake-up call for lenders to start capturing and storing necessary information. Over time, it enables banks to better manage risks and optimize lending processes.

Basic information exchange is a first step. The bureau uses this information to provide a comprehensive analysis of borrower creditworthiness through such techniques as credit scoring. The bureau can also use the information for portfolio monitoring and fraud detection— just a few of the value-added services discussed in Chapter 3 that a bureau can provide.

In many countries, information-sharing cannot begin because an adequate legal and regulatory framework is lacking. Chapter 4 presents an overview of approaches to regulating sharing of information. With the rise in retail lending and the collection of data on individuals and small businesses by credit bureaus, concerns about data protection and consumer rights are also on the rise. In some countries, this debate has been highly political; in others, the debate focuses more on recent abuses, such as identity theft. The latter has become much more than a nuisance, especially in the United States where people spend more and more time protecting the integrity of their credit histories. This situation emphasizes the importance of security measures that credit bureaus must take, but it also has more far-reaching implications for the kinds of data that can be used for credit decisions and the way bureaus ensure the quality of the data and value-added services they provide.

The difficulties in ensuring data quality, which many developing markets face, could delay the startup of a new credit bureau. Developing markets are not the only ones that face this challenge, however, as data quality concerns are also present in more developed markets, including the United States. A recent study by the Consumer Federation of America and the National Credit Reporting Association revealed a significant variation in credit score accuracy and in the quality of underlying credit history data among the leading bureaus. Accordingly, the future of credit reporting will not only require further consumer education on the use, benefits, and risks of credit reporting but also consistent endeavors by credit bureaus to ensure data quality and consumer access.

Credit reporting legislation should carefully balance the ability of creditors to share information with the individual's right for privacy. Banks often use their secrecy and confidentiality provisions as an excuse not to share information. Banks generally are willing to provide information on defaults but not on good loans. This unwillingness to share positive information, however, limits competition and does not allow a good borrower to leverage his/her good credit history to obtain better terms of credit. The borrower has a right to

have his or her credit history disclosed to any lender he or she may approach to obtain credit. The law should enable a credit bureau to facilitate information-sharing while at the same time ensuring data security and protection of data subject's rights.

Credit bureaus are an important element in promoting responsible lending. With the consumer lending crisis in Hong Kong (China) and South Korea just a few years ago, reckless credit card lending in the absence of credit bureaus with positive information led to the over indebtedness of individuals and subsequent rise in personal bankruptcies. Since then, Hong Kong (China) introduced positive credit reporting in order to reduce the risk of this happening again. As other markets struggle with predatory and reckless lending, credit bureaus can play a central role in allowing lenders to evaluate indebtedness of clients and setting prudent and responsible lending limits.

Rounding out the theoretical discussions and practical guidelines are five case studies about credit bureaus that have been established or are being established in recent years in different parts of the world: an example of a successful credit bureau serving microlenders in South Africa; a regional credit bureau in Central America, which is a promising solution for smaller markets where lenders operate on a regional basis; a credit bureau in the KSA that demonstrates the importance of the long-term commitment of the stakeholders to the bureau setup; the first credit bureau in Egypt, which demonstrates how a private credit bureau can be set up in a relatively short time when all stakeholder interests are aligned and the project has the strong backing of the authorities; and a Vietnamese bureau that shows the importance of a comprehensive policy for the development of the private credit bureau and highlights the importance of public sector support.

1 Basics of Credit Reporting

1.1 Definition of a Credit Bureau

A credit bureau is an institution that collects information from creditors and available public sources on a borrower's credit history. The bureau compiles information on individuals and/or small firms, such as information on credit repayment records, court judgments, and bankruptcies, and then creates a comprehensive credit report that is sold to creditors.

Credit bureaus differ from credit rating agencies, such as Standard & Poors (S&P), Moody's, and Fitch, which collect financial information on large companies; conduct detailed analyses of operations, finances, and governance of such companies; and then issue credit ratings. Credit bureaus focus on smaller creditors, mostly concentrate on credit repayment records, and rely on statistical analyses of large samples of borrowers and not on in-depth analysis of individual companies.

Credit bureaus are essential to the success of credit markets. They serve as indispensable tools used by financial institutions to support their retail lending business. Credit bureaus help address the fundamental problem in financial markets known as "asymmetric information," which means that the borrower knows the odds of repaying his or her debts much better than the lender does. The inability of the lender to accurately assess the credit worthiness of the borrower contributes to higher default rates and affects the profitability of the financial institution.

Lenders address this problem by investigating a borrower's ability to repay and/or by requiring collateral to cover the loss in case of a default. Requiring collateral is often problematic, especially in developing countries and particularly in the case of new firms, micro-entrepreneurs, and small and medium-size enterprises (SMEs), which often lack significant assets for use as collateral. In addition, the costs to lenders of seizing and liquidating assets that were used as collateral can be significant and the process can take a long time. According to a World Bank survey,[1] in most developing countries it takes one to two years to enforce a contract and costs around 20-40 percent of the cost of the debt. In extreme cases, for example in the Congo, it takes on average three years to enforce a contract and may cost up to 250 times the cost of the debt.

Hiring investigators to check borrowers' backgrounds is costly. Conducting in-depth background checks, while justifiable for larger loans, is not possible for small loans. The unavailability of information at a low cost restricts the ability of lenders to expand and profitably run retail lending operations.

Monitoring and screening borrower behavior offers an alternative strategy to reduce the problem of asymmetric information. Past behavior is an extremely reliable predictor of future behavior. For example, many countries commonly grant credit

[1] World Bank. 2005. *Doing Business in 2005: Removing Obstacles to Growth.* Washington, D.C.: World Bank, International Finance Corporation and Oxford University Press.

to a firm only after the firm has had an account with the bank for at least six months to a year, which allows the bank to observe the firm's cash flow. Another alternative, the group lending approach, mostly used by microfinance institutions, allows lenders to provide loans to individual borrowers who, through participation in the group, have developed a credit history with the institution. Only then does the lender extend individual loans. In these examples the credit history of the borrower, sometimes referred to as "reputational collateral," enables an individual or a firm to gain access to financing.

Credit bureaus also rely on monitoring and screening of borrower behavior. Lenders share information accumulated through their lending operations with a credit bureau, which then disseminates it to other credit providers. This allows them to better assess credit risks based on a given borrower's past payment behavior. Lenders, therefore, can make better informed lending decisions.

1.2 Consumer versus Commercial Reporting

The private credit bureau industry is divided into two categories: consumer credit bureaus and commercial credit bureaus (see Figure 1). Small businesses can be covered by either side.

The business model of consumer credit reporting consists of (a) receiving information for free, primarily from creditors and public sources and then matching, cross-checking, and merging such data; (b) analyzing and interpreting the data; and (c) selling it back to the lenders. Historically, this model was applied to consumer reporting but now increasingly bureaus also include information on small-size loans to firms.

Commercial credit reporting, on the other hand, relies less on reporting from lenders, and more on company information available both through public sources and direct investigations,

Figure 1: Client Base by Type of Credit Bureau/Agency

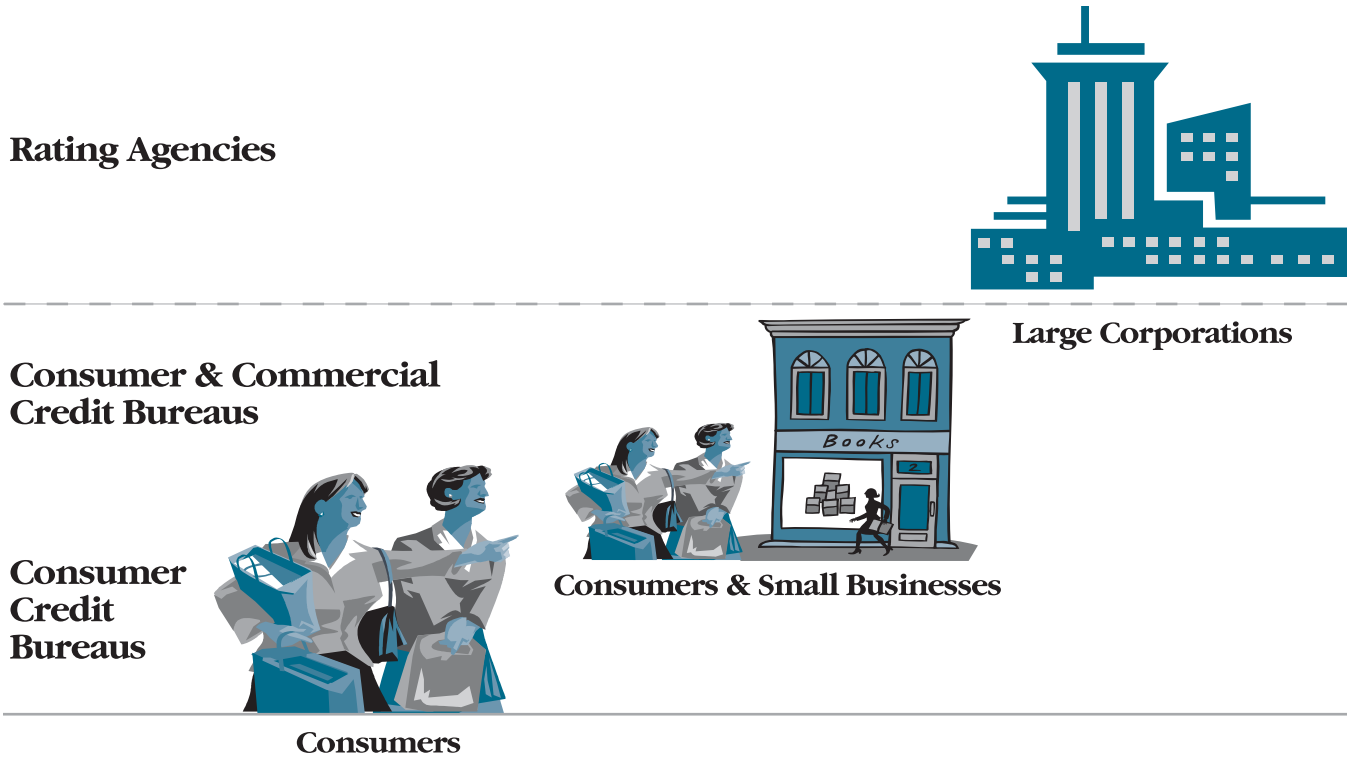
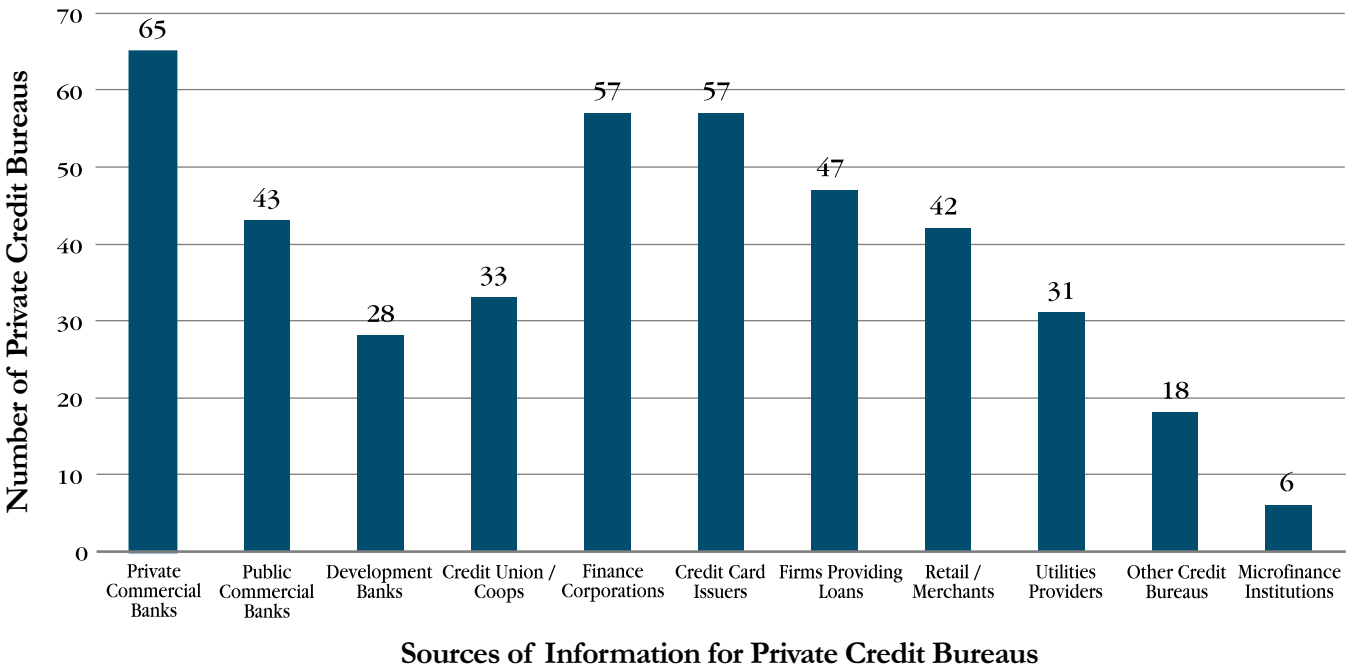


Figure 2: Sources of Information for Private Credit Bureaus



as well as payment behavior reported by suppliers. One of the best known commercial credit reporting firms is Dun & Bradstreet. As mentioned earlier, one has to distinguish this service from the services provided by credit rating agencies such as Moody's, S&P, and Fitch.

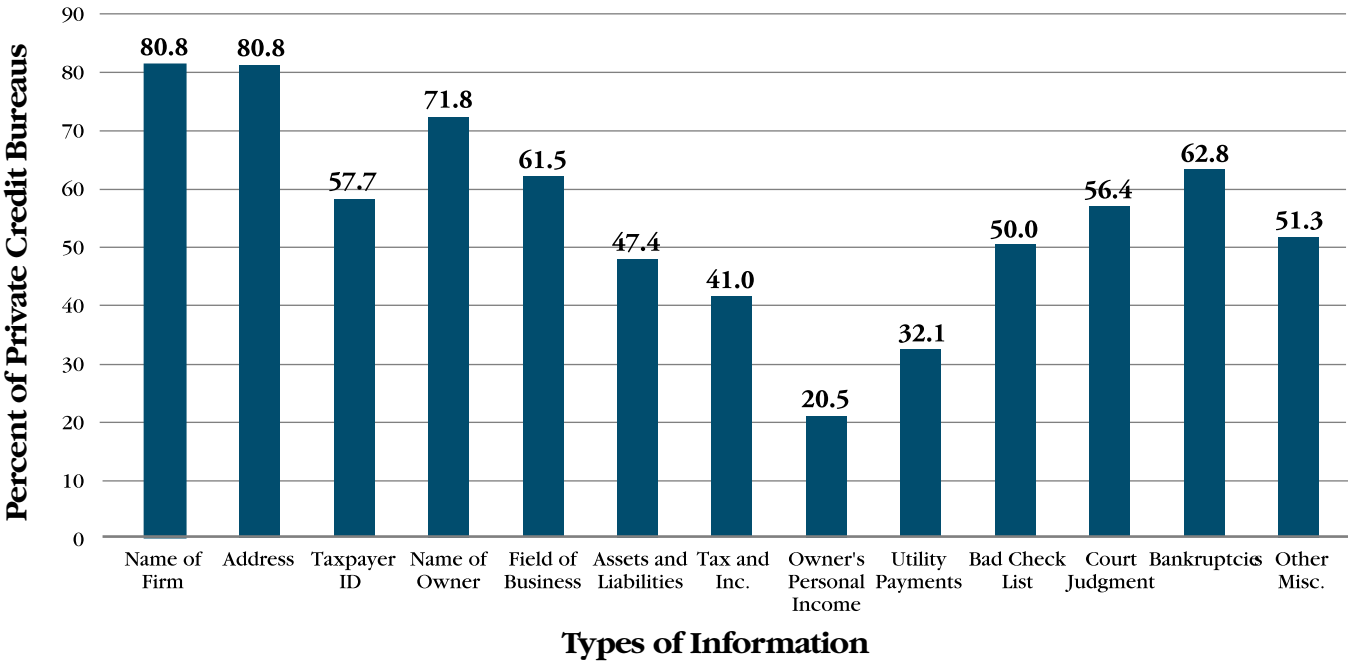
1.2.1 Consumer Credit Bureaus

Consumer credit bureaus collect information in a standardized format from several types of lenders, such as banks, credit card companies, retail lenders, other non-bank financial institutions, and utility companies. The World Bank survey, for example, reported that roughly 60 percent of private credit bureaus included information from retailers and merchants, and at least 43 percent included information from utility providers in their databases (see Figure 2).[2]

The credit bureaus merge and cross-check the data to produce a credit report for each individual borrower. This report constitutes a comprehensive borrower profile and is then sold to lenders. These individual credit reports generally contain personal borrower information and information on borrower credit accounts. The personal section usually captures the borrower's name; identification number, such as social security (if any); date of birth; former names; current and previous addresses; other forms of identification; employment history; alerts, such as ID theft or security freezes; and date of information update (see Figure 3). The credit summary section contains information on all credit accounts (both open and closed) that the borrower may have had, all accounts in good standing, past due accounts, negative account history, and all inquiries made about the borrower for at least the past 12 months.

[2] World Bank. 2005. Doing Business Database on Private Credit Bureaus.

Figure 3: Firm-level Information Collected by Private Credit Bureaus[3]



Borrower credit history is often recorded in terms of the number of missed payments provided in a format similar to the one in Figure 4. The credit report also provides information on collections made on outstanding accounts and any available public records, such as court judgments and bankruptcy rulings. The report usually outlines consumer rights and procedures for filing disputes. Finally, in many countries credit reports include a credit score.

History of Payments — Observation Periods		
2006	2005	2004
SAJ JMAMFJ	DNOSAJ JMAMFJ	DNOSA J J
312512111	111113212121	1123145

Most recent record of payments — Read histories from right to left — Oldest record available

1 Payment on time
2 Payment delayed between 1 to 29 days
3 and above indicate more delays in payment

Figure 4: Sample History of Payments

Reports are usually available electronically and via the Internet, and large creditors have credit reports fed directly into their loan processing systems. Lenders pay the credit bureau for credit reports in the form of a subscription fee, a fee-per-query with significant volume discounts, or a combination of both. The price of a credit report may range from a few cents to US$5 or more depending on the size of the lender, scope of information, and the country. Investigative reports prepared by commercial reporting firms, on the other hand, have significantly more detail on businesses and cost anywhere between US$10-75 depending on the size of the lender, scope of information, and the country.

Historically, consumer credit bureaus only collected information on individuals. In recent years, however, with the expansion of small business lending and advances in information technology (IT), more credit bureaus also include information on small businesses. In a recent World Bank survey[4] approximately 76 percent of all private credit bureaus contained at least some information on

[3] World Bank. 2005. Doing Business Database on Private Credit Bureaus.
[4] World Bank. 2005. Doing Business Database on Private Credit Bureaus.

firms. Collecting information on both individuals and firms in one bureau has an additional benefit of allowing the assessment of a business and its owner to be combined. The credit history of a business owner is an important predictor of the credit risk of a small business. Moreover, small business owners often mix personal and business finances, thus necessitating information on both for a more accurate assessment of risk.

1.2.2 Commercial Credit Bureaus

Commercial credit bureaus provide information on companies available through public sources and direct investigations and payment behavior reported by suppliers. Commercial credit bureaus report on companies that are smaller in size and earnings than those corporations covered by rating agencies. Commercial reporting may include very small businesses although the information is often limited because the reporting format is inappropriate for small companies. In addition, the cost of a report on a small (and micro) company is likely to be high in relation to the size of the loan. For this reason, small businesses are probably better handled within the framework of a consumer credit bureau.

The international leader in commercial credit reporting is Dun & Bradstreet, which traces its roots back to the Mercantile Exchange, established in New York City in 1841.[5] Formerly, Dun & Bradstreet delivered its reference books to subscribers under lock and key. Today, it transmits credit information on more than 60 million businesses worldwide.[6] More recently, Coface, the second largest international credit risk insurer, entered the international market, building on its database of payment behavior of hundreds of thousands of medium-sized companies, which it built through its credit risk insurance business. In most countries, local companies also operate credit investigation businesses. This Guide focuses on consumers and small business credit bureaus.

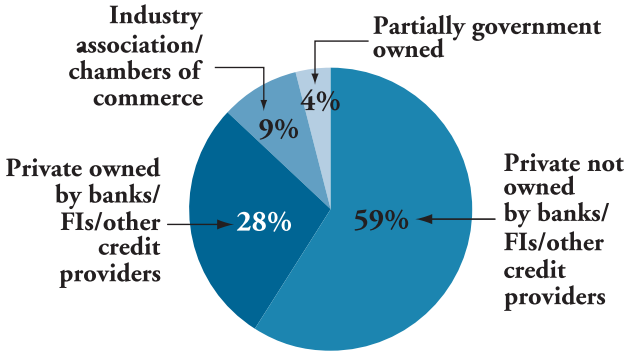
1.3 Ownership Structures

Generally the ownership structure of a credit bureau falls into one of the following categories:

- For-profit credit bureaus in which banks and/or other creditors are either majority or minority shareholders.
- For-profit credit bureaus owned and operated by a specialized firm with no ownership by creditors.
- Not-for-profit credit bureaus, formed on the basis of an association or chamber of commerce, that mostly operate on membership fees of some kind.

A World Bank survey[7] of 78 credit bureaus in 55 countries around the world found that approximately 46 private credit bureaus had no ownership by banks, financial institutions, or credit card providers; 22 were owned by banks, financial institutions, or credit card providers, seven were held by industry associations or chambers of commerce; and only three were partially held by governments (see Figure 5).

Figure 5: Ownership Structures of Private Credit Bureaus



[5] Rowena Olegario. 2003. "Credit Reporting Agencies: A Historical Perspective," in *Credit Reporting Systems and the International Economy,* ed. Margaret J. Miller. Boston: Massachusetts Institute of Technology.

[6] World Bank. 2004. *Doing Business in 2004: Understanding Regulation.* Washington, D.C.: World Bank, International Finance Corporation and Oxford University Press.

[7] World Bank. 2004. Doing Business Database on Private Credit Bureaus.

Partial government ownership of credit bureaus is rare, and only a few countries follow this model. For instance, in Sri Lanka, the Credit Information Bureau is a public-private partnership in which the central bank holds a 49 percent equity stake.[8] The central bank, however, plans to eventually divest itself of its shares in the bureau. In other examples in this category, state-owned banks rather than government entities became majority shareholders. In India for example, the State Bank of India and the Housing Development Finance Corporation Ltd. (40 percent each) were majority owners of CIBIL when it was first established along with Dun & Bradstreet and TransUnion (10 percent each).[9] Over time, other banks joined as shareholders.

Independent credit bureaus with no ownership by lenders, such as Equifax and TransUnion in the United States, are sometimes viewed as more efficient structures for operating a credit bureau. Credit reporting is the core business of such companies, and the shareholders' main objective is to maximize the value of the credit bureau by expanding its operations and providing new services. Such an approach, however, is often not feasible when establishing a credit bureau in countries where credit bureaus do not yet exist. In most cases, lenders are reluctant to share information with an independent credit bureau because of a lack of trust.

A common solution, therefore, is to establish a credit bureau with ownership by banks and/or other lenders. Brazil, Germany, Italy, Romania, Turkey, and several other countries adopted this approach. The downside of this approach is that lenders, even as shareholders of a credit bureau, may not always choose credit bureau growth as a top priority. For example, existing members may be reluctant to allow new lenders to participate in the bureau because newcomers, while unable to contribute significant amounts of information, benefit greatly from information on existing clients. The fact that lenders own the bureau may also make them less likely to use the services of an independent bureau, thus increasing barriers to entry in the credit information provider market. In cases when only a few banks are shareholders but several other banks are members of the bureau, it is possible that shareholding banks may influence the pricing policy in a manner that penalizes non-shareholder members. One way to mitigate such problems is to limit ownership of individual lenders in a credit bureau.

In summary, this approach has several downsides when compared to the independent operator option, but it is often the only feasible approach to gaining lenders' trust. Recently, large international credit bureaus have expanded into emerging markets, and in many cases the new bureaus have the international bureau as well as local banks as shareholders as in Mexico, Russia, Kazakhstan, and several other countries. It is also possible that as lenders gain trust in the operations of the bureau they may divest themselves of their ownership shares as was the case in Hong Kong (China) and the Dominican Republic.

The credit reporting business is characterized by network externalities and economies of scale that could potentially classify a credit bureau as a natural monopoly. On-going debate on the optimal number of credit bureaus in a market has not produced any consensus thus far. On the one hand, a single registry combining aggregated information across the entire system and including both bank and non-bank credit information would provide lenders with the most complete set of information, including comprehensive inquiry information. On the other hand, the lack of competition eliminates incentives for such a bureau to improve data quality, provide value-added services, and lower prices.

Small markets are unlikely to support more than one credit bureau, but many large countries have a very competitive credit information industry with two or more bureaus actively competing. For example, three major credit bureaus operate cur-

[8] World Bank. 2004. *Credit Bureau Development in South Asia, Finance & Private Sector Development, South Asia Region.* Washington, D.C.: Washington D.C.

[9] Credit Information Bureau (India) Ltd. (CIBIL) web site available at: http://www.cibil.com/web/promoters.htm

rently in the U.S. market. This industry structure is the result of consolidation in the financial services industry over the past 15 to 20 years. While many banks contribute data and obtain reports from more than one credit bureau, the information contained in each report is not identical. To address this problem, another set of firms—aggregators—entered the market to provide comprehensive aggregated reports. In South Africa, three credit bureaus all contain information from the same set of banks but compete on the quality of information and provision of value-added services. Other countries with a competitive credit information industry include Italy, Chile, and Ecuador among others. On the other hand, Germany, Austria, and most smaller European countries have only one major credit bureau.

Commercial credit bureaus are usually more prevalent than non-commercial credit bureaus. Experience with non-commercial bureaus indicates that they are generally less innovative, lack the ability to deliver top-quality services, and tend to be bogged down with bureaucratic procedures (see Table 1). While lenders' associations or chambers of commerce may be a good platform to begin the discussions on the need for sharing information and to build the consensus among the potential bureau members, the bureau itself should be a commercial entity. See Chapter 2, Developing Credit Bureaus in Emerging Markets, for a more detailed discussion of credit bureau business models.

Table 1: Comparison of Credit Bureau Ownership Structures

	Commercial, Ownership by Creditors	Commercial, no Ownership by Creditors	Non-commercial, Creditor Association
Pros	• Often the only feasible way to establish a credit bureau and ensure buy-in from lenders. • Lender support implies strong commitment and ensures bureau sustainability. • Commercial outlook ensures innovation and high-quality service.	• No conflicts of interest exist in management. • Commercial outlook ensures innovation and high-quality service. • The bureau is open to broad market coverage.	• The association provides the cost-support.
Cons	• Conflicts of interest are possible, where existing shareholders resist the entry of new lenders to the credit bureau or the introduction of new services. • The decision-making process is slow as diverging views of large numbers of shareholders need to be accommodated. • Barriers to entry exist for new providers as well as new members. • Government as shareholder creates conflict of interest between supervisory and shareholder functions.	• Banks generally are unwilling to share data without taking ownership in a bureau. • Capital is lacking.	• Limited incentives exist to innovate. • Usually service is of lower quality than in a for-profit bureau. • The decision-making process is slow.
Examples	• CRIF (Italy) • CIG (Iceland) • SCHUFA (Germany) • Serasa (Brazil) • SIMAH (Kingdom of Saudi Arabia)	• Equifax (US) • Experian (US, UK) • TransUnion (US) • CompuScan (South Africa) • Datacheck (Pakistan)	• Common in Latin America, where chambers of commerce maintain lists of bad debtors.

1.4 Types and Scope of Collected Information

Credit history information can be broadly divided into two categories:

- **Negative information:** credit history only contains information on defaults. The information may include amounts outstanding at default and the date of last payment. When the debt is repaid, information on delinquencies is deleted from the database. These types of databases are also often referred to as black lists. Among all consumer credit bureaus, 32 percent provide negative only information.

- **Positive (and negative) or full-file information:** credit history contains information on all open and closed credit accounts, including the amount approved, as well as the information on repayment. If a borrower has defaulted on payments, but eventually paid it off, the default information remains on file and is not deleted for a defined period of time. Among all consumer credit bureaus, 68 percent provide both negative and positive information.

A report that includes positive information allows the lender to more accurately assess the creditworthiness of a borrower. A database with negative-only information, excludes high-risk borrowers that have accumulated significant debt exposure without yet defaulting on any loans. In such instances, even a small shock to the borrower's income could lead to cascading defaults on all of the accounts.

In recent years, Hong Kong (China) and South Korea have experienced a period of major increase in retail credit defaults, in an unfortunate combination of reckless lending and unavailability of positive information. While both had negative information registries, positive information was not shared. As competition in the credit card market increased and banks marketed credit cards more aggressively, many consumers accumulated several credit cards. Borrowers would typically open one credit card account and then another one to pay off the debt accumulated on the first one. This borrowing was unsustainable and resulted in a large number of credit card defaults. For example, in Hong Kong (China), where banks shared only negative credit information, on average debtors who went bankrupt owed 42 times their monthly income in unsecured debt whereas debtors in the United States, where banks supplied all available information to the bureau, had unsecured debts 21 times their monthly income.[10] Since the credit card crisis, Hong Kong's (China) bureaus have now migrated to a positive and negative credit reporting system.

In South Korea between 1998 and 2003, credit card issuance rose from a little over 40 million credit cards to approximately 90 million cards. Between 2002 and 2003 alone, delinquency ratios on credit cards rose from 12.8 percent to 43.3 percent. Following the crash of the credit card market, credit delinquents accounted for a staggering 16.7 percent of the economically active population at the end of 2003. Personal delinquency was a serious social issue because delinquents were concentrated among youth, women, and lower income population—the most fragile sector of the economy. This crisis could have been avoided if the lenders had had access to a credit bureau that provided positive and negative information, which would have helped them be more conservative in their lending practices.

According to the World Bank survey, approximately 68 percent of all private credit bureaus provided both positive and negative information on individuals, and roughly 50 percent provided both positive and negative information on firms.[11] The fact that several countries, including such financially advanced markets as Brazil, do not have positive information poses a significant threat to the sustainable growth of retail and SME credit in these countries.

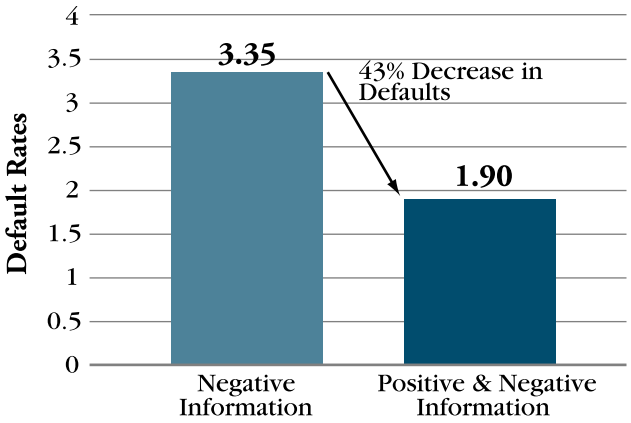
[10] Bailey, A., Suzi Chun and Jeffrey Wong. August 11, 2003. "Wanted: Asian credit bureaus." *The Bangkok Post.* Available at: http://www.bangkokpost.net/mckinsey/McKinsey110803.html.

[11] World Bank. 2005. Doing Business Database on Private Credit Bureaus.

Recent research studies have quantified the impact of positive information on default and credit approval rates. One study simulated default rates on loans resulting from lending decisions, using a credit scoring model with only negative information and one with both negative and positive information. The simulations were based on data in one of the largest U.S. credit bureaus.[12]

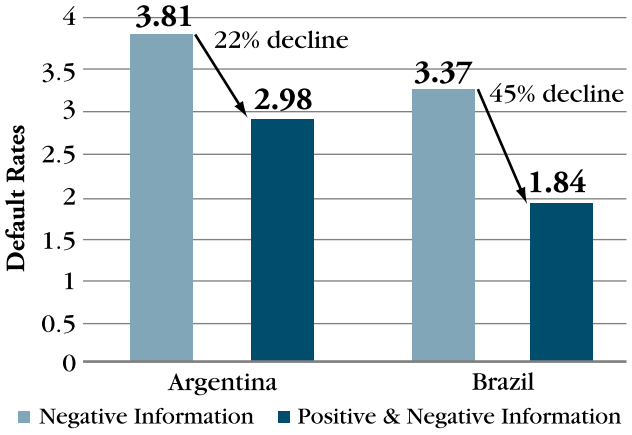
Many lenders use credit bureau information to generate credit scores, which are statistical estimates of the probability of default of a borrower based on characteristics available in the credit bureau. Higher credit scores indicate higher expected probability of repayment and can be used to set credit approval rules and procedures. The study generated credit scores using negative only and then both negative and positive information. Borrowers were then ranked by credit scores and those with the highest scores (60 percent) approved for credit. According to the study, the resulting default rate from lending to borrowers based solely on negative information was 3.35 percent. If, both positive and negative information had been used, the default rate would have dropped to 1.9 percent, a 43 percent decrease in default rates (see Figure 6).

Figure 6: Effect on Default Rates of Including Positive Information (simulation using U.S. data)



Another study[13] conducted the same exercise using data from Brazil and Argentina and found similar results. Inclusion of positive information would have produced a 22 percent decrease in the default rate for Argentine banks and a 45 percent decrease in default rates for Brazilian banks (see Figure 7). Having positive information improves the ability of lenders to separate good borrowers from bad ones and thus reduces their costs associated with defaults. For a bank with a US$100 million loan portfolio, this translates into average savings of US$830,000 in Argentina and US$1.5 million in Brazil.

Figure 7: Effects on Default Rates of Including Positive Information (Argentina and Brazil)



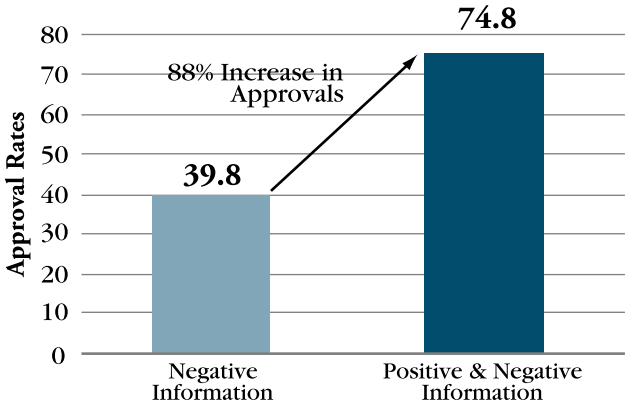
Including positive information also allows banks and other lenders to lend more or supply more credit while keeping default rates at the same level. Using the simulations with the U.S. data mentioned above and keeping the target default rate at three percent, the inclusion of positive information almost doubles the percentage of borrowers approved from approximately 40 percent to 75 percent, indicating the importance of positive information for improving access to credit (see Figure 8).[14]

[12] Barron, J.M. and Michael Staten. 2003. *The Value of Comprehensive Credit Reports: Lessons from the US Experience.* Available at: http://www.privacyalliance.org/resources/staten.pdf. Figures show the simulated credit defaults assuming an acceptance rate of 60 percent.

[13] Powell, A., Nataliya Mylenko, Margaret Miller and Giovanni Majnoni. November 2004. *Improving Credit Information, Bank Regulation and Supervision: On the Role and Design of Public Credit Registries.* World Bank Policy Research Working Paper 3443. Washington, D.C.: World Bank.

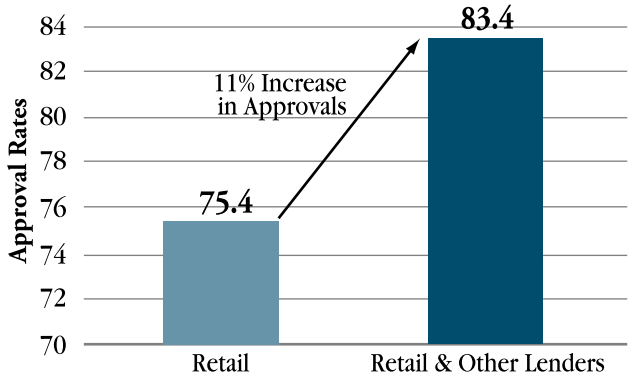
[14] Barron et. al., op cit.

Figure 8: Effect on Approvals of Including Positive Information



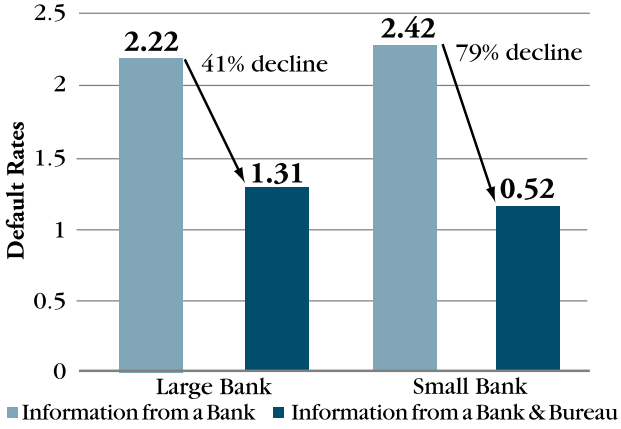
Credit bureaus often include information not only from traditional lenders, such as banks and credit card companies, but also from other credit providers, such as retailers, suppliers, and telecom and utility companies. In emerging markets where information is scarce, such non-traditional sources can provide invaluable information. The study mentioned above[15] found that in the United States, including information from non-bank lenders into a credit scoring model allows lenders with a target approval rate of 60 percent to reduce default rates by 38 percent. If the default rate is used as a target, the bank would be able to approve 11 percent more clients before reaching the target three percent default rate (see Figure 9). Overall, the simulations show that sharing positive information among the broader category of lenders would allow significant operational improvements either through the lower costs of default or increased lending volumes to new categories of borrowers.

Figure 9: Effect of Including Positive Information on Approvals Among Retailers and Other Lenders



Information sharing brings benefits to both small and large institutions. The study, using information from Argentina,[16] found that while small lenders do benefit more than large lenders from sharing information, large banks still experience a significant drop in defaults if positive information is used. Although the results may vary from country to country and from lender to lender, both anecdotal and available empirical evidence suggests that information sharing and use of credit scoring allow both large and small banks to significantly reduce default rates and/or increase lending volumes (see Figure 10).

Figure 10: Effect on Default Rates of Increasing Number of Information Sources



In summary, credit bureau reports that have the highest predictive power combine both positive and negative information from both banks and non-bank lenders. Bureaus or credit registries fragmented by industry that provide negative information only deliver reports that have less predictive power and often result in inaccurate credit risk assessment (see Figure 11).

[15] Ibid.
[16] Powell, A. et al., op. cit.

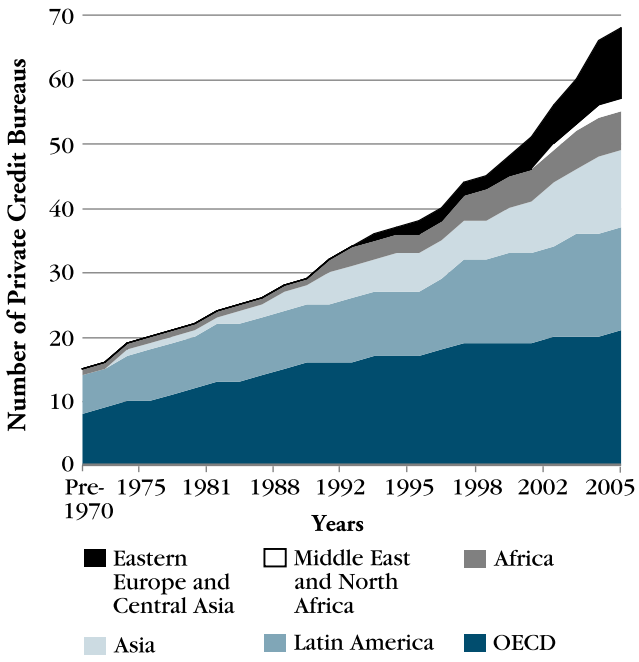
Figure 11: Effect of Types and Sources of Information on Predictive Power

Sources of Information \ Types of Information	"Positive & Negative"	"Negative Only"
"Full" (information shared by banks, retailers, NBFIs)	High Predictiveness (e.g. U.S., UK, Italy)	Lower Predictiveness (e.g. Australia)
"Fragmented" (e.g. information shared among banks only or retail only)	Lower Predictiveness (e.g. Mexico)	Lower Predictiveness (e.g. Morocco)

1.5 Industry Overview and International Trends

The private credit bureau industry has experienced unprecedented growth over the past five years, especially in emerging markets (see Figure 12).

Figure 12: Growth of Private Credit Bureaus



Annex 1 provides maps showing private credit bureaus by region and by type of reporting (positive and negative-only).

This growth was driven by two main factors:

- **High growth of retail credit in emerging markets.** Between 1985 and 1995, unfavorable macroeconomic environments and structural restrictions in credit markets in developing countries constrained credit growth. Over this period, the private credit to GDP ratio for the developing markets increased by 46 percent.[17] Financial liberalization and a more stable macroeconomic environment were associated with an increase in credit growth, and the period between 1996 and 2004 saw credit to the private sector increase by 62 percent.[18] As lenders began to enter the retail credit market, the need for credit information and for streamlining lending processes resulted in the establishment of credit bureaus. This phenomenon was particularly pronounced in Eastern Europe, where the number of private credit bureaus grew from five in 2002 to 12 in 2006.

- **Developments in information technology.** The credit bureau industry is data-driven. Recent improvements in database management software and decreasing costs of storing and processing data, as well as decreasing costs of hardware, have reduced the start-up costs of a credit bureau.

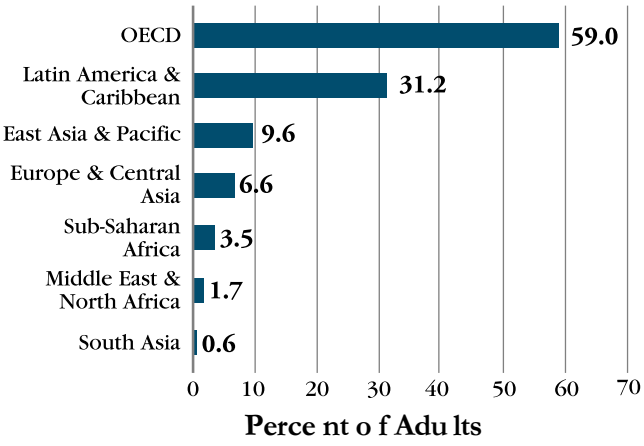
According to the World Bank's report, Doing Business in 2006, approximately 67 countries had a private credit bureau operating at the end of 2005. Among developing countries, the Latin America and the Caribbean region is the most advanced, where 16 out of 22 countries had a private credit bureau in operation. These bureaus also covered a higher percentage of the adult popula-

[17] World Bank's World Development Indicators as of July 2006. Data based on domestic credit to private sector as a percent of GDP for low-income, lower-middle income, and upper-middle income countries. Includes 101 countries.

[18] Ibid. Includes 128 countries.

tion (31.2 percent) compared to all other regions (see Figure 13). All private bureaus in the region provided data electronically either via the Internet or via modem and phone lines.[19] Bureaus in most countries in Latin America include both positive and negative information with a few exceptions. In Brazil, for example, the credit bureau provides negative-only information. Although Brazil's credit bureau system is one of the oldest in the world and highly sophisticated, it is unable to provide lenders with positive information. Reforms are under discussion that would provide the necessary legal and regulatory framework for sharing positive information among private credit bureaus. The development of a credit bureau that provides positive information in Brazil, however, will require not only legal changes but also a broad buy-in from lenders and a willingness to share positive information.

Figure 13: Average Private Bureau Coverage



The Middle East and Africa have the least developed credit information infrastructure. The survey reported that only five out of a total of 37 Sub-Saharan African countries had any private bureau coverage. In countries where credit bureaus operate, they mostly provide negative-only information with a few exceptions, such as the Kingdom of Saudi Arabia (KSA) and South Africa.

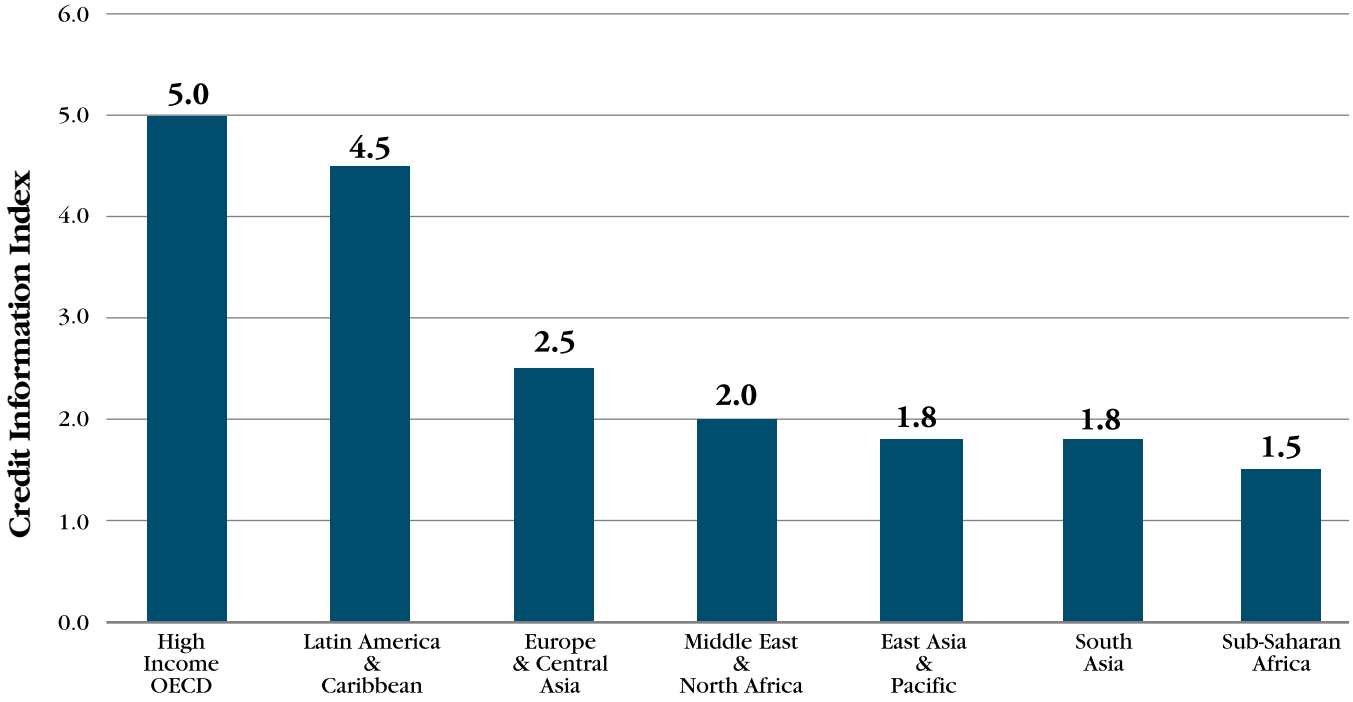
In Asia and Eastern Europe, many countries have recently established bureaus but experienced delays in populating databases and issuing reports, which in part explains the low coverage ratio. In Eastern Europe, the situation is changing fast and even as this publication goes to print Russia and Ukraine are in the process of operationalizing their credit bureaus and plan to issue credit reports by the end of 2006.

Another factor contributing to the low coverage ratios in these regions is that the credit-active population still only constitutes a small portion of the total population. As credit growth continues, however, the scope of credit bureau coverage is expected to expand as well.

In addition to the coverage ratio, the World Bank's Doing Business Survey also computes a credit information index for more than 120 countries. The index measures credit information availability based on six key factors that measure scope, access, and quality of available credit information (see Figure 14).

[19] World Bank. 2005. Doing Business Database on Private Credit Bureaus.

Figure 14: Credit Information Index



The index attributes scores to countries and regions on a scale of 1 to 6, with 6 being the highest. For each of the following six features, a country or region receives one point and the points are added to arrive at the total score:

- Both positive and negative credit information (for example on payment history, number and kind of accounts, number and frequency of late payments, and any collections or bankruptcies) is distributed.
- Data on both firms and individuals are distributed.
- Data from retailers, trade creditors, and/or utilities as well as financial institutions are distributed.
- More than five years of historical data is preserved.
- Data on loans above one percent of income per capita are distributed.
- By law, consumers have the right to access their data.

Using this indicator, the Latin American region again scores higher than all other regions with an average of 4.5. The Sub-Saharan African region scores the lowest on this scale with a 1.5, followed closely by the South Asia and East Asia & Pacific regions with 1.8 each. While bureaus in East Asia have a higher coverage ratio, their collection of negative-only information contributes to their low score on the Credit Information Index.

The development of credit bureaus in many emerging markets often means engaging one of the main international credit bureau operators. As a result, several major players dominate the credit information industry globally. The three major international credit bureau providers today are Experian, TransUnion, and Equifax. Their main operations are concentrated in the high-income Organization of Economic Co-operation and Development (OECD) countries, but all three have actively expanded into emerging markets in recent years. At least one of these three major

international credit bureaus operates in 16 countries in the Latin American & Caribbean region. The "big three" also have operations in six countries in Sub-Saharan Africa, five in East Asia and South Asia, and four in the Europe & Central Asia.[20]

In recent years, several new credit bureaus with international operations have emerged including CRIF, an Italian-based firm with a focus on the Eastern European markets; Creditinfo, an Icelandic credit information provider with operations in Eastern European and Central Asian countries; D&B SAME with a target market in the Middle East and Africa; CompuScan, CRB, and XDS in two or more African countries; and Baycorp Advantage based in Australia and New Zealand with a previous focus on Asian markets. The entry of the new operators is a welcome development as more competition will result in a better product offering and lower prices for the countries shopping for a credit bureau provider.

1.6 Public Credit Registries

A public credit registry is defined as a database managed by the public sector, usually by the central bank or the bank supervisor, that collects information on the creditworthiness of borrowers (persons or businesses) from supervised financial institutions, makes such information available to financial institutions, and is used primarily for supervisory purposes.

Participation in a Public Credit Registry (PCR) is mandatory for supervised financial institutions. Although the primary reason for establishing a PCR is to support banking supervision functions and monitor systemic risks, many PCRs provide credit reports to lenders as part of their operations.

According to a World Bank survey in 2004, there were 57 PCRs operating globally. Figure 15 illustrates the growth in PCRs from before 1964 to 2002.

The first PCRs were established in Western Europe—in Germany in 1934 and then in France in 1946. By the mid-1960s, three other European countries—Italy, Spain and Belgium—had also established PCRs. Former French colonies in Western Africa followed the French example and established PCRs after the creation of the West African Monetary Union in 1962. Several Middle Eastern and North African nations adopted PCRs in the 1950s and 1960s: Egypt (1957), Tunisia (1958), Morocco (1966), and Jordan (1966). Among the Eastern European and Central Asian republics, Turkey was the first country to establish a PCR in 1951.

The Latin America region has the highest number of PCRs. In this region, 15 countries have established PCRs, including all of the largest economies such as Argentina, Brazil, Chile, and Colombia. Mexico established Latin America's first PCR in 1964, with the primary aim to regulate policies regarding the allocation of credit by sector at that time. A few Latin American countries established PCRs in the 1970s and 1980s, but most PCRs were set up in the 1990s, following the financial crises that swept the region.

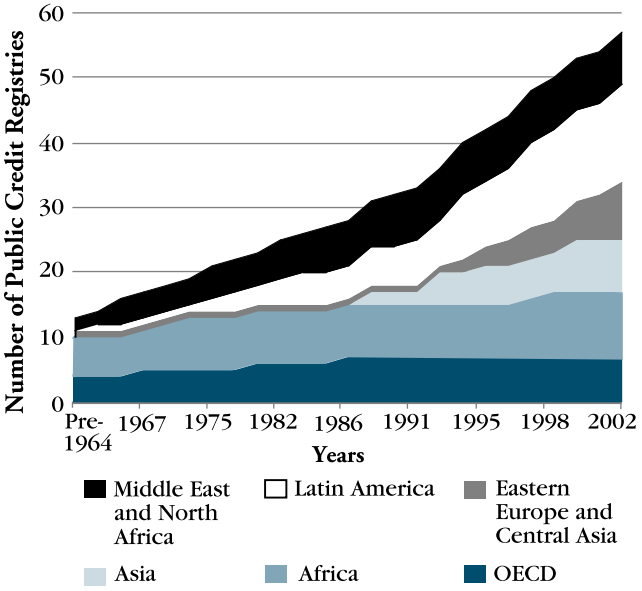
Since most public registries are set up with the primary purpose of bank supervision, they usually only include loans above a certain minimum amount. Of the 57 PCRs included in the World Bank survey, 40 had minimum loan requirements for inclusion of a company or individual in the PCR. About 60 percent of PCRs had loan cutoffs that were at least twice the average Gross National Income (GNI) per capita, thus excluding most retail and small business loans.

PCRs have lower coverage in general when compared with private credit bureaus, which is not surprising given their focus on larger loans and supervised institutions. According to the World Bank survey, the average coverage ratio of PCRs in developing countries was at 3.6 percent of the active population, while private bureau coverage was at 16.0 percent.[21]

[20] Information drawn from web sites of Experian, Equifax, and TransUnion available at www.experian.com, www.equifax.com and www.transunion.com, respectively.

[21] World Bank. Doing Business web site. Available at: http://www.doingbusiness.org/ExploreTopics/GettingCredit.

Figure 15: Growth of Public Credit Registries[22]



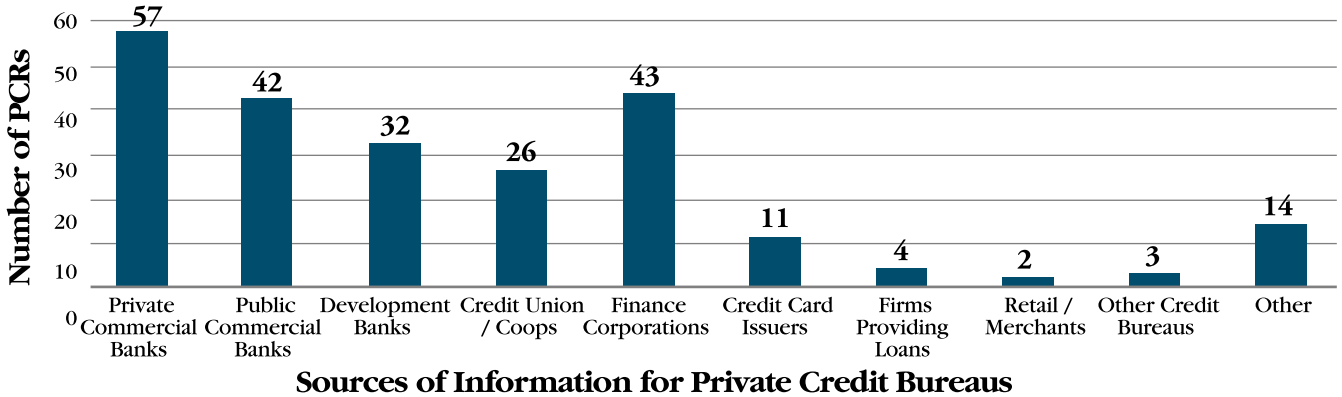
Unlike private credit bureaus, few PCRs distribute data electronically. Only 60 percent of PCRs in Latin America and 30 percent in Sub-Saharan Africa distribute data electronically. In both South Asia and Sub-Saharan Africa, almost all PCRs provide paper copies of credit reports. The reliance of PCRs on non-electronic data distribution compromises the quality of data and speed with which such data are made available to PCR clients. Furthermore, non-electronic forms of data are less likely to be updated frequently and are, therefore, less likely to be accurate or current.

In countries with no cutoff requirements (i.e., minimum loan requirements), PCRs provide credit reports to banks and perform functions similar to those of private credit bureaus. The scope of PCR data, however, is limited to fewer data items and excludes information from non-banks. Figure 16 indicates that PCRs rely largely on banks and financial corporations for information. Less than four percent of all PCRs included information from retailers, merchants, and other non-bank creditors.

PCRs usually provide their credit reports at low or no cost to the lenders. Of the 57 PCRs surveyed by the World Bank,[23] only four PCRs had a subscription fee. Owing to the limited available resources and non-profit basis of operation, public registries often lack the necessary motivation and funds to invest in data quality assurance systems and provide value-added services, such as credit scoring and portfolio monitoring.

Development of a public registry with the objective of serving the credit information needs of retail lenders might appear effective in filling the gap of available credit information by mandating bank participation in a PCR. In the medium to long term, however, establishing a PCR may undermine private initiatives and thus hurt creditors who will not have access to a broad set of credit data, including the information from non-banks that is usually collected by private bureaus.

Figure 16: Sources of Information for PCRs[24]



[22] World Bank. 2004. Doing Business Database on Public Credit Registries.

[23] World Bank 2004. Doing Business Database on Public Credit Registries. Information was unavailable for two of the 57 PCRs surveyed.

[24] World Bank. 2004. Doing Business Database on Public Credit Registries.

Moreover, creditors who rely on public registries will be unable to benefit from value-added services, such as bureau credit scores, which allow them to maximize the value of credit information.

Not all countries have a strong free market tradition, and in many cases the involvement of the public sector is essential for the establishment of a viable private credit information industry. The government plays a critical role in creating an appropriate legal and regulatory framework for private credit bureaus. Recently several countries, including Russia, Singapore, Kazakhstan, and Mexico, issued laws and regulations encouraging financial institutions to share information through private credit bureaus. Another approach, successfully implemented in Ecuador, requires that all regulated financial institutions report credit data to the central bank registry. The PCR, however, is not allowed to sell the credit reports to lenders; instead they must make the reports available to the private credit bureaus that are operating in the country. Private bureaus combine this information with other data and compete on the quality of service. These examples demonstrate the successful collaboration of the public and private sector to develop a sustainable credit reporting industry.

2 Developing Credit Bureaus in Emerging Markets

2.1 Prerequisites for Credit Bureau Development

To establish a successful credit bureau in an emerging market, the founders must:

- Change perceptions of and build awareness in the community.
- Ensure commercial viability.
- Establish an appropriate legal and regulatory framework.
- Identify appropriate technology and software.
- Ensure adequate data availability.
- Specify staffing needs.

Change Perceptions and Build Awareness

In emerging markets, the public is likely to resist the concept of sharing information, particularly financial information. For political reasons, authorities unfamiliar or uncomfortable with sharing financial information may also be resistant to this concept. In such economies fragmentation, competition, and secrecy characterize the financial sector, and lenders fear that by sharing positive information, their competitors will learn about and steal their good customers. These perceptions need to be changed.

For a credit bureau to flourish and gain acceptance among its users and subscribers in these economies where credit is scarce, the public needs to be educated about the benefits of credit and credit sharing, lenders must overcome their distrust of their competitors, and consumers must be assured of the security of their information.

Consequently, the initial phase of building a credit bureau where such an institution does not exist should focus on building awareness among lenders and their clients, the general public, government officials, policy makers, regulators, and other potential participants in the credit bureau.

Tools that can be used to change perceptions and build awareness of the benefits of information sharing include the following:

- **Media.** Coverage of conferences and roundtables as well as publication of articles on the role of credit information with expert opinions and reflections on the local debate is useful to promote credit bureau development. For example, several conferences on the role of credit information were held in Russia and were well covered in the press. As a result, awareness among the public on the need to build a credit history and consent to submitting one's credit records to a credit bureau was improved significantly.
- **Internet.** A credit bureau's web site should contain information for consumers that explains the importance of building a positive credit history. The site must also explain the various channels available to consumers to report and rectify errors in their credit reports.
- **Proactive consumer education.** The Credit Bureau of Singapore offers one example of this type of consumer education. Its senior executives give presentations to diverse groups of bor-

rowers. These meetings have succeeded in broadening understanding of the activities of the bureau and explaining consumers' rights.

- **Roundtables and conferences.** Several examples exist of the efficacy of this type of awareness building. In Kazakhstan, for example, a large conference was organized with high-level participation from the central bank, lenders, and speakers from several successful credit bureaus in the region. The conference was used to jumpstart the initial phases in establishing a credit bureau and to secure high level buy-in. As a result, necessary legal changes and consensus building among lenders took place smoothly and within a reasonable time frame. Similar events, in Vietnam, Russia, Kenya, and several other countries were instrumental in promoting the establishment of credit bureaus.

Issues to be addressed in these awareness building activities differ according to the audience.

Campaigns targeted to the **general public** should:

- Explain the role and nature of credit information-sharing to mitigate general concerns about sharing of personal information.
- Inform about the function of a credit bureau and its obligations to respect the privacy of consumer data.
- Discuss the obligations of a credit bureau to protect all personal information and its duty to treat all such information as confidential.
- Discuss the measures that a credit bureau will take to ensure the security of consumer data and the way mistakes are to be corrected.
- Discuss how authorities and regulators will work in conjunction with the credit bureau to create an environment conducive for sharing credit information on a secure basis.
- Emphasize the importance of borrower consent to enable data sharing.

In addition to educating the public about credit bureaus, the campaign must educate the public on using credit responsibly. In markets, where members of the public are not very credit savvy, the public needs to understand the dangers of buying into various lender schemes and being overly indebted.

Campaigns targeted to **financial and non-financial institutions** should:

- Address concerns about sharing of information and the fear of losing market share due to such information-sharing.
- Explain the different measures that could be enforced to prevent competitor institutions from poaching customers.
- Emphasize the need for cooperation among a country's banking, financial, and non-financial institutions for the credit bureau to succeed.
- Assure lenders of the confidentiality of all information provided and discuss the obligations of lenders to treat confidential information appropriately.
- Explain the importance of sharing positive information.
- Encourage broad participation by bank and non-bank lenders in the credit bureau.
- Promote the introduction of updated credit control policies and procedures taking into account the information in the credit bureau.
- Highlight the need to educate staff about the credit bureau.

For the target audience of **government officials, policy makers, and regulators,** the campaign should:

- Hold high-level meetings among various government officials, policy makers, and regulators to explain the importance of a credit bureau and the sharing of credit information.
- Explain their role and the need for laws conducive to credit information- sharing.
- Stress the importance of information sharing for financial stability and expansion of credit.
- Outline the value of obtaining access to third party databases, particularly official registers such as the National ID or Company Registration databases.

- Highlight the need for appropriate privacy and data protection legislation.

Ensure Commercial Viability

A credit bureau needs to be commercially viable, regardless of the market in which it operates, and emerging markets are no exception to this rule. In addition to ensuring the sustainability and success of the credit bureau, commercial viability reinforces the faith and changed perceptions of the public and all those involved in the operations of the credit bureau.

A commercially viable credit bureau requires the following:

- **Sizeable economically active population.** Economies of scale underpinning the operations of a credit bureau require a sufficiently large population base that uses credit for a credit bureau to be commercially viable. The size of the economically active population dictates the level of sophistication and complexity of the credit bureau system to be implemented. Without a large borrower base, the bureau will have to charge high fees for its credit reports, which may reduce the demand from lenders. Credit bureaus in emerging markets might face this challenge in their initial years of operation if the population does not use credit heavily. Developed countries with small populations, such as Iceland (population 300,000) and New Zealand (population 4 million), operate small but profitable credit bureaus. In New Zealand, where the economically active population is estimated at two million, the credit bureau receives about four and a half million queries a year.

  In emerging markets, however, the economically active population may be too small to generate sufficient demand from lenders. In this case, the bureau may consider a regional solution. TransUnion Central America (TUCA), for example, operates a regional solution covering five countries. This approach lowers the fixed cost of starting a bureau and is particularly attractive when lenders also operate regionally.

- **Provision of value-added services.** Most bureaus begin operations by providing lender raw data in the form of credit reports. In a second phase, the bureaus then leverage the value of the data by offering value-added products, such as credit scoring, portfolio monitoring, fraud alerts, and the like.

- **Appropriate pricing and investment decisions.** The bureau must conduct market assessment studies and forecast demand that will enable it to price its reports accordingly. Pricing is one of the key factors in bureau sustainability, and crucial investment decisions such as software acquisitions should be aligned with the bureau's pricing strategy to avoid heavy losses.

- **Shareholder commitment.** Establishing a credit bureau, especially bank-owned bureaus, takes a long time and requires strong shareholder commitment. Several examples exist of credit bureaus that have struggled commercially due to the lack of "total commitment" from the financial community. Some bureaus struggle for years trying to build up membership. Local banking communities, notwithstanding their initial commitment to support the credit bureau, often fail to adhere to their commitment in the bureau's early days. Other types of lenders may hold back until the banks join, thus adding to the problem. Ensuring strong commitment of the key shareholders is essential because a bureau may not breakeven for three to five years, and it can sustain heavy losses in the early years.

- **Streamlined organizational structure.** In its initial stages, a bureau must pay particular attention to its organizational structure and its human and capital investments (see Specify Staffing Needs below), and adopt a streamlined structure from the start to maintain profitability.

Establish an Appropriate Legal and Regulatory Framework

Without the appropriate legislation and regulations to enable the sharing of data and information, a credit bureau is, for all practical purposes, ineffective. For instance, in Uzbekistan, a credit bureau that was registered in 2000 was unable to operate because it lacked the legal authority to share data. In Slovakia, existence of laws restricting the collection of historical data delayed the

bureau's launch. Many other countries faced similar challenges.

For credit bureaus in emerging markets, the enabling legislation must:

- Establish the rights and obligations of the credit bureau, its users, the organizations that supply information to the bureau, and of public at large.
- Treat all stakeholders equally and favor no one stakeholder over others. The law should allow information-sharing among bank and non-bank lenders.
- Provide clear guidelines on the kinds of data that can be collected. Data accumulation can be simplified if the legislation does not restrict the type of information that a credit bureau can gather as long as it is relevant, accurate, and meets certain quality standards (for example, as in the U.S. Fair Credit Reporting Act and EU Data Protection legislation).
- Indicate how long data can be retained. In particular, it must address the need to store and share positive information, whereby all information on a particular client is saved, instead of erasing negative records once debts have been repaid, which significantly undermines the predictive power of data. Historical data are great indicators of a borrower's future behavior and is invaluable in making lending decisions.

A more detailed discussion of legal and regulatory issues is provided in Chapter 4.

Identify Appropriate Technology and Software

The overriding duty of both a credit bureau and its members is to maintain absolute security over sensitive personal information and to treat it appropriately at all times. Failure to maintain this cornerstone function is a major breach of trust. As a trusted third party, a credit bureau must have the most appropriate technology and software to provide an adequate level of service while maintaining the security of the data.

To function efficiently, a credit bureau must invest in appropriate software and technical systems. Technologies available in emerging markets may not be sufficiently sophisticated to meet modern credit information-sharing needs. Some of the infrastructure requirements are quite basic and are generally taken for granted in more sophisticated markets. In many developing countries, however, essential infrastructure support, such as a reliable electricity supply and adequate Internet and telephone connectivity, do not always exist and may require additional investments.

In addition to infrastructure requirements, the success of a bureau's operations depends on the ability to extract credit performance data from financial institutions and other lenders and deliver credit reports in a format that is easy to use by one and all. Experience shows that financial institutions in emerging markets are transitioning from traditional relationship lending models to more volume-driven and standardized retail lending businesses. In most cases, banks have not yet reorganized their processes to fit this new business model. This has major implications in terms of:

- Availability and validity of historical information.
- Ability to automatically report data on asset portfolios.
- Flexibility of legacy systems to adapt to the input/output requirements of a credit bureau.
- Availability/prioritization of IT resources that could be channeled to support adaptations required for the new credit bureau.
- Existence of standardized formats or language used within the systems.

In many cases, banks do not have adequate core systems to store data on customers and their payment histories. In countries as diverse as Russia, India, and Egypt, extracting data in a format acceptable to the respective credit bureau was a major challenge and required substantial IT resources to access old legacy systems. It has proved much easier to extract credit card records, as these tend to be hosted on systems that are more modern and store data in a much more logical format. Large, local, often state-owned or recently privatized banks with large branch networks face a major challenge because records may be paper-based and credit functions decentralized.

For bureaus in such situations, the most practical solution is often to start with credit portfolios that have better quality information, with banks that are able to provide such information, and with more recent data, then gradually build up the bureau to include more lenders and more portfolio types. Often, however, the cost of uploading credit history data that are two or more years old may be too high compared with the benefit, given the varying levels of accuracy of lender files.

In such environments, credit bureaus function less efficiently than their Western counterparts and offer fewer products and services to their customers. For example, in Fiji, with a population of only one million, the bureau provides only negative data on borrowers because banks and other financial institutions are unwilling to commit time and resources to provide comprehensive positive data to the credit bureau, due to the small market size and lack of market sophistication. Consequently, the Fiji bureau is limited to confirming whether an individual is on the local body electoral roll and recording any previous applications for credit in the credit report.

Ensure Adequate Data Availability

It is absolutely essential that banks and other lenders store customer information in a format that allows the credit bureau to easily extract the information and upload it to its own system to further match and merge with other data. In most emerging markets, financial institutions had developed their own unique database structures well before a credit bureau was ever contemplated and, as a consequence, do not share standard data formats.

Identifying information, such as a unique ID number, name, address, and date of birth, is essential to enable the merging of credit records for a given borrower to form a complete credit history of that borrower.

Countries that have a national ID system enjoy an advantage over those that do not, but only if the IDs are correctly recorded within databases and can be verified against the registry maintained by the government agency that issues them. Foreign residents that are not eligible for a national ID, can use a passport number instead for identification but this approach poses challenges because passports must be renewed on a regular basis and, as a consequence, the passports numbers change.

National IDs can cause issues if they are recorded incorrectly. For example, in Malaysia, when Bank Negara, the Central Bank of Malaysia, established a credit bureau in the early 1990s, the assumption was that all Malaysian nationals had a unique national ID number. After all borrower records had been centralized within one database, it was discovered that duplicate IDs existed for the same person because previously various state provinces had held the power to issue IDs. Malaysia is not alone in the challenges that it faces in establishing unique identifiers. Many countries encounter similar problems. These issues can be overcome if authorities set digital protocols that can be used to validate the numeric configuration of an ID. In the Kingdom of Saudi Arabia (KSA), for example, a joint effort among lenders, borrowers, and the authorities in this regard has been particularly successful. It is important to note that in all cases the establishment of the bureau helped authorities and lenders to identify the problem and start to solve it.

In jurisdictions without national IDs that are verifiable and suitable to use in the match-and-merge process, most bureaus use sophisticated matching algorithms to correctly match and merge separate records belonging to the same individual. These matching algorithms traditionally use a combination of name, address, and date of birth. New Zealand and Germany, for example, use such sophisticated matching solutions because legislation actually prevents the recording of unique identifiers. The ability to use such algorithms is significantly restricted, however, in emerging markets where other crucial information, besides unique IDs, such as names, addresses, and dates of birth are unreliable.

In addition to the issue of unique identifiers, consumers' names and addresses may be stored in

various formats and styles. For instance, an institution may choose to store data in single strings rather than in a structured database, some with the surname first, others with only initials, and some with only the surname. Consumers also contribute to the confusion by using different names, particularly where names may be anglicized or a nickname used (e.g., William may be known as Bill, and/ or Will).

Addresses are equally challenging. In the KSA, for example, residential addresses are not used and several unrelated families may share a single post box. And in India, many banks record borrower addresses as "care of" a bank branch.

Dates of birth can also be an issue, particularly where the data are stored in disparate databases and in inconsistent formats. In some cultures, the exact date of an individual's birth may not be as important as it is in Western society. Records may give the date of birth as born in "the year of the great flood," which from a bureau's point of view is somewhat difficult to use as part of a match-and-merge logic. Another frequent problem with dates of birth, and possibly with all other identifiers, is incorrect data entry: customers may appear to be hundreds of years old or, in some cases, not even born. Incorporating simple validation rules into both the lenders' and credit bureaus' input systems can help overcome such inconsistencies.

These issues, while posing challenges for bureau operators, should not prevent a credit bureau from starting operations. Experience shows that establishing a credit bureau serves as a trigger for financial institutions to start recording and managing information in a more systematic manner, which in turn improves their own ability to measure risks. Postponing the establishment of a credit bureau until banks have perfect information may only hasten financial crises as banks increase lending without adequate information and risk management tools.

Specify Staffing Needs

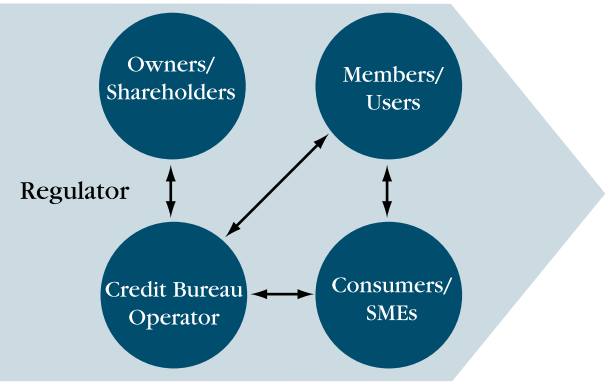
A credit bureau's function and its employees' duties are to obtain account history data from member institutions, sort and aggregate these data into personal credit histories, and disseminate this information to members at their request. In addition to performing these functions, credit bureau staff must be trained to use the available credit information to conduct credit analyses. Staff should be current on market trends and needs and be able to provide bureau users with advice and customized products that incorporate the most updated information and use the latest technology. Bureau employees must also be trained to sort out irrelevant information from all the information they compile from various sources. Data alone have limited value—data need to be aggregated, analyzed, and converted into useful and reliable information on which critical lending decisions can be based.

Integrity is an absolute prerequisite for all bureau staff because on a daily basis they will receive requests from consumers to amend records on the basis of friendships or relationships, or simply to access the bureau's database without the consumers' consent. Resisting such requests is particularly difficult in close-knit communities where bestowing favors is the norm and denying requests is contrary to the norm. All bureaus should establish strong rules that dictate immediate dismissal of personnel should they fail to resist such requests.

2.2 Business Models for Credit Bureau Operations

The implementation of a private credit bureau requires a business model where all key players have clearly defined roles (see Figure 17). Each country develops its own approach in establishing and operating a credit bureau to fit its cultural, economic, political, and regulatory environment. It is possible, however, to identify several distinct business models for setting up a private credit bureau, based on the principle of reciprocity, which lies at the core of any credit bureau's business. In brief, this principle may be summarized as follows - members of a bureau can obtain credit reports only if they provide data to the bureau. All the models described below are based on this principle and vary primarily in ownership and management structures.

Figure 17: Key Credit Bureau Stakeholders



- Owners/Shareholders
- Credit Bureau Operator
- Members/Users
- Data Subjects (Consumers/SMEs)
- Regulator

Owners/Shareholders are the investors that provide seed capital to enable the credit bureau to acquire assets, including technology, the physical premises, office equipment, and so forth. They also recruit necessary personnel to manage the bureau's operations. Potential owners/shareholders include:

- **Banks and other financial institutions**. They can become shareholders individually or as a group through, for example, a banking association. The Association of Banks in Singapore, for instance, owns a share in Singapore's credit bureau. Other countries in which a group of banks own credit bureaus include Serbia, Turkey, Romania, Ukraine, Kazakhstan, and the KSA.

- **Technical partner.** This category refers to a qualified credit bureau operator, such as Experian, TransUnion, Equifax, Dun & Bradstreet, CRIF, Creditinfo, and others. The technical partner may become a minority shareholder, as in Kazakhstan, Russia, and Mexico, or a majority shareholder, as in Singapore and the Czech Republic.

- **Government.** In some countries, government entities, such as the Central Bank in Sri Lanka, or public sector financial institutions, as in India and Thailand, become major shareholders in the credit bureau.

- **Private individuals/entities.** Individuals or organizations that provide venture capital and individual entrepreneurs may also become partners in the credit bureau as is the case of Datacheck in Pakistan, CompuScan in South Africa, CRB in Kenya, and many others.

Operators of private credit bureaus run and operate the business on a day-to-day basis. This category refers to the on site executive management team and staff charged with all operational responsibilities, such as ensuring that data are collected, managed, and dispersed to its users. This management team is responsible for a bureau's sustainability and reports regularly to its shareholders.

Users/Members usually are creditors, including financial institutions and non-bank lenders that contribute credit information on their customers' accounts on a regular basis, typically monthly, to the credit bureau. In keeping with the principle of reciprocity, these lenders can access credit information reports from the bureau to assess the credit worthiness of new credit applications and to review accounts. Bureaus usually charge users/members a pay-per-use fee (per click) as well as a membership/enrollment fee.

Data Subjects (Consumers/SMEs) consist of the borrowers on whom the credit bureau collects and disseminates credit information. They are the subjects on whom lenders wish to assess the risks of default and non-payment before approving any new loans or advancing further credit.

Regulator is responsible for setting the guidelines, rules, and regulations under which the credit bureau, its users, and consumers will operate. In many jurisdictions, the regulator is also the enforcement authority and has the right to issue a license to the bureau and penalize the bureau in case of severe violations. Once the credit bureau is established and users are sharing information, the regulator's role is to ensure ongoing compliance with the regulations by all parties.

A private credit bureau's ownership and governance structure is important as all participants must have confidence and trust in the bureau. This trust in turn motivates banks to contribute their

data and helps the bureau develop more rapidly and effectively. Two major models for a private credit bureau in terms of ownership structure and operations include the following:

- Creditors own and operate the bureau.
- Creditors do now own and do not operate the bureau. Independent operator.

Model 1. Creditors Own and Operate the Bureau

Many markets around the world follow this model. Lenders, most often banks, establish a credit bureau where they are the main shareholders of the credit bureau. In most credit bureaus using this model, shareholding is fragmented and may include several banks as well as government entities, international financial institutions such as the IFC, independent private investors, and a technical partner as a minority shareholder.

A credit bureau may operate either with the support of a technical partner as in Mexico, Kazakhstan, Russia, and many other countries, or with in-house developed systems as in Germany, Austria, and Brazil.

The main benefit for bureaus that use this model is that it allows for a faster startup compared to a model without lenders as shareholders. Agreement among banks to become shareholders of the bureau implies a strong commitment to share data and ensures the sustainability of the bureau. Participation of a government authority may also add credibility to the venture. Including a technical partner as a shareholder allows the credit bureau to better align its incentives and guarantees a long-term commitment.

A major downside of this model is that a possible conflict of interest may exist between the objectives of individual creditor shareholders and the bureau: some banks, for example, may strongly object to the inclusion of new entrants in the bureau. Larger shareholders may also influence the pricing policy so that it favors some members over others and is not entirely based on commercial considerations. If a government entity becomes a shareholder, the possibility of conflict of interest exists between its supervisory function and its role as a credit bureau shareholder.

Several countries use a version of this model. Many bureaus in Europe, for example in Germany, Austria, and Switzerland, started with non-bank creditors as shareholders and eventually expanded ownership to include banks. Some of these bureaus were originally non-profit entities but eventually were reorganized into commercial companies. These bureaus operate on technical platforms developed in-house.

As technology develops and related costs decrease, more recently established credit bureaus have chosen to engage a technical partner instead of developing the credit bureau platform in-house. In some cases the technical partner becomes a minority shareholder. Examples include Mexico, where TransUnion is a shareholder along with several banks, and Kazakhstan's First Credit Bureau, which includes Creditinfo as a technical partner and a minority shareholder. The Indian credit bureau is a joint venture where Dun & Bradstreet and TransUnion each hold a 10 percent share and lenders hold the rest.

A variation of this model may include a structure, where lenders become shareholders in a holding company that, in turn, owns a share in a credit bureau along with the technical partner. This approach was used in setting up a credit bureau in Singapore. The shareholders of the Credit Bureau Singapore include the Association of Banks in Singapore, local Singaporean entrepreneurs, and the technical partner Baycorp Advantage.

Model 2. Creditors Do Not Own and Do Not Operate the Bureau. Independent Operator

This model is also referred to as an independent bureau because lenders do not own the company. Major international credit bureaus follow this model, including TransUnion, Experian, Equifax, and Baycorp Advantage in Australia and New Zealand. While this model is not so widespread in emerging markets, some examples do exist includ-

ing Datacheck in Pakistan, CRB in Kenya, CompuScan and XDS in South Africa, Credit Registry Corporation in Nigeria, and TUCA in Central America.

The main advantage of such a model is that it is a purely commercial entity with strong incentives to innovate and provide high-quality service to its customers, especially if the market of credit information providers is competitive. Conflicts of interests are absent because ownership and operations are separate and relationships with members and users are driven by commercial interests.

Attracting lenders and convincing them to share information are the main challenges facing such bureaus. Due to economies of scale, lenders only have an incentive to share information when they are certain that other lenders will join the credit bureau and share their information. This is the main obstacle in countries with no credit bureaus or where a bank-owned bureau already exists, as independent providers struggle to attract creditors. Another potential challenge relevant to new independent bureaus is the lack of capital, which may hinder the development of new products.

Major international credit bureaus are mostly independent operators. However, the lenders' failure to coordinate among themselves may hinder the success of this model in some emerging markets. Consequently, in many countries when the first credit bureau is established, the only feasible approach is for lenders to become bureau owners so as to build trust and initiate the process of information exchange. In cases where a bureau has been successfully operating for a period of time, it may be in the lender-owners' interest to dilute their shareholding. The credit bureau's owners would then be commercially motivated to broaden their customer base as well as to introduce new products and services as was the case in Hong Kong (China).

A structure combining the elements of the two models is operating in South Africa. Experian and TransUnion, as independent operators, both collect and distribute credit payment information for the Consumer Credit Association (CCA) and the South African Banking Council (SABC). The association and the council operate as closed user groups and can determine who can become a member and access data. The association and the council retain ownership of data, meaning that the credit bureaus collect, process, and distribute data, but on behalf of and with permission of the association and council.

2.3 Practical Considerations for Setting up a Credit Bureau

Although this Guide attempts to present a standard approach to establishing a credit bureau, the actual process of establishing a bureau may differ substantially from the proposed approach because no two countries are alike in terms of demographics, regulations, legislation, and needs.

An independent provider or an entity, such as a banking association, that is interested in establishing a credit bureau has to consider the following:

- Market Assessment and Strategy
- Financial Projections
- Technology Needs and Technical Partner
- Organizational Structure and Staffing

Market Assessment and Strategy

Market assessment and strategy development for a credit bureau can generally be divided into three phases — Phase 1: Assess Prospects, Phase 2: Conduct a Feasibility Study, Phase 3: Develop a Business Plan. Depending on the market environment, there will be a certain degree of overlap and variation in these phases.

Phase 1: Assess Prospects

This phase involves conducting an initial assessment of the demand for and feasibility of developing a credit bureau.

Making a decision to set up a credit bureau requires consideration of the following market characteristics:

- Population size, which indicates potential customer base for lenders.
- Size of existing retail and SME credit market and potential for growth.
- Level of sophistication of the credit market in terms of products and services.
- Size of the existing credit bureau(s) service in terms of borrowers covered and personnel.
- Threat of competition from public credit registries or other private credit bureaus.
- Legal and regulatory environment pertaining to credit bureaus.
- Level of support for credit information-sharing from the government, central bank, and other financial institutions.
- Possibility for regional expansion (as in the case of TUCA, see Case Studies).

The next step is to conduct consultations with all key stakeholders including:

- Financial authorities such as the central bank, bank supervisory authority, and especially representatives of the public credit registry if one exists.
- Legislative bodies including commissions working on credit bureau laws.
- Government bodies when relevant, including members of the ministries of finance and commerce and other relevant ministries.
- Licensing bodies including, where they exist, regulatory agencies that oversee credit bureaus.
- Lenders/financiers, including regulated banks, non-bank financial institutions, microfinance institutions, leasing companies, and other creditors such as utility and telecom companies.
- All existing data providers, including legal firms familiar with credit information-sharing issues.

Phase 2: Conduct a Feasibility Study

A feasibility study is an in-depth analysis of the market and stakeholders to determine whether credit bureau establishment is feasible and in what form.

The components of the study are as follows:

- Market analysis
- Technical scoping study
- Stakeholder analysis
- Legal and regulatory assessment

Market analysis. This component of the feasibility study examines the demand for, and supply of credit information and the market risks. It addresses such questions as:

- What is the potential demand for credit information?
- What are the existing sources of information, including public information sources?
- What is the risk of competition from other private bureaus and public registry, if one exists?
- What are the credit market trends?
- What are the broader economic and political risks?

A useful framework for conducting a market analysis is to conduct demand and supply assessments.

The demand-side analysis looks at:

- Depth of the credit market in terms of number and types of products offered and volume of clients served.
- Historical rate of growth of the credit market.
- Major players (financial and non-financial) in the credit industry.

The supply-side analysis answers the following questions:

- Is the demand for credit information satisfied by the existing providers?
- Are there credit bureaus already operating in the country and, if so, what market do they serve?
- Is there a public credit registry, and does it include or have plans to include information on retail borrowers?
- What are the existing sources of public information that the bureau can rely on? (Examples can include electoral rolls, telephone registers, court judgments, bounced check lists, vehicle registration registries, collateral registration registries, and the like.)

Technical scoping study. The objective of a technical scoping study, a critical part of the feasibility study, is to assess the technical capacity and readiness of the lenders to participate in the bureau. It is used to define the technical specifications of the future bureau. Conduct of this study involves sending detailed questionnaires on the nature and formats of available information to all potential participants and following up with meetings with all lenders to discuss the results of the survey. The focus here is on issues such as:

- Types of consumer and SME credit products offered.
- Level and growth rates of retail and SME credit, by product.
- Current and expected number of credits issued to inform projections about the potential volume of inquiries.
- Availability of electronically stored historical information.
- Borrower consent to disclose information to a credit bureau.
- Availability of unique ID numbers for individuals and firms.
- Level of sophistication of lenders' internal information management systems.
- Technology and infrastructure constraints.
- Level of awareness among lenders on issues related to credit reporting.
- Lender willingness to share negative and positive information.

Comprehensive analysis of these issues is used to develop the technical specifications for the bureau as well as help lenders make the changes needed in their lending processes to enable them to join the bureau.

Stakeholder analysis. This component of the feasibility study addresses issues related to possible stakeholders of the credit bureau. It asks questions such as:

- Is there a broad consensus among lenders on the usefulness of credit information-sharing?
- Who are the potential members/users of the bureau?
- Are lenders willing to share positive and negative information?
- Do lenders have the technological capacity to share the information?
- Are the authorities supportive?
- What level of technical and communication infrastructure exists in the country, and will it be able to support the needs of the credit bureau?
- What is the potential business model for the bureau?
- Are consumer rights issues being addressed?

Legal and regulatory assessment. This component requires meetings with regulators and qualified legal experts to assess the legal landscape in the country in question. Following are the main issues on which providers should focus while talking to regulatory agencies:

- Is information sharing allowed and, if not, what are the limitations?
- What is the existing legislation relevant to information sharing and the proposed credit bureau?
- Who are the enforcement authorities for the laws relevant to information sharing?
- What new rules/regulations are being proposed?
- What are the implications of the legal framework for the credit bureau's operations?
- How organized are consumer groups, and how likely are they to oppose information-sharing plans?

Experience shows that in many emerging markets, the legal environment for the operation of credit bureaus is not clearly defined. In such cases, a formal legal opinion from a qualified, local legal counsel should be obtained to inform decision makers, from a legal and regulatory viewpoint, on the feasibility of establishing a credit bureau in that particular market.

Phase 3: Develop a Business Plan

If the results of the feasibility study indicate that a viable credit bureau can be established, the next step consists of drawing up a viable business plan. When an independent company plans to enter the credit bureau market, the process is straightforward and includes preparation of a business plan that builds on the findings of the feasibility study and requires securing financing, and obtaining commitment from lenders to participate in the bureau.

If a credit bureau is expected to be a lender-owned entity, the process involves the establishment of the entity itself. The key stakeholders must agree on the establishment of the credit bureau and its structure. This agreement can be achieved with the support of the banking association, which can be used as the key platform to bring together all banks interested in the establishment of the credit bureau and can provide project management support until the credit bureau entity is registered and funded. In some countries, such as Nigeria, lenders with the most interest in establishing a credit bureau have contracted with a private consulting firm to manage the process by organizing meetings of key stakeholders, helping them reach agreement on the structure of the bureau, and preparing a business plan in consultation with all key stakeholders.

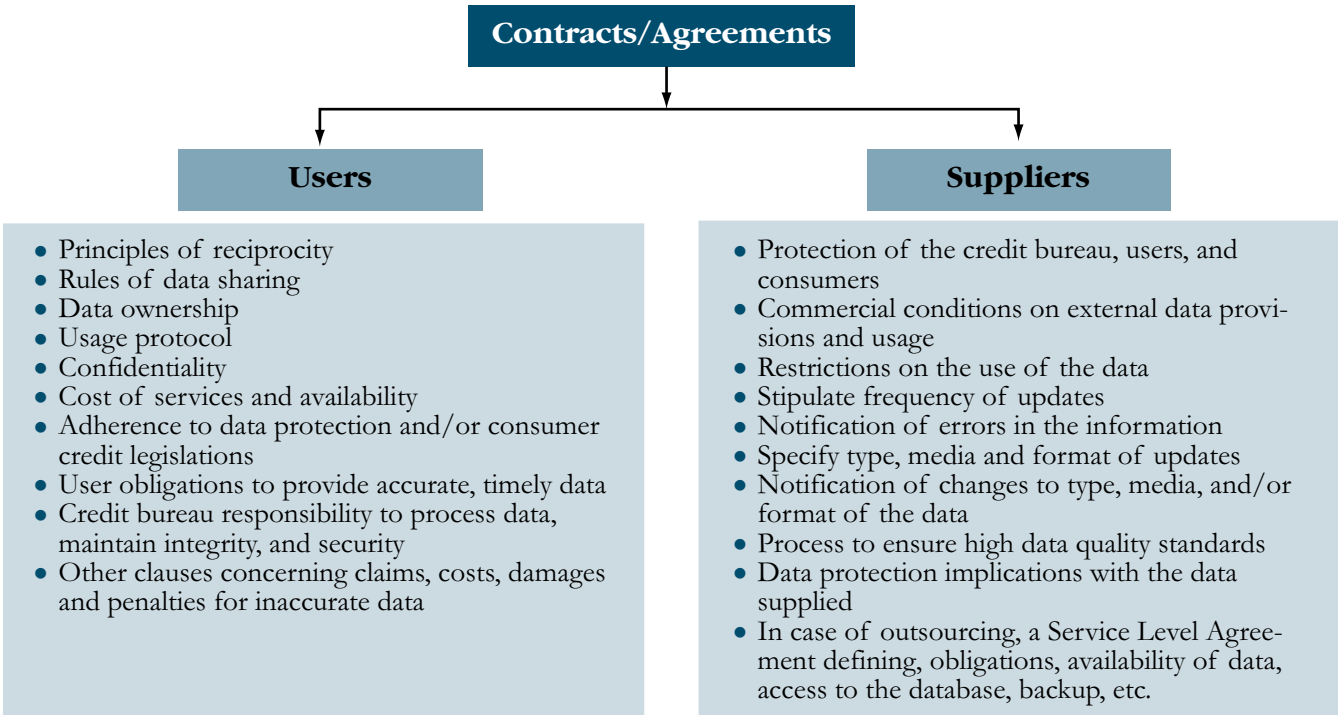
Once the credit bureau company is registered and funded, the next key steps involve the following:

- Identify and select the technology infrastructure to decide whether the bureau should develop the needed software in-house or collaborate with a technical partner.
- Prepare financial projections to determine when the bureau will breakeven and the operational implications in terms of pricing of services and necessary volumes of operation.
- Decide on the organizational structure and identify and hire staff accordingly.

These issues are discussed in more detail in the sections below.

Once the decision on a technical partner is taken and a financial plan is finalized, the bureau can proceed with entering into agreements with its members. Because the principle of reciprocity is the basis for exchanging information, users of data are also suppliers of data. In some exceptional cases, a member, such as a public source of data, may have an agreement to only supply information. In most cases, however, the agreement will cover the rights and responsibilities of the members as both users and suppliers of data. Figure 18 summarizes the key issues to be addressed in the agreement that members must sign with the credit bureau to enable information exchange.

Figure 18: Key Contracts/Agreements with Users and Suppliers



2.3.2 Technology Needs and Technical Partner

Credit bureaus require an adequate technical infrastructure to process data accurately, provide the appropriate communication network, and offer an effective and secure delivery mechanism to its clients. Credit bureau systems are not off-the-shelf solutions that can be acquired and installed into a computer hardware system. Each credit reporting system must be a customized and locally adapted solution, usually requiring six to eighteen months to develop, from analysis of available data from data suppliers through preparation of functional specifications, actual system development, and acceptance testing. Results of the feasibility and scoping studies described in the previous section will help in designing this solution.

Identification of technology needs requires the bureau to specify the functions the system must perform, and decide whether to build the system in-house or to outsource it to a technical partner.

Functional Requirements for Credit Bureau Technology

The credit bureau's systems must perform the following functions:

- Collect validate, and merge data.
- Generate and distribute reports.
- Provide data security and backup.

Collect, validate, and merge data

Credit bureaus collect data from many different sources and in many different formats. Because of this variety in sources and formats, a bureau could run the risk of collecting inaccurate or insufficient information and thus providing erroneous reports to its subscribers. As part of the process for identifying technology needs, therefore, the bureau should develop a standard data requisition form to send to its subscribers that stipulates the minimum information requirements. Such forms should meet all national and local legislative requirements for fair credit reporting and disclosure.

As a further attempt to mitigate risk, some bureaus, as for example in Kazakhstan, build their credit bureau system in a way that does not allow the bureau to change the records supplied by the lender. While the bureau may accept or reject a file supplied by the lender, it cannot make changes in the file, thus limiting the bureau's liability in case of error.

In addition, the bureau platform must be designed to receive information in many different forms even though now most data suppliers submit data in electronic format on-line. Less sophisticated clients, including small banks and non-banking financial institutions, may be unable to provide information on-line, thus making it necessary for the credit bureau to accept data on DVDs, CDs, diskettes, magnetic tape, or other portable data storage devices.

The bureau is responsible for validating all data before uploading the data to the database. Accordingly, the bureau's system must include automated processes to check for completion of all mandatory fields, conformity to the standard format, and quality of data. The system must also be able to reject files that have critical errors or missing information and send them back to the data provider, who must resend a corrected file.

After the data have been validated, the bureau must merge the new data into its database. The system must be able to locate the respective subject, be it an individual or a legal entity, using national unique identifiers, such as passport or identity card numbers, tax IDs. In countries where unique identifiers of individuals and/or legal entities are non-existent or unreliable, the credit bureau usually develops its own matching key and, if needed, cross-references the information with public databases containing identification data. Whatever matching key is used, the borrower's identification details must be found and must be accurate, the bureau's objective being to match the incoming data with the single best possible match from all the files held on the bureau database.

Once the correct subject file has been identified, the system will update the existing record or,

if the information relates to a new borrower, create a new credit file in the database.

Generate and distribute reports

The system must also have the capability to allow subscribers to access the bureau's credit reports. Typical modes of access include the following:

- **On-line access.** The most popular on-line access is system-to-system (host-to-host), whereby the client's system is connected to the bureau via a high-speed leased line. Interaction with the credit bureau is performed entirely by the client's system with no human interaction. A host-to-host connectivity solution may be required for even a start-up bureau, as some customers with large volumes of data would want to integrate their back office system with credit data to eliminate data duplication and to streamline internal workflow.
- **Dialup or web access:** In this case, access to the credit bureau is routed either via an Internet browser or other PC software. Once connected to the bureau, the client provides necessary authentication information (user name, password, etc.) to validate access to the credit bureau. This mode of access is preferred among users who are not technically ready or who make limited inquiries to the credit bureau and for whom cost of a host-to-host solution cannot be justified.
- **Batch access.** This mode of access provides clients with a cost-effective means of processing large volumes of requests. Lenders deliver information to the bureau via DVD, CD, magnetic tape or electronically and the bureau should be able to processes these requests off-hours with a quick turn-around. This mode of delivery is usually recommended for processing of risk monitoring for large client portfolios.

Provide data security and backup

Security is a high priority for credit bureaus because they manage highly confidential customer information. Secure systems protect the data and reports and in so doing protect the bureau's integrity and reputation and contributes to its success. The bureau must make sure that it has proper physical as well as system security in place to protect the sensitive information it holds. The bureau's physical office must only be accessible by authorized personnel who have been previously screened. Information theft is as much a physical threat as a system threat, where printed reports or computer diskettes/CDs can be picked up by a passing unauthorized person.

The system's security features should include:

- Strict control of access to the database via mechanisms for identifying and authenticating users.
- Protection against hackers.
- Clear delineation of authority among network administrators.
- Procedures for backing up data.
- Automated data updates.
- Provisions for recovering information in the event of a disaster or total system failure (e.g., use of a secure site for storing data where everything needed to restart the system is available in case of a disaster).
- Continual updating of all items stored in the recovery site.
- Periodic testing of backup hardware and recovery plans and procedures.

Adequate policies and procedures are an integral part of implementing the bureau's technology system. Bearing in mind that credit bureaus handle data that are highly confidential and sensitive, the bureau staff must sign internal agreements to abstain from any misuse or breach of confidentiality of the bureau information.

In short, it is ultimately the responsibility of the credit bureau management to put in place a security policy and take the following actions:

- Develop and circulate a security policy that applies to all bureau staff and any technical contractors with access to data.

- Run regular audit checks to ensure enforcement and adherence to the policy.
- Apply appropriate disciplinary action in the event of security breaches.
- Review and update the policy as relevant changes occur in technology, data protection legislation, employment law, and the like.
- Keep members of staff up to date with the policy.

Failure to address the issues of security and disaster preparedness in the early stages of technology development puts bureaus at high risk and creates a technical gap that might negatively affect their ability to attract lenders to their services.

Technology Acquisition Strategy

Once the functional requirements have been specified and the hardware and software needs identified, the bureau must decide whether to build its technology in-house or to outsource it to a technical partner.

The emerging combination of micro/mid-range and web technology has dramatically changed the credit bureau industry. Until a few years ago, the industry mostly operated on heavy and costly mainframes. Now credit bureaus use web-based applications and are no longer as expensive to launch as they once were. The positive impact of the new technology, with its downward pressure on costs and lowering of entry barriers for new players, has made it more convenient for investors and entrepreneurs in emerging and developing countries to "buy" technical platforms from external sources—usually internationally reputable technology providers— rather than "build" them in-house.

Cost should not be the only driver in the decision to buy a system. It may not be sufficient to have a good local technical infrastructure, well-trained domestic computer programmers and IT specialists. Credit bureaus require unique knowledge and experience to develop and operate the system because of their complexity and the high sensitivity of the data held. Participation of an international credit bureau operator as a technical partner in a new credit bureau, therefore, not only can provide the required technology and technical expertise but also, and more importantly, can lend its reputation, crucial business know-how, and the expertise to continuously develop new value-added services as the bureau grows and the market matures.

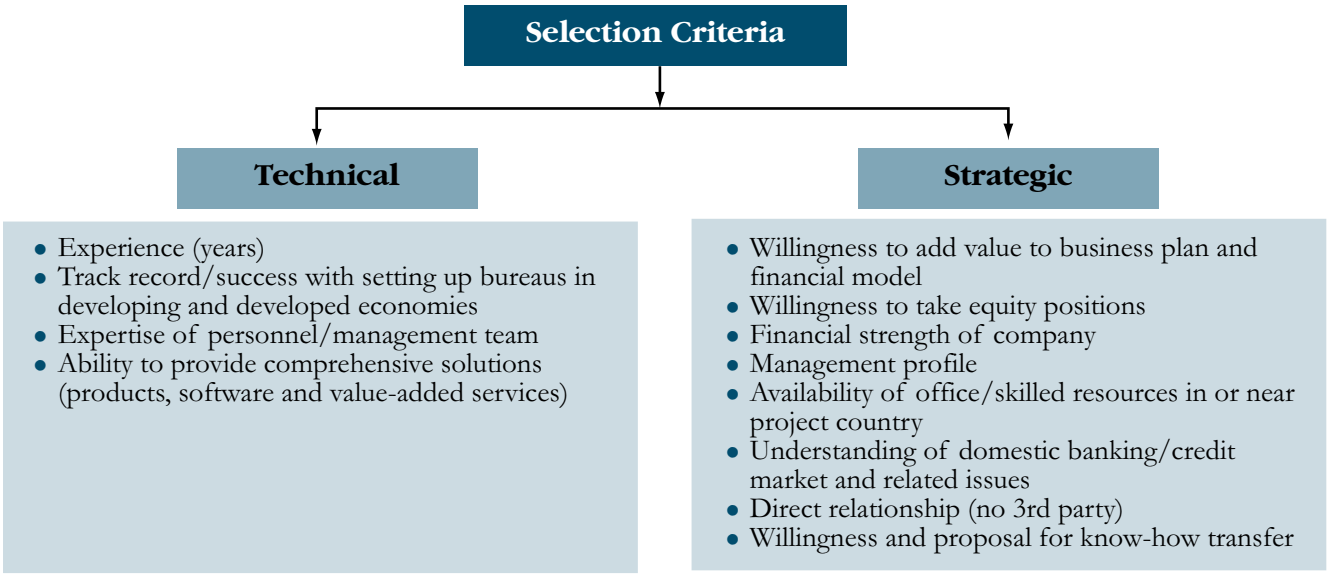
These added benefits explain why the majority of emerging countries that have established lender-owned credit bureaus in the last few years, including Mexico, Czech Republic, Turkey, Romania, Kazakhstan, Russia, Ukraine, KSA, and Egypt have opted for the "buy" option. In some cases, the terms of the partnership may include selling a share in the bureau to the technical partner as in Mexico, Kazakhstan, and Russia; in other cases, the contractual agreement covers only the sale of the software and support. Even when credit bureaus have opted to develop the software in-house, they often call upon international technology providers when their markets are ready to offer value-added services—such as credit scoring—that require more than just technology.

When selecting a technical partner, the bureau needs to evaluate a potential partner according to the following criteria:

- Technical: Does the potential partner have the capability to implement the system in accordance with the local technical specifications? Does it have a track record in implementing credit bureau systems in similar markets?
- Strategic: Is the potential partner able to commit to the credit bureau over the long term?
- Financial: Is the cost of the system in line with the demand for services?

Figure 19 provides several key criteria that need to be applied from a technical and strategic point of view. The decision regarding the financial implications of choosing a technical solution must be made in conjunction with overall financial planning and is discussed in the next section.

Figure 19: Qualities of a Strong Technical Partner



2.3.3 Financial Projections

Forecasting financial outcomes of establishing the bureau requires an assessment of potential revenue and costs and an identification of the drivers in each of these categories.

Revenue Projections. The main revenue driver for the credit bureau business is the number of credit reports or value-added services sold. Revenue projections are based on the estimated demand for credit reports and the pricing of reports. In most cases, the bureau charges a flat membership fee plus a charge per inquiry (per click). Volume discounts usually apply, and it is common to have a pricing matrix depending on the volume of inquiries and the type of user. Table 2 provides a hypothetical pricing matrix based on the annual inquiry volume per user. The cutoff points for volume discounts are determined based on projected demand and average expected inquiries.

Table 2: Hypothetical Pricing Matrix for Credit Bureaus

Inquiry volume	Price Per Inquiry
<25000	
25001 - 50000	1.00
50001 - 100000	0.95
100001 - 250000	0.85
250001 - 500000	0.80
> 500000	0.70

The inquiry-demand estimate is based on the survey of potential users. The financial projections for revenue should allow for time between the launch of a credit bureau's operations and the breakeven point at which it actually achieves its targeted inquiry volume. It is common to have many technical issues related to connecting a lender to the bureau and integrating the credit bureau's information into the lending cycle of the institution. Resolving these issues may take at least three to six months. The growth rate for the volume of inquiries is based on the projected credit growth rate for the economy and the expected number of new users joining the bureau. It is feasible to have growth rates of 50 percent and above in the first three to five years of a bureau's operations in a country with stable credit growth and new members joining the bureau.

Cost Projections. In large part, the costs are driven by the choice to acquire a credit bureau technology system, also referred to as bureau platform, or to develop one in-house. In both cases, the possible cost range is wide and depends on the level of sophistication of the system and the types of products it is expected to provide.

Cost projections based on the assumption that an existing platform will be acquired must include the following cost elements:

- Development/customization/installation fee for the credit bureau platform (usually paid in installments).
- Maintenance fee, usually a flat fee paid monthly, quarterly, or annually.
- License and royalty fees paid to the technical partner based on the number of inquiries received by the system in addition to fees to cover ongoing updates and enhancements to the system, usually at an agreed-upon rate.
- Consultancy fees charged by the technical partner for any service over and above the services specified in the development and maintenance agreement.

The exact fee structure of the contract will vary significantly in each case. For example, the license and royalty fees may not be applicable if the technical partner is a shareholder in the bureau.

Other elements to be addressed in the cost projections include hardware, such as database and network servers; network equipment and worksta-

Table 3: Hypothetical Profit & Loss Statement

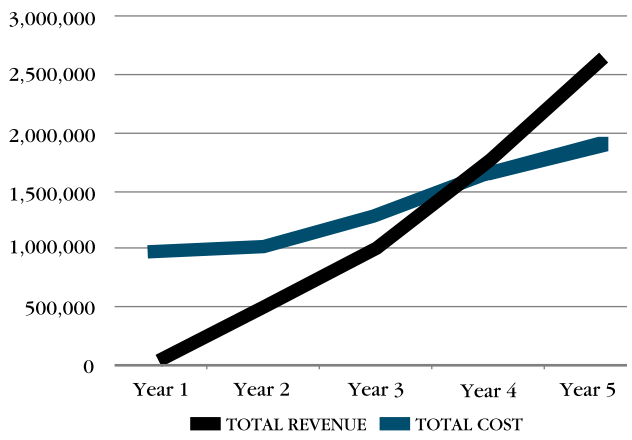
	YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5
TOTAL REVENUE	**0**	**500,000**	**1,000,000**	**1,750,000**	**2,625,000**
% change in revenue	0		100%	75%	50%
Cost					
Operating cost					
Labor	315,000	346,500	450,450	585,585	761,261
Rent	50,000	52,500	55,125	57,881	60,775
Utilities	1,500	1,800	2,160	2,592	3,110
Office equipment, supplies	7,000	8,000	8,000	8,000	8,000
Telecom	14,400	17,280	20,736	24,883	29,860
Audit, legal, and other fees	12,000	12,000	12,000	12,000	12,000
Insurance	13,000	13,000	13,000	13,000	13,000
External data, marketing	20,000	25,000	30,000	37,500	46,250
Total Operating Costs	432,900	476,080	591,471	741,441	934,256
% of Total Cost	52%	55%	54%	53%	53%
Fixed cost					
Rent, furniture, other fixed costs	20,000	20,000	20,000	20,000	20,000
System HW & SW	75,000	75,000	75,000	75,000	75,000
Credit Bureau Platform	300,000	300,000	400,000	550,000	725,000
% of Total Cost	36%	34%	37%	40%	41%
Total Fixed Cost	395,000	395,000	495,000	645,000	820,000
TOTAL COST	827,900	871,080	1,086,471	1,386,441	1,754,256
% change in cost		5%	25%	28%	27%
NET INCOME BEFORE INTEREST & TAXES	(827,900)	(371,080)	(86,471)	363,559	870,744
Tax	0	0	0	109,068	261,223
NET INCOME AFTER TAXES	(827,900)	(371,080)	(86,471)	254,491	609,521

tions; system software and other necessary software applications; office furniture and equipment; utilities and telecom expenses; and labor costs. In some cases, an important cost component is the cost of the data that the bureau acquires from external sources and then sells as part of its product offering.

Table 3 provides a hypothetical profit and loss statement for a credit bureau's five-year business plan.

Based on this hypothetical financial plan, the credit bureau would breakeven in the third year of operations. In most cases, credit bureaus reach the breakeven point over a three-to-five year period (see Figure 20).

Figure 20: Breakeven Point for a Newly Established Credit Bureau



It is important to assess the high and low scenarios for the operation of the credit bureau as the successful operationalizing of the credit bureau depends on many external factors. For example, often the bureau faces delays in beginning its operations due to the inability of banks to upload data to the bureau. Another example is underestimated costs. In many emerging markets, customizing and implementing the system may require a significantly longer period of time than originally planned and contracted for. Usually, this means that the bureau may have to pay high consulting fees to the technology provider to finalize the system implementation, which is likely to delay the timing of the breakeven point.

2.3.4 Organizational Structure and Staffing

Pre-operational Phase

During the startup or pre-operational phase, the bureau does not have any revenue and must, therefore, keep staff numbers to an absolute minimum. Growth in market demand for its products and services will determine subsequent staff growth.

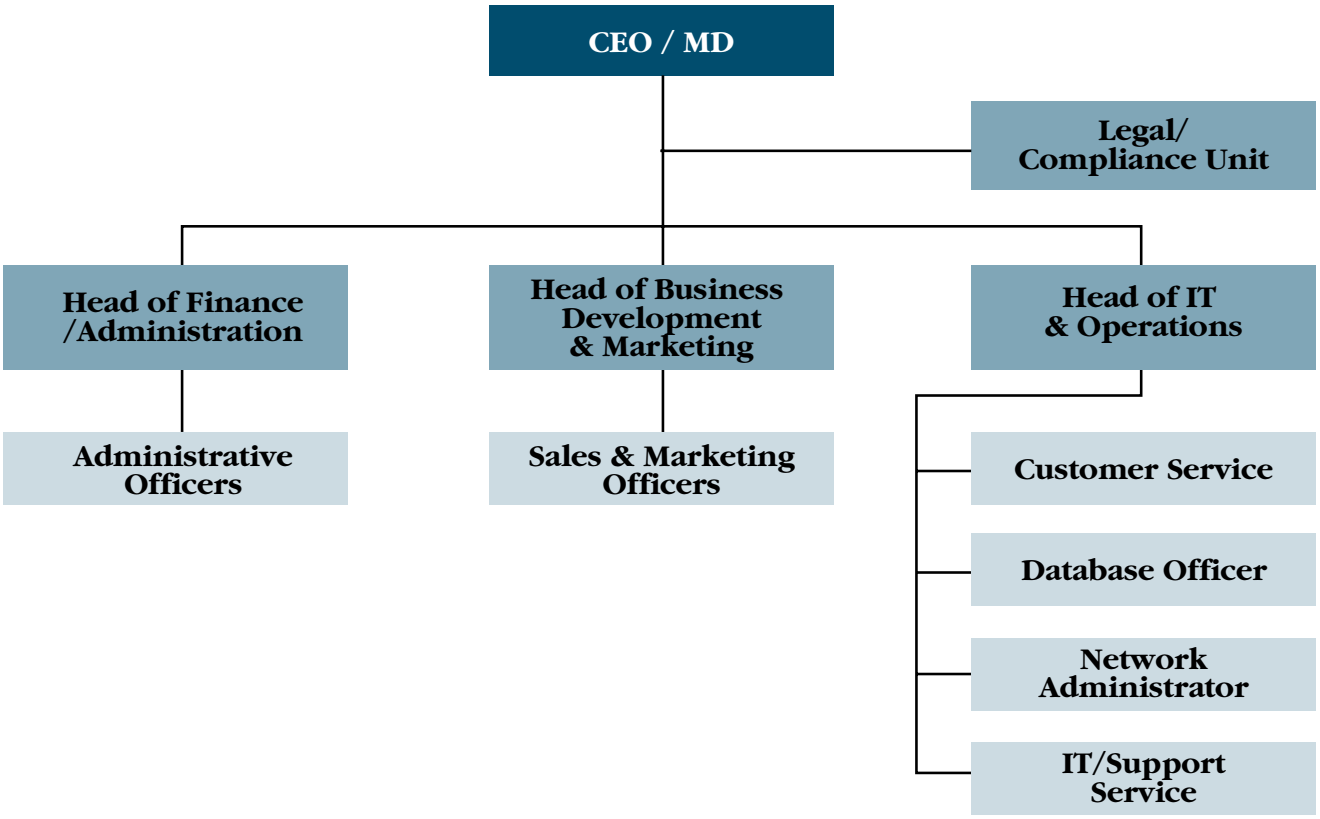
Initially, staff members should cover more than one role, whenever possible. The early phase of a credit bureau can essentially be run by a general manager/project manager, an office/communication manager, and a technical coordinator. In general, employing a general/project manager who is knowledgeable, experienced, and well connected in the financial sector is a critical factor for success. In addition to providing technical assistance, a reputable international technical partner can also provide strategy and business development support to bureau management. Finance, administrative and legal functions can be outsourced at the beginning.

As with any other private business, staffing during the pre-operational phase of a credit bureau needs to be tightly controlled. The credit bureau's market can be highly unpredictable, and a successful launch requires a combination of ingredients that could be difficult to obtain all at once, such as an enabling regulatory environment, willingness of data providers to contribute their data, available data of good quality, and pricing conditions acceptable to all parties involved. An over-staffed credit bureau in the pre-operational phase may fail even before it starts selling its first credit report.

Operational Phase

Once the bureau becomes operational (i.e., the system goes live and starts selling its first reports) several factors affect the decision on how many people should be assigned to each role or whether multiple roles could be assigned to a single position. The workload for each role guides these decisions. Among the factors to consider in determining workloads are the following:

Figure 21: Organizational Structure of Credit Bureau



- Number of existing and potential subscribers.
- Number of branches/workstations connected to the bureau.
- Inquiry volumes.
- Competitors' strength.
- Consumer awareness of rights and legislation.
- Projected and actual database size.
- Growth plans for the bureau.
- Complexity of operations (e.g., need for "off-line" checks/updates overnight or on week-ends).

The main divisions of the operational credit bureau are: IT and Operations, Business Development and Marketing and, Finance/ Administration. Divisional heads in each area report directly to the Chief Executive Officer (CEO) who manages the company's activities and, in turn, reports to the Board of Directors. The Board, whose members are appointed by the participating investors of the bureau, is responsible for the overall corporate governance. Ideally, the Board should include one or two members of the executive team (the Managing Director and Operations Director/representative of the technical partner).The Board of Directors nominates one of its members as Chairman of the Board. Figure 21 presents a traditional organizational chart of an operational credit bureau. Staffing requirements and responsibilities for an operational credit bureau are outlined in Table 4.

Table 4: Operational Phase Staffing

Role	Key Tasks
Managing Director/CEO	Overall bureau strategy Marketing/business development activities
Head of Finance and Administration	Financial and administrative operations Human resources functions (recruitment, compensation, performance management, career development)
Finance/ Administration	Day-to-day administrative and bookkeeping operations
Legal Counsel	Overall legal support Internal legal training
Head of Marketing and Business Development	Market segmentation Product development and branding Advertising Sales and promotion
Sales & Marketing Officers	Responsible for relationship with existing clients and for new clients enrollment Responsible for implementing sales & marketing plan and achieving business objectives Advertising, conferences/exhibitions Market research Media affairs dentify new data sources
Head of Technology and Operations	Vendor relations Data management Technology management Network and security operations Customer service
Customer Service Officer	Consumer Help Desk
Database Officer	Data quality checking procedures Data loading Emergency updates
Network Administrator	Network administration Subscriber communications interfaces Network security
IT Support / Technical Service	Housekeeping System administration Subscriber and internal Help Desk

The bureau should operate a help desk staffed with the qualified technical experts. Help desk technical experts should assist credit bureau members who have problems connecting to the system, uploading data, and modifying some of the their data as well as new lenders that may need additional help in enabling their internal systems to "talk" to the bureau.

The help desk also should assist consumers and firms whose information is stored in the credit bureau and who have the right to obtain their own credit reports and challenge any erroneous information.The help desk staff should aid these clients in obtaining their reports and registering complaints. The staff should also inform the responsible team to determine whether a mistake resulted from bureau operations and the institution that have submitted the data if necessary. This is an important tool for monitoring the quality of the data in the bureau.

To accommodate the needs of growing numbers of users and borrowers and their respective requests, most of the growth in staff in the credit bureau will occur in the Customer Service department. The Sales and Marketing group would also need to grow to promote the products and services of the bureau as it tries to expand into new markets.

Last but not least, it is recommended that the credit bureau set up a "Compliance Committee" (or Compliance Auditor) early on in the process. The Committee or Auditor would report directly to the Board of Directors and regulators on issues relating to quality control. Its main duties are to ensure compliance with the credit bureau's Code of Conduct and monitor any misuse of credit bureau data by users.

2.4 Measuring Effectiveness of a Credit Bureau

The effectiveness of a credit bureau, as of any other firm, can be measured in many different ways. A good performance measurement system includes multiple dimensions of performance, including financial, operational, and behavioral characteristics. The key categories for measurement include: quality, quantity, timeliness of products and services delivered, financial performance, and customer satisfaction (see Figure 22).

Figure 22: Key Performance Indicators of a Credit Bureau

1) Quantity. This category is a measure of the volume of goods and services delivered. Relevant indicators may include:

- Number of queries received by the system over the reporting period.This is the key measure of the demand for the credit bureau services.
- Number of credit reports sold. This is the key output measure for the bureau. It can also be tracked at the product level, for example how many basic reports are sold, how many reports with credit scores are sold, etc.
- Number of borrowers with credit records in the system at the end of the reporting period. This measure can also be tracked for different categories of borrowers, such as firms and individuals.
- Number of records in the system at the end of the reporting period. Each borrower may have more than one credit line and the history on each credit line is stored separately.
- Hit ratio. This is the ratio of the number of reports issued to the number of queries received and is an important indicator of the ability of the bureau to satisfy lenders' demand for information.

- Number of products offered. This could include basic reports, detailed reports, credit scores, portfolio monitoring, fraud detection, etc.

The World Bank Doing Business surveys estimates the depth of coverage by private credit bureaus at country level. The indicator used in this case is the number of borrowers covered by the system (see Figure 13).

A bureau's objective is to simultaneously increase its coverage ratio, defined as the number of borrowers in the system divided by the active population, and the hit ratio. Consideration of only one of these two measures does not provide an adequate understanding of the bureau's performance. For example, the hit ratio may be high in a bureau with a very low coverage ratio. This situation, often found in markets with underdeveloped credit markets, indicates that the formal financial system serves a small group of individuals and most lenders continue targeting the same group for new lending.

2) Quality. This category refers to the accuracy, currency, completeness, and consistency of the bureau's data. Information, the main asset of the credit bureau, only has value if it is accurate and current. Relevant indicators of quality may include:

- Number of complaints. The bureau must have a mechanism to receive and log complaints of the borrowers about the accuracy of the information in their credit reports.
- The percentage of complaints with inaccuracies due to the actions of the bureau. Many complaints that bureau receives may be unjustified or result from mistakes made by the data supplier and not the bureau. Tracking the number of complaints that can be attributed to the bureau's actions allows the bureau to improve the quality of its processes.
- Data quality reports. The bureau should run data quality reports to analyze the completeness and consistency of the data. Such reports produce tabulations of fields such as IDs and addresses, dates of birth, and other identifying information and allow the credit bureau to determine whether there are duplicate or incomplete files in the system.
- Number of rejected files. When accepting the data from the supplier, the bureau runs simple consistency checks on the data in the files. If the file does not pass this test, is the system rejects it and sends it back to the data supplier. Tracking the number of rejected files allows the credit bureau to monitor the quality of data available in the market.

Because bureaus are privately owned, ascertaining the quality of information contained in the bureau databases is difficult. The only publicly available information is self-reported by the bureaus in their annual statements. Several studies have been conducted recently in the United States and Europe to examine this question. For example, a report by the Consumer Federation of America and the National Credit Reporting Association contained analyses of the information in the credit reports issued by the three large U.S. credit bureaus: TransUnion, Equifax, and Experian. The authors analyzed a random sample of credit reports and found that 82.4 percent of the files contained inconsistencies in the category of the balance on revolving accounts or collections and 96.1 percent of the files had inconsistencies in the category of account's credit limit. In 43.1 percent of the files, conflicting reports existed for the same accounts on how often the consumer's payments had been late by 30 days. The study estimates that, based on inaccuracies contained in credit reports, nearly 40 million people may be mistakenly classified as sub-prime borrowers in the mortgage market.[25]

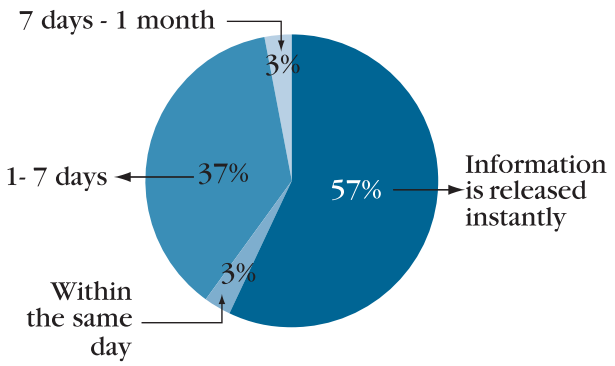
While it is true that credit bureaus manage highly complex and extremely large databases, thereby making mistakes inevitable, it is essential that a bureau implement all necessary procedures to assess the quality of data and take necessary actions to ensure data consistency and accuracy.

3) Timeliness. This category refers to the time it takes for lenders to receive a credit report. The

[25] Consumer Federation of America and National Credit Reporting Association. December 2002. *Credit Score Accuracy and Implications for Consumers.* Available at: http://www.ncrainc.org/documents/CFA%20NCRA%20Credit%20Score%20Report.pdf.

World Bank's Doing Business Survey[26] indicates approximately 57 percent of private credit bureaus (in a survey of 78 credit bureaus) reported that data requests were met instantaneously. The majority of credit bureaus met all demands within seven days of receiving a request (see Figure 23).

Figure 23: Average Time between Request and Release of Data



The key indicators for the timeliness of service may include:

- **Time between obtaining the query and issuing the report.** In many countries, the process is automated, depends on the search capacity of the software, and takes seconds or less. In many developing countries where the reports are not provided on-line, the process may take hours or in some cases days. Minimizing the delivery time is the key timeliness objective for the bureau.
- **Time to assimilate information, update records, and rectify errors.** This is the time between receiving information or updates from the data contributors and integrating them into the database. Running checks on the files received from lenders and merging the new records with existing files may take anywhere from one day to one month[27] depending on the quality of the information supplied by the lenders, the reliability of the unique identifiers, or the merging algorithm. This parameter is critical to ensure that the data available to lenders are current.

  This indicator also measures the time it takes the credit bureau to correct any data errors that have been reported. According to the World Bank's 2004 survey, 78 private credit bureaus surveyed, approximately 76 percent reported taking less than two weeks to rectify errors. Another eight percent reported taking between two weeks and one month to correct errors.[28]

4) Financial Performance. While return on equity, profit margins, and operational costs are standard indicators of financial performance, the bureau may also track more specific indicators, such as:

- Profit margin per product line. The services that bureaus provide vary greatly and are bound to have different levels of profitability and cost structure. For example, while the bureau may sell raw data at a relatively low cost, it may sell analytical products, such as credit scoring and portfolio monitoring, at higher margins.
- Profit margin per client. Bureaus aim to attract large creditors by providing significant volume discounts. Analysis of profit margins by client allows a bureau to better tailor its pricing strategy.

5) Customer satisfaction. Methods used to measure this category include customer surveys or actions taken by customer.

- Number of complaints. By tracking separately complaints from lenders and those from data subjects, the bureau can identify areas for improvement.
- Average time to resolve complaint. Providing fast responses to complaints is one way of improving client satisfaction. One approach to doing so is to operate a help desk with staff available to answer questions and complaints promptly.

Systematically tracking a set of key indicators enables the bureau to monitor its performance and formulate a clear strategy to improve service.

[26] World Bank. 2004. Doing Business Database on Private Credit Bureaus as of 2004.

[27] World Bank. 2004. Doing Business Database on Private Credit Bureaus. Based on information from 62 private credit bureaus.

[28] Ibid. Information not available for 13 private credit bureaus.

Developing Value-Added Services in Emerging Markets

3.1 Definition and Importance of Value-Added Services

Value-added services comprise a broad class of products that more sophisticated credit bureaus can offer. Such services entail the manipulation, processing, and analysis of existing raw data to produce tools that can be easily integrated into banks' credit approval and risk management processes. The range of potential value-added services is quite extensive and includes, but is not limited to:

- Marketing services
- Credit scoring
- Application processing
- Portfolio monitoring
- Fraud detection
- Collections

Raw credit data can be very useful in each of these areas, however, the lender needs significant time, resources, and expertise to analyze and interpret the data. Value-added services use a variety of techniques, ranging from simple data aggregation and cross-referencing to complex statistical algorithms, to provide an output that provides the lender with a simple interpretation of the information available (e.g., a risk score).

Given the volume of decisions often required to manage a typical retail portfolio (e.g., grant/reject facility, over-limit authorization, cross sell/up sell, past due action required), many lenders have turned to automation as a means of maintaining efficiency, but raw data in the form of a credit report can be extremely difficult to integrate into such systems. Many types of value-added service (e.g., application processing systems and behavioral risk assessment) however, lend themselves perfectly to inclusion within automated systems.

The major benefit of automated decision-making systems is that they allow users to manage many customer decisions on an exception basis rather than having to review each and every case. This helps contain the need for employing highly experienced, and often very expensive, individuals to make mundane or rudimentary decisions and allows lenders to channel this experience into more productive tasks.

Larger financial institutions that operate in developed markets typically develop customized value-adding tools, either using in-house analytical teams or contracting with one of the numerous specialized companies that have emerged to service this market, such as FairIsaac and Experian-Scorex (Global), PIC Solutions (Africa), and LISIM (Latin America). Financial institutions in developing markets, however, tend to be smaller and either have customer databases that are too small for such solutions to be statistically reliable or find it difficult to justify the up-front capital cost of development.

In emerging markets, therefore, the credit bureau can play an important role in making these types of services available to a broader audience, by pooling data across a range of customers and spreading the cost of development across its user base.

Although users still have to pay for these services, typically on a "pay as you go" or "click" basis, they get immediate access to the benefits of improved lending methodologies, more cost-effective processes, and increased operational efficiency that, under other circumstances, would only be available to larger institutions.

3.2 International Industry Trends

The range of value-added services offered by credit bureaus has broadened significantly over the last 20 years. This growth has been fueled both from the demand side—users wanting more and more sophisticated products—and the supply side—bureaus trying to increase/maintain income margins in an environment where there is consistent downward pressure on commodity prices (the cost of the raw data).

The scope of the products offered is very much a function of the environment in which the credit bureau operates, that is, the extent to which the raw data can be used. The trend in developed markets, however, has been to create a suite of value-adding products aligned to what is sometimes referred to as the "customer life cycle" (see Figure 24).

The customer life cycle effectively mirrors the core business functions adopted by most lenders when managing customers: prospecting and marketing, new business acquisition (loan processing), customer relationship management, and collections.

The credit bureau, typically, builds products or solutions that help its customers in each of these business functions make better or faster decisions by using the predictive nature of bureau data. In effect, the bureau is re-cycling its databases so that users access the files more than just at the point when they make an initial loan inquiry. For example, a behavioral scoring system may access a customer's credit file monthly to identify updates rather than just once at the point of application.

Figure 24: Customer Life Cycle: Offering Value-added Services

Some value-added services may be no more than enhanced bureau reports, such as a watch-out service that pro-actively advises a lender of a change to a customer's file, and requires little in the way of analytical expertise. Having introduced these services at a relatively early stage, most credit bureaus aim to move up the value chain to add increasingly more sophisticated tools, such as scoring and credit information management software. These more complex solutions have the dual benefit of generating greater revenues for the bureau and also locking in the clients to the bureau services, (i.e., making users more reliant on the supplying bureau and, therefore, less likely to transfer allegiance to competitive sources of information).

In developed economies, bureaus tend to use specialized internal analytical teams to develop and maintain these services. In emerging countries that lack such specialists, bureaus typically rely on outsourcing development, often to the same vendors that supply custom services directly to the lenders, such as FairIsaac, Experian, or LISIM, who recently developed generic microfinance bureau scoring services for CompuScan in South Africa. The critical issue, however, is not who develops the services, but when they can be deployed.

The credit bureau databases in most developed countries have had many years to develop, are rich in information, and for the most part offer high quality data, thus providing an ideal base for data mining and data modeling.

The credit bureau databases in many emerging markets, however, are considerably less developed: they may have information only from banks and may not have been operational long enough to build the diversity of information sources required for value-added products. Their inquiry/search databases, for example, may not contain enough historical information. In these circumstances, it may be difficult, or indeed impossible, to build some of the more sophisticated solutions, such as credit scoring.

Planning for the development of value-added services requires an understanding of the stages required for a credit bureau to "mature."

Stage 1: Initial Deployment. At inception, a new credit bureau is intrinsically an empty box, a database with no data. Although able to back-fill the database with some historical records, such as past defaults, the bureau does not have access to the most powerful data sources, such as the credit repayment record and the inquiry footprint, which need to be built up over time.

Stage 2: User Acquisition. Although not necessarily the case in all countries, the trend in many emerging markets is for the initial development of credit bureaus to take place within the banking community. The main driver of this approach is that the banks are the major providers of credit and have one clearly defined supervisory entity. The first step then is to upload the data from the initial members, i.e., the lenders.

Stage 3: Data Diversification. In parallel with Stage 2, the bureau attempts to augment the basic credit history data with other forms of information that may be beneficial to users, such as electoral rolls, identity records, court judgments, telephone numbers, and company registration records. This type of data can be particularly useful to members: it may be predictive of future borrower behavior or it may make their processes simpler by providing a portal to a "one-stop data shop". The data also provide a valuable source of information for data mining and modeling.

Stage 4: User Diversification. Even where the banks take a pro-active role in establishing the credit bureau, it is often clear from the outset that, at some point in time, the user base should expand to include non-bank creditors, such as telecommunications companies, microfinance lenders, and the like.

The introduction of new users can have a profound effect on the composition of the bureau databases and, therefore, the predictive nature of the data. In several countries, expanding to include telecommunications providers has had a significant impact on the predictive power of the inquiry database as the pattern of telecom payments may be indicative of future defaults on bank credits.

Adding new bureau members also has implications in terms of reciprocity, namely access to the information on the basis of their level of data contribution. The rules of reciprocity extend to the design and delivery of value-added products. A bureau score that incorporates positive credit history information, for example, should not be made available to a member that provides only negative information, even if the member never actually sees the positive data.

Stage 5: Database Maturity. Credit bureau databases change over time as the availability of data sources and the number/type of users change. Databases typically tend to grow in both depth and breadth, but not always. Privacy restrictions can result in changes to the availability of certain types of information as was seen in the United Kingdom in 2000 when restrictions were placed on using electoral roll information.

In general, however, the core bureau database needs a period of time to mature from the above stages of development in order for the data therein to be predictive of a future outcome (see section below on Credit Scoring).

The ever-changing nature of the database explains why value-added products and services require continuous monitoring and fine-tuning. Estimates based on today's data may not apply 12 months from now as the overall economic environment may change.

Stage 6: Service Expansion. There are no hard and fast rules as to when value-added services can be introduced. Simple services, such as expanded credit reports, can be introduced at low cost at a relatively early stage, even during Stages 2 and 3. Bureaus typically develop more sophisticated products, such as credit scoring, which are usually more expensive to build and maintain, when the database and to some extent the user base have reached a level of maturity where the resulting products will be both robust and have a reasonable shelf life. This is most likely to occur once the bureau has reached Stages 3 or 4. It is only when the bureau has reached stage 5, however, that a broad suite of products, such as described in Figure 24, can be contemplated.

There are two other key factors that a bureau would typically take into consideration when developing value-added services: Return on Investment (ROI) and users' capacity to adopt the service.

- **Return on Investment.** A clear business case must exist for the development of a value-added service. The projected revenue from the sales of the services must cover the investment cost and produce positive return. The pricing and marketing strategy often includes bundling value-added services with the sale of core data.

- **The capacity of users to adopt the service.** Members will only demand a service if they have the capacity to use the service to improve some element of their own processes. A bureau score, for example, adds no value unless the lender is able to integrate it into its credit underwriting process to lower the costs of credit approval. User-side constraints have a significant bearing, especially in emerging markets, on who will use the services and in what quantities.

Even in developed markets, the uptake of new bureau products and services is not guaranteed and typically requires a highly pro-active sales and marketing department/staff to promote the product to the market. Experian, for example, launched Detect, its industry-leading fraud detection product, three times in the United Kingdom before the product received market acceptance.

In emerging markets, the problem of acceptance of value-added products is even more pronounced. Except for the international banks, many lenders in emerging markets lack an understanding of the lending methodologies that can be implemented using these services and of the IT infrastructure needed to deploy them.

Credit bureaus in emerging markets should not underestimate, therefore, the need for outreach training, market development, and sales functions within their organizations. As products become more sophisticated and more analytical, bureaus should also recognize the need to have internal specialist resources to monitor and maintain the products and, perhaps more importantly, communicate the benefits to potential users.

Developing value-added services can benefit both the bureaus and their customers and ultimately may improve access to finance for the broader community. The opportunities, challenges, and ensuing benefits, however, will vary considerably depending on a bureau's individual circumstances and the market in which it operates.

The following sections describe in detail some of the core value-added products credit bureaus offer.

3.3 Products

The following list, although not inclusive of all of the value-added products credit bureaus provide, serves as a guide to the key services typically available. The accompanying examples indicate how these products are deployed in certain markets and may not be applicable to all circumstances.

3.3.1 Bureau Scores

A credit score is a number assigned to a borrower based on his ability and capacity to repay debt. This number falls within a range of scores, and a higher score indicates a more creditworthy borrower. This score is computed from available credit history information using a statistical model or mathematical algorithm. Credit scores can be used in the loan approval process for simple accept/reject rules or for more sophisticated risk-based pricing rules and credit limits.

Bureau score refers to credit scores developed on the basis of the credit bureau data and are different from the credit scores developed on the basis of the data supplied by an individual lender. Bureau scores are based on the information pooled across many creditors as well as public information sources and thus include characteristics otherwise unavailable to the individual lender, such as total exposure, number of outstanding loans, and previous defaults within the system. All of these are highly predictive measures of future repayment.

Credit bureaus typically build scores using three historical data files that are unique to the credit bureau:

- Defaults on previous credit transactions.
- Positive payment behavior (trade line data).
- Previous searches/inquiries.

In certain circumstances, the models may include other types of data, such as:

- Third party data, e.g., court judgments and bankruptcies.
- Demographic data, e.g., applicants' personal attributes, such as age.
- Geodemographic data, aggregated information at the geographic level.

Each of these components could potentially add predictive power to a bureau score, but care must be taken to ensure that the resulting models do not conflict with a lender's existing decision-making process. For example, a credit score that incorporates the customer's age may be incompatible with a lender's custom scorecard that also includes age. Typically, therefore, a credit bureau may choose to develop a suite of models rather than just one model to accommodate as many different customer requirements as possible. Examples follow:

- Positive bureau score for closed user group members providing both positive and negative data and typically used as a plug-in or addition to in-house custom scores.
- Negative bureau score for closed user group members providing only negative information.
- Enhanced bureau score incorporating additional customer demographic data and typically used on a stand-alone basis by lenders with no other scoring models.
- Industry-specific bureau scores using data derived from specific industry sectors, such as banking or telecommunications.
- Public domain bureau score using data available in the public domain and, therefore, available to all customers.

Because different users can use the scores for different purposes, the credit bureau typically uses a variety of different distribution channels. In its simplest form, the credit score can be incorporated into a credit report, usually with some explanation as to what the score means. Alternatively, the bureau may supply the score to the users electronically so that it can be incorporated into customized scoring solutions or automated software applications. A third and increasingly popular service is the use of a regular batch service that rescores complete portfolios periodically. The charging structure for each of these services also varies although most bureaus charge users on a per-score or per click basis.

When adequate quantities of reliable information are available, bureau scores can be statistically derived, typically by using some form of multivariate regression analysis. The techniques used to develop the models are very similar to those used for any other type of customized model development. There are, however, several unique challenges that can complicate the process of building/deploying bureau models:

- **Retrospective Data.** A key requirement of the analysis is the ability to observe the transition of a credit file from the point at which an application was made, through the observation period, to the outcome point. This requires that the bureau be capable of retrospectively reconstructing a credit file at various points in time. With adequate archiving of the database, reconstruction may not seem like a significant issue. Changes in customer name, address, ID numbers, and the like can cause tracking problems, however, if not appropriately addressed.

- **Thin File.** The data files may range from extremely detailed, as when a data subject has a variety of pre-existing credit facilities with various outcomes, to very thin data, as when the bureau has no pre-existing information on the applicant. In cases when a bureau has only a limited amount of data on borrower performance and outcomes, standard statistical multivariate analysis may not apply and other methods should be used.

- **Scoring Model Calibration.** The bureau builds the credit scores from a broad spectrum of customer histories found in its database. The derived scores are typically calibrated for an average portfolio; that is, the distribution of customers across the range of scores reflects what is seen across the whole spectrum of customers at the bureau. While probability of default at any given score should remain constant for all users, the cumulative good to bad odds will vary from portfolio to portfolio depending on the risk profile of the applicant base. This can have a profound effect on the way lenders manage their cut-off strategies (the scores at which the lender chooses to accept or decline applicants). It is highly recommended, therefore, that individual portfolios be retrospectively tested before the models are implemented.

In emerging markets where either the market is too small or the credit bureau is insufficiently mature to have confidence in the data, the bureau may consider offering models that rely more heavily on customer demographic characteristics than on credit performance data. Although less predictive, these models often provide a useful introduction to the methodology for lenders with little or no previous experience in credit scoring.

3.3.2 Software Applications

A key advantage of credit scoring is the bureau's ability to establish a quantifiable measure of risk in what is otherwise a highly subjective process. Having a numeric value (a measure of probability of default) for risk is valuable in its own right but becomes increasingly powerful when integrated into automated processes and used to pro-actively manage strategy and a lender's appetite for risk.

To help facilitate this process, many credit bureaus in mature economies have developed a range of software solutions that complement both the raw bureau data and the scoring process adopted by sophisticated lenders. These solutions are commonly provided either as software applications—customized to specific user requirements and maintained within the client's own IT environment—or as bureau solutions—more generic in

nature and hosted at the bureau. The available solutions are many and varied, but the following represents a summary of the more popular applications.

- **Application Processing**

  A key driver of profitability in mass market lending environments, such as consumer loans and credit cards, is the ability to keep the cost of new business acquisition to a minimum. Many financial institutions have turned to automated application processing systems as a means of streamlining the credit-granting process. Many examples of such systems exist, but the common design incorporates several fundamental features:

  Electronic Data Capture. Typically an application processing system has a series of standardized data capture screens. These screens allow the operator to capture the information necessary to process the decision and, perhaps more importantly, store the customer data in a format that can later be used for analysis.

  Rule/Scoring Engine. The system captures the application data electronically, then the software automatically applies policy rules, such as minimum required lending criteria, and scoring algorithms, including score cut-off criteria.

  Decision Output. An automated application processing system assimilates all of the input data, including any available on-line information from the credit bureau; applies the rules and scoring models from the decision engine; and presents the operator with a recommended course of action, such as accept, refer, or reject. This output is then queued so that the final decision is presented to an individual with the appropriate level of underwriting authority.

  The degree of complexity of such software solutions varies depending on the technical sophistication of the user. Advanced decision systems are capable of managing almost all aspects of the decision-making process, including customer segmentation and strategy allocation (e.g., terms, limits, and product features) and even champion/challenger strategy setting to test the lender's appetite for risk.

- **Behavioral Scoring (Card Management Solutions)**
  For a variety of credit products, such as credit cards, charge cards, and overdrafts, the initial decision whether or not to lend is only the first of many decisions that must be taken during the life of the lender-borrower relationship. These dynamic products require a greater degree of monitoring than term loan products as the exposure to risk increases over time. Additional credit decisions must be taken on a variety of issues, such as limit management, over-limit authorizations, and card reissue.

  Behavioral credit scoring is an adaptation of more traditional scoring techniques specifically designed to observe and evaluate the payment behavior patterns of borrowers. The output score changes to reflect the changing risk profile over time and can be used either to automate routine decisions or provide operators with an immediate assessment of current risk.

  A range of powerful software solutions has been designed to host card management solutions and provide strategic control over practically all aspects of customer relationship management. While the complexity of these systems has a correspondingly high price tag, these systems have become almost an integral part of mass market credit management.

- **Model Tracking and Performance Monitoring**
  An overlooked benefit of introducing credit scoring methodology into the lending process is the ability to monitor customer risk in an objective and quantifiable manner. Undertaking this analysis requires an in-depth understanding of the way the models are performing. Several credit bureaus provide score diagnostic tools that monitor and report on the performance of scorecard characteristics in terms of their continuing ability to discriminate and the way shifts in the applicant population may create misalignments that would affect the quality of the decisions.

3.3.3 Collections Services (Receivables Management)

A long and often successful association has existed between credit bureaus and debt collection companies. In several instances, negative information in credit bureaus has been derived directly from information gathered by debt collection companies (e.g., Baycorp in New Zealand and Credit Reference Bureau in East Africa).

Many different collections products and services are available, but the following three are among the most common.

- **Tracing.** Tracing services products use the credit bureau data to identify the whereabouts of a customer with whom a lender has lost contact ("Skips"). These products either trawl the current bureau databases to identify existing contact information of which the lender may be unaware (e.g., telephone numbers or a new address) or place a marker on the customer file so that if the customer subsequently makes another application for credit the previous lender can be informed.

- **Debt Management.** Debt collection is an expensive and time-consuming function and typically requires specially trained and dedicated personnel. Some lenders, therefore, opt to outsource this function, and credit bureaus may perform this service. These services are usually performed on a fixed fee basis or on a performance basis, where the collector gets to keep a proportion of any monies recovered.

- **Debt Purchase.** Credit bureaus that specialize in receivables management may choose to take the ultimate risk and buy distressed or non-performing accounts from the credit provider. In these circumstances, the bureau purchases the outstanding balances from the lender at a discount, assumes responsibility for collecting the debt, and keeps the proceeds once the debt has been collected.

3.3.4 Asset Registries

For secured loans, a lender needs to establish that the collateral used for the loan actually exists and is unencumbered. Developed credit bureaus, therefore, often attempt to become more than just a source of credit data by providing customers with access to associated lending information, such as asset registries. Bureaus can provide this service either by building an automated link to a third party database or by building and hosting the service directly. Whether it is fixed assets, such as land and buildings, or moveable assets, such as motor vehicles, these services typically provide two basic functions:

- **Inquiry**. This function allows users to ascertain the bone fide nature of the asset and whether or not there are any encumbrances prior to purchase or acceptance of the asset as collateral.

- **Registration of Interest.** This function allows the lender or individual to register a notice of a charge or lien on the asset.

3.3.5 Marketing Services

The use of credit bureau data, especially closed user group data, for marketing purposes, is often a highly contentious issue. In many countries, including Australia, use of such data is either prohibited by law or severely restricted to specific applications. In many other countries, especially in emerging markets where lenders are already nervous about sharing credit information, marketing applications are intentionally excluded from the definitions of permissible purpose in either the industry code of conduct or the membership agreement between the bureau and its customers.

There are, however, several value-added marketing services that the bureau can provide that do not necessarily involve the use of credit bureau data.

The range of potential products/services that can be offered is extensive. The following list represents a sample of the most common examples:

- **Customer profiling.** Historically, many financial organizations have suffered from poor knowledge management systems (e.g., paper-based customer records). Consequently, these organizations have relied heavily on branch distribution channels to obtain comprehensive information about their customers. Customer profiling attempts to bridge this knowledge gap by providing analytical services that help to profile the attributes of particular types of customers. This service may include augmenting the lender's existing customer information with additional data from the credit bureau. The subsequent analysis identifies homogeneous customer clusters or segments that have similar profiles, such as young, credit-active high achievers, that can then be used to help the financial institution either provide a more tailored relationship or better target cross-sell and up-sell promotions.

- **Modeling.** As with credit scoring, the number of applications for modeling services is extensive. Among the more popular are propensity modeling and response modeling. Propensity modeling tries to predict the likelihood that a particular prospect will take up a marketing offer; response modeling measures the effectiveness of particular marketing campaigns to increase the responsiveness of customers in the future and thereby optimize the cost of new business acquisition. More complex forms of modeling include applications such as customer worth or customer life-time value. These techniques analyze customer potential not only in terms of actual, current contribution/profit but also in terms of what a customer may contribute over the lifetime of the relationship.

- **Geodemographic Analysis.** Geodemographic modeling looks at the relationship between geographical areas, indicated by zip codes or postal codes, and the types of individuals/businesses that live/work in a given area. The technique creates similar customer profiles to those described above but does so using aggregated rather than individual data.

- **List Services.** In countries that have a mature direct marketing industry, many credit bureaus have developed products and services to assist with customer prospecting. These services range from providing prospect lists (e.g., the names and contact details of potential customers) augmented with credit bureau data or geodemographic data, to the outsourced management of a client's customer relationship management database.

- **Mail Screening.** Again, in countries that use direct mail extensively as a means of acquiring customers, the credit bureau can be useful in helping ensure efficient targeting of potential customers. Mail screening removes from a mailing list those applicants who are most likely to be rejected for an offer of credit if they were to apply. This screening saves the lender time and effort. This service also has positive customer benefits in those countries that operate a do-not-mail database—a screening facility for consumers that would prefer not to receive unsolicited marketing offers.

Where marketing services are permissible (e.g., in the United States and United Kingdom) and are used extensively, they have proven to be a highly lucrative form of added value for the credit bureau and a significant value-added proposition for the user. These services also have a positive effect on the risk management process of the bank by allowing the bank to pre-screen the offers.

3.3.6 Portfolio Monitoring

Monitoring and maintaining credit quality is a task that all lenders undertake but one that has taken on more prominence in recent years with the upcoming introduction of Basel II.

Some credit bureaus have been providing services in this field for many years, using a range of standard reporting and bureau scoring products.

- **Portfolio Monitoring Services.** These services advise a lender of any significant change to a customer's credit file, such as a default registered by another lender.
- **Batch Screening.** This service allows lenders to periodically update the risk profile of entire portfolios by reviewing the current credit scores of its clients.
- **Monitoring and Reporting.** These services typically help smaller lenders with limited internal analytical capacity to produce the management information required to track credit quality.

The forthcoming introduction of the Basel II Capital Accord and the need for lenders to comply with the best practice risk management guidelines have created an increased focus on the ability of lenders to monitor portfolio quality. Implementing the Advanced Internal Ratings Based approach requires all lenders to be capable of calculating not only Probability of Default but also Loss Given Default and Exposure at Default. Credit bureaus with developed analytical capabilities have seized this opportunity to use advanced modeling, software solutions, and consultancy to help their clients with these compliance issues.

3.3.7 Fraud Detection

As the retail credit market grows in an economy, so will the incidence of fraudulent financial transactions. Fraudulent activity can range in severity from what is sometimes referred to as soft fraud—embellishing application information to obtain credit—to more hard forms of fraud, such as identity theft.

A variety of products and services can be developed on the back of the bureau platform to help lenders identify and thereby prevent fraud. These products include, but are not limited to, the following:

- **File Cross-referencing.** These relatively simple products cross-reference various data files to identify anomalies.
- **Known/Suspect Fraud Closed User Groups.** These industry initiatives, such as the Credit Industry Fraud Avoidance Scheme (CIFAS) in the United Kingdom, pool information about known or suspected fraudulent activity.
- **Fraud Scoring.** This product may be custom built models for individual institutions or generic models developed by the credit bureau.
- **Fraud Detection Systems.** These sophisticated software solutions use a combination of rules logic, scoring, and enhanced databases to identify application fraud. A range of software solutions have also been developed specifically to track card fraud by means of payment behavior analysis.

4 Legal and Regulatory Framework

4.1 Key Principles for Credit Information-Sharing Legislation/Regulation

The legal framework for credit reporting differs from country to country and may include a combination of the following legal acts:

- Credit Reporting Laws
- Data Protection Laws
- Consumer Protection Laws
- Fair Credit Granting and Consumer Credit Regulations
- Personal and corporate privacy and secrecy provisions

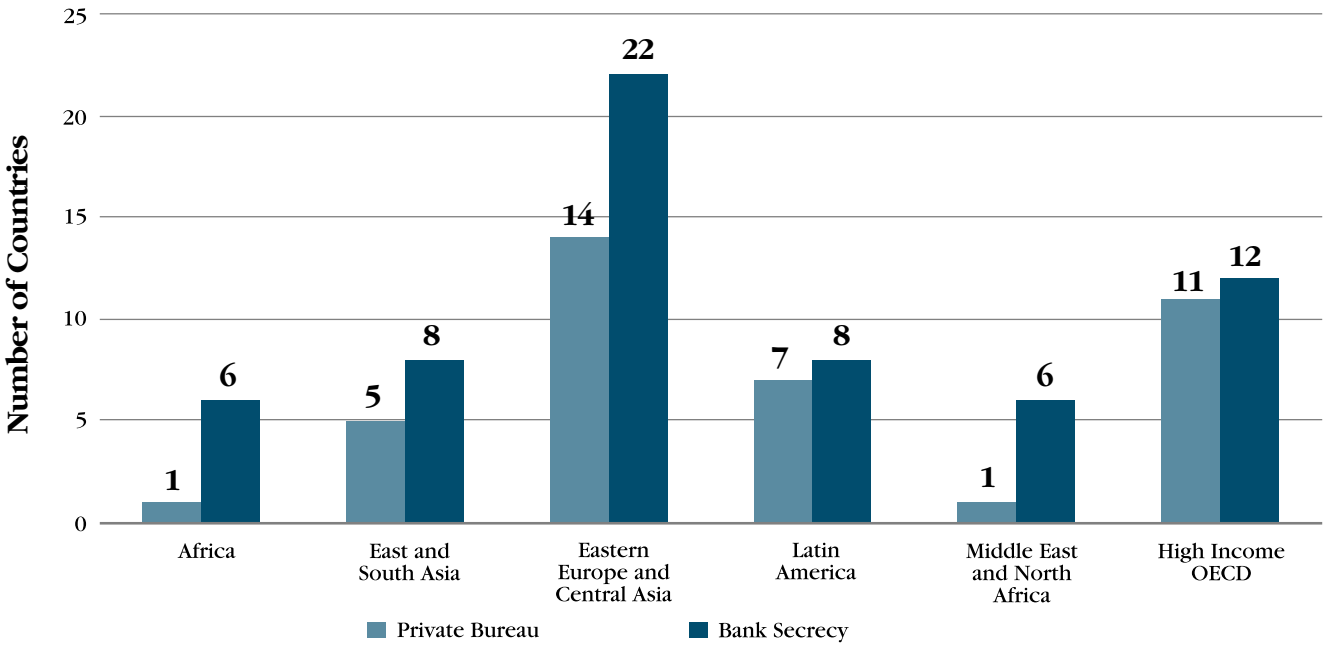
Bank secrecy provisions in the law or contractual confidentiality provisions are often cited as an impediment to the development of a credit bureau. In accordance with these provisions, banks are not allowed to disclose information related to the account and transactions of its client to a third party. Analysis of 84 countries in all regions of the world shows that in 62 countries with explicit bank secrecy provisions, roughly 63 percent or 39 countries had an operating private credit bureau. Figure 25 shows the number of countries with operating credit bureaus in the countries with explicit bank secrecy provisions in the law. In high-income Organization of Economic Cooperation and Development (OECD) countries, 11 out of 12 countries with bank secrecy provisions had a private bureau. In Latin America, seven out of eight countries operated credit bureaus. In Eastern Europe, to date 14 out of 22 countries have a credit bureau. Most bureaus in the region were established within the last five to seven years and all of them in countries with bank secrecy provisions.

Legal and regulatory approaches vary across countries, but explicit borrower consent generally suffices to enable a bank to share information. Debate surrounding the issue usually revolves around the format in which consent should be submitted and the way banks should store such consent. Passing a credit reporting law or a regulation generally helps resolve these issues. In the absence of such laws, however, a simple agreement among lenders to collect consent and share information will suffice. In Switzerland, for example, a credit bureau has been operating since 1974 merely on the basis of borrower consent.[29]

Although bank secrecy and confidentiality provisions do not prohibit the sharing of credit information, lack of clarity and agreement among stakeholders on the most appropriate way to address such issues usually impedes the establishment of credit bureaus. In several countries, such as Russia, Kazakhstan, and Ukraine, credit bureaus were not set up until clarifying legislation was passed. In other countries, such as Kenya, Tanzania, and Georgia, the debate continues on the most appropriate manner in which to share credit information.

[29] World Bank. 2005. Doing Business Database on Private Credit Bureaus.

Figure 25: Credit Bureaus in Regions with Bank Secrecy Laws



The main objective of legislation to enable credit reporting is to balance the ability of institutions to exchange credit information in the normal course of business while simultaneously protecting individuals' rights to privacy. Two broad approaches to the regulation of credit reporting can be identified: 1) use of broad data protection laws and 2) use of specific credit bureau or credit reporting laws. The European Union and several other European countries regulate credit reporting activities under broad data protection laws that cover not only credit bureau activities but also any other relationships and transactions related to data management and exchange. Recently, several emerging markets have followed this approach: Chile passed a data protection law in 1999, and Argentina passed a similar law in 2000.

Regulating credit reporting activities through a specific credit bureau or credit reporting law is another approach. Countries that have adopted this type of approach include the United States, Thailand, Russia, Kazakhstan, Peru, and Ukraine. See Annex 2 for further information on existing credit reporting and data protection laws.

Good enabling legislation incorporates the following characteristics:

- **Open system.** Reporting and access are open to both financial institutions and non-bank creditors, such as retailers, telecom and utility companies, and debt collectors.
- **Permissible purpose.** The legislation protects the rights of individuals and firms to ensure that data are not misused, while permitting the sharing of information. Typically, access to information is only allowed for a certain identified purpose, such as credit approval, portfolio monitoring, debt collection, and employment. Many countries require borrower consent in order for a creditor to access information in a bureau.
- **Authorized access to information.** Only authorized parties may access information in the credit bureau, and information may only be used for permissible purposes. The legislation may require borrower consent or notification to allow the lender to access information. The legislation may also require that the names of all lenders that have accessed data be a part of the credit report available to the borrower so as to ensure that no information is accessed without borrower consent.

- **Consent.** Depending on the jurisdiction, explicit or implicit individual borrower consent may be required to provide data to the bureau and to access a credit report. The objective of the consent is to enable the data subject to control the information flow. Several European Union countries, Thailand, Kazakhstan, and many others, require explicit borrower consent to provide information to the bureau. The loan agreement usually includes standard clauses to cover such consent. Many countries also require borrower consent for the creditor or another eligible third party to access a credit report. Loan or employment applications usually contain consent clause. In the interest of maintaining operational efficiency, the onus of obtaining and maintaining a record of borrower consent for data submission rests on lenders. In the event of a dispute, the lender must be able to demonstrate that it had obtained borrower consent in accordance with the law. Some countries, including the United States, do not require explicit consent. The consent of the borrower is considered implicit if the borrower has originated a transaction with the lender. Banks are required to inform their customers, however, on the use of the information that they obtain from their clients.

- **Length of information retention**. Legislation stipulates a specific length of time for allowing information to be stored. Although historical information enables lenders to assess a borrower's credit quality over a period of time, the legislation should specify a cut-off date for information storage, after which time information is erased to give borrowers a fresh start. Payment history information is usually maintained for a minimum of five years. Rather than erasing information on defaults once loans have been repaid, this information should be stored with the rest of the borrower's file for the assigned period of time. Public records relating to bankruptcy are usually retained for seven years or more. According to a World Bank survey, out of 78 private credit bureaus, 57 preserved historical information for more than five years, and 34 credit bureaus preserved data between five and seven years.[30]

- **Positive and negative information-sharing.** Lenders are generally hesitant to share positive information for fear that their competitors might poach their best customers once positive information is made available. Enabling legislation, however, can include information-access rules that restrict the ability of banks to poach other banks' customers. For example, the legislation may specify that a lender can only access a bureau's information if an individual or a firm has applied to the lender for credit.

- **Consumer protection.** Regulations include provisions ensuring that individuals have the right to check their own information and bureaus have mechanisms for correcting erroneous information. The regulation also creates grievance and dispute-resolution mechanisms that include limits on the time the bureau may take to respond to a borrower's complaint. In most countries, this period ranges between 10 and 20 business days. During this period, the bureau must put a notice into the credit report indicating the dispute. The law, however, should be reasonable and specify the penalties to be imposed on a credit bureau and/or lenders in case of violations. In Thailand, a law was passed with very steep penalties for violations such as data inaccuracies or the lack of borrower consent. Since the law did not clearly define the requirements for data accuracy and the procedures for obtaining consent, the two existing credit bureaus in the country shut down for fear of having to face severe liabilities. It took five months for the authorities to issue clarifying regulations and for the industry to adjust its processes before the bureaus could reopen.

- **Licensing and registration.** In Mexico, Thailand, India, and Kazakhstan, credit bureaus are required to obtain a license to operate from the supervisory authority. Licensing requirements usually require credit bureaus to meet certain financial, security, and governance standards. In most countries where specific credit bureau

[30] World Bank. 2005. Doing Business Database on Private Credit Bureaus.

laws have been passed recently, the central bank, the bank superintendent, or the supervisor of a non-bank financial institution can perform the licensing function. In Russia and some European Union countries, the credit bureau is required to register with the supervisory authorities but does not need to obtain a license to operate. Other countries, such as the United States, require neither licensing nor registration.

In case of severe violations of data sharing regulations or laws, the supervisory authority can penalize the bureau in question by revoking its license or registration. In the absence of licensing or registration procedures, any data violations need to be resolved via the country's court system. This approach works well in countries, such as the United States, where the judicial systems are well developed and consumers can file a class action law suit in case of systemic violations by credit bureaus. Most emerging countries, however, have weak judicial systems and opt for a strong regulatory agency instead.

- **Access to public information.** Public information access is open to all market participants at low or no cost.

Enforcement

Enforcement is an essential element of the legal and regulatory framework necessary to enable the operation of the credit information industry. A country may opt for one of the following two broad approaches to enforcement depending on its legal traditions:

- **A strong supervisory authority** with the power to license, register, and control credit bureaus. The authority's functions usually include issuing industry regulations, granting licenses, conducting or requesting audits, receiving and analyzing complaints, and imposing penalties. Mexico, Kazakhstan, and Thailand use this approach.

- **Industry self-regulation** within an established legal framework. Here the enforcement authority's role is limited to issuing clarifying statements, collecting complaints, and in some cases bringing class action suits in case of systematic violations. This type of enforcement mechanism is prevalent in the United Kingdom, Hong Kong (China), Australia, and South Africa.

To ensure the smooth implementation of credit bureau legislation, it is critical to build the capacity of the supervisory authority. In several cases, implementation of the law was delayed or had a significant negative impact on existing bureaus due to the lack of enforcement capacity. For example, in Russia a credit bureau law was passed in December 2004. The law required all financial institutions to submit information, to a registered credit bureau after obtaining borrower consent. A supervisory authority, however, was appointed after much delay and could not develop a registration procedure in time. As a result, the implementation of the law had to be postponed by more than one year. Due to the lack of supervisory capacity, the authority also was unable to provide guidance to financial institutions on compliance with the law.

4.2 Self-Regulation Principles

In Australia, the United Kingdom, South Africa, and Hong Kong (China), credit bureaus operate on the basis of a Code of Conduct (COC) under broad privacy legislation. CoC is a binding agreement signed by the members of the bureau. It provides the rules that govern the operations of a credit bureau and mechanisms for resolving disputes among its members. In countries where more than one bureau exists, such as in South Africa, all credit bureaus operating in the country endorse the CoC, and an association of credit bureaus is responsible for enforcement

The CoC usually covers the following key areas: 1) bureau operation principles; 2) bureau rights and obligations; 3) member rights and obligations; 4) data subject's rights and obligations; and 5) dispute resolution mechanisms.

The basic bureau operation principles include:

- Reciprocity—the requirement that all members provide data in order to obtain access to the information in the bureau.

- Data format—the specification of the format in which data are submitted and distributed.
- Frequency—the schedule for data submission and updates. It is customary to have updates on a monthly basis with the exception of default records, which need to be updated only if there is a change in the status of the credit.
- Quality—the requirement that the information be accurate, complete, current, and provided on time.

Table 5 identifies the respective rights and obligations of a credit bureau and its members and data subjects.

The CoC also specifies responsibilities of bureaus and members in the areas of investigation and correction of erroneous information, investigation and resolution of complaints, and imposition of penalties where appropriate.

Examples of CoC provisions related to investigation into disputed information are as follows:

- A data subject or a member may notify the bureau in writing that the completeness or accuracy of any item of information is disputed.
- The bureau shall investigate such disputed information and provide response to the information subject within a specified period of time, usually between five and 15 business days.
- The bureau must ensure that information regarding a consumer is updated and must verify the information with the member that has supplied the information.
- The bureau shall correct the information regarding the data subject if the complaint is substantiated in the course of investigation.
- For the duration of the investigation, the credit record in the bureau must indicate that the information is under dispute.

Table 5: Rights and Obligations of COC Parties

Bureau's rights and obligations	• Record, maintain, collate, synthesize, and/or process information properly and accurately. • Protect information against loss and damage. • Protect information against unauthorized access, use, modification, or disclosure. • Retain and display information for the relevant periods. • Grant access to own credit reports to individuals who offer proof of identity. • Maintain a help desk.
Bureau Members' rights and obligations	• Comply with reciprocity principles. • Restrict inquiries to those allowed by law. • Maintain records and be able to demonstrate that the query was made for a permissible purpose. • Use information only for permissible purpose. • Disclose information obtained from a bureau only to authorized parties. • Secure information obtained from the bureau. • Appoint a bureau relationship manager.
Data subjects' rights and obligations	• Access own credit report. • Dispute inaccurate information and obtain response within a set period of time.

With respect to breaches of the code and mechanisms for resolving them, the CoC usually specifies that any member may submit a complaint of violation of the CoC by another member. Generally, a compliance committee comprising the members of the bureau and/or independent experts investigates such complaints.This committee, appointed in consultation with the Board of the bureau, the members, and the supervisory agency for the law governing the activities of the credit bureau, has the right to impose penalties, such as suspending access to the registry by a member that systematically violates the Code.

5 Case Studies

CompuScan, South Africa: Successfully Serving Microlenders

CompuScan was established in 1994 to provide credit bureau services to microlenders in South Africa. Its owners founded the company in response to increasing levels of bad debts among what appeared to be habitual nonpayers. While South Africa had a well-developed credit bureau infrastructure at that time, the industry had traditionally ignored the microfinance market because the cost to service an almost entirely paper-based client base was considered unviable.

The CompuScan bureau started life as a collective of microfinance providers in the Cape Town area that shared a negative list, updated on a weekly basis and distributed as a simple Excel spreadsheet. As the value of the service became apparent to users, the geographical coverage expanded and the bureau introduced a range of value-enhancing propositions. A key component of CompuScan's unique offer has been the provision of training to microfinance lending officers through the development of a specialized credit academy.

Today CompuScan offers a broad base of credit bureau products, incorporating both positive and negative data, and serves more than 3500 credit officers (branches) throughout South Africa. All credit data are accessed and loaded via a high-functionality Internet GUI, in batch format files or fully integrated into the in-house systems of the microlenders and banks. CompuScan also provides a variety of other services, such as notifying lenders when customers take loans or receive court judgments. These services are seen as an integral part of allowing small lenders to build credit histories, thus facilitating their transition to formal borrowing and supporting broader access to finance in the market.

In 2004, CompuScan undertook analytical research into the effectiveness of the then available generic bureau scores for the microfinance sector. Not surprisingly, given that these models had been derived from activity within a completely different market sector, the models appeared to be providing unacceptable levels of discrimination. CompuScan, with technical assistance from IFC, began work, therefore, on developing the first microfinance-specific bureau scores for South Africa.

In 2005, CompuScan partnered with LISIM, a Colombia-based credit scoring and analytical solutions company, to develop a suite of credit risk models using a combination of unique data sources from CompuScan's database. These services were launched in mid-2006 and are expected to help microlenders improve both the efficiency of the credit approval process and the quality of credit decisions.

CompuScan is an emerging regional player, with existing operations in Namibia and Botswana and further plans to expand to other countries in the region. The combination of using highly flexible technology and the focus on user development through training have clearly demonstrated that servicing relatively low-value credit transactions can be both profitable and sustainable.

TransUnion Central America (TUCA): Building a Regional Solution

Due to economies of scale in the credit information industry, small economies are often unable to attract state-of-the-art credit information providers. The lack of credit bureaus in Costa Rica, Guatemala, Honduras, and Nicaragua was imposing a constraint on credit growth among consumers and small businesses.

A regional private credit bureau can be a viable alternative to a national bureau in a small market. TransUnion in Central America (TUCA), established in 1999, is the private credit bureau that provides services to Guatemala, Honduras, El Salvador, Costa Rica, and Nicaragua. TUCA's business model is based on a hub-and-spokes system (with Guatemala as the hub and the other four Central American countries as the spokes). The spokes leverage the more advanced technological system present in the hub, thus enabling economies of scale, improved efficiency, and higher profitability. In addition, the creation of a single cross-border private credit bureau enables the delivery of standardized products and services that have superior information quality.

With the support of IFC, TUCA's primary focus has been on various educational initiatives, including demonstrating the importance of data contribution and full-file reporting from financial institutions and the positive effect they can have on the economy. In addition, through international conferences on credit information and credit scoring, along with roundtables and videoconferences, TUCA has raised the awareness and highlighted the advantages of private credit bureaus, thus, facilitating discussions among the various parties.

Going forward, TUCA intends to provide value-added services, such as credit scores and fraud alert systems, all of which will enhance the capacity of financial institutions to manage risk.

SIMAH, Saudi Arabia: Long-term Stakeholder Commitment

SIMAH, the Saudi Arabian credit bureau, began operations in 2004 and is jointly owned by 10 banks. The Saudi Arabian Monetary Agency (SAMA), the Kingdom of Saudi Arabia's (KSA) central bank, spearheaded discussions before the launch of the credit bureau. Although these discussions were launched in the mid-1990s, it was not until 1998 that SAMA facilitated the establishment of a committee to work on the consumer credit bureau. The committee consisted of representatives from the banks as well as SAMA. In 1999, a Request For Proposal (RFP) was issued to internationally renowned technical vendors, but the process was soon abandoned. The process was revived in 2001 when SAMA issued a circular to all banks outlining its position. SIMAH was established shortly thereafter.

SIMAH engaged the services of Accenture to help select the technical vendor. A Request For Information (RFI)/RFP process ensued, and Baycorp Advantage was selected as SIMAH's technical partner. SAMA was very supportive during the entire process, acting as a banking regulator and appointing one of its key executives as managing director of the credit bureau.

In the absence of a legislative framework to support the establishment of a credit bureau, SAMA and the participating banks agreed to operate under a voluntary Code of Conduct until the appropriate legislation was drafted and passed by the Sharia council. The relevant legislation has been drafted and is expected to be enacted by the end of 2006.

Currently, SIMAH contains records relating to approximately four million borrowers. This number will grow substantially in the near future as major telecommunications providers have agreed to join the bureau and submit their customer records. The bureau provides in excess of 120,000 individual credit reports per month.

To better serve the needs of lenders in the KSA and to expand credit to small businesses, SIMAH is creating a commercial reporting business to complement its retail credit bureau operation. Expanding the bureau's service to include commercial credit reporting will fill the existing information void. SIMAH is currently going through a comprehensive RFP process to select an appropriate technical partner to help with this expansion. The commercial phase of the credit bureau is expected to be operational by mid-2007.

Estealam, Egypt : Building the First Private Credit Bureau in Egypt

Estealam, Egypt's first private credit bureau, was established in September 2005 and will include information on both consumers and SMEs. Jointly owned by 27 commercial banks and the Social Development Fund, each of which holds equal stakes, Estealam is wholly supported by the Central Bank of Egypt. The bureau is still in its preliminary stages of operation and is expected to be fully functional in the second quarter of 2007.

The Central Bank of Egypt was highly instrumental in creating a legislative framework conducive to the operation of a private credit bureau. The legislation allows data sharing by banks and non-bank financial institutions. In addition, obtaining borrower consent is only mandatory for non-bank financial institutions. The legislation requires that all banks obtain a credit report for credit approval.

Estealam requested technical advisory support from the IFC for the development of the bureau. IFC Global Credit Bureau assisted the bureau in the following:

- Conducting a scoping and technical feasibility study, which included a review of the legislative environment and of the technical ability and willingness of a selected number of banks and the Social Fund for Development to contribute data to the bureau.
- Preparing and issuing an RFP to select potential international vendors and providing credit bureau expert assistance to the evaluation committee.
- Preparing a business plan for Estealam.

Estealam recently contracted with Dun & Bradstreet International/D&B SAME to provide software solutions and operational know-how for the creation of its database.

The creation of the bureau itself is divided into three phases. The initial phase will focus on populating the bureau's database with credit card information in English, thus allowing bureau operations to begin. At the same time, Estealam will work on the data quality challenges identified in other asset portfolios. Examples of the issues to be addressed include the lack of unique IDs in Egypt, the recording of names and other information in English or Arabic, and inconsistent formats across all lenders for recording names, addresses, and dates of birth. Once the database has been populated, it will contain information from seven major banks and the Social Fund for Development, which represent approximately 60 percent of national bank lending.

In phase two, Estealam will invite second-tier banks and non-bank financial institutions to join the bureau once they are in a position to upload their data in a format consistent with that of the bureau.

In the final phase of development, the bureau will focus on the provision of value-added solutions, such as scoring, identity verification, fraud detection, and application processing.

Vietnam : Public Sector Support for the Establishment of a Private Bureau

The State Bank of Vietnam (SBV) operates a public registry called the Credit Information Center (CIC), which like most public registries is designed primarily as a supervisory tool to identify systemic risk in the banking industry. Initially the information captured by the CIC related predominantly to large exposures of banks to their corporate clients. More recently, the CIC expanded its role beyond supervision to include sending information back to lenders by way of credit reports on potential borrowers.

The increase in retail and SME credit in recent years has created a need for an adequate information infrastructure to ensure that the growth is healthy. SBV was requested to design a strategy for providing the necessary information infrastructure, including the future role of CIC and the potential for private bureaus. SBV has asked the World Bank and IFC for support in defining this strategy. The key challenges identified through the analysis of CIC operations and the credit market in Vietnam include the following:

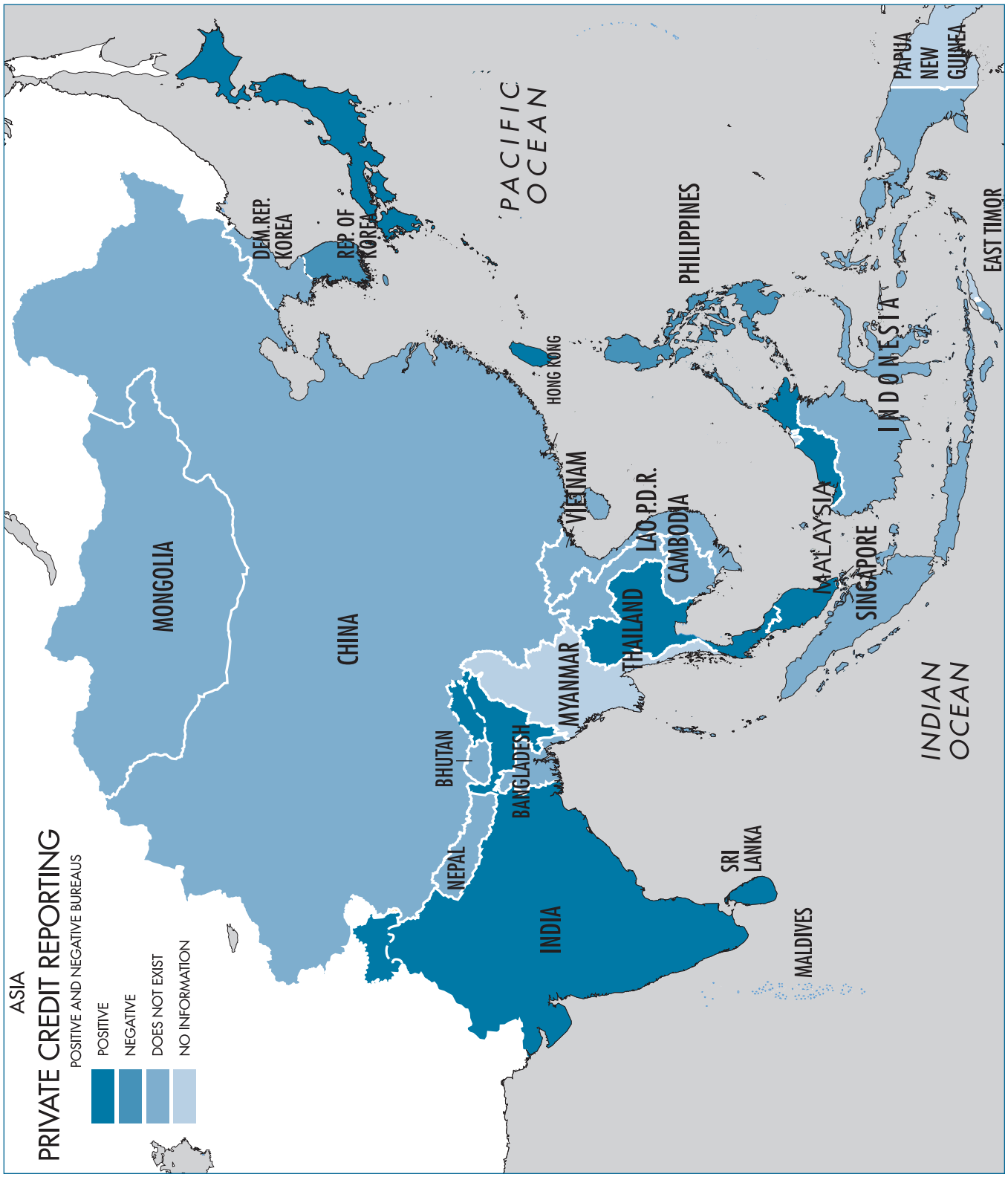
- CIC's technical infrastructure cannot support the data volumes associated with a comprehensive consumer credit file.
- CIC does not have the requisite experience for developing or operating a consumer credit bureau.

The World Bank and IFC recommended that the development of the consumer credit-reporting infrastructure in Vietnam be undertaken as a private sector initiative with the strong support of the SBV. At the same time, CIC should be better integrated into the banking supervisory process.

IFC has worked closely with SBV to prepare a detailed strategy plan that lays out a roadmap for developing the private credit bureau in Vietnam. The strategy envisages active participation of the SBV in developing an adequate legal and regulatory framework and assignment of the SBV as the supervisor of credit bureaus. SBV's role also includes guiding and encouraging commercial banks to actively participate in the establishment of a credit bureau. To ensure broad buy-in and limit fragmentation of the data in the early stages of the credit bureau development, the Vietnamese authorities have agreed that the best approach is to establish a private bureau owned by a consortium of banks and with participation of a technical partner.

The SBV approved the strategy plan, and work on the legal and regulatory framework and the preparation of the business plan for the credit bureau began in April 2005.

Annex 1: Maps


ASIA
PRIVATE CREDIT REPORTING
POSITIVE AND NEGATIVE BUREAUS
POSITIVE
NEGATIVE
DOES NOT EXIST
NO INFORMATION
MONGOLIA
CHINA
DEM.REP. KOREA
REP. OF KOREA
PACIFIC OCEAN
HONG KONG
PHILIPPINES
PAPUA NEW GUINEA
EAST TIMOR
INDONESIA
VIETNAM
LAO P.D.R.
CAMBODIA
THAILAND
MALAYSIA
SINGAPORE
MYANMAR
BHUTAN
BANGLADESH
NEPAL
INDIA
SRI LANKA
MALDIVES
INDIAN OCEAN


LATIN AMERICA AND THE CARIBBEAN
PRIVATE CREDIT REPORTING
POSITIVE AND NEGATIVE BUREAUS
POSITIVE
NEGATIVE
NO INFORMATION
Gulf of Mexico
MEXICO
BAHAMAS
HAITI
DOMINICAN REPUBLIC
JAMAICA
See Enlargement Below
ANTIGUA & BARBUDA
ST. KITTS & NEVIS
Guadeloupe (Fr)
DOMINICA
Martinique (Fr)
ST. LUCIA
ST. VINCENT & THE GRENADINES
BARBADOS
GRENADA
TRINIDAD & TOBAGO
BELIZE
HONDURAS
GUATEMALA
NICARAGUA
EL SALVADOR
COSTA RICA
PANAMA
Caribbean Sea
ATLANTIC OCEAN
PACIFIC OCEAN
VENEZUELA
GUYANA
SURINAME
COLOMBIA
ECUADOR
PERU
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CHILE
ARGENTINA
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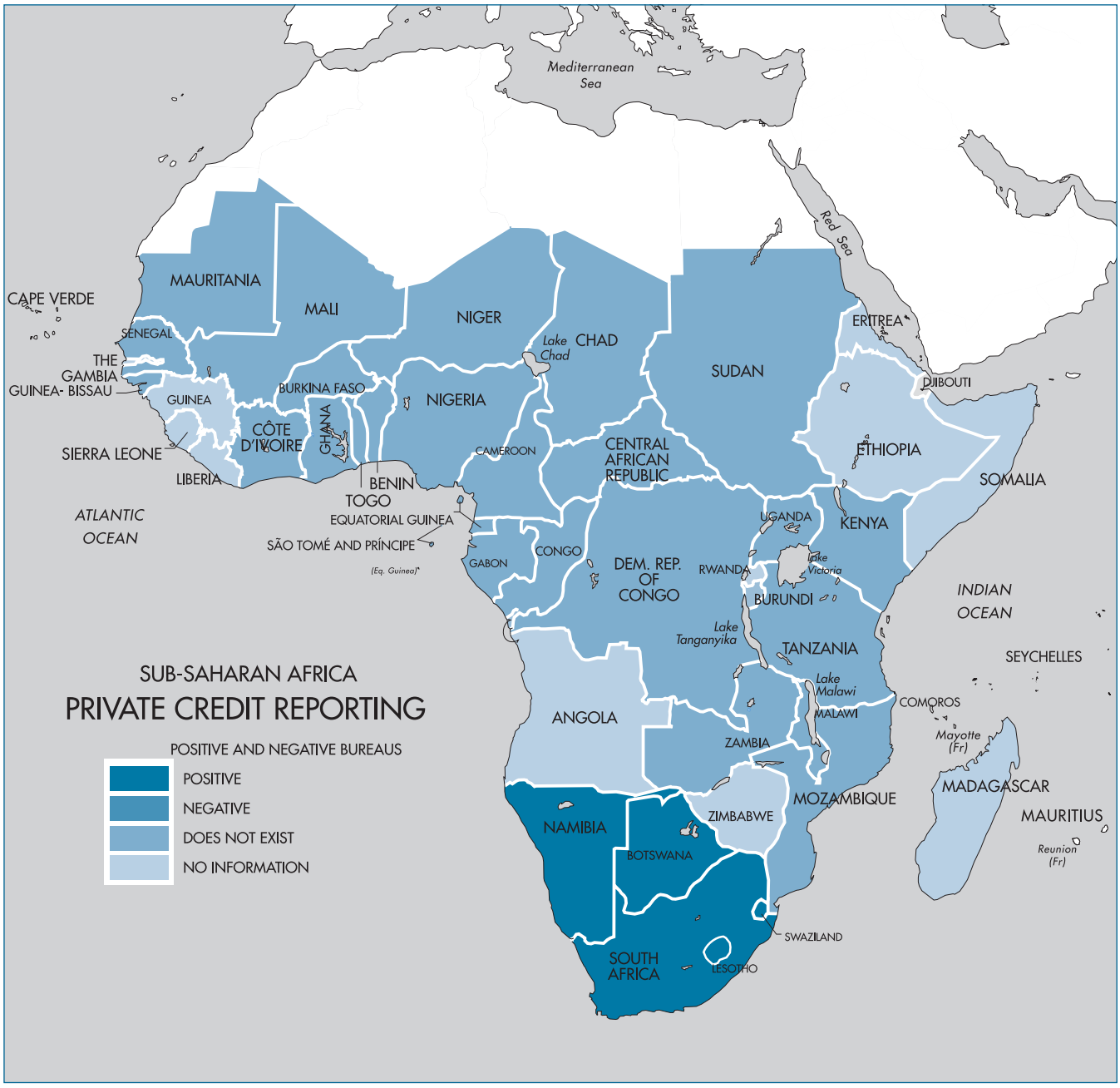
Falkland Islands (Islas Malvinas)
Puerto Rico (US)


Mediterranean Sea
Red Sea
MAURITANIA
MALI
NIGER
CHAD
Lake Chad
SUDAN
ERITREA
DJIBOUTI
CAPE VERDE
SENEGAL
THE GAMBIA
GUINEA- BISSAU
GUINEA
BURKINA FASO
NIGERIA
CÔTE D'IVOIRE
GHANA
CAMEROON
CENTRAL AFRICAN REPUBLIC
ETHIOPIA
SOMALIA
SIERRA LEONE
LIBERIA
BENIN
TOGO
EQUATORIAL GUINEA
SÃO TOMÉ AND PRÍNCIPE
(Eq. Guinea)*
ATLANTIC OCEAN
UGANDA
KENYA
GABON
CONGO
DEM. REP. OF CONGO
RWANDA
Lake Victoria
BURUNDI
INDIAN OCEAN
Lake Tanganyika
TANZANIA
SEYCHELLES
Lake Malawi
COMOROS
ANGOLA
MALAWI
Mayotte (Fr)
ZAMBIA
MADAGASCAR
MOZAMBIQUE
ZIMBABWE
NAMIBIA
MAURITIUS
BOTSWANA
Reunion (Fr)
SWAZILAND
SOUTH AFRICA
LESOTHO
SUB-SAHARAN AFRICA
PRIVATE CREDIT REPORTING
POSITIVE AND NEGATIVE BUREAUS
POSITIVE
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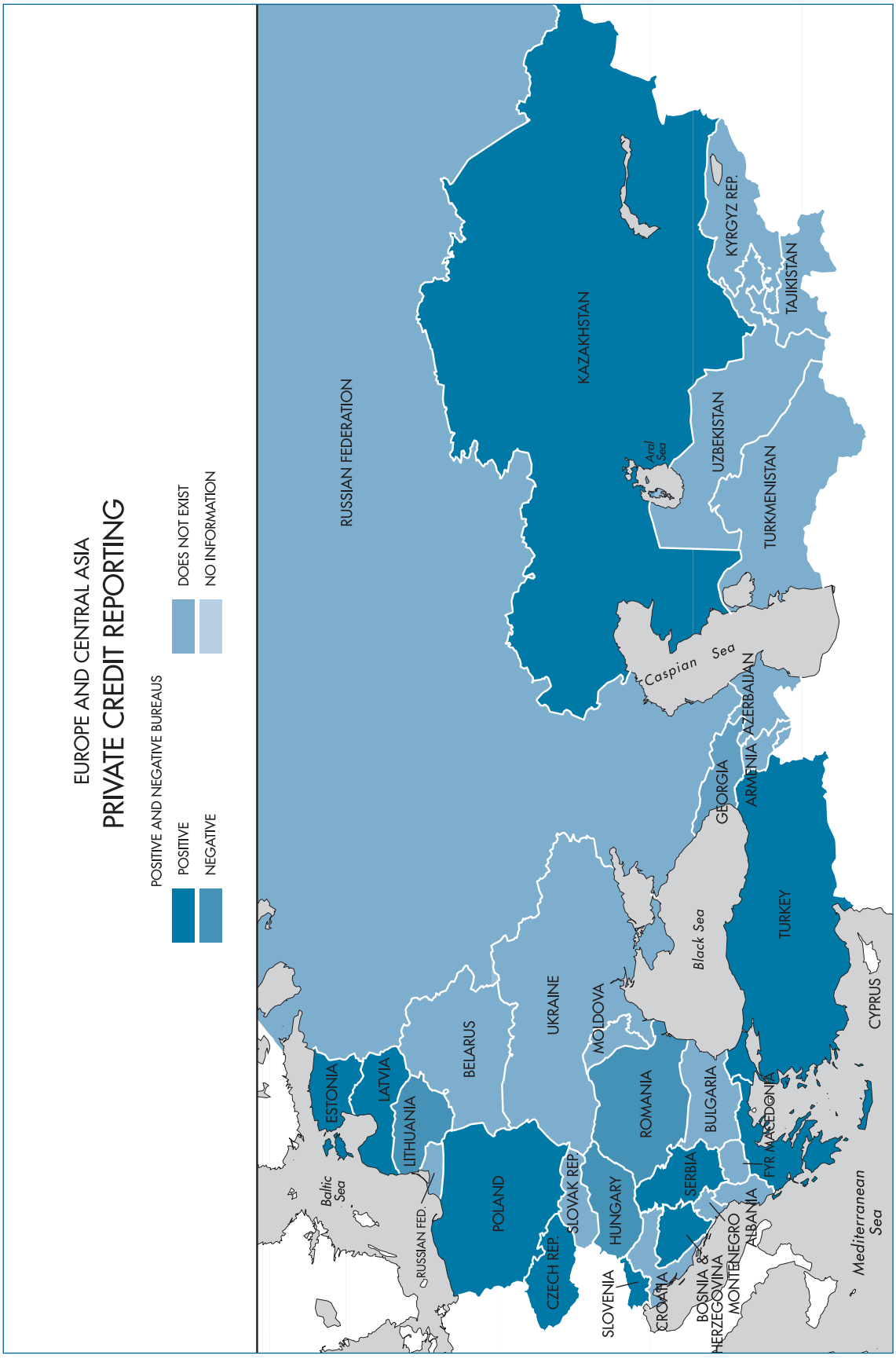
EUROPE AND CENTRAL ASIA
PRIVATE CREDIT REPORTING
POSITIVE AND NEGATIVE BUREAUS
POSITIVE
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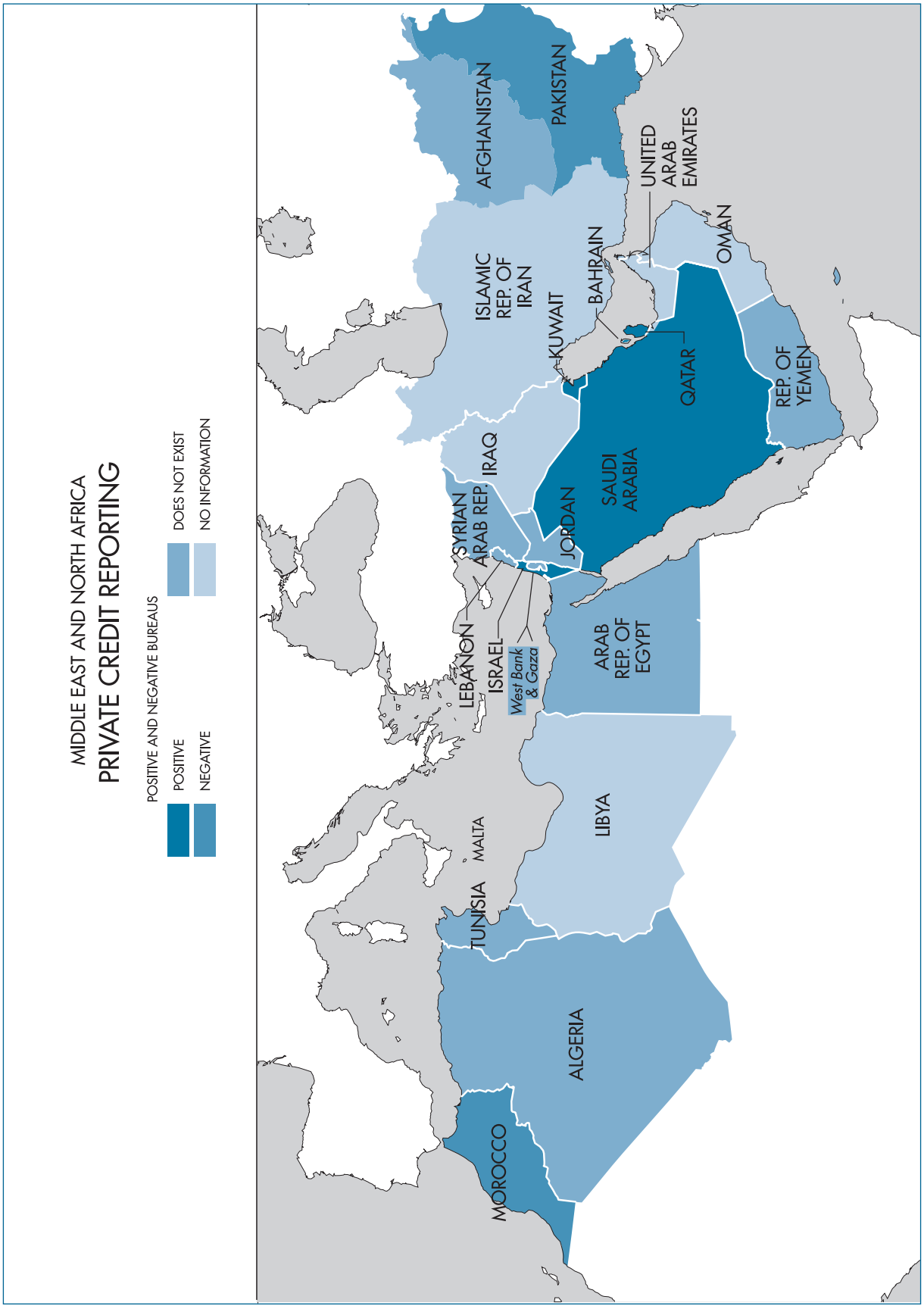
DOES NOT EXIST
NO INFORMATION
RUSSIAN FEDERATION
KAZAKHSTAN
KYRGYZ REP.
TAJIKISTAN
UZBEKISTAN
TURKMENISTAN
Aral Sea
Caspian Sea
AZERBAIJAN
ARMENIA
GEORGIA
Black Sea
TURKEY
CYPRUS
Mediterranean Sea
BELARUS
UKRAINE
MOLDOVA
ROMANIA
BULGARIA
FYR MACEDONIA
SERBIA
ALBANIA
MONTENEGRO
BOSNIA & HERZEGOVINA
CROATIA
SLOVENIA
HUNGARY
SLOVAK REP.
CZECH REP.
POLAND
LITHUANIA
LATVIA
ESTONIA
RUSSIAN FED.
Baltic Sea


MIDDLE EAST AND NORTH AFRICA
PRIVATE CREDIT REPORTING
POSITIVE AND NEGATIVE BUREAUS
POSITIVE
NEGATIVE
DOES NOT EXIST
NO INFORMATION
AFGHANISTAN
PAKISTAN
UNITED ARAB EMIRATES
OMAN
ISLAMIC REP. OF IRAN
KUWAIT
BAHRAIN
QATAR
REP. OF YEMEN
IRAQ
SAUDI ARABIA
SYRIAN ARAB REP.
JORDAN
LEBANON
ISRAEL
West Bank & Gaza
ARAB REP. OF EGYPT
LIBYA
MALTA
TUNISIA
ALGERIA
MOROCCO

Annex 2: Countries with Credit Information Sharing Laws

Country	Name of Relevant Law	Year Passed
Albania	Law 8517 on the Protection of Personal Data	1999
Argentina	Law 25326 on the Protection of Personal Data and Decree 1558/2001	2000, 2001
Australia	Australian Privacy Act 1998	1988
Austria	Austrian Data Protection Act	2000
Belgium	Law on Protection of Personal Data	1992
Brazil	Consumer Protection Law	
Bulgaria	Data Protection Law	2001
Canada	Privacy Act, The Personal Information Protection and Electronic Documents Act	1983, 2000
Chile	Supreme Decree No. 950 and Privacy Laws No. 19628 & 19812	1999
Czech Republic	Personal Data Protection Act	2000
Denmark	Act on Processing of Personal Data	2000
Dominican Republic	Credit Bureau Regulation and Protection of Individual Subject's Information Act	2005
Ecuador	Law on Credit Information Bureaus	2005
Estonia	Data Protection Law	
Finland	Law on Personal Data (Data Protection)	1999
France	Act on Informatics, Data Files and Liberties	1978
Germany	German Data Protection Act	2002
Greece	Law 2472/97, Directive 95/46/EC, various decisions of the Hellenic Data Protection Authority, Law 3259/2004 (Article 40) regarding the storage time of personal data in the Credit Behavior Databank	Various
Hong Kong, China	Personal Data (Privacy) Ordinance	1995
Honduras	CB incorporation and operations law	2005
Hungary	Act No. LXIII on the Protection of Personal Data and the Publicity of Data of Public Interest	1992, 2003
Iceland	Act Respecting Systematic Recording of Personal Data, Protection and Processing of Personal Data, No. 77/2000	1989, 2001
India	Credit Information Companies (Regulation)	2004
Ireland	Data Protection Act 1988 and 2003	1988

Israel	Law on Credit Data Service	2002
Italy	Protection of individuals and other subjects with regard to the Processing of Personal Data Act	1996
Japan	Personal Information Protection Law	2005
South Korea	Act Relating to Use & Protection of Credit Information	1995
Kuwait	Royal Decree 2/2001	2001
Latvia	Law on Personal Data Protection	2000
Lithuania	Law on Legal Protection Of Personal Data of the Republic of Lithuania	2000
Mexico	Law to Regulate Credit Information Societies	2002
Netherlands	Personal Data Protection Act	2000
New Zealand	New Zealand Privacy Act 1993	1993
Nicaragua	Private Credit Bureau Regulation	2005
Norway	Personal Data Act	2000
Panama	Law 24 that regulates credit information on consumers or clients	2002
Paraguay	Law 1682/01 and modified law 1969/02 on Data Protection	2001, 2002
Peru	Law 27863 for Private Credit Registries	
Poland	The Act on Protection of Personal Data	1997
Portugal	Law 67/98 on Protection of Personal Data	1998
Puerto Rico	Fair Credit Reporting Act and the Fair and Accurate Credit Transactions Act	1992, 2003
Romania	Law No 677/2001 on Protection of Individuals with regard to the Processing of Personal Data and the Free Movement of Such Data	2001
Russian Federation	Law on Information	1995
Slovak Republic	Personal Data Protection Act	1998
Slovenia	Personal Data Protection Act	1999
Spain	Organic Law 15/99 on the Protection of Personal Data	1999
Sri Lanka	Credit Information Bureau of Sri Lanka Act No.18 of 1990	1990
Sweden	The Credit Bureau Act	1998
Switzerland	Federal Data Protection Act	1992
Taiwan, China	Computer Processed Personal Data Protection Law	1995
Thailand	Credit Information Business Act, B.E. 2545	2002
Ukraine	Law on Information	1992
United Kingdom	Consumer Credit Act, Data Protection Act	1998
United States	Fair and Accurate Credit Transactions Act, Fair Credit Reporting Act, Fair Credit Billing Act, Equal Credit Opportunity Act	Various
Uruguay	Law 17.838 on Protection of Personal Data	2004

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