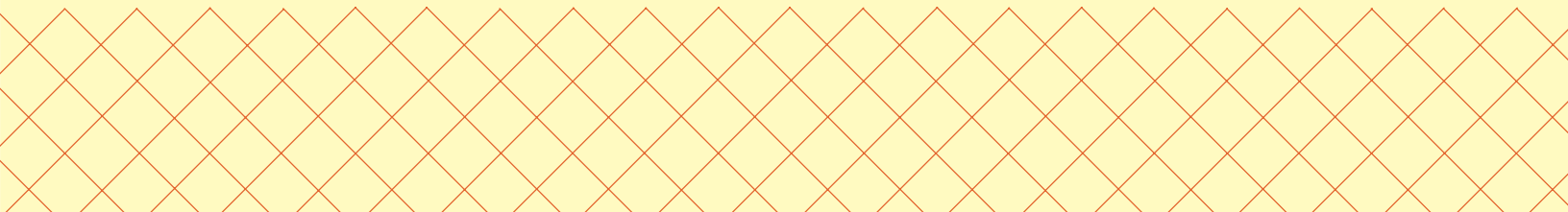


WESTERN HEMISPHERE PAYMENTS AND SECURITIES SETTLEMENT FORUM  
CENTRE FOR LATIN AMERICAN MONETARY STUDIES  
THE WORLD BANK

**PAYMENTS AND SECURITIES  
CLEARANCE AND  
SETTLEMENT SYSTEMS  
IN BOLIVIA**

DECEMBER 2004



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WESTERN HEMISPHERE PAYMENTS AND SECURITIES SETTLEMENT FORUM  
CENTRE FOR LATIN AMERICAN MONETARY STUDIES  
THE WORLD BANK

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## Foreword

Following a request from the Western Hemisphere Finance Ministers, the World Bank launched in January 1999 the Western Hemisphere Payments and Securities Clearance and Settlement Initiative. The World Bank, in partnership with the Centre for Latin American Monetary Studies (CEMLA), first led this Initiative, which, over the years, has evolved into a permanent Forum as a result of the capacity already created throughout the Region. The Western Hemisphere Payments and Securities Settlement Forum represents a new set of organizational arrangements to give continuity to the efforts started under the Initiative and was formally launched in June 2003.

The objective of the Forum is to describe and to assess the payment systems of the Western Hemisphere with a view to identifying possible improvement measures in their safety, efficiency and integrity. To carry out this mandate an International Advisory Council (IAC) was established in March 1999 comprised of experts in the field from several institutions. In addition to representatives from the World Bank and from CEMLA, this Council includes members from the following institutions: Bank for International Settlements, Bank of Italy, Bank of Portugal, Bank of Spain, Council of Securities Regulators of the Americas (COSRA), De Nederlandsche Bank, European Central Bank, Federal Reserve Board, Federal Reserve Bank of New York, Inter-American Development Bank, International Monetary Fund, International Organization of Securities Regulators (IOSCO), Securities Commission of Spain, Swiss National Bank and U.S. Securities Commission (SEC).

To assure quality and effectiveness, the Forum includes two important components. First, all studies are conducted with the active participation of country officials and the project builds on the existing work being undertaken in the respective countries. Second, the Forum draws on international and national expertise on the subject, through the IAC, to provide guidance, advice and alternatives to current practices.

The Forum has undertaken a number of activities in order to respond to the Western Hemisphere Finance Ministers' request. These include: the preparation on public reports containing a systemic in-depth description of each country's payments clearance and settlement systems; the delivery of recommendations reports to country authorities on a confidential basis; the organization of IAC meetings to review country studies and provide input for future work; the organization of workshops focusing on issues of particular interest; the creation of a web-page ([www.forodepagos.org](http://www.forodepagos.org)) to present the outputs of the Forum and other information of interest in the payments systems area; and promotion of working groups to ensure a continuation of the project activity.

CEMLA has been acting as Technical Secretariat of the Forum and is playing a major role in making the process sustainable and capable of extension to all the countries in the Hemisphere. To this end, the Forum has helped strengthen CEMLA's in-house expertise. Additionally, practitioners in payments and securities clearance and settlement in some countries in the Region have participated in the studies prepared under the Initiative and at present under the Forum, through CEMLA coordination, and this has contributed to broadening the knowledge and the transfer of know-how within the Region. The endeavors of the working groups in coordination with CEMLA already provide this permanent Forum for the countries in the Region to discuss, coordinate, and add a collective impetus to the work in the area of payment and securities clearance and settlement systems.

This report, "Payments and Securities Clearance and Settlement Systems in Bolivia", is one of the public reports in the series and was prepared under the coordination of CEMLA and the World Bank. The Banco Central de Bolivia also participated actively in its preparation.

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# 1 ECONOMIC AND FINANCIAL MARKET OVERVIEW

## 1.1 OVERVIEW OF RECENT REFORMS

Before 1985, the Bolivian economy was characterized by a marked state intervention in its productive activities, financed with external resources the use of which, due to the important increase in the world interest rates, implied growing needs of external debt service and losses of international reserves, which caused the country to default of its foreign payments. In addition, in order to avoid a greater deterioration of international reserves, the economy was “dedollarized”<sup>1</sup> in 1982 and the obligations denominated in US dollars were compulsory converted into Bolivianos, with obvious effects on the public confidence and on the financial disintermediation. Along with this behavior, the collapse of prices of the country main primary products and unexpected weather effects determined a severe decrease of the GDP, and a sudden increment of inflation and of unemployment rates.

Due to the default of the debt service, the State deficits could not be covered with external resources, thus it was decided to make an unlimited issue of paper money which caused a deeper deterioration of the economy, generating a hyperinflationary spiral which in 1985 reached more than 8,000 percent per annum.

In face of this situation, on August 29, 1985 with the enactment of the Supreme Decree 21060, Bolivia undertook a stabilization and structural reform program called “New Economic Policy”. Among the most outstanding aspects of the stabilization program, stand up the implementation of restrictive fiscal and monetary policies which limited the credit of the Central Bank of Bolivia (*Banco Central de Bolivia*, BCB) to the public sector, the liberalization of prices and salaries, the currency devaluation to its real value, the stabilization of the exchange rate and the creation of the “Bolsín”, as a competitive means to define the exchange control without losing the control of this monetary instrument; in addition, the first steps were taken for opening international trade. In order to revert the dedollarization effects on the population confidence, since late mid-1980s it was allowed the establishment and maintenance of accounts denominated in USD in the financial system. Later on, with the aim to increment fiscal revenues and to put in order public expenses, the employment of the public sector was rationalized and a fiscal reform law was enacted.

On the other hand, in the financial sphere the reform looked for ways to improve the allocation of resources and to promote a sustained development of the financial intermediation entities, within a framework of the proper limits of prudential regulation. For this purpose, the Banking and Financial Entities Law (*Ley de Bancos y Entidades Financieras*) was enacted in 1993, which, among other things, determined the independence of the Superintendency of Banks and Financial Entities (*Superintendencia de Bancos y Entidades Financieras*, SBEF) related to the BCB.

In 1995, with the approval of the Law of the Central Bank of Bolivia (*Banco Central de Bolivia*, BCB) its independence and autonomy character was strengthened and its relationship with the public

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<sup>1</sup> Dedollarization is known in Bolivia as the measures adopted by the government in 1982, that prohibit holding assets or liabilities denominated in foreign currency.

sector was clearly established, defining as the main objective of the BCB the maintenance of the internal purchasing power of the domestic currency.

Between 1994 and 1997 public companies were capitalized under different modalities, with which the State stopped participating directly in the productive and services sector.

In 1998 the Securities Market Law (*Ley del Mercado de Valores*) was enacted and the Superintendency of Pensions, Securities and Insurance (*Superintendencia de Pensiones, Valores y Seguros*, SPVS) was created, with the purpose to foster the development of the money and capital market and to achieve a better supervision of privatized activities generated since the reform of the pension system.

Finally, modifications to the BCB Law were introduced in the same year, conferring it powers to formulate policies of general application on matters related to the payments system.

## 1.2 MACROECONOMIC BACKGROUND

Bolivia is a country with a surface of 1,098,581 square kilometers and a population of around 9.2 million inhabitants. During the last 10 years (1994-2004), the actual average growth of the gross domestic product (GDP) was 3.3 percent; in the last five years that average rose to 2.5 percent, with a negative growth of the GDP per capita.

In 2004, the nominal GDP reached USD 8.5 billion. The GDP had an actual growth of 3.7 per cent in 2004 and 2.6 percent in 2003. The economic activities which show a higher impact on the GDP growth in 2004 were: hydrocarbons (48 percent); manufacturing industry (28 percent), transportation and communications (10 percent), trade (7 percent) and public administration services (4 percent). The growth of these four economic activities represented 98 percent of the GDP growth. On its turn, the mining sector had a negative impact of 11 percent.

Goods exports (FOB), as of December 2004, reached the amount of USD 2.1 billion, which represents an increment of 35.3 percent in regard to 2003, partly supported by better prices in some sectors. Mineral exports increased in a 24 percent, hydrocarbons in 70.4 percent and non-traditional products in 28.3 percent. Exports of other commodities suffered a decrease of 10.3 percent.

Adjusted imports (CIF), which exclude airplanes rental and nationalization of vehicles imported in previous administrative periods, as of December 2004, reached USD 1.9 billion, which represents a 15.7 percent increment in regard to 2003. The imports increment resulted from a generalized increase in imports of consumption goods (10.7%), intermediate goods (14.2%), capital goods (22.9%) and others (42.2%).

The public debt balance reached USD 6.9 billion at the end of 2004, equivalent to 81.5 percent of the GDP, with an increase of USD 168 millions in regard to 2003. Out of this total, 71.5 percent corresponds to external indebtedness.

The accrued inflation as of December 2004 reached a 4.6 percent, slightly over the one registered during 2003 which was 3.9 percent. The average inflation of the last ten years (1995-2004) was 5.4 percent and the inflation of the last five years was 3.0 percent.

The rate of open unemployment estimated for 2004 reached an 8.7 percent, lower than the 9.2 percent recorded during 2003<sup>2</sup>.

### **1.2.1 Fiscal Sector**

It is estimated that at the closing of the 2004 the deficit of the non financial public sector was 6.1 percent of the GDP, which means a fiscal adjustment equivalent to two percentage points of the GDP in regard to the deficit generated in 2003. This result responds to an important increment in fiscal revenues, associated to the fiscal regularization programs and to a higher efficiency of the tax collection processes and, to a lesser extent, to a greater dynamism of the economy

The global deficit of the 2004 was externally financed in a 71 percent.

### **1.2.2 External Sector**

As of December 2004 the current account of the balance of payments registered a positive balance of USD 257.1 million<sup>3</sup>. The balance in the financial and capital account registered a deficit of USD 131.1 million, resulting in a global balance of a positive balance of payments for USD 126 million. Thus, there was an increase of net international reserves for the amount of USD 138.5 million. In GDP terms, the Current Account passed from a 0.6 percent surplus in 2003 to another one of 3 percent in 2004.

## **1.3 FINANCIAL SECTOR**

In the decade of the 1970s and part of the 1980s, the concept of specialized banking prevailed, with a strong participation of the State. The role of the state banking, composed by the Mining, Agriculture, State and Housing banks represented a priority instrument for the promotion of the productive activity. Part of the funds which were internationally taken in through deposits was channeled to private activity through these state entities, with subsidized rates. The commercial banking played a supplementary role, granting short term credits (up to one year) and was able to channel part of the external resources obtained by the state through development lines of the BCB.

On account of the severe economic crisis that the country faced during the first half of the 1980s, there was a disintermediation process which substantially reduced the financial sector activity. The 1985 stabilization plan introduced the concept of universal banking, including liberalization measures

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<sup>2</sup> The figures are preliminary from the National Statistics Institution. The open unemployment rate measures the percentage of workers that belong to the economically active population who on the week prior to the survey or census did not work and were available to perform an activity or sought to be part of an economic activity.

<sup>3</sup> Estimated data of the BCB.

of the financial market and of external capital movements. The interest rates passed to be determined by market forces.

The effect of these measures was a quick recovery and expansion of the activity of the sector. However, some financial institutions suffered severe solvency problems in 1987, basically due to the growth of their past due portfolio, which in several cases resulted from granting credits to entities or people linked to the banks. As a consequence of this situation, four banking entities were intervened and later on liquidated: *Banco de la Vivienda S.A.M.*, *Banco de Crédito Oruro S.A.*, *Banco de Potosí S.A.* and *Banco del Progreso Nacional S.A.M.*

To avoid negative repercussions on the liquidation processes and with the aim to prevent similar problems in the rest of the system, in December 1987 the government reestablished the SBEF as an autonomous and independent institution, in charge of regulating and supervising the activities of the financial intermediation institutions.

As part of the reforms program, the closing of the state banking which had caused huge losses to the State and to private banks with an excessive concentration of credit risks was ordered. International progress in regulation and banking supervision were undertaken in the regulating sphere. For this effect, the Banking and Financial Entities Law was approved in 1993. The state banks liquidated were: *Banco Minero de Bolivia* (1991), *Banco Agrícola de Bolivia* (1991) and *Banco del Estado* (1994). Likewise, within the private banking were liquidated: *Banco Latinoamericano de Desarrollo S.A.* (1988) and *Banco de Financiamiento Industrial S.A.* (1991).

During 1993 and up to mid-1994s, the deposits and external private debt of some banks had been growing too fast, which led to a risky expansion of their portfolio and to the permanent refinancing of old credit transactions. Consequently, it provoked a new crisis which ended with the liquidation of three banks: *Banco Sur* (1994), *Banco de Cochabamba* (1994) and *Banco Internacional de Desarrollo* (1997). To calm down the effects of this crisis, the BCB honored the liabilities with the public of these entities by refund deposits up to USD 5,000 in cash and in Deposits Payoff Certificates (*Certificados de Devolución de Depósitos*, CDDs) for higher amounts. This implicit deposits insurance which was put in practice by the BCB allowed to successfully solve the crisis and did not provoke greater negative effects on the expectations of economic agents.

Shortly afterwards, at the beginning of 1995, the *Banco Boliviano Americano* (BBA) which was second higher in volume of deposits taking institutions, faced a crisis that caused strong bank runs of deposits which endangered the bank solvency. In view of this situation and to avoid a new systemic crisis, financial and monetary authorities were forced to look for ways to restructure and transfer it to new shareholders, as well as to look for instruments that would allow the strengthening of its equity. To maintain the system stability, the BCB had to intervene granting this entity liquidity credits.

Other banking entities also faced solvency problems, thereby, to avoid a systemic crisis, they designed mechanisms to solve them, such as the Financial System Development and Productive Sector Support Fund (*Fondo de Desarrollo del Sistema Financiero y Apoyo al Sector Productivo*, FONDESIF), to grant structural liquidity credits and subordinated to capitalization. This mechanism contributed to the recapitalization of troubled banks and increased the availability of financial resources to the



national productive sector. At the end of 1995, the banking situation was stabilized and the banking deposits went back to the growth levels of years prior to this crisis.

On October 31, 1995, Law 1670 of the BCB was approved which in the financial sphere prohibits financial entities to grant credits to borrowers or groups of borrowers linked to them. In this same line of action and with the purpose to enhance the soundness of the financial system, since July 01, 1998 a more strict banking assets risk weighting, this coincides with the assets weighting rules of the Basel Committee for banking supervision (BIS). Likewise, it was incremented the coefficient of equity adjustment to 10 percent and was established the timely reserve of low quality assets in banking balance sheets.

The financial intermediation system in Bolivia has also two non-banking entities. This sector is made out of Private Financial Funds (*Fondos Financieros Privados*, FFP), Savings and Credit Cooperatives (*Cooperativas de Ahorro y Crédito*, CAC) and Housing Loans and Credit Mutual Associations (*Mutuales de Ahorro y Préstamo para la Vivienda*, MAP), entities that orient their credit operations to individuals, basically to those having medium and low income. Currently, the participation of these entities relative to the volume of assets of the banking system is of 9.3 percent for MAP, 4.7 percent for CAC and 4.5 percent for FFP.

## 1.4 CAPITAL MARKETS

The Pensions Law No. 1732 of 1992, created the Superintendency of Securities (*Superintendencia de Valores*, SV) in substitution of the National Securities Commission (*Comisión Nacional de Valores*, CNV), assigning it powers and obligations, with the exception of the regulatory capacity which was delegated to the Executive Branch. In order to reorganize the organizational and regulatory framework of the stock exchange, since 1998 the Popular Credit and Participation Law (*Ley de Participación y Crédito Popular*, PCP) determined that the Superintendency of Pensions, Securities and Insurance (SPVS) was to absorb the Superintendency of Securities (SV), converting it into the present Intendancy of Securities.

Likewise, in 1998 the Securities Law No. 1834 was enacted, whose main purpose is to regulate and promote an organized, integrated, efficient and transparent securities market. This Law and its regulations are applied to the stock market and to the over-the-counter market, it regulates public offering and intermediation of securities, stock exchanges, brokerage houses, funds managers and investment funds, securitization corporations and securitization, risk rating agencies, issuers, securities deposit entities, as well as other activities and corporations or individuals who act in the securities market of Bolivia.

Once implemented the new standard and created the Intendancy, the first months were destined to organize and adapt the Intendancy to the new regulatory scheme and to the elaboration of basic standards, aimed at complying with the mission established for the SPVS as the supervisory body of the market. Within this framework the Regulation of the Securities Market Law was elaborated and the elaboration of the new Regulations was started, including rules destined to govern public offering of non registered shares, regulating rates, risk rating agencies, fund investments and the establishment of the Securities Market Registry.

Since the integration and organization of the 1) new regulatory framework of the securities market there was a significant growth in trading floor transactions, 2) investments portfolio of securities mutuals funds and their participants. However, those securities were concentrated in short term debt transactions more related to the money market than to the capital market, and with a strong participation of public securities and fixed term deposits rather than in other private debt instruments or shares.

In 2002, were created the Mutual Funds Managing Companies (*Sociedades Administradoras de Fondos de Inversión*, SAFI); and the transformation of Securities Common Funds to Investment Funds and the transfer of the administration of these Funds of the Brokerage Houses to Mutual Funds Managing Companies, within the framework provided by the Securities Market Law and the Administrative Resolution SPVS/IV/290 took place.

In 2002, the market, which had been recording important bond transactions of private companies and had been developing a broader variety of products, as the first portfolio securitization transaction, was severely affected by the political crisis generated by the uncertainty of the electoral process.

## 1.5 MAJOR TRENDS IN THE PAYMENT SYSTEMS

In 1998, the 1864 Property and Popular Credit Law introduced modifications to the BCB Law, providing that it had to formulate general application policies on matters regarding monetary, foreign exchange and payment systems, in order to comply with its main objective, that is, to maintain the stability of the national currency purchasing power.

Following this mandate, since June 1998 the BCB started to carry out several studies and projects for the modernization of the payments system in Bolivia, promoting the compliance of the basic functions contained in its Law and incorporated in its institutional strategic objectives.

In 2002, the BCB in coordination with the Treasury of the Nation (*Tesoro General de la Nación*, TGN), developed the Treasury Payment System (*Sistema de Pagos del Tesoro*, SPT), appointed to process the payment to providers of goods and services of the public sector, as well as the payment of salaries and earned income to employees of some public entities. At present, the annual transactions channeled through this system represent an important part of the payments made by the TGN. The greatest percentage of payment orders is made in Bolivianos, congruent with the nature of these payments.

As of this date, the BCB has started the operation of the so-called Large Value Payment System (*Sistema de Pagos de Alto Valor*, SIPAV), which allows banks to carry out electronically interbanking transfers in real time. Likewise, the BCB is also operating an application which provides on-line information on account movements and balances and the first version of the application of management and control of liquidity risks, which allows participants to have access to liquidity facilities.

The messages that generate electronic transactions carried out among the BCB and other banks are confidential, thus in addition of using digital signatures they also use encryption mechanisms, both



for hardware and software, which makes illegible for non-authorized agents the information transmitted through the communication network.

The different large value payments system services that the BCB currently provides shall be complemented by new developments which will allow to structure a payments integral system, as well as to increment the safety and efficiency of the payments systems as a whole.

In a parallel manner to the reforms started in the BCB, the private sector also contributed to the modernization of instruments and services that introduce new operations in the low value payments system, mainly for transactions made in cheques, magnetic cards and securities.

The check is the instrument mostly used as an alternative for cash. The annual amount of transactions made with this instrument is almost equivalent to the national GDP. The average cheque value is almost thirty times higher than in more advanced economies, due the low development of large value payments electronic instruments. However, in recent years credit and debit cards are increasingly being used, increasing 45 percent in the last five years, which anticipates a broad development in the future.

The BCB through coordinated actions with the Association of Private Banks of Bolivia (*Asociación de Bancos Privados de Bolivia*, ASOBAN) has supported private initiatives aimed at the development of new payment instruments for the retail market, such as electronic transfer orders through an Automated Clearinghouse (ACH) system.

## **1.6 MAJOR TRENDS IN THE SECURITIES CLEARANCE AND SETTLEMENT SYSTEMS**

In the sphere of clearance and settlement systems of securities transactions, the most outstanding aspect is the establishment of the Central Securities Depository (*Entidad de Depósito de Valores S.A.*, EDV). This institution was born as a project undertaken by the Bolivian Stock Exchange (Bolsa Boliviana de Valores, BBV) in partnership with the company CAVALI<sup>4</sup>, NAFIBO and CAF. The SPVS granted the EDV an operating license in May 2002. The EDV started operating (partially) early in April 2003.

The EDV obtained the operating license based on the Regulations approved in 2001 by the SPVS, which establishes the requirements for its incorporation and operation. However, these Regulations established that issues related to the clearance and settlement of funds originated from stock exchange transactions should be defined on the basis of the Regulations issued by the BCB for electronic clearinghouses. Within this framework, in December 2003 the BCB approved the Regulation of Electronic Clearing and Settlement Houses and Clearance and Settlement Services, whose main rules establish the obligation that clearance and settlement entities must carry out their transactions through a settlement account opened for such effect in the BCB.

The continuous development of the EDV and the support it shall receive from the dematerialization of public securities is expected to allow a greater dynamism in securities transactions.

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<sup>4</sup> CAVALI ICLV S.A. is a company incorporated in Peru and has as exclusive purpose the registration, custody, clearance, settlement and transfer of securities.

## 2 INSTITUTIONAL ASPECTS

### 2.1 GENERAL LEGAL FRAMEWORK

**Table 1: Legal Framework of the Payments System**

<i>Name</i>	<i>Number</i>	<i>Issuance Date</i>
Banks and Financial Entities Law	No. 1488	April 14, 1993
Financial System Capitalization Fund and Private Sector Support	Supreme Decree No. 24110	September 1, 1995
Bolivia Central Bank Law	No. 1670	October 31, 1995
Pensions Law	No. 1732	November 29, 1996
Securities Market Law	No. 1834	March 31, 1998
Insurance Law	No. 1883	June 25, 1998
Financial Supervision and Regulations Strengthening Law	No. 2297	December 20, 2001

*Source: BCB.*

#### 2.1.1 Payments

As the body responsible for regulating the payments system and in compliance with the powers conferred by the Law, the BCB decided, through the Board Resolution No. 070/2001 of July 24, 2001, to create the Large Value Payment System (SIPAV) and to approve its regulation. Its objective is to regulate the operation and effectiveness of the system, as well as to establish the rights, obligations and responsibilities of its administrator and direct participants. This regulation was updated through the Board Resolution No. 166/2004 of November 9, 2004.

The effective operation of the system requires, in addition to regulatory standards, other legal instruments. The most outstanding, among them, are the agreements subscribed by the BCB with direct participants:

- Participation Agreement in the Large Value Payment System, in which the obligations, responsibilities and rights of the participants and administrator are established, and
- Credit Line Opening Agreement, which defines the conditions under which the BCB shall grant intraday credits to the system participant.

The system uses the communications network of the Association of Private Banks of Bolivia (*Asociación de Bancos Privados de Bolivia, ASOBAN*), under the terms and conditions agreed upon in the Interbanking Network Use Agreement subscribed with this entity.

As to the retail payments system, in compliance with the provision set forth in article 54, paragraph k) of the BCB Law and article 68 of the Banks and Financial Entities Law, the Regulation of Electronic Clearinghouses and Clearing and Settlement Services, which regulates the creation, incorporation

and operation of these entities has been approved. The standards contained in this regulation cover all payment system entities that carry out funds clearance and settlement transactions, as well as those entities accredited as Clearinghouses, and the entities that without being clearinghouses, carry out funds clearance and settlement activities such as the EDV which, as result of the securities transfer processes, generate net positions of funds that must be cleared and settled in the BCB.

With the objective to grant validity to transactions made by electronic means, Law No. 1488, modified by Law No. 2297, acknowledges the probatory evidence of the transactions and information contained and transmitted through electronic messages, determining that in the payment system framework, the BCB establishes the regulation framework of digital signature to grant safety and efficacy to electronic transfers.

Based on the above issue, the Regulation of Digital Signature for the Payment System has been approved including the main international standards and definitions related to digital signature characteristics, which allow compliance with the necessary requirements that grant legal validity and probatory evidence to electronic transactions similar to the one that the Law grants to autograph signatures. One of the most important provisions is the possibility of using the services of international notary publics or those whom the participants and administrators contractually agree upon, considering that Bolivia has not any Certification Entities incorporated as yet.

### **2.1.2 Securities**

The Securities Market Law (LVM for its acronyms in Spanish) considers as a security any instrument created and issued according to a specific regulation; which identifies the beneficiary of the resources obtained for their issuance, whose public offering is authorized by the SPVS; and which represents the existence of an effective obligation assumed by the issuer and comprises its documentary acceptance as well as its validity in a book-entry.

The securities are enforceable, both if they are in physical or in the book entry form, and they are freely transferable according to the provisions established in the LMV, being null every limitation regarding their circulation.

The LMV created the Securities Market Registry (*Registro del Mercado de Valores, RMV*) under the SPVS with the objective to register public offering securities, intermediaries and other market participants and to provide free information and certification to the public in general.

The LMV regulates every securities public offering, including those instruments and securities listed on foreign stock markets that want to be included as public offering in Bolivia. The only securities exempt from public offering are those of the TGN and of the BCB. However, said securities must be registered in the RMV.

### **2.1.3 Derivatives**

In Bolivia there is not yet any formal legal basis for derivatives trading. In cases when it is required to trade with derivative instruments in the national markets, the interested parties may agree the compliance of rights and obligations through a contractual relationship.

## **2.1.4 Specific Legal Issues Related to Clearance and Settlement**

### **2.1.4.1 Netting**

The concept of netting is an important element in the field of payments and securities settlement. The most complete Regulation regarding clearance is established in the Regulation of the Automated Clearinghouses (*Cámaras Electrónicas de Compensación*, CEC) and Clearance and Settlement Services (*Servicios de Compensación y Liquidación*, SCL) approved by the RD No. 138/2003 of the BCB, which establishes the general framework and guidelines of the clearing.

The Civil and Commerce Codes do not establish explicit rules applicable to netting, whether of a bilateral or multilateral type.

However, article 49 of the LMV established the rules for the clearance and settlement of stock exchange transactions in the Central Securities Depositories.

### **2.1.4.2 Novation**

Novation is not ruled in the Bolivian legislation. However, the Code of Civil Procedure mentions novation contracts, without specifying the terms under which they are carried out or the rules under which they operate.

### **2.1.4.3 Finality**

In the law there is not explicit regulation about settlement finality. However, the regulation of the SIPAV and of the Automated Clearinghouse and Clearance and Settlement Services issued by the BCB establish the time when the operation is considered irrevocable and final.

### **2.1.4.4 Zero Hour Rule**

The Bolivian legislation does not contain a zero hour rule that invalidates transactions, settled and considered as final, carried since the beginning of the day on which a bank failure is originated. The Code of Commerce established the actions derived from a bank failure and its effect on several payment instruments.

### **2.1.4.5 Digital Signatures and Documents**

The Financial Supervision and Regulations Strengthening Law No. 2297, which modifies the Banks and Financial Entities Law, establishes that the financial sector transactions may be carried out through electronic means, granting to these transactions and to the information contained and transmitted as electronic messages of data, the same legal, judicial and probatory evidence of a written document with autograph signature.

Likewise, it established that the SBEF shall issue the security regulation for the electronic transactions and transmissions carried out by the financial intermediation entities and, within the payments

system framework, the BCB shall establish the regulatory framework of the digital signature to grant safety and effectiveness to electronic transfers.

In this regard, the Informatics Safety Minimum Requirements issued by the SBEF and the Digital Signature Regulation for the Payments System issued by the BCB is in effect.

Currently the “Law of Data Electronic Communication, Electronic Contracting and Electronic Signatures” which is a legal package of greater scope for all matters related to documents and digital signatures, is under discussion among the Superintendency of Telecommunications (*Superintendencia de Telecomunicaciones*, SITTEL), the SBEF, the BCB, the Agency for the Development of the Information Society in Bolivia (*Agencia para el Desarrollo de la Sociedad de la Información en Bolivia*, ADSIB) and the Vice minister of Justice.

## 2.2 THE ROLE OF THE FINANCIAL INSTITUTIONS: PAYMENTS

### 2.2.1 The Banking Sector

The Banks and Financial Entities Law rules the activities of financial intermediation and of financial auxiliary services. Within this framework, the activities ruled include receiving money from individuals or corporations as deposits, mutual loans or under other modality for their joint placement with the capital of the financial entity in credits or investments; to issue, discount or trade securities and other debentures representative documents; provide services in general bonded warehouses; issue travelers’ cheques and credit cards; carry out sale, purchase and exchange of foreign currencies; carry out trusts and mandates of financial intermediation, manage third parties funds, operate clearinghouses and give guarantee and banking surety bond; carry out factoring and financial leasing transactions, if these activities are carried out by financial intermediation entities; and to rate financial system entities.

The Bolivian banking system is made out of 12 banks, out of which 3 of them are foreign banks.

**Table 2: Banks of the Bolivian Banking System**

<i>National banks</i>	<i>Foreign banks</i>
Banco Nacional de Bolivia S.A.	Banco Do Brasil S.A.
Banco Santa Cruz S.A.	Citibank N.A. Sucursal Bolivia
Banco Mercantil S.A.	Banco de la Nación Argentina S.A.
Banco Unión S.A.	
Banco Ganadero S.A.	
Banco Económico S.A.	
Banco Solidario S.A.	
Banco de Crédito de Bolivia S.A.	

*Fuente: BCB.*

Currently banks offer a broad range of financial products to the public. Among them, services related to credit and debit cards and funds transfers among accounts of the same institution through Internet banking. Banks also carry out direct debit transactions at intrabanking level, charged to credit card or current account.

### **2.2.2 The Non-Banking Sector**

The non-banking financial sector corresponds to the financial sector specialized in Microfinance. In the last two years it has experienced an accelerated expansion and growth, both in volume of transactions as in number of clients served, acquiring more and more relevance within the national financial system and contributing to integrate the financial system to an important part of the low income population.

The Supreme Decree No. 24000 established the bases for the creation, organization and operation of the Private Financial Funds (*Fondos Financieros Privados*, FFPs) as stock corporations specialized in the intermediation of resources to small borrowers and micro businesses, that Non Governmental Organizations (NGOs) specialized in this type of activity, could better comply with their objectives through the integration of companies with risk capital, authorized to take in deposits. Seven FFP subject to the SBEF's control operate within this framework.

The Banks and Financial Entities Law facilitated the incorporation of the Savings and Credit Unions (*Cooperativas de Ahorro y Crédito*, CAC) to the non-banking financial sector with the rights and obligations inherent to entities that carry out financial intermediation with resources of the collectivity submitted to the SBEF's control. At present 21 CAC are operating.

This sector also comprises the Housing Loans and Saving Mutual Companies. The Housing Loans and Savings System made up by nine mutual companies at national scale, was created by Executive Order No. 07585 of April 20, 1966, as a result of the need to continue housing financing under a private model. Its operations are included within the provisions contained in the legal framework in force and the regulation provided by the SBEF.

As to the payments of services provided by entities that belong to the non-banking sector, the Private Financial Fund PRODEM, S.A. develops an Electronic Purse, with national owned technology. The Purse allows storing predetermined amounts in the magnetic card, which can be spent in any purchase. The application of this instrument is relatively recent, and, therefore has not achieved yet a broad dissemination.

### **2.2.3 Other Institutions that Provide Payment Services**

The main institutions of the private sector which offer low value payment services are the Cheque Clearinghouse and the credit card administrators.

The Cheque Clearinghouse is managed by Administradora de Cámaras de Compensación y Liquidación, (ACCL), S.A., which was recently created. In this clearinghouse transactions made by

the banking entities authorized by the SBEF to operate current accounts with the public are cleared on a net multilateral basis. These transactions are settled at the BCB by using the current accounts and legal reserves of participants and the settlement account of ACCL, S.A.

Also, there are two private entities which manage the clearing and settlement of debit and credit cards: ATC S.A. and LINKSER S.A.

## **2.3 THE ROLE OF FINANCIAL INSTITUTIONS: SECURITIES**

### **2.3.1 Securities Market Participants**

The brokerage houses are stock corporations which act as intermediaries between the supply and demand of securities. The brokerage houses undertake the legal, economic, moral and professional solvency responsibilities and for their incorporation they must comply with the requirements demanded by the LMV and by the Bolivian Stock Exchange (Bolsa Boliviana de Valores, BBV).

The main roles of the brokerage houses according to the LMV are: i) securities intermediation on behalf of third parties and by their own account; ii) advisory services rendered on matters of securities intermediation and financial advisory services; iii) manage portfolio investments.

At the date of publication of this report, there are 9 brokerage houses registered, which have to carry out their transactions through the BBV. The volume transacted by the brokerage houses in the trading floor during 2003 reached USD 3.1 billion in debt securities and USD 4.4 million in equity securities.

As to institutional investors, the main ones operating in Bolivia are:

- Mutual Funds Managing Companies (SAFIS), six of them were operating in 2003, and Open Investment Funds (Fondos de Inversión Abiertos, FIA), thirteen of them also operating at that time. In 2003, these companies as a whole managed the equivalent to USD 229 million with a total of 15,938 clients.
- Pensions Funds Managing Firms (Administradoras de Fondos de Pensiones, AFP), two in Bolivia which basically manage two funds, the Collective Capitalization Fund (*Fondo de Capitalización Colectiva*, FCC) with a value of USD 1.5 billion and the Individual Capitalization Fund (*Fondo de Capitalización Individual*, FCI), with a value of USD 1.5 billion.
- Insurance and Reinsurance Companies, nine of them operating in 2003, which managed their investment portfolios and resources from common and professional risk for a value of USD 309 million.



### 2.3.2 Exchanges

The Securities Market Law establishes the following requirements for the incorporation of exchanges in the country:

- To be incorporated as a Stock Corporation, with a minimum of 8 stockholders.
- To have a board of directors having at least five directors.
- To have the necessary organization, infrastructure and internal regulation, to ensure an efficient, fair, competitive, ordered and transparent market.
- To have proper means and procedures to ensure a unified and efficient market for its participants.

The only exchange currently operating in Bolivia is the BBV. Its main functions in the Bolivian stock market are the following ones:

- To register the securities.
- To provide its members facilities for securities trading.
- To offer true and timely information about the securities traded in its trading floor and about their issuers.
- To solve controversies among its members.
- To supervise brokerage houses.

### 2.3.3 Securities Clearance and Settlement Institutions

As mentioned above, the EDV was created in 2002, but at the date of publication of this report, it has not fully implemented its stock market transactions. However, it is expected to start full operations in 2005. Its main function shall be the dematerialization of securities and their transformation in book entry form. This procedure will allow that the transactions made by the stock brokers in the BBV be cleared in the registries of this entity in a net multilateral form. The settlement of transactions cleared by the brokerage houses shall be carried out under the scheme of delivery versus payment (DVP), which assures the settlement by decreasing underlying risks. Likewise, by instructions of the Central Bank, the settlement of payments corresponding to stock exchange transactions shall be carried out in a settlement account opened by the EDV in the BCB, which assures that the settlement occurs timely.



Since stock brokers cannot open accounts in the BCB, they must provide funds for debit positions and receive the resources which result from their creditor positions in the current accounts and legal reserve of the financial system banks, by signing contracts with the clearing banks of their choice and through which they may access the large value payments system to settle their transactions.

Although, the EDV has been already created, it is not fully operating yet since securities cannot be traded in a dematerialized form at the BBV.

## **2.4 THE ROLE OF THE CENTRAL BANK**

### **2.4.1 Monetary Policy and Other Functions**

The BCB executes the monetary policy and regulates the amount of money and credit volume according to it. For this objective, it may issue, place and acquire securities and carry out other open market transactions. The Law of the Central Bank of Bolivia sets forth that:

- The BCB may define compulsory reserves for Banks and financial intermediation entities. Their composition, amount, estimation form, characteristics and remuneration, are established by absolute majority votes of the BCB's Board. The control and supervision of the legal reserve correspond to the SBEF.
- The BCB exercises in an exclusive way the function of issuing the monetary unit of Bolivia, that is the peso Boliviano, in form of notes and metallic coins, which are the means of legal tender payment, with the denominations, dimensions, designs and colors provided for and published by its Board.
- It is in charge of controlling and strengthening International Reserves to allow the normal operation of Bolivia's international payments.
- The BCB determines the exchange rate regime and executes the exchange rate policy, regulating the conversion of the peso Boliviano in regard to foreign currencies and the procedures to determine the domestic currency exchange rates. Likewise, the BCB is empowered to rule foreign financial transactions, carried out by private and public entities or individuals.
- As Financial Agent of the Government, the BCB renders services related to contracting external credits, on behalf of the State makes capital contributions to international financial bodies, prior deposit of those funds in the BCB; participates in the issuance, placement and administration of public debt instruments, carries out trust transactions, participates in every renegotiation and conversion of the external public debt, and others activities as necessary to comply with its function of agent of the government.

- In regard to the financial system, all the entities of the system are submitted to the regulatory competence of the BCB. To take care of liquidity needs, in cases duly justified and rated by its Board, by absolute majority of votes, the BCB may grant credits to banks and financial intermediation entities for ninety-day renewable terms.

Pursuant to the Law, the Central Bank of Bolivia is the only monetary, exchange rate and payments system authority of the country and its objective is to obtain the stability of the internal purchasing power of the currency.

### **2.4.2 Involvement in the Payments System**

Since June 1998, with the approval of the Property and Popular Credit Law No. 1864, article 3 of the Law of the Central Bank of Bolivia (BCB) was modified conferring it the power to formulate the policies of general application on payments system matters.

In this regard, the Central Bank passed to play several roles related to the Payments System. The first of them, which has been always performed by it, was as operator of the large value payment system.

This system settles most of the large value payments of the economy, which belong to banks, to non-banking financial entities, to the central government, to public institutions and to the BCB itself. The BCB is in the process of modernizing its large value payments system; since December 2004 the Large Value Payment System (SIPAV) was released and constitutes an efficient, safe and modern system that allows the transfers of on-line, gross value and real time funds. It also incorporates the on-line consultation application for movements and balances, and the credit application which allows participating entities to have access to intraday and overnight credit resources, fully collateralized.

The Central Bank also plays a catalyst role among the different actors of the payments system, promoting the establishment of new entities and instruments that facilitate and support the reform and modernization of the sector. Within this framework, it carries out coordination meetings with entities that present initiatives for electronic clearance of payment instruments in accounts of the BCB, within the framework of its regulation of Automated Clearinghouses and Clearance and Settlement Services.

The Cheque Clearinghouse is managed by the Administradora de Cámaras de Compensación y Liquidación, S.A., whose main shareholder is the ASOBAN.

The role of regulator is enforced by the BCB through the publication of administrative regulations, which must be in line with the powers that the Law confer to it; thus, the definitions for the use of digital signatures in the payments system are under its competence, as well as the regulation related to the incorporation and operation of the Clearinghouses and Entities which provide Clearance and Settlement services.

Finally, the role of the payments system overseer, which by international consensus must correspond to Central Banks, is not officially established in the country with substantive rules to empower the BCB; however, due to the importance that the sector has for monetary transactions of the BCB and for the stability of the financial system, this activity is performed by the BCB, who has to develop the necessary instruments to support and strengthen these capabilities.

## **2.5 THE ROLE OF THE BANKING SUPERVISION AUTHORITY**

### **2.5.1 Supervision of Financial Entities**

The supervisory function of the Superintendency of Banks and Financial Entities (SBEF) has the objective to strengthen the powers of all the actors to identify, measure and monitor the risks of each financial intermediation entity, as well as of the system as a whole; thereby contributing to the development of a healthy, efficient and solvent financial system in benefit of the public savings safety.

Since 1989, the SBEF has been adopting, within the framework of its powers, authorities and limitations, a series of control and prudential measures in the Bolivian financial system, with the objective to promote a culture based on risk diversification, oriented on its turn to achieve higher equity levels in banks and consequently, a more solvent financial system, for safekeeping the resources of the public and of third parties.

The control and prudential measures are among others:

- Accounting standard. Besides standardizing the accounting practices in the financial system, the SBEF has introduced standards and other practices to achieve: i) a proper evaluation of the banking assets and ii) the recognition of real profits, coming from a real cash flow.
- Prudential regulations in regard to portfolio rating and assessment. To prevent problems with the credit portfolio.

As a whole, these two standards oblige banks to disregard revenues for past due loans, lost or doubtful credits and to create reserves for such assets.

- Regulation of Administrative Sanctions. It empowers the SBEF to impose administrative sanctions, -including fines and suspension of functions-, applicable both to the financial entity as well as to its authorities and officers, as result of violations to regulatory or legal provisions, or otherwise, for acts of negligence or recklessness.

Besides, the Superintendency of Banks and Financial Entities created a public regime for credit exposures. This tool allows bankers and authorities to have a better knowledge and evaluation of their risks, at the same time that represents a valuable source of information for the system.

### 2.5.2 Deposits Insurance Schemes

Currently, the Bolivian legislation is not regulating deposit insurance schemes; however, it is analyzing the incorporation in the Law of the concept of a Deposit Guarantee Fund, with legal recognition and its own equity. This Fund would manage an autonomous equity constituted by the contributions of banking and non-banking financial intermediation entities. Thereby, the deposits of the public will be partially guaranteed.

The Banks and Financial Entities Law No. 1488 of April 1993, amended by Law No. 2297, sets forth the solution process destined to protect the deposits of the public in cases of intervention of financial entities, which allows that these deposits be transferred to other financial entities, receiving for clearance first rate assets or investments.

The same Law creates the Financial Restructuring Fund (*Fondo de Reestructuración Financiera*, FRF) with the objective to support the solution procedures of intervened financial entities. Up to January 01, 2005, the support mechanisms under the FRF will be carried out by the Central Bank of Bolivia for account of the Treasury, whose total contribution cannot exceed 50% (fifty percent) of the preferential debentures of the intervened financial intermediation entity. From January 2005 on, the total contribution of the FRF cannot exceed 30% (thirty percent) of preferential debentures of the intervened financial intermediation entity. Likewise, the Law states that as long as the FRF is not operating, the support given by the Central Bank of Bolivia to solution procedures shall be cleared by the General National Treasury through the issue of long term bonds.

Finally, this Law sets forth that the contributions of the financial entities shall be carried out quarterly based on the total deposits of the public in general and shall be credited to the account opened in the Central Bank of Bolivia, the contribution fee was gradual for five years, starting with 0.15 per thousand up to 1.0 per thousand during the 2005 period. When the individual contributions of the financial entities reach 5.0 percent of deposits of the public, the BCB may exempt the financial entity from this contribution.

### 2.5.3 Anti-money Laundering Measures

The Bolivian State established in the Bolivian legislation the typification of the illicit revenues legalization felony. It is a complete provision, as it covers all the stages or circuits of capitals legalization process, regardless whether the main illegal conduct was committed abroad or not as long as it is typified as a felony in both Nations.

With the modifications made to the Criminal Code through Law 1768 of March 10, 1997, was established the seizure regime of goods and resources derived from this felony, the regime of administrative violations and the procedures to impose sanctions to financial entities and to their directors, managers or administrators.

In addition a Financial Intelligence Unit (*Unidad de Investigaciones Financieras*, UIF) was created. The Supreme Decree 24771 of July 31, 1997, regulates the UIF as the sole entity to carry out financial

investigations for the legalization of illicit revenues derived from drug traffic, public corruption and criminal organization felonies.

The UIF has functional, operational and administrative autonomy, that is, it has been structured as a deconcentrated entity, which allows it to be free of all type of interference in the development of its activities. The mission of the UIF is to prevent, detect, analyze and report financial information already processed to the competent authority, about activities derived from drug traffick, public corruption and criminal organizations linked to money-laundering.

## **2.6 THE ROLE OF THE REGULATORS**

The Superintendency of Pensions, Securities and Insurance (SPVS) is the body that controls, regulates and supervises the sectors dedicated to the activities of the three areas under its jurisdiction (pensions, insurance and securities), guaranteeing the markets transparency and the literacy of economic agents.

The SPVS was created by the Property and Popular Credit Law on June 15, 1998, as part of a national administrative process. Its activities are ruled by the laws of Pensions, Securities Market, Insurance, and Property and Popular Credit. This Law merged in a sole Superintendency the three previously existing superintendencies for each one of the markets, as the activities of these three sectors are closely linked. It was necessary, therefore, that the standards, supervision mechanisms and systems that rule them be properly coordinated.

The fundamental mission of the SPVS is to promote the sustained development of the pensions, securities and insurance sectors, in a transparent, organized form and within a framework of prudence that avoids unnecessary risks that guarantee a controlled growth.

This mission is complied with by supervising and regulating the actors of the three markets; providing true, complete and timely information both to the institutions that render services as well as to the growing universe of users; and educating the population about their rights, obligations and benefits.

The follow-up and supervision of the issuer entities of the financial and non-financial private sector have generated significant results in regard to the delivery of financial and operational information.

Among the supervision functions, besides the follow-up through the information provided by the different agents of the securities market, special inspections are carried out that allow corroborating the data received.

In the first 2000 semester, with the support of the IT Direction of the SPVS the operation of the Transactions Monitoring System was consolidated, which allows having an extensive data base of all the transactions made by the Brokerage Houses. This contributes to control that these transactions be carried out according to the provisions established in the regulation in force and that the information therein contained be truthful, sufficient and timely. In addition, new alerts are being implemented in order to allow a more efficient monitoring.

Work was also carried out with the IT Direction so that the Brokerage Houses and Mutual Funds Administration Companies send daily via electronic mail the evaluation of their own portfolio, clients and funds. Regulations were issued in regard to the delivery of the report of Portfolio Evaluation and the electronic format to present the information. This report is part of the Validation and Assessment Control System that was also developed in its initial stage.

## **2.7 THE ROLE OF OTHER PRIVATE AND PUBLIC SECTOR ENTITIES**

### **2.7.1 Association of Private Banks of Bolivia (ASOBAN)**

ASOBAN carried out the development and modernization of the cheque clearinghouse, through the creation of the Administradora de Cámaras de Compensación y Liquidación (ACCL S.A.). This entity promotes the development of an automated clearing system of electronic orders, known as Automated Clearinghouse (ACH). In the first phase, it will allow to make more efficient the payments to the public sector entities through the national private banking.

On the other hand, ASOBAN provides the digital signature certification service, within the framework of a contract subscribed with an international firm, Verisign.

### 3 PAYMENT MEDIA USED BY NON-FINANCIAL ENTITIES

#### 3.1 CASH

The monetary unit in circulation is the Boliviano (Bs), in force since January 01, 1987, according to Law 901 of November 28, 1986. The Boliviano is legal tender and, therefore discharges of any obligation in the country. However, payments in foreign currency are allowed, provided the parties usually agree. The use of the US dollar (USD) is common, which results in Bolivia being a practically bimonetary economy.

The national currency keeps its common monetary functions, despite the high financial dollarization in the country or the use of US dollars as value reserve. The Boliviano is basically used as a payment means in daily transactions.

**Table 3: Notes and Coins in Circulation**  
(In millions of Bolivianos, as of December 2004)

<i>Monetary material in cuts</i>	<i>Number of pieces</i>	<i>Value</i>	<i>%</i>
Notes			
200	7,040,425	1,408	32.9%
100	15,054,440	1,505	35.1%
50	11,442,420	572	13.4%
20	12,684,000	254	5.9%
10	22,370,900	224	5.2%
5	20,330	0	0.0%
2	1,441,455	3	0.1%
Subtotal	70,053,970	3,966	92.6%
Coins			
5	29,037,062	145.2	3.4%
2	24,336,585	48.7	1.1%
1	61,047,766	61.0	1.4%
0.5	72,270,958	36.1	0.8%
0.2	76,049,470	15.2	0.4%
0.1	92,747,150	9.3	0.2%
0.05	19,995,580	1.0	0.0%
0.02	19,949,998	0.4	0.0%
Subtotal	395,434,569	316.9	7.4%
Total	465,488,539	4,283	100.0%

Source: BCB.



The Central Bank is the only issuer of legal tender notes and coins of obligatory, organizes its printing and minting through international public bidding adjusting to the market needs as to quality, size, cut, amounts and ratio of necessary cuts.

The year 2004 was characterized by the uncertainty caused by the economic situation due to the adverse social and political environment and the application of the Financial Transaction Tax (*Impuesto a las Transacciones Financieras*, ITF<sup>5</sup>). Consequently, the public showed its preference for liquidity, with an increment of demand deposits, notes and currency in circulation which led to a growth of more liquid monetary aggregates. Likewise, the decrease of deposits, most of them in US dollars, determined the drop of the broadest monetary aggregates which include foreign currency.

The most liquid monetary aggregates, cash and private money M1 and M'1, increased in nominal terms by 11% and 10%, between 2004 and 2003. On their part, the broader monetary aggregates such as the M'3 and M'4 decreased by 2.4% and 4.4% respectively, in the same period. In real terms, in 2004, the growth of all the aggregates was lower than the one registered during the 2003 period.

The public's preference for currency, determined the growth of monetary aggregates in national currency, that is in M1 and M3, 11% and 12% respectively. This increment in cash in national currency is explained by the slower pace of the Boliviano depreciation, the levels of controlled inflation and the ITF implementation imposing a tax on financial transactions with a proportional fee of 0.3%

There was an important decrease in M'1 which include cash and demand deposits in national and foreign currency, because the public showed preference for longer term deposits since they are excluded of the application of the ITF.

## **3.2 PAYMENT MEANS AND INSTRUMENTS OTHER THAN CASH**

### **3.2.1 Cheques**

In low value payments, after cash, cheques are the mostly used payment means in Bolivia, both in terms of transactions as well as in terms of amounts. During the 2004 period, the movements of the Cheque Clearinghouse (*Cámara de Compensación de Cheques*, CCC) recorded a total of 1,859,929 cheques settled during the year, out of which 60% correspond to national currency for an amount of Bs 24.1 billion and the remaining 40% refers to foreign currency for an amount of USD 4.1 billion. These transactions made with cheques represent a decrease of 14% in the number of transactions and 18% in value in regard to the 2003 period. This decrease both in number as well as in value was the result of the implementation of the new tax to financial transactions since July 2004.

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<sup>5</sup> The Financial Transactions Tax created by Law 2646 of April 01, 2004, imposes a tax on financial transactions with a proportional fee of 0.3% during the first 12 months of their application and of 0.25% during the next twelve months. This tax is neither imposed on savings accounts under USD 1,000 nor to State institutions, diplomatic missions or services payment. Accounts in national currency and Housing Promotion Units (Unidades de Fomento de Vivienda, UFV) are also exempt of this tax.



The total amount of transactions in 2004 that passed through the CCC represented 0.84 times the GDP, data which shows the importance of this payment means and shows evidence of the low development of alternative payment instruments such as credit and debit cards, among others.

**Table 4: Payment Instructions Processed by Chosen Interbanking Transfer Systems**  
(value of transactions)

	2001	2002	2003	2004
Low value systems				
–Clearinghouse (millions of USD)	9,579	9,022	8,758	7,122
<i>In local currency</i>				
(millions of Bs)	26,304	26,191	26,400	24,148
<i>In foreign currency</i>				
(millions of USD)	5,592	5,364	5,299	4,081
Large Value systems				
–Process through the BCB (millions of USD)	32,868	34,625	28,159	23,943
<i>In local currency</i>				
(millions of Bs)	88,222	88,826	96,753	99,370
<i>In foreign currency</i>				
(millions of USD)	19,495	22,219	15,512	11,428

Sources: BCB and ASOBAN.

### 3.2.2 Direct Credits and Debits

Payments made by direct debits are not very representative yet in Bolivia. Some banks offer their clients the payment of some public services such as telephone, electricity and water and private services as payment of school pensions. The payer must have an account in the institution through which he aims to make the payment, that is, at present this service is exclusively available at the intrabank level.

Transfers of low value funds for the payment of salaries of an account to different account holders, present a low relevance as it is a manual procedure operation.

### 3.2.3 Payment Cards

#### a) Debit and credit cards

There are two companies that provide these services through the banks of the system: Administradora de Tarjetas de Crédito, S.A. and LINKSER, S.A.

As of December 2004, there were around 425,486 debit cards in the country, recording an increment of 70,089 cards (20%) in regard to December 2003. There was a 42% increment in payments value and 45% in transactions volume in regard to the 2003 administration. This increment, both in value

as in number of transactions, is basically due to the extension of the banking infrastructure to offer means for cash availability, as an alternative to presenting cheques in a bank counter, and the possibility to get cash even outside of the national territory.

The number of credit cards as of December 2004 presented a slight decrease (1%) in regard to December 2003. Presently, there are about 76,193 activated cards, with operations representing a value of USD 107 million, slightly higher (4%) than the one registered in 2003. As to the volume of transactions, it presented a 6% increment in the same period.

Some stored value cards are issued by the PRODEM Private Financial Fund (*Fondo Financiero Privado*, FFP). The user has a limit up to which he can use the card, being able to reload it by making new deposits on his account. These cards do not require an on-line authorization (electronic purse). This payment instrument shows an important growth since the number of cards in circulation have reached 81,928 as of December 2004; likewise, the volume of transactions and the value of operations had an increment of 76% and 29% respectively. This important growth shows clients acceptance of this new payment instrument.

**Table 5: Number of Payment Cards in Circulation**

	2001	2002	2003	2004
Cards with the cash withdrawal function	530,555	535,832	480,793	583,607
Cards with the debit / credit function	520,367	513,215	432,579	501,679
out of which:				
Debit cards	430,628	396,381	355,397	425,486
Credit cards	89,739	116,834	77,182	76,193
Cards with value storing capability <sup>(a)</sup>	10,188	22,617	48,214	81,928

Sources: Administradora de Tarjetas de Crédito S.A. (ATC) and LINKSER S.A.

<sup>(a)</sup> Information corresponding to Prodem FFP S.A.

**Table 6: Payments Made with Cards**

(volume of transactions)

	2001	2002	2003	2004
Payments with cards	1,934,092	2,388,945	2,576,853	3,311,167
Debit	122,350	199,095	509,844	738,758
Credit	1,810,764	2,003,028	1,514,619	1,602,275
Stored value <sup>(a)</sup>	978	186,822	552,390	970,134

Sources: Administradora de Tarjetas de Crédito S.A. (ATC) and LINKSER S.A.

<sup>(a)</sup> Information corresponding to Prodem FFP S.A.

**Table 7: Payments Made with Cards**  
(value of transactions in thousands of USD)

	2001	2002	2003	2004
<i>Payments with cards</i>	93,263	155,323	216,135	249,879
Debit	4,230	5,533	13,871	18,478
Credit	88,984	106,724	102,999	103,177

Sources: Administradora de Tarjetas de Crédito S.A. (ATC) and LINKSER S.A.

<sup>(a)</sup> Information corresponding to PRODEM FFP S.A.

### **b) Automatic tellers machines (ATMs) and EFTOS**

The numbers of ATM's and cash dispensers grew from 453 in 2003 to 511 in 2004 (58 additional dispensers), mainly due to the fact that other financial institutions (mutual companies and cooperatives) started operating in this system, involving a higher demand of the public for ATMs, improving the service of their liquidity needs and business opportunities.

## **3.3 NON-CASH GOVERNMENT PAYMENTS**

The Treasury Payment System (SPT) started operating on January 02, 2001. This system allows to carry out the payment of beneficiaries of the Treasury of the Nation through electronic transfers to the BCB, and from it to the Financial Entities to credit the current accounts or savings accounts that the providers to the State hold in these entities. These credits are destined to the payment in general terms of payrolls, contractors, providers and State creditors.

There are two cycles of transactions, at 11.00 a.m. and at 2:30 p.m., in which often validation of the destination accounts, the BCB sends to the participating banks the corresponding information, so that they can carry out their credit process to the accounts of the State beneficiaries. In case of existing erroneous files, the return of the respective files must be made within a fixed schedule.

The Treasury Single Account (*Cuenta Única del Tesoro*) was opened in the BCB to carry out these transactions, on which resources generated by the Public Entities are deposited. Each entity maintains their individual financial availabilities in a separated and individual manner through transfer passbooks on which the TGN processed the funds transfers.

The implementation of the SPT has resulted in the almost complete elimination of cheques from the TGN when transferring the payments processing through the national banking. In 2004, the total amount of payments channeled through the SPT was about Bs 12.6 billion.

## 4 PAYMENTS: INTERBANK EXCHANGE AND SETTLEMENT CIRCUITS

### 4.1 THE REGULATION FRAMEWORK FOR CLEARINGHOUSES

The BCB through Board Resolution 138/2003, approved the Regulation of the Automated Clearinghouse and Clearance and Settlement Services, within the framework of the powers that Law 1670 conferred to it and considering the need to have regulatory provisions to establish minimum guidelines for the clearance and settlement of the payment instruments, thus fostering the operation of the clearinghouses based on international standards and best practices of the low value payments system.

The general objective of this is to limit and/or reduce the risks associated with the operation of the Automated Clearinghouses (CEC) and the Entities that provide Clearance and Settlement Services (ESCL), establishing appropriate rules about the legal validity of clearing and settlement, as well as the establishment of guarantees to insure the compliance of the participants' obligations, minimizing legal risks, providing a proper regulatory framework and ensuring that payments made through the CEC be made in an safe and efficient manner.

The specific objectives of the regulation<sup>6</sup>, are hereinafter described:

- To have a sound legal basis for all relevant issues in regard to operations and functions of the CEC and the ESCL.
- To ensure that the clearinghouse participants assume the risks derived from participating in this type of net clearance systems, establishing procedures that allow them to manage and contain the credit and liquid risks.
- To establish the rights and responsibilities of the CEC as well as those of their participants.
- To make sure that these system have same day settlement.
- To reduce credit and liquidity risks through the use of the accounts in the BCB for the settlement of the CEC and the ESCL positions (settlement in central bank's money).
- To promote the safety and reliability of operational systems of the CEC and ESCLS.

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<sup>6</sup> Committee on Payments and Settlement Systems (CPSS), Bank for International Payments (BIS). Core Principles for Systemically Important Payment Systems, Basel, Switzerland. January 2001.

- To establish criteria that allows open access to all potential participants of these systems.
- To release the BCB from the responsibility of guaranteeing the settlement of clearinghouse transactions, by assigning the responsibility to each clearinghouse.
- To attain that the financial position of every participating entity of a clearinghouse be guaranteed, through the establishment of debt net position limits and settlement guarantees.
- To establish basic guidelines that every clearing and settlement process of the clearinghouses must meet, in order to reach a proper level of safety and efficiency.
- To ensure that the processing of every clearance operation be more efficient and safer through the use of informatics systems.
- To promote transparent governance of the CEC, through the supervision of the Superintendency of Banks and Financial Entities (SBEF) and to carry out periodic and special audits.

The main issues contained in the Regulation, which form the basic policies established for the operation of the CEC and ESCL within the framework the national payments system, are hereinafter described:

### **Incorporation and minimum capital**

The CEC are entities of financial auxiliary services incorporated as Stock Corporations and as such must obtain the Operating License from the SBEF, which, at the time of evaluating the license application, must verify compliance with the minimum requirements demanded in the Regulation. The minimum capital necessary for the incorporation of these entities is established in Bolivianos equivalent to three million (3,000,000) of UFVS (Housing Promotion Units). The ESCL are not obliged to comply with these requirements. However, according to the provision established in the Law and in the final paragraphs of the regulation, the supervisory bodies of these entities must consider including that rule in the specific regulations of the entities under their control.

### **Payment instruments**

The Regulation is defined in its conception to be applicable to a payment transaction started with any instrument. In other words, regardless of the payment instrument used (cheques, electronic transfers, etc.), the rules of the Regulation are applied to the clearing and settlement of the payments involved in these transactions. Likewise, the Regulation includes an article establishing the payment instruments covered by this rule, determining that the BCB may extend, with the approval of its Board, the use of other payment instruments.

- Cheques.

- Electronic fund transfers.
- Payment instructions generated from:
  - Securities transactions.
  - Direct debits.
  - Credit cards transactions.
  - Debit cards transactions.

### **Oversight**

Finally, it is established that the oversight body of the low value payments system managed and operated by the CEC and the ESCL is the Central Bank, with the objective to promote its smooth functioning and prevent systemic risks. The oversight function must be coordinated with the supervisory bodies, avoiding overlapping in regard to the competences of each entity.

## **4.2 LOW VALUE PAYMENT TRANSFER SYSTEMS**

In Bolivia have been identified two entities which carry out clearing and settlement activities:

- Administradora de Cámaras de Compensación y Liquidación, S.A. (ACCL), in charge of cheque clearing.
- Administradora de Tarjetas de Crédito, S.A. (ATC)<sup>7</sup>.

On the other hand, there is now under process a project of the ACCL S.A. to be implemented in the near future, called ACH, whose main activity will be the clearing and settlement of electronic fund transfers among parties through the financial sector entities and the Treasury of the Nation.

### **4.2.1 Cheque Clearing and Settlement**

The CCC is the central processing mechanism through which the Banks exchange the cheques deposited by their clients. It is managed by the ACCL according to the Regulation of the Automated Clearinghouses and Clearance and Settlement Services of the BCB.

The ACCL operates since November 2004, and is responsible for the clearing and settlement of transactions resulting from payment instruments. For this objective, the ACCL has an IT infrastructure through which it carries out the exchange and clearing of cheques for final settlement. The system used allows image transmission and automatic recovery of the data of the Magnetic

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<sup>7</sup> As of the date of publication of this report, there are two entities that provide these services to the national financial system: LINKSER, S. A. and ATC S.A.

Ink Character Recognition (MICR) line, which allows maintaining the balances of debit and credit net positions of their participants on-line. The Bolivian legislation does not allow yet carrying out truncation activities, thus cheques must be physically exchanged at the end of the process. The settlement of these transactions is made through the use of accounts in the BCB; in this process each bank pays its debt position and receives the funds of its net credit position through the settlement account of the ACCL S.A. in the BCB. Likewise, the system of the cheque clearinghouse, according to the regulations of the BCB, foresees the use of the digital signature as a safety mechanism in the clearing phase as well as in the settlement process. Currently, the clearinghouse channels transactions for an annual total amount of about USD 9.0 billion.

In order to ensure the daily settlement of these transactions, a limit for debt net multilateral position for each participant was established, made up by a fraction of the RAL Fund (*Fondo Requerimiento de Activos Liquidos - Liquid Assets Requirement Fund*), which the participant keeps in the BCB, with this collateral it can access a credit to settle its debt position, which has to be covered on the following day. Thus, the liquidity risk is eliminated and consequently, the systemic risk is minimized.

The following table shows the transactions made by cheques, as of December 2004.

**Table 8: Transactions of the Cheques Clearinghouse**

	2001	2002	2003	2004
Number of transactions	2,310,085	2,225,822	2,172,256	1,859,929
Value of transactions (thousands of USD)	9,579,000	9,022,000	8,759,000	7,122,000
Average amount per transaction (USD)	4,147	4,053	4,032	3,829

Source: ASOBAN.

## 4.2.2 Payment Cards

### Credit Card Clearinghouses (CTC)

These entities execute the clearing of payment orders originated by debit and credit cards, among banks that issue cards and banks that receive funds (beneficiaries' accounts).

At present, the process implies the exchange of electronic orders without digital signature among participants (banks) and the settlement is carried out by cheques issued by the debt banks. These cheques are exchanged in the cheques clearinghouse and increase the risks concentration in the system. In the future, it is foreseen to adjust these procedures to the provisions established in the Regulation of Automated Clearinghouses and Clearance and Settlement Services, and positions will be settled in central bank's money, on the accounts held at the BCB.

Transactions started in automatic teller machines and points of sale terminals are carried out through the network of these entities. These services have been growing in importance since the public has become more familiar with their use. In addition, more commercial entities have joined the network of points of sale, allowing their clients to make direct payments with debit or credit cards.

Table 9 shows the volume of payment transactions with debit and credit cards.

**Table 9: Payment Transactions with Cards**

	2001	2002	2003	2004
Number of transactions (thousands)	1,934	2,388	2,578	3,311
Value of transactions (thousands of USD)	93,263	155,323	216,136	255,030
Average amount per transaction (USD)	48	65	84	77

Sources: ATC, LINKSER S.A. and Prodem FFP S.A.

### 4.2.3 Risk Control Mechanisms in the Clearinghouses

#### Multilateral net debit position limit

In order to reduce the risks that participants introduce in a payment system, international standards, are call for settlement of transactions at on a same day basis. In this respect, the Regulation establishes that each participant must have defined a multilateral net debt position limit that constitutes the maximum amount that is guaranteed it can settle at the end of the day with its own funds or through the liquidity facilities made available by the BCB. The mechanisms for processing transactions of each CEC or ESCL must verify and control during the clearing process the multilateral position of each participant comparing it with its limit.

#### Liquidity credits

To ensure the same day settlement, the BCB makes available to participants credit facilities for the settlement of debt positions in the clearinghouses with guarantee of the RAL Fund. The Regulation imposes more onerous conditions for this type of credits, in order to create disincentives to their utilization. They are offered overnight and with an interest rate of 200 basic points above to the interest rates determined by the Open Market Transactions Committee which are applied to liquidity credits with the RAL Fund guarantee.

#### Settlement

The Regulation assigns the settlement responsibility to the participants themselves of each CEC or ESCL, eliminating the possibility of an automatic overdraft of their accounts in the BCB and in turn,



establishes liquidity credit mechanisms properly implemented as to their timeliness and collateralization. In this regard, the BCB does not carry out the settlement of transactions executed among third parties (participants and CEC) but provides the accounts so that the participants themselves could provide the funds necessary to cover their debt positions through credits to the settlement account of the CEC, in order to process the payment to participants with a credit position.

### **4.3 LARGE VALUE PAYMENT TRANSFER SYSTEMS**

The large value payments system is a system in which, in general terms, very few large value and time critical transactions are executed, typically interbanking transactions. The BCB, for the functions that the Law has conferred to it, assumed the responsibility for developing an electronic payment system objective to automate and facilitate payments among financial entities and from them to the BCB.

Since 1999, the BCB started the development and modernization of the large value payment system. To this end, it approved the Board Resolution No. 070/2001 that regulates the SIPAV. In a parallel manner, it fostered the design of an IT system that allows carrying out this type of transactions.

Also, during the 2003 period the conceptual design of the SIPAV was elaborated and approved, defining it as a real-time gross settlement (RTGS) system, composed by a transactional electronic system, with its own database and appropriate security, and a safe communications channel, which would allow participants to connect with the BCB to make their payments and access facilities of immediate liquidity.

Once it started working, the SIPAV has operated through electronic messages originated in remote sites, through financial terminals connected on-line with the BCB, where the payment orders are settled.

Since its very beginning, it was foreseen that the SIPAV should comply with the Core Principles for Systemically Important Payment System. In this regard, it has the following features:

- Only participants authorized by the BCB have direct access to the SIPAV. Initially banks with current account and compulsory reserve at the BCB. Access criteria must respect the non-discrimination and transparency principles.
- Optimize time and resources, to achieve that operational procedures be practical, expedite and efficient, with proper safety controls.
- Grant autonomy to participants in regard to the management of their accounts.
- Generate more dynamics in the financial market, through the execution of real-time gross settlement transactions.

- Carry out transactions in a system with technology supporting an efficient, practical and safe messaging.
- Promote mechanisms that facilitate money circulation in the transactions made by economic agents, through automatic liquidity facilities.
- Ensure the finality and irrevocability of payments.
- Reduce and contain risks, particularly systemic risk, to preserve the stability of the system.
- Allow interconnection with systems owned by participants and other payment systems, such as clearinghouses, facilitating that the settlement of their transactions be made through the SIPAV.
- Achieve reduction of transactional costs.

The types of transactions that can be carried out through the SIPAV are classified in two groups, according to the nature and origin of the information:

- a) Based on information of the Participant itself: transfers (to other participants of the SIPAV and to other of its own accounts) and transfers to accounts of other entities in the BCB, which are not direct participants.
- b) Based on the information of the BCB: debits and credits for transactions made by the BCB.

Table 10 shows the evolution of the flow of transactions settled through the large value payment systems. For 2001, the annual value of the payment transactions that were carried out through the accounting system of the BCB represented approximately 4.1 times the annual value of the Gross Domestic Product (GDP) of the Bolivian economy, while in 2002 represented approximately 4.4 times the GDP and for 2003 and 2004 represented 3.6 and 2.8 times respectively the annual value of the GDP.

**Table 10: Large Value Transactions**

	2001	2002	2003	2004
Number of payments (thousands)	53,574	57,586	61,131	69,230
Value of transactions (thousands of USD)	32,868,000	34,625,000	28,161,000	23,943,000
Average amount per transaction (USD)	613,507	601,275	460,666	345,847

Source: BCB.

As can be observed, the demand in terms of number of payment transactions is low; however, the average value of each transaction is high in regard with the other systems.

It is important to highlight that, at present, many large value transactions are still made through the CCC, despite in this system is being associated to low value transactions.

#### **4.3.1 Risk Control**

Due to the high demand of liquidity, which characterizes a real-time gross settlement system, the SIPAV has credit mechanisms to ensure the timely provision of liquidity through collateralized credit facilities. They are: intraday credit, overnight credit and liquidity granted with the guarantee of the RAL Fund, as well as credits with guarantee of the RAL Fund for settlement of the clearinghouses.

The operations of administration, management and credit control, are carried out through the control and management module of the liquidity facilities.

### **4.4 CROSS-BORDER PAYMENT SETTLEMENT SYSTEMS**

The BCB provides cross-border payments service to the financial and public sectors through SWIFT, by means of foreign correspondent banks. The procedures for funds transfers to foreign countries are made using express requests in predefined formats, stating the account to be debited of the BCB and the corresponding credit as well as the city, currency and foreign bank account.

Both transfers from and to foreign countries requested by financial entities and public sector entities are settled in the extent in which transfers are ordered or instructions are received through SWIFT.

On the other hand, the BCB participates in the Agreement on Reciprocal Payments and Credits effective among the Central Banks of the countries members of the Latin American Association of Integration (*Asociación Latinoamericana de Integración*, ALADI) and the clearing system of transactions related to regional trade (imports and exports), whose net balances are settled on a fourth month basis. This cross-border payments mechanism only gives access to banks which comply with the requirements established by the BCB up the maximum limit of 10% of its net worth. The transactions made through this mechanism are described in item 8.4 of this report.

### **4.5 MAJOR PROJECTS AND POLICIES BEING IMPLEMENTED**

#### **4.5.1 Automated Clearinghouse (ACH)**

Among private initiatives, one of the most important and advanced that will be implemented in 2005 is a clearinghouse known as ACH, that will allow electronic clearing of payment orders among financial institutions, through electronic means and telecommunication networks, managed by a data processing center for their clearing on-line and settlement at the end of the day.

The ACCL will start the operation of clearinghouse, which is expected to modernize the payments process among clients of the participating entities across the country.

Through this system, it will be possible to make payment transactions to creditors and providers, both of the Municipalities and Governments as well as the Treasury of the Nation, which will be channeled directly from the financial management system of the public sector.

#### **4.5.2 Payment Systems Oversight**

With the aim to ensuring the safety and efficiency of the payment systems, which allows the soundness and promotes the stability of the financial system, it is foreseen to launch the implementation of the first phase of the project to establish the oversight function of the national payments system in 2005.

To exercise the oversight function, according to the experiences of the most advanced Central Banks in this topic, two essential aspects are established, the first one related to the importance of having a proper legal basis, and the second one about the need of having agreements among supervisors and overseers, which allow sharing relevant information and coordinated control of risks management. These issues will be considered for the implementation of this function by the BCB.

#### **4.5.3 Adjustments to the BCB Law**

As complement of the previous issue, it is necessary to adjust some legal provisions effective in Bolivia, in order to have a sound legal basis for the operation of payment systems and the control of inherent risks. The 1864 Law which modifies article 3 of the 1670 Law, empowers the Central Bank of Bolivia to formulate policies of general application on Monetary, Foreign Exchange and Payments System matters, for the compliance of its objective; however, this rule is not sufficient to regulate efficiently the operation of the Payments System.

Within this framework, one of the objectives is to review the Law of the BCB, to incorporate among other issues the rules relative to the payment systems, to reduce legal risks generated by participation in these systems, through establish accurate rules about the legal validity of netting, the legal enforcement of collateral obligations granted by the participants for the compliance of their obligations, as well as assign to the BCB the oversight function of the payments systems.

## 5 SECURITIES: MARKET STRUCTURE AND TRADING

### *INSTRUMENTS*

#### 5.1 FORMS OF SECURITIES

According to article 2 of the Securities Market Law, securities may be represented by physical documents or via book-entries.

#### 5.2 TYPES OF SECURITIES

According to article 2 of the Securities Market Law, in the market of Bolivia trade is permitted for securities regulated by the Commercial Code, securities issued by the Government of Bolivia and its entities, and securities that meet the following requirements:

- are created and issued according to a specific regulation;
- identify the beneficiary of the profits obtained through the issue;
- the public offering has been authorized by the Securities Superintendent; and
- represent the existence of an actual obligation assumed by the issuer.

Traded securities are classified as fixed income and equities. In the first group the following can be found:

- Short Term Corporate Bonds.
- Long Term Corporate Bonds.
- Trading Banking Bonds.
- Share Convertible Bonds.
- Central Bank of Bolivia Bonds.
- Treasury Bonds.

- Municipal Bonds.
- Negotiable Credit Notes Certificates.
- Bank Certificates of Deposit.
- Certificates of Deposit issued by the Central Bank of Bolivia.
- Deposit Payoff Certificates.
- Tax Payoff Certificates (over-the-counter).
- Bond Coupons.
- Fixed Income Deposits.
- Bills of Exchange (Stock Exchange Trading Desk).
- Treasury Bills.
- Fiscal Credit Notes (over-the-counter).
- Municipal Credit Notes.
- Promissory Notes (Stock Exchange Trading Desk).
- Debenture Stock.
- Securitized Loan Portfolio Securities.

The following are also equity securities:

- Shares not listed in the Stock Exchange (auction mechanism).
- Shares listed in the Stock Exchange (trading floor).

Pursuant to article 261 of the Commercial Code there are two types of shares:

- Common Stock: Each common share gives the holder the right to vote during the ordinary as well as the extraordinary Shareholders' Meetings.
- Preferred Stock: These shares establish preferential benefits. They do not give the holder the right to vote during ordinary Shareholders' Meetings, but only during the extraordinary ones.

### 5.3 SECURITIES IDENTIFICATION CODE

The slate codes can be found in various regulations and are as follows:

- Supreme Decree 25022 dated August 3, 1998, whereby the securities slate code is established for Corporate Bond issuers.
- Administrative Resolution 417 dated September 8, 2001, whereby the structure of the slate code for asset backed securities issued as a result of the securitization process is established.
- Administrative Resolution 1000, dated December 20, 2002, whereby the structure of the slate code used by the Central Bank to allocate the codes to issue Certificates of Deposit of the BCB (CD's) (Certificados de Depósito del Banco Central de Bolivia), and Treasury Bills, known as LTs (Letras del Tesoro General de la Nación) are established.
- Administrative Resolution 65, dated March, 12, 2004, whereby the structure of the slate code for Debenture Stock issuer securities, considered within an Issuers' Program, is established.

The code structure used by the Central Bank as the basis to allocate the slate codes to issue Certificates of Deposit of the BCB (CD's), Treasury Bills (LTs) and Treasury Bonds, known as BT's (Bonos del Tesoro de la Nación), issued via open market operations is as follows:

MXXXXAASS

Where:

M = Currency  
 N = Bolivianos  
 E = US Dollars  
 V = Maintenance Boliviano Value  
 Y = Euro  
 U = Bolivianos indexed to the Housing Promotion Unit (UFV)  
 XXXX = Terms in weeks

When securities are dematerialized (LTs and BT's) the first character starting from the left will be substituted by the letter "C" according to the instructions given by the Central Bank to the Securities Depository Entity.

AA = Last two digits of the year

SS = Number of weeks of the issue

## **5.4 TRANSFER OF OWNERSHIP**

The different types of transfer of ownership are established under Book Two, Title II of the Commercial Code, depending on the type of security.

### **Registered securities**

These securities are established by a regulation that stipulates that the owner must be registered in the registry of the originator of the security. Only the person registered both in the securities as well as in the corresponding registry will be acknowledged as the legitimate owner.

### **Order securities**

Order securities are those issued on behalf of a particular person, where it has been specifically stated that they are "negotiable". These securities are transferred by endorsement and delivery of the document, without needing the registration of the originator.

### **Bearer Securities**

Bearer securities are those that have not been issued on behalf of a specific person, whether they contain the word bearer or not. The simple fact of possessing the document is sufficient to establish ownership and the transfer is automatic.

When the Central Securities Depository begins its operations fully the transfer will be carried out in book-entry form.

## **5.5 PLEDGE OF SECURITIES AS COLLATERAL**

A security, by representing property, can be subject to property mortgages, as established in Title II, Chapter III, Section VI of the Civil Code. The pledge on the securities gives the creditor the right to be paid based on the value of the pledged goods, and privilege and preference over the other creditors.

## **5.6 TREATMENT OF LOST, STOLEN OR DESTROYED SECURITIES**

Securities that lack essential data for their identification or that have been lost, stolen or totally destroyed, can be replaced in the following way or be declared as having no value.



## **Registered Securities**

Registered securities can be replaced by the issuer without any judicial authorization, so long as it has been requested by the person under whose name they have been registered. Before the replacement takes place the issuer must publish an advertisement in a national newspaper on three consecutive dates stating all the necessary characteristics that identify the corresponding securities and clearly indicating their replacement. Replacement will not become effective until thirty days after the last published date. If during those same thirty days someone challenges the replacement by presenting the alleged lost securities, the operation can only be carried out by means of a court order.

## **Order securities**

Regarding negotiable securities, the following documents can be replaced by the issuer without the need of a judicial authorization.

- 1) Non-negotiable cheques, at the request of the beneficiary;
- 2) Negotiable cheques, at the request of the first beneficiary, as long as:
  - a) Thirty days have passed after the date of issuance, if issued within the country;
  - b) Three months have passed, if issued abroad to be paid within the country.
- 3) Order instruments, at the request of the first beneficiary; after the corresponding advertisement, mentioned in the case of registered securities, has been published and only thirty days after the last publication. If during that time someone challenges the replacement of the alleged lost instrument, the operation can only be carried out by means of a court order.

## **Bearer Securities**

Bearer securities may be replaced by means of a judicial authorization, once the legality of the circumstances has been proven.

## **5.7 LEGAL MATTERS CONCERNING CUSTODY**

Regarding securities, the Securities Market Law considers the segregation of accounts in the securities depository entities. At the same time, the custody arrangements carried out by the securities depository entity are legally protected in such a way so that third party creditors cannot claim the assets of the depository clients in the case of bankruptcy of the latter. However, for other custodian cases, this protection is not explicitly mentioned in the corresponding laws.

## **Mutual Funds**

Mutual Fund Managing Companies must only hire the custodial services of those Central Securities Depositories that have been authorized and registered with the Securities Market Registry for those Securities that have been registered with the Securities Market Registry.

For those securities that have not been registered at the Securities Market Registry and documents that represent assets different from securities, the Mutual Fund Managing Companies may only hire the custodial services of the Central Securities Depositories and of the Financial Institutions authorized by the Superintendency of Banks and Financial Entities, and whose minimal risk rating is BBB1.

### **Pension Fund Management Companies**

Article 40 of the Pension Law states that the pension fund managing company must maintain with the securities custody entities or with the securities depositories authorized by the Superintendency of Pensions, Securities and Insurance, securities that represent at least 95% of the value of the pension funds and of the Collective Capitalization Fund resources that they manage.

### **Insurance Companies**

Article 34 of the Insurance Law states that all securities that make up the resources for investment must be maintained in national or foreign Securities Depository Entities that meet all the requirements established in the Securities Market Law or the specific standards of the corresponding country.

## **MARKET STRUCTURE AND TRADING SYSTEMS**

### **5.8 PUBLIC OFFERING OF SECURITIES**

Pursuant to article 6 and the ones that follow of the Securities Market Law, a public offering is considered to be an invitation or a proposal made to the public in general or to specific sectors, carried out through the mass media, either personally or through authorized intermediaries, with the purpose of realizing any type of licit business in the securities market.

Any securities offering carried out by a brokerage house will always be considered as a public offering. By means of a specific resolution, the Superintendency of Securities will identify the stock exchanges abroad so that, by only complying with the registration and information requirements foreseen in the Securities Market Law, the instruments that are listed with them can be the object of a public offering in the Bolivian Securities Market.

The only exceptions to the public offering authorization are the TGN and BCB Securities issues since their own legal standards that endorse their issuance and public offering are sufficient. The legal documentation and records must be sent to the Superintendency of Securities so that they can be registered in the Securities Market Registry.

### **5.9 PRIMARY MARKET**

Pursuant to article 4 of the Securities Market Law, the primary market is the market where the public offering securities, with which the Government, the companies and other juridic persons as issuers participate in, are placed for the first time at a given price, whether it is done directly or by means of authorized broker-dealers in the sale of the issues to the public.

In case of a Securities Public Offering, the authorization of the Superintendency of Pensions, Securities and Insurance as well as the registration in the Securities Market Registry is required.

## **5.10 SECONDARY MARKET**

Pursuant to article 5 of the Securities Market Law, the Secondary Market includes all transactions and trading carried out with the public offering securities, previously issued and placed by means of the authorized broker dealers.

The volume traded in the securities market in 1998 was USD 4.9 billion; by 2002 it had decreased to USD 2.97 billion; however during this period (2002-1998) the total volume traded was over USD 4 billion. As of December 2003, the amount traded decreased to USD 1.9 billion and as of December 2004 the volume reached USD 1.7 billion.

Regarding the trading venue, in 1998 USD 1.7 billion were traded on the Trading Floor which increase to USD 2.4 billion by 2002; however, in 2001 the maximum amount of USD 3.8 billion was reached. Contrary to this situation, the off-floor trading reached USD 3.2 billion in 1998 and started to decrease in 2002, when only USD 498 million were traded. This was due to the fact that in 1999 the repo sales between their own position and that of the clients of the Brokerage Houses ("crossing" repos) could be done off-floor. After the before mentioned period, it was established that all transactions had to be carried out on the trading floor, which led to an increase in the volume traded in the stock market.

The volume of transactions in the Securities Market in 2002 reached USD 2.97 billion, of which USD 2.4 billion (82.6%) were carried out on the Trading Floor and USD 518.3 million (17.5%) over the counter. It must be highlighted that the volume traded in the securities market decrease by 30.5% in relation to the previous period. In the over the counter transactions USD 133.3 million correspond to the Primary Market and USD 365.3 millions in over the counter repos (with the BCB). On the other hand, Trading Desk transactions reached USD 19.6 million and the Trading Floor USD 2.5 billion; in addition, during this period share auction trading was carried out for USD 77 thousand.

During 2003, the volume traded in the Stock Market reached USD 1.9 million. The trading on the Floor reached USD 1.6 billions, (USD 504.8 million in definitive purchase and sale, USD 140 million in the primary market and USD 918.9 million in repos). The Off-floor trading reached USD 310 million (USD 95 million in crossing repos with the BCB and USD 215.4 million in the primary market). Regarding the Trading Desk, the volume of transactions was USD 37.6 million.

As of December 2004, the volume traded in the Securities market reached USD 1.7 billion, of which USD 1.3 billion were on the Trading Floor (USD 334 million in definitive purchase, USD 111 million in the primary market and USD 872 million in repos) and USD 315 million over the counter. The over the counter transactions include USD 252 million in the Primary Market and USD 63 million in over the counter repos (with the BCB). On the other hand, Trading Desk transactions reached USD 25 million.

Mutual Funds are important indicators of the securities market performance.

The Mutual Funds portfolio had a steady growth, and from December 1998 to December 2001 increased from USD 251 million to USD 415 million. However, the regional economic crisis, and more importantly, the internal political instability triggered by the outcome of the presidential elections in June 2002, caused a run that affected both the depositors as well as the participation quotas. From December 2001 the portfolio decreased from USD 415 million to USD 198 million at the end of July 2002. From August 6, 2002 onwards Mutual Funds curbed their sharp decline and started to show positive results with a tendency to grow.

The performance of the Funds themselves weakened the situation in two aspects: one, the long duration of their portfolios that together with the high liquidity of their participation quotas created a very noticeable mismatch, plus a high volatility in their valuation (which really caused the SPVS to suspend the fund valuation standard); and two, the marked confusion of the investors, regarding bank deposits and Mutual Fund quotas. Therefore this led the investors to consider the quotas as equivalent to bank deposits, especially regarding two things: the implicit insurance and the “impossibility” of capital losses.

During the 2003 period a considerable recovery of the total fund portfolios was observed, the period closed with a USD 228.5 million portfolio.

As of December 2004, the fund portfolio was up to USD 301.6 million<sup>8</sup>. It is important to highlight the startup of a new mutual fund called “Oportuno” during the 2004 period, which consisted exclusively of securities in Bolivianos, and that closed the year with a balance of Bs 41.8 million.

## 5.11 STOCK EXCHANGE TRADING

The transactions authorized by the Superintendency of Pensions, Securities and Insurance that takes place on the Trading Floor of the Bolivian Stock Exchange and that are subject to registration are as follows:

- Buying and Selling: where the value is transferred from one owner to another, with all the rights.
- Repos: are sale transactions with a repurchase agreement. These transactions are for a maximum of 45 days.
- Primary Placement: when securities are placed for the first time at a specific price.
- Trading Desk: a centralized over the counter mechanism, managed by the Stock Exchange by means of which the Brokerage Houses can trade with bills of exchange, promissory notes, exchange invoices and other Securities determined by the Superintendency.

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<sup>8</sup> Includes balance of the Oportuno Mutual Fund (Oportuno Fondo de Inversión) in Bolivianos.

- Auction of Shares not listed on the Stock Exchange: Mechanism by means of which the Brokerage Houses publicly offer the Definitive Purchase or the Definitive Sale of shares, which will be carried out during a special session arranged by the Stock Exchange.

Among the trading mechanisms provided by the BBV for the stock market are the following:

- Trading Floor: For stock exchange securities trading, both equity securities and fixed-income securities. Trading with these instruments can be carried out every business day, although they can take place at different times according to what is established within the BBV Regulations.
- Trading Desk: For trading promissory notes and bills of exchange from companies previously listed on the Stock Exchange (Chartered Companies and Limited Liability Companies) and only authorized by the BBV. This type of transaction is only carried out in the short term (maximum 270 days).
- Public Auction of Non-listed Shares: For trading with shares of companies not registered with the BBV. The auction takes place whenever the Brokerage Houses request it.

The above mentioned trading mechanisms take place on the Trading Floor and during the time established by the BBV Regulations. The main trading transactions that are done through the BBV are those definitive purchase and sale transactions. The volume of these transactions in 2003 was USD 642 million and in repos USD 919 million.

A trade that takes place on the Trading Floor of the BBV is considered as settled when the corresponding funds and securities of the transaction have been delivered and received by each one of the parties under the agreed terms and conditions.

## **5.12 OVER-THE-COUNTER MARKET**

This refers to trading not carried out in the stock exchange with the participation of authorized broker dealers and with securities registered with the Securities Market Registry. Only those securities authorized by the SPVS can be traded in the over-the-counter market. Basically there are two types of transactions that are carried out: the primary market, where first issue securities are traded and Repurchase Agreement Transactions with the Central Bank.

## **6 CLEARANCE AND SETTLEMENT CIRCUITS FOR CORPORATE SECURITIES**

### **6.1 ORGANIZATIONS AND INSTITUTIONS**

#### **6.1.1 Stock Exchanges**

In Bolivia, only one stock exchange is in operation, the Bolivian Stock Exchange (BBV). This is a private company, established as a profit-making corporation that has been operating in the country since 1989.

#### **6.1.2 Central Securities Depositories**

The Central Securities Depository (EDV) of Bolivia has already been established but has not started operations. According to article 42 of the Securities Market Law, the objective of this entity will be to provide the securities depository service, including the registration, custody and management of the securities registered in the account and to guarantee their safekeeping. At the same time, these entities will carry out the clearance and settlement of the securities transactions.

### **6.2 SECURITIES REGISTRATION AND CUSTODY PROCEDURES**

Currently, all securities that have the authorization to be traded from the Securities Intendency are registered in the Bolivian Stock Market for their future trading activities. Once the EDV of Bolivia begins its clearance and settlement activities, the securities will be represented by book-entries via its irrevocable deposit with the deposit entity.

### **6.3 SECURITIES CLEARANCE AND SETTLEMENT PROCESS**

The clearance of transactions takes place after the closing of market operations upon calculation of the corresponding obligations of each Brokerage House interchanged securities and funds. The settlement of transactions includes the cancellation of obligations that emerge from the transactions, when the funds are delivered by the buyer and the securities are delivered by the seller. The BBV allows the following forms of settlement.

- a) Transactions with securities represented by book-entries (dematerialized). This activity is not in operation yet because the EDV has not yet developed its processes. In that case, it has been anticipated that the settlement of securities represented by documents will be carried out at EDV that keeps a registry of such securities. The settlement of securities will be done by electronic transfers between the accounts that both seller and buyer should have on their behalf in the main account of such EDV payable by the Brokerage House that carried out the transaction on their behalf. The settlement of the cash leg will be executed through the settlement account that was opened for that purpose by the EDV at the BCB, where each

Brokerage House will deposit the corresponding funds of its debit position and receive the corresponding funds of its credit position.

- b) Securities transactions represented by documents (in physical form), which is the current way the BBV works, the settlement of transactions will be done physically and directly between the two parties. Funds are provided and received by means of the payment systems established by the BBV and securities must be delivered and received in their document form. Currently the forms of payment defined by the BBV include the use of cheques.
- c) Settlement terms accepted: The BBV allows the Brokerage Houses to reach an agreement on the Trading Floor regarding the following transaction settlement terms.
  - For Fixed-Income Securities transactions up to T + 1. This means that a transaction with these securities can be settled the same day that it is realized or the following day, as long as any one of these alternatives has been established and agreed upon, between the parties, at the exact moment when the transaction takes place.
  - For Equity Securities transactions up to T + 2. This means that a transaction with these securities can be settled the same day that it is realized or the following day or two days after, as long as any one of these alternatives has been established and agreed upon, between the parties at the exact moment when the transaction takes place.

The securities trading settlement that is carried out through the BBV at the end of the day by means of the physical exchange of the securities traded and by using cheques to be cleared and settled at the Cheque Clearinghouse, implies risks in both legs of the transaction. Therefore in compliance with the BCB regulation effective in 2005 and once the official implementation of the EDV services has been concluded, securities settlement will be carried out via book-entries, funds are settled through the settlement account that EDV maintains in the Central Bank of Bolivia, in accordance with the delivery versus payment (DvP) principle.

## 6.4 GUARANTEE SCHEMES

As of to this date, the regulations related to the guarantee schemes is still at a development stage.

In the case of sale transactions, the guarantee system includes Generic Guarantees and the Guarantee Fund, while in the case of Repurchase Agreement Transactions, the system is represented by the Generic Guarantees, the Specific Guarantees and the Guarantee Fund, as explained below.

Mutual Fund Managing Companies, must substantiate and continually maintain a performance and a good management guarantee that is equivalent to the highest amount between USD 100,000 and 1 % of the total amount of the Open Mutual Funds portfolios under their management. In the case of



Closed Mutual Funds<sup>9</sup> (“closed-end funds”), this percentage is 0.75% of the total amount of their portfolios.

### **Generic Guarantee**

The current 100,000 Special Drawing Rights that have been established in favor of the Stock Exchange constitute the Generic Guarantee. This generic guarantee will be used to cover those activities and transactions that the Brokerage Houses perform.

### **Specific Guarantee**

These guarantees will only be used in repo transactions in order to maintain a guarantee that is equal to the amount of the repo. Two types of Specific Guarantees will be in place: the Initial Guarantee and the Additional Guarantee. The first one will be used when the transaction is initiated, while the second one will only be used if the market price of the security underlying the repo changes.

### **Guarantee Fund**

This refers to the Fund whose purpose is to cover the difference between the price obtained on the sale of the security, as a consequence of a court order, and the original price of the transaction. It consists of a loan granted to Brokerage House in default, subject to an interest rate and to a specific term. In case the Brokerage House cannot cover the loan in the expected time it will receive a temporary suspension and if it does not comply during the extended time it will be permanently suspended.

## **6.5 SECURITIES LENDING**

Securities lending can be applied in the clearance and settlement process of transactions carried out with securities represented in book-entries. Securities lending is a contract whereby a depositor hands over his own securities or those of his clients so that the EDV can deliver securities on behalf of another depositor (borrower) who accepts the responsibility of replenishing the securities from the same issuer in the same amount, type, class and series.

By handing over such securities, the ownership is transferred to the borrower, however the borrower is obliged to reimburse the proceeds of the economic rights that the securities would have earned during the time frame of the transaction and to pay the price for the loan. These transactions have to be regulated in Bolivia.

At the same time the Brokerage House Regulation that will be approved in the near future covers securities lending.

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<sup>9</sup> In the Closed Mutual Funds, a limited amount of equity is issued (shares, common stock, or fees). This issue is placed in the market, and once sold out, the fund is closed. An investor can participate in the fund if he buys the share from another person who wants to be out of the secondary market. By mutual agreement, investors can carry out additional investments.



## **6.6 DERIVATIVES CLEARANCE AND SETTLEMENT**

At present, no derivatives are traded in the Bolivian securities market.

## **6.7 INTERNATIONAL LINKS AMONG CLEARANCE AND SETTLEMENT INSTITUTIONS**

Currently there is no international linkage; however, Chapter IV of the Rules of the CSD and the Securities Clearance and Settlement states that the CSD may subscribe contracts, agreements and settlements with other foreign CSD or with those institutions in charge of securities registration, custody, clearance and settlement that have been established abroad with the purpose of adopting procedures that will allow the operating systems to be linked in order to facilitate the clearance and settlement of securities that are traded in the local or in the international market.

## **6.8 MAJOR PROJECTS AND POLICIES BEING IMPLEMENTED CONCERNING CUSTODY, CLEARING AND SETTLEMENT**

The main project in relation to securities custody, clearance and settlement is the start up of the securities dematerialization activities and the trading of book-entry securities by means of the *Entidad de Depósito de Valores de Bolivia S. A.*

## 7 CLEARANCE AND SETTLEMENT CIRCUITS FOR GOVERNMENT SECURITIES

### 7.1 THE REGULATORY ENVIRONMENT

Treasury of the Nation (TGN) and Central Bank of Bolivia (BCB) issues do not require public offering authorization, since their own legal regulations are sufficient to back their issuance and public offering. However, the corresponding background information and legal data must be sent to the Superintendency of Pensions, Securities and Insurance (SPVS) for their registration in the Securities Market Registry (*Registro del Mercado de Valores*, RMV). Notwithstanding what has been stipulated, according to the regulations, this Superintendency can also exempt certain public offerings from some of the legal requirements.

It is important to highlight that the authorization from the SPVS does not imply a rating on the attributes of the issue, the solvency of the issuer or the broker-dealer. However, it does stipulate that the risks and characteristics of each issue be sufficiently explicit in the prospectus of the issue, in the advertising that is carried out and, if necessary, in the pertinent security. In this regard, it may include within the prospectus and other documentation, all notifications considered to be reasonably warranted and timely for the protection of the investors and market transparency.

The registration of the Securities issued by the TGN and the BCB is immediate and of a general nature, and only requires the general standard that authorizes each issuance and a description of the essential characteristics of the securities.

### 7.2 THE GOVERNMENT SECURITIES MARKET

#### 7.2.1 Public Securities Buying and Selling Transactions

The BCB carries out the sale of public securities in the primary market for monetary policy purposes by means of two mechanisms:

- a) A weekly public auction. The entities that participate are those that have a license from the SBEF or de SPVS and were previously authorized by the Open Market Operation Committee (*Comité de Operaciones de Mercado Abierto*, COMA). Currently Banks, Mutual Entities, Brokerage Houses, Pension Funds Managing Companies (AFP) and Mutual Funds Managing Companies (SAFI) intervene directly in these auctions.

There are two modes of auction: 1) the competitive mode, where the securities are assigned in function of the prices proposed by the participants in a sealed envelope; 2) the non-competitive mode, where the brokers do not propose a specific price, but adhere to the average adjudication price that is the result of the competitive mode. The amount offered in the non-competitive mode cannot be over 50% of the total offering in each currency and term.

- b) Money-Market Desk. In compliance with COMA's decision and in order to promote more competition during the auction, this mechanism is only used on rare occasions for the sale of securities. In addition, the sale price is usually higher than the price obtained during the competitive auction.

In the Money-Market Desk the BCB can also carry out, at any moment, advance purchases or cancellations of public securities, but at highly discounted prices. The BCB carries out these transactions with TGN securities, by using the Monetary Regulation Account, so as not to divide a small market into two types of securities.

Besides de placements for monetary regulation, the BCB, as government financial broker, also manages public securities issues that the TGN carries out on a weekly basis for fiscal funding, under the same mechanisms that were previously described and with the participation of the financial entities authorized by the Treasury Securities Administration Council (*Consejo de Administración de Valores del Tesoro General de la Nación*, CAVT)<sup>10</sup>. The results of these transactions in the money supply are different. The issues of the BCB modify the amount of money available in the economy, while the placements of the TGN, in as much as they finance public expenditure, have no bearing on the money supply.

### 7.2.2 Repurchase Agreement Transactions

Repurchase agreement transactions are the main instrument used by the BCB to provide short term liquidity to the financial system. They consist in the purchase of securities by the BCB from brokers who have been authorized by COMA (Banks, Mutual Entities, and Brokerage Houses), with a commitment from both sides to carry out a reverse transaction at the end of an agreed upon term. The BCB carries out these transactions at terms of no more than 15 days and at Base Interest Rates determined weekly by the COMA. These transactions are done by means of daily auctions at competitive rates. These rates cannot be inferior to the Base Rate, or carried out through the Money-Market Desk, at penalized rates. Generally the BCB uses the Base Rate and the daily bidding of repos as signals to the market, in line with its perception of the short term liquidity performance.

## 7.3 THE CLEARING AND SETTLEMENT PROCESS

To participate in the auction, authorized entities must have the necessary funds in one of the following ways:

- By means of a written or electronic document to the BCB which authorizes the debit from their current and reserve account, for their own transactions or in favor of other authorized

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<sup>10</sup> It is important to highlight that the TGN also places securities directly, without the participation of the BCB. This is the case of the long term securities placement done by the Pension Funds Managing Companies, with the purpose of financing the Pension System reform. These securities are cancelled by the BCB from the TGN accounts that it manages, after the holder presents the security.

financial entities that do not have a current and reserve account with the BCB<sup>11</sup>. This authorization could be granted indefinitely.

- By means of a payment equivalent to 2% of the face value of the corresponding securities in the authorized account in the BCB.

The sale becomes effective 48 hours after the completion of the auction<sup>12</sup>. During this time the successful bidder must insure the existence of sufficient funds in one of the above mentioned accounts. If the funds exist, the BCB debits the account and issues the security. If on the day of the sale the successful bidder does not have sufficient funds, the BCB or the TGN consolidate in their favor a fine of 2% of the face value of the securities, notwithstanding other penalties they could determine.

In the case of physical issues, the BCB issues a security for each sale carried out with the corresponding security requirements and characteristics that support the issuance. When these are dematerialized issues, the BCB will pass on to the EDV the names of the holders and the characteristics of the allocated securities, so that the EDV may proceed and carry out the corresponding book-entries.

### **Registration and Custody**

The BCB will electronically register the name of the buyer of the securities plus all the definitive sale and purchase transactions of the above, regardless of the securities registration represented in book-entries charged to the EDV, whose information regarding the ownership of the pertinent legal securities, will prevail as to the one included in the BCB registry.

Due to the fact that these are negotiable documents, it is mandatory that the BCB be informed either in writing or by any other means authorized by the COMA, of the definitive purchase and sale transactions of the securities in the secondary market. If this information is not conveyed, the transfer of property of the physical securities cannot be registered in the BCB and will not be valid for the holder until the lack of registration can be corrected.

In addition, the BCB can be the custodian, in a physical or electronic registry, of the securities issued. The BCB can also register the repo transactions carried out between brokers.

### **Redemption**

Public securities can be redeemed by the BCB at maturity, after the physical securities have been presented and the ownership of the holder together with the BCB registries has been verified. For this purpose, the BCB will deposit the resources in the current and reserve accounts of the beneficiaries or in any current and reserve account that they specify, and will debit the BCB accounts or the corresponding TGN accounts.

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<sup>11</sup> Currently, only Banks and three Mutual Entities have current and reserve accounts of the BCB, which is the reason why the rest of market participants operate through these accounts.

<sup>12</sup> This term may be modified by the COMA, for example, when holidays.

The dematerialized securities will be cancelled after the ownership of the holder has been verified with the EDV records.

After the maturity date, no interests will be recognized, nor will an automatic renewal of the securities be accepted. If the maturity date of the physical security coincides with a holiday or non business day, it can be redeemed on the previous business day at a curve price at the request of the holder. The dematerialized securities may be redeemed at the average curve price of the corresponding series.

## **7.4 MAIN PROJECTS AND TRENDS**

In the next few months the dematerialization process of public securities through the EDV will begin. The start up of operations of this entity will bring about an increase in the security, speed and efficiency of the financial market. In addition to providing more information and control for the issuers, it should also facilitate the development and strengthening of the public debt market by increasing efficiency and decreasing clearance and settlement risk.

On the other hand, for the 2005 period, the BCB has foreseen the implementation of an electronic securities and repo auction system. This system will automate and speed up the securities primary placement process as well as the repo transactions to inject liquidity into the financial system. Besides the current "sealed envelope" auction mechanism, this new system considers the possibility of an interactive "English type" auction alternative, that will allow participants to learn on line and in real time the bids of the other brokers (without revealing their identity) that will permit them, on the basis of this data, to modify their own bids. This, in turn, will allow the resulting interest rate from the auction to reflect in a better way the market conditions, decrease the problem of the "winner's curse" and promote a more active participation in the auctions of a larger number of participants.

## 8 THE ROLE OF THE CENTRAL BANK IN CLEARANCE AND SETTLEMENT SYSTEMS

### 8.1 THE RISK CONTROL POLICY

#### 8.1.1 Financial Risks

In order to minimize risks and insure the settlement of transactions in the clearinghouses, the Automated Clearinghouses and the Clearance and Settlement Services Regulation issued by the BCB determines the “net multilateral debit position limits”, which constitutes the maximum debit amount that a clearinghouse participant can register as its debit position during a cycle (this includes the clearance and settlement stages of the multilateral net positions of the participants).

This limit that is communicated to the BCB is determined by each participant, as a percentage of his RAL Fund. After verifying the adequate availability, the BCB informs each clearinghouse, before the beginning of the cycle, the limit of the amount of each one of the participants, so that they can be registered in its system in order to have control so that the transactions of the participants do not exceed the net multilateral debit position in the payment instrument clearing process.

Whenever the net multilateral debt position has been exceeded, one of the following procedures is used for those instruments that could not be clearing and settled:

- Rejection of the payment instruments that exceed the net multilateral debt position of the participant.
- Placement in a queue, by maintaining those instruments that exceed the amount of the net multilateral debt position limit of the participant as pending in the clearing system entry process. The pending payment instruments must be cleared during the cycle up to the limit allowed, otherwise the management mechanism, established by each clearinghouse within its internal regulations for transactions, must be applied.

In order to facilitate those instruments in the queue to enter the clearing system, participants can increase their limit by means of the non-committed percentage amount of the RAL Fund or via a fund deposit in the settling account of the clearinghouse (advance payment).

Regarding large value payment systems, the BCB provides the electronic fund transfer service. This is a real time gross settlement system, therefore, the transactions are settled when there is a sufficient balance in the accounts of the participants and, in this way, credit risk in large value payment systems is substantially reduced.

At the same time, in order to control liquidity risk, the BCB has an intraday liquidity credit mechanism without cost and to cover temporary liquidity needs, there are liquidity credit windows of up to 7

days; the collateral of these credits is the RAL Fund resources. In order to cover temporary liquidity needs there also exist public securities repos of up to 15 days.

### **8.1.2 Legal Risks**

Regarding payment system legal risks, although there is no a superior law that can provide the payment system with a sound legal base, the BCB has issued the necessary minimum regulations required for the smooth running of the payment systems under the adequate conditions; the use of a digital signature as a safety mechanism for electronic fund transferes plus the performance and operation standards for the large value payment systems. This regulation anticipates that various aspects, including those considered in the same regulation, must be accepted in a contract by the participants and by the payment system managers, in order to fill the legal gaps that could exist regarding this matter.

### **8.1.3 Operational Risks**

In order to insure the operating continuity of the different payment systems, both the BCB Automated Clearinghouses Regulation as well as the Large Value Payment Systems Regulation require that the systems have the appropriately approved contingency mechanisms for software, communications and alternative processing sites emergencies.

On the other hand, The Superintendency of Banks and Financial Entities and the Superintendency of Pensions, Securities and Insurance have established minimum information system security requirements, which the supervised entities and the companies that provide auxiliary services must meet, in order to manage the information systems plus the support technology required, and that are used in financial intermediation transactions and in securities transactions.

## **8.2 SETTLEMENT**

In order to insure the settlement of low value payment system transactions at the end of the day, the BCB has established a regulation, by means of the Automated Clearinghouse Regulations, that the settlement of net multilateral positions of the clearinghouse participants be carried out with funds from the current and reserve accounts the financial entities maintain in the BCB and when warranted, with the disbursement of liquidity credits guaranteed by the RAL Fund that these entities maintain in the Central Bank.

For this purpose, the BCB has authorized the opening of settling accounts for the clearinghouses, where the participants with net multilateral debt positions execute their payments during the time established by each clearinghouse for this purpose. These payments will be carried out through the BCB electronic transference system. If the participant does not make the payment of his debit position, the clearinghouse can ask the BCB to automatically debit the entity's account. If funds are insufficient, the entity is granted a liquidity credit with the guarantee from the RAL Fund, which will allow it to cover its debit position.



When the settling account receives the total amount of the payments the clearinghouse will order the payments to the accounts of the participants with net multilateral credit positions, by means of the BCB transfer system.

Large Value transactions in the BCB are settled one by one and on line, in function of the availability of funds in the accounts of the participants. The BCB has an intraday liquidity mechanism, based on collateralized credits with a fraction of the RAL Fund. In addition, the system has been set up to enable the intraday repo mechanism. These credits have no cost and must be cancelled before the closing of the operations of the day. In case a participant does not repay the intraday credit, this automatically becomes an overnight credit with the corresponding penalty cost.

### **8.3 MONETARY POLICY AND PAYMENT SYSTEMS**

Regarding monetary policy, the BCB regulates the amount of money and the credit volume according to its monetary program. For that purpose, it issues, places and acquires securities and carries out other open market operations. The BCB is authorized to establish legal reserves that are mandatory and must be complied with by the banks and financial intermediation entities, and to establish their composition, amount, the way to calculate them, their characteristics and remuneration.

The BCB is also responsible for stipulates exchange rate and payment system policies. In this regard, the BCB determines the exchange rate of the local currency versus the US dollar by means of a foreign exchange public auction mechanism that operates on a daily basis: it establishes the standards regarding the currency exchange position of the financial entities so that these can maintain a currency match between assets and liabilities: and establishes the operation of the payment system in order to avoid the discontinuation of payment by the entities and the systematic risk that this implies.

Although the regulation of the financial system is not the direct responsibility of the Central Bank, currently it has the ability to propose prudential regulations. As monetary authority, in 1998 the BCB introduced important reforms to the legal reserve system. The differentiated regime was substituted by a more uniform one, under which, the legal reserve is mostly established by market yield instruments. This reform allowed a prudential type standard to induce important monetary effects, since these instruments can be used as collateral so that the BCB can grant short term liquidity credits to the financial system.

The high degree of dollarization in the Bolivian economy reduces the degree of freedom of monetary policy. According to the theoretical models, a fixed exchange rate regime, together with the high level of dollarization, leaves little space for maneuvering for monetary policy. The current exchange rate regime in Bolivia, the crawling-peg type, gives a certain margin of action to the monetary policy. At the same time, the imperfect substitution between the internal and the international assets in US dollars provides an additional margin for the monetary transactions of the BCB.



The exchange rate has become the nominal anchor to help detain the hyper-inflation of the Eighties and, since then, has continued to play an important role in maintaining the stability of prices. BCB studies confirm that the ratio between the depreciation rate and the inflation persists. Therefore, an adequate coordination between the monetary and the exchange rate policies must exist. Within this context, the BCB applies an exchange rate policy that allows an acceptable balance between inflation and competitiveness to be reached, by managing the nominal exchange rate with an actual exchange rate objective, subject to the restriction of the primary objective of inflation.

The premise that the main monetary policy objective is to obtain and maintain a low and stable inflation rate, has rallied the almost general support of economists and authorities. The current monetary policy in Bolivia is geared towards the use of market mechanisms and of indirect instruments. Up until the middle of the Eighties, the work of the monetary authority was limited by the task of financing private productive activities at subsidized interest rates and, mainly, by the attention given to the continuous funding requirements of the public sector, which run substantial deficits and had limited access to external debt.

The restructuring of public finances and the ceasing of development banking activities have prompted monetary authorities to concentrate on their objective of obtaining price stability. With this purpose, the BCB adopted a strategy of intermediate objectives by establishing the limits for its net internal credit (*Crédito Interno Neto*, CIN). By controlling the performance of the CIN, the BCB expects that the evolution of net international reserves (*Reservas Internacionales Netas*, RIN) be able to meet an annual objective. That evolution of the monetary issue should be consistent with the money demand from the public, and by so doing avoid the pressure on prices, exchange rate and international reserves.

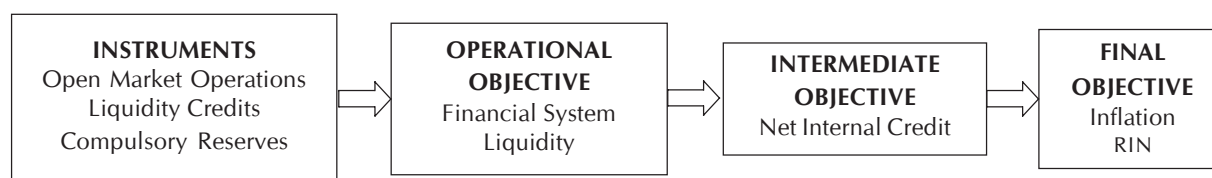
In general terms, the link of the intermediate objective – monetary aggregate or rate – with the final monetary policy objective is a topic that has generated a lot of debate. This has determined the formulation of different monetary policy transmission channels. In the case of Bolivia, the CIN can be measured, controlled and has a predictable effect on the final objective: inflation. In addition, since it is a quantifiable variable and is available daily, it provides the authorities with timely signals to correct diversions, and allows the economic agents to assess the performance of the monetary authorities. These attributes justified its being selected as an intermediate objective for the implementation of the monetary policy. The strict government funding limits, the elimination of development credits and the reform of the legal reserve system have improved the ability of the monetary authority to have control over the intermediate goal. However, there are still factors that impede having a better control of this variable, such as the fluctuations of the voluntary deposits in the BCB that sustain the financial sector (excess of legal reserve) and the public sector.

The CIN includes the BCB net credit to the non-financial public sector and the financial sector, besides other net operations of the Institution. The Central Bank Law limits those situations where the BCB can grant loans to the government and in addition can also reject credit applications, when

these affect the compliance with the monetary program. At the same time, this law establishes those cases where the BCB can grant credits to the banks and to other financial entities.

Monetary policy actions are executed by means of an operational objective, whose modifications allow the intermediate objective to be adjusted in order to obtain the final objective. The BCB's operational objective is the liquidity of the financial system, defined as the surplus of bank reserves (excess of legal reserve), which is a quantity variable that can be reasonably controlled in the short term and whose direct variations affect the CIN. The BCB forecasts the legal reserve surplus variations by means of expansion and contraction factor estimates. Based on this forecast, it decides if the ex-ante changes in the liquidity of the financial system must be offset in order to meet the CIN goal and, consequently, the inflation objectives and the RIN. The intervention of the BCB in the money market is mainly carried out by means of open market operations, both in the primary as well as the secondary market and also through liquidity credits.

**Figure 1: Monetary Policy Implementation**



This analytic framework assumes that a relatively stable demand exists for banknotes and coin. Money supply adapts itself to the local monetary demand, so that the payment methods grow according to the expected growth of the economy and the prices. When the Central Bank perceives that inflationary pressures exist, it reduces the CIN by means of its different instruments, which determines a decrease in the monetary supply. This reduction produces an adjustment in the internal demand and the level of prices. At the same time a reduction of the CIN translates into less demand for foreign currency and reduces the pressures on the exchange rate.

In the open market operations (securities buying, selling or repos), the BCB uses government bills and bonds that it places in a monetary regulation account (in case of repo transactions, it also uses treasury bills and bonds issued directly by the TGN). These transactions are carried out by means of public auctions where the BCB establishes the securities supply by term and currency and lets the market determine the prices, where the discount rates and the premium rates for repo transactions are obtained. For repo transactions there exists a base rate defined by the BCB that is normally higher than the monetary market.

In general terms, the required legal reserve rate in Bolivia is 12% (although exceptions exist by term and currency), applicable to public deposits and to external short term liabilities of the financial entities. 2% is placed in cash at the BCB and the remaining 10% in a Liquid Assets Requirement Fund that is invested in local and foreign securities according to the currency of the

deposits. This legal reserve modality reduced the financial costs for the system and introduced the possibility of having new mechanisms that were quick, timely and that provided liquidity by means of credits guaranteed by the RAL Fund.

These credits can be, in a first tranche, up to 40% of the amount deposited in RAL Fund by each financial entity, and in a second tranche, up to an additional 30%. The first tranche resources can be automatically obtained for a period of 7 days, while the free availability credits up to the second tranche are granted after obtaining validation and a written request.

The interest rates of these credits function as a “lombard window” for short term interest rates, and are used to send signals and reduce the volatility of the inter-bank rates. Therefore, the monetary policy also hopes to, in an indirect way, give stability to the interest rates.

The high percentage of public deposit in US dollars determines that the largest part of the legal reserve should be in foreign currency. Under the previous legal reserve regime, the legal reserve in US dollars formed part of the RIN and the BCB. After the reform, that part of the legal reserve in foreign currency that forms the previously mentioned RAL Fund, is established with foreign securities and is now part of the external reserves of the banks. Consequently, by excluding the legal reserve of the RIN and the BCB these latter ones are not largely affected by deposit fluctuations, which at the same time reduce the effect of such fluctuations on the CIN.

### **8.3.1 Repo Transactions**

Banks, mutual entities and brokerage houses are authorized to carry out Repurchase Agreement Transactions. In all cases the settlement of the operations are only done in the current and reserve account that the financial entities have in the BCB. Those entities that do not have them must present a specific authorization from the holders, which will allow deposits and debits to be made to their accounts at the maturity date of the repurchase agreement.

The financial entities that are authorized must present, when necessary, the securities endorsed in favor of the Central Bank, or otherwise, carry out the transfer of the dematerialized securities to the BCB portfolio in the Securities Depository Entity. In all cases, the physical securities object of the repurchase agreement, must remain deposited and under the custody of the BCB during the term of the transaction.

It is important to highlight that the BCB first receives the repurchased securities and immediately deposits the resources to the repurchased. At the maturity of the repo transaction, the BCB collects the corresponding amount and immediately returns the collateral. In case of default in the repurchase commitment, which normally never occurs due to the important “haircut” that is applied to the collateral and in addition to the consolidation of the property in favor of the BCB reported security, the financial entities will not be authorized to participate in Open Market

Operations. The first time for a period of 3 months, the second 6 months and, if a third infringement should occur, the case would be submitted to the Board of the BCB.

## **8.4 THE ROLE OF THE CENTRAL BANK IN CROSS-BORDER PAYMENTS**

Cross-border payments in Bolivia are executed via a correspondent bank system. The banks can enter SWIFT. There does not exist any type of specialized or centralized system to carry out the cross-border payments, therefore they are done on a bilateral basis or through the BCB.

### **8.4.1 ALADI**

Bolivia is one of the member countries of the Latin American Integration Association (*Asociación Latinoamericana de Integración*, ALADI) that operates a cross-border multilateral clearing and settlement payments system related to foreign trade. There are twelve countries that participate in the system by means of their Central Banks: Argentina, Bolivia, Brazil, Colombia, Chile, Ecuador, México, Paraguay, Perú, Uruguay, Venezuela and the Dominican Republic.

In 1965 the Central Banks of those countries subscribed a reciprocal settlement and credit agreement with the main objective of reducing to the minimum the currency transactions among them. By means of this agreement the members offer their participants the convertibility, transferability and reimbursement guarantees.

Since 1982 the Central Bank of Bolivia has been participating in the Mutual Payment and Credits Agreement (*Convenio de Pagos y Créditos Recíprocos de la Asociación Latinoamericana de Integración*, CPCR) of the ALADI by means of which the funding transactions for the export and importation of goods and services are carried out.

In the ALADI system member Central Banks accept payment documents associated to intra-regional trade, especially those related to letters of credit denominated in US dollars. In compliance with the ALADI agreement, the Central Bank of the country where the exportation originates delivers the funds to the commercial bank that participates in the foreign trade transaction on behalf of the Central Bank of the country that is importing the goods.

The results of these transactions are accumulated net positions in US dollars between Central Banks; a multilateral settlement takes place between the participating Central Banks every four months. These institutions can carry out advance payments (advanced settlement) for the purpose of limiting the size of their net debt positions.

With the objective of minimizing the risks assumed by the Central Banks in guaranteeing the operations, in 1977 the ALADI members created the Future Commitment System (*Sistema de Compromiso a Futuro*, SICOF) where the traders must indicate beforehand the transactions that will enter the system.

Each Central Bank is free to decide how to control the banks in its own country in terms of risk management. On the other hand, between banks there exist bilateral agreements related to the net debit amounts (lines of credit), and when this limit has been surpassed, the Central Bank in question must carry out advance payments to reduce the total and remain within the limit. At the same time, a Central Bank can realize advance payments if it is still within the limit, in order to reduce its financial costs, since the debit balance is subject to the payment of interests.

**Table 11: Transactions Via the ALADI Agreement**  
(in thousands of USD)

	2001	2002	2003	2004
Exports through ALADI	5,119	4,322	12,731	28,721
<i>% of the total amount of exports</i>	0.4%	0.3%	0.8%	1.3%
Imports through ALADI	49,068	39,559	29,429	35,660
<i>% of the total amount of imports</i>	2.9%	2.2%	1.8%	1.9%

Source: BCB.

During the last five years the amount of payments channeled through ALADI has decreased significantly. As of December 2003, the BCB collected an amount equivalent to 0.81% of its intra-regional exports which was much lower than the 4.22% that refers to the significant amount collected as of December 1999. Regarding its intra-regional importations, as of December 2003 payments equivalent to 1.80% were made, which was much lower than the percentage registered as of December 1999, when a payment equivalent to 4.15% was made. This decrease is partly due to the emergence of other more attractive funding methods and also because of higher international reserves of the Central Bank.

In 2003, operations for USD 42.1 million were channeled through CPCR-ALADI; USD 12.7 million corresponds to exports and USD 29.4 million to imports. Importation operations have maintained a downward trend that had already been observed in previous years, and the concentration continues in Brazil (73%) and Argentina (13%). On the other hand, exports recovered due to the increase in soybean sales in Venezuela, that concentrates 71% of export operations, and to a lesser degree in Colombia that represents 22% of the same operations.

As of December 31, 2003, the indebtedness of the Central Bank of Bolivia due to transactions channeled through CPCR-ALADI was USD 18.6 million, which represents a decrease of 34.9% regarding the indebtedness as of December 31, 2002. Of this total amount, USD 11.5 million is owed to Brazil and \$ 5.2 million to Argentina. As of the same date, the banking system as a whole has maintained an indebtedness due to import operations of USD 17.5 million, which represents a decrease of 33.7% regarding the 2002 period.

## 8.5 PRICING POLICIES

Within the framework of the payment systems, the BCB charges fees for the services it renders. The collection policy is directly related to the recovery of the operational costs incurred by the BCB for the rendering of its services. In this way, the fees for those services have the following structure:

**Table 12: Prices Structure**

<i>Type of operation</i>	<i>Fee</i>
External	
ALADI	
Imports	0.3% of the amount
Exports	0.1% of the amount
Transferences Abroad	0.3% of the amount
Internal	
SIPAV Transactions	Bs 4 per transaction

*Source: BCB.*

## **9 SUPERVISION OF THE SECURITIES CLEARANCE AND SETTLEMENT SYSTEMS**

### **9.1 SECURITIES REGULATOR SUPERVISORY AND STATUTORY RESPONSIBILITIES**

#### **9.1.1 Responsibilities on the Stock Exchanges**

According to the Law the main obligations of the Stock Exchanges are:

- To comply with the Law, its regulations and other applicable standards, as well as to ensure its compliance by natural or artificial persons that take part in them.
- To permanently maintain a net equity equal to or higher than the minimum capital requirement by the Stock Exchange.
- To maintain adequate facilities and systems to carry out stock exchange security transactions in an efficient, transparent, continuous and effective manner.
- To provide and make available to the public all information regarding securities quoted and traded in the Stock Exchange, its issues, broker-dealers and stock exchange transactions, with the exception of private or privileged information.
- To update the SPVS regarding non-compliance with the legal and the regulatory provisions by market participants whose securities are listed in stock exchange.
- To report on and certify the stock exchange quotes and transactions by means of a daily and complete updated report, including data on those securities traded in other Stock Exchanges.
- To accept the registration of those securities to be publicly offered when they and their issuer are registered in the Securities Market Registry.

### **9.2 SELF-REGULATORY ORGANIZATIONS SUPERVISORY AND STATUTORY RESPONSIBILITY**

#### **9.2.1 Central Securities Depositories**

Securities Depository Entities must be established as an exclusive purpose corporation. The Securities Intendancy authorizes the establishment, the bylaws and the management of the company as long as it complies with the requirements and obligations established in the Securities Market Law. One of the requirements that establish it as a self-regulated entity is the fact that it has the corresponding

regulations for its activities and for those of its depositors, which must be previously approved by the Superintendency of Pensions, Securities and Insurance.

### **9.2.2 Stock Exchanges**

The purpose of the Stock Exchanges is to establish an organized, continuous, expedite and public Securities Market infrastructure and to provide the necessary means to efficiently carry out its securities trading.

According to the Securities Market Law, the Stock Exchanges have the power to establish their own internal regulations in order to regulate their organization and management.

In Bolivia, the Stock Exchanges are exclusive purpose corporations, whose shareholders, according to the Securities Market Law, are the Brokerage Houses themselves who carry out the transactions with them.



## APPENDIX: STATISTICAL TABLES

The first series of tables (A) are statistics regarding payment and securities clearance and settlement in Bolivia. The second series of tables (B) present general financial system statistics.

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**Table A1: Basic Statistical Data\***

	2001	2002	2003	2004
Population	8,274,325	8,823,743	9,026,689	9,247,843
GDP (in USD thousands) <sup>(a)</sup>	8.153.879	7,935,502	8,099,178	8,780,068
GDP per Capita (USD)	985.44	899.34	897.25	949.42
Exchange rate Bs vs. USD				
year end <sup>(b)</sup>	6.81	7.48	7.82	8.04
average <sup>(c)</sup>	6.60	7.16	7.65	7.93

Sources: Central Bank of Bolivia (BCB) Statistics Bulletin No. 324 December, 2004 issue, National Institute of Statistics (INE) (Instituto Nacional de Estadística)

<sup>(a)</sup> At nominal or current market prices (preliminary 2002, 2003 and 2004).

<sup>(b)</sup> Purchase exchange rate.

<sup>(c)</sup> Purchase exchange rate average for the year.

**Table A2: Settlement Means Used by Non-banks**  
(in Bs thousands, year-end)

	2001	2002	2003	2004
Notes and coins issued	2,700,240	3,037,421	3,524,676	4,282,951
<i>held by the public</i>	2,396,358	2,677,868	3,193,035	3,865,381
Transferable deposits in local currency	54,998	60,673	79,611	160,995
Restricted M1 monetary supply	4,710,784	5,123,837	6,179,374	5,882,230
Transferable deposits in foreign currency <sup>(b)</sup>	2,256,284	2,381,129	2,900,972	1,849,612
Wide monetary aggregate (Vg. M2, M3) <sup>(c)</sup>	7,636,483	7,953,455	9,338,391	10,184,720

Sources: Central Bank of Bolivia and Banks and Financial Entities Superintendence.

<sup>(a)</sup> M1: Bank notes and coins in the hands of the public + sight deposits in local currency, in foreign currency and value conservation local currency (non-banks).

<sup>(b)</sup> Takes into account transferable deposits in M/E of non-bank entities.

<sup>(c)</sup> M3: M1 + thrift association in local currency, foreign currency and value conservation local currency and in the housing promotion unit + other obligations in the four types of currencies mentioned (non-bank entities)

\* The following conventions for notation are used throughout the Statistical Appendix: "n.a." represents data not available; "..." stands for data not applicable; "neg" (i.e. negligible) indicates where data are very small relative to other relevant data in the table concerned.

**Table A3: Settlement Means used by Credit/Deposit Taking Institutions**  
(in Bs thousands, year-end)

	2001	2002	2003	2004
Reserves required at the Central Bank				
<i>In local currency</i>	227,116	193,7224	251,578	310,563
<i>In foreign currency (in USD thousands)</i>	337,181	294,618	294,449	277,770
Excess reserves at the Central Bank <sup>(a)</sup>				
<i>In local currency</i>	199,583	140,296	200,231	400,721
<i>In foreign currency (in USD thousands)</i>	10,522	35,043	25,955	7,531
Loans granted to the Institutions by the Central Bank <sup>(b)</sup>	520,278	481,427	468,633	551,966

Source: Central Bank of Bolivia.

<sup>(a)</sup> Positive Amount = surplus. Negative amount = shortfall.

<sup>(b)</sup> BCB funding to Domestic and Foreign Commercial Banks.

**Table A4: Institutional Framework**  
(year ended 2004)

Categories	Number of Institutions	Number of branches	Number of accounts	Value of accounts <sup>(a)</sup>
Central Bank <sup>(b)</sup>	1	0	49	175,649
Commercial Banks <sup>(c)</sup> of which:	12	244	590,060	1,311,122
of which:				
<i>Public Banks</i>	0	0	0	0
<i>Private Banks</i> <sup>(d)</sup>	9	239	588,829	1,269,527
<i>Foreign Bank branches</i> <sup>(e)</sup>	3	5	1,231	41,595
<i>Non-bank financial Institutions</i> <sup>(f)</sup>	46	267	927,920	258,055
<i>Post Office</i>	0	0	0	0

Sources: Central Bank of Bolivia and Superintendency of Banks and Financial Entities.

<sup>(a)</sup> In thousands of USD

<sup>(b)</sup> The account numbers and the amount that corresponds to banks and non-banks that have a current and reserve account with the Issuing Entity.

<sup>(c)</sup> Considers accounts: sight, thrift.

<sup>(d)</sup> These are domestic private banks, considers accounts: sight, thrift.

<sup>(e)</sup> Considers accounts: sight, thrift

<sup>(f)</sup> Only have thrift associations in order to coincide with the numbers of "transferable deposits" in table No.2.

**Table A5: Bank Notes and Coins**  
(in Bs thousands, year-end)

	2001	2002	2003	2004
Total of banknotes and coins issued	2,700,240	3,037,421	3,524,676	4,282,951
of which:				
Banknotes issued	n.a.	n.a.	n.a.	3,966,025
Coins issued	n.a.	n.a.	n.a.	316,926
Banknotes and coins held by the banks	303,882	359,443	331,641	417,570
Banknotes and coins held by the public	2,396,358	2,677,868	3,193,035	3,865,381

Source: Central Bank of Bolivia.

**Table A6: Cash Dispensers, ATMs and EFTPOS Terminals**  
(year-end)

	2001	2002	2003	2004
Cash Dispensers and ATM's				
Number of Networks	2	2	2	2
National	2	2	2	2
Number of Terminals	431	418	453	511
Volume of Transactions	12,132,324	12,039,211	9,630,748	9,976,827
Value of transactions (in USD)	511,141,637	554,404,433	636,591,683	637,802,450
EFTPOS:				
Number of Networks	2	2	2	2
Debit Cards	1	1	1	1
Credit Cards	1	1	1	1
Number of Terminals	2,533	2,218	2,739	2,806

Source: Administradora de Tarjetas de Crédito S.A. (ATC) and LINKSER S.A.

**Table A7: Number of Payment Cards in Circulation**  
(year-end)

	2001	2002	2003	2004
Cash Dispensers and ATM's				
Cards with cash withdrawal function	530,555	535,832	480,793	583,607
Cards with debit/credit function	520,367	513,215	432,579	501,679
of which:				
Debit Cards	430,628	396,381	355,397	425,486
Credit Cards	89,739	116,834	77,182	76,193
Stored Value Cards <sup>(a)</sup>	10,188	22,617	48,214	81,928

Sources: Administradora de Tarjetas de Crédito S.A. (ATC) and LINKSER S.A.

<sup>(a)</sup> Information that corresponds to PRODEM FFP. S.A.

**Table A8: Indicators of Use of Various Cashless Payment Instruments**  
(volume of transactions)

	2001	2002	2003	2004
Payments with	1,934,092	2,388,945	2,576,853	3,311,167
debit	122,350	199,095	509,844	738,758
credit	1,810,764	2,003,028	1,514,619	1,602,275
stored-value	987	186,822	552,390	970,134

Sources: Administradora de Tarjetas de Crédito S.A. (ATC) and LINKSER S.A.

<sup>(a)</sup> Information that corresponds to PRODEM FFP. S.A.

**Table A9: Indicators of Use of Various Cashless Payment Instruments**  
(value of transactions, in USD)

	2001	2002	2003	2004
Payments with cards	93,263,025	155,323,455	216,135,976	255,030,297
debit	4,230,608	5,533,885	13,871,350	19,741,001
credit	88,984,999	106,724,187	102,999,093	107,065,960
stored-value <sup>(a)</sup>	47,418	43,965,383	99,265,533	128,223,336

Sources: Administradora de Tarjetas de Crédito S.A. (ATC) and LINKSER S.A.

<sup>(a)</sup> Data that corresponds to PRODEM FFP. S.A.

**Table A10: Payment Instructions Handled by Selected Interbank  
Transfer Systems**  
(volume of transactions in thousands)

	2001	2002	2003	2004
Low Value Systems	2,310	2,226	2,172	1,860
in local currency	1,395	1,338	1,290	1,127
in foreign currency	915	888	882	733
Large Value Systems	53.6	57.6	61.0	69.2
in local currency	34.1	34.9	39.9	48.4
in foreign currency	19.5	22.7	21.1	20.8

Sources: Central Bank of Bolivia and Private Banks of Bolivia.

**Table A11: Payment Instructions Handled by Selected Interbank Transfer Systems**

(value of transactions, in USD million)

	2001	2002	2003	2004
Low Value Systems (Clearing House)	9,579	9,022	8,758	7,122
<i>in local currency</i> (in Bs millions)	26,304	26,191	26,460	24,148
<i>in foreign currency</i>	5,592	5,364	5,299	4,081
Large Value Systems (Processed by the BCB)	32,868	34,625	28,159	23,943
<i>in local currency</i> (in Bs millions)	88,222	88,826	96,753	99,370
<i>in foreign currency</i>	19,495	22,219	15,512	11,428

Sources: Central Bank of Bolivia and Private Banks of Bolivia.

\* The average exchange rate is used for the conversion of Bolivianos.

**Table A12: Securities and Accounts Registered at the Central Securities Depositories**

At the moment of preparation of this report a Central Securities Depository was not operating in Bolivia.

**Table A13: Securities Holdings in the Central Securities Depository**

At the moment of preparation of this report a Central Securities Depository was not operating in Bolivia.

**Table A14: Transfer Instructions Handled by Securities Settlement Systems**

(volume of operations)

	2000	2001	2002	2003	2004
<b>System A</b> (Bolivian Stock Exchange)	21,630	18,727	13,110	9,501	10,917
<i>Government Securities</i>	2,866	5,123	3,643	2,677	3,524
<i>Corporate debt</i>	681	1,036	2,198	2,574	3,887
<i>Shares</i>	103	77	46	21	32
<i>Others</i>	17,980	12,491	7,223	4,229	3,474

Source: BCB Payment System Project based on data provided by the BBV.SA. Stock Exchange.

**Table A15: Transfer Instructions Handled by Securities Settlement Systems**

(value of transactions in USD thousands)

	2001	2002	2003	2004
Bolivian Stock Exchange	3,763,845	2,450,095	1,563,720	1,317,053
<i>Government Securities</i>	1,868,073	1,210,132	676,142	597,767
<i>Corporate Debt</i>	342,286	245,416	338,284	379,743
<i>Shares</i>	1,306	91,166	2,219	4,453
<i>Others</i>	1,552,180	903,381	547,075	335,090

Source: BCB Payment System Project based on data provided by the BBV.SA. Stock Exchange.

**Table A16: Participation in SWIFT by Domestic Institutions**

At the moment of preparation of this report no data was available.

**Table A17: SWIFT Message Flows To/From Domestic Users**

	2001	2002	2003	2004
Total messages sent	5,146	5,479	4,595	3,767
of which:				
<i>Category I</i>	n.a.	n.a.	n.a.	713
<i>Category II</i>	5,146	5,479	4,595	2,309
<i>Others</i>	n.a.	n.a.	n.a.	745
Total messages received	14,201	14,450	11,443	8,816
of which:				
<i>Category I</i>	n.a.	N.D.	N.D.	1,008
<i>Category II</i>	14,201	14,450	11,443	209
<i>Others</i>	n.a.	n.a.	n.a.	7,599
Domestic traffic	19,347	19,929	16,038	12,583
Memo:				
Global SWIFT traffic	n.a.	n.a.	n.a.	n.a.

Source: Central Bank of Bolivia.

\* As of the 2004 Period itemized data by category is available



**Table B1: Number of Financial Entities**  
(year-end)

	2001	2002	2003	2004
Total financial system	57	55	53	46
Of which are banks:	12	12	12	12
Local	9	9	9	9
Foreign	3	3	3	3
Of which are non-banks:	45	43	41	34
Cooperatives	25	22	21	18
Mutual Entities	13	13	12	9
FFP	7	8	8	7

Source: Superintendency of Bank and Financial Entities

**Table B2: Number of the Current, Savings and Deposits Accounts**  
(year-end)

	2001	2002	2003	2004
Total financial system	1,456,094	1,362,520	1,424,180	1,613,051
Total banks	698,498	627,293	601,565	638,288
Local	696,694	625,659	599,731	636,775
Demand deposit accounts	92,832	88,871	86,596	77,605
Savings accounts	547,211	491,543	473,508	511,224
Time deposits	51,056	39,005	34,009	42,274
Guarantee deposits	5,595	6,240	5,618	5,672
Foreign	1,804	1,634	1,834	1,513
Demand deposit accounts	1,056	932	1,237	984
Savings accounts	208	215	222	247
Time deposits	528	458	336	259
Guarantee deposits	12	29	39	23
Total non-banks	757,596	735,227	822,615	974,763
Cooperatives	423,149	357,778	381,393	421,870
Savings accounts	401,006	341,283	364,712	401,962
Time deposits	18,746	13,568	13,918	18,654
Guarantee deposits	3,397	2,927	2,763	1,254
Mutual Entities	284,246	288,293	295,291	310,721
Savings accounts	263,100	271,762	278,271	283,717
Time deposits	20,525	15,885	16,385	26,615
Guarantee deposits	621	646	635	389
FFP	50,201	89,156	145,931	242,172
Savings accounts	45,487	81,748	135,124	224,290
Time deposits	4,666	6,867	9,769	16,463
Guarantee deposits	48	541	1,038	1,419

Source: Superintendency of Bank and Financial Entities.

**Table B3: Assets**  
(in US million, year-end)

	2001	2002	2003	2004
Total financial system	5,621	5,021	4,865	4,790
<i>Total banks</i>	4,612	4,080	3,818	3,664
<i>Local</i>	4,312	3,808	3,537	3,497
<i>Foreign</i>	300	272	281	167
<i>Total non-banks</i>	1,009	941	1,047	1,126
<i>Cooperatives</i>	292	249	258	271
<i>Mutual Entities</i>	540	468	499	470
<i>FFP</i>	176	225	290	385

Sources: Superintendency of Banks and Financial Entities

**Table B4: Deposits<sup>(a)</sup>**  
(in US million, year-end)

	2001	2002	2003	2004
Total financial system	4,026	3,536	3,518	3,417
<i>Total banks</i>	3,239	2,819	2,713	2,594
<i>Local</i>	3,102	2,659	2,575	2,526
<i>Foreign</i>	136	160	148	69
<i>Total non-banks</i>	787	718	805	823
<i>Cooperatives</i>	232	197	221	217
<i>Mutual Entities</i>	466	393	416	388
<i>FFP</i>	88	128	167	218

Sources: Superintendency of Banks and Financial Entities.

<sup>(a)</sup> In reference to obligations with the public.

**Table B5: Equity**  
(in US million, year-end)

	2001	2002	2003	2004
Total financial system	584	585	580	553
<i>Total banks</i>	485	484	462	421
<i>Local</i>	427	426	393	364
<i>Foreign</i>	59	58	69	57
<i>Total non-banks</i>	98	101	118	132
<i>Cooperatives</i>	37	35	37	40
<i>Mutual Entities</i>	34	35	46	51
<i>FFP</i>	27	31	35	41

Sources: Superintendency of Banks and Financial Entities.

**Table B6: Portfolio**  
(in US million, year-end)

	2001	2002	2003	2004
Total financial system	3,393	3,005	2,932	2,953
<i>Total banks</i>	2,786	2,400	2,258	2,183
<i>Local</i>	2,640	2,298	2,181	2,143
<i>Foreign</i>	146	102	77	40
<i>Total non-banks</i>	608	605	674	770
<i>Cooperatives</i>	191	168	184	196
<i>Mutual Entities</i>	281	260	260	258
<i>FFP</i>	136	177	231	315

Sources: Superintendency of Banks and Financial Entities.

**Table B7: Transactions via the ALADI Agreement**  
(in US million, year-end)

	2001	2002	2003	2004
Exports through ALADI:	5,119	4,322	12,731	28,721
Total exports percentage	0.40%	0.33%	0.81%	1.35%
Imports through ALADI	49,068	39,559	29,429	35,660
Total imports percentage	2.87%	2.23%	1.80%	1.91%

Source: Central Bank of Bolivia.

## LIST OF ABBREVIATIONS

ACCL	<i>Administradora de Cámaras de Compensación y Liquidación S.A.</i>
ACH	Automated Clearing House
ADISB	Agency for the Development of the formation in Bolivia ( <i>Agencia para el Desarrollo de la Sociedad de la Información en Bolivia</i> )
AFP	Pension Fund Managing Firms ( <i>Administradoras de Fondos de Pensión</i> )
ALADI	Latin American Association of Integration ( <i>Asociación Latinoamericana de Integración</i> )
ASOBAN	Association of Private Banks of Bolivia ( <i>Asociación de Bancos Privados de Bolivia</i> )
ATC	Administradora de Tarjetas de Crédito S.A.
ATM	Automated Teller Machine
BBA	Bolivian-American Bank ( <i>Banco Boliviano Americano</i> )
BBV	Bolivian Stock Exchange ( <i>Bolsa Boliviana de Valores</i> )
BCB	Central Bank of Bolivia ( <i>Banco Central de Bolivia</i> )
BIS	Bank for International Settlements
BNV	National Bank of Bolivia ( <i>Banco Nacional de Bolivia</i> )
Bs	Bolivianos
CAC	Savings and Credit Cooperative ( <i>Cooperativa de Ahorro y Crédito</i> )
CAF	Andean Promotion Corporation ( <i>Corporación Andina de Fomento</i> )
CAVT	Treasury Securities Administration Council ( <i>Consejo de Administración de Valores del Tesoro General de la Nación</i> )
CEMLA	Centre for Latin American Monetary Studies
CCC	Cheque Clearing House ( <i>Cámara de Compensación de Cheques</i> )
CD	Certificates of Deposit ( <i>Certificados de Depósito</i> )
CDDS	Deposits Payoff Certificates ( <i>Certificados de Devolución de Depósitos</i> )

CEC	Automated Clearinghouses ( <i>Cámaras Electrónicas de Compensación</i> )
CIN	Net Internal Credit ( <i>Crédito Interno Neto</i> )
CNV	National Securities Commission ( <i>Comisión Nacional de Valores</i> )
COMA	Open Market Operations Committee ( <i>Comité de Operaciones de Mercado Abierto</i> )
CPCR	Mutual Payment and Credits Agreement ( <i>Convenio de Pagos y Créditos Recíprocos</i> )
CPSS	Committee on Payment and Settlement Systems
CSD	Central securities depository
CTC	Credit Card Compensatory Agencies ( <i>Compensadoras de Tarjetas de Crédito</i> )
DvP	Delivery versus Payment
D.S.	Supreme Decree ( <i>Decreto Supremo</i> )
EDV	Central Securities Depository ( <i>Entidad de Depósito de Valores, in Bolivia</i> )
USA	United States of America
EFA	Credited Financial Entities ( <i>Entidades Financieras Acreditadas</i> )
EFTPOS	Electronic Funds Transfer at the Point of Sale
FCC	Collective Capitalization Fund ( <i>Fondo de Capitalización Colectiva</i> )
FCI	Individual Capitalization Fund ( <i>Fondo de Capitalización Individual</i> )
FIA	Open Investment Fund ( <i>Fondo de Inversión Abierta</i> )
FFP	Private Financial Fund ( <i>Fondo Financiero Privado</i> )
FONDESIF	Financial System Development and Productive Sector Support Fund ( <i>Fondo de Desarrollo del Sistema Financiero y Apoyo al Sector Productivo</i> )
FRF	Financial Restructuring Fund ( <i>Fondo de Reestructuración Financiero</i> )
IDB	Interamerican Development Bank
IT	Information Technology

ITF	Financial Transaction Tax ( <i>Impuesto a las Transacciones Financieras</i> )
LINKSER	Servicios Bancarios Auxiliares, S.A.
LT	Treasury Bills ( <i>Letras del Tesoro</i> )
MAP	Housing Loans and Credit Mutual Associations ( <i>Mutuales de Ahorro y Préstamo para la Vivienda</i> )
MICR	Magnetic Ink character Recognition
MV	Stock Market ( <i>Mercado de Valores</i> )
MVDOL	Maintenance Dollar Value ( <i>Mantenimiento de Valor dólar</i> )
NAFIBO	Nacional Financiera Boliviana
NGO	Non Government Organization
PCP	Popular Credit and Participation Law ( <i>Ley de Participación y Crédito Popular</i> )
RA	Administrative Resolution ( <i>Resolución Administrativa</i> )
RAL	Liquid Assets Requirement ( <i>Requerimiento de Activos Líquidos</i> )
RD	Board Resolution ( <i>Resolución de Directorio</i> )
RIN	Net International Reserves ( <i>Reservas Internacionales Netas</i> )
RMV	Registro del Mercado de Valores ( <i>Securities Market Registry</i> )
RTGS	Real Time Gross Settlement
S.A.	Public Limit Company ( <i>Sociedad Anónima</i> )
SAFI	Mutual Funds Managing Companies ( <i>Sociedades Administradoras de Fondos de Inversión</i> )
SBEF	Superintendency of Banks and Financial Entities ( <i>Superintendencia de Bancos y Entidades Financieras</i> )
SCL	Clearance and Settlement Services ( <i>Servicios de Compensación y Liquidación</i> )
SICOF	Future Commitment System ( <i>Sistema de Compromiso Futuro</i> )

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SIPAV	Large Value Payment System ( <i>Sistema de Pagos de Alto Valor</i> )
SITTEL	Superintendency of Telecommunications ( <i>Superintendencia de Telecomunicaciones</i> )
SPT	Treasury Payment System ( <i>Sistema de Pagos del Tesoro</i> )
SPVS	Superintendency of Pensions, Securities and Insurance ( <i>Superintendencia de Pensiones, Valores y Seguros</i> )
SV	Superintendency of Securities ( <i>Superintendencia de Valores</i> )
SWIFT	Society for Worldwide Interbank Financial Telecommunication
TDA	Open Unemployment Rate ( <i>Tasa de Desempleo Abierto</i> )
TGN	Treasury of the Nation ( <i>Tesoro General de la Nación</i> )
UFV	Housing Promotion Units ( <i>Unidades de Fomento de Vivienda</i> )
UIF	Financial Intelligence Unit ( <i>Unidad de Investigaciones Financieras</i> )
USD	United States Dollars
WB	World Bank

## GLOSSARY

In January 2001 the Committee on Payments and Settlement Systems (CPSS) of the Bank for International Settlements (BIS) published the first edition of a glossary that included payment and securities clearance and settlement terms. This glossary can be found on the BIS web page: [www.bis.org](http://www.bis.org). The Western Hemisphere Payments and Securities Clearance and Settlement Initiative (WHI), based on the glossary produced by the CPSS, has also produced a uniform glossary of terms in Spanish with the objective of avoiding an unnecessary proliferation of terms and definitions. This glossary in Spanish can be found on the WHI web page: [www.ipho-whpi.org](http://www.ipho-whpi.org).

Below are found some special terms not included in that Glossary and/or used within a specific context in Bolivia.

Bolsín:	( <i>Bolsín</i> ) Mechanism used by the Central Bank of Bolivia for the adjudication of US dollars to the public, by means of the financial system. The adjudication is carried out via daily auctions where price bids (exchange rates) that are the same or higher than the base price are rated and adjudged at that price. This has been in effect since 1985
Required reserve:	( <i>Encaje requerido</i> ) Amount that every authorized financial entity must deposit in the Central Bank of Bolivia or in other authorized entities for that purpose, after applying the legal reserve rates to the liabilities subject to the reserve.
Established legal reserve:	( <i>Encaje legal constituido</i> ) Amount the authorized financial entities maintain in the Central Bank of Bolivia or in other authorized entities, in cash or in securities.
Liquid Assets Requirement Fund:	( <i>Fondo RAL</i> ) Asset fund that has a component in local currency (RAL-MN), in Housing Promotion Units (RAL-UFV) and another in foreign currency (RAL-ME), in which financial entities participate for each currency proportion to their reserve established in securities.
Housing Promotion Unit	( <i>Unidad de Fomento de Vivienda</i> ) (UVF) Reference index that indicates the daily evolution of prices. The BCB calculates it based on the IPC that the National Institute of Statistics (Instituto Nacional de Estadística) publishes. The UVF can be used to carry out transactions, contracts and all types of legal proceedings in local currency with value maintenance regarding the evolution of prices. In spite of its denomination, the use of the UFV is not only limited to the promotion of housing.



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