General Principles for Credit Reporting

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Contents

Foreword

Financial Infrastructure broadly defined comprises the underlying foundation for a country's financial system. It includes all institutions, information, technologies, rules and standards that enable financial intermediation. Poor financial infrastructure in many developing countries poses a considerable constraint upon financial institutions to expand their offering of financial services to underserved segments of the population and the economy. It also creates risks which can threaten the stability of the financial system as a whole.

The World Bank Group is a leader in financial infrastructure development in emerging markets, including payment systems and remittances, credit reporting and secured lending. Moreover, the World Bank Group is intensifying its commitment to promote and disseminate the policy and research debate on these and other topics within the scope of financial infrastructure and also plays the role of international standard setter in this space.

Credit reporting systems are very important in today's financial system. Creditors consider information held by these systems a primary factor when they evaluate the creditworthiness of data subjects and monitor the credit circumstances of consumers. This information flow enables credit markets to function more efficiently and at lower cost than would otherwise be possible.

This report describes the nature of credit reporting elements which are crucial for understanding credit reporting and to ensuring that credit reporting systems are safe, efficient and reliable. It intends to provide an international agreed framework in the form of international standards for credit reporting systems' policy and oversight. The Principles for credit reporting are deliberately expressed in a general way to ensure that they can be useful in all countries and that they will be durable. These Principles are not intended for use as a blueprint for the design or operation of any specific system, but rather suggest the key characteristics that should be satisfied by different systems and the infrastructure used to support them to achieve a stated common purpose, namely Expanded Access and Coverage, Fair Conditions, and Safe and Efficient Service for borrowers and lenders.

Against this background, the standards are expected to inform the action of authorities in this field, for example central banks and banking supervisors in the context of their supervisory function. It is further envisaged that the standards would be useful to service providers and system operators when designing or modifying their product offerings, to financial intermediaries when choosing to be a participant in any specific system, and to end users when agreeing to use a specific system.

The report has been prepared by a Task Force coordinated by the World Bank, with support from the Bank for International Settlements. The Task Force comprises representatives from central banks and other financial and privacy regulators, from multilateral organizations involved in credit reporting and from international credit reporting service providers. The Task Force also benefited from the significant experience of the Credit Bureau Team of the International Finance Corporation. Some institutions ("Tier 2" Group), although not con-

sidered formally members of the Task Force, have been actively consulted to provide inputs during the process of preparation of the Principles. They include other industry associations, private sector operators, scholars and practitioners. The report was also released for public consultation.

The World Bank thanks the members of the task force, the reviewers, the Secretariat and its Chairman Massimo Cirasino, for their excellent work in preparing this report.

Janamitra Devan, Vice President
World Bank Group

1

Introduction and Executive Summary

Well functioning financial markets contribute to sustainable growth and economic development, because they typically provide an efficient mechanism for evaluating risk and return to investment, and then managing and allocating risk. Financial infrastructure (FI) is a core part of all financial systems. The quality of financial infrastructure determines the efficiency of intermediation, the ability of lenders to evaluate risk and of consumers to obtain credit, insurance and other financial products at competitive terms. Credit reporting is a vital part of a country's financial infrastructure[1] and is an activity of public interest.

2. Credit reporting addresses a fundamental problem of credit markets: asymmetric information between borrowers and lenders, which may lead to adverse selection, credit rationing, and moral hazard problems.[2] Regulators and financial market participants are therefore increasingly recognizing the value of credit reporting systems for improved credit risk and overall credit portfolio management, to enhance financial supervision and financial sector stability, and as a tool to enhance access to credit.

3. In competitive markets, the benefits of credit reporting activities are passed on to borrowers in the form of a lower cost of capital, which has a positive influence on productive investment spending.[3] Improved information flows also provide the basis for fact-based and quick credit assessments, thus facilitating access to credit and other financial products to a larger number of borrowers with a good credit history (i.e. good repayment prospects).

4. While credit reporting systems are developing rapidly across the world, there are no principles to systematically guide the various stakeholders in dealing with the challenges associated with the development and day-to-day operation and improvement of these systems. The Credit Reporting Standards Setting Task Force was launched by the World Bank, with the support of the Bank for International Settlements, to fill this critical gap, aiming to provide a core set of general principles to guide these efforts in any given jurisdiction.

5. The general principles are intended for policymakers, regulators, financial supervisors, credit reporting data providers, credit reporting service providers, the users of such services, and individuals and businesses whose credit histories and identification data are stored in these systems (the latter two are referred to as "data subjects" throughout the report). In addition to the principles, the Task Force has also developed a set of specific roles, one for each of the stakeholders in credit

[1] The World Bank, "*Financial Infrastructure: Building Access Through Transparent and Stable Financial Systems*", Financial Infrastructure Policy and Research Series, Washington D.C., 2009.

[2] Some of these issues are analyzed in further detail in Section 2 of this report.

[3] For more information on how credit reporting can lower the cost of capital, see Marco Pagano and Tullio Jappelli, "Information Sharing in Credit Markets," *The Journal of Finance*, 43 (1993): 1693–1718; A. Jorge Padilla and Marco Pagano, "Endogenous Communication Among Lenders and Entrepreneurial Incentives," *The Review of Financial Studies*, 10 (Spring 1997): 205–236; and Tullio Jappelli and Marco Pagano, "Information Sharing in Credit Markets: The European Experience," Centre for Studies in Economics and Finance, *Working Paper* No. 35 (March 2000).

reporting systems, as well as recommendations for effective oversight of credit reporting systems.

6. The principles and related roles define the minimum elements underlying a sound, efficient and effective credit reporting system. Different markets around the world are at different stages in terms of the development of their own credit reporting systems, and the Task Force recognizes that while credit reporting systems in some jurisdictions will already fulfill some or probably even most of the principles, in others observance of the principles will need medium to long-term efforts.

7. The report builds on previous work in the area of credit reporting and related fields such as data protection and credit risk management.[4] The World Bank Group, through the Global Credit Bureau Program and the Western Hemisphere Credit Reporting Initiative,[5] has analyzed issues affecting the creation and overall functioning of domestic credit reporting systems, and their continuous development through reforms. Other relevant work includes that of the Basel Committee on Banking Supervision (mainly the Basel Capital Accord),[6] the work developed by the European Central Bank (ECB) through the Working Group on Credit Registers, the work of the International Conference of Data Protection and Privacy Commissioners which has debated the role of privacy and data protection from a broad perspective including credit reporting, the privacy frameworks developed by The European Union, APEC and OECD,[7] and the work conducted by the European Commission Directorate General on Internal Markets and Services regarding the challenges of cross-border credit data flows in the context of credit reporting.[8]

Key Considerations Concerning Credit Reporting and the General Principles

8. The key considerations concerning credit reporting systems can be broadly grouped around the following topics: i) data; ii) data processing; iii) governance arrangements and risk management; iv) legal and regulatory environment; and, v) cross-border data flows. The General Principles are organized around these five topics. These five General Principles aim at the following public policy objectives for credit reporting systems: *Credit reporting systems should effectively support the sound and fair extension of credit in an economy as the foundation for robust and competitive credit markets. To this end, credit reporting systems should be safe and efficient, and fully supportive of data subject/consumer rights* (see Box 1 for a list of the five General Principles, the related roles, and the recommendations for the effective oversight of credit reporting systems).

9. Information quality is the basic building block of an effective credit reporting environment. Accuracy of data implies that such data is free of error, truthful, complete and up to date. Inaccurate data may lead to numerous problems, including unjustified loan denials or higher borrowing costs. Quality also means that data is sufficient and adequate, implying that: i) relevant detailed information is captured, including negative as well as positive data; ii) information from as many relevant sources is gathered, within the limits established by law;

[4] The list of relevant references presented in this paragraph is not intended to be exhaustive.

[5] The Global Credit Bureau Program was created by the IFC in 2001, to improve credit bureaus worldwide through promoting the role of the private sector in their development. The Western Hemisphere Credit Reporting Initiative is a program created in 2004 following a request from the central banks of Latin America and the Caribbean. The objective of the program is to assess and describe credit and loan reporting systems in the Western Hemisphere, and provide recommendations for their improvement. The latter program is led by the World Bank in association with CEMLA, and with financial support from the FIRST Initiative.

[6] For further information visit the website of the Bank for International Settlements at www.bis.org.

[7] Information on these efforts can be found on the websites of, APEC (www.apec.org), OECD (www.oecd.org) and the Spanish Data Protection Agency (www.agpd.es). For the European Union Privacy framework please see The Convention of the Council of Europe for the Protection of Individuals with regard to Automatic Processing of Personal Data (ETS Nº 108) and its Additional Protocol regarding supervisory authorities and trans-border data flows (ETS Nº 181); Directive 95/46/EC of the European Parliament and of the Council of 24 October 1995 on the protection of individuals with regard to the processing of personal data and on the free movement of such data.

[8] The full report from the Expert Group on Credit Histories is available at http://ec.europa.eu/internal_market/consultations/docs/2009/credit_histories/egch_report_en.pdf.

BOX 1

The General Principles

The General Principles aim at the following **public policy objectives** for credit reporting systems: *Credit reporting systems should effectively support the sound and fair extension of credit in an economy as the foundation for robust and competitive credit markets. To this end, credit reporting systems should be safe and efficient, and fully supportive of data subject and consumer rights.*

Data

General Principle 1: Credit reporting systems should have relevant, accurate, timely and sufficient data—including positive—collected on a systematic basis from all reliable, appropriate and available sources, and should retain this information for a sufficient amount of time.

Data Processing: Security and Efficiency

General Principle 2: Credit reporting systems should have rigorous standards of security and reliability, and be efficient.

Governance and Risk Management

General Principle 3: The governance arrangements of credit reporting service providers and data providers should ensure accountability, transparency and effectiveness in managing the risks associated with the business and fair access to the information by users.

Legal and Regulatory Environment

General Principle 4: The overall legal and regulatory framework for credit reporting should be clear, predictable, non-discriminatory, proportionate and supportive of data subject and consumer rights. The legal and regulatory framework should include effective judicial or extrajudicial dispute resolution mechanisms.

Cross-Border Data Flows

General Principle 5: Cross-border credit data transfers should be facilitated, where appropriate, provided that adequate requirements are in place.

Roles of Key Players

Role A: Data providers should report accurate, timely and complete data to credit reporting service providers, on an equitable basis.

Role B: Other data sources, in particular public records agencies, should facilitate access to their databases to credit reporting service providers.

Role C: Credit reporting service providers should ensure that data processing is secure and provide high quality and efficient services. All users having either a lending function or a supervisory role should be able to access these services under equitable conditions.

Role D: Users should make proper use of the information available from credit reporting service providers.

Role E: Data subjects should provide truthful and accurate information to data providers and other data sources.

Role F: Authorities should promote a credit reporting system that is efficient and effective in satisfying the needs of the various participants, and supportive of data subject/consumer rights and of the development of a fair and competitive credit market.

Recommendations for Effective Oversight

Recommendation A: Credit reporting systems should be subject to appropriate and effective regulation and oversight by a central bank, a financial supervisor, or other relevant authorities. It is important that one or more authorities exercise the function as primary overseer.

Recommendation B: Central banks, financial supervisors, and other relevant authorities should have the powers and resources to carry out effectively their responsibilities in regulating and overseeing credit reporting systems.

Recommendation C: Central banks, financial supervisors, and other relevant authorities should clearly define and disclose their regulatory and oversight objectives, roles, and major regulations and policies with respect to credit reporting systems.

Recommendation D: Central banks, financial supervisors, and other relevant authorities should adopt, where relevant, the General Principles for credit reporting systems and related roles, and apply them consistently.

Recommendation E: Central banks, financial supervisors, and other relevant authorities, both domestic and international, should cooperate with each other, as appropriate, in promoting the safety and efficiency of credit reporting systems.

iii) information is sufficient in terms of the period over which observations are available. *General Principle 1 is, therefore, that credit reporting systems should have relevant, accurate, timely and sufficient data—including positive—collected on a systematic basis from all reliable, appropriate and available sources, and should retain this information for a sufficient amount of time.*

10. Credit data reside in databases and other types of data-holding methods that are subject to security and safety concerns, including loss, destruction, corruption, theft and misuse. Moreover, as credit reporting services are increasingly important for financial market development, the reliability of credit reporting data providers and credit reporting service providers is a crucial element of an effective credit reporting system. At the same time, users of credit reporting services expect affordable services that meet their needs on a continuous basis. *General Principle 2 is, therefore, that credit reporting systems should have rigorous standards of security and reliability, and be efficient.*

11. The growing importance of credit reporting and the potentially sensitive nature of the activities it entails require that proper governance arrangements for credit reporting service providers and credit reporting data providers be in place in order to ensure appropriate levels of management accountability and transparency in their activities. Good governance arrangements are also crucial for ensuring that the organization will be able to cope successfully with the risks underlying the information sharing and credit reporting businesses, including mainly operational risks, legal risks, and reputational risks. Governance arrangements should also ensure that fair competition in the market place and the robustness of the credit reporting system are not compromised because of the particular ownership structure of the credit reporting service provider or data provider. *General Principle 3 is, therefore, that the governance arrangements of credit reporting service providers and credit reporting data providers should ensure accountability, transparency and effectiveness in managing the risks associated with the business and fair access to the information by users.*

12. A robust legal and regulatory framework covering all relevant aspects involving credit reporting is critical for the sound functioning of credit reporting systems. In particular the legal and regulatory frameworks should provide a balanced solution to the natural tension between the objectives of having access to broader sources of information for enhanced credit reporting and the interest in preserving individual privacy. There is no clear consensus on what constitutes an optimal legal and regulatory framework for credit reporting. In addition to contractual agreements, a clear trend worldwide is that laws be enacted to help protect privacy and provide data subjects with the ability to access and correct information about them. *General Principle 4 is, therefore, that the overall legal and regulatory framework for credit reporting should be clear, predictable, nondiscriminatory, proportionate and supportive of data subject and consumer rights. The legal and regulatory framework should include effective judicial or extrajudicial dispute resolution mechanisms*.

13. As financial markets are increasingly globalized, cross-border data transfers can become a useful instrument to monitor the credit exposures of important borrowers outside a financial institution's home markets, or to facilitate the provision of credit and other financial services across borders (e.g. to individuals that do not have a credit history in the country where they are applying for credit). In addition, a single mechanism serving more than one country can be the only cost-effective option for credit reporting activities to develop in some small markets. While in principle cross-border data flows raise similar concerns as purely domestic credit reporting activities, cross-border activities typically face a more complex environment due to the multiplicity of applicable laws, consumer protection frameworks, credit cultures, market practices, and institutional structures, among others. *General Principle 5 is, therefore, that cross-border credit data transfers should be facilitated, where appropriate, provided that adequate requirements are in place*.

Scope and Use of the General Principles

14. The scope of the principles includes those credit reporting mechanisms whose primary objective is to improve the quality of data for creditors to make better-informed decisions, as well as those mechanisms intended to assist banking and overall financial supervision. These principles are not intended to apply

to credit rating agencies.[9] At the same time, not all of the principles may be applicable to commercial credit reporting companies or registries that provide information and ratings to businesses for the purpose of evaluating trade credit.

15. While the principles are intended to have universal applicability, they are non-binding and do not aim at detailed prescriptions for action at national level. Rather, they seek to identify objectives and suggest various means for achieving them. They can be used by policy makers and other stakeholders as a reference point when examining the status quo of credit reporting in their jurisdictions and the need for reforms. International financial institutions such as the World Bank Group, the International Monetary Fund, regional development banks, and others may also use these principles when carrying out assessment programs and in providing technical assistance to countries. Moreover, the principles and related roles are evolutionary in nature and might be reviewed in light of significant changes in the environment surrounding credit reporting.

Structure of the Report

16. Section 2 provides a brief overview of the market for credit information sharing and credit reporting activities and then analyzes in some detail the key considerations underlying credit reporting. Section 3 outlines the General Principles and related Roles. Section 4 proposes a framework for the effective oversight of credit reporting systems.

[9] Credit rating agencies typically provide debt or securities rating services for businesses. In some countries, credit rating agencies are starting to provide other types of services, including credit reporting services. In such a case, the principles would apply over this particular line of business.

2

Credit Reporting Systems: Brief Overview and Key Considerations

2.1. The importance of Credit Reporting Systems

17. Credit reporting systems comprise the institutions, individuals, rules, procedures, standards and technology that enable information flows relevant to making decisions related to credit and loan agreements. At their core, credit reporting systems consist of databases of information on debtors, together with the institutional, technological and legal framework supporting the efficient functioning of such databases. The information stored in these systems can relate to individuals and/or businesses.[10]

18. A fundamental challenge affecting the relationship between creditors and debtors is that of asymmetric information.[11] Debtors are more informed about their financial situation or standing than the creditor who is evaluating whether to extend credit to the debtors. Creditors, therefore, are often limited in their ability to assess the credit risk associated with lending money or providing goods and services on credit. Such information asymmetries can result in the following less than optimal outcomes: (i) potential debtors who are the most likely to produce undesirable outcomes being the ones that most actively seek out a loan, and are likely to be selected since good debtors are less willing to pay a risk premium and hence tend to withdraw their loan applications (so-called "adverse selection problem");[12] (ii) debtors being able to borrow more money (or goods or services) than they are able to repay under normal circumstances, or creditors willing to lend only a fraction of the money that the debtor can steadily repay; (iii) as debtors have more information than creditors, they may enter into a contract with no intention of honoring it (the so-called "moral hazard" problem).

19. Credit reporting systems reduce information asymmetries by making a debtor's credit history available to potential creditors, and are therefore an effective tool in mitigating issues of adverse selection and moral haz-

[10] See also the definition of National Credit Reporting System in the Glossary. One of the objectives of this report is to provide a consistent and standard set of definitions of key concepts in credit reporting.

[11] The problem of asymmetric information is well described in several academic papers including George A. Akerlof, "The market of Lemons: Quality, Uncertainty and the Market Mechanism", *The Quarterly Journal of Economics* 84 (August 1970) using the credit market in India in the 1960s for one of his examples; Michael Spence, "Job Market Signaling," *The Quarterly Journal of Economics* 87 (August 1973); Michael Rothschild and Joseph Stiglitz "Equilibrium in Competitive Insurance Markets: An Essay on the Economics of Imperfect Information," *The Quarterly Journal of Economics* 90 (November 1976); and finally also Joseph Stiglitz and Andrew Weiss, "Credit rationing in markets with imperfect information," *The American Economic Review* 71 (June 1981).

[12] For example, see Frederic S. Mishkin, The Economics of Money, Banking and Financial Markets (Addison-Wesley, 2004) 7th edition, p 32.

ard. Through credit reporting information and the tools derived from it (e.g. credit scores), creditors can better predict future repayment prospects based on a debtor's past and current payment behavior and level of indebtedness, among other factors.

20. Historically, credit would be granted on the basis of a credit officer's personal knowledge of the debtor. Robust credit reporting systems capture most of this information and sometimes even facts that might not be disclosed to credit officers. Moreover, creditors are generally able to access credit reporting information at a fraction of the cost and time of traditional lending mechanisms.[13] Credit reporting systems aim to provide objective data, which favors segments of the population that may have been denied credit in the past due to some form of prejudice (e.g. assuming that a low-income individual is always a bad debtor).

21. Credit reporting systems also serve to discipline debtor behavior. A good credit history facilitates access to credit and can often obviate the need for debtors to put up tangible collateral for loans.[14] Debtors who understand this are motivated to make payments on time so as to continue to have access to credit products under favorable conditions.

22. Financial supervisory authorities use credit reporting data for macro and micro prudential supervision and monitoring of systemic risk levels and producing macro statistics of financial system performance. The analysis of credit risk management, provisions and capital adequacy, for example, benefits from the availability of credit information held by credit reporting service providers.[15]

2.2. Key Participants in a Credit Reporting System

23. While different models of credit reporting exist throughout the world, each of them involves a number of actors that intervene at one or more points throughout the cycle of producing/collecting, storing, processing, distributing and, finally, using information to support credit-granting decisions and financial supervision.[16] Figure 1 illustrates this cycle and identifies the key participants involved in each step.

24. A large variety of private and public entities gather information on individuals and businesses. Many private organizations collect such information as an ancillary activity derived from their ordinary commercial activities involving the sale of goods or services. Other private entities specialize in the collection of information *per se*, with the intention of selling it to interested parties. Some public sector agencies collect information to build public records for a variety of public interests (e.g. to better inform public policy decisions, administration of justice, or creating and updating vehicle inventories, etc.).

25. The individuals and businesses whose information and data are collected, shared or distributed throughout the credit reporting system are referred to as *data subjects* in this report. In some jurisdictions, a data subject does not need to have an actual contractual relationship with a creditor for its information to be included in the credit reporting system.[17] In others, information on data subjects can be collected and treated only with

[13] It should be noted that credit reporting is normally only one of the inputs that goes into the decision of whether to extend a loan.

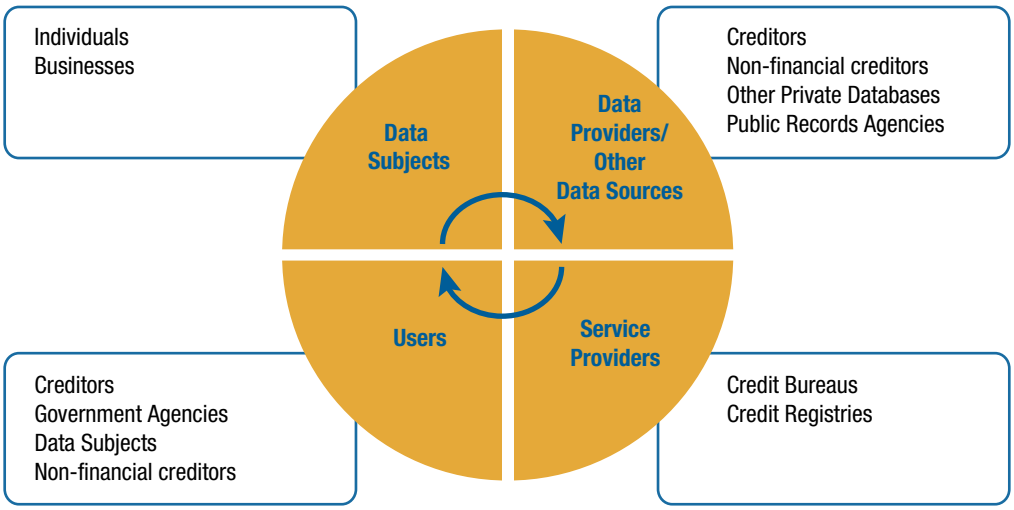
[14] Jappelli and Pagano (2000) show that better information may lead banks to shift from collateral-based lending credit underwriting policies to more information-based policies. Margaret Miller, ed., Credit Reporting Systems and the International Economy (Cambridge: The MIT Press, 2003), shows how credit bureaus can provide borrowers with "reputation collateral", frequently viewed as more valuable than physical collateral by surveyed lenders.

[15] For an analysis of the usefulness of credit reporting data in relation to Basel II, see, for example, the following papers: Carlos Trucharte Artigas, "A Review of Credit Registers and their Use for Basel II", Financial Stability Institute (September 2004); Jesús Saurina Salas and Carlos Trucharte, "An Assessment of Basel II Procyclicality in Mortgage Portfolios, Journal of Financial Services Research 32 (2007); pp. 81–101; Rafael Repullo, Jesús Saurina and Carlos Trucharte, "Mitigating the pro-cyclicality of Basel II," Economic Policy 25 (2010).

[16] Annex 2 provides a detailed description of the main existing models of credit reporting.

[17] In the United Kingdom, identification information is captured directly from the voters roll and included in the credit reporting system. Also, in the United States credit reporting service providers collect information from sources that do not grant credit as is normally understood, like utility companies.

FIGURE 1: Key Participants in a Credit Reporting System



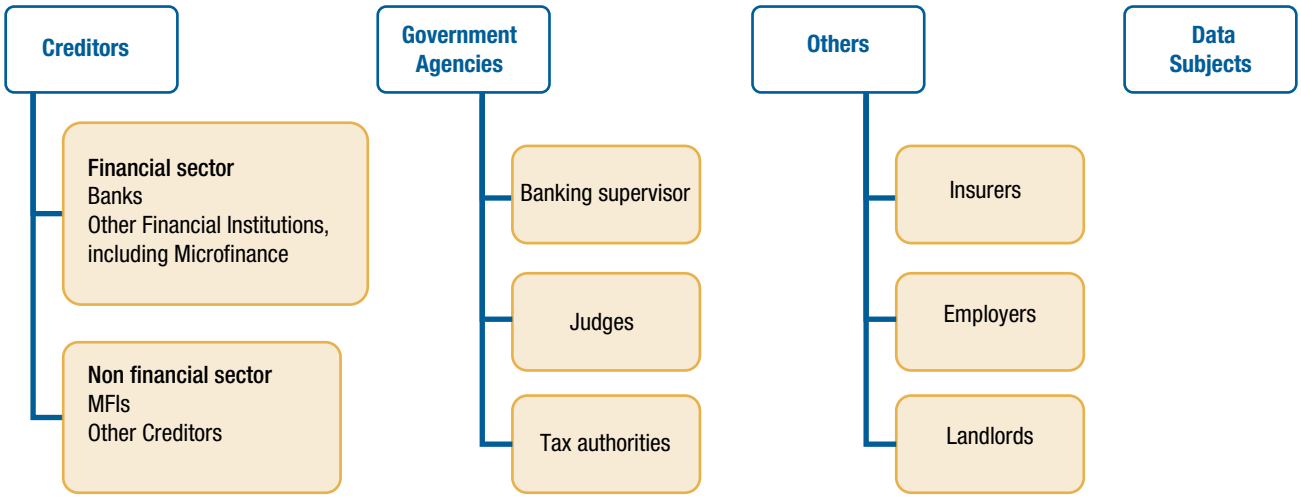
the consent from the data subject and only for some specific purposes. In yet other cases, although data can be collected with no data subject consent for specific purposes, explicit consent might be required for distributing or disclosing information when the purpose of such distribution or disclosure and the purpose for which the data was collected differ.

26. All the private and public entities that collect information on data subjects are potential sources of information for other parties interested in such information. Those entities that pro-actively provide information to other parties, either because of commercial reasons, agreements or a legal obligation to do so, are referred to as *"data providers."* Some of the most common data providers include commercial banks, other non-bank financial institutions, credit card issuers, and in some cases non-financial creditors such as retailers and utility providers. Some entities collect information (for instance court judgment data), compile it and sell it to credit reporting service providers,[18] to complement the data collected under reciprocity arrangements. These entities are referred to as "other private databases" in the report. Other entities collect information for purposes different than credit granting decision-making or financial supervision. Those sources that do not pro-actively provide the information they collect to credit reporting service providers but rather can be consulted upon request, are referred to throughout this report as *"other data sources."* These other sources may include databases on bounced cheques, promissory notes and protested bills of exchange, collateral registries, vehicle registries, real estate registries, personal identity records, company registries, tax authority databases and some court records. It is worth noting that in some jurisdictions some of these databases may actually meet the definition of data providers rather than the one used herewith for "other data sources".

27. Credit information collected is of interest to a variety of other parties, which are referred to as the *"users"* of this information. A typical user would be a creditor who has been approached by a potential borrower or a debtor for a loan and who orders a credit report on the applicant to evaluate the loan request. However, credit information might be of interest to other users, which range from financial supervisors and other units within a central bank, to users in other sectors of the economy, like employers, insurers or landlords. In some jurisdictions the system might be open to individuals or businesses showing a legitimate interest for accessing a

[18] See paragraph 29 for a definition of credit reporting service provider.

FIGURE 2: Main Users of Credit Reporting



Source: Other creditors include: retailers, utility providers, telecom providers, deferred payment providers, to name a few. The term "merchant traders" refers to suppliers of trade credit, or trade creditors.

particular credit report. Figure 2 depicts the main users of credit reporting services and products.

28. Actual practices, however, do not frequently involve a direct relationship between the users and the data providers or other data sources. On the one hand, users may find it difficult and/or costly to utilize information that was collected or produced based on different methodologies—in the extreme, each data provider will have its own methodology for collecting or producing it. On the other hand, providing credit information to third parties is not a core business of many of the entities that collect such information.

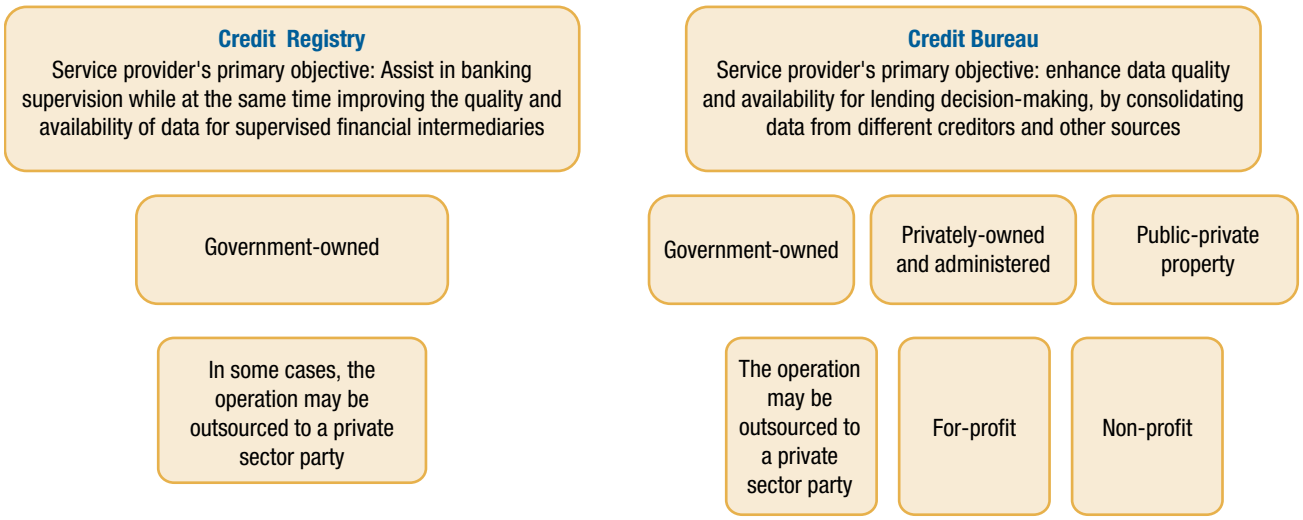
29. As a result of the above, specialized intermediaries have emerged in order to fill the gap between the needs of users and those of the entities that gather credit information from individuals and businesses. These specialized intermediaries are denominated here as *"credit reporting service providers"* (CRSPs).

30. Credit reporting service providers perform many important functions. For instance, information received from data providers, or that collected from other data sources, is cleaned, validated (i.e. checked for consistency) and stored in a standardized data format. Credit reporting service providers then supply organized information to users in a certain format that can be used more efficiently for credit assessment purposes. The data provided refers both to consumer lending and to commercial lending.

31. Broadly speaking, two main types of credit reporting service providers can be identified based on the primary objective each of them fulfills: i) those service providers aiming primarily at improving the quality and availability of data for financial and non-financial creditors to make better-informed decisions; and, ii) those service providers whose primary purpose is to assist banking supervision while at the same time improving the quality and availability of data for supervised financial intermediaries. In practice, while not their primary objective many service providers of the first type support banking and overall financial supervision activities. The same is true for several service providers of the second type with regard to improving data for creditors in the market place.

32. In many international reports and academic papers the first type of service provider is typically referred to as a *private credit bureau*, while the second type is normally referred to as a *public credit registry*. This taxonomy is not necessarily appropriate. First, as previously discussed, some "private" credit bureaus do support public functions like financial supervision,

FIGURE 3: Credit Reporting Service Providers



and several "public" credit registries provide services that are of interest for private sector activities. Moreover, there are cases where credit bureaus are partially or wholly-owned by the public sector. Other scenarios that are inconsistent with the private credit bureau and public credit registry taxonomy are illustrated in Figure 3. Because of such inconsistencies, the terms "private/public" will not be associated with either credit bureaus or credit registries in the remainder of this report.

33. Credit bureaus are typically characterized by complex information flows. Data is collected from various sources and distributed to different users, which may include both to those that contribute data as well as others that do not. Credit bureaus generally enter into agreements with different parties to exchange data in a systematic manner, based on agreed conditions such as the frequency of data updates, the use of standardized formats including common line items, the frequency of data access and the price.

34. Credit bureaus generally target retail credit and small business lending markets, where average loan volumes are small and mass screening techniques using statistical analyses enable the processing of a large number of standard loan applications cost-effectively. Indeed, the data collected from various data providers is used to develop specialized products and services such as credit reports, credit scores and portfolio monitoring applications, which enable better informed and quicker credit granting decisions, enhanced credit portfolio monitoring and improved overall credit risk management. These products and services are typically offered for a fee.

35. Credit bureaus can be formed when creditors, driven by the common interest of improving the performance of their loan portfolios, associate in order to share data in a structured and systematic manner. In other cases, an independent party such as a specialized technical firm is the single or majority shareholder. A significant difference between these two models is that credit bureaus owned by third parties aim at maximizing profits; hence, in addition to exchanging information they produce value-added products such as credit scores. Such bureaus also have incentives to give access to as many users as possible, and to attract information from a larger variety of data providers and other data sources.

36. Credit registries, on the other hand, provide supervisors with an additional offsite tool for systemic risk concentration monitoring and assessing overall portfolio quality, or in order to identify discrepancies in borrower ratings among banks or to identify trends in lending. Therefore, most credit registries collect and process information associated with credit and loans granted by regulated financial intermediaries. In more sophisticat-

ed markets, this information is further used to ascertain capital requirements and provide guidance for dynamic and countercyclical provisioning against loan losses.[19]

37. Credit registries also aim at maximizing synergies of collecting credit data relevant for supervisory purposes by distributing back those data to the original providers to assist them in improving the quality of their portfolios. Notwithstanding the latter, some key differences persist. A credit registry would normally distribute back data only to the financial institutions that fall within the regulatory purview of the financial supervisory authority. Also, this information would normally be provided on a consolidated or aggregated basis and only for debtors whose current level of debt or borrowings exceed a specified threshold. The range of possibilities and combinations will depend on the idiosyncrasy of the local credit markets, the institutional and legal arrangements underlying credit markets and, if available, credit information sharing, and the level of development of the credit reporting industry.

38. With very few exceptions, credit registries are owned and operated by central banks or other financial supervisors. There are nevertheless cases where the central bank or financial supervisor has deferred the task of operating the credit registry database to a private sector party.

39. Commercial credit reporting companies provide credit information on (mainly small to medium-sized) businesses and can therefore be considered as part of the credit reporting system.[20] Users of their services include financial institutions and other creditors looking to assess the creditworthiness of a business for the purpose of extending business loans or trade credit. Commercial credit reporting companies collect information from the company itself (through interviews), from public records and courts (for information on company registration, lawsuits, tax liens, judgments and business bankruptcies), and from other entities that do business with the company such as lenders or suppliers. Services provided include assessments of credit risk and information on management's ability to manage their working capital.[21]

40. Commercial credit reporting is different from consumer credit reporting, in the following ways: (a) commercial credit reporting companies focus on the creditworthiness of the business itself rather than the creditworthiness of the individuals who run the business (except where the business is a sole proprietorship and the creditworthiness of the business and the creditworthiness of the individual(s) who run the business are the same); (b) commercial transactions are significantly larger and more complex, and risks are inherently different; (c) information needed to assess the risk of commercial transactions generally includes significantly more payment performance and financial data (e.g., full financial statements).

41. From a broad perspective, credit rating agencies can also be considered part of the overall credit reporting system, as they issue opinions on the creditworthiness of a particular data subject—usually larger companies—as of a given date. Investors, creditors and even some regulators often rely upon these opinions. While this report intends to cover credit reporting systems as broadly as possible, given the specific function and nature of credit ratings agencies, these will not be discussed in the remainder of the report.[22]

[19] For further reference see: Basel Committee on Banking Supervision, *International Convergence of Capital Measurement and Capital Standards: a Revised Framework*, Basel, Switzerland, 2006.

[20] As noted in Section 1, this report and the principles it outlines target primarily consumer credit reporting systems rather than commercial credit reporting mechanisms. Information on commercial credit registries is provided here to enable the reader to understand better the distinction between consumer and commercial credit reporting.

[21] The following information on businesses is usually provided as part of the service: chief executive officer, company status, parent company, trading styles, name changes, sales, credit ratings, start date, control date, history synopsis, public record filings, line of business, suits, liens or registered charges, number of employees business address, tax code, import/exports/flag, delinquency score synopsis and failure of default synopsis.

[22] As noted in Section 1, the principles are not intended for credit rating agencies in their traditional role. However, some credit rating agencies have expanded into the credit reporting business (e.g. as credit reporting service providers, data providers and/or other data sources), in which case the general principles would become applicable to that specific line or lines of business. For further information on credit rating please visit the official website of IOSCO.

2.3. Key Considerations Concerning Credit Reporting

42. The key considerations concerning credit reporting systems can be broadly grouped around the following topics: i) data; ii) data processing: security and efficiency; iii) governance arrangements of credit reporting data providers and credit reporting service providers, and risk management concerns; iv) legal and regulatory environment; and, v) cross-border data flows.

2.3.1 Data

43. Credit information results from processing two broad categories of data: identity data and credit data. Identity data is collected to enable the correct identification of the borrower; credit data is collected to describe the borrower's indebtedness. In the case of individuals, the information usually shared throughout the system includes, among others, the name and address of the data subject, amount of loan, type of loan, maturity of loan, guarantees and collateral value, default information and payments in arrears. Credit reporting service providers usually supply this information to creditors in a standardized manner, and some service providers also include other system-wide or consolidated information such as credit inquiries from other creditors and credit scores (see Box 2).[23]

44. Other types of data that are valuable for credit reporting but that are not provided by traditional data providers include identity data that can be matched and cross-checked to validate a data subject's identity,[24] companies' registry data, judicial court rulings that provide additional information regarding unpaid debts, utility records and telephone files. This information could be useful to detect and prevent fraudulent credit applications. Frequently, the owners of these data sources are public agencies that are not users of the credit reporting system. Moreover, in some countries certain data elements are deemed "sensitive" and are prohibited by law from being provided to others, such as geo- and ethno-demographic data (e.g., race, religion, gender).

45. Some of the typical data elements supplied by credit registries include name and address of borrower, type of loan, outstanding amount of loan, late payments, defaults/cancelled debts, and on-time payments. Credit registries also develop debtor/borrower classifications which is based on elements such as past due loan payments (e.g. on-time payment would be classified as 1; 30-days past due would be classified as 2; 60-days past due would be classified as 3, and so on).

46. Credit reporting service providers add value to the data they receive by consolidating the various infor-

BOX 2: Credit Scores

Credit scoring is a statistical method of evaluating the probability of a prospective borrower to fulfill its financial obligations associated with a loan. The practice of credit scoring began in the 1960s, when the credit card business automated its decision-making processes. Over time, the use of credit scoring techniques has been extended to other classes of customers including small and medium enterprises.

The predictive value of credit scores is generally higher than that of assessments derived from credit histories alone. However, a credit score's relevance, and thus its predictive value, is higher when applied to an identified and homogeneous population of borrowers with regard to a specific product. For example, different scoring tables and weights are used for mortgage loans than for personal loans. Broad-based scores from credit reporting systems are often used in conjunction with internal or external product specific scores. Moreover, to sharpen the predictive value of the various credit scores there is an increasing trend to collect more data from a wider range of data providers and other data sources.

Scores are often provided by private credit bureaus and some commercial credit registries, but creditors also tend to develop their own scoring models. Where credit reporting systems do not provide scores it is normally because the data needed to develop a predictive score is not available.

[23] The latter two are produced by the service provider itself.

[24] Being able to positively identify a data subject in a database (usually referred to as a successful "hit") is one of the critical challenges of a credit reporting service provider. In this case refers to other data sources that can be cross referenced to validate identity data provided by data providers (i.e. collected through application forms).

mation pieces and introducing a series of parameters, identifiers, measures or other tools to assist users in identifying the risk features of data subjects. Additionally, service providers may offer predictive scoring models for risk or fraud, and historical performance information.

47. Information quality is the basic building block of an effective credit reporting environment. Accuracy of data implies that such data is free of error, truthful, complete and up to date. Inaccurate data may lead to unjustified loan denials or higher borrowing costs. Thus, problems related to data accuracy are the subject of numerous complaints and litigation around the world and, as a result, have a significant impact on the development of credit reporting systems.

48. Incorrect data may result from human error or other causes. For example, incorrect data provided by the data subject or human error from creditors or other sources when inputting data will result in incorrect data being transmitted to the credit reporting system, subsequently affecting the quality of reports. In addition, data pertaining to a certain data subject may erroneously be associated to another data subject due to inadequate identification mechanisms (e.g. improper matching of names, lack of identification keys for individuals and/or businesses, the inability of such keys to provide a unique identifier or the impossibility to use such keys given legal and regulatory restrictions). Identity matching problems are likely to be exacerbated in the context of cross-border data transfers.

49. Errors can also originate at the level of credit reporting service providers. A potential source of errors in this case is associated with one of the core functions of credit reporting service providers, which consists of consolidating and matching the data that is received from a variety of credit reporting data providers and other data sources. If no proper definitions, tools and controls are in place, execution of such processes may result in duplicate or missing records, which would then lead to incorrect inferences about the data subject due to, for example, underestimation or overestimation of the data subject´s outstanding liabilities.

50. Another possible source of inconsistency in data relates to different definitions being used by the various data providers and other data sources with regard to what constitutes a delinquency or other credit events. For example, most creditors will report a delinquency when a loan is 30-days past due. However, some will do so only after 60 days or more. Still others might report delinquencies immediately after the deadline for a scheduled loan payment is not met.

51. In addition to being free of error, data needs to be updated and made available in a timely manner. This implies first that data providers and other data sources need to update their respective databases quite frequently (i.e. a given number of days after the occurrence of a given relevant event). Second, updated data needs to be provided to a credit reporting service provider on a frequent basis. This will usually take the form of a pre-defined schedule –, although many credit reporting service providers have also defined a set of variables that, in the event of a change, are to be reported within the pre-defined interval (i.e. so-called “trigger events”). Thirdly, updated data needs to be made available to users as soon as practical.

52. Data providers may fail to meet the updating schedule of credit reporting service providers. This may be due to several factors, including lack of human or financial resources or inefficient technology that is incapable of meeting reporting requirements. It could also be the case that the data provider willingly fails to observe the reporting schedule. For example, data providers may lack the necessary motivation to provide data in a timely manner if they believe that the data they receive from the credit reporting service provider is not useful enough. A data provider may also come to the conclusion that other data providers are not providing timely information, for instance, to keep to themselves information they deem strategic, in which case it may decide to do the same. Situations like these tend to be more frequent in the absence of a clear set of rules and/or incentives that foster compliance with the updating schedule.

53. The final step in ensuring timeliness of data is that the updated information actually flows to users from credit reporting service providers without any significant lag. As discussed earlier, credit reporting service providers convert raw data into information that is more readily usable by users. Therefore, it is important that the time period to execute this process be as short as possible. Service providers can also help ensure timely delivery of

information by offering a range of secure delivery modes that enhance the ability of users to access and use data.

54. Another characteristic of accurate data is its sufficiency and adequacy. Three features are critical for sufficiency: i) being able to capture relevant detailed information, including negative as well as positive data on a given data subject; ii) gathering information from as many data providers and other data sources as possible, within the limits established by law; iii) having sufficient information in terms of the period over which observations are available.

55. So-called "negative credit reports" or "negative data" are normally limited to reporting unfulfilled financial obligations, such as late payments, defaults, bankruptcies and court judgments. Negative data is "event-based", i.e. is only registered upon the occurrence of an adverse event. For most debtors, however, such adverse events are rare or do not occur at all. Therefore, in an environment where only negative credit reports are provided, debtors that meet their financial obligations regularly and without any adverse events will only have a partial credit history in the eyes of third parties, since no data on them is shared or reported.[25]

56. Positive credit reporting, also known as positive data, integrates the data captured by negative-only files with other types of data which may include, but not limited to, account balances, number of inquiries, debt ratios, on-time payments, credit limits, account type, loan type, lending institution, and public record data, detailed reports on the prospective borrower's assets and liabilities, guarantees, debt maturity structure, and pattern of repayments, among others.[26] Positive data is therefore more comprehensive and its use is empirically associated with lower incidences of extension of credit to bad debtors, and at the same time successful extension of credit to debtors with little previous credit experience.[27]

57. In countries where positive credit reporting is prohibited by the legal and regulatory framework or simply not performed for other reasons, a debtor's ability to access new financing following an adverse event may be severely impaired. This is because the negative data stemming from the adverse event is usually stored for a number of years, normally ranging from three to seven. On the other hand, in a positive credit reporting environment a debtor's economic recovery and improved repayment behavior after the adverse event are captured, and the debtor's credit score would be progressively adjusted.

58. In addition to credit reporting being of a "positive" or "negative" type, it can also be classified as comprehensive in the sense that information silos are avoided.[28] Non-comprehensive (which is also known as "segmented") credit reporting is based on the collection and distribution of information from/to a limited number of sources.[29] Comprehensive credit reporting on the other hand is based on the collection of information from a wide variety of sources and sectors, including retail, small business, microfinance, credit cards, insurance, telecoms, utilities, and others. As a result, comprehensive credit reporting increases the ability of creditors to assess and monitor credit risk, creditworthiness, and credit capacity.[30]

59. Ensuring a wide range of data providers and other data sources is not always possible, however. The scope of data and/or the scope of data providers and other data sources may be limited by legal or regulatory restrictions. For example, regulators of non-traditional data providers like telecoms may find it

[25] As will be discussed later on, in such a scenario debtors that duly fulfill their financial obligations will not be able to benefit from that good performance by building a good credit history.

[26] The variables outlined refer to data that is collected though not necessarily disclosed.

[27] See John M. Barron and Michael Staten, "The Value of Comprehensive Credit Reports: Lessons from the U.S. Experience," 2000.

[28] See Michael A. Turner et. al., "Give Credit Where Credit is Due: Increasing Access to Affordable Mainstream Credit Using Alternative Data." PERC (December 2006). This paper builds on the benefits that the inclusion of utility and telecom payment data on a credit reporting system could bring to low income households, young people and immigrants, as observed in the US market.

[29] A typical example would be information that is collected from banks and is distributed only to such banks.

[30] It should be noted that credit registries normally have a narrower scope or legal mandate (i.e. regulated financial institutions). The term "non-comprehensive", as used herewith, would not be applicable to such credit registries.

unacceptable for their supervised entities to share detailed information on their customers outside the sector. Moreover, access to public sources of information is often limited or prohibitively expensive, for instance due to the low levels of automation of public records in some countries.[31]

60. At the same time it should be recognized that not all information that can be potentially collected on a given data subject will be relevant for the purposes associated with credit reporting. Indeed, some data are irrelevant in that they add little or no value in determining the probability of repayment.[32] For example, it is not evident that demographic details such as race and ethnic origin add any value to credit underwriting decisions. Moreover, some data pieces may not only be irrelevant but also harmful to collect or distribute as it could deter the appetite of data providers to share data, or could lead to undesirable biases in the decision-making process for loans and other credit extensions. The continued collection of irrelevant data is an excessive burden on any credit reporting system.

61. Irrelevance of data can also occur when certain pieces of data, typically negative data, are retained for a longer-than-needed period of time and become obsolete, thus losing their predictive capacity. For example, "bad debtors" may turn around their repayment behavior and become good borrowers over time.

62. Retention periods are established for storing data and disclosing data. The length of the retention period for each of these functions will depend on whether the data is personalized or depersonalized and if there is a need for retaining and/or disclosing such data. On the one hand, data should be kept and/or disclosed for the sufficient time serving the purpose of collection. On the other hand, retaining that same data for a period of time that is too short may lead to insufficient timeframe sampling or inadequate information on a data subject. Indeed, in some countries once a bad debt is paid off, all negative data related to it is deleted from databases right away, either because it is mandated by law or simply because it is common practice in the market place. This reduces the ability of creditors to make informed decisions due to the lack of a sufficient number of years of relevant data. For banking supervisory purposes, granular credit data should be kept for at least one economic cycle enabling predictable borrowers' behavior detection over time, and serving also as a valuable tool to make assessments on capital requirements and rules on provisions for banks and credit institutions. Finally, the lack of sufficient years of relevant data impacts the predictive power of scoring models built using such data. Current practices for scoring models require a period that ranges between three to seven years of data.[33]

2.3.2 Data Processing: Security and Efficiency

63. Credit reporting data resides in databases and other types of data-holding methods that are subject to security and safety concerns, including loss, destruction, corruption, theft and misuse. These concerns become greater as the interconnectivity of databases and data networks increases. If such threats were to materialize, they could have serious or even irreversible consequences on credit reporting system activities such as widespread distrust regarding data sharing.

64. The major issue related to security and confidentiality lies in identifying sources of risk, addressing those risks and assigning appropriate responsibilities for correcting situations in which such risks actually materialize. The more complex a system is, the more difficult it becomes to identify the potential liabilities and proactively assign appropriate responsibilities.

65. Services rendered by the credit reporting service providers are becoming increasingly critical. In countries where credit granting decision-making is highly automated, a disruption in credit reporting services

[31] In some countries, laws ensuring access to public information have been enacted. Examples include Chile (2009), Guatemala (2008), Hungary (2005), Dominican Republic (2004), Ecuador (2004), Croatia (2003), Mexico (2002), Japan (2001), Bulgaria (2000), and Directive 2003/98EC of the European Council of 17 November 2003 on the re-use of public sector information.

[32] It might also be necessary to determine whether data is *relevant enough* considering the costs associated with its acquisition, updating, processing and storage.

[33] Major credit reporting systems around the world tend to retain information for distribution among the users for anywhere between 5 to 7 years.

may cause upheavals in consumer credit markets.[34] The reliability of credit reporting services (i.e. being able to access the service when needed) is therefore a crucial element of an effective credit reporting system.

66. Ensuring the provision of continuous service within the accepted service level standards will most likely require credit reporting service providers to make significant capital investments and undertake a series of other measures related to the organization of work and responsibilities under different emergency scenarios. All these can present major challenges.

67. Significant capital investments are also required to meet a growing demand for high quality products and services that meet the needs of a rapidly evolving credit culture. Credit reporting service providers are therefore faced with the additional challenge of meeting these demands while at the same time trying to maintain the affordability of the services for the various categories of users.

68. It should be noted that the likelihood of service providers making the necessary investments will depend to a large extent on the size and sophistication of the market they serve. From another perspective, in markets lacking sufficient critical mass, investments of this magnitude might not be viable.

2.3.3 Governance Arrangements for Credit Reporting Service Providers and Data Providers and Risk Management

69. To a large extent the services provided by the credit reporting industry are deemed to be of public interest, and therefore might become the object of public policy. However, situations exist where the actual objectives that the credit reporting service provider seeks in practice diverge from the public policy goals underlying a service of this kind. A major determinant of such divergences can be traced back to the ownership structure of the credit reporting service provider. While there are no "good" or "bad" ownership structures, certain structures may lead to more issues than others.

70. Ownership by a particular group of large lenders, typically banks, can lead to anti-competitive behavior in the information sharing market. For example, majority shareholders can restrict or prevent access to the service by smaller lenders. In another scenario, a credit reporting service provider may wish to expand access to all types of users in order to maximize profits. Large lenders may not be willing to share information in such a scenario as they may consider that they will be contributing quality data and disclosing their good customers, while it is unlikely that this will be compensated with the data they will be able to obtain from the service provider. Situations like these may lead to the creation of service providers that serve specific sectors of the credit market, thus leading to silos of information. As earlier discussed, such fragmented information sharing markets undermine the benefits of comprehensive credit reporting systems. Problems like these can be mitigated through proper governance arrangements.

71. Appropriate governance is also crucial for ensuring that data providers, other data sources and credit reporting service providers will be able to cope successfully with the risks underlying the information sharing and credit reporting businesses. These entities are mainly exposed to operational risks, legal risks, and reputational risks. Therefore, probably more than in most other businesses, the materialization of any of these risks can severely impair the long-term viability of the credit reporting organization.

72. As with all technology-intensive organizations dealing with multiple parties, the potential for operational errors and unauthorized access to the information, either from inside the credit reporting service providers or from outside, is significant. Legal risk stems from the inadequate or erroneous observance or interpretation of the applicable legal and regulatory framework. Reputational risk is particularly relevant due to the nature of credit reporting: personal data being used in sensitive activities like lending and financial supervision. As it is practically impossible to avoid all risks while maintaining a viable business, credit reporting service providers

[34] It should be noted that credit reporting is normally only one of the inputs that goes into the decision of whether to extend a loan. At the same time, most creditors involved in consumer lending use credit reports as a mandatory input, meaning that the flow of the transaction would stop in case such reports were not available.

and data providers need to recognize these risks and hence need to manage them.

73. Given the relevance of credit reporting activities for credit and other financial markets, coupled with the sensitivity of the data that is handled in these activities, it appears desirable that credit reporting service providers and data providers be scrutinized in order to promote an appropriate level of accountability on the side of such providers. This would generally be done through some form of independent check by a qualified third-party such as an auditing firm or a government agency.

74. Peculiarities in governance arrangements of publicly-owned credit reporting service providers should not preclude the achievement of the business and public policy objectives and appropriate risk management.

2.3.4 Legal and Regulatory Framework

75. Although credit reporting systems have existed at least since the 1800s, specific regulation of credit reporting systems coincided with the technological development of 1960s and rising concerns over transparency and individual rights. The growing recognition of credit reporting activities as a core function in any modern financial market has also become a catalyst for the regulation of these activities.

76. Over the last decade a large number of countries have devoted efforts to regulate the credit reporting market, particularly when private sector credit reporting service providers are present. Regulation of credit reporting activities usually focuses on registering or licensing of credit reporting service providers, imposing responsibility for data accuracy, collection and disclosure, consumers having access to their information and being able to have erroneous information corrected, compliance monitoring, and enforcement. There is however no consensus on what constitutes an adequate legal and regulatory framework for credit reporting as there is a natural tension between the objectives of having access to broader sources of information for enhanced credit reporting, and the interest in preserving individual privacy.[35]

77. In some countries, laws or regulations are enacted to deal with specific issues of concern, some of which might not be exclusive to credit reporting like privacy issues and data protection. In others, a special legal framework for credit reporting activities exists, usually in an attempt to typify these activities and regulate them in an integral manner. It is also possible for the two models to co-exist. According to experience in several countries,[36] legal risks are generally greater where there is an absence of laws and regulations covering credit reporting systems and the related activities. These risks include confidentiality breaches regarding financial data, credit reporting service provider employees' liability for data processing, and risks related to automated decision making, to name just a few.

78. As with other economic activities, there is the risk that the legal framework be too restrictive, thus hindering the development of an efficient credit reporting system. For example, the legal framework, if not properly designed, can create unjustified barriers to entry to potential new market players. Also, in an attempt to protect privacy rights, the legal framework might require data providers and service providers to obtain consent from data subjects each time they wish to collect data on them, which, apart from being costly would be overly cumbersome and undermine the usefulness of the data.

79. On the other hand, regulation can be the only means through which certain problems can be addressed in an effective manner. One important example is that of ensuring competitors' fair access to credit reporting services, especially when ownership structure of credit reporting service providers do not

[35] Privacy is a fundamental right recognized in numerous international agreements including The Universal Declaration of Human Rights (U.N., 1948); The Convention of the Council of Europe for the Protection of Individuals with regard to Automatic Processing of Personal Data (ETS Nº 108) and its Additional Protocol regarding supervisory authorities and trans-border data flows (ETS Nº 181); Directive 95/46/EC of the European Parliament and of the Council of 24 October 1995 on the protection of individuals with regard to the processing of personal data and on the free movement of such data. See also annual reports of national data protection authorities of the EU.

[36] Several examples on this were identified in Latin American and Caribbean countries through the WCHRI. For additional references, see the WCHRI's Orange Books at www.whcri.org.

provide incentives for the latter to do so. Regulation can also be necessary to ensure that certain standards (e.g. data quality) be equally applicable to all participants in the system.

80. Since credit reporting systems are based on the flow of data through an existing network of stakeholders, laws and regulation should carefully consider issues related to property rights regarding data and databases, assigning realistic responsibilities and rights over the data processed and the format used for such processing. A relevant matter is that of format ownership, especially if this might represent a barrier of entry for other service providers.

81. One of the biggest challenges of the legal framework is that its provisions be enforceable. On the one hand, laws and regulations should be practical and effective to ensure a high degree of compliance. In other words, rules that cannot be enforced are not likely to be effective. On the other hand, authorities should be capable of enforcing legal provisions administratively, which requires a combination of sufficient powers and adequate human and financial resources. In the case of credit reporting activities, one additional difficulty is that cross-cutting issues might fall under the jurisdiction of several government agencies, which then leads to the need for effective cooperation between regulators.

82. The public agencies that are normally charged with the responsibility of regulating credit reporting activities include central banks and bank supervisors, and in some cases ministries of finance, data protection authorities, consumer protection authorities and competition and antitrust authorities. In recent years, it is recognized that the role of the authorities is not limited to applying the existing legal framework; authorities also play a leading role in developing a vision for the systems, in coordinating with all stakeholders—and other authorities as well—and in carrying out a reform plan, if necessary. In some cases, one of the authorities is designated as the system overseer and is charged with the responsibility of promoting the appropriate development of the credit reporting system as a whole, making sure that the efforts of the various regulatory authorities are coordinated and are consistent.[37]

2.3.4.1 Consumer Protection and Data Subject Rights

83. There are many different approaches to the regulation of consumer protection and data subject rights as it relates to credit reporting systems. European countries, for example, have developed a data protection directive that establishes broad protection for data subjects with regard to their information[38] and with a scope that goes beyond credit reporting systems. Alternatively, the United States has adopted a sector-specific law which focuses narrowly on the flows and uses of consumer data associated with credit reporting systems.[39] Regardless of the approach taken, ensuring that consumers trust credit reporting systems is imperative. Below is a short discussion of the most relevant data subject and consumer rights, and approaches taken to codify these rights into laws and regulations.

84. Consumer protection and privacy considerations are closely linked to the purposes of data collection and data disclosure. The legal and regulatory framework surrounding credit reporting typically sets out specific conditions for data collection and specific conditions for data disclosure.

- Collection: In several countries there is an underlying legal basis for data collection. In countries where this is not the case, a pre-condition for data collection is that consent be obtained from data subjects.
- Disclosure: Similarly, different frameworks set conditions for data disclosure. One such condition is the limited use of data. The legal and regulatory framework establishes a finite set of permissible purposes for which the data subject's data may be used. Permissible or legitimate purposes are usually associated with matters that are of general interest to a society, and generally include verification for the extension of credit or the collection of debts, as well as to enforce the fulfillment of

[37] See the Recommendations for Effective Credit Reporting Oversight under Section 4 of this report.

[38] Directive 95/46 European Parliament and of the Council of October 1995 on the protection of individuals with regard to the processing of personal data and on the free movement of such data.

[39] The Fair Credit Reporting Act (15 U.S.C 1681 et seq.).

legal and other contractual obligations (see Table 1). However, even though it might be clear that permissible purposes are being sought after, consumers/data subjects may have the choice to limit some of the uses for which data is collected (e.g. employment).

85. Notification. As data subjects have in principle a decisional role over the collection and further processing of data about them, in some countries, when data is not obtained directly from the data subject or with his/her consent, data subjects are notified (informed) of the collection and sharing of such data. The need and modalities for notification are generally linked to the purpose of collection and sharing.

86. To protect consumers from the negative consequences of inaccurate data or unlawful collection, as mentioned earlier, it is common practice to provide consumers with rights to access and challenge data held on them.

- Access. Provisions are frequently established allowing data subjects to access the information held on them. Such access could be provided at little or no cost to data contained in the files of credit service providers.[40] In some countries, data subjects are allowed to have free access to their credit reports once per year upon request. The benefits of giving consumers access is that it builds trust and ensures transparency.
- Dispute and Correction. Data subjects are normally able to challenge inaccurate data held on them and to receive a report on the results of the subsequent investigation. Inaccuracies in data are to be rectified or deleted when appropriate, and data subjects may claim compensation for damages incurred. Ideally, the rectification process will be straightforward and inexpensive for the data subject. This right to dispute and seek rectification of inaccuracies in data is not meant to impede the lawful processing of data or allow for misuse by data subjects. A detailed example of dispute resolution mechanisms for credit reporting is provided in Annex 3.

87. The various conditions and rights listed above serve to protect the rights of consumers and data subjects. While there is little question on the need for having an adequate set of laws and regulations that duly protect and enforce consumer rights, other important needs such as fostering the development of an effective and efficient credit reporting system should also be part of the equation. A balanced approach to individual privacy interests, data subject rights and a robust credit reporting system is therefore necessary.

TABLE 1: Permissible Purposes for Personal Data Disclosure in Select Legal Frameworks

FCRA (United States)	PIPEDA (Canada)	Directive 95/46/EC (European Union)
Court Order		Legal Obligation
Consumer	Consumer	Court Order
Credit/insurance/ rental transaction	Extension of credit Insurance/rental	Consumer consent Legitimate purpose (with notification)
Business transaction		Purpose consistent with purpose for data collection
Employment	Employment	
Account review Licensing		
Child support		
Collection of debt	Collection of debt	

2.3.5 Cross-border Data Flows

88. Financial liberalization has significantly reduced restrictions on the operations of financial institutions in foreign markets. At the same time, businesses initiating activities in a new country and individuals that have changed their country of residence will most likely need to establish a relationship with a local financial entity. New challenges have thus emerged in recent

[40] It should be noted that there are credit registries that do not provide regulated institutions credit information at the level of account but on an aggregated manner showing the overall behavior of the bank as regards to the rest of the banking sector. In these cases, data subjects' rights would not apply because the data is not linked to a particular data subject.

years, including the need to monitor credit exposures of important borrowers outside a financial institution's home markets, or providing credit and other financial services on a sound basis to businesses and individuals that do not have a credit history in the country where they are applying for credit. Box 3 describes some of the measures and arrangements in the case of the European Union.

89. These examples reflect the fact that, under some circumstances, cross-border data transfers can be considered a necessary instrument to facilitate the provision of credit and other financial services in a globalized world, as well as for financial supervisory purposes.

90. In addition, small markets raise the issue of economies of scale for credit reporting service providers. As credit reporting services need to be commercially feasible and cost effective, in small markets this might only be possible through the creation of a single mechanism serving more than one market. Such an arrangement will most likely involve setting up an information network that centralizes credit data and which is accessed by creditors from different jurisdictions.

91. In principle cross-border data flows raise concerns similar to those raised by purely domestic information sharing and credit reporting activities. However, cross-border activities are associated with a more complex

BOX 3: Single Market and Cross-border Credit: the Case of the EU

The European Directive on Consumer Credit (Directive 2008/48/EC) aiming at the integration of consumer markets in Europe, contains provisions facilitating the exchange of information regarding credit payment history of borrowers/consumers between different countries in the European Union. The Directive stresses the importance of assessing creditworthiness on the basis of sufficient information and, where appropriate, on the basis of a consultation of the relevant databases. Access to the relevant databases shall be in a non-discriminatory way and in compliance with data-protection legislation.[1]

The Expert Group on Credit Histories (EGCH)[2] led by the European Commission devoted significant efforts to outlining the major issues impeding the use of credit reporting systems across borders in the European Union context. These findings are consistent with previous studies.[3] In addition, the EGCH recognizes the relevance of operational factors such as differences in data content, terminology and registration criteria as obstacles for the broad use of credit reports produced in other jurisdictions.

There are examples of arrangements for the exchange of credit information between certain credit reporting service providers. For example, against the background of free flow of financial services within the EU and in particular the use of the Euro as single currency in many member states of the EU, the need to gain a picture as complete as possible of the total indebtedness of their borrowers drove several public credit registries in Europe (Austria, Belgium, Czech Republic, France, Germany, Italy, Portugal, Romania and Spain) to sign a Memorandum of Understanding providing for the exchange of credit information on a regular, monthly basis. In addition, institutions are allowed by electronic means to make cross-border inquiries about the indebtedness of their clients on a case by case basis.[4]

Similar arrangements are observed between some private credit bureaus, which agree to exchange information on the basis of reciprocity and bilateral agreements. Information exchange takes places between BKR (Netherlands) and National Bank of Belgium and between BKR (Netherlands) and CRIF (Italy). Similar arrangements are provided by SCHUFA (Germany) and Credit Info (Iceland).[5]

[1] See Article 9.4 of the Consumer Credit Directive 2008/48/EC of the European Parliament and of the Council of 23 April 2008 on credit agreements for consumers and repealing Council Directive 87/102/EEC.

[2] For further study see Expert Group on Credit Histories report, 2009.

[3] Nicola Jentzsch and Amparo San José Riestra, "Information Sharing and its Implication for Consumer Credit Markets: United States vs. Europe," (paper prepared for the European University Institute Workshop "The Economics of Consumer Credit: European Experience and Lessons from the U.S.," Florence, May 13–14, 2003). The paper compares the US and Western Europe credit reporting systems.

[4] The Memorandum of Understanding on the Exchange of Information among National Central Credit Registers for the Purpose of Passing it on to Reporting Institutions (2003, amended in 2010) is available at the European Central Bank's website (www.ecb.int).

[5] The binding contract used for these arrangements has been facilitated by ACCIS.

environment due to the multiplicity of applicable laws, consumer protection frameworks, credit cultures, market practices, and institutional structures, among others. For example, sharing the data of a given data subject across borders can elevate concerns about privacy and appropriate data safeguarding. It can also be the case that the data protection or data access laws that apply in a certain foreign jurisdiction are in conflict with a service provider's internal or domestic obligations. Also, in case of a dispute by the data subject, the source of inaccuracy might be harder to identify, which could be coupled with unclear guidance on what the applicable laws or remedial procedures are.

92. Differences between countries in terms of data retention periods, update frequency, amount of thresholds, loan or credit types being reported, among others, could also represent barriers when implementing cross-border credit reporting.

93. It is also worth mentioning that not all cross-border ventures of this kind might be economically or legally viable despite the potential benefits they may entail. Engaging in such a venture without previously conducting a cost-benefit analysis exercise that is sufficiently objective and detailed can lead to numerous financial and reputational problems for the parties involved.

3

The General Principles

3.1. Public Policy Objectives

94. For this report, the following public policy objectives for credit reporting systems have been defined: *credit reporting systems should effectively support the sound and fair extension of credit in an economy as the foundation for robust and competitive credit markets. In doing so, credit reporting systems should be safe and efficient, and fully supportive of data subject and consumer rights.*

More specifically, an effective credit reporting system should be able to:

- Support financial institutions and other grantors of credit to accurately assess the risks involved in credit granting decisions and maintain well-performing credit portfolios.
- Facilitate sustainable expansion of credit in the economy in a responsible and efficient manner.
- Support financial regulators in supervising regulated institutions in order to ensure that the latter remain safe and sound, minimizing systemic risk.
- Facilitate fair and unbiased access to various types of credit products on competitive terms.
- Educate and provide incentives to individuals and businesses to manage their finances responsibly, rewarding responsible behaviors and curbing over-indebtedness issues.
- Take into account consumer interests.

3.2. The General Principles

Each General Principle described below should be read in conjunction with the accompanying guidelines and explanatory text.

Data

General Principle 1: Credit reporting systems should have relevant, accurate, timely and sufficient data—including positive—collected on a systematic basis from all reliable, appropriate and available sources, and should retain this information for a sufficient amount of time

Guidelines on accuracy of data

> Data collected and distributed should be, to the extent possible, free of error, truthful, complete and up to date.

95. Information is at the core of credit reporting activities. Therefore, high data quality is the basic building block of an effective credit reporting environment. Inaccuracies in data contained in credit reporting systems can result in unjustified loan denials, higher borrowing costs, and other unwanted consequences for debtors, data providers and credit reporting service providers.

96. It is of utmost importance that data be unambiguously linked to the data subject. If data is erroneously associated with another data subject (e.g. due to namesakes or inconsistencies in commonly used identification keys such as national identification numbers for individuals or businesses), this will render the rest of the data collection and distribution process useless and potentially even harmful.

97. The accuracy of data which is made available to users relies on a series of steps, all of which are crucial.

The chain starts with the information that is gathered on data subjects, normally through loan applications and contracts, which is then stored by credit reporting data providers and other data sources. The other part of the equation is the set of processes that is executed by the credit reporting service provider to convert the raw data into the final product or products that are accessed by users. This includes data validation, normalization and other technical processes, as well as applying algorithms to transform the data into a series of value-added products and services.

98. One way to ensure that the data provided are accurate is that the latter are actually used on a continuous basis. Data on which no continuous quality controls and routine processes are applied have the risk of becoming either imprecise or misleading once such data are accessed at a later stage. Therefore, credit reporting systems should balance the need for collecting as much information as possible with that of collecting information that is useful for the service being rendered.

To ensure that data accuracy is achieved on a continuous basis, credit reporting system participants should consistently apply appropriate data-supplying rules and procedures to all data providers with similar characteristics.

99. Appropriate rules or other enforcement tools should be in place to promote compliance with the applicable standards on data collection and distribution, especially with regard to incorrect, incomplete or inaccurate data. While a broad range of enforcement tools can be considered (e.g. from warnings to some form of monetary sanction for non-compliance), it is important that the choice does not compromise the integrity of the database.

100. Caution should be exerted over granting exceptions, as there is a high cost and risk in managing a variety of data collection schemes. Exceptions regarding data supply should consider implications on data accuracy and database integrity.

101. It is equally important that rules and procedures be disseminated extensively throughout the system, using as many means as possible (e.g. newsletters, seminars, face-to-face consultations), especially when planning changes to the data collection scheme.

Guidelines on timeliness of data

Credit reporting service providers and data providers should apply clear and detailed rules for the updating of information. Such rules should ensure that updates be performed on the basis of pre-defined schedules and/or specific trigger events. At a minimum, this should include prompt action in the event of error adjustments and ideally in case of relevant changes in credit exposures, arrears, fraud, defaults and bankruptcies.

102. Data should be updated immediately upon the identification of an error. In an ideal scenario, upon occurrence of one or more of the trigger events described above, the relevant information on the data subject would be updated quite promptly. In contrast, for those data subjects for whom there are no relevant changes, data would be updated less frequently, though not less often than on a monthly basis.

103. Appropriate rules should be in place to promote compliance with the agreed standards on data updating.

Data should be available for users of the credit reporting system in a prompt manner to enable them to carry out their functions without unnecessary delays.

104. Credit reporting service providers should strive to minimize the lag between the time they receive the updated data and the time the new data are made available to final users. In this regard, credit reporting service providers should set up service levels that match users' and data subjects' needs for timely and accurate data.

105. Automation and standardization of rules and processes are usually the most effective means to improve service levels (i.e. in this particular case, to reduce the "conversion period" of raw data into the information that is actually made available to users) without the risk of negatively affecting data accuracy.

Guidelines on sufficient data – including positive

Credit reporting service providers should be able to collect and process all the relevant information needed to fulfill their lawful purposes. Relevant information comprises both negative and positive data, as well as any other information deemed appropriate by the credit reporting system, consistent with the considerations described in the other General Principles.

106. Data collected should include all relevant information to enable any given user to adequately evaluate and manage credit risks on a continuous basis. This includes information that is necessary to make an unequivocal identification of the data subject, as well as information related to the creditworthiness of the debtor and/or the repayment prospects of a new loan (e.g. current credit exposures, maturities, guarantees and/or collateral, default information, etc.)

107. Negative credit reporting data refers to late payments, loan defaults and other unfulfilled economic obligations, as well as bankruptcies and other judicial processes. Positive credit reporting also includes several other pieces of information about the debtor, such as account balances, number of inquiries, debt ratios, on-time payments, credit limits, account type, loan type, lending institution, interest rates and public registries' data, detailed reports on assets and liabilities, guarantees and collateral, debt maturity structure, pattern of repayments, employment records, etc.

108. There is a limit on the information that can be shared, which is usually associated with the permissible purposes underlying information sharing, or privacy considerations when dealing with sensitive issues such as ethno-demographic data. In other cases, while sharing such potentially sensitive data *per se* is not prohibited, there are legal or regulatory restrictions on using that information for credit reporting purposes, for example if the data is considered out of proportion when compared to the intended use, or to reduce the possibility of introducing a bias in creditors' decisions.

Credit reporting service providers should set up clear rules on minimum data inputs and optional data inputs. Data elements to be collected should include, at a minimum: identification information, information on the credit including original amount, date of origination, maturity, outstanding amount, type of loan, default information, arrears data and transfer of the credit when applicable. Ideally this would also include credit risk mitigation instruments such as guarantees, collateral and an estimate of their value.

109. Credit reporting service providers should provide clear definitions and detailed explanations on the data being sought. In agreement with data providers, and eventually with other data sources, credit reporting service providers should establish a list of mandatory data inputs to be provided on a systematic and continuous basis. Minimum data inputs should be consistent with the previous Guideline on "sufficient data".

110. Credit reporting service providers should also specify the form(s) through which the data is to be provided (e.g. specific templates or layouts). From a service provider's standpoint, using a standard format facilitates automation and data consistency, which in turn may result in greater efficiency. From the perspective of data providers and other data sources, using a standard format with all credit reporting service providers would enable them to process and send the required data with little or no additional costs.

Guidelines on collection of data on a systematic basis from all relevant and available sources

Credit reporting service providers should be able to gather information from all relevant data providers, within the limits established by the law.

111. Data subjects benefit from having their data provided to all credit reporting service providers in a given market. Therefore, data providers should refrain from entering into exclusivity agreements with a particular credit reporting service provider—or a subset of these—and share data widely and equitably across the system because it is beneficial for the credit reporting system as a whole.

Credit reporting service providers should be able to access other data sources of relevance, within the limits established by the law.

112. Other data sources deemed relevant for credit reporting include private and public sources or records. In the case of private sources, the same considerations described under the previous guideline would apply.

113. Public records are generally available to the public, and credit reporting service providers should be able to access these records at least under the same conditions as those applicable to the general public.

114. Some public records might not be available to the general public. This may include identity registries for individuals and businesses. As such information might be crucial for validating a data subject's identity, credit reporting service providers could be allowed to access such information under specific or limited conditions.

115. Services associated with public records are often quite basic, like consultations of physical records or consultation of basic computerized data that cannot be enriched with further data exploitation techniques (e.g. under a data warehouse environment). Credit reporting service providers should seek to negotiate special agreements with public records agencies to ensure a smooth and systematic flow of information. In some cases this may involve defining a cost recovery scheme in order for a public record to be able to provide enhanced services.

Guidelines on retention of data

Data collected by credit reporting systems should be available to users for a period of time that is consistent with the purpose for which the data is used.

116. The credit-related performance of debtors can change over time. For example, a default or another negative performance in the past could have been the result of a generalized economic downturn or even a natural catastrophe, and should not affect the long-term creditworthiness of an otherwise creditworthy debtor. For reasons like this, authorities may set limits on the length of time that the negative data can remain in the file of data subjects.

117. There is, however, a difference between limiting the length of time for the processing of personal identifiable data, and limiting the length of time for the storage of such data in depersonalized manner. Data collected by credit reporting service providers is frequently used to build credit scoring models and other analytical decision-enabling tools that are useful for creditors. These tools generally require long time series of data in order to produce a reasonable degree of predictability (see Guidelines on Accuracy of Data). Moreover, to build a model *per se*, data may not need to be personalized. Insofar as this information remains stored in such a way that is not possible to reverse engineer the depersonalization process, data in a credit reporting service provider should be usable for as long as necessary.

118. Therefore, any rules or regulations on the maximum time length that credit data can be stored, used for modeling purposes, or explicitly distributed to users should be clear and specify over which of these activities the limitation(s) would apply. At the same time, these sorts of limitations should carefully balance the objectives of fairness on one hand, and information integrity and accuracy on the other.

Clear rules should be in place regarding the method to determine the specific date or event when distribution of data should be discontinued.

119. Rules that restrict the period of time in which that data can be distributed to users should also be clear and specific on how exactly that period of time is to be calculated. Any ambiguities or lack of specificity on this issue can become a source of disputes, for example between data subjects and credit reporting service providers or between the latter and their regulators.

120. For example, the rules should state whether the maximum length of time, typically expressed as a number of years, would be calculated starting when the relevant event (e.g. a default) took place, or when the latter was first reported to the credit reporting service provider, or when an event first led to the denial of a loan to a data subject. The definition of what constitutes the "event" itself is also important.

Data Processing: Security and Efficiency

General Principle 2: Credit reporting systems should have rigorous standards of security and reliability, and be efficient

Guideline on security measures

Credit reporting system participants should protect data against any loss, corruption, destruction, misuse or undue access.

121. Some common threats to data security include cyber attacks from outsiders, improper data use by employees of service providers and/or from the users, accidental disclosure of data, accidental loss of data, and natural disasters, among others. All participants in a credit reporting system should undertake best efforts to implement commercially reasonable data security safeguards to protect data against these and other potential threats.

122. Specific measures and safeguards should be adopted to cope with the logical, physical and organizational aspects of data security (i.e. so-called "tridimensional approach to data security"). The objective of these safeguards should be to contain, limit and respond to data security breaches. Measures and safeguards should be reviewed on a regular basis to ensure that they are up to date and effective against newly emerging threats.

Guideline on reliability

Credit Reporting Service providers should implement appropriate business continuity measures to ensure that their services will be available to users without any significant disruptions.

123. As services rendered by credit reporting service providers are increasingly becoming critical, the reliability of credit reporting services (i.e. users being able to access the service when needed) is a crucial element of an effective credit reporting system.

124. For several years, business continuity has been an important subject of discussion and action by international financial institutions and the financial industry. As a result, extensive literature now exists on this subject and will not be discussed in further detail in this report. Two aspects are worth mentioning, however. First, a comprehensive business continuity plan goes beyond the availability of redundant hardware or other pieces of infrastructure, and needs to consider human factors as well (e.g. avoiding situations whereby a severe interruption of the service materializes due to people not being able to react promptly or effectively, even when the necessary equipment to operate under a contingency is available). Second, the criticality of credit reporting systems varies from jurisdiction to jurisdiction; hence, a "one-size fits all" approach with regard to business continuity should be avoided.

125. The reliability of credit reporting services is a matter that concerns not only credit reporting service providers but other stakeholders as well, including credit reporting data providers, users and authorities. Therefore, an "optimal" reliability level for a given credit reporting system should be the result of discussions and negotiations balancing service levels (from credit reporting service providers to users as well as from users to their clients), costs, available infrastructure, and regulatory aspects, among other considerations.

Guideline on efficiency

Credit reporting service providers should strive to be efficient both from an operational as well as from a cost perspective, while continuing to meet users' needs and high standards for service levels.

126. Creditors and supervisors alike demand not only high-quality data but also increasingly faster response times from credit reporting service providers. In this particular regard, real-time data transmission following a query is becoming the standard worldwide.

127. To meet such a standard while offering cost-efficient services, credit reporting service providers will require appropriate infrastructure, including adequate processing capacity and reliable telecommunication infrastructure. Proper infrastructure planning should enable the credit reporting service provider to cope

with an increasing number of users and data volumes without compromising service levels. Also, as discussed under the Guideline on reliability, comprehensive business continuity measures are essential to ensure the availability of a service without major disruptions.

128. It should be noted that significant investments are necessary in order to meet these service level standards. In markets lacking the sufficient critical mass (in terms of data and users), an investment of this magnitude might not be viable. This does not necessarily mean that users in smaller countries are to be constrained to lower service levels. A single credit reporting service provider serving multiple countries can be an alternative to achieve the necessary economies of scale that will enable the investments required for the deployment of top level services to its users.[41]

129. The provision of integrated services may help lower unitary costs to users. Users, however, may prefer having the service provider offer a series of value-added services at an incremental cost compared to the cost of accessing just the basic data.

130. In case a given credit reporting service provider is a monopoly or a clear dominant player or when other market failures exist, regulators and overseers could consider developing a mechanism to review periodically costs and pricing from an efficiency perspective. This review would need to take into consideration the nature of the services being offered, as well as market size and structure. When competitive conditions exist, regulators and overseers may need to monitor the market to ensure that excessive competition on pricing does not compromise security standards, introduce unnecessary data fragmentation, efficiency losses or jeopardize the sustainability of the credit reporting system.

Governance and Risk Management

General Principle 3: The governance arrangements of credit reporting service providers and data providers should ensure accountability, transparency and effectiveness in managing the risks associated with the business and fair access to the information by users

Guideline on accountability of governance arrangements

Credit reporting service providers and credit reporting data providers should be subject to mechanisms that ensure proper accountability of management and, where applicable, of board members. This should include independent audits or reviews.

131. Good governance arrangements provide incentives for an organization's top management to pursue the long-term interests of the organization, such as continued growth, increased coverage, profitability (where applicable), and overall viability.

132. Given the sensitive nature of credit reporting activities, credit reporting service providers as well as credit reporting data providers must be held accountable to the various system participants, including the data subjects on whom they hold information. Credit reporting service and data providers should therefore be subject to mechanisms of accountability and independent oversight, including independent audits, and, where applicable, supervision by a public authority. In some cases some form of self-regulation (e.g. code of conduct) could be promoted for example through industry associations. Observance of self-regulatory mechanisms should be monitored, as appropriate, by the relevant authorities.

Guideline on transparency of governance arrangements

Governance arrangements for credit reporting service providers and credit reporting data providers should ensure timely and accurate disclosure of relevant matters related to the entity and its activities.

133. Disclosure helps improve public understanding of the structure and activities of credit reporting service providers, their corporate policies and performance with respect to existing standards, and their relationships with the communities in which they operate.

[41] For further discussions on this specific issue see General Principle V.

Credit reporting service providers are expected to disclose information deemed material, i.e. information whose omission or misstatement could influence the economic decisions taken by users of information.

134. Management of credit reporting service providers and credit reporting data providers should ensure timely and accurate disclosure of all relevant matters relating to the business. In the case of credit reporting service providers, relevant information to be disclosed may include: i) The objective of the service provider; ii) Legal and regulatory framework that supports its activities; iii) Key financial results as required by law; iv) Codes of conducts; v) The types of entities that may become users of the service, and the conditions they must fulfill in order to do so; vi) Rules and procedures for collecting and processing data, including scope of data collection efforts; vii) Uses of data; viii) Mechanisms for identifying and mitigating risks; ix) Share distribution, main shareholders and related parties; x) Dispute resolution mechanism applied by the service provider.

135. Similar standards would apply to those data providers whose core business consists in the collection and distribution of data for credit-related decision-making. It is likely that banks and other financial and non-financial institutions that collect and distribute data as an ancillary activity will already be subject to transparency standards associated with their core business.

Guidelines on the effectiveness of governance arrangements in ensuring appropriate management of the risks associated with the business

The management of credit reporting service providers and data providers should identify all relevant risks faced by the organization. The outcomes of this risk analysis should be reported periodically to the organization's top governing body.

136. Major risks faced in credit reporting activities include, but are not limited to, operational risk, legal risk and reputational risk.

137. Credit reporting service providers are technology-intensive and deal with multiple parties that provide and use data. The potential for operational errors, either within the credit reporting service provider or from outside is therefore significant. Operational risk is not only related to the proper operation of information technology equipment or other pieces of infrastructure; unintentional human errors, or unlawful activities like the unauthorized access to data by the service provider staff or others are also a key source of operational risk. Operational risks can also lead to legal problems (e.g. data being distributed to parties that are not allowed to have access to it).

138. Legal risk stems from the inadequate or erroneous compliance of the applicable legal and regulatory framework. Legal risks are generally greater where there is an absence of laws and regulations dealing explicitly with credit reporting systems and the related activities, or when such laws do exist but are unclear and subject to multiple interpretations, or simply when the legal framework is ineffective in dealing with the major issues identified in this report.

139. Reputational risk is particularly relevant due to the nature of credit reporting: personal data being used in sensitive activities like lending and financial supervision. A credit reporting service provider with a history of frequent operational problems or that is constantly involved in legal disputes will be exposed to greater reputational risks. So will those service providers that lack transparency in the information they provide to the market (see Guideline on transparency).

To properly address and mitigate risks, credit reporting service providers and credit reporting data providers should establish sound internal controls and risk management mechanisms.

140. All economic activities face a variety of risks, and it is the role of management to determine whether the identified risks should be avoided, accepted, shared or transferred to third parties. Management will need to establish internal controls to mitigate the risks it decides to accept. Some of the basic elements of a sound system of internal controls include: i) having clear lines of responsibility with the organization; ii) having clear levels of responsibility for proper escalation of problems and proposed solutions; iii) policy-setting areas within the organization that are independent from business-oriented areas; iv) policies and procedures providing clear

guidance on how to manage the identified risks; v) an independent audit function with a direct reporting line to the organization's top governing body (e.g. Board of Directors); and vi) other periodical external reviews.

141. Management also needs to analyze whether the system of internal controls will have an impact over the services being provided in the market place, and the extent to which that impact will be transferred to the users in the form of either higher costs or lower quality. This is clearly another source of risk that needs to be mitigated and balanced with other risk management objectives. In any case, it should be noted that in competitive markets, the extra costs generated by a sound system of internal controls that are actually transferred to users are usually minimal.

Guideline on effective governance arrangements ensuring that all users have fair access to information

Governance arrangements of credit reporting service providers should promote all users having access to information under equitable conditions. This objective should not be affected by the ownership structure of the service provider.

142 Decision-making in economic organizations reflects the balance of power of its stakeholders. In credit reporting this might be reflected in large shareholders—that in many cases are also major users of the service—imposing conditions that are disadvantageous to other independent users. For example, the latter might not be able to access some of the information available in the service providers, or may be able to do so only at an unreasonable price.

143. Governance arrangements of the service providers should mitigate such possibilities. One common formula consists of smaller shareholders or smaller service users having appropriate representation in the decision-making bodies of the service provider.

Legal and Regulatory Environment

General Principle 4: The overall legal and regulatory framework for credit reporting should be clear, predictable, non-discriminatory, proportionate and supportive of data subject/consumer rights. The legal and regulatory framework should include effective judicial or extrajudicial dispute resolution mechanisms

Guidelines on clarity and predictability

The legal and regulatory framework should be sufficiently precise to allow service providers, data providers, users and data subjects to foresee the consequences that their actions may entail.

144. Laws, regulations and the more specific rules derived from them should be specific and clear on all key issues, such as the types of data that can be and cannot be collected, what type of users can access the credit reporting databases and under what conditions, or the rules to deal with non-compliant behaviors, among others.

145. Predictability requires that rules be prospective, publicly available, clear, non-contradictory and relatively stable. While striving to be clear and precise with regard to key concepts, functions, or responsibilities, laws and regulation should be written to accommodate evolving trends related to credit reporting without requiring frequent amendments.

The terminology used throughout the legal and regulatory framework, including the rules and other norms, should be consistent at the domestic level.

146. Key terms used in the credit reporting industry should have a unique meaning allowing participants and regulators minimum space for interpretation. Key terms such as "positive information" or "consent" are frequently misinterpreted by the various participants leading to inconsistencies and in general an inadequate functioning of the legal framework.[42]

147. Definitions should reflect the full scope of the issue they intend to cover as in some cases very narrow definitions may be harmful. For example, when defining

[42] A glossary of key relevant terms is provided in the Annex 5 of this document for reference.

the entities that are entitled to access credit reporting databases, using a narrow definition for "credit provider" could prevent some legitimate participants from accessing such databases.

Public awareness of the laws and rules of credit reporting operations contributes to the clarity and predictability of the legal and regulatory framework.

148. Dissemination of the legal and regulatory framework is essential in order for credit reporting systems' participants to be fully aware of their rights and obligations and shape their conduct accordingly. Apart from the laws and key regulations, the specific rules and internal norms that do not compromise intellectual property and trade secrets should also be available to the general public as pertinent.

149. Proactive efforts should also be undertaken to disseminate how certain rules and norms have been applied or enforced in varying circumstances.

BOX 4: Summary of Reciprocity Principles in the UK

Data shared only for the prevention of over-commitment, bad debt, fraud and money laundering and to support debt recovery and debtor tracing, with the aim of promoting responsible lending.

1. Data provided for sharing purposes must meet legal, regulatory and voluntary code of practice requirements before provision and in use.
2. Subscribers must use data only for purposes for which the required form of consent has been given.
3. Data will be shared on the principle that subscribers receive the same credit performance level data that they contribute, and should contribute all such data available.
4. Data may be used or made available by the Credit Reporting Agencies (CRAs) only in ways permitted by these Principles.
5. Subscribers must never use shared data to target any customers of other specific subscribers.

Guidelines on non-discrimination

Data supplying and data access should be established in a fair manner, responding to impartial rules regardless of the nature of the participants.

150. Non-discriminatory refers to the legal and regulatory framework being equally applicable to the various participants in credit reporting insofar as they are providing equivalent services. This helps to promote a level playing field that encourages competition on a fair and equitable basis.

151. In principle, all active users of data for lending purposes should be allowed to access credit reporting databases. A possible exception to this general rule could be the case of some credit registries whose basic purpose is to support banking supervision and improve the availability and quality of credit data for supervised intermediaries—and that as a consequence require data from, and provide access to regulated financial institutions only.

152. In many cases, access to the credit reporting databases is based on some degree of reciprocity between the data providers/users and the credit reporting service provider(s). The principles issued by the Steering Committee on Reciprocity[43] (see Box 4) may serve as a reference in determining the extent to which reciprocity should be used as the guiding principle with regard to granting access to the credit reporting databases.

Obligations on data quality, security measures and consumer rights should be equally applicable to all credit reporting service providers, data providers and users.

153. To ensure consistent service levels throughout the credit reporting system, rules, regulations and procedures covering data quality, security measures and consumer rights should apply equally to all data providers, credit reporting service providers and users.

154. At the same time, the principles that support the various participants having equal rights with regard to

[43] The Steering Committee on Reciprocity (SCOR) is a cross industry forum made up of representatives from credit industry trade associations and credit reference agencies in United Kingdom.

credit reporting (i.e. fair access) should correspond with principles setting equal obligations for each of them.

155. Nevertheless, the legal framework may be such that some of these obligations are more closely related to one specific category of credit reporting system participants (e.g. data providers) than others (e.g. credit reporting service providers or users). In such cases, this might justify some differentiation of the obligations across categories of participants.

Guidelines on proportionality

The legal and regulatory framework should not be overly restrictive and burdensome relative to the possible issues it is designed to tackle.

156. Proportionality of laws and regulations responds to three main characteristics: a) adequacy; b) necessity; and c) non-excessiveness. In credit reporting, these three aspects should be reflected in the legal and regulatory framework supporting the collection of credit and related data from businesses and individuals, and the use of such data.

157. When designing new laws or regulations, or amendments to the existing ones, regulators should carefully weigh the intended benefits with the potential negative consequences such new rules may have on the credit reporting system as a whole. This includes the need that any penalties that are established be proportional to the related offense. The industry should be consulted to help ensure the proposed new regulations are proportionate and effective.

158. It is important to realize that public policy objectives being sought through new laws or regulations may not always point in the same direction. Regulation can be a significant barrier because of the costs of compliance. However, to encourage competition among credit reporting service providers barriers to entering the market should not be excessively high. On the other hand, other public policy objectives such as safety and efficiency require potentially burdensome regulation. Proportionality in this case would mean that any such inconsistencies are recognized and resolved in a way that, in the light of a country's overall priorities, achieves an appropriate balance.

Laws and regulations should be practical and effective as to ensure a high degree of compliance.

159. The legal framework should be designed to balance interests of the consumers/data subjects on one hand, and the objective of promoting credit information flows and innovation in the credit reporting system.

160. Introducing obligations that require extraordinary efforts from credit reporting service providers or other credit reporting participants may undermine the efficient provision of the service and might negatively affect the development of comprehensive credit reporting systems. Therefore, it is important that any law or regulation balances the benefits of increased safety or consumer protection against the potential costs in terms of lost efficiency, competition and innovation.

161. Proportionate regulation is likely to be more effective in the sense that all types of participants in a credit reporting system are more likely to observe it. Setting costly and/or overly sophisticated requirements to all participants regardless of their size or nature (e.g. requiring a minimum number of staff or departments in the organization, or minimum size of premises) may result in participants simulating compliance when this is clearly not the case.

Guideline on consumer rights and data protection

Rules regarding the protection of data subjects/consumers should be clearly defined. At the minimum these rules should include: (i) the right to object to their information being collected for certain purposes and/or used for certain purposes, (ii) the right to be informed on the conditions of collection, processing and distribution of data held about them, (iii) the right to access data held about them periodically at little or no cost, and (iv) the right to challenge accuracy of information about them.

i) the right to object to their information being collected for certain purposes and/or used for certain purposes:

162. Credit reporting systems should serve banking supervision and credit decision purposes. There are other

potential uses of personalized data in the system (e.g. employers using the data to decide whether or not to hire an individual) which could require consent by data subjects, though such need for consent should be analyzed together with other variables such as suitability, necessity and non-excessiveness.

ii) the right to be informed on the conditions of collection, processing and distribution of data held about them:

163. Data subjects should be informed of the conditions of collection, processing and distribution of data. They should be provided with sufficient and understandable information to enable potential data access and data challenge under user-friendly mechanisms and reasonable costs. Additionally, data subjects should be cognizant of the various credit reporting service providers that operate in their country.

iii) the right to access data held about them periodically at little or no cost:

164. Data subjects should be able to access data held about them periodically at little or no cost. Extended practice is to provide data subjects, at their request, with a copy of reports about them at no cost once a year or in the event of an adverse action.

iv) the right to challenge the accuracy of information about them:

165. The legal framework should ensure that credit reporting service providers and data providers adopt clear, effective and streamlined procedures and tools to support data subjects that wish to challenge errors in the databases. A common approach to this matter by all service providers and data providers in a given jurisdiction is highly desirable.

The legal and regulatory framework for credit reporting should address all relevant issues related to data subjects' privacy, especially if such issues are not covered by a personal data protection law or other similar law.

166. Because data subjects are not parties to the contract between credit reporting service providers and data providers, domestic laws should ensure that data subjects' rights are adequately safeguarded. In the absence of a general privacy or data protection law, or other specific provisions related to credit reporting, credit reporting service providers and data providers may not be legally bound to observe the minimum set of rights as described in the previous guideline. Therefore the legal framework covering credit reporting activities should consider these needs and address them effectively.

Guidelines on dispute resolution

The process for solving disputes should be established in the law(s) governing credit reporting activities or in substantive regulations when such laws do not exist.

167. Judicial systems are frequently costly and excessively burdensome for consumers/data subjects when dealing with disputes concerning data held on them. Therefore, the legal framework should provide for alternative mechanisms to solve such disputes in an expeditious and less costly manner.

168. As a first instance, in many jurisdictions the legal framework requires credit reporting service providers to create an in-house dispute resolution mechanism—sometimes referred to as an in-house consumer satisfaction system. This mechanism has proved useful to expedite the dispute resolution process as the data provider is closest to the data subject and, hence, is cognizant of the issue underlying the dispute. To be effective, the in-house mechanism should be transparent, adhere to specific deadlines, easily accessible and should describe with precision the different actions that a data subject should take to dispute an error related to its records (e.g. where and how to present the claim, potential costs, timelines and expected outcome).

169. Other alternative (i.e. extra-judicial) dispute resolution mechanisms such as arbitration, mediation or the existence of a supervisory authority playing a neutral role between the parties involved in a dispute should also be encouraged. These mechanisms should ensure impartiality, effectiveness (i.e. designated mediators should be adequately skilled), and should keep procedural requirements to the minimum.

170. When the legal framework provides for a specific judicial mechanism for solving disputes involving data in credit reporting systems, it is important that this mechanism operates efficiently and fairly in practice.

Credit reporting service providers and data providers should flag to all users cases where data subjects are involved in a dispute with the data provider in connection with the subject's data.

171. The flag can consist of a simple mark indicating the existence of the dispute. This flagging should be available to all users accessing the data subjects' report.

172. In general terms, a flagged report should not be perceived *per se* as a negative sign of consumer behavior. However, it should be noted that some disputes might not be based on legitimate claims.

173. Sometimes data might not be incorrect *per se* (e.g. there is in fact a non-payment). There might be ongoing disputes on a related service (e.g. the merchandise related to a loan was not delivered), which once solved could change the content of the report.

Credit reporting service and data providers should cooperate in reaching an expeditious solution to disputes.

174. Data providers in particular should duly investigate potential errors in data and correct them as quickly as possible before informing back to the credit reporting service provider/s about the result of the investigation. Credit reporting service providers should act promptly and inform recipients of the relevant reports that an error has been corrected.

The legal framework should provide suitable enforcement mechanisms, including redress for data subjects harmed.

175. Consumers/data subjects should be entitled to redress based on the harm suffered from the error. It should be noted, however, that quantifying the damages and the corresponding compensation is difficult to do in practice.

176. Errors can occur at different stages of the data chain. Liability should be assigned based on the source of the error. For example, users of data should not be liable for errors that originated with the data provider or the credit reporting service provider. Therefore, it is very relevant to investigate the specific step where the error occurred so that liabilities can be properly assigned.

Cross-border Data Flows

General Principle 5: Cross-border credit data transfers should be facilitated, where appropriate, provided that adequate requirements are in place

Guidelines on pre-conditions for cross-border credit data transfers

The feasibility or desirability of cross-border data transfers should be based on a cost-benefit analysis that considers market conditions, the level of economic and financial integration, legal and regulatory barriers, and participant needs.

177. As a result of cross-border businesses, migration and other factors, businesses entering a new country and individuals that have changed their country of residence will most likely need to establish a relationship with a local financial entity. It is also possible that some businesses and individuals in the above-mentioned scenario will continue to use financial services from entities based in their home country.

178. In regions or economic blocks characterized by a strong financial and economic integration, authorities may even wish to establish as a policy objective that businesses and nationals of the block receive financial services under similar conditions within the block, regardless of the specific country they reside in at any given moment in time. This may require, for instance, that credit reports become available and portable across countries.

179. In yet some other cases, a credit reporting system may only be viable when used by two or more countries, which, due to market size limitations, would not be able to support such a system on an individual basis.

180. Examples like these reflect the fact that cross-border data transfers may be a useful, or even neces-

sary, instrument to facilitate the provision of credit and other financial services, as well as for banking supervisory purposes. However, given the complexity of any cross-border activity, including but not limited to legal and regulatory aspects, differences in consumer protection frameworks, infrastructure, the diverse nature of the institutions involved and thus the potential for conflicting interests, the uncertainty about the scale of future data flows and others, it is important that there is a careful analysis of whether the likely benefits will justify the costs.

181. Sometimes such initiatives may be undertaken by the market itself, while in other cases supervisory authorities might be the key promoters to properly discharge their supervisory obligations in connection with cross-border banking and lending activities.

Standardization of data formats and procedures should be fostered to facilitate cross-border credit data transfers.

182. Even without direct cross-border links between credit reporting service providers, standardized formats can do much for creditors and supervisors alike. As discussed under General Principle 1, the use of standardized formats is probably as important for data accuracy purposes as having standard procedures for the collection and updating of data.

183. The standardization of data content and data formats, at least with respect to what are considered mandatory inputs, among credit reporting systems in different jurisdictions is a necessary element to ensure consistency in cross-border credit or supervisory assessments. Standardization can also reduce expensive manual intervention necessary to "translate" a format used in a given jurisdiction into the one that can be used by creditors and supervisors in other jurisdictions.

Guidelines on requirements for cross-border credit data transfers

When cross border credit data transfers occur, the potential sources of risks that can arise should be identified and appropriately managed.

184. When there is a direct link between credit reporting service providers in different jurisdictions, the cross-border mechanism is subject to practically the same risks as the domestic ones (i.e. operational, legal, and reputational risks). Hence, the parties involved should adopt governance and control measures equivalent to those that are applicable to any given domestic credit reporting service provider, as described under General Principle III.

185. Even when there is no direct cross-border link between systems, cross-border data transfers or exchanges will still entail several operational, legal and reputational risks. The difficulty in identifying, understanding and managing the new risks might even be greater given the inherent complexity in trying to comply with an expanded, or possibly even conflicting, set of laws, regulations and other rules.

186. When a single credit reporting service provider services two or more countries, it is likely that the data collected from multiple countries will be stored in a single repository located in a specific country. Likewise, the information stored in the repository would be sent across several jurisdictions. Such a model might entail specific operational and legal risks.

There should be a framework for cooperation and coordination between the relevant regulators and overseers.

187. In general, cross-border activities and initiatives require a high level of bilateral (or possibly multilateral) cooperation on technical, regulatory and oversight matters. Regulators and overseers will naturally be interested in credit reporting service providers and users observing all applicable laws, regulations and rules in the relevant jurisdictions. But, as mentioned earlier, it could also be the case that regulators themselves will be the users and/or providers of cross-border credit data transfers (e.g. for banking supervision purposes).

188. A framework for cooperation and coordination is therefore a useful tool to ensure a common understanding of the relevant issues and problems, as well as to discuss, propose and eventually develop solutions. An initial framework for cooperation typically consists of periodic (e.g. annual or semi-annual) meetings between the parties. In many cases, the latter evolves into

more formal forms of cooperation, like a Memorandum of Understanding (MoU) between two or more parties in order to, for example, secure regular exchanges of information, or joint task forces to address specific issues.

3.3. The Roles of Credit Reporting System Participants

Role A: Data providers should report accurate, timely and sufficient data to credit reporting service providers, on an equitable basis.

189. The first responsibility of data providers is to ensure that the information they collect from their customers (e.g. as part of the loan-underwriting process) is accurate and complete. They should also ensure that data subjects are duly aware of their responsibility to provide accurate information and that the information they have provided can be distributed to third parties. If required by law and/or regulation, data providers should collect consent for collecting, storing and distributing data from data subjects.

190. Once they have the data, data providers should take all the necessary provisions to safeguard it, as explained under General Principle II.

191. Data providers must abide by the credit reporting system's rules on data updating. Notwithstanding the minimum standards on this matter, data providers should aim at reporting any new data immediately upon receipt of the same.

192. With regard to the error correction process, it should be noted that data providers are closest to data subjects than any other participant in a credit reporting system. In most cases, data providers would also be aware of the issue(s) involving allegedly erroneous data. Data providers are therefore expected to act diligently in addressing disputes (including a timely reporting of the dispute to credit reporting service providers), and, if applicable, in correcting the information as required.

193. Data providers should not discriminate among credit reporting service providers as established by General Principle I.

194. If a data provider is also a user of the information in a credit reporting system, it should also observe Role D.

Role B: Other data sources, in particular public records agencies, should facilitate access to their databases to credit reporting service providers.

195. Public records agencies can make a significant contribution to a credit reporting system by systematizing their records, transforming them into full-scale databases that can be efficiently accessed with modern tools and technologies.

196. Since proper identity matching is crucial in credit reporting, public agencies in charge of identity registries (individuals and businesses) should facilitate access to such registries to credit reporting service providers.

197. In their role as information repositories, public records agencies should also observe the guidelines for information security described under General Principle II, regardless of the level of automation of their processes.

198. As it is the case with data providers, public records agencies are usually the first link in the chain for addressing data disputes. Therefore, relevant public records agencies, especially those that gather information directly from the public, should cooperate in the data dispute resolution process on similar terms to those established for data providers under Role A.

199. Some public records agencies are active suppliers of data to the credit reporting system, rather than passive information repositories. Public records agencies falling in this sub-category are also expected to observe the other aspects described for data providers under Role A.

Role C: Credit reporting service providers should ensure that data processing is secure and provide high quality and efficient services. All users having either a lending function or a supervisory role should be able to access these services under equitable conditions

200. To a large extent, high quality and efficient services will be the result of good governance, adequate risk management and internal controls, an appropriate set of policies and rules dealing with information collection, consultation and distribution, and safe and reliable IT systems, among other elements. The General Principles, particularly GP1, GP2 and GP3, provide a broad road map for credit reporting service providers aiming at providing levels of service that are consistent with the needs of users.

201. User needs evolve over time. Because of competitive pressures, users are increasingly demanding new products and solutions to enable them to better assess risks in a consistent, systematic and cost-effective manner. Credit reporting service providers must be prepared to meet those needs by making available a menu of value added services beyond standard credit reports.

202. Credit reporting service providers should contribute to a level playing field in the credit and other financial markets. All users of credit reporting services (e.g. those involved in supervisory activities or with a lending function) should be able to access the related services under equitable conditions.[44] In that sense, credit reporting service providers should avoid using pricing policies or any other method that favors a particular group of users over others with no reasonable basis.

Role D: Users should make proper use of the information available from credit reporting service providers

203. If and when required by law or regulation, users should get consent from data subjects to access information stored in credit reporting databases. Users are also responsible for maintaining required confidentiality over any data accessed by them. At the same time, users should not use the data for purposes other than those specified by the law.

204. Users should adopt and enforce proper security measures to safeguard the data/information.

205. With regard to the actual use of the information and data available from credit reporting services, while different users will have different credit underwriting policies it should be recognized that credit reporting information is typically only one of the inputs to be used as part of a credit assessment. Therefore, credit decisions, either approvals or denials, should not be based solely on the past credit history of applicants as reflected in a typical credit report, a credit score or other similar credit reporting products. Users should train their personnel on the adequate use of these tools.

206. In case an adverse action against a particular debtor is taken (e.g. loan denial, a higher interest rate is charged), users must inform the debtor in case such an action was motivated by information contained in a credit report or other credit reporting value-added products.

Role E: Data subjects should provide truthful and accurate information to data providers and other data sources

207. Data subjects should be conscious that the information they provide as part of loan applications can be distributed to other parties, and that providing wrongful, incomplete or inaccurate data (e.g. wrong identification number) might eventually become an element for credit denial. Moreover, careless completion of application forms leading to the provision of inaccurate data might have unintended consequences on other parties, such as the erroneous association of data with an unrelated data subject.

208. Data subjects should take advantage of the mechanisms provided by the credit reporting system to verify the information stored in the latter. No other party should be more interested in that the data is accurate and updated than the data subject itself.

[44] In the case of credit registries there are some possible exceptions. Many credit registries would only provide access to regulated financial institutions. Other databanks operated by central banks or other financial supervisors might be intended solely for banking supervision purposes rather than to support lending or other related decisions, and therefore might not provide access at all to any outside party.

Role F: Authorities should promote a credit reporting system that is efficient and effective in satisfying the needs of the various participants, and supportive of data subject and consumer rights and of the development of a fair and competitive credit market

209. Where implementation of the General Principles and related roles involves multiple domestic authorities, public policymakers should ensure that domestic policies are coordinated and that the authorities cooperate at the policy and implementation levels. A system overseer charged with the responsibility of promoting the appropriate development of the credit reporting system as a whole, for which purpose it would act as the coordinator of the various authorities, has proved to be an effective solution in other elements of financial infrastructure.

210. Authorities should avoid distortions in the credit reporting system, which may translate into an unlevel playing field or result in inefficiencies in the credit market.

211. To accomplish their policy goals, authorities will typically have at their disposal a variety of policy tools, depending on the specific powers vested in them. The tools range from dialogue and moral suasion, to more interventionist ones like regulations and sanctions.

212. To ensure the accomplishment of policy goals, authorities might also consider participating in the decision-making body of a credit reporting service provider. This could be especially relevant in cases where that credit reporting service provider is the only real alternative in the market place and this situation cannot be offset otherwise.

213. In cases where a given authority operates a credit bureau or credit registry, then that same authority should not be charged with regulatory responsibility over the credit reporting system, unless the operational and regulatory functions within the given authority are clearly separated.

214. In cases where cross-border credit reporting activities are relevant or are expected to become relevant in the foreseeable future, the authorities of the corresponding jurisdictions should cooperate in order to ensure that such cross-border activities will also observe the General Principles.

215. Section 4 of this Report provides recommendations for the implementation of an effective oversight framework for credit reporting systems.

4

Recommendations for Effective Oversight of Credit Reporting Systems[45]

The following are some recommendations for establishing a proper oversight framework for credit reporting systems.[46]

Oversight Recommendation A: Regulation and oversight of credit reporting systems

Credit reporting systems should be subject to appropriate and effective regulation and oversight by a central bank, a financial supervisor, or other relevant authorities. It is important that one or more authorities exercise the function as primary overseer.

Key considerations

- Authorities at the national level should identify credit reporting systems that should be subject to regulation and oversight using publicly disclosed criteria.
- Appropriate authorities such as a central bank, financial regulator, or other relevant body should oversee credit reporting systems that are identified using such criteria.
- One or more authorities should be appointed as primary overseer. Such authority(ies) should coordinate its/their oversight actions with other relevant authorities.

217. Credit reporting systems should be regulated and overseen by a central bank, financial supervision, or other authority. The division of responsibilities among authorities for regulating and overseeing credit reporting systems varies depending on a country's legal and institutional framework. Sources of authority and approaches to regulation and oversight may take different forms. For example, an authority may have regulatory and oversight responsibility for a credit reporting system provider registered, chartered, or licensed as an entity that falls within a specific legislative mandate. Credit reporting systems also may be overseen by an authority that exercises customary or other forms of responsibility for oversight that does not derive from a specific legislative mandate. Relevant authorities should address any existing gaps in regulation or oversight of credit reporting systems through coordination with relevant legislative body to implement statutory changes, where possible, or through other capabilities, including moral suasion.

[45] The oversight section benefited from a number of documents developed in the payment system space, in particular, Committee on Payment and Settlement Systems (CPSS), 2001, Core Principles for Systemically Important Payment Systems, BIS; CPSS, 2005, Central Bank Oversight on Payment and Settlement Systems, BIS; and the discussions surrounding the revision of the CPSS-IOSCO standards on Financial Market Infrastructure, to be released in mid-2011.

[46] This framework is based on the framework defined in other areas of financial infrastructure, namely the payment and settlement systems.

Oversight Recommendation B: Regulatory and oversight powers and resources

Central banks, financial supervisors, and other relevant authorities should have the powers and resources to carry out effectively their responsibilities in regulating and overseeing credit reporting systems.

Key considerations

- Authorities should have powers or other capacity consistent with their relevant oversight responsibilities, including the ability to obtain information and induce change.
- Authorities should have sufficient resources to fulfill their regulatory and oversight responsibilities.

218. Central banks, financial supervisors, and in some cases other authorities (e.g. Ministry of Finance) generally share the common objective of ensuring the safety and efficiency of credit reporting systems. The primary responsibility for ensuring a credit reporting system's safety and efficiency, however, lies with the system's owner, designer, and operator. Regulators and overseers should have the appropriate powers and resources in order to administer their regulatory and oversight responsibilities effectively.

219. Authorities should have appropriate powers or other capacity to obtain timely information necessary for effective regulation and oversight. In particular, relevant authorities should have access to: i) information that enables them to understand and assess the risks borne or created by credit reporting systems; ii) adherence to relevant regulations and policies, including the rules, procedures, and risk-management controls; iii) various functions, activities, and overall financial condition; iv) the impact of any given credit reporting system participant in the financial system and the broader economy. Such information can be obtained through regular or ad hoc reports, on-site visits, inspections, dialogue with board members, management, internal auditors or other system participants. Authorities should have appropriate legal safeguards to protect all non-public confidential information obtained from credit reporting service providers and data providers. Authorities, however, should be able to share relevant confidential, non-public information with other relevant authorities, as appropriate, to minimize gaps in regulation or oversight.

220. Authorities also should have appropriate powers and tools to induce change in a credit reporting system that is not complying with relevant regulations or policies. Tools that could be used to effect change vary significantly, from dialogue and moral suasion to explicit statutory powers that enable the authority to enforce regulatory and oversight decisions. Discussions with credit reporting system participants play an important part in achieving regulatory and oversight objectives. In many cases, an authority may be able to rely on moral suasion in discussing public policy interests with credit reporting system participants and in carrying out its regulatory and oversight responsibilities. Moral suasion, however, works best when there are credible regulatory or other legal remedies available to the relevant authorities. Where appropriate, authorities may want to consider publicly disclosing their assessments of certain credit reporting systems.

221. In promoting effective regulation and oversight, authorities should have sufficient resources to carry out their regulatory and oversight functions, including adequate funding, qualified and experienced staff, and appropriate and ongoing training. In addition, authorities should adopt an organizational structure that allows these resources to be used effectively. It should be clear where the responsibility for regulatory and oversight functions lies within a relevant authority. Regulatory and oversight functions may include gathering information on credit reporting systems, assessing their operation and design, taking action to promote observance of relevant policies and standards, and conducting on-site visits or inspections when necessary. Where relevant, staff should have appropriate legal protections in carrying out their responsibilities.

Oversight Recommendation C: Disclosures of objectives and policies with respect to credit reporting systems

Central banks, financial supervisors, and other relevant authorities should clearly define and disclose their regulatory and oversight objectives, roles, and major regulations and policies with respect to credit reporting systems.

Key considerations

- Authorities should clearly define their regulatory and oversight objectives, roles, regulations, and policies to set clear expectations for credit reporting systems and facilitate compliance with applicable policy requirements and standards.
- Authorities should publicly disclose their objectives, roles, regulations, and policies to provide accountability in the exercise of regulation and oversight of credit reporting systems.

222. Central banks, financial supervisors, and other relevant authorities should clearly define their regulatory and oversight objectives, roles, regulations, and policies with respect to credit reporting systems. An authority's objectives, roles, regulations, and policies provide a basis for consistent policymaking and a benchmark by which the authority can evaluate its effectiveness in achieving its objectives. Typically, the primary objectives of an authority with respect to credit reporting systems are to promote their safety and efficiency. The objectives of an authority are usually implemented through specific policies, such as minimum standards or expectations. The objectives, roles, and policies of an authority should be consistent with the legislative framework for the authority. In many countries, authorities may find it beneficial to consult with key stakeholders and/or the broader public regarding their objectives and policies. In many countries, such consultations may be required by law.

223. Authorities should publicly disclose their regulatory and oversight objectives, roles, regulations, and policies with respect to credit reporting systems. Public disclosure promotes a transparent policy environment and consistency in regulation and oversight. Such disclosures typically communicate an authority's regulatory and oversight principles, which facilitates compliance with applicable policy requirements and standards. Furthermore, public disclosures communicate the roles and responsibilities of authorities to the wider public and promote the accountability of relevant authorities. These disclosures, however, do not shift the burden of responsibility from credit reporting system participants to authorities in ensuring the safety and efficiency of the system. Authorities should emphasize that primary responsibility for complying with the regulatory and oversight principles rests with the specific credit reporting system participants themselves.

224. Authorities can publicly disclose their objectives, roles, regulations, and policies in a variety of forms. These forms include plain-language documents, policy statements, and relevant supporting material. The mechanism for disclosing these documents or statements should ensure they are readily available, for example, by posting them to a public website.

Oversight Recommendation D: Application of the General Principles for credit reporting systems

Central banks, financial supervisors, and other relevant authorities should adopt, where relevant, the General Principles for credit reporting systems and apply them consistently.

Key considerations

- To establish key minimum standards, authorities should adopt the General Principles for credit reporting systems, providing a consistent regulatory and oversight framework within and across national and regional jurisdictions
- Authorities should ensure that the General Principles and related roles are applied consistently to all credit reporting system participants.

225. Central banks, financial supervisors, and other relevant authorities can enhance their regulation and oversight of credit reporting through the adoption of the principles, guidelines and roles presented in this report. These standards draw on the collective experience of many authorities and industry representatives and have been subject to public consultation. They also represent common interests which make it easier for different authorities to work cooperatively and enhance the effectiveness and consistency of regulation and oversight.

226. Authorities should strive to apply these principles consistently across jurisdictions (including across borders) and similar types of credit reporting systems. Consistent application of standards is important because different systems may be dependent on each other, or in direct competition with each other, or both. Where

central banks or other authorities themselves own or operate key components of credit reporting systems, they should apply the same international standards. Central banks or other authorities can further promote consistency, as well as transparency, by disclosing the policies applicable to the systems they own or operate. Further, clarification of the central bank's or other authorities' oversight and operational functions including an appropriate level of separation between them, where appropriate, helps ensure consistent application of the principles.

Oversight Recommendation E: Cooperation among authorities

Central banks, financial supervisors, and other relevant authorities, both domestic and international, should cooperate with each other, as appropriate, in promoting the development, safety and efficiency of credit reporting systems.

Key considerations

- Authorities should cooperate with each other, as appropriate, to support more efficient and effective regulation and oversight of credit reporting systems.
- Authorities should adopt current and evolving best practices on international cooperative arrangements.

227. Central banks, financial supervisors, and other relevant authorities should cooperate with each other, as appropriate, to support the mutual objectives of safe and efficient credit reporting systems, particularly those conducting business in multiple jurisdictions. Cooperative arrangements provide a mechanism whereby the individual responsibilities of the authorities of credit reporting systems can be fulfilled more efficiently and effectively through mutual assistance. Cooperative arrangements should be addressed in a way that delivers regulation and oversight consistent with each relevant authority's responsibilities and minimizes the duplication of effort and the burden on credit reporting system participants. Cooperation should also help avoid inconsistency in policy approaches and reduce the probability of gaps in regulation and oversight that could arise if authorities acted independently of each other. Cooperative arrangements, however, should be consistent with an authority's statutory powers and other legal frameworks.

228. Cooperative regulatory and oversight arrangements for systems that have important cross-border links or serve multiple jurisdictions will need to involve a formal arrangement because of the involvement of non-domestic authorities. The case of cross-border data transfers is covered in the discussion under General Principle 5. A credit reporting system that operates across borders and serves more than one jurisdiction should be subject to day-to-day regulation and oversight by an authority that accepts primary responsibility, although that could potentially be supplemented by a committee of regulators and overseers. In most cases, the primary regulator or overseer is the relevant authority where the credit reporting system is located, as it has the authority to provide effective regulation and oversight and the relevant local market experience. Where necessary, the primary regulatory or overseer should organize an effective process for cooperating and consulting with other relevant authorities to seek consensus on common issues and keep each other informed of developments related to the credit reporting system. The following box presents some principles for international cooperative oversight.

BOX 5: Principles for International Cooperative Oversight

The principles below in no way prejudice the statutory or other responsibilities of authorities participating in a cooperative arrangement. Rather, they are intended to provide a mechanism for mutual assistance among authorities in carrying out their individual responsibilities in pursuit of their shared public policy objectives for the efficiency and stability of credit reporting arrangements.

Cooperative oversight principle 1: Notification

The primary overseer(s) of a jurisdiction that has identified the actual or proposed operation of a cross-border credit reporting system should inform other countries' authorities that may have an interest in the prudent design and management of the system.

For the purposes of deciding whether or not to set up a cooperative oversight arrangement, the authorities to be informed of the existence of the system, or the proposal to create the system, will normally include those where the main operations of the system are located. These authorities should, in turn, seek to inform any other domestic authorities that may have an interest in the prudent design and management of the system. In the case of a major system that is already in existence and which serves multiple jurisdictions, this principle could be met by requiring the system itself to inform the relevant authorities or to publicly disclose its cross-border activities in a way that meant they were transparent to the relevant central authorities. Financial supervisors and Central banks which have the relevant powers may also find it useful to require financial institutions to report their provision of or participation in any cross-border system.

Cooperative oversight principle 2: Primary responsibility

Cross-border credit reporting systems should be subject to oversight by authorities which accept primary responsibility for such oversight, and there should be a presumption that the primary overseer where the system is located will have this primary responsibility.

One of the authorities in the cooperative arrangement should, by mutual agreement, have primary responsibility for oversight of the system ("the authority with primary responsibility"). The acceptance by a central bank of primary responsibility means that it agrees to carry out the role set out in Cooperative oversight principle 3. It does not prejudice the ability of other authorities to fulfill their individual responsibilities and does not represent any delegation of responsibility to the authorities with primary responsibility from the other authorities.

The authority with primary responsibility needs to be able and willing to carry out the agreed role. Determination of which authority is best placed to carry out the role involves consideration of a range of factors including the oversight powers available to that authority, the relevance of the overseen system to local financial markets and the authority's capacity to carry out effective oversight. These criteria are often fulfilled best by the primary overseer where the system is located (in terms of incorporation, management and operations) and thus there is a presumption that this authority bank will have primary responsibility. However, it could be agreed that another authority will have the primary responsibility. This flexibility enables an effective oversight framework to be created in many circumstances, for example if the system has little importance in the country where it is located or if it is located in more than one country.

Cooperative oversight principle 3: Assessment of the system as a whole

In its oversight of credit reporting systems, the authorities with primary responsibility should periodically assess the design and operation of the system as a whole. In doing so it should consult with other relevant authorities.

A key element of the role of the authority with primary responsibility is to carry out periodic comprehensive assessments of the design and operation of the system as a whole on the basis of agreed policies and standards, including the General Principles for credit reporting systems. In carrying out the assessments, the authority with primary responsibility should actively solicit the opinions of the other authorities in the cooperative arrangement, recognize their interests and concerns through a process of consultation, and draw on their expertise where relevant.

The authority with primary responsibility has several other functions relating to the cooperative oversight arrangement, including (1) organizing an effective, efficient and clear process for cooperation, (2) facilitating the distribution of the information needed to satisfy the respective responsibilities of the central banks and other authorities in the arrangement, (3) seeking agreement on the policies and standards to

(Continued on next page)

BOX 5: Principles for International Cooperative Oversight (*Continued*)

apply in carrying out the assessments, (4) seeking consensus on issues of common interest related to risks and risk management of the system, (5) providing effective communication and coordination in both routine and stressful situations involving the system, and (6) when appropriate, using its powers and influence over the system to induce necessary change.

To avoid duplication, inconsistencies or gaps in oversight, all authorities in the cooperative arrangement should agree on their responsibilities and expectations, for example in a memorandum of understanding (MoU) or similar document. It is particularly important to be clear about the objectives of the cooperative oversight, the policy requirements and standards against which the system will be assessed, the scope and frequency of the information to be shared, and the procedures for assessing the system.

Cooperative oversight principle 4: Unsound systems

In the absence of confidence in the soundness of the design or management of any cross-border credit reporting system, authorities should, if necessary, discourage use of the system or the provision of services to the system, for example by identifying these activities as unsafe and unsound practices

In the course of their consultations, relevant authorities should endeavor to ensure the prudent operation of the cross-border systems on terms acceptable to them. However, if this is not possible in some cases, it is clear that authorities must maintain its discretion to discourage the use of a system or the provision of services to a system, if, in their judgment, the system is not prudently designed or managed.

Annex 1

Information Cycle for the Creation of a Credit Report

Credit reports and related value added services and products are the result of a combination of data pieces which, when put together in structured manner, become useful information for creditors in order to make lending decisions. This annex explains in detail the main elements and steps necessary for the creation of a credit report.

First Step: Data Collection

Information is collected from each data provider according to a specific template or form containing all the relevant fields necessary for the elaboration of a credit report. At the minimum, this form would contain identification data, including those that would be helpful to uniquely identify data subjects; variables of interest regarding credit account information and the history of enquiries related to that account.

Too often a poor form design interferes with proper capturing of data. As an example of a bad design, the word "NAME" followed by a line leaves sufficient room for very different responses: nicknames, formal names, no initials, titles, and so on. The data format is frequently designed jointly by users and service providers. In the United States, the "credit reporting agencies" (CRAs) developed a specific format, called METRO 2, and encourage all parties contributing data to the CRAs in the country to use this format for consistent reporting. Since each piece of information should be placed in the adequate field to make the resulting information meaningful across organizations, it is particularly relevant that all participating organizations have harmonized rules for completing the fields

Ensuring a timely and systematic data contribution/updating is also crucial. Data providers generally supply data on a monthly basis as the frequency tends to be related to the billing cycles or installment payments due. In most developed markets, some data providers do provide/update data on a weekly basis and even on a daily basis.[47]

Data can be provided through different methods, including on–line electronic data transfers through the Internet or a dedicated connection, or the physical delivery of tapes and magnetic disks. Many data providers commonly consider more than one way to provide the information in case the primary method is not available. Data security is a crucial part of this step as there are several risks associated with data handling and transferring which may end up in data mishandling, misplacement or unauthorized access. Data providers and credit reporting service providers frequently agree on terms to mitigate these risks (e.g. data encryption).

Many credit reporting service providers also collect information from other data sources, mainly public re-

[47] In the U.S. credit reporting agencies collect data every month, and they typically update their credit records within one to seven days after receiving new information (Avery et al. 2004, 298).

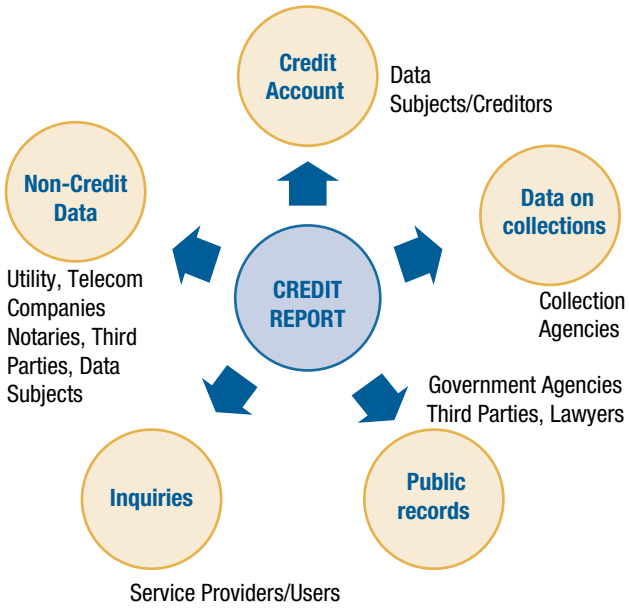
cords, as referred to throughout this report. In these cases it is typically the credit reporting service provider who proactively collects the data from the public sector agency or agencies holding those records.

A credit report is built on data provided by different sources, the figure below shows the sources of each of the type of data of a credit report. Data subjects and creditors both contribute data related to the credit account. Data on enquiries is generated by the credit reporting service provider based on enquiries made by users on a specific data subject. Data on collections is mostly provided by either collection agencies or creditors themselves. Finally there is a group of other sources which contribute data and do not necessarily use the system (e.g. most government agencies).

Second Step: Data validation

In order to validate the authenticity, completeness, consistency and accuracy of data received from data providers and other data sources, credit reporting service providers apply a number of techniques and processes conducive to preventing errors and enhancing data quality at data gathering. Techniques may include

FIGURE 4: Data Sources for Credit Reporting



digit checking, data monitoring, double keying, checking allowable ranges of values for a field and hash totals. All these processes are typically run by the credit reporting service provider, with no intervention from the data provider unless the file is rejected for inconsistencies found, large number of errors or other similar reasons. In such cases, it is common for service providers to send back to each data provider an error file with a description of the errors found in their respective files, prompting them to review the files and send back a corrected one.

Third Step: Data dissemination

Once data is cleaned and organized in a structured manner, it is presented to users according to their interests. The most common form of showing the data is on the form of a credit report that includes a summary of the data subjects' account, detailed information of each line and a history of the payment performance for the past 24 months. Users can also sign up for additional services (see discussion on value added services below).

The most frequent means of accessing credit reports is through on-line electronic data transfers. Frequently, credit reporting service providers offer users a 24/7/365 access to the credit reporting databases. This capability depends very much on the type of connectivity between the service provider and the final users, as well as on the technological capacity of the service provider to process concurrent requests from a large number of users, including multiple sub-users from the same user.

Value-added services

The quality and quantity of historical data available are the most important factors to determining what type of value added services can be developed by the credit reporting service provider. In the absence of positive data only a limited number of value added services can be developed. Although value-added services continue evolving as needs grow in different areas, the most common services available include the following: (i) credit scoring; (ii) anti-fraud tools; (iii) portfolio monitoring services; (iv) debt collection services; and (v) marketing

services. Value-added services such as scoring models built with sufficient data including negative and positive tend to be more predictive than those built only with negative data. Anti-fraud products are developed using data from applications and other data sources in addition to credit account data. Debt collection and marketing oriented products and services rely extensively on geo-demographical data such as a compilation of addresses of the debtor or applicant and recent enquiries regarding specific financial products among types of data. It is current practice that credit registries do not develop value-added services.

Annex 2

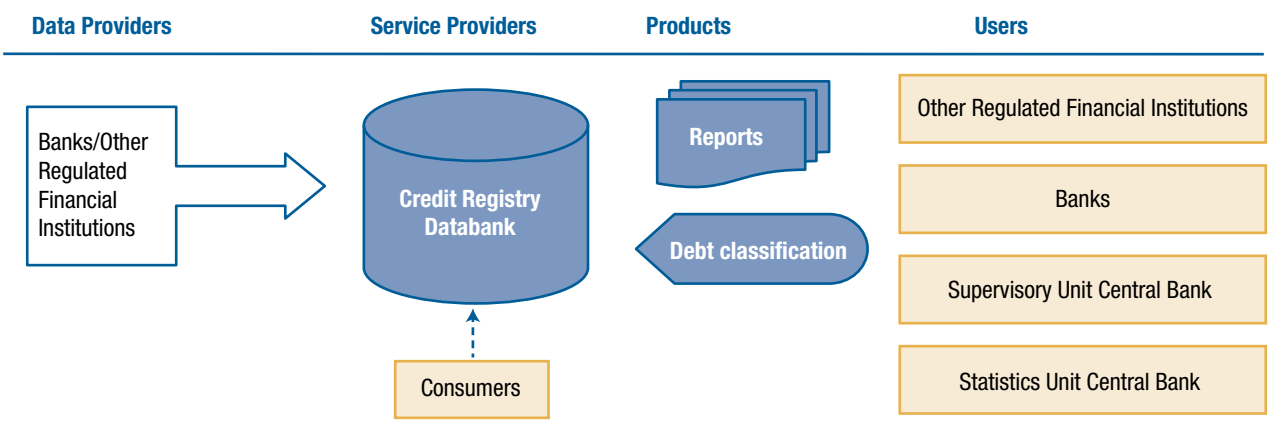
Basic Existing Models of Credit Reporting Services

1. Credit Registry

In this model, banks and other regulated financial institutions act as data providers, sending data to the credit registry, generating a database where information from all creditors is centralized. Most likely the database will be administered by the central bank, or in some cases another financial sector supervisory authority, that also sets data requirements to be fulfilled by regulated institutions. Once the data is cleaned and organized—including in some cases a classification of debt according to pre-defined rules—, this is made available to regulated financial institutions, which then become also the users of the service. This information is used by regulated financial institutions and also by other units within the central bank or financial supervisory authority, including mainly the banking supervision and statistics units. Data subjects may also access the information and request the correction of erroneous personal data. It should be noted that data subjects are not able to access and dispute errors regarding information collected exclusively for supervision.

In a credit registry, users are usually only able to access consolidated information concerning prospective customers (i.e. information reflecting financial obligations undertaken with all other creditors reporting to the registry). Frequently the credit registry collects historic data although such data is not always distributed back to users. Users therefore might only be able to access a report

FIGURE 5: Typical Model of a Credit Registry



covering a portion of the credit account or so–called "snapshot". In this type of model, value-added services for users are very seldom developed. When detailed information at account level is provided back to the regulated financial institutions, consumers/data subjects are frequently granted the same rights as in credit bureau models. However, when information is provided back to regulated financial institutions in a consolidated manner or de-personalized those rights do not necessary apply.

2. Credit Bureau

A credit bureau network is usually more complex than that of a credit registry, mostly because it involves various types of data sources as well as a greater variety of users. Apart from banks and other financial institutions, sources of information in this case include other non-financial credit card companies, retailers and suppliers extending trade credit. In addition, non-traditional sources of information to bolster information on "thin-file" clients (i.e. those who lack relevant information from traditional sources) are also included, like data on payments associated with utilities or telecom services. On the side of the users, entities other than banks and financial institutions are usually able to access the service. This frequently includes the data subjects, which can access their reports and other products and services based on data held on them as regular users. Data subjects are also able to access data held on them free-of-charge one or more times per year, and request correction of errors.

In the case of a credit bureau it is also worth noting that some of the users will not be contributing with data. This could be the case, for example, of landlords or employers. The reciprocity principle is therefore more difficult to apply in some cases. Finally, a variety of value-added services is frequently available given greater data availability and broader coverage.

3. Example of a model involving both a Credit Registry and one or more Credit Bureau

In some countries, a credit registry and one or more credit bureau can co-exist without any type of formal interaction between the different service providers (see Figure 7a). The credit registry collects data from banks and other regulated financial institutions and

FIGURE 6: Typical Model of a Credit Bureau

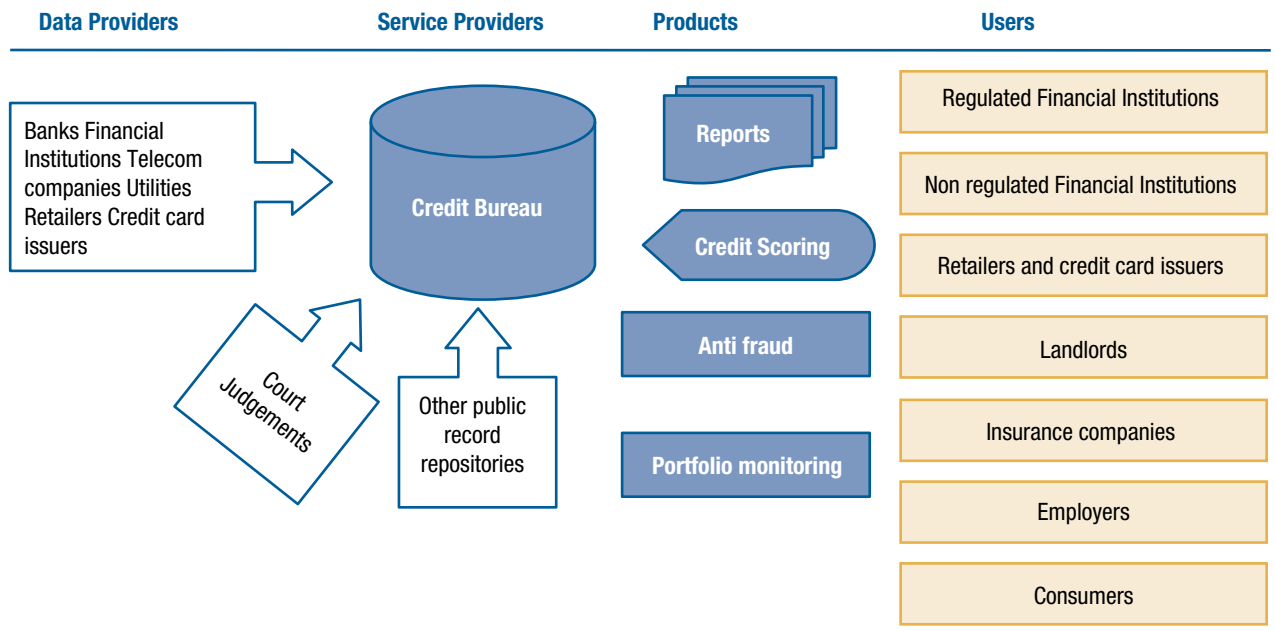
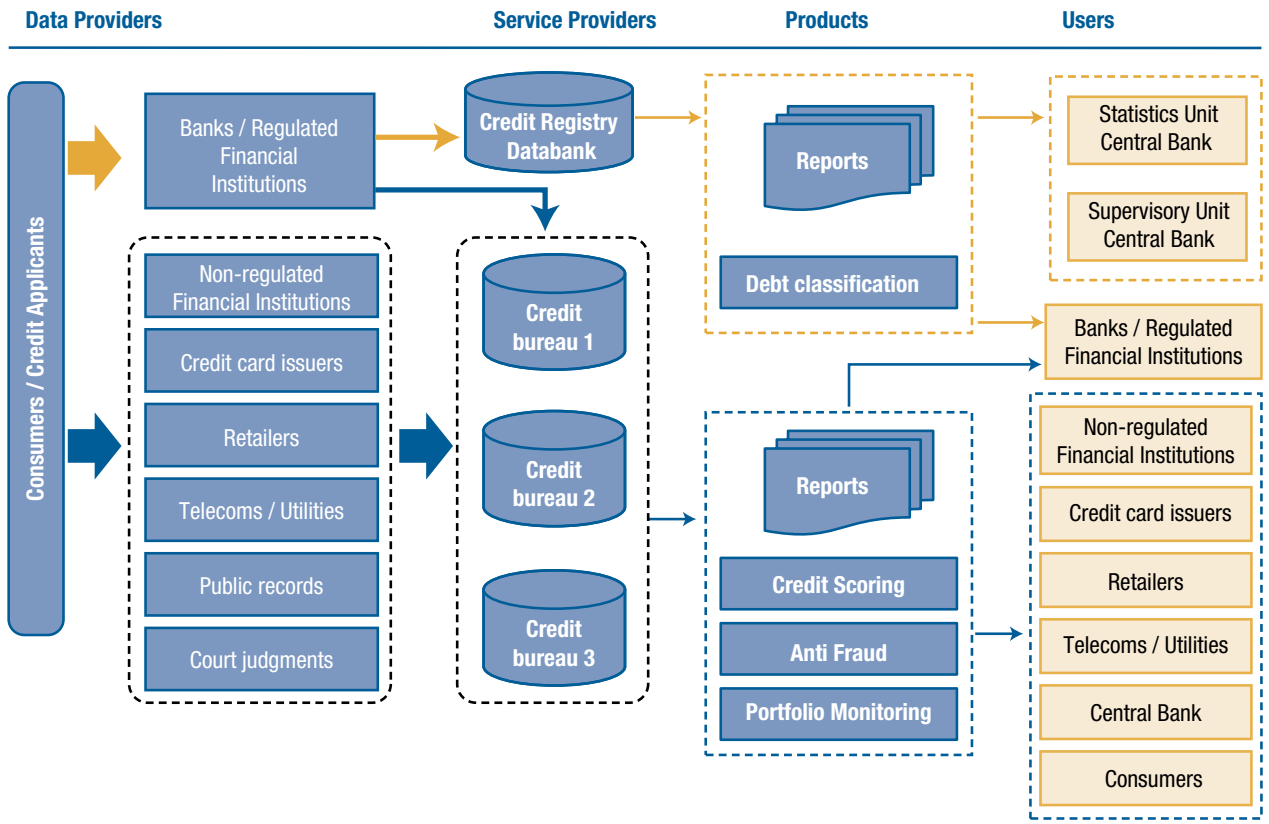


FIGURE 7A: Example of a Model involving both a Credit Registry and Credit Bureau(s)

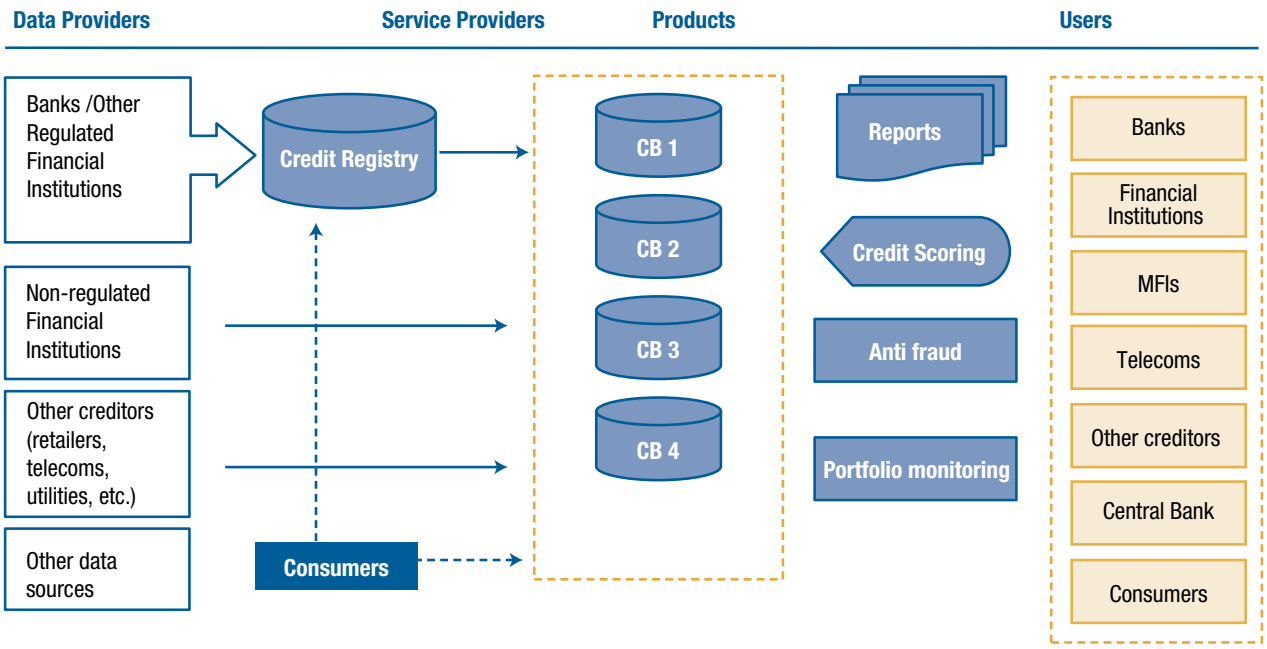


provides back data to those institutions, as well as uses the information for supervisory purposes. The credit bureau(s) may collect data from a variety of sources besides the banking/regulated financial institutions and provide several products and services to a wider range of users.

In a hybrid type of arrangement, data is collected from a variety of sources and housed in a central database, typically operated by the relevant financial supervisory authority in the country. Information held in this database is provided by the latter to one or more credit reporting service providers operating in the country. These networks further augment the basic data obtained from the central database with other pieces of information from other non-regulated creditors as well as other data sources.

In terms of users, this set up frequently provides information to a large number of users including the bank supervisor and other units within the central bank, banks and financial institutions, micro-finance institutions, telecoms and utilities, insurers, and when permitted even landlords and employers. In this model, value-added services are frequently developed by the credit bureaus and offered to final users together with the reports.

FIGURE 7B: Example of a Model involving both a Credit Registry and Credit Bureau(s)



Annex 3

Privacy, Data Protection and Consumer Protection

1. Consumer Protection and Preserving Privacy

Consumer protection in the context of credit reporting can be summarized as the right of any data subject to be aware that his/her information is being collected, shared or consulted (information/notice and access), to challenge data (petition to correct or delete information), and claim compensation for damages suffered as a result of the misuse of personal data held on them in credit reporting systems.

There are two main paradigms for safeguarding privacy rights or interests, with some overlap between them. As a broad generalization, the paradigm followed by the European Union views privacy as a fundamental right and relies on a prescriptive and static set of rules. Under that paradigm, privacy of any given individual is protected via requirement of individual's consent, i.e. the individual's decisional role to determine the manner and extent to which his/her data are collected and processed by others.[48] The commercial privacy paradigm favored by the United States and APEC focuses on flexible application of high level principles depending on context, such as the nature of the transaction.

Table 2 shows a comparison between key features of each privacy framework, highlighting commonalities among them.[49] The European Union framework relies on five principles followed by Directive 95/46/EC which should be transposed into EU Member States' legislation. The OECD, APEC and International Standards set a framework allowing for more flexible implementation than that contained in the European framework. In all existing frameworks, the role of the data subject as an active participant is highlighted. So is the concern for data quality accountability and transparency. Some disparities between the frameworks are also evident (e.g. proportionality vs. collection limitation, international transfers).

2. Dispute Resolution

One of the key elements of consumer/privacy protection in credit reporting is the existence of a mechanism for solving disputes regarding the information contained in the system. Redress mechanisms enable the identification and correction of errors. These mechanisms are frequently built into laws and regulations, which among other things allow data subjects to access and correct errors in personal data held on them in credit reporting systems.

[48] Consent is frequently analyzed together with the principle of proportionality based on: (i) suitability, (ii) necessity, and (iii) non-excessiveness.

[49] More recently, an international effort led by fifty National Data Protection Authorities resulted in the issuing of the so-called Madrid Resolution, containing international standards on privacy and data protect protection This Resolution was adopted in Madrid on November 6, 2009. An English version of the Madrid Resolution can be obtained at https://www.agpd.es.

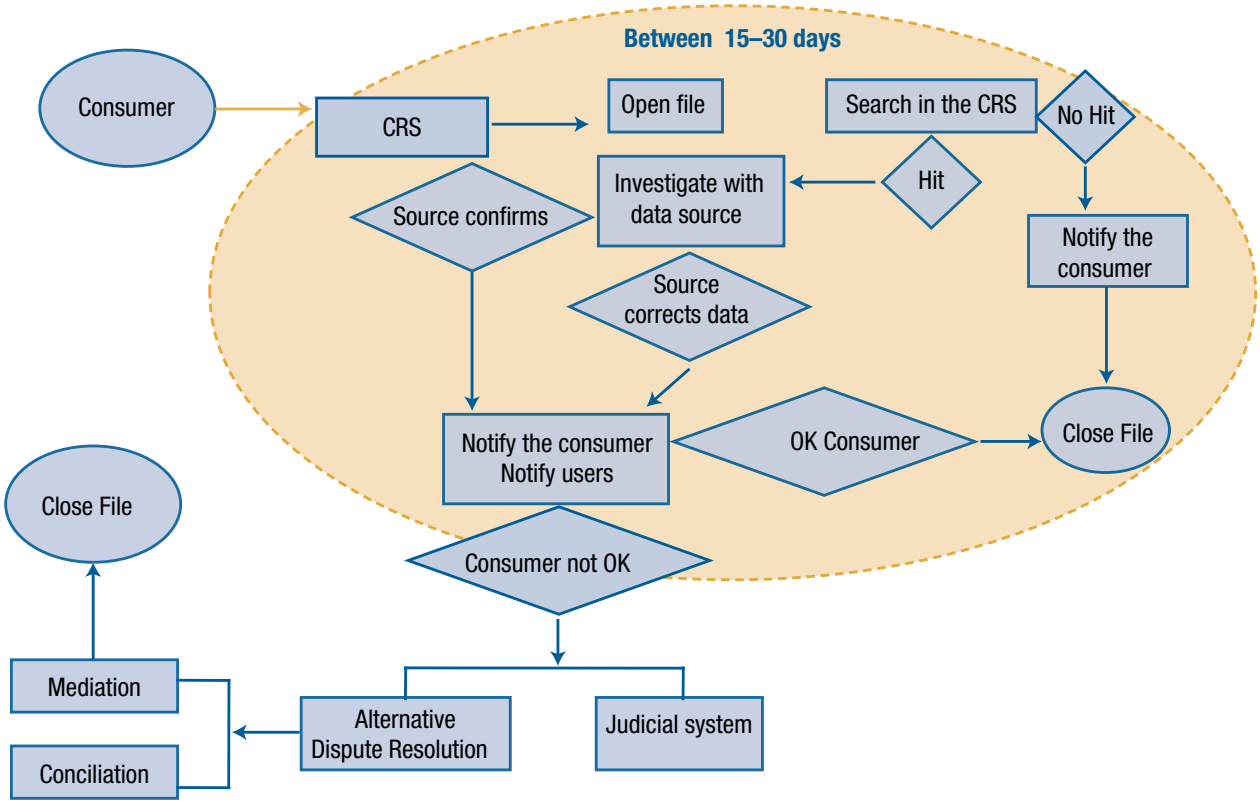
TABLE 2: A Comparison of Key Data Protection Frameworks

OECD (1980)	European Union (1995)	APEC (2004)	Madrid Resolution (2009)
Preventing Harm; (a) Remedies for privacy infringements, (b) design for preventing harm	Protecting rights (a) Administrative and Judicial remedies, (b) compensation to the data subject	Preventing Harm: (a) from wrongful collection, (b) from misuse	Protecting rights; (a) Proactive measures to prevent and detect breaches (b) Data Protection Officers (c) Privacy Impact Assessments (d) audits and codes of practice
Notice Unless it is already in the public domain	Notice: (a) when data is collected from the data subject, (b) data collected from a third party unless involves a disproportionate effort	Notice (a) for individuals to know (b) purpose specification	Openness (a) data collected from the data subject (b) data collected from third party
Collection Limitation(Relevant information according to specific purposes)	Data Quality: (a) Fair and Lawful (b) collection limitation (c) adequate, relevant and non-excessive (d) accurate and kept up to date (e) data retention	Collection Limitation (a) lawful and fair (b) purpose specification in reference to the collection	(a) Lawfulness and fairness (b) data quality
Uses of PI (Specific purposes)	See accountability and legitimate data processing	Uses of PI (a) in reference to the purposes of collection (b) consent (c) interest of the individual (d) legal obligation	Purpose specification
Choice	Legitimate Data processing (a) Choice b) contract (c) legal obligation (d) interest of the data subject (e) public interest	Choice (a) where appropriate (b) accessible and affordable mechanisms to provide choice	Legitimacy (a) consent (b) legitimate interest (c) legal contract (c) legal obligation (d) exceptions
Integrity (Accuracy and completeness)	(see data quality)	Integrity (a)accuracy and completeness (b) up to date (c) for the purpose of the use	(see data quality)
Security Safeguards	(a) Security (b) Confidentiality	Security Safeguards (a) proportional to likelihood of harm (b) proportional to severity of harm	(a) Security Measures (b) Confidentiality
Access and Correction	Access and rectification Notification to third parties	Access and Correction (a) conditions on timing, fees and process (b) sufficient proof of identity (c) explanation of codes included	Access, rectification and deletion Notification to third parties
	Right to Object (a) justified by personal circumstances (b) when a decision is based SOLELY on automated processing of data to evaluate his creditworthiness		Right to object: (a) legitimate reason, (b) when a decision is based Solely on automated processing of data with exceptions related to legal relations.
Accountability (Data Controllers)	Accountability (a) single purpose or related purposes (b) register open to consultation (c) prior checking by authorities	Accountability: (a) ensure compliance with the principles, (b) subject to conditions	Accountability: (i) ensure compliance, (ii) mechanisms to show compliance to data subjects and supervisory authorities
	Transfer to third parties subject to adequate level of protection	See accountability	International transfer subject to adequate level of protection

Figure 8 illustrates a type of consensual data dispute mechanism. The data subject initiates a dispute. The relevant credit reporting service provider(s) then initiates the review process, which is likely to involve the data provider or data source. In this example it is assumed that the process takes between 15 and 30 days. The resolution of the dispute is notified not only to the data subject itself, but also to other interested parties, namely users showing recent enquiries on that particular data subject. In this last regard, it is particularly relevant that data subjects be provided with a list of users who accessed their data lately in order to ensure that such users have been notified of any corrections in data, if applicable. It should be noted that the outcome of the resolution process does not preclude the data subject from seeking redress of grievances in a court of law. However, compensation for damages must be alleged only when appropriate (e. g damage is the result of a wrongful act by any of the credit reporting system participants or when the damage has had a significant impact on the data subject).

On some occasions the data is not corrected retrospectively in the relevant database up to the moment where the error was initially generated. This has the potential to cause adverse impacts for consumers, especially in those credit reporting products and services where historical data comprising longer periods of time is used.

FIGURE 8: Example of a Data Dispute Mechanism



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Annex 5

Glossary

Below is a short glossary of some key terms relating to credit reporting as used in this report.

Account Type: Refers to the use and payment method of credit selected by the consumer (e.g. revolving, installments).

Arrears: Failure to pay an obligation when due.

Borrower: see Debtor.

Commercial Credit Reporting Companies: Entities that collect information on businesses, including sole proprietorships, partnerships and corporations for the purpose of credit risk assessment, credit scoring or for other business purposes such as the extension of trade credit.

Collection agencies: businesses specialized in collecting delinquent accounts.

Consent: A data subject's freely informed and specific agreement, written or verbal, to the collection, processing and disclosure of personal data.

Consumer: (see data subject)

Credit Bureau: Model of credit information exchange whose primary objective is to improve the quality and availability of data for creditors to make better-informed decisions.

Credit Rating Agency: An entity that typically assigns a credit grade or rating to issuers of certain types of debt obligations. More recently credit rating agencies assign a credit rating to some financial institutions, despite whether the latter are issuing securities in the marketplace or not, and have even entered into new business lines, including in some cases credit reporting.

Credit Registries: Model of credit information exchange whose main objectives are assisting bank supervision and enabling data access to regulated financial institutions to improve the quality of their credit portfolios.

Credit Reporting Service Provider: An entity that administers a networked credit information exchange.

Credit Reporting System: Credit reporting systems comprise the institutions, individuals, rules, procedures, standards and technology that enable information flows relevant to making decisions related to credit and loan agreements.

Credit Reporting System Participant: Any individual or business that intervenes at one or more points throughout the cycle of collecting, storing, processing, distributing and, finally, using information to support credit-granting decisions and financial supervision.

Credit Scoring: A statistical method for evaluating the probability of a prospective borrower fulfilling its financial obligations associated with a loan.

Credit Type: Refers to the purpose of the credit (e.g. mortgage, credit card, consumer credit).

Creditor: One to whom a financial obligation is owed. Also, an individual or legal person who is engaged in the business of lending money or selling items for which

immediate payment is not demanded but an obligation of repayment exists as of a future date.

Creditworthiness: The ability of a borrower to repay current and prospective financial obligations on a timely manner. It is used as an assessment of a borrower's past credit behavior to assist a potential lender to decide whether or not to extend new credit.

Data Privacy: Ability to control one's personal information. See also Data Protection.

Data Protection: Discipline that aims at creating adequate safeguards to prevent misuse of individual data subjects' information. Comparable to consumer protection in other areas.

Data Providers: Creditors and other entities that proactively and in a structured fashion supply information to the credit reporting service providers.

Data Subject: An individual or a business whose data could be collected, processed and disclosed to third parties in a credit reporting system.

Debtor: An individual or a business that owes a financial obligation to a creditor.

Default: Failure to complete a payment obligation under a credit or loan agreement (see delinquency).

Delinquency: Situation where the borrower fails to meet his/her financial obligations as and when due.

Financial Infrastructure: The underlying foundation for a country's financial system. It includes all institutions, information, technologies, rules and standards that enable financial intermediation.

Hit: A positive match from an inquiry on a data subject is made by a creditor or other party and the data stored in a credit reporting service provider.

Late Payment: Any payment posted after the due date (see arrears). In the credit report is represented by the number of days after the due date.

Lender: See Creditor.

Moral Hazard: The risk that a party to a transaction has not entered into the contract in good faith. For example, this may include that party providing misleading information about its assets, liabilities or credit capacity.

National Credit Reporting System: Describes the broader institutional framework for credit reporting in an economy, including the following: (1) the public credit registry, if one exists; (2) private credit reporting firms, if they exist, including those run by chambers of commerce, bank associations, and any other organized database on borrower performance available in the economy; (3) the legal framework for credit reporting; (4) the legal framework for privacy, as it relates to credit reporting activities; (5) the regulatory framework for credit reporting, including the institutional capacity in government to enforce laws and regulations; (6) the characteristics of other pertinent borrower data available in the economy, such as data from court records, utility payments, employment status; (7) the use of credit data in the economy by financial intermediaries and others, for example, the use of credit scoring or use of credit data in creating digital signatures; and (8) the cultural context for credit reporting, including, for example, the society's view on privacy and the importance accorded to reputation collateral. (See credit reporting system).

Negative data: It consists of statements about defaults or arrears and bankruptcies. It may also include statements about lawsuits, liens and judgments that are obtained from courts or other official sources.

Networked Credit Information Exchange: Mechanism enabling credit information collection, processing and further disclosure to users of data as well as value added services based on such data.

Other Data Sources: Entities that collect information for purposes different than credit granting decision-making and/or financial supervision. These entities typically do not pro-actively provide the information they collect to credit reporting service providers but rather can be consulted upon request.

Payment history: A detailed compilation of past and current payment behavior.

Positive Data: Information that covers facts of contractually compliant behavior. It includes detailed statements about outstanding credit, amount of loans, repayment patterns, assets and liabilities, as well as guarantees and/or collateral. The extent to which positive information is collected typically depends on national legislation, including the data protection regime.

Public Records: Information filed or recorded by government agencies that is made available to the public under existing laws. Typical public records include corporate and property records, court judgments, and identification information, among others. These records are subject to be made available to the public.

Reciprocity: Mutual exchange of information.

Sensitive Data: Personal data that affect the individual's most intimate sphere or that could lead a party that gets hold of such data to discriminate against, or create a serious risk to, certain individuals. Sensitive data typically includes gender, health status, marital status, national origin, political affiliation, race, sexual orientation, or union membership, among others.

User: An individual or business that requests credit reports, files or other related services from credit reporting service providers, typically under pre-defined conditions and rules.

Annex 6

Members of the Task Force

Chairman	Massimo Cirasino, The World Bank
Members	
Agencia Española de Protección de Datos	José Leandro Nuñez
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