



Bolsa Mexicana  
de Valores

ANNUAL REPORT

2019

Leading actions in Mexico  
**125 years**





## In Grupo Bolsa Mexicana de Valores...

We are a group of companies that offer comprehensive services to facilitate the operation and post-negotiation of the securities and derivatives market in Mexico, supported by a modern and cutting-edge technological infrastructure.

We operate a stock exchange, a derivatives products exchange, an OTC derivatives and securities brokerage company, the central securities depository in Mexico where the custody and settlement of securities is carried out, a securities clearing house and a derivatives clearing house, as well as a price valuation and risk management services company.

Day by day we strive to be the best, we work with dedication and integrity and our philosophy guides our strategic, tactical and operative decisions.



## OUR MISSION

### “We make the operation of the stock market and the derivatives market in Mexico possible”

- *Through a group of integrated businesses*, covering all stages of stock transactions, from promotion, execution of orders, settlement of transactions, custody and clearing, risk management, as well as the production of information in real time and of added value.
- *Supported by our talent and experience*, which ensure competitiveness and high standards of efficiency and transparency in the provision of services, as well as the optimal use of cutting-edge technology and platforms.
- *With commitment and passion*, to promote the growth and development of the country.



## OUR VISION

To maintain our leadership in the stock and derivatives markets, **for the excellence of our services, experience and innovation**, and therefore be a catalyst for economic progress.

### Six values essentially define our organization and provide the performance guidelines for all those who proudly collaborate with BMV Group.

- **Teamwork** unites our talent in order to achieve better results
- **Integrity** guides all our actions
- **Transparency** is the basis of the trust we generate in the market
- **Innovation**, the axis of transformation and continuous improvement
- **Customer Service** is the priority in the execution of our activities
- **Excellence** drives our daily work

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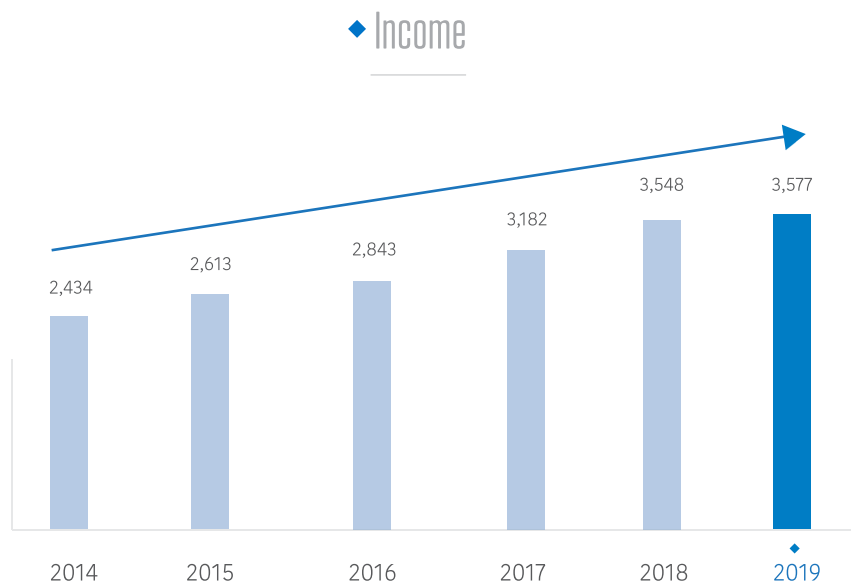
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# 2019 in Figures

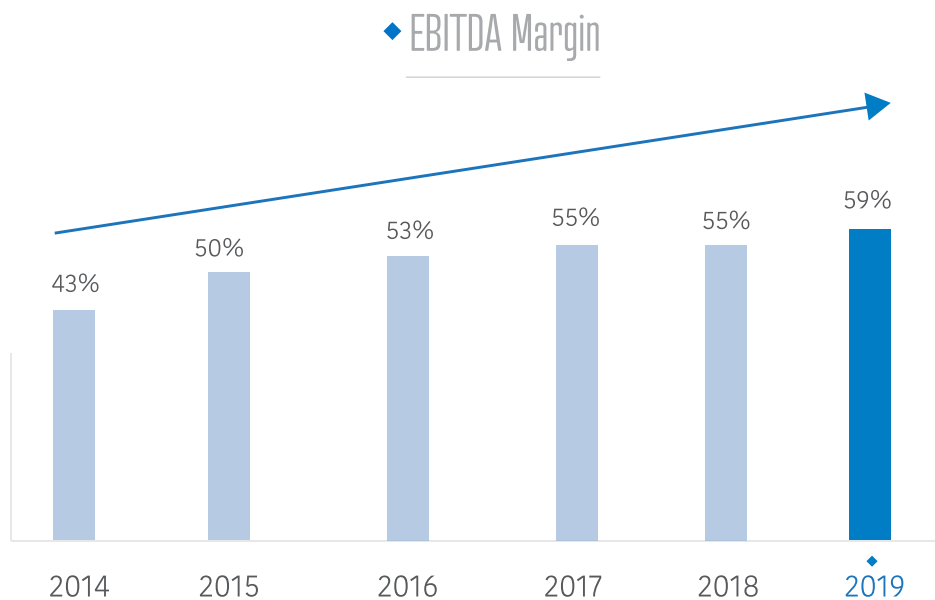
## Total Income

At the end of 2019, revenues totaled 3,577 million pesos or an increase of 1% compared to 2018.

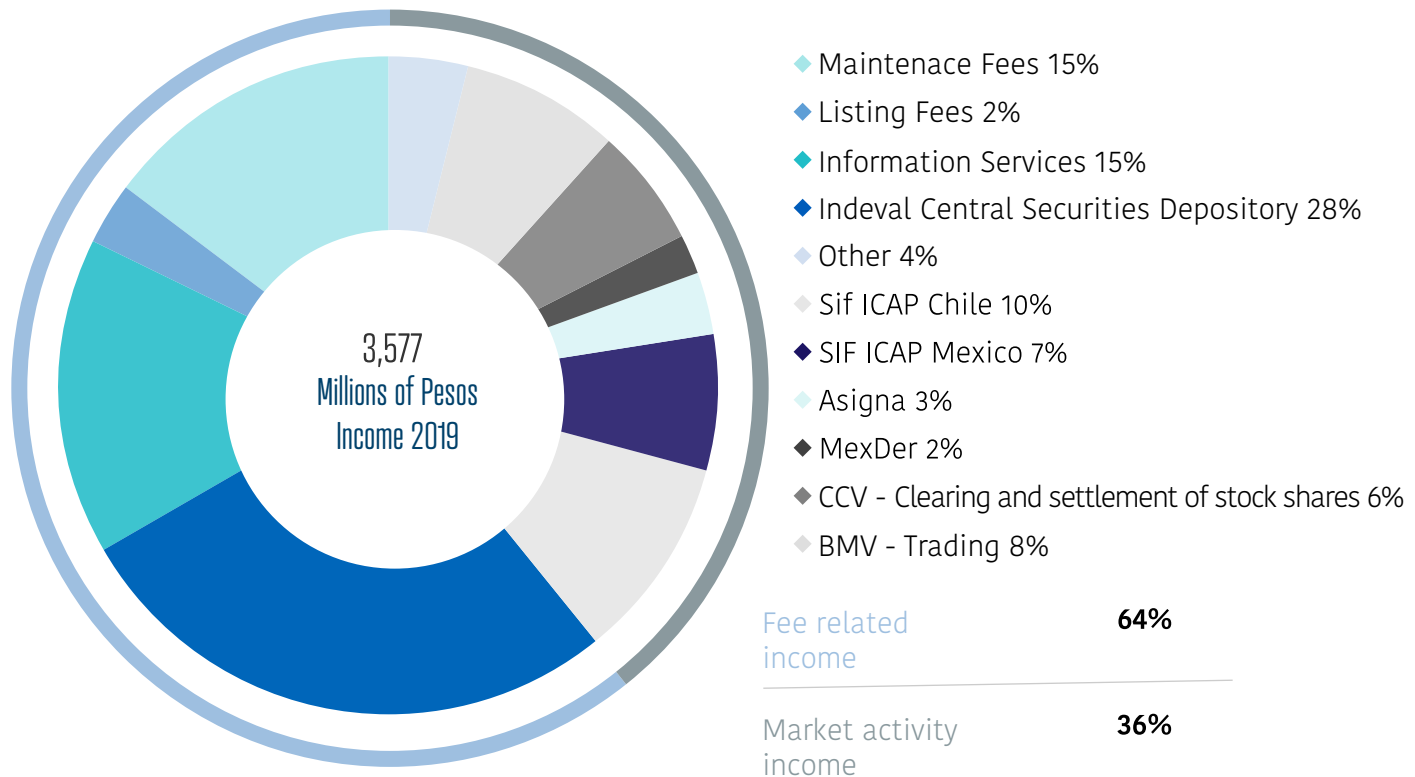


## EBITDA Margin

EBITDA Margin increased 394 basis points compared to the previous year, obtaining a record margin of 59%.



## Total income by line of business



## Capital Market Operation

The annual result for 2019 from capital operation income was 272 million pesos, 44 million or 14% below what was reported in the same period of 2018. The average daily operated value (VOPD) in 2019 decreased in both markets, registering a drop of 16% compared to 2018. BMV's market share in the Total Market is 91% and in the Main Market 98%.

## CCV

CCV registered revenues of 213 million pesos, 23 million less compared to what was reported in 2018. The VOPD of the total Mexican capital market in 2019 was 14,610 million pesos, 13% lower than the same period of the previous year.

## Derivatives Market Operation MexDer

MexDer's revenues were 81 million pesos, a similar figure to that of 2018. This behavior is explained by the higher swap operation of TIE 28 (25%) and settled by a lower currency transactions (-19%) and contracts of the CPI index (-2%).

## Asigna

Asigna's revenues were 105 million pesos, a decrease of 16 million or 13% compared to 2018, mainly due to a decrease in the transactions of currencies and CPI, as well as less open interest in Dollar's futures, which generated lower margin deposits (-12% vs. Accum. 2018).

## Operation OTC (SIF ICAP)

Annual income in 2019 was 585 million pesos, a result similar to that of the previous year. It is important to mention that in SIF ICAP Mexico there was an extraordinary income in 2018 for 12 million pesos due to the resolution of a labor demand. Excluding this non-recurring item, SIF ICAP Mexico's revenues decreased 5%, while at SIF ICAP Chile they increased 8% compared to the same period of the previous year.

## Issuers

### Listing

The **annual result** of 2019 for the income from **securities listing fees** was 94 million pesos, 28 million or 23% lower compared to those observed in 2018. In 2019, 16 subsequent placements and issues were presented (1 SPAC, 3 CKDs and 11 CERPIs) compared to 39 placements (1 SPAC, 14 CKDs, 18 CERPIs, 3 FIBRAs and 3 FIBRAs E) from the previous year. Regarding the long-term debt market, the number of issues increased 19%, while the amount placed decreased 19%. Short-term placements increased both in number of placements and in the amount placed by 24% and 23%, respectively. The **The accumulated impact of the discounts** amounted to 19 million pesos and the differential due to lower placements.



## Maintenance fees

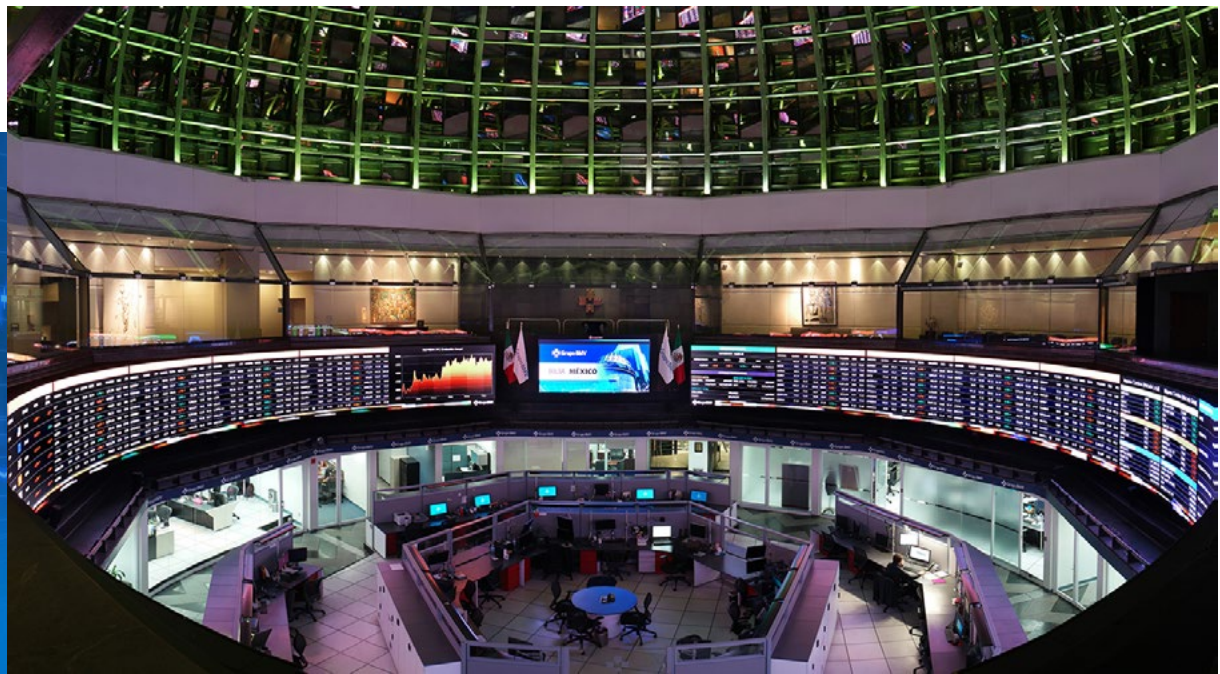
**Annual revenues** for this concept were 521 million pesos, 51 million or 9% less than those observed in 2018. The impact of discounts in 2019 was 73 million pesos. Not counting **the impact of discounts**, the growth of 22 million pesos is explained by the 2018 listings, which from this year on generated maintenance fees.

## Central Securities Depository

Indeval's annual income was 1,014 million pesos, that is 113 million or 13% above what was reported in 2018. This increase is mainly due to services related to the SIC, where the income amounted to 316 million pesos in 2019, 84 million above the 2018 figure.

## Information Services

**Annual information services' revenues** reached amounts of 371 and 188 million pesos for **Market data** and **Valmer**, respectively. In 2019, Information Services has recorded non-recurring income of 38 million pesos, 20 million in Market Data and 18 million in Valmer. Similarly, in 2018 accumulated non-recurring income was 20 million pesos in Market Data. Excluding non-recurring income, growth for the year was 60 million pesos or 13% derived from the commercialization of products developed in 2018 and the acquisition of new clients.





# Message from the Chairman of the Board of Directors

Dear shareholders, collaborators and friends of Bolsa Mexicana de Valores Group (Mexican Stock Exchange):

The 2019 was a momentous year for Mexico and for BMV Group, where the main events and trends at the national and international level allowed us to face important challenges. Notwithstanding the slowdown in the Mexican economy, a complex macroeconomic environment and the volatility of the markets, I am pleased to inform you that in 2019 we had a historic record in revenue and EBITDA margin, which reflects our focus, strength, vision, and allows us to strengthen our position in the Mexican Financial Market.

Our goal:  
to promote Mexico's growth

At BMV Group we have as a premise to be allies of Mexico to enhance its growth. We have achieved this by diversifying businesses, with high standards of corporate governance and technological innovation, promoting the institutionalization of companies and the transparency of results to contribute to the economic development of the country. Always supporting investors, businesses and the government to find in us a platform in which they can finance their projects, generate more employment opportunities and capitalize challenges in opportunities.

An example of this is the ratification of the USAMCA Agreement (T-MEC), which places Mexico in a privileged position at the global level, benefiting the commercial and investment flow of Mexican companies. In this sense, I am confident that our geographical location will open great opportunities for new companies offering various services, but especially manufacturing services, to successfully develop in the country.



## Facing 2020


Towards 2020 I see two important challenges: one of them regarding public health and how it will impact the national and international economy, even with the adoption of new forms of work. In this sense, it is important to know how to adapt, understand the new rules and support everything necessary to drive economic growth with technology, leadership and determination.

The second one is climate change. On the other hand, it is essential that growth also contributes to sustainable development and is reflected in all our activities, inside and outside the organization. Since 2014, we have been part of the Sustainable Stock Exchange Initiative (SSE) with the aim of promoting sustainability in the financial market, and although we have developed various instruments that promote responsible investment, in 2020 we will strengthen our Sustainability strategy, adhering to international standards and being a benchmark in terms of Environment, Social and Corporate Governance, helping to build a profitable, sustainable and equitable economy.

## Our commitment for 125 years

Our commitment for 125 years has been to finance the development of Mexico in an efficient, reliable and safe manner. We are an engine for business growth and we have everything to get ahead. We are living through a time of unprecedented changes, but I am convinced that the BMV Group is ready to respond to them, because we have the strategy, the infrastructure and the best talent to achieve it.

Sincerely,  
**Jaime Ruiz Sacristán**





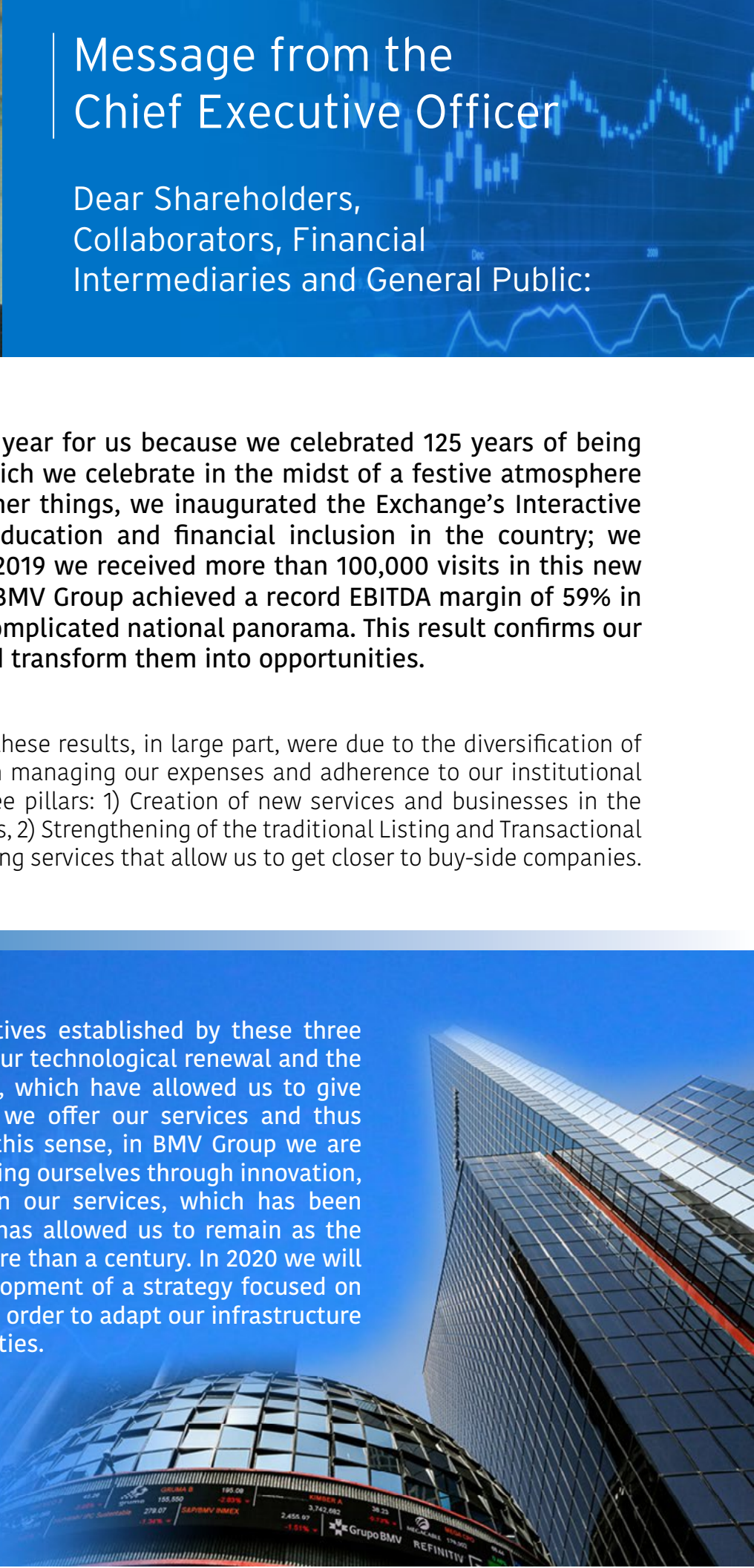
# Message from the Chief Executive Officer

Dear Shareholders,  
Collaborators, Financial  
Intermediaries and General Public:

2019 was a very emblematic year for us because we celebrated 125 years of being Mexico's Stock Exchange, which we celebrate in the midst of a festive atmosphere and great events. Among other things, we inaugurated the Exchange's Interactive Museum, which promotes education and financial inclusion in the country; we can proudly say that during 2019 we received more than 100,000 visits in this new cultural space. Additionally, BMV Group achieved a record EBITDA margin of 59% in the face of a changing and complicated national panorama. This result confirms our ability to face challenges and transform them into opportunities.

It is important to mention that these results, in large part, were due to the diversification of our business model, prudence in managing our expenses and adherence to our institutional strategy, which is based on three pillars: 1) Creation of new services and businesses in the Post-Trade and Market Data areas, 2) Strengthening of the traditional Listing and Transactional Services businesses and 3) Offering services that allow us to get closer to buy-side companies.

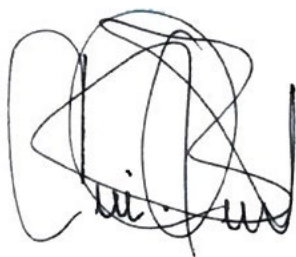
The achievement of the objectives established by these three pillars was possible thanks to our technological renewal and the execution of strategic projects, which have allowed us to give another approach to the way we offer our services and thus reach more market niches. In this sense, in BMV Group we are prepared to continue transforming ourselves through innovation, transparency and excellence in our services, which has been a constant in our history and has allowed us to remain as the Mexican Stock Exchange for more than a century. In 2020 we will work on the analysis and development of a strategy focused on technological transformation in order to adapt our infrastructure and implement new functionalities.



Finally, recognizing the role we have in the Mexican Financial System, I want to highlight the importance of leading with actions to rethink the way we do things. It is necessary to look beyond immediate economic results to ensure long-term growth and sustainability. For this reason, we are carrying out an organizational strategy that will allow us to ensure that all the products and services provided by BMV Group are built under international standards of Corporate Governance, contribute to the strengthening of the Financial Culture to become the main platform in which the issuers can obtain green financing and minimize the Group's impact on climate change. During 2019 we helped finance more than 700 million pesos through sustainable bonds for the development of Mexican communities.

**I thank our shareholders, directors and clients for the trust they have given us and I recognize the excellent work of each and every one of the collaborators, who day by day do their best to make the operation of the Securities and Derivatives Market in Mexico possible.**

Sincerely,  
**José-Oriol Bosch Par**

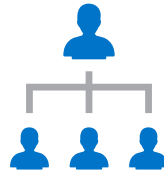




## Corporate Governance

At BMV Group, in addition to having a solid infrastructure, part of our success comes from the strength of our governing bodies, which are structured according to best practices.

### BOLSA MEXICANA DE VALORES, S.A.B. DE C.V. (Mexican Stock Exchange)



#### Board of Directors

#### Institutional Directors

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##### Proprietary

Jaime Ruiz Sacristán  
Álvaro Vaqueiro Ussel  
Carlos Hank González  
Ernesto Ortega Arellano  
Juan Bordes Aznar  
Felipe García-Moreno  
Rodríguez  
Carlos Bremer Gutiérrez

##### Alternate

Marcos Ramírez Miguel  
Tomás Christian Ehrenberg Aldford  
Marcos Martínez Gavica  
Edgardo Mauricio Cantú Delgado

## Independent Directors

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### Proprietary

Francisco Gil Díaz  
Alfonso González Migoya  
Blanca A. Treviño de Vega  
Alberto Navarro Rodríguez  
Eduardo Valdés Acra  
Fernando Ruiz Sahagún  
Alberto Torrado Martínez  
Claudio X. González Laporte

### Alternate

Clemente Ismael Reyes-Retana  
Valdés

### Chairman

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Jaime Ruiz Sacristán

### Proprietary Commissioner

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Jorge E. Cañellas Pueyo

### Proprietary Secretary

Rafael Robles Miaja

### Alternate Secretary

María Luisa Petricioli Castellón



# Mexican Stock Exchange's Committees

## Main Functions and Members

### Audit Committee

Like any other stock corporation, we have an Audit Committee. Our Audit Committee is required to be made up exclusively of independent directors, elected by our Board of Directors, except for the chairman, who is elected by our shareholders. Our Audit Committee is required to prepare an annual report to be presented to our Board of Directors, which must include, among others: (i) a report regarding our internal control systems, our internal surveillance procedures and any deficiencies, (ii) the evaluation of our external auditors, (iii) the results of the review

of our Financial Statements, (iv) any modification to our accounting policies and their impact on us, and (v) measures taken as a result of suggestions made by shareholders, directors or employees regarding accounting, internal control or any other related matter. The quorum for any session of our Audit Committee is the majority of its members and decisions must be made by the majority of its members.

Additionally, our Audit Committee has the following duties:

- Give an opinion regarding the matters that correspond to it;
- Comment on and evaluate the services of our external auditors;
- Supervise internal control and internal audit systems;
- Prepare an opinion, to be submitted to the Board of Directors, regarding our financial statements prepared by our Chief Executive Officer (including an opinion on whether our accounting policies and criteria are adequate and sufficient);
- Obtain expert opinions as deemed necessary or appropriate;
- Require the Chief Executive Officer, and any other employee, the preparation of reports regarding financial information;
- Initiate investigations regarding transactions, internal control systems, internal audit and accounting records; and
- Inform the Board of Directors of any irregularity.



The Audit Committee has pre-established annual meetings. The Audit Committee shall meet when called by the Chairman or by the Secretary of the Board of Directors or by two of its members or by the Chairman or Secretary of the Audit Committee itself.

Since BMV is a regulated company considered as a financial entity for the purposes of the CNBV (National Banking and Securities Commission) Law, it has both a Commissioner and an Audit Committee. Although it is true that the Commissioner is a delegated body of the Shareholders' Meeting and reports to it, there may be duplication between the functions performed by the Commissioner and those carried out by the Audit Committee, which could result in conflicts of interest and in differences in criteria, which could affect BMV's operation. This is particularly important regarding the determination of (i) whether the

accounting and reporting policies and criteria followed by BMV are adequate and sufficient, (ii) whether said policies and criteria have been applied consistently, and (iii) whether the financial information presented reasonably reflects BMV's financial situation and results. It is also important regarding issues related to the review and supervision of financial information. Although BMV tries to avoid duplication or conflict in the discharge of the functions of the Audit Committee and the Commissioner, it cannot be assured that this is achieved and the consequences it can have on BMV's results.

The members of the Audit Committee are:



## AUDIT COMMITTEE

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Alfonso González Migoya (Chairman)

Alberto Navarro Rodríguez

Fernando Ruíz Sahagún

Clemente Ismael Reyes-Retana Valdés

It is worth mentioning that according to the information that emerges from their biography, the aforementioned members are financial experts.

# Corporate Practices Committee

Administration, except for the Chairman who is elected by our shareholders. The quorum for any session of our Corporate Practices Committee is the majority of its members and decisions must be made by the majority of its members.

Our Corporate Practices Committee has the following duties:

- Comment on any matter that corresponds to it, including the performance of our officers and operations with related parties;
- Give an opinion regarding the remuneration to be paid to our officers and directors;
- Comment on waivers for directors and officers in order to take advantage of corporate opportunities that would otherwise belong to us;
- Obtain expert opinions as deemed necessary or appropriate;
- Review and comment on operations with related parties in terms of the LMV (Stock Market Law); and
- Make recommendations to our Board of Directors regarding the compensation of the Chairman of the Board of Directors, the Chief Executive Officer and other high-ranking officials, as well as those of our subsidiaries and affiliates.

The Corporate Practices Committee is not obliged to meet on certain dates and does not have pre-established meetings. The Corporate Practices Committee shall meet when called by the Chairman or by the Secretary of the Board of Directors or by two of its members or by the Chairman or Secretary of said Committee.

The members of the Corporate Practices Committee are:



## CORPORATE PRACTICES COMMITTEE

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Alfonso González Migoya (Chairman)

Alberto Navarro Rodríguez

Fernando Ruíz Sahagún

It is worth mentioning that according to the information that emerges from their biography, the three previous members are financial experts.

## Admission of Members Committee

The function of the Admission of Members Committee is to decide whether new Mexican brokerage firms are accepted to operate in BMV. This committee has the power to consult with external experts regarding any matter submitted for approval.

The members of the Admission of Members Committee are:



### ADMISSION OF MEMBERS COMMITTEE

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Alfonso González Migoya (Chairman)

Alberto Navarro Rodríguez

Fernando Ruíz Sahagún

## Issuers' Securities Listing Committee

The Issuers' Securities Listing Committee determines whether the listing of new issuers or securities is permitted in order to, where appropriate, trade such securities in BMV. To avoid possible conflicts of interest between BMV as issuer and BMV as self-regulator, all the members of the Issuers' Securities Listing Committee are independent.

The members of the Issuers' Securities Listing Committee are:



### ISSUERS' SECURITIES LISTING COMMITTEE

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Xavier M. de Uriarte Berrón (Chairman)

Jorge Eduardo Alonso Olivares

Mauricio Basila Lago

Carlos Césarman Kolteniuk

# Surveillance Committee

The Surveillance Committee has been tasked with analyzing possible violations to BMV's internal regulations and other regulations issued by BMV, as well as with proposing disciplinary measures to the Disciplinary Committee. To avoid possible conflicts of interest, all the members of the Surveillance Committee must act free of conflicts of interest.

The members of the Surveillance Committee are:



## SURVEILLANCE COMMITTEE

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Jaime Díaz Tinoco (Chairman)

Carlos Ballados Villagómez

Antonio Villarruel Lagos



BMV has a Surveillance Director, who is appointed or removed by the Board of Directors and reports to the Surveillance Committee and, when deemed necessary, to the Board of Directors. The Surveillance Director will have the right to convene, directly, the Surveillance Committee and will support the Committee in carrying out the functions that correspond to it, developing preparatory, investigative, advisory and assistance activities, proposing the disciplinary and corrective measures that correspond, and relying on the independent experts that it deems necessary to carry out its functions. In addition, the Surveillance Director will periodically verify that BMV meets the necessary requirements to keep its securities registered for listing on BMV.

## Normative Committee

The Normative Committee has, among others, the function of issuing self-regulatory regulations, applicable to BMV, brokerage firms and other market participants. To avoid possible conflicts of interest, all the members of the Normative Committee must be independent.

The members of the Normative Committee are:



### NORMATIVE COMMITTEE

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Alberto Saavedra Olavarrieta (Chairman))

Juan Pablo del Río Benítez

Rosa Martha Ríos Vázquez

Hernán Sabau García

María Teresa Vargas de Regil

## Disciplinary Committee

The Disciplinary Committee has, among other functions, to hear and decide on cases of alleged violations of the self-regulatory rules issued by BMV, the provisions of its Internal Regulations and other BMV's regulations, committed by the persons liable pursuant to said provisions and impose the corresponding disciplinary measures, if appropriate. All the members of the Disciplinary Committee must be independent.

The members of the Disciplinary Committee are:



### DISCIPLINARY COMMITTEE

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Jorge Gaxiola Moraila (Chairman)

Ernesto Nuño Gutiérrez

Romeo Vizzani Fuentes

# Technology Committee

The Technology Committee has, among others, the function of carrying out consultative and advisory activities in technological matters, reviewing and monitoring the implementation of the main technology projects of the Company and of the legal entities that it controls and informing the Company's Board of Directors on the situation of these projects, including the deviations that, if applicable, it detects, as well as others functions that are entrusted to it by the Board of Directors.

The members of the Technology Committee are:



## TECHNOLOGY COMMITTEE

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Francisco Gil Díaz (Chairman)

Guillermo Güémez Sarre

Bárbara Mair Rowberry

Blanca A. Treviño de Vega

Francisco Xavier Leyva Rubio

Miguel Alejandro Hernández Orozco





# Brokerage Firms that are Members in BMV

## INTEGRAL MEMBERS

Intermediation activities in the capital and debt market

1	Actinver Casa de Bolsa, S.A. de C.V., Grupo Financiero Actinver
2	Barclays Capital Casa de Bolsa, S.A. de C.V., Grupo Financiero Barclays México
3	BTG Pactual Casa de Bolsa, S.A. de C.V.
4	Bursamétrica Casa de Bolsa, S.A. de C.V.
5	Casa de Bolsa Banorte, S.A. de C.V., Grupo Financiero Banorte
6	Casa de Bolsa BBVA Bancomer, S.A. de C.V., Grupo Financiero BBVA Bancomer
7	Casa de Bolsa Credit Suisse (México), S.A. de C.V., Grupo Financiero Credit Suisse (México)
8	Casa de Bolsa Finamex, S.A.B. de C.V.
9	Casa de Bolsa Multiva, S.A. de C.V., Grupo Financiero Multiva
10	Casa de Bolsa Santander, S.A. de C.V., Grupo Financiero Santander México
11	Casa de Bolsa Ve por Más, S.A. de C.V., Grupo Financiero Ve por Más
12	CI Casa de Bolsa, S.A. de C.V.
13	Citibanamex Casa de Bolsa, S.A. de C.V., Casa de Bolsa integrante del Grupo Financiero Citibanamex
14	Deutsche Securities, S.A. de C.V., Casa de Bolsa
15	Evercore Casa de Bolsa, S.A. de C.V.
16	Grupo Bursátil Mexicano, S.A. de C.V. Casa de Bolsa
17	HSBC Casa de Bolsa, S.A. de C.V., Grupo Financiero HSBC

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18	Intercam Casa de Bolsa, S.A. de C.V.
19	Inversora Bursátil, S.A. de C.V., Casa de Bolsa, Grupo Financiero Inbursa
20	Invex Casa de Bolsa, S.A. de C.V., Invex Grupo Financiero
21	J.P. Morgan Casa de Bolsa, S.A. de C.V., J.P. Morgan Grupo Financiero
22	Merrill Lynch México, S.A. de C.V., Casa de Bolsa
23	Monex Casa de Bolsa, S.A. de C.V. , Monex Grupo Financiero
24	Morgan Stanley México, Casa de Bolsa, S.A. de C.V.
25	Punto Casa de Bolsa, S.A. de C.V.
26	Scotia Inverlat Casa de Bolsa, S.A. de C.V., Grupo Financiero Scotiabank Inverlat
27	UBS Casa de Bolsa, S.A. de C.V.
28	Value, S.A. de C.V., Casa de Bolsa, Value Grupo Financiero
29	Vector Casa de Bolsa, S.A. de C.V.
30	Vifaru, S.A. de C.V., Casa de Bolsa

## BOUNDED MEMBERS

Intermediation activities only with debt securities

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1	Casa de Bolsa Base, S.A. de C.V., Grupo Financiero Base
2	Goldman Sachs México, Casa de Bolsa, S.A. de C.V.
3	Masari, Casa de Bolsa, S.A.





## Governing Body of BMV Group

José-Oriol Bosch Par	Chief Executive Officer
José Manuel Allende Zubiri	Senior Vice President of Issuers and Information
Roberto González Barrera	Senior Vice President of Deposit
Catalina Clavé Almeida	Senior Vice President of Clearinghouses
Hugo A. Contreras Pliego	Senior Vice President of Compliance and Regulations
Aída S. Andrade Ancira	Director of Internal Audit
José Miguel De Dios Gómez	MexDer General Director
Pedro Díez Sánchez	Director of Market Surveillance
Ramón Güémez Sarre	Director of Administration and Finance
Alfredo R. Guillén Lara	Director of Transactional Services of the Capital Market
Clementina Ramírez de Arellano Moreno	Legal and Regulatory Director
Gabriel Rodríguez Bas	SIF Icap General Director
Rosa Lara Crespo Casas	Director of Human Factor and Education



# CONTRAPARTE CENTRAL DE VALORES DE MÉXICO, S.A. DE C.V. (Securities Central Counterparty)



## BOARD CCV

### Institutional Directors

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#### Proprietary

Jaime Ruiz Sacristán  
José De Aguinaga Girault  
Ernesto Ortega Arellano  
Roberto Valdés Acra

#### Alternate

José-Oriol Bosch Par  
Luis Murillo Peñaloza  
León De Paul Martínez  
Roberto Quirós Caballero

### Independent Directors

---

#### Proprietary

Alfonso González Migoya  
Hernán Sabau García  
Clemente Reyes-Retana Valdés

#### Alternate

Alberto Navarro Rodríguez  
Luis Perezcano Díaz  
Héctor Anaya Doll

### Chairman

Jaime Ruiz Sacristán

### Vice-chairman

Ernesto Ortega Arellano

### Commissioner

---

Jorge E. Cañellas Pueyo

#### Proprietary Secretary

Rafael Robles Miaja

#### Alternate Secretary

Clementina Ramírez de Arellano Moreno



## COMMITTEES CGV

### Surveillance Committee

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#### Proprietary

Bernardo Ernesto Reyes Retana  
Felipe Torres Luquin  
Gabriel Rincón Hernández  
Iñigo Ruíz Bada  
Patricio de la Vega Flores (Presidente)  
Carlos Alberto Gómez Rocandio

#### Alternate

Jessica Yolanda Durán Olguin  
Airam Paloma Torres Martínez  
Ricardo Arteaga Botello  
Salvador Martínez García

## Risk Committee

### Independent

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#### Proprietary

Dr. Gustavo I. Fuertes Sánchez  
Mtro. Sergio García Quintana  
Hesiquio Gerardo Cabañas Tapia

#### Alternate

Lic. Alejandro Diosdado Rodríguez  
Francisco Fernández Antonio

## Institutional

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#### Proprietary

Lic. Octavio Mieres Hermosillo  
Act. Daniela Gallardo Loera  
León de Paul Martínez (*Chairman*)

#### Alternate

Lic. Rogelio Sandoval Saavedra  
Jendanny Raña Custodio



# MEXDER, MERCADO MEXICANO DE DERIVADOS, S.A. DE C.V. (Mexican Derivatives Market)



## BOARD MEXDER

### Institutional Directors

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#### Proprietary

Jaime Ruiz Sacristán  
José de Aguinaga Girault  
Tomás Acosta Álvarez  
Gerardo Vargas Pérez  
Jorge Arturo García Parés

#### Alternate

José-Oriol Bosch Par  
Erick Noel Rodríguez Jimarez  
Eduardo Arturo Carrillo Madero  
Mauricio Dibildox Valls  
Esteban Puente Mier

### Independent Directors

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#### Proprietary

Guillermo Zamarripa Escamilla  
Ernesto Fernández Arias  
Alberto Saavedra Olavarrieta  
Hernán Sabau García

#### Alternate

Jorge Sánchez Tello  
Guillermo Andrés Moreno Arias  
Luis Sánchez Tapia  
Luis Perezcano Díaz

#### Chairman

Jaime Ruiz Sacristán

#### Proprietary Commissioner

Jorge E. Cañellas Pueyo

#### Proprietary Secretary

Rafael Robles Miaja

#### Secretary

Clementina Ramírez de Arellano Moreno



## COMMITTEES MEXDER

### Admission and new products committee

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#### Members

Pedro Oscar Arroyo Espinoza  
Guillermo Camou Hernández  
Alfonso García Araneda  
Víctor Manuel Gutiérrez López  
Celso Hernando Ledesma Rodríguez  
Adolfo López González  
Guillermo Ochoa Tommasi  
Ricardo Siqueiros Suárez

### Audit Committee

---

#### Independent Members

Alfonso González Migoya (*Chairman*)  
Clemente Reyes-Retana Valdés  
Alberto Rodríguez Navarro  
Fernando Ruíz Sahagún

### Disciplinary and Arbitration Committee

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#### Independent Members

Jorge Gaxiola Moraila (*Chairman*)  
Ernesto Nuño Gutiérrez  
Romeo Vizzani Fuentes

### Regulatory and Ethics Committee

---

#### Independent Members

Alberto Saavedra Olavarrieta (*Chairman*)  
Juan Pablo del Río Benítez  
Hernán Sabau García

#### Institutional Members

Rosa Martha Ríos Vázquez  
María Teresa Vargas de Regil



# ASIGNA, COMPENSACIÓN Y LIQUIDACIÓN (Asigna, Clearing and Settlement)



## COMMITTEES ASIGNA

### Asigna's Technical Committee (Trust)

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#### Institutional Members

##### Proprietary

Jaime Ruiz Sacristán  
Héctor Guillermo Camou Hernández  
Luis Antonio Betancourt Barrios  
Patricio de la Vega Flores  
León de Paul Martínez  
Álvaro Vaqueiro Ussel

##### Alternate

José-Oriol Bosch Par  
Salvador Peredo Mendía  
Guillermo Ochoa Tommasi  
Susana Alejandra Morales Mendoza  
Jendanny Raña Custodio  
Maria Eugenia Palomera Mancilla

#### Independent Members

##### Proprietary

Clemente Reyes-Retana Valdés  
Alberto Saavedra Olavarrieta  
Hernán Sabau García  
Enrique E. Solórzano Palacio

##### Alternate

Alfonso González Migoya  
Luis Sánchez Tapia  
Luis Perezcano Díaz  
Guillermo Andrés Moreno Arias

#### Chairman

---

Jaime Ruiz Sacristán

#### Proprietary Secretary

Rafael Robles Miaja

#### Alternate Secretary

Clementina Ramírez de Arellano Moreno

## Administration Subcommittee

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### Members

#### Proprietary

Leticia Torrescano Ibarra (*Chairman*)  
Gonzalo Benavides Soriano  
Araceli Fernández Ortiz  
Susana Alejandra Morales Mendoza

#### Alternate

José Manuel Federico Barbosa Robledo  
Quiahuitl Aztryd Marín Galván  
Alfonso Vazquez Moreno  
Patricio de la Vega Flores

## Admission and Risk Management Subcommittee

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### Members

#### Proprietary

León de Paul Martínez (*Chairman*)  
Hesiquio Gerardo Cabañas Tapia  
Adriana Katia Dobbertin Félix  
Gustavo Iván Fuertes Sánchez  
Graciela García Vázquez  
Ruth Peña Thompson  
Aldo Raúl Trillo Sánchez

#### Alternate

Dzoara de la Cruz Torres  
Jaime Enríquez Martínez de Velasco

## Audit Subcommittee

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### Members

Alfonso González Migoya (*Chairman*)  
Clemente Reyes-Retana Valdés  
Alberto Rodríguez Navarro  
Fernando Ruíz Sahagún

## Disciplinary and Arbitration Subcommittee

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### Members

Jorge Gaxiola Moraila (*Chairman*)  
Ernesto Nuño Gutiérrez  
Romeo Vizzani Fuentes

## Regulatory and Ethics Subcommittee

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### Members

Alberto Saavedra Olavarrieta (*Chairman*)  
Juan Pablo del Río Benítez  
Hernán Sabau García  
Rosa Martha Ríos Vázquez  
María Teresa Vargas de Regil



# S.D. INDEVAL INSTITUCIÓN PARA EL DEPÓSITO DE VALORES, S.A. DE C.V. (Central Securities Depository)



## BOARD S.D. INDEVAL Institutional Directors

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### Proprietary

Jaime Ruiz Sacristán  
José de Aguinaga Girault  
Manuel Lasa Lasa  
Ernesto Ortega Arellano  
Roberto Valdés Acra

### Alternate

José-Oriol Bosch Par  
Fernando Rioja Maldonado  
Antonio Doderó Portilla  
Luis Manuel Murillo Peñaloza  
Roberto Quirós Caballero

## Independent Directors

---

### Proprietary

Manuel Miguel Ángel Díaz Díaz  
Francisco Zago Berra  
Alfonso González Migoya  
Clemente Reyes-Retana Valdés

### Alternate

Dr. Othón Martino Moreno González  
Jorge E. Alonso Olivares  
Alberto Navarro Rodríguez  
Héctor Anaya Doll

### Chairman

---

Jaime Ruiz Sacristán

### Vice-chairman

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Ernesto Ortega Arellano

### Commissioner

---

Jorge E. Cañellas Pueyo

### Proprietary Secretary

Rafael Robles Miaja

### Alternate Secretary

Clementina Ramírez de Arellano Moreno





STOCK MARKET

# OVERVIEW



# STOCK MARKET

In the year covered by this report the growth of the economy in Mexico was somewhat weak, given that the long-term growth projections reveal uneasiness about the recovery of the global economy; this scenario generated a lower average daily traded value, as well as lower placements in the debt market.

The FIX exchange rate reached a maximum of \$20.12 pesos per dollar; also, INEGI reported an annual inflation rate of 2.83% and Banco de México registered the target interest rate at 7.25%.

The volatility of the Prices and Quotation Index (S&P/BMV IPC) of the Mexican Stock Exchange (BMV) accumulated a variation of 3% in pesos and 7% in dollars, reaching 43,541 units at the end of the year. On the other hand, the BMV (BOLSAA) share accumulated a variation of 20% in pesos and 25% in dollars, with a closing price of 41.34.

## ◆ Prices and Quotation Index (IPC)



Figures in Units

Other BMV indices, such as the Sustainable IPC, Bursa Óptimo and IPC CompMX benefited from nominal variations in pesos of 3.97%, 2.86% and 2.88%, respectively.

The capitalization value in national currency increased by 20% in nominal terms and 25% in dollars (without considering foreign issuers).

## ◆ Capitalization value as a percentage of the GDP

	2014	2015	2016	2017	2018	2019
Amount*	7,078,720	6,953,833	7,267,265	8,206,380	7,564,412	7,830,632
% GDP	41.50%	38.90%	37.10%	40.10%	40.64%	42.31%

\*Millions of pesos



OUR MARKETS

IN FACTS

# OUR MARKETS IN FACTS

With our integrated business group we cover all stages of stock market transactions: the promotion, listing, trading, settlement of transactions, custody and clearing, risk management, as well as the generation of real-time information and added valuable services.

## A WELL BALANCED BUSINESS PORTFOLIO



### Listing

- Equities
- SPAC
- MLP (Fibra E)
- Debt
- ETFs (TRACs)
- REITs (FIBRAS)
- Private Equity (CKDs and CERPIs)

•BMV



### Trading

- Local Market
- Global Market (SIC)
- Listed Derivatives
- OTC Market
  - Fixed Income
  - SWAPS

•BMV  
•MexDer  
•SIF Icap



### Post-Trade

- Clearing
- Settlement
- Securities Lending
- Custody
- Central Securities Depository

•Indeval  
•CCV  
•Asigna



### Market Data

- Data Feed
- Screens
- Statistics
- Price Vendor
- Indices

•BMV  
•Valmer



### Value Added

- Education
- Financial Risk Management
- Governance, Risk & Compliance
- Softwares

•BMV  
•Valmer

Bolsa Mexicana  
de Valores  
125  
AÑOS

# LISTING

## Type of securities traded

On the Exchange, we trade the following types of securities:

- **Common shares**, limited voting shares, preferred shares, ordinary share certificates, convertible obligations and domestic warrants. We trade a wide variety of variable income instruments issued by private companies incorporated in Mexico.
- **Debt Securities**. We list an important range of short and long-term debt instruments issued by certain Mexican government entities and by private companies and trusts established in Mexico. Secondary trading occurs on OTC platforms.
- **TRAC's**. We trade a variety of TRAC's issued by private trusts established in Mexico, several of which follow our stock indices.
- **CKDs**. CKDs, launched in 2009, are fiduciary certificates dedicated to investing in stocks, shares, or financing Mexican companies, either directly or indirectly, through investment vehicles. They are designed to promote infrastructure, real estate, mining projects, companies in general and projects for technology development. The flows to be received are variable and depend on the results of each project.
- **FIBRAS**. FIBRAS were launched in 2010 and are securities issued by trusts dedicated to the acquisition or development of real estate that are used for leasing or acquiring the right to receive income from the leasing of such assets, as well as granting financing for those purposes.
- **FIBRAS E**. They are stock certificates for investment in companies, projects or mature energy or infrastructure assets, where there are proven flows. The instrument can be acquired by the general investing public; therefore, disclosure and corporate governance requirements are incorporated.
- **CERPIs**. They are the stock certificates that can be issued through a restricted public offer, aimed exclusively at institutional and qualified investors. Financing of projects in the development stage will be promoted through these instruments, under a flexible regulatory framework that improves their administration.
- **Optional Certificates or Warrants**. They are the documents that grant their holders, in exchange for the payment of an issue premium, the right to buy or sell to the issuer a certain number of shares to which they are referred, or to a group or basket of shares, or to receive from the issuer a certain amount of

money resulting from the variation of a price index at a certain price (strike price) and during a certain period and on a certain date.

- **SPAC.** The SPACs were launched in 2017 and it is an initial public offering of shares with the characteristic that the resources obtained are used only for the purchase of one or more companies. The money that is raised from the market is placed in a custodial account abroad to show that the use of the resources will be used for purchases; as long as the money is not used, it is invested in United States' government securities.

## Listing of Variable Income Instruments

On December 31, 2019, there were 139 Mexican issuers of shares and 5 foreign issuers listed on the Exchange (not including the securities listed on the Global Market). Additionally, 459 Investment Funds and 117 SIEFORES were listed. Approximately 15.83% of the listed companies had a capitalization value greater than \$99 thousand million; 25.90% had a market capitalization value of less than \$99 billion and greater than \$20 thousand million, while 58.27% had a capitalization value of less than \$20 thousand million. The total capitalization value of national issuers was equivalent to 42.21% of the GDP. On the other hand, a total of 2,221 foreign instruments were listed in the Global Market of the Exchange.

On December 31, 2019, the capitalization value of the shares that are part of the IPC represented 82.11% of the total capitalization value of the stock market.

Additionally, at the end of 2019, 15 Infrastructure and Real Estate Trusts (FIBRAS) with a capitalization value of \$304,386 million pesos, a Mortgage Trust with a capitalization value of \$7,513 million and 3 Energy and

Infrastructure Trusts with a capitalization value of \$74,570 million were listed on the Exchange.

The number of Mexican issuers listed with shares on the Exchange at the end of 2019 was 139. The total market capitalization of the national issuers at the end of 2019 is \$7,830 billion pesos.

### ◆ Shares listed on BMV \*

	2015	2016	2017	2018	◆ 2019
National shares					
Mexican Companies	136	137	141	140	139
Series <sup>(1)</sup>	187	186	190	194	187
Market capitalization <sup>(2)</sup>	6,954	7,627	8,206	7,564	7,830

On December 31,  
(not including the Exchange's Global Market)

<sup>(1)</sup> For series of various national shares

<sup>(2)</sup> In thousands of million pesos

The types of companies included are insurance and surety companies; industrial, commercial and service companies; brokerage firms; bank shares; SAPIBS.

In 2019, a Follow on was carried out by Vista Oil & Gas, S.A.B. de C.V. (VISTA) in the market, through a primary public offering of shares in the amount of \$2,031 million pesos.

The 11 placements of Investment Project Trust Certificates (CERPIS) at the end of 2019 stand out, for a total amount of \$5,896 million pesos. These CERPIS are:

- BXMX2PI 19D Bx México Advisors, S.A. de C.V.
- SVPI 19 Spruceview México, S. de R.L. de C.V.
- ACTPI 19 Actis Gestor de Capital Mexico S. de R.L. de C.V.
- HV2PI 19D Harbourvest Partners México, S. de R.L. de C.V.
- BLKPEPI Blackrock México Manager III, S. de R.L. de C.V. (Series 19D, 19-2D, 19-3D, 19-4D, 19-5D, 19-6D y 19-7D.)

During 2019, 3 placements of Development Trust Certificates (CKDes) were made for an amount of \$1,194 million pesos. The CKDes are the following:

- FFLA4CK 15 Pmic Latam, S.A.P.I. de C.V.\*
- FFLA2CK 15 Pmic Latam, S.A.P.I. de C.V.\*
- ODOCK 18 O´donell Capital Management, S. de R.L. DE C.V.\*

\* Reopening.

Additionally, a Follow on of FIBRA MTY, S.A.P.I. DE C.V. was carried out with a ticker code FMTY 14 for an issue amount of \$3.900 million pesos.

In 2019, 109 placements of optional securities were made for an amount of \$8,698 million. BBVA Bancomer and CITI were the most active brokerage firms, as they made 55 and 42 placements, respectively. Among the most representative underlying assets are CEMEX CPO, Netflix Inc., NVIDIA Corporation, Tesla Inc. and SPDR S & P500 ETF Trust.

Additionally, **14 investment funds were listed, out of which 11 correspond to variable income funds and 3 to debt instruments funds.** Additionally, 48 SIEFORES were listed to comply with the Generational Funds Scheme, with the aim that AFORES can carry out investment strategies focused by generation.

## Listing of Debt Securities

On December 31, 2019, 209 Mexican issuers had debt instruments listed on the Exchange (not including issuers of securities listed on the Exchange's Global Market).

Although mainly debt certificates issued by corporate issuers, states, municipalities and trusts in relation to securitizations are listed, the following debt instruments are also listed:

- Short-term debt: Short-term certificates are listed and have a maturity of less than one year.
- Long-term debt: Medium-term certificates, certificates of real estate participation, convertible instruments and certificates of debt participation are listed.

In 2019, regarding **short-term debt programs**:

- The amount of lines in force at the end of the year was \$544,960 million, which is 15.14% higher than the previous year.
- 1,187 issuances of short-term stock certificates were made for an amount of \$217,722 million.
- 10 programs (dual and short-term) were authorized, among which the following stand out: the dual programs established by the Special Fund for Agricultural Financing (FEFA) for an amount of \$180,000 million and by the Institute of the National Fund for the Consumption of Workers (FNCOT) for \$20,000 million.

In 2019, regarding **long-term debt** programs:

- 3 new debt issuers were presented, whose activity is the provision of financial services.
- 158 long-term debt issuances for \$215,508 million were made, the stock certificates represent 94.55% of the total issued.
- 20 programs were authorized, among which the following stand out: the programs established by Banco Inbursa (BINBUR) and Petróleos Mexicanos (PEMEX) for an amount of \$100,000 million each.

Out of the issuances of 2019, the following stand out:

- The Issuers with the highest amount placed throughout the year were Scotiabank Inverlat (SCOTIAB) with \$16,483 million, FOVISSSTE (FOVISCB) for \$14,000 million, Red de Carreteras de Occidente (RCO) for \$10,669 million, BBVA Bancomer (BACOMER) and Banco Santander (BSMX) with \$10,000 million each.



- BBVA Bancomer led the placement of structured bank bonds with a total amount of \$6,056 million through 15 issuances, followed by HSBC Mexico (HSBC) with a total amount of \$3,252 million through 38 issuances.
- Grupo Palacio de Hierro (GPH), Banco del Bajío (BBAJIO) and Grupo Lamosa (LAMOSA) ventured into long-term debt financing.
- Crediclub (CREDICL), new issuer, and Genomma Lab (LAB) ventured into short-term debt financing.

### ◆ Amount in circulation of Stock Certificates in BMV

Year ended December 31,	2017		2018		◆ 2019	
	Issuances	Value(1)	Issuances	Value(1)	Issuances	Value(1)
ISSUER OF STOCK CERTIFICATES						
Mexican local and municipal governments	29	86.8	25	75.3	24	71.4
Entities of the Mexican federal government	117	538.1	117	568.7	107	536.5
Private sector companies	316	588.2	324	635.7	313	631
Financial institutions	65	168.7	52	157.7	55	198.3
Backed by mortgages	65	21	61	19.2	53	17.4
Segregable Certificates	3	3.3	1	2	1	1.9
Total	595	\$1,406.1	580	\$1,458.6	553	\$1,456.5

(1) Thousands of millions of Pesos



## International Quotation System

At the end of December, 2019, 433 foreign securities were listed, out of which 257 are Companies and 176 are ETFs.



The listing of shares of **Domino's Pizza, Fox Corporation, Spotify, Beyond Meat, Philip Morris, Carnival, Juventus Football Club, Autozone, Campbell, Hershey, Kellogg, McCormick, Hasbro, Mattel, Expedia, TripAdvisor, Harley-Davidson, Ralph Lauren, Pinterest y Levi Strauss**, stand out, as well as the ETF's of new Asset Managers in the SIC such as: **Horizons, Fidelity, John Hancock y Metaurus.**

## Integral Services to Issuers

The promotion and advisory activities with potential companies and listed issuers continued during 2019 as a fundamental part of the Promotion and Issuers Department; the following activities stand out:

### a. Advisory

The Issuer Service Center (CAE) continues to be the point of contact for all the companies listed with BMV Group. During 2019, through the advisory service provided continuously from 7 a.m. to 7:00 p.m., over 3,750 calls were addressed in which doubts and requests were answered to the directors of the issuers on regulatory, operative and financial topics.

It is important to mention that, in order to keep the issuers updated, events focused on training on the applicable regulations were carried out. In addition, in-person, online and group trainings were given with specific topics on the obligations of the issuers. The previous activities allowed us to achieve that the issuers complied in a timely manner with their obligations before the investing public.

## b. Promotion

During 2019, the Promotion of Issuers Management continued to strengthen the links with executives of the issuers that participate in the Stock Market, achieving more than 350 visits that helped to know first-hand the concerns and needs of our clients, to be able to identify new opportunities in the market and at the same time to share with the executives the options offered by the various instruments available in the Mexican Exchange.

As a result of the meetings with issuers, events were held within the facilities of BMV, such as talks to employees and Board meetings of the issuers, which have allowed to permeate within the organizations the importance of working in a public company. In addition, a close relationship has been established with the BMV School, where we managed to offer courses and diplomas for the collaborators of the listed issuers at a preferential price, supporting the issuers in their annual training plans.

On the other hand, through Road Shows, “opening bell” ceremonies and days with investors it has been possible to provide visibility alternatives for our issuers, linking them with media and analysts of financial institutions, having a much more comprehensive value added service that strengthens their institutional image.

As every year since 2009, we held the Ninth Forum of Issuers, where we achieved one more time record attendance in number of issuers and participants, where great personalities such as Mtro. Arturo Herrera Gutiérrez and Mr. Luis Carlos Ugalde participated as speakers, addressing large-scale issues such as Cybersecurity, Energy, challenges and changes for issuers, attraction of global investors, Mayan Train, among others. This Forum has positioned itself as the meeting point for the main executives and officials of the stock market.



During 2019, the approach with the Mexican business community was also consolidated through the Promotion of New Issuers Management, which although it is an area that has been working for several years, during the last periods it has collaborated very closely with Consulting Firms, Rating Agencies, Lawyers, Brokerage Firms and other participants involved in the preparation process for a company to carry out a placement, not only contemplating a stock placement, but any financing alternative in the Stock Market.

In addition, together with associations and institutes, 8 cities were visited in the country, where several statistics and success stories were presented, looking for the entrepreneur to break some paradigms that exist around the Stock Market, thus achieving an important presence with the main representatives of the business sector of each region.

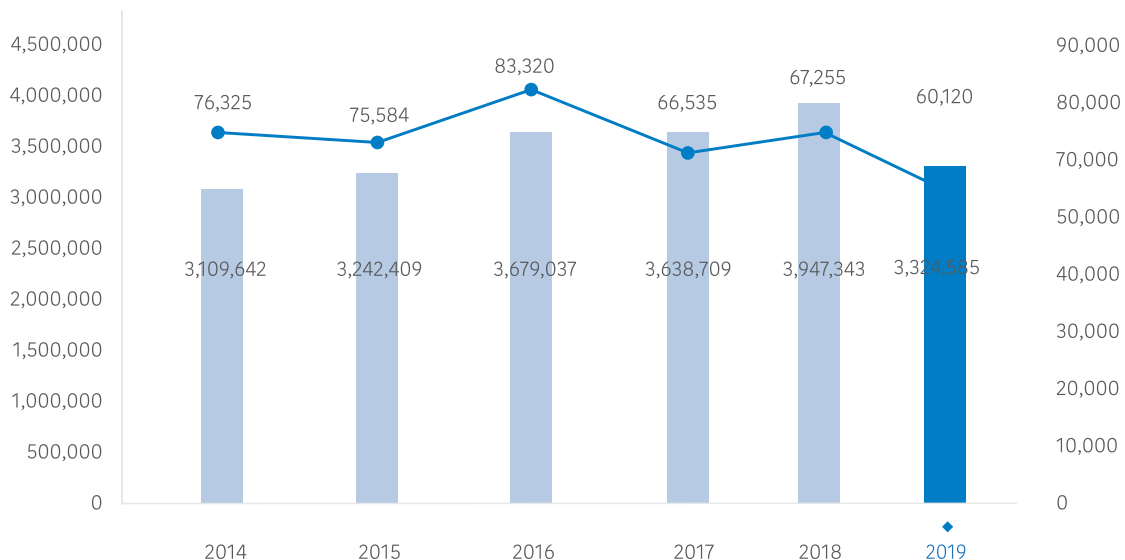
In addition, during 2019, a working group was created with the administrators of the CKDs, with a specific agenda with topics of interest such as: tax reform, operative processes with INDEVAL, approach with institutional investors, among others.

## TRADING

### Capital Market

In the stock market, the traded volume was 60,120 million shares with a value of \$3,324,585 million pesos, which represents a decrease of 18.73% in amount and 11.87% in volume, compared to the values registered in the previous year.

#### ◆ Operability of the stock market



## ◆ Average operability of the Stock Market

Concept	2018	2019	Variation %
Number of transactions	379,690	353,586	-7.38%
Volume (000,000)	268	240	-11.67%
Amount (\$000,000)	15,726	13,245	-18.73%

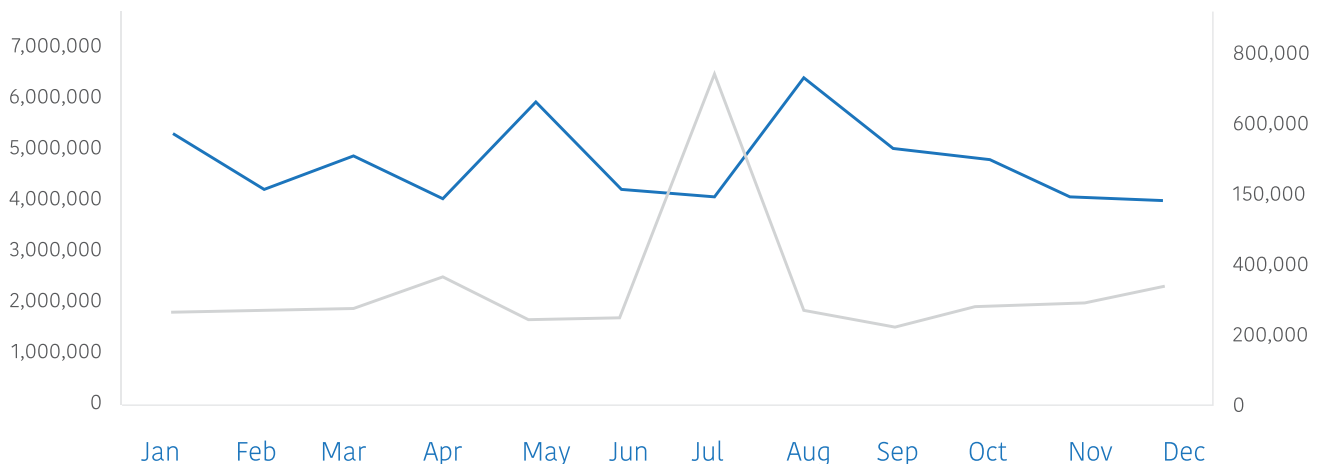
In the cumulative 2019, it was observed that the VOPD of the total market decreased by 18% compared to the previous year. Revenues accumulated in the year for trading of shares were 272 million pesos, 44 million less or 14% lower than the ones reported in 2018.

Total Market	2016	2017	2018	2019
Traded value	14,595	14,497	15,726	13,245
Transactions	292,247	277,628	379,690	353,586
Volume	330,561	265,080	267,948	239,522
<b>Local Market</b>				
Traded value	10,287	9,276	9,163	7,640
Transactions	288,928	274,889	376,430	350,180
Volume	323,554	257,898	259,791	227,055
<b>Global Market</b>				
Traded value	4,309	5,221	6,564	5,605
Transactions	3,318	2,739	3,260	3,406
Volume	7,008	7,182	8,157	12,467

\*Traded value: figures in millions  
\*Volume: figures in thousands

The traded volume of the Local and Global Market in 2019 is shown below:

## ◆ Behavior of Local VS. Global Market



On the other hand, the daily averages of messages, bids and cancellations registered in 2019 present positive variations of 6%, 8% and 12% and the registered events present a negative variation of -6%, in comparison with the figures of 2018, as shown below:

<b>Year</b>	Messages	Bids	Cancellations	Events	Ratio bids/Events	Ratio Mssg/Events
2007	122,900	51,785	33,814	14,153	4	9
2008	284,164	60,599	38,254	18,333	3	16
2009	399,235	157,694	126,664	29,774	5	13
2010	829,253	386,306	347,352	33,522	12	25
2011	1,759,064	707,948	656,227	48,981	14	36
2012	2,264,450	847,268	758,850	79,317	11	29
2013	3,398,640	1,113,028	953,365	138,801	8	24
2014	3,144,305	1,289,285	1,103,164	155,682	8	20
2015	3,821,506	1,530,429	1,315,633	197,863	8	19
2016	3,927,246	1,674,650	1,355,168	292,247	6	13
2017	3,961,917	1,301,551	1,301,551	358,818	5	11
2018	4,791,014	1,638,638	1,638,638	379,604	5	13
2019 ♦	5,099,975	2,209,742	1,837,265	355,256	6	14

It should be noted that in 2019 the amount traded via Program Trading represented 37% of the total market, maintaining the same % registered in 2018.

## Operative Improvements

In order to maintain the process of continuous improvement, strengthen transactional security and market continuity, during 2019 BMV Group implemented the following initiatives that allow us to be at the forefront and on par with the most advanced Exchanges in the world.

- Various improvements were made to the BMV Transactional Engine to:
- Incorporate Block Transactions with variable income and SIC securities.
- Integrate the limited market bid to the participants' transactional options.
- Allow short sales in securities of any marketability and without price restriction.
- Cancel existing short sales in the suspended value for exceeding static ranges.
- Incorporate the maximum volume to be yielded in the recording of a cross transaction.
- Disseminate at the start of the auction the Prices of the market of origin in SIC values.
- Register cross transactions by format without closing bids at the same price.

- Strengthen transactions at the daily average price, executing them in 4 decimals.
- Transaction cancellation process within 20 minutes of registration.
- Implement the mechanism to prevent crossings between the same client.
- Allow hidden volume bids with a minimum of 100 titles and 1% to discover.
- Incorporate transactions to register baskets with SIC values.

## Transmission of information with other Exchanges

In order to meet the provisions of various Communications issued by the National Banking and Securities Commission (CNBV) for the start of a new Exchange, BMV allocated significant resources for the implementation and adaptation of systems, rules and procedures that allow the establishment of real-time communication between markets.

The information flow considers the entire cycle:

- a) Listing and administration of new securities.
- b) Diffusion of corporate events.
- c) Determination of the status of the securities.
- d) Suspension and resumption of the quotation of a security.
- e) Operation and determination of closing prices of securities

## Continuity of the Trading Session

Exercises were carried out, with satisfactory results, in order to validate BMV's schemes that give continuity to the Trading Sessions and resume the market in a timely manner in the event of failures that could occur in the order routing system.

In addition, during 2019 the Disaster Recovery Plan was applied, which covers contingencies that arise with BMV's Main Data Center.

## Availability and capacity of the Transactional System

During 2019 the level of availability of MoNeT, BMV's Transactional Engine, stood at 99.99%, in line with the levels offered by the markets at an international level.

An average of 5.1 million messages are received daily, with a historical maximum of 8.2 million, below the installed capacity that allows BMV to receive more than 25 million messages a day.

## Market Maker

The Market Maker scheme released in September, 2008, has been maintained with excellent results. This important operative figure to provide liquidity in domestic variable income issuers continues to record excellent results. At the end of November, there are 6 brokerage firms acting as Market Makers in 38 series.

## Co-Location Services

At the end of 2019, 30% of the Intermediaries that operate in the Capital Market maintain their transactional servers together with the Exchange's Trading Engine, which has allowed them and their clients to obtain better response times.

## New fee schedule

In order to continue offering CBs a lower unit cost, the higher their amount traded during the month in BMV the higher the incentive to create greater liquidity in the capital market, as of November 1, the new tariff table for Capital and Debt was implemented.

## Derivatives Market

### Operability of the Derivatives Market

The most traded contracts in 2019 were the Future of the IPC as there was a greater participation of foreign clients and the TIIE 28 Swaps due to an increase in the operation of institutional clients such as Afores and Investment Funds.

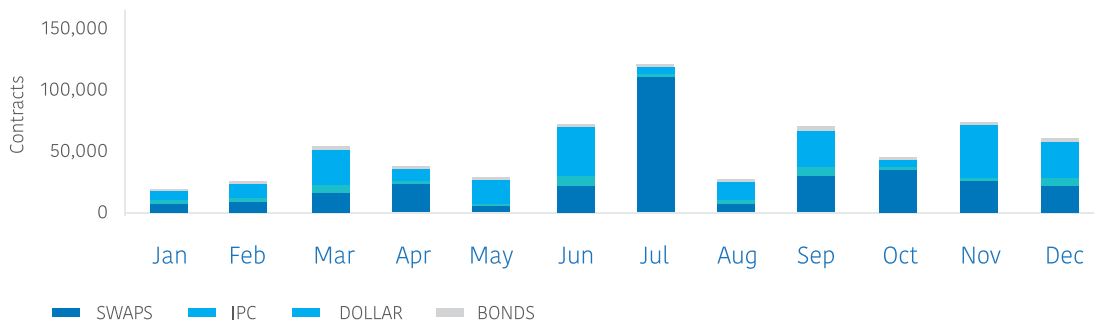
MexDer traded 8,500 million pesos of the daily average notional amount, distributed as follows: the Dollar Future with 200 million dollars, TIIE Swaps with 2,800 million pesos, IPC Future 1,500 million pesos and Bond Futures 150 million pesos.

#### ◆ Average Daily Volume

	2018	◆ 2019	1Q	2Q	3Q	4Q
SWAPS	22,459	28,174	11,918	17,812	51,795	29,740
IPC	3,727	3,622	3,486	3,989	4,020	2,981
DOLLAR	24,961	20,299	16,389	23,110	16,416	25,326
BONDS	2,129	1,331	1,562	1,352	1,395	1,022

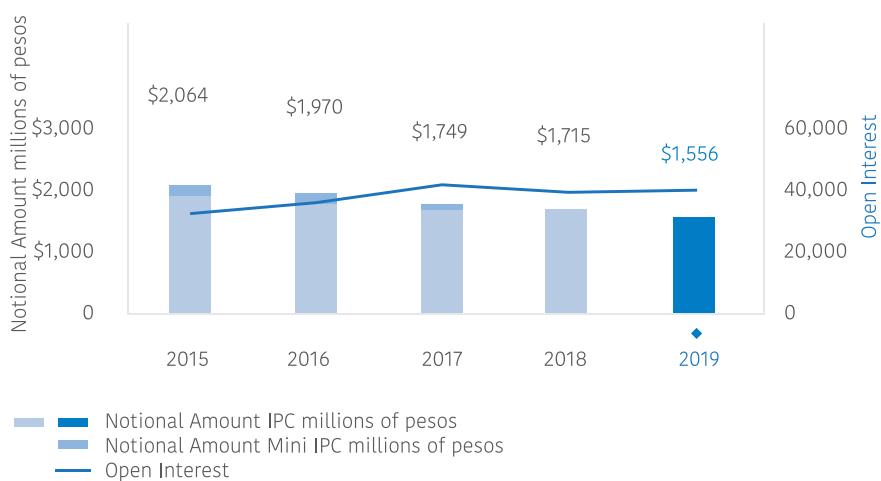


## ◆ Average Daily Volume



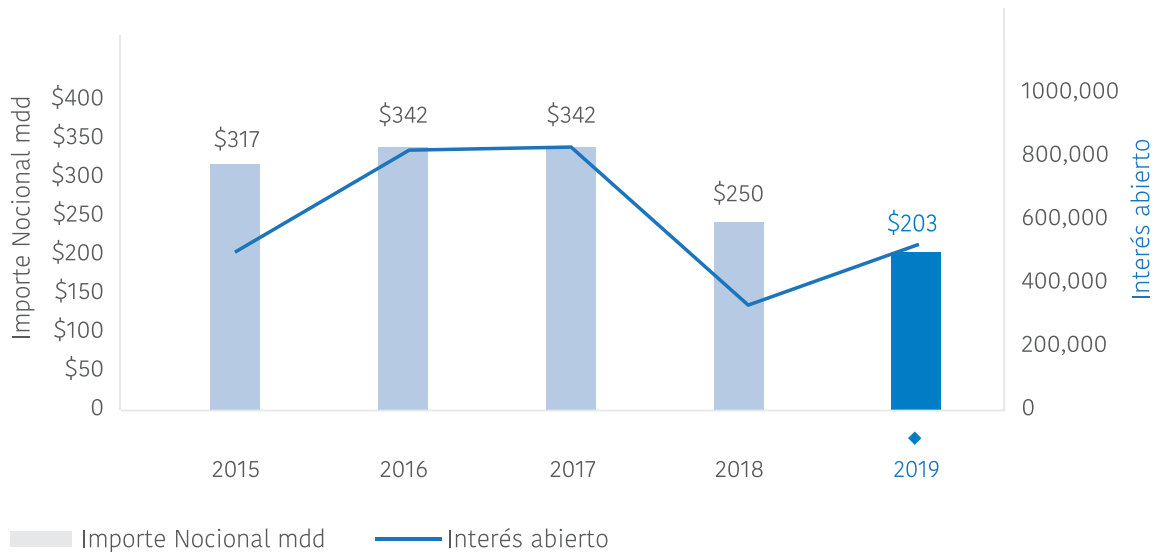
### 1. IPC futures

- The trading of foreign clients is around 35%, 70% of the open interest is from foreign clients.
- The Notional Amount traded is equivalent to 12% of the volume traded in BMV (local market + SIC).
- Comparing it only against the local market, it represents 20%.



## 2. Dollar Futures

- The volume of contracts traded in 2019 was 20,300, it decreased 18% vs. 2018; on the contrary, Open Interest grew 60%.
- Revenues registered an increase of 11% so far this year compared to the previous year.



## 3. 28-day TIIE swaps

- In 2019, the historical record of Open Interest was reached: 12 million contracts.
- This is equivalent to 1.2 billion pesos in notional amount.
- 2019 is the record year of trading with 707 million pesos of notional amount traded.

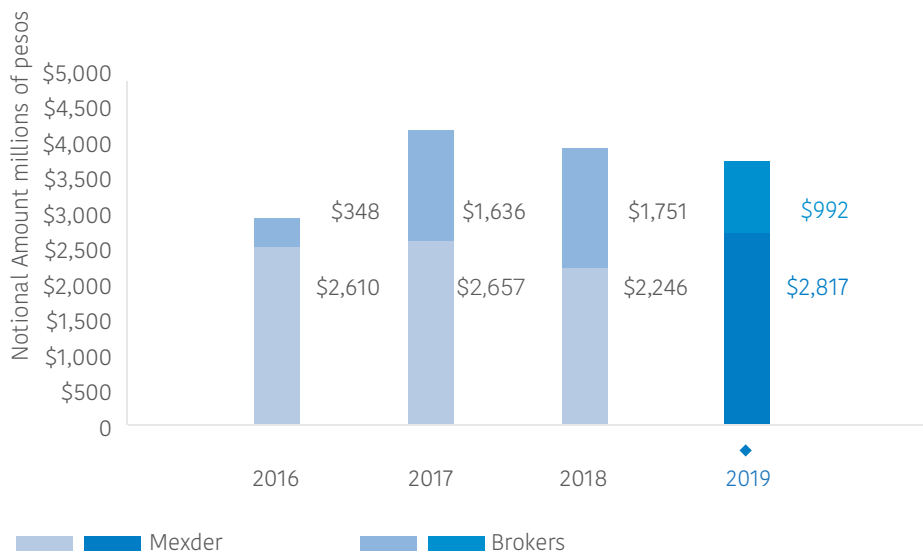
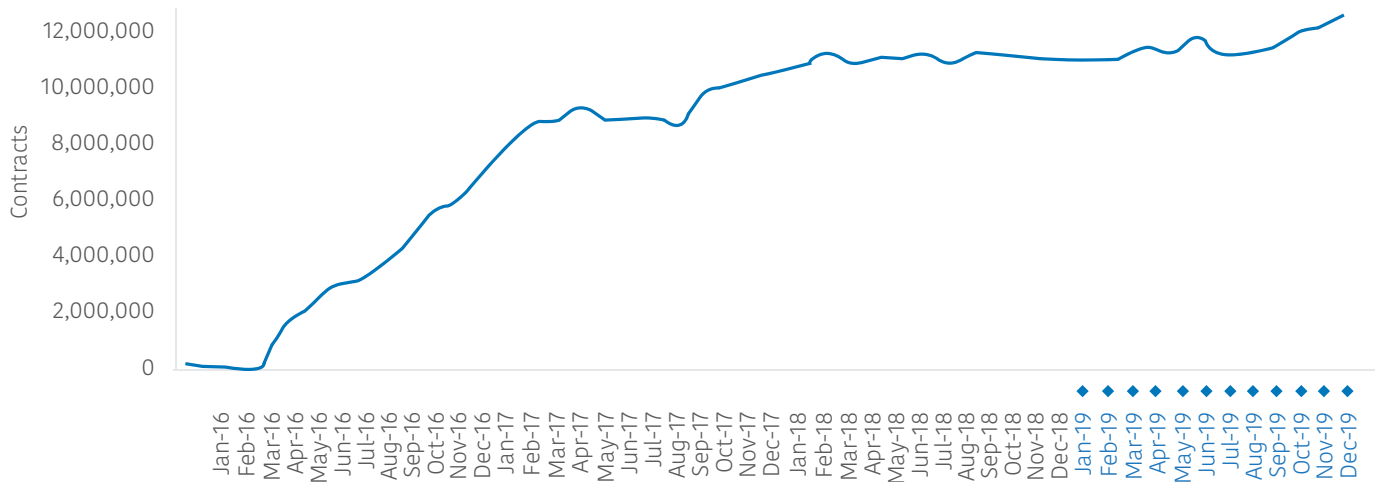
### Operative data

	2016	2017	2018	2019
SWAPS				
Notional Amount*	658	667	564	707
Number of transactions	379	513	668	686
Open interest**	5,235	6,464	6,320	6,762

\*Thousands of millions of pesos

\*\*Thousands of contracts

## ◆ Open Interest



During 2019, **MexDer worked on strategic initiatives for its development, focusing mainly on the evaluation of new products that could meet the needs of our participants**, on migrating the operation to a 100% electronic operative scheme, eliminating the voice service that was provided to Market Makers, attracting new foreign clients interested in operating the IPC Future and encouraging institutional clients to expand the range of products they trade.

The most relevant aspects and results of 2019 are presented below:

### 1. 100% electronic operation

Most exchanges operate electronically and in many cases through algorithms that send orders to the market automatically; therefore, MexDer is now a 100% electronic exchange.

## 2. Business Continuity (Information Systems)

With the intention of ensuring continuity in all MexDer's systems, in 2019 high availability was implemented for administrative systems, which were the only ones that did not have this scheme, thus achieving efficiency in processes and functionalities, since now there is redundancy in all applications. This was developed on a new generation platform, thereby lengthening the life of the systems.

## 3. Order routing from abroad

MexDer expanded its presence to New York by having a "Point of Presence" at Equinix, the global interconnection and data center company. This service allows clients to access market information through a Multicast Data Feed, as well as the possibility of sending orders directly through a dedicated link to MexDer.

## 4. Local and International Promotion

This year an important local promotion effort was made to seek greater participation of AFORES and Investment Funds. As a result, we managed to get new Investment Funds to start operations and we also managed to get some Afores to expand the range of products they trade in our market.

In the international promotion part, Banks and investment funds in Brazil were visited, as well as the participation of North American Brokers who could offer our products to their clients. As part of the achievements of these visits, there was an increase in the trading of foreigners in the IPC Futures, which currently represents approximately 35% and the open interest of foreigners represents 70%.

On the other hand, three ISVs (suppliers of trading screens) carried out the Certification process with MexDer, which promotes and facilitates the access of more clients to all the products listed in our market, expanding their options to use an electronic system to operate. Among them is Trading Technologies (TT), one of the ISVs with the largest presence in the US and Brazil.

Additionally, MexDer was present at relevant events in the financial market, attending as every year the annual FIA Boca Ratón conference in March. Later, in April, we participated in the CTA Expo NY event, in May we attended the Profit & Loss America event, also in May we participated in the Energy Mirec Week expo, which brings us closer to potential participants in the electricity derivatives market, which is completely new. In October we had a booth at the annual Futures and Options FIA Expo in Chicago.

## 5. New Products

In order to offer a range of products that meets the needs of our clients, during the year we worked together with Banco de México in the analysis and development

of the Funding TIE Future, the General Conditions of the contract were designed, which as in the case of Electricity Price Futures, are in the process of approval by the authorities.

## 6. Electronic Block Trades

The functionality of electronic Block Trades has been implemented in the trading screens offered by MexDer. With this change, users now have the possibility to send Block Trades between two members without having to report it by telephone to the trading desk.

## OTC Market

**Annual revenues** in 2019 amounted to 590 million pesos, 5 million or 0.85% higher than those observed in 2018.

The volumes traded in Mexico, as well as the transactions agreed in 2019 by business area are shown below:

### ◆ Transactions in SIF ICAP\*

	2017	2018	◆ 2019
<b>Government Bonds</b>			
Transactions <sup>(1)</sup>	156	165	129
Amount <sup>(2)</sup>	5,882	6,963	6,205
<b>SET TD</b>			
Transactions <sup>(1)</sup>	65	67	66
Amount <sup>(2)</sup>	101	119	123
<b>Assignment</b>			
Transactions <sup>(1)</sup>	66	64	53
Amount <sup>(2)</sup>	146	136	90
<b>IRS / Basis</b>			
Transactions <sup>(1)</sup>	1	3	1
Amount <sup>(2)</sup>	8,751	7,981	15,299
<b>SIPO RFQ</b>			
Transactions <sup>(1)</sup>	130	125	120
Amount <sup>(2)</sup>	504	616	553

\*Updated figures

(1) Daily average number of transactions

(2) Average amount 28 days per transaction in Millions of pesos

## ◆ Number of Transactions

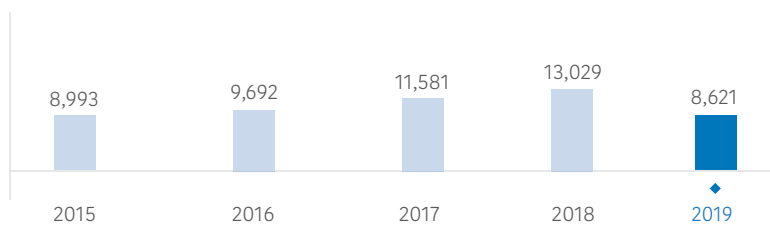
	2018	◆ 2019	Variation %
Government Bonds	41,633	32,384	(2.22)
Corporate Bonds	22	11	(50.00)
OTC Derivatives	816	298	(63.48)
Set TD Funding and Repos	16,992	16,666	(1.92)
SIPO	34,742	32,701	(5.87)

## ◆ Amount

	2018	◆ 2019	Variation %
Government Bonds	3,270	2,164	(34)
Corporate Bonds	2	0.4	(83)
OTC Derivatives	969	332	(66)
Set TD Funding and Repos	34,453	32,425	(6)
SIPO	60,956	69,911	(15)

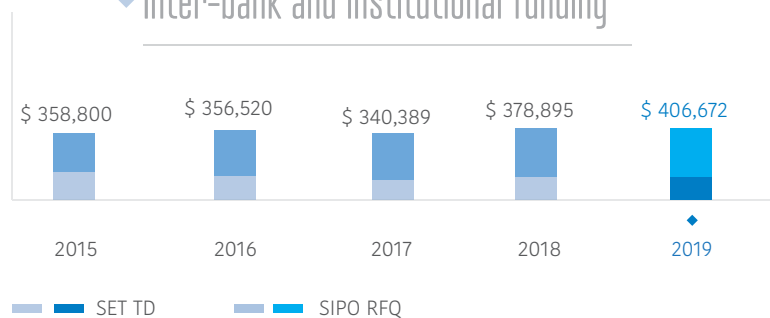
Thousands of Millions of Pesos

## ◆ Government Bonds\*



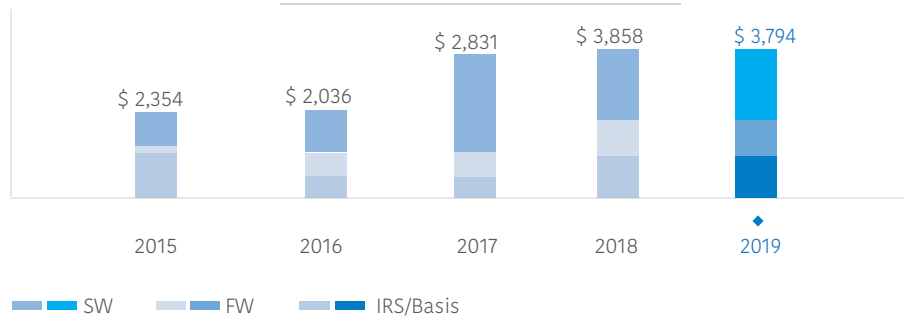
\*Average daily volume in millions of pesos

## ◆ Inter-bank and institutional funding \*



\*Average daily volume in millions of pesos

### ◆ OTC Derivatives NY + Mexico\*



\*Average daily volume in millions of pesos

Regarding market participation, our presence in the OTC Market was:

Funding and Repos	34 %
Government Bonds	25 %
SIPO	65 %
OTC Derivatives	25 %

The percentage of income by market this year was:

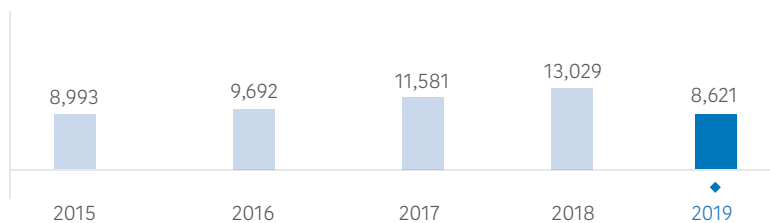
Government Bonds	50%
Funding and Repos	15%
Corporate Bonds	1%
OTC Derivatives	2%
SIPO	25%
SIPO Auctions	7%

\* Information prepared based on market estimates.

## SIF Icap Chile

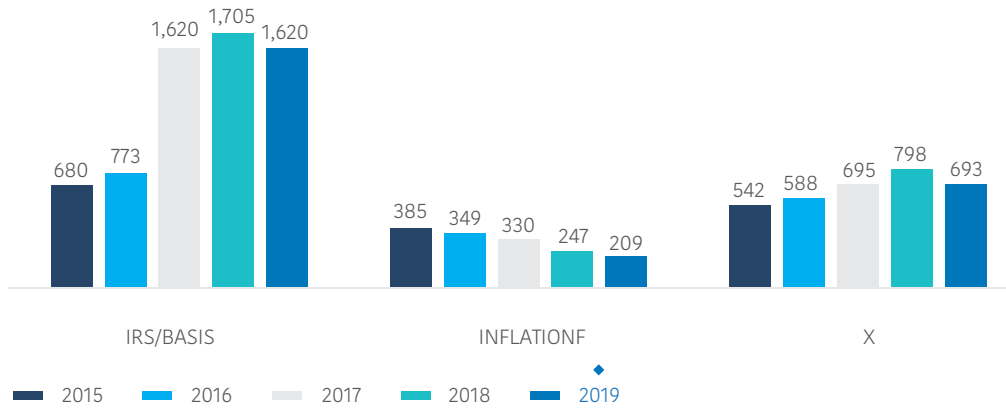
The average daily operation of SIF Icap Chile in government bonds, IRS/Basis, inflation and Forex is shown below.

### ◆ Government Bonds\*



\*Average daily volume in millions of pesos

## ◆ OTC Derivatives\*



\*Average daily volume millions of dollars

## POST- TRADING

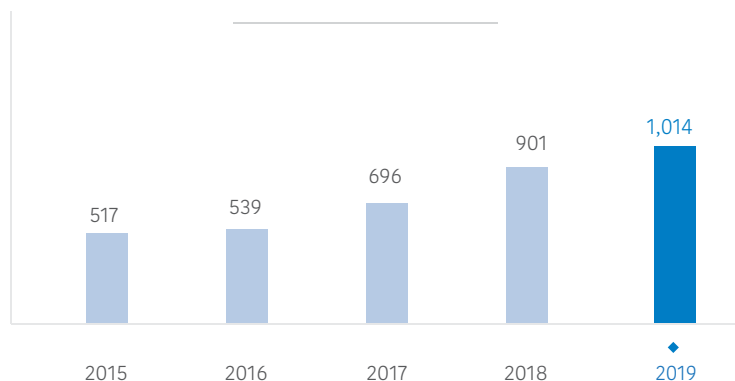
### Central Securities Depository

S.D. Indeval is the Central Securities Depository in Mexico, where the custody, clearing and settlement of all the securities that are traded in the Exchanges are carried out, including the securities of the Global Market or International Quotation System (SIC); as well as of the governmental, corporate and banking securities of the local and international market. We also have value added services for our direct participants, among which we can highlight: securities lending, collateral management and information services.

The most relevant aspects and results of 2019 are presented below.

At the end of 2019, Indeval's total revenues increased 12.5% (equivalent to +112 million MXN) compared to 2018 in the same period. This growth was largely due to the increase in the valuation of the assets in custody, both in the national market and in the international market; as well as to the increase in the number of transactions and settled amounts of the SIC assets.

## ◆ Indeval Total Income



\*Millions MXN



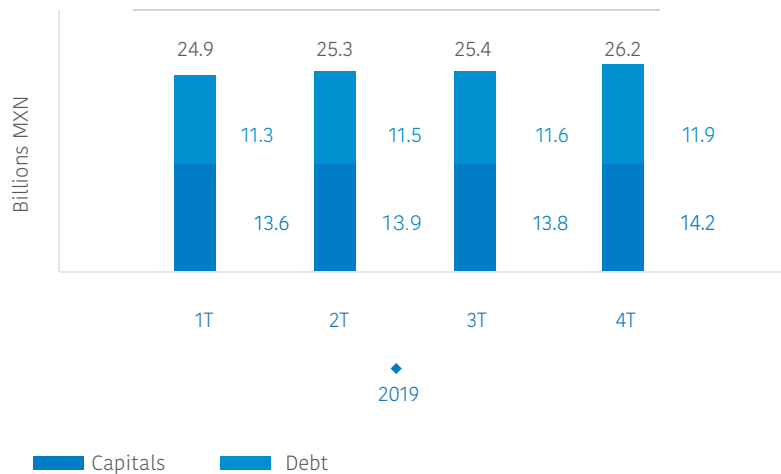
December 2019

The Central Securities Depository in Mexico closed 2019 with a total value of assets in custody of \$26.31 billion MXN, which represents an increase of 7.3% compared to 2018.

National	Shares	13.45
	Debt	11.78
International	Shares	0.88
	Debt	0.20
Total Custody Indeval*		26.31

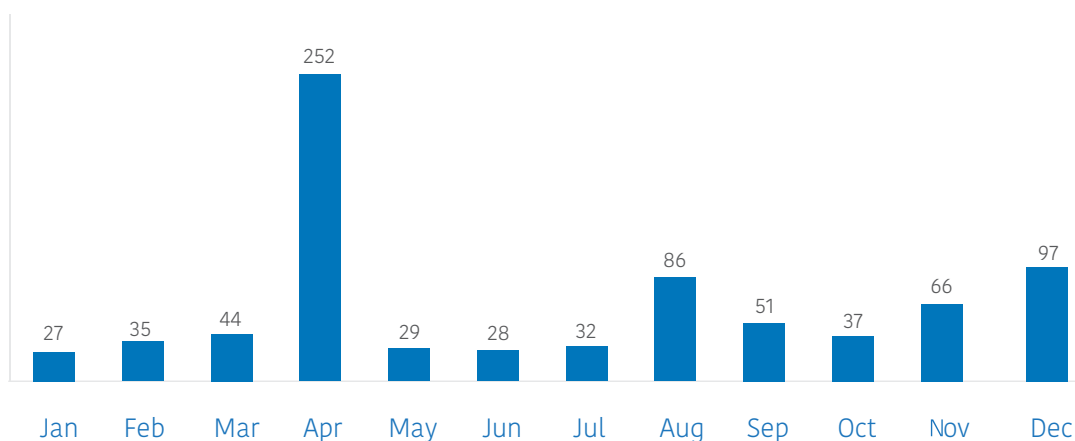
\*Billones MXN

### Assets in Custody - Type of Instrument



During 2019, the requests of the depositors were followed up, 784 meeting calls were received and processed, decreasing by 2% compared to the previous year.

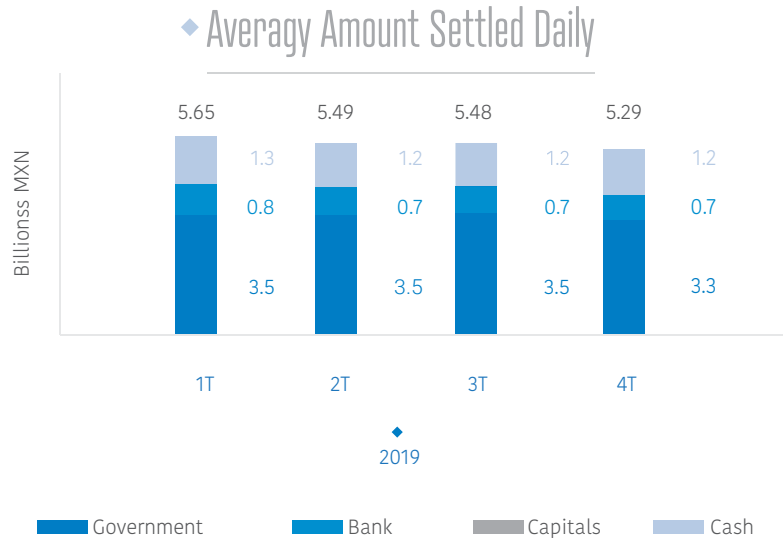
### Meetings Tendency



In follow-up to the agreements reached at the meetings, 39,966 decrees were received and processed, 16% more than in 2018. For the payments of Patrimonial Rights, more than 66 billion MXN were generated, which were distributed among the depositors of Indeval by each type of right.

## Settlement of Securities and Cash

During 2019, the settlement of securities and cash showed a downward trend mainly due to a decrease in the secondary market trading in government and bank bonds; as well as a decrease in the amount of cash transfers.



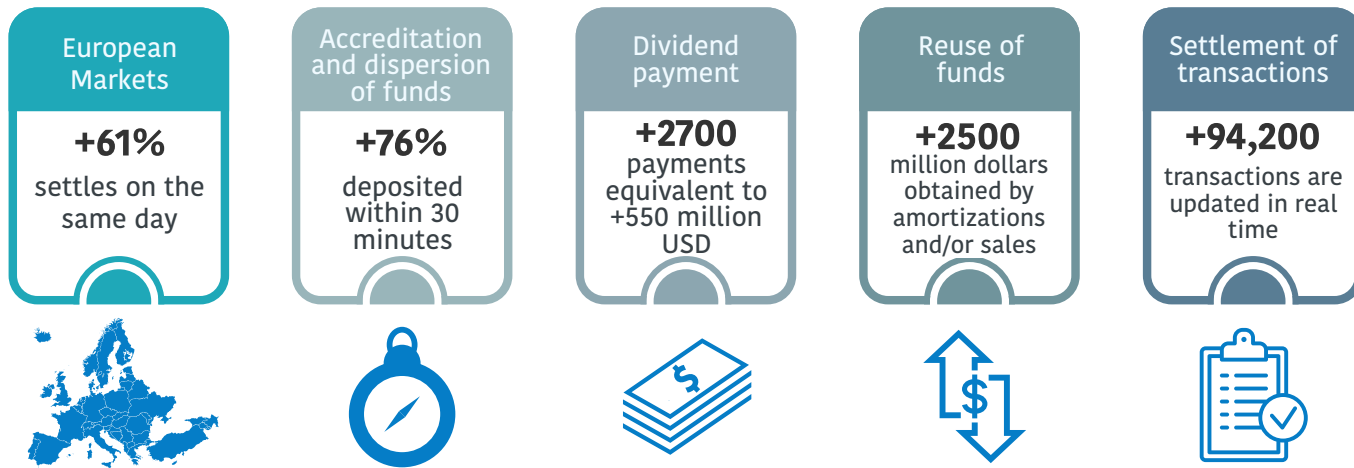
## Global Market

The International Quotation System has been strengthened in the last two years thanks to regulatory changes, as well as to the implementation of the new business model.

Indeval currently operates with three custodians:

- Citibank, N.A. - For securities of the United States and Canada, offers withholding agent services, access to the Depository Trust & Clearing Corporation “DTCC”, the United States securities depository.
- Euroclear Bank - securities for the rest of the world that include international debt, shares and ETFs.
- BNP Paribas Securities Services - United States’ debt operated by Euroclear and DTCC, also assumes the role of secondary provider for the United States and Canada market.

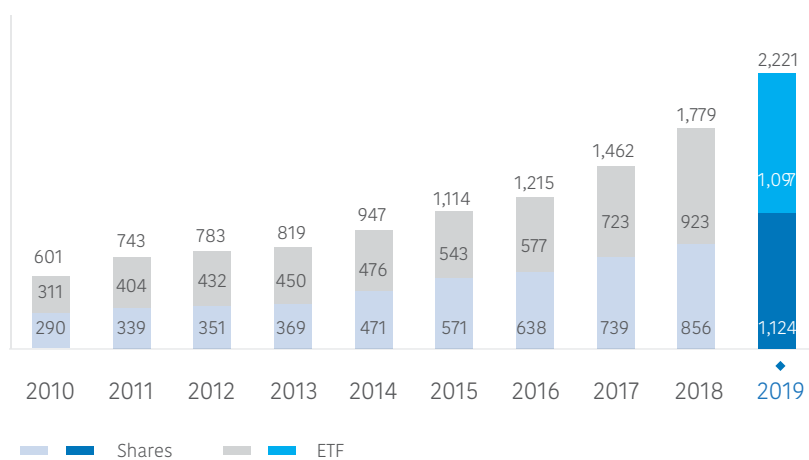
This regulatory change, which together with the efficiencies resulting from the new custody model, has driven the already growing trend of the SIC, achieving savings in tariffs for the Mexican market of more than 50 million USD and operative efficiencies, among which are:



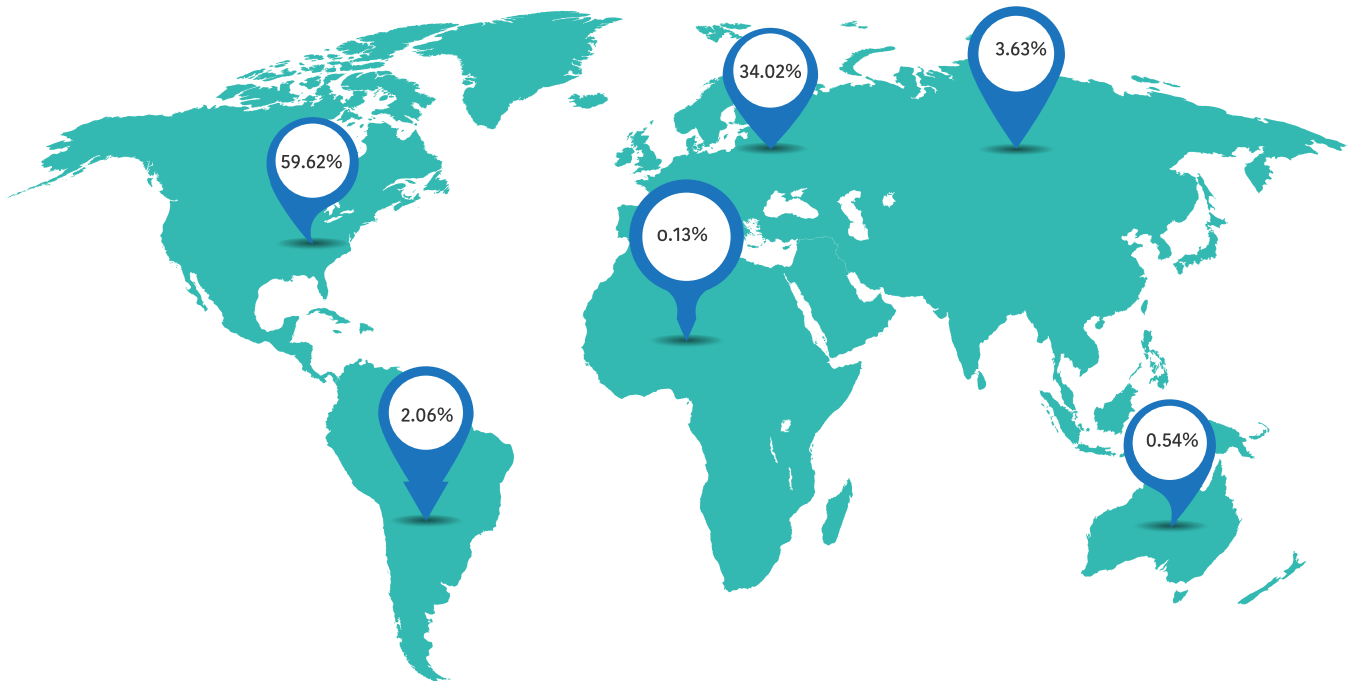
During 2019, the structure of the international market was consolidated, generating outstanding income in the different service lines: custody of securities in international markets (129.7 million MXN); settlement of transactions (352.1 million MXN); administration of tax forms (12.5 million MXN) and corporate events (39.9 million MXN). As a whole, the International Division generated +547 million MXN, representing 54% of Indeval's total revenues.

In addition, the number of listed securities in SIC increased 24.8%, closing 2019 with 2,221 securities, out of which 1,124 are shares and 1,097 are ETFs.

### ◆ Number of securities listed- SIC



Offering investment alternatives in shares, bonds, funds and ETFs (Exchange Traded Funds) mainly from North America, Europe and Asia.



The foregoing strengthened the operation of the global market in BMV, which currently represents 42.3% of the total amount traded.

## Equity Clearinghouse

In CCV, in accordance with the provisions of the Stock Market Law, we have as our main function to become a reciprocal debtor and creditor (novation) of the purchase and sale transactions in the stock market. Therefore, we provide transactions management services, guarantee requirements and subsequent clearing and settlement, operating in a safe and efficient manner for the market and its Agents. The most relevant aspects and results of 2019 are described below.

### Operative Activity

The number of transactions traded in BMV Group and cleared/settled in the Securities Central Counterparty registered a decrease in 2019 compared to the previous year, closing with 92.55 million transactions, while the total amount agreed was 3.73 billion pesos, 11% lower than the 4.14 billion traded in 2018.

The average amount traded for each transaction during 2019 was \$40 thousand pesos.

## Service Levels

Given the advantages of measuring Indeval's service levels, we decided to incorporate this practice for the Securities Central Counterparty. That is why, as of 2016, availability levels were determined by grouping them into two service lines: Trading and Settlement services and Risk Management

## Requirements and Value of Guarantee Funds

The requirement of guarantees that CCV asked its agents in order to novate transactions stood at 240 million on average daily, which represents a decrease of 35%. As in previous years, we maintained in the Contribution and Clearing funds, pillars of CCV's Financial Safeguards network, 15.88 times the minimum requirement of guarantees, with a monthly average of more than 3,231 million pesos.

On a daily average, in the Central Counterparty we invested the liquid guarantees of the agents for an amount of 3,447 million pesos, obtaining a yield of 8.01%.

## Transactions in Arrears

BMV Group's Securities Central Counterparty continues to be one of the counterparties with the lowest number of defaults, compared to other counterparties in the world, with the implicit benefit that this brings to investors in the Mexican market. In 2019 we had a decrease of 36.59% for defaults in the delivery of securities, caused by the delay of its agents. The observed percentage of transactions in arrears in the year was only 1.17% of the total amount traded on the Exchanges, with a decrease of 29.58% percentage points compared to 2018.

In order to contain the defaults for agents' delivery of securities, in each trading session CCV borrows securities from 2 institutions that operate in the market. In 2019 we managed to stop defaults by taking 2,157 loans with an accumulated amount of \$12,658 million pesos, presenting a decrease of 12.89% compared to 2018.

## Profitability

Regarding profitability, the Securities Central Counterparty closed 2019 with an EBITDA of 56.0% with respect to income, which represents a decrease compared to 66.6% in 2018.

## Technological Renovation

Development of complementary methodologies in the New Risk Calculation Engine (SAS), for compliance with the PFMIIs.

At the request of the Authorities, an improvement was made in the calculation of the Risk Value, incorporating the “Expected Shortfall”, increasing the degree of confidence in the risk calculations.

The added value of the SAS Engine for the Participants is the following:

- More robust methodologies are enabled with the incorporation of liquidity risk components, additional guarantees for unusual risk levels, measurement of risk of concentration of positions, etc.
- The monitoring and the novation process (2) are more agile, the calculation cycles are reduced in up to 5 minutes or less, giving greater certainty to the market.
- There is an increase in operative efficiency by reducing processing time; for example, the closing process that previously took 1.5 hours now takes 10 minutes on average. The intraday process used to take 8 minutes, now it takes less than a minute.
- There is more detail on the risk structure, since the risk per position is easily broken down, thus allowing the identification and mitigation of those positions with greater risk. This allows Agents to be more protected.

## Benefits of the SAS Engine for CCV:

- Although SAS Institute developed the solution for CCV from the SAS calculation software, CCV owns the codes developed especially for this project. This Engine gives sustainability to CCV's business as it is a key element for the compliance with the PFMI's and the new business needs.
- Facilitates risk monitoring and mitigation for CCV by being an efficient Engine in terms of processing time, frequency, calculation capacity and integration with the New SCO.
- It allows the integral management of data: portfolios, prices, scenarios, parameters.
- Provides flexibility in risk modeling, statistical analysis and custom reports.
- CCV has 24/7 service.
- The calculation process is automated.
- It has High Availability replication.
- It has replication in DRP. (2) It is the process by which the CCV becomes reciprocal debtor and creditor of the transactions it receives from the Stock Exchanges.
- Runs on a powerful and modern platform.
- It can process transactions that come from multiple Exchanges.
- Places CCV at a better level of competence.

## Compliance with the Principles for Financial Market Infrastructures (PFMI's)

In April, 2012, CPSS-IOSCO issued the Principles for Financial Market Infrastructures (PFMI'S) in order to increase the security and efficiency in payments, settlement, clearing, recording of transactions, but more broadly to limit systemic risk and promote transparency and financial stability; 22 of these principles apply directly to central counterparties. Among the most relevant are those related to: credit risk, margins, collateral and liquidity risk.

In 2018, the Work Plan for compliance with the PFMI was fulfilled, which included, among others:

- Sending to the Authorities the update of evaluation and dissemination documents of Annex A and B, Statistical Annex and Evaluation per key consideration.
- Sending to the Authorities the Methodology to determine the Clearing Fund and the Contributions Fund, which included:
  - Use of the Reserve Fund.
  - Auctions and Buy-In.
  - Safeguards Network
  - Change in the composition of the Clearing Fund.
  - Anticipated and mandatory transfers.
- Submission of proposed amendments to the Regulations and Manual.
- Sending the final version of the Methodology to determine the Contributions Fund.
- Submission to Authorities of the 2019 Work Plan.

## Derivatives Clearinghouse and Settlement

During 2019 we received 16.8 million derivatives contracts for registration, clearing, market valuation, marginalization, collateralization and settlement, which compared to the 18.4 million contracts received in 2018, represent a decrease of 9% in total.

The traded amount of the contracts traded in 2019 reached the amount of \$2.38 billion pesos, which compared to \$2.73 billion of the previous year, also means a decrease of 13%.

On the other hand, during the same year, we recorded in Asigna an average daily open interest of 12 million of contracts, which compared to the 11.8 million contracts opened on average in 2018 represents an increase of 2%.



The detail of the average daily open interest, by type of Derivatives contract, is shown below:

### ◆ Open Interest

	Futures	Options	Swaps	Total
Average 2019	543,680	106,106	11,357,572	12,007,357
Average 2018	807,632	94,068	10,902,491	11,804,191
Percentage Variation	(33%)	13%	4%	2%

The most relevant aspects of the daily operations in 2019, is that the number of transactions and the volume of Derivative contracts traded decreased in total 23% and 9%, respectively, compared to the previous year.

The number of transactions in Exchange Contracts (Swaps) decreased by 16% while the volume traded also decreased by 5%; on the other hand, in the Option contracts there was an increase in both transactions and volume traded of 74% and 76%, respectively, while the Futures contracts had a decrease of 24% and 19%, in the same areas:

Contract	Transactions			Volume			Amount		
	2018	◆ 2019	Var	2018	◆ 2019	Var	2018	◆ 2019	Var
Futures	321,066	243,776	(24%)	7,841,451	6,377,583	(19%)	1,727,953,289,407	1,423,380,181,796	(18%)
Options	2,435	4,230	74%	490,060	863,075	76%	587,711,438	259,446,862	(56%)
Swaps	1,055	887	(16%)	10,032,859	9,561,195	(5%)	1,003,285,900,000	956,119,500,000	(5%)
Total	324,556	248,893	(23%)	18,364,370	16,801,853	(9%)	2,731,826,900,845	2,379,759,128,658	(13%)

Among the most relevant of 2019 regarding Derivatives contracts, is that an increase was observed at the end of the third quarter in the category of Open Interest, whose maximum observed figure was 13.2 million, coinciding with the last day of the year. This figure is mainly due to the continuous increase shown by the Exchange Contracts (Swaps) which, by themselves had an increase of 14%, comparing the closing figure of the last day of 2018, located at 10,975 million, with that of 2019 of 12,542 million contracts.

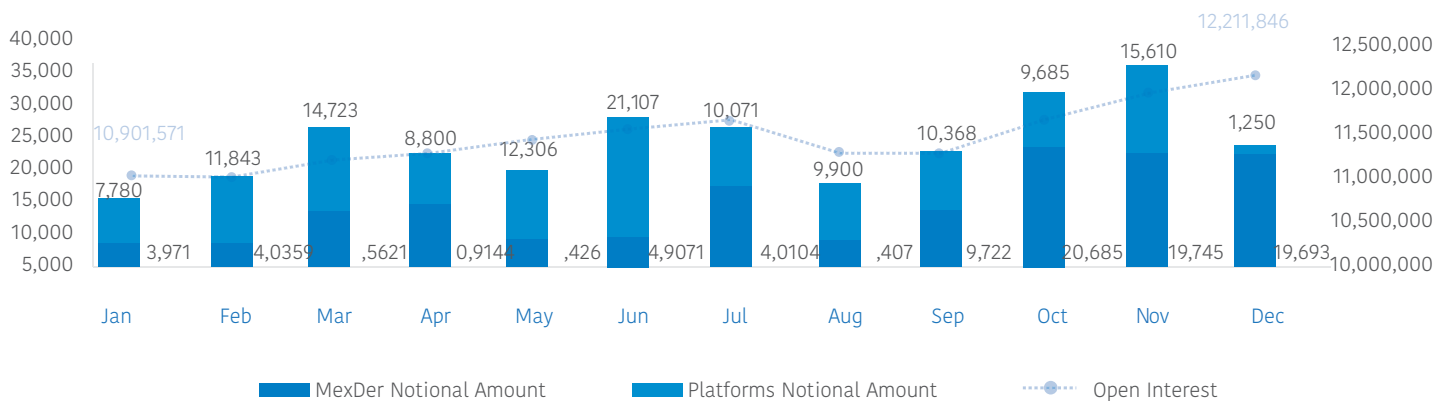
It is important to highlight the increase in the daily average of Open Interest of Option contracts which increased by 13% in total compared to the previous year, emphasizing the increase in Option Contracts on Shares such as CEMEX, ORBIA (formerly MEXCHEM ) and GMEXICO.

During 2019, significant drops were observed in the clearing of Futures contracts, whose daily average of open contracts fell by 33%; despite the aforementioned, it was observed that the daily average of open interest of the Daily Dollar Futures increased by 795%, while that of the Euro Futures increased 108%, in comparison with the daily average of open contracts which these underlying assets showed in 2018.

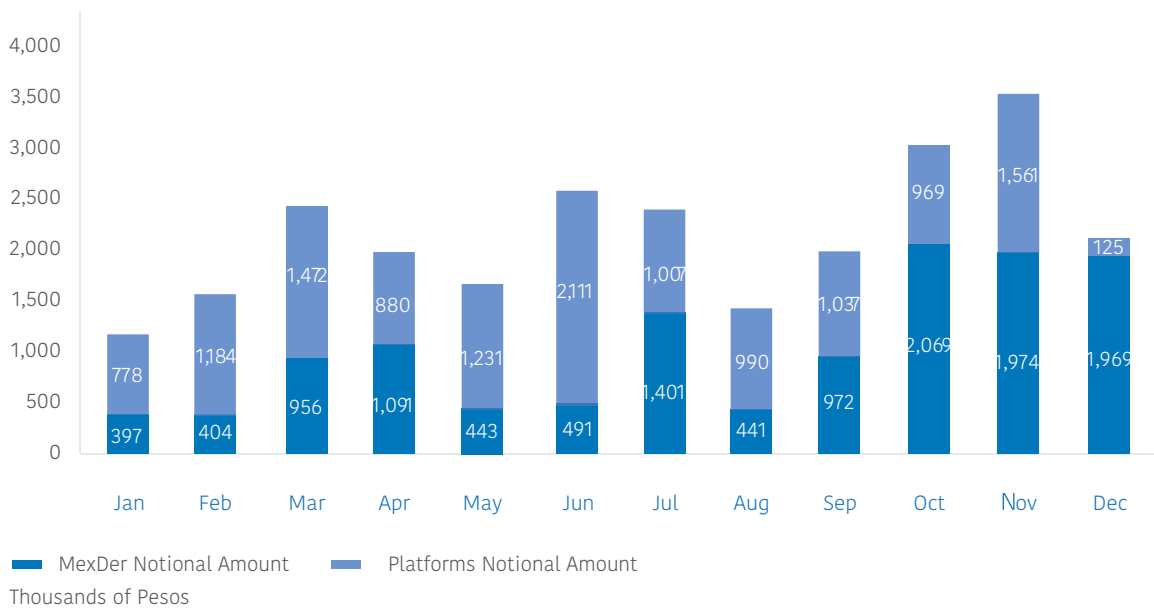
## Exchange Contracts (*Swaps*)

The total of transactions of Exchange Contracts in the Derivatives Exchange (MexDer), as well as in the Trading Platforms, meant a traded amount of \$956 billion pesos in 2019.

### ◆ Monthly Average Trading and Open Interest of Exchange Contracts

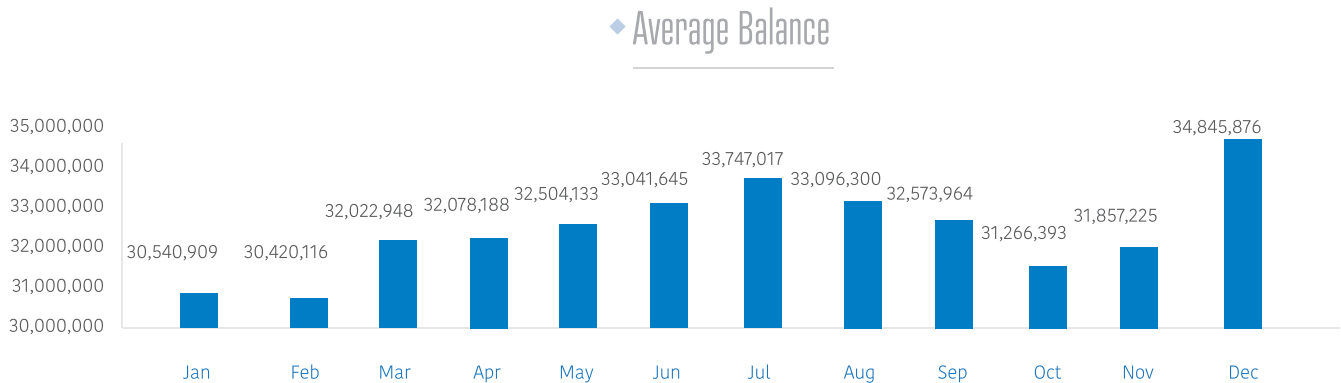


### ◆ Average Monthly Notional Amount



## Margin Deposits (AIMs)

This year we had a decrease of 12% in the average balance of the AIMs, compared to the one in 2018.



## Funds Administration

At the end of the year, the total resources we administered in Asigna were \$38,777 million pesos, composed of \$21,624 million of the Margins Fund in cash, \$13,437 million of Margins in securities and \$2,631 million of the Clearing Fund, while the Minimum Equity amounted to \$271 million pesos.

The weighted yield of Asigna's Contribution and Clearing Funds was 8.09%, only 1 basis point lower than the Government Weighted Average Funding Rate (TPPFG) published by the Bank of Mexico (Central Bank). It should be mentioned again that the policy of risk diversification, although it decreases the weighted yield paid by the funds, it allows the investment to be made in accordance with what is recommended by the applicable Principles for Financial Market Infrastructures.

## Daily Market Settlement

The daily settlement of the obligations was carried out without major setbacks and within the hours established in the applicable regulations; during 2019 more than 136.7 thousand million pesos were settled in the daily settlement.

The settlements with physical delivery are detailed below:

## Maturity Settlement with delivery of the underlying asset.

### Derivatives Contracts on the United States Dollar.

5.14 million derivatives contracts were cleared on the peso/dollar exchange rate, out of which we settled in kind more than 708.8 thousand contracts, that is, 13.7% of all the contracts traded. The settlement generated the delivery of a total of 7,088 million dollars in the United States of America.

### Derivatives Contracts on Share Series.

We cleared 843.9 thousand futures and options contracts on share series. Of the total of contracts that we received for their clearing and settlement, 157.4 thousand were settled in kind. The settlement generated the delivery of almost 15.7 million titles and over \$324 million pesos.

### Derivatives Contracts on Bonds.

We cleared 334 thousand Futures Contracts related to Bonds at different terms (DC24, MR26, JN27, MY31 and NV47). Out of these cleared contracts, 30.7 thousand were settled by physical delivery, that is, 9.2% of all the contracts traded. The value of these settlements was over \$3.4 thousand million pesos and represented the delivery in kind of more than 30.7 million Bonds.

The following table shows the open interest in derivatives contracts and the amounts of Asigna's Contribution Fund and Clearing Fund for the periods indicated.

### ◆ Open Contracts and Financial Resources of Asigna

	2015	2016	2017	2018	◆ 2019
Open Contracts	2,124,553	7,567,816	11,413,804	11,523,887	13,154,732
Required Contributions Fund*	15,508	39,546	34,888	24,883	30,870
Clearing Fund*	1,345	4,312	3,099	2,242	2,631

On December 31

\*Million Pesos

## Risk Management in Asigna, Clearing and Settlement

Asigna may be subject to financial losses if any of the Clearing Members or their clients fall into default. In order to face such an event and ensure that market participants benefit from the highest level of security, Asigna has implemented a risk management framework and has structured a solid Safety Net based on multiple levels of financial resources. Some of the activities in risk management carried out by Asigna are the following:

- Daily, real-time monitoring of (a) operative limits for each market participant, (b) sufficiency of the participants' resources to cover their margins, (c) market price pattern, as well as volatility of the underlying assets;
- Portfolio margin calculation, both in real time and at day-end;
- Daily monitoring of risk parameter patterns, including limit position indicators and market risk indicators; or daily supervision of the settlement processes;
- Supervision of compliance with Asigna's internal regulations and with the Provisions issued by the CNBV;
- Simulation of extreme scenarios and evaluation of their potential impact on the portfolio of each Clearing Member; and/or updating of contingency plans and manuals of procedures.

### Marginalization Model

Asigna uses a Marginalization Model that allows to determine the margin requirements at portfolio level. The portfolios can be composed of Futures, Options and Swaps, that is, the Marginalization Model allows to clear the requirements between Contracts that are associated to the same underlying asset or that have a high correlation between them.

The Marginalization Model determines four different Margins (AIM) for the Contracts that make up the portfolios:

1. Premium AIM
2. Risk AIM
3. Opposite Position AIM or Spread
4. Delivery Position AIM

Moreover, the margin requirements of the Marginalization Model are designed to cover market variations during different periods, contemplating periods of high volatility for the calculation.

The resources mentioned below can be used by the Clearing Members to cover the margin requirements:

1. Cash
2. US Dollar
3. Government securities (national and US)
4. Securities issued by development banking institutions (backed by the federal government)
5. Stock certificates (with special characteristics)

It is worth mentioning that all deposits other than cash are subject to a discount on the price (Haircut) in order to have greater coverage against possible movements in the market over the value of these assets.

## Safety Net

Asigna has established a safety net to deal with the default in payment by one or more Clearing Members.

The resources that are deposited in Asigna are used to constitute the funds that make up the Safety Net, which in aggregate form is made up as follows:

1. Margins of the party in default.
2. Excess minimum equity of the Clearing Member in default.
3. Clearing Fund of the Clearing Member in default.
4. Equity of the Clearing Member in default.
5. Where appropriate, the resources of the Proprietary Position Clearing Member in the same order indicated in numerals 1 to 4.
6. Supplementary Fund.
7. Fifty percent of the Safety Net Equity Percentage.
8. If applicable, the Variable Resources of the other Clearing Members.
9. Fixed Resources of the Clearing Fund of the Clearing Members in compliance.

10. The resources resulting from the request of the Clearing House to restore the Clearing Fund (up to double the amount).
11. Total of the Safety Net Equity of the Clearing House.
12. Minimum equity of the Clearing Members in compliance.

On the other hand, the methodologies used by Asigna for the calculation of margins use statistical models that provide high robustness in the results they show. An example of this is the 99% Conditional Risk Value that is used to determine margins, and it also has stress scenarios to which the Safety Net is subjected. These tests seek to determine the strength of the aforementioned Net in different scenarios of high volatility and pressure on the markets.

The scenarios used in the stress tests cover a wide range of events, ranging from historical scenarios to those hypothetical scenarios approved by Asigna's Admission and Risk Management Subcommittee.

The following table shows the open interest in derivatives contracts and the amounts of Asigna's Contribution Fund and Asigna's Clearing Fund for the indicated periods.

### ◆ Open Contracts and Financial Resources of Asigna

	2015	2016	2017	2018	◆ 2019
Open Contracts	2,124,553	7,567,816	11,413,804	11,523,887	13,154,732
Required Contributions Fund*	15,508	39,546	34,888	24,883	30,870
Clearing Fund*	1,345	4,312	3,099	2,242	2,631

On December 31

\*Million Pesos

Source: Asigna

Open Interest on the last day of the year

## INFORMATION SERVICES

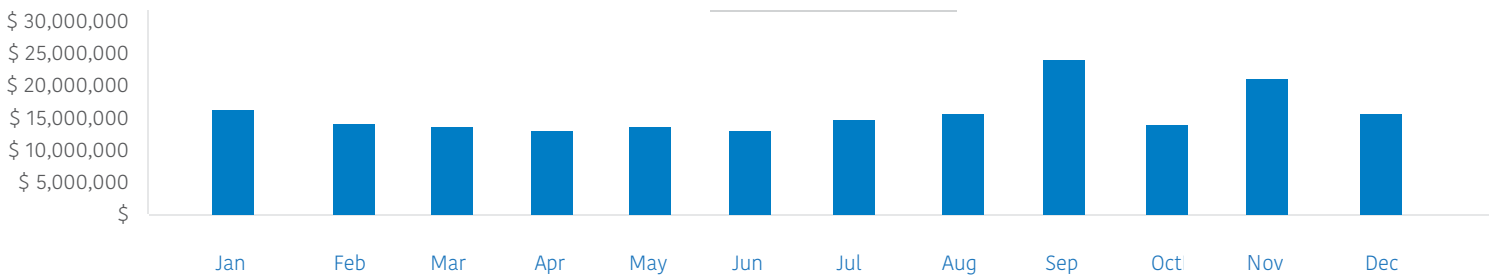
Within the services provided by BMV Group there are various information services and products that we offer to brokerage firms, banks, Afores, insurance companies and other financial institutions. The sale of market information is done through BMV, MexDer, Sif Icap and Valmer, with which we commercialize pricing services, financial and operative risk management, as well as other financial tools.

## Operative valuation and market reference - Valmer

In 2019 for each one of the months it achieved a cumulative of \$186,702,686 million pesos which come from sales and new products.

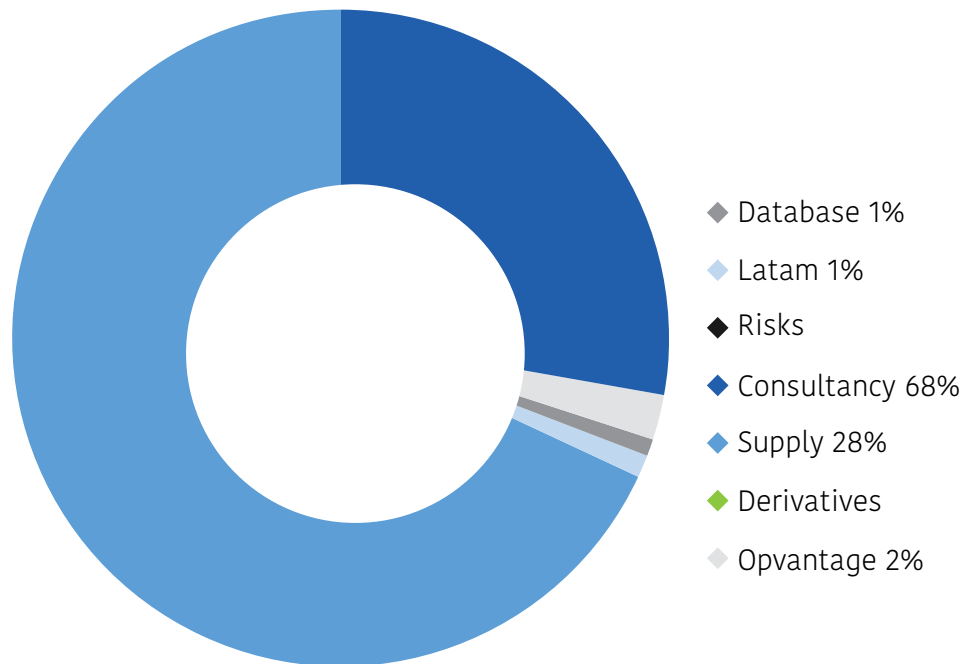
A commercial plan was established at the beginning of the year where the objectives to be pursued were defined, as well as the collaboration and commitment of each of the areas to reach the goal and be more competent in the financial market.

### ◆ Total Income 2019



### ◆ Relevant Financial Figures

	2019
Database	\$342,600.00
Latam	\$4,275.00
Risks	\$339,681.00
Consultancy	\$20,201,515.00
Supply	\$8,313,252.00
Derivatives	\$102,650.00
Opvantage	\$414,561.00





## Methodological Changes Valuation

Based on market needs, improvements were made to the following methodologies used in the Mexico version:

1. Credit Risk Backtesting, January 16, 2019
2. VaR of Parametric Market, July 22, 2019
3. VaR of Parametric Market with Delta Gamma approximation, July 31, 2019
4. Counterparty Risk, October 22, 2019

## Delivery Schedules

Significant progress was made by improving delivery schedules and achieving 93% annual efficiency compared to last year, according to the strategy implemented which has ensured continuous quality improvement in service delivery and involves guidance towards the achievement of quality objectives and a commitment to the satisfaction of internal and external clients in the delivery of services.

As a quality control, an internal Valmer Bulletin was implemented which details the incidents presented in the month and in which errors are identified, reviewed and corrected in order to make improvements in the operative processes of each area.

## SIMOVA TV

Due to the platform implemented in 2017, SIMOVA, great benefits have been provided mainly in the operative areas, as well as better process control.

Based on the competitiveness presented, there is a need to develop new platforms that allow differentiating and adding value to internal processes, which is why SIMOVA TV was implemented, a screen that allows to measure in real time each one of the processes executed, as well as to have a better classification of processes and detect possible errors that may occur in the execution.

## PROCESS AUTOMATION

We have sought to simplify the processes to be performed frequently and one of the factors to consider is the automation of processes which has facilitated the optimization of work and the quality of the processes. This year the automation of the following processes was carried out:

1. Structured Notes Engine
2. IFRS Vector
3. Collateralized Curves
4. Eurobonds engine

This has achieved the systematization of activities, the reduction of time in process execution, operative efficiency, reduction of errors and improvements in the quality of each one of the processes.

## Technological Developments Financial Risks

SYSTEM/PROCESS	PREVIOUS	CURRENT
CVA calculation, simulation of risk factors	Normal Log model with bands	Vasicek and CIR model, self-adjusting
CVA calculation	Calculations were carried out in parts	A calculator was automated in MATLAB to generate the entire calculation.

## Update of the Valrisk System

### **On April 17, 2019 the following changes were presented:**

1. Use the configured price type (MD or 24H) to calculate the total active weight.
2. Take into account the price of checkbooks in Delta Gamma Parametric VaR.
3. In the Experimental Portfolios module, consider the type of investment to add titles.

### **On September 5, 2019 the following changes were presented:**

4. Stock Investment Report Format.
5. In the Experimental module the Listed Derivatives can be seen.
6. Correction of Derivatives interests in Historical and Parametric Market Var.

7. Use Coupon Duration in Parametric Var with Delta Gamma approximation.
8. Update of Stress Levels in Liquidity Risk - Funds.
9. Credit BKT Update.
10. Correction in the CVaR formula for Parametric Var.
11. Correction in CVaR formula for Parametric Var Delta Gamma.
12. CR Credit Risk modification of Repo Ratings.
13. BackTesting Panama and Costa Rica.
14. Update SFTP.
15. Modification for the Consolidated Report in the Fund Weighting section.
16. Modification of Scenario Sheet for the Dates for Delta Gamma Parametric Report.

**On December 9, 2019 the following changes were presented:**

17. Adequacy for reading new generational siefores.
18. Implementation of the new calculation “Tracking Error” for generational siefores.
19. Improvement in time of automatic calculations.

### Focus on the client

Valmer’s Risk area offers a wide range of useful services for financial entities, which cover diverse needs according to the client’s profile; among the main objectives are:

1. To facilitate compliance with the requirements for Financial Risk Management (market, liquidity and credit), using methodologies that are part of the market’s standard; as well as complementary analysis. Through the Valrisk system.
2. Calculation of coverage efficiency and CVA for various entities, mainly issuers.
3. Carry out mathematical and financial analyses that allow the client to make timely decisions: valuation of credit portfolios, calculation of gauging, etc.

The quality of the service offered by Valmer has allowed sixty-four clients to remain in in Mexico, in terms of Financial Risks, five clients in Costa Rica and two clients in Panama.

## A) Regulatory Changes

The following regulatory changes were applied in Valrisk system:

REGULATORY ENTITY	COMMUNICATION	NAME	DATE OF PUBLICATION IN THE OFFICIAL JOURNAL OF THE FEDERATION
CONSAR	Circular 19-21	Modifications and additions to the general rules to which the information provided by the Retirement Fund Administrators, the Retirement Fund Specialized Investment Companies, the receiving entities and the operating companies of the national SAR database, must submit to the national commission for the savings system for retirement.	January 18, 2019
CONSAR		Modifications to the General Provisions that establish the Investment Regime to which the investment companies specialized in retirement funds must subject.	May 31, 2019

## QUALITY MANAGEMENT

The Internal Control area has achieved great objectives within Valmer through continuous control and improvement mechanisms that have boosted the strengthening of productive processes, achieving satisfactory results, as well as a higher level of efficiency in recent months.

The management of the improvement strategies is based on quality indicators that allow the evaluation and administration of the daily processes of prices vector, curves and matrices production.

## CUSTOMER SERVICE.

A CRM (Customer Relationship Management) was implemented whose function is an administration based on the relationship with the client, a management model where the five participating areas of VALMER have a request-response approach to commercial issues and customer satisfaction.

Previously, the requests of our clients that involved commercial issues were not followed-up to determine if the clients were satisfied with our performance; therefore, with this new application we can determine the services, visits and new developments that our clients require. The aforementioned has revealed an improvement in the controls for the follow-up of requests, especially, since there is a registry in which each of the requests that originate new sales is segmented by stages.

On the other hand, a new survey system was implemented, which aims to listen to the concerns and areas of opportunity that clients observe in us, applied continuously after each training or visit from our collaborators.

Additionally, the User Attention Center (CAU) followed the same trend as last year (2018) with 100% efficiency, which means that immediate requests are dealt with in a timely manner. For 2018 the CAU response average was 1.25 days and for 2019 it was 0.65 days, improving the average service, 50% faster.

## COMPLIANCE

The regulations applicable to the price provider according to observations or communications made by Authorities have been updated and each one has been 100% complied with on the established dates.

## Information Products (Market Data)

### SALE OF INFORMATION

During 2019, we continued the technological evolution for information delivery by implementing 2 initiatives, the first aimed at improving the management and control of clients and income, and the second, focused on the way in which we distribute “Reference Data” information that includes Financial Information, relevant and corporate events, as well as end-of-day price catalogs.

The implementation of the information and clients management system for Market Data services was concluded during the month of August. This system will provide greater efficiency in the administration, control, reporting and billing processes, reducing dependence on manual processes, with a better commercial analysis capacity by integrating the information services to which each of the clients are subscribed

in a single platform, in addition to generating an automatic link with the billing process, providing traceability of income from the sale of information.

In September, we carried out a re-engineering, adhering to international standards to include new contents, facilitating the distribution and delivery of information in open communication protocols and redesigning the commercial strategy for the Reference Data products offered by the Group for the delivery of information at the end of the day.

Additionally, we reinforced our continuous improvement processes: in June an adaptation to the scenarios of the Market Data Protocol Book was carried out. To test its effectiveness, we carried out, in coordination with the stock and financial community, a comprehensive test in November.

At the end of 2019, there are more than 175 users -Banks, Stock Brokers, Institutional Investors, Algorithm Brokers and Information Vendors (redistributing agencies), national and foreign, with access to information on the Capital and Derivatives markets in real time and deferred. The redistribution of this information allows the Group to have global coverage and presence through more than 24,500 information terminals.

As for the SiBolsa App, the total of free downloads on the iOS platform during 2019 was 2,085 additional compared to the end of the previous year, while, for the Android platform 4,057 additional downloads were obtained, jointly reaching over 106,000 cumulative downloads since its launching.

## INDICES

The main characteristics of our indices is that they are Replicable, Investable and Representative of the market, their main importance lies in the fact that there are investment vehicles that replicate them, in this sense the S&P/BMV IPC is one of the oldest investable indices in Latin America, continues to be the main indicator of the variable income Mexican market since 1978 and the issuers that comprise it trade on a daily average 80% of the amount of the local market.

Following international practices, in February, a public consultation was held on the S&P/BMV FIBRAS index; as a result of it, we strengthened the diversification and investability of the indicator by adding changes in the trading history, as well as in the weighting scheme of its components.

In September, as a result of the public consultation regarding the Operation History requirement in the S&P/BMV Indices, the criterion of number of days traded was expanded in order to expand the universe of issuers eligible for the S&P/BMV Habita, of Economic Activity and Investable Sector.

Committed to product diversification and development, the BMV family of indices closed the year with more than 70 indicators for the Mexican market, along with S&P DJI, 8 new-generation indices were developed, among which the following stand out:

- S&P/BMV Ingenius, which is represented by the world's largest companies in technology, entertainment and communication services; and
- S&P/BMV Unifactorial Indices, which are weighted so that companies have a weight determined by quality, performance, volatility or quality factors, depending on the index in question:
  - S&P/BMV IPC CompMx Enhanced Value
  - S&P/BMV IPC CompMx Enhanced Value Weighted (MXN),
  - S&P/BMV IPC CompMx Quality (MXN),
  - S&P/BMV IPC CompMx Quality Weighted (MXN),
  - S&P/BMV IPC CompMx Risk Weighted (MXN),
  - S&P/BMV IPC CompMx Short-Term Momentum (MXN),
  - S&P/BMV IPC CompMx Short-Term Momentum Weighted (MXN)

At the end of 2019, there are 16 capital market ETFs with assets in circulation of more than \$87,000 million pesos, representing an increase of more than 21% compared to the end of the previous year.

## LED

As a result of the agreement signed between Bolsa Mexicana de Valores, S.A.B. de C.V. (BOLSA) and Bolsas y Mercados Españoles (BME), to promote the generation, distribution and sale of information from Latin American financial markets, during 2019, the company “Latam Exchanges Data México S.A. de C.V.” was incorporated, which will focus on hosting technical and production infrastructure, as well as on the provision of first-level support for all services.

At the same time, agreements were signed with various sources of information in Latin America allowing the integration of the contents for the production of 3 end-of-day products considered in the first stage of the project.

The 3 products that were developed using best practices and international standards are:

### **1.- Securities Master**

It is a catalog that includes the main attributes of instruments of variable income, fixed income, derivatives, futures, investment funds, ETFs, structured products and others, listed on the financial markets.

## 2.- Prices and Volumes

It is a file that provides, once the session is over, files with the closing prices and information on the traded volume together with additional data such as maximum, minimum and average session prices of the various instruments listed on the financial markets.

## 3.- Relevant Events

A relevant event is any circumstance regarding the issuer, its business and its securities that is of importance for the determination of the price of the security and that could positively or negatively affect the legal, economic or financial position of the company, the relevant events include: Quarterly Information, Capital Increases, Dividends, Public Offerings, Mergers and Spin-Offs, Amortizations, among others.

Additionally, the development of the technological platform that allows the reception, processing, validation, control, distribution and sale of information, under the highest levels of automation and processing for the homologated delivery of end-of-day products, has been completed and its launch is planned in production as from the first quarter of 2020.

# Credit Ratings

## BOLSA MEXICANA DE VALORES

During 2019 Fitch Ratings granted BMV the following ratings:

### Ratings

#### **Bolsa Mexicana de Valores S.A.B. de C.V.**

Foreign and Local Currency Long-Term IDRs	BBB+
Foreign and Local Currency Short-Term IDRs	F2

### **National Ratings**

Long Term	AAA(mex)
Short Term	F1+(mex)

### **Sovereign Risk**

Foreign and Local Currency Long-Term IDR	BBB
Foreign and Local Currency Short- Term IDR	F2



## CONTRAPARTE CENTRAL DE VALORES (Securities Central Counterparty)

In September 2019, Fitch Ratings awarded the Securities Central Counterparty the international long and short term rating in local and foreign currency at “BBB+” and “F2” respectively. Fitch also granted the national long and short-term ratings in “AAA (mex)” and “F1+(mex)” with a stable outlook.

### Fitch Ratings

Escala Global BBB+ / Estable F2

Escala Nacional: AAA(mex) /Estable/F1+(mex)

## ASIGNA, COMPENSACIÓN Y LIQUIDACIÓN (Asigna, Clearing and Settlement)

In September 2019, Fitch Ratings granted Asigna the international long and short-term rating in local and foreign currency at “BBB +” and “F2” respectively. Fitch also granted the national long and short-term ratings in “AAA (mex)” and “F1+(mex)” with a stable outlook.

In October 2019, the rating agency Standard & Poor’s confirmed its long-term and short-term credit ratings on a global scale of “BBB +” and “A-2” and on a national scale of “mxAAA” and “mxA-1+” also with a stable perspective.

The following table details the credit ratings granted to Asigna in 2019:

### ◆ Credit Ratings 2019

#### Fitch Ratings

Global Scale BBB+ / Stable F2

National Scale: AAA(mex) / Stable/F1+(mex)

#### Standard & Poor’s

Global Scale BBB+ / Stable / A-2

National Scale: mxAAA / Stable / mxA-1+

## PROJECTS

In 2019 the portfolio consisted of 20 projects, out of which 11 are considered new initiatives approved in 2019 by BMV Group's Board of Directors and 9 began in previous years and continued their development.

The most representative are detailed below:

### Valrisk 2.0

This project seeks to update components and add functionalities to the Valrisk system in the Financial Risks area - Valmer, which provides the operative and commercial advantage of being able to be installed on site with each of the clients, in order to automate the process of risk calculation.

### HA MexDer

In BMV Group it was proposed to strengthen the operation platform of MexDer's Information Systems (Derivatives Account, MexDer Billing, SIM, IMM and Accredited Personnel), adding a High Availability scheme on each one of the components that make them up, and that together make it possible to increase the availability of these Production Systems.

### Development of App

Seeking to be closer to our clients, a mobile application was developed to consult and manage issuer information, including information for issuers regarding their obligations, delivery deadlines, instrument infographics, rates, information from the Issuers Committee, events, annual calendar of information deliveries and a chat as another means of communication.



## Bonds Chamber/House

In order to centralize and make transparent the risk calculation valuation processes in debt instruments, facilitate and increase liquidity through clearing mechanisms for a better perspective of systemic impact by knowing the risk of portfolios, a Debt Instrument Chamber/House that generates a new line of business in the CCV is in the process of being created.

## Direct Custody

In order to offer more competitive services in favor of the Mexican market, a project was started at Indeval, which seeks to automate processes and develop new services in order to offer Direct Custody to foreign and national institutional investors. Among the new services are: market data, corporate events, cash management and specialized customer service.

## Asigna's risk engine

A new solution for Asigna's risk calculation engine is in the process of being implemented, which will achieve a stable and robust process that meets the service levels necessary for proper risk management. This tool also integrates a new risk calculation methodology and is aligned with the provisions issued by national and international authorities (PFMI's).

## Infomatch

A tool was implemented in 2019 that will allow users to know the behavior of market data users to have control over compliance issues in the distribution of information.

## Alta disponibilidad

A comprehensive technological solution was implemented that allows for a High Availability scheme at the hardware and software level for the technological platforms of Indeval, Asigna and CCV.

## DRP

Strategic project for BMV Group, which seeks the implementation of a new Flexible DRP architecture that will independently activate a disaster recovery plan scenario for Indeval's, CCV's and Asigna's companies.

During 2019 we carried out the renovation of some technological platforms, we focused on strengthening cybersecurity issues and continued to mature processes that allow us to maintain operative excellence and make the delivery of services more efficient maintaining high levels of availability.

During this year we focused on the following initiatives:

**1. Flexible DRP.** The project aims to eliminate the dependencies that currently exist between Post Trade areas, which prevent the activation of a recovery mechanism in the event of a disaster independently, resulting in the different entities being decoupled and not having the flexibility to operate in their contingency infrastructure when required. This year phase 1 of the project was concluded and phase 2 began, which will be running during 2020.

**Benefit: Service improvement**

**2. Post-Trade High Availability.** It was possible to implement a comprehensive technological solution by strengthening the continuity scheme of the operation of Indeval, Asigna and CCV to comply with the Principles for Financial Market Infrastructures (PFMIs). The project consisted of the renovation of the current IBM platform by teams with VxBlock convergent architecture, as well as the migration of operative systems for Post-Trade companies to this new platform, which provides a unique infrastructure for the provision and administration of systems with high availability characteristics at hardware and software level.

**Benefits: Technological update, service improvement, risk reduction.**

**3. Network Operation Center (NOC).** The project was concluded and its objective is to centralize the services of supervision, proactive monitoring and maintenance of the Technological Infrastructure (Telecommunications, Servers, Database, Applications, Network Traffic, etc.), providing BMV Group with tools and methodologies to manage IT events and timely alert of incidents that may interrupt the service.

**Benefits: Service Improvement, Infrastructure Monitoring, Risk Reduction.**

**4. Network Encryption.** In order to continue with the strategy of strengthening financial links in terms of information security, this year BMV Group's Financial Network's links were encrypted.

**Benefits: Compliance, Greater Security.**

**5. Bonds Clearinghouse.** The project aims to generate a new line of business for CCV. During this year, Phase 1 of the project was concluded, which consisted of analysis and development.

**Benefit: Increase the service portfolio.**

**6. Eurobonds Engine.** Automation of the calculation processes of the International Instruments that are part of Valmer's Price Vector.

**Benefit: Greater control, technology update, agile flow of information.**

**7. Collateralized Curves Engine.** Creation of new curve models, which contribute to the valuation of special instruments in the Price Vector.

**Benefit: New products for our clients.**

**8. XBRL Annexes.** Timely and proper compliance with the requirement of the Authority for the integration of Annex AA, Change of Financial Information Catalogs, Relevant Events, Quarterly Financial information of Trusts (Annex T) in XBRL.

**Benefits: Compliance with Authorities, Technology Update**

**9. Statistical Products.** Creation of new products where clients can consume statistical information in order to compare operative performance between Exchanges in real time.

**Benefit: Competitive Differentiator**

**Financial result: Greater income**

**10. RINO 2019.** 5 releases were made during the year with more than 25 new functionalities, among which we can highlight: baskets, block transactions, avoidance of auto crossings, limited market bids, among others.

**Benefits: Compliance, increase of services portfolio, competitive differentiator**

**11. DINO 2019.** 5 releases were made during the year with more than 15 new functionalities, among which we can highlight: future of 1 day TIIE, report of market makers to Banxico, Forward Starting Swaps, standardization of the reference field to attract new clients (Wedbush), among others.

**Benefits: Compliance, increase of services portfolio, competitive differentiator**

**12. Stability in Market systems.** During the year, important non-functional changes were made to the systems, maintaining stability and achieving 100% availability for the Derivatives Market and 99.97% for the Capital Market.

**Benefits: Service stability and improvement**

**13. ISO 20000 SGS Revision Audit**

The Service Management System was continued by maintaining the ISO 20000 Certification in three of the services that the BMV Group provides to its clients: Order Routing, Market Data and Clearing and Settlement. The certification was endorsed by the SIGE/NYCE certification agency in November.

**Benefits: Image Improvement, Competitive Differentiator**

**14. Router Renewal.** Renewal of the access service to BMV Group's Financial Network for participants, using new technology.

**Benefits: Cybersecurity Improvement, Technology Update**





## OUR COLLABORATORS... OUR MOST IMPORTANT ASSET

We are convinced that behind each project there is a great team, who enrich our day to day with their talent, experience and diversity.

Our collaborators are the main differentiator of BMV Group. Their integral development also represents the development and evolution of our Institution, that is why we constantly seek to offer the best working conditions and we maintain an adequate balance between professional and personal life.

In BMV Group we work 40 hours a week distributed from Monday to Friday, with one hour for lunch, in a general schedule of 8:30 a.m. to 5:30 p.m. The working hours and schedule may be modified based on the needs of the company or the nature of the work, always within the framework of the Federal Employment Law and the Internal Regulations. We have a program of staggered schedules.

In our organization, all employees have:

- Insurance for major medical expenses
- Life insurance
- End of the year bonus
- Vacation Bonus
- Savings Fund
- Food Vouchers
- Retirement plans

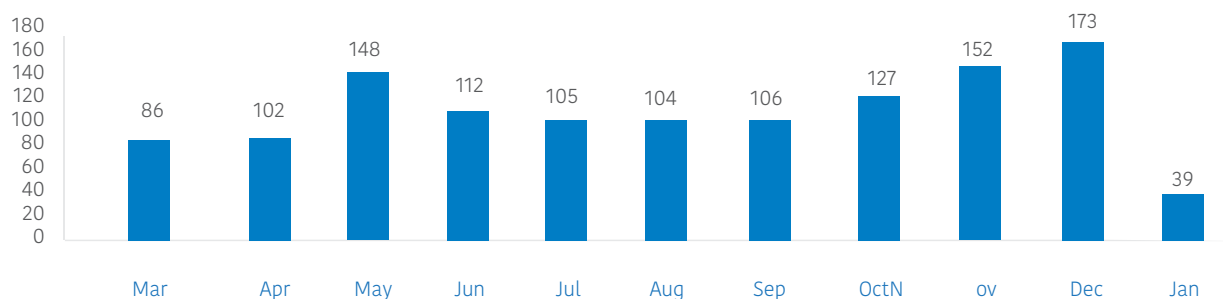
There are also additional benefits, such as:

- Medical office with a service hours from 9:00 a.m. to 6:00 p.m.
- Nursing room
- Lunch area and cafeteria
- Discounts in day care centers and schools
- Agreements with gyms
- Discounts and special promotions in restaurants, hotels, amusement parks, artistic activities, appliances and department stores, among others.

During 2019 and adhering to the best practices in the labor market, the “Days Off Program” was implemented, where the Group’s employees, as of March 1, had 3 days that they could use to carry out various activities: personal, professional, cultural or just to relax and enjoy the family.

On January 31, 2020, the staff has enjoyed 1,314 days off, which means that 80.66% of the total number of days granted has already been used. May, November and December were the most demanded months.

◆ “Days Off Program” - Days Granted





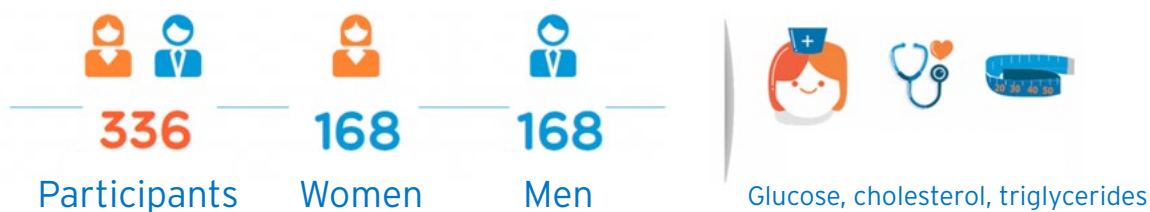
Thanks to this program, all employees, regardless of their seniority in the company, may take personal days and make use of this benefit.

For BMV Group, taking measures that take care of the physical well-being of our employees is of utmost importance, since in this way we contribute to improving their quality of life through a culture of prevention and healthy habits.

That is why, the **“HEALTH WEEK”** was held in its 2019 edition, from August 19 to 23, which had the participation of expert companies in the field of health, where they offered studies, products and services at preferential prices, such as:

1. Talks about chronic-degenerative diseases
2. Talks about cervical cancer
3. Nutrition
4. Ópticas Lux with discounts of 20% off in the purchase of frames
5. L’oreal with discounts of 20% to 50% off in various products
6. GNC offered health and general care products
7. NUTRILICIAS offered nutritional products
8. DENTEGRA had promotions to purchase dental insurance
9. Sports activities
10. Luis Pasteur Foundation

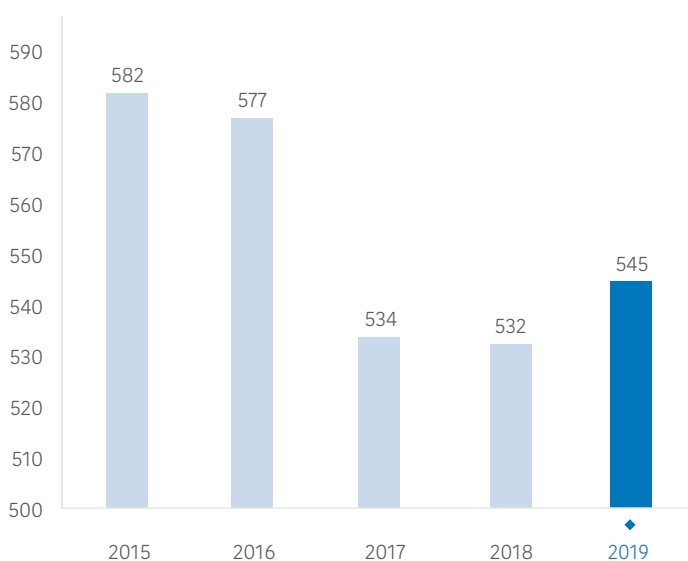
Additionally, GNP was present and through Médica Móvil they carried out free studies to the Group’s collaborators. Vital signs, weight, height, body mass index measurements were taken, as well as glucose, cholesterol and triglyceride tests. This year, the participation of the collaborators represented 55.4% in this initiative, increasing 8.4% in relation to 2018.



# BMV Group's Demographic Data

At December 31, 2019, we have 545 employees, out of which 310 are men and 235 are women, to whom we provide the benefits established in Mexican legislation for full-time employees, including social security, employee participation in profits and paid vacations, as well as some additional benefits granted by the company. We believe that relations with our workers are good.

## ◆ Number of Collaborators

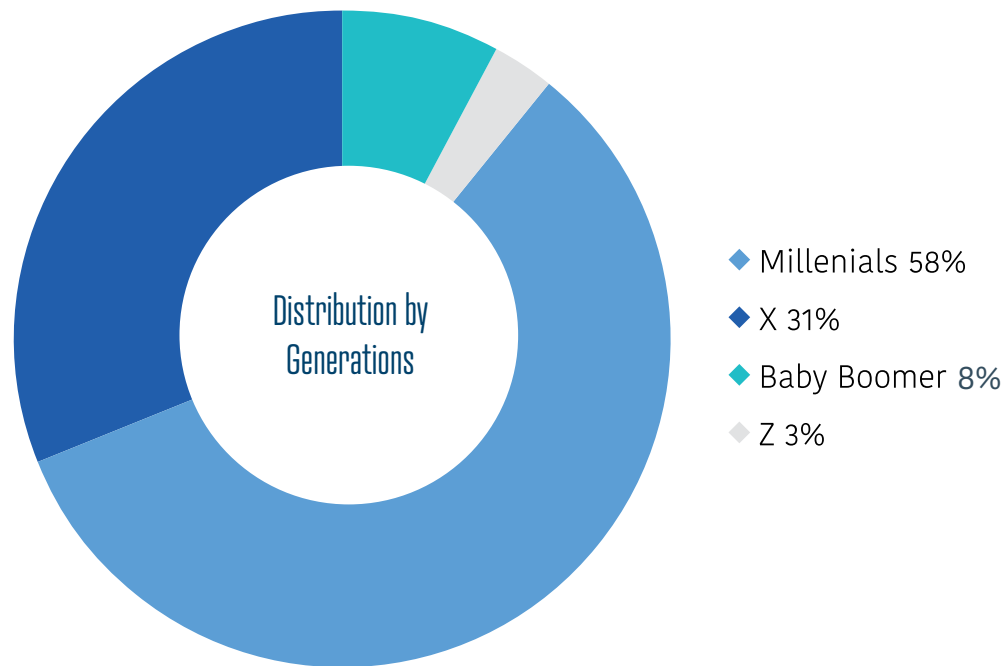


## ◆ Distribution by Gender

Year	Women	Men
2015	42%	58%
2016	44%	56%
2017	43%	57%
2018	44%	56%
2019	43%	57%

Position	2015		2016		2017		2018		2019	
	Men	Women	Men	Women	Men	Women	Men	Women	Men	Women
Chief Executive Officer (General Director)	1	0	1	0	1	0	1	0	1	0
Deputy General Director	4	0	4	0	4	0	4	1	3	1
Executive Director	1	1	1	1	1	1	0	0	0	0
Director	21	4	18	4	20	4	18	3	19	3
Compliance Officer	1	1	1	1	1	1	1	1	1	1
Deputy Director	37	18	26	13	27	14	33	18	35	20
Manager	56	49	58	45	54	37	61	49	62	41
Specialist							119	88	124	101
Analyst							60	75	65	66
TOTAL							297	235	310	235

## Generations



## Equal opportunities in our work team

BMV Group supports equal opportunities and is committed to maintaining a team in which no one is discriminated against based on gender, marital status, age, religion, race, physical appearance, differences of opinion, political opinion, social condition, language, nationality, sexual orientation, pregnancy or different physical abilities. This is established in our Ethics' and Conduct Code within the "Principles that guide our conduct".

BMV Group does not discriminate anyone based on gender, race, age, religious creed, political doctrine, sexual orientation and social or physical condition; similarly, in the selection process, no candidate is questioned or rejected based on health, pregnancy, family planning and disability in general. On a quarterly basis, an analysis of the main indicators is presented to the Chief Executive Officer's Office, with information on the topics previously mentioned, for his knowledge and corresponding management.

In order to avoid any type of discrimination in the conformation of our work team, we created the “Personnel Hiring Policy”, which establishes guidelines of the process for filling a vacancy. The essential conditions when selecting a person for a position must be the merits, achievements and experience obtained in their work, as well as the capacity and skills they have for the future position, which must be verified by comparing the profile of the person against the job description. Although we support the growth of our internal collaborators, the selection process must evaluate at least 3 candidates and adhere to an objective selection.

In terms of **Recruitment and Selection**, we continue with internal calls giving our own collaborators the opportunity to continue their professional development. Additionally, we continue to expand our recruitment sources with universities such as Anáhuac, UP, UVM and EBC by attending their recruitment fairs and actively participating in their job portals in order to attract the best talent from new generations.

In 2019, 99 internal calls were published and 9 evaluation panels were held, which were composed of both internal and external candidates, thus taking a firm step in the optimization of talent selection processes. During this year, 31 personnel movements were made (laterals and promotions).

On the other hand, we remain committed to developing the skills and knowledge of new generations with our internship and scholarship programs, **in addition to joining the Youth Building the Future initiative** to promote their integration into the workplace.

In the Professional Practices program during 2019, we had the participation of more than 41 students, which represent a great seedbed for the Group, since 13 of those were hired as analysts.

Last year we started with the scholarship program in which we had 5 participants, who are focused on the development of improvement projects and/or process automation. 50% of the participants continue with us and this year one of them will be hired as an analyst.

On the other hand, in the Youth Building the Future project, there are currently 5 people and in 2019 one of them was hired as an analyst.

# Performance evaluation and career plan

In 2019, we continued with the Performance Management Model, which seeks to:

1. Align the Group's goals with individual performance
2. Clarify the objectives of the area in individual objectives and how each function allows to achieve the strategic goals
3. Provide transparency in the Performance Management process
4. Identify development programs for specific segments (development, leadership, high potential and succession plans, among others)
5. Classify the collaborators in the Talent Matrix in order to activate the development programs according to the identified segments

With this model, the institution promoted the achievement of the objectives framed in the Strategic Plan and the goals set for the current year were achieved.

A fundamental component of the Model is to clearly define the objectives to be developed, in order to establish the pertinent actions, know and set the expectations, levels of demand, measurement mechanisms and goals to achieve, as well as the execution times of the activities.

The recording of the objectives of each collaborator must be considered for constant feedback and open dialogue between leaders and collaborators; this will lead us as an organization to maintain an environment of continuous improvement and development focused on achieving individual and institutional goals.

The individual evaluation has two components: Objectives and 360° Evaluation. We made a review of institutional competences and identified part of the expected behaviors by job level, which were evaluated by: immediate boss, collaborators and peers.

The Institution seeks to reward with an additional incentive employees who achieved a higher than expected performance of their objectives and who showed throughout the year- great willingness, initiative, teamwork, support for employees and an attachment to values and the ethics' code.

The Model is applicable to all levels and positions, according to their roles and levels of influence on BMV Group's results.

## Integrating more

In order to strengthen BMV Group's sense of belonging, we constantly develop different initiatives and spaces that promote greater integration between the areas of the organization.

The following are among them:

**Social Thursday**, an activity where collaborators can be in a social context and participate in games. The theme was "Equity", so, in addition to having a pleasant time, we sensitized them on the importance of this topic.

**Bowling Tournament**, where 40 teams strengthened their winning and teamwork spirit and which allowed collaborators from different areas to spend time together.

**Races**, in order to promote sport and physical activity of our collaborators.

**1. Fun, Finance & Running**, organized by Riskmathics, in which we were proud sponsors integrating the financial sector within the framework of our 125th anniversary.

**2. Escucha a Fondo Race**, in order to support deaf children. Collaborators' children under the age of 12 participated in this edition.

**Bicycle Sunday**. For the third consecutive year, collaborators, family and friends moved by bike on a Sunday morning through different streets of Mexico City, taking advantage of the Sunday Ride organized by the Government of Mexico City. At the end of the tour, the gathering continued on the 15th floor with breakfast and games for the children.



## 125th Anniversary

For us, 2019 was very special, as we turned 125 and took the moment to reinforce institutional pride with our collaborators. In this regard, we had them participate in all the events organized within the framework of the celebrations, and we recognized them with a special kit.

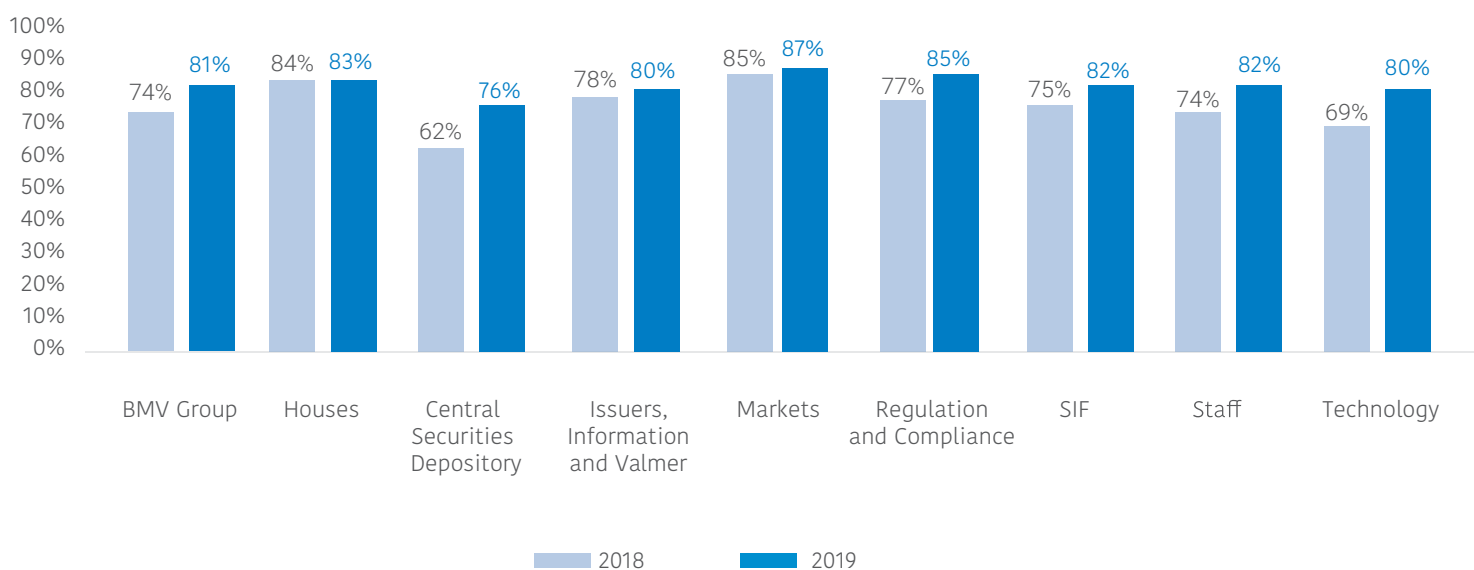
On October 31, we carried out the “Exchange Day”, which began with a commemorative “Opening Bell” and in the evening we closed the day with an emotional celebration recognizing the role that we have as collaborators in the organization.

With these activities, we reiterate our commitment to continue strengthening ties with our staff, family and friends.



## Organizational environment

With regard to the Work Environment component, during 2019 the results were very satisfactory and were reflected in a significant increase in BMV Group and in most of its areas.



On the other hand, the areas of greatest opportunity derived from 2018’s results were improved, through various group integration and coaching activities for some of the areas of the Organization.



# STRENGTHENING STOCK MARKET CULTURE

Understanding our role in the economic development of our country, we know the importance of strengthening the financial culture through education, culture and communication and in this way have a closer relationship with different audiences. We detail the efforts made in these three areas during 2019 below.

## Education

As it has been since 2002, we have been distinguished by a history of commitment with society for over 17 years. Bolsa Mexicana School has always been entrusted with favoring people with current issues that can equip them with new knowledge, skills and attitudes that allow the perfection of their skills or professionalize even more their daily actions and thus, fulfill the promise of: **positively transforming people.**

The students who favor us with their attendance and commitment to cultivate in a subject that is not at all simple, but not impossible either, finances in their different angles of understanding, make us think of the inexhaustible potential of bringing new investors to the market, as well as having the iron hope of influencing in some way the future companies listed in the stock market; without a doubt, a very long and complex route but the most effective that exists in the world.

During 2019, “Bolsa Mexicana School” faced a scenario that was not as favorable as the previous years, but continued with a commitment to remain sowing the different audiences that have had contact with us or the new ones that had a first experience. This is how **this year more 3,327 people were trained in various modalities of open, closed and online courses.**

152 courses were given, out of which 130 correspond to open or scheduled courses and 22 closed courses by explicit request of a client in question, which were brought to their facilities.

In order to add value for the Group’s clients, a plan was carried out to support the training of the issuers of the stock market; therefore, we developed 14 new training programs for them that resolved new ways of operating in the savings system for retirement or modifications to the various certifications that we have.

For the issuers we offered a scholarship scheme to which they could adhere for the simple fact of being a BMV’s issuer and in this way be a support in case they required it, in order for their training plans to continue despite common budget cuts, which occurred throughout the year and that could impact them.



Therefore, on a bimonthly basis, they were directly announced of the scheduled training programs chosen for them, which could be Diplomas (over 30 hours of training) and Courses (less than 30 hours), highlighting that investments in them would be the lowest in the market and thus allowing us to pay attention in great measure to these new students who would be in said courses, providing a collaborative environment among the employees of the most important companies in the country.

The training program for issuers showed that 56 issuers in the market considered it and sent 206 people from various positions in their organizations, taking advantage of this approach.

Joining efforts with other institutions led us to make 6 strategic alliances or collaboration agreements this year, signing agreements with companies such as Citibanamex and BlackRock, as well as 4 more universities, as was the case of Universidad Panamericana , Instituto Tecnológico de Monterrey,

Universidad Anahuac and Universidad del Valle de México.

Thanks to these agreements and the already increasingly strengthened relationships built years ago, we had the opportunity to have an impact on highly relevant Financial Education issues, in which we considered conferences in open forums for various universities or teaching professorships with them, free presentations for companies that request it in person or through electronic means, being active protagonists in financial contests or stock simulation with important allies in Mexico and in the world, reaching an approximate number of 28 thousand people in 31 different events throughout the year.



### Growth in 2019:

Courses offered

152

Number of People

3,278

We had a 1.2% growth in number of students, with respect to 2018.

And in Financial Education activities, an increase of 205% was reached compared to 2018.

Due to the need for both courses and financial education activities, today there is an academic body of 148 professors who represent a growth in staff of 54%. It should be noted that the scores obtained for their performance are around 9.7 out of 10, stating that the academic level of our facilitators is outstanding.

In 2020, like in any other year, we will face great challenges, but also great opportunities to continue making the stock market possible, where the contribution of the Bolsa Mexicana School is about human formation and financial inclusion.

The image shows a modern museum gallery. On the left, there are several large digital screens displaying financial data and charts, with titles like 'SIMULADOR DE INVERSIÓN' and 'INVERSOR 1'. The floor is polished and reflects the ambient light. On the right, there are tall, narrow informational panels with various graphics and text, including the 'GBMV HOY' logo and a circular diagram titled 'Participación en los ingresos por líneas de negocios'. The ceiling has a complex, geometric structure with recessed lighting.

# CULTURAL PROMOTION

Through the Cultural Promotion program, we transform our social commitment into actions regarding the dissemination of values. The sub-directorate manages two programs: The Exchange Museum (MUBO) and temporary exhibitions.

The Exchange Museum is a space that seeks to help build more conscious generations in the roles that the economy plays in the development of the country, this is achieved from the historical narrative of the Mexican Stock Exchange and interactive spaces deployed in the museum.

The temporary exhibitions are a space open to all audiences where we present works by established artists and emerging talent in whom we find proposals that enrich the culture of our country.

- On April 8, celebrating 125 years of the Exchange, we inaugurated the Exchange Museum.
- From its opening until December 31 we have had 98,000 visitors to the MUBO.
- In November we enabled the MUBO website to incite more interaction with our visitors.
- During 2019 we presented 5 temporary exhibitions: “Common substance” by Óscar Ávila, “Master Recreations” by Lalo Sánchez del Valle, “Transferences” by Mariló Corral, “Xochiquetzal, silver flowers” by Vivi Guerrero and “Body and soul, a microcosm” by Ale Zamavi.
- We supported Fundación Quiera with the exhibition “The Mexico where I want to grow up”.
- We added to our artistic heritage 5 pieces from the temporary exhibitions: Bouquet bleu by Mariló Corral; Tree Seams by Óscar Ávila; The mother of the SalTinbanco by Lalo Sánchez; Metatron by Ale Zamavi and Reyna by Vivi Guerrero.



# BMV GROUP'S DIGITAL STRATEGY

The Corporate Communication strategy of BMV Group has been immersed in an evolutionary process, the messages were modified for each of our audiences, since in addition to the “traditional” way, we have inserted new channels and digital tools.

Because communication has become much faster, more direct and personalized, at BMV Group we strengthened our Corporate Communication, allowing us to inform and interact with audiences.

The most relevant aspects of our participation in social networks are described below:

## Facebook / @BolsaMexicanaValores

- At the end of 2019, **we obtained a growth of 20.64% in followers**, which translates into **278,346 fans**.
- The countries with the greatest consumption of our contents were: Mexico, followed by the United States, Colombia, Peru and Spain. The main cities of our country that consume the contents are: Mexico City, Toluca, Puebla, Guadalajara and Monterrey.

## Twitter / @BMVMercados

- We managed to increase the number of followers to 332,572 at the end of 2019, equivalent to an increase of 8.1% in relation to the previous year.

## YouTube / grupobmv

- Last year we increased to 4,458 subscribers. The age range of our community is between 25 and 34 years of age, which represent 38.9% of our subscribers.

The three most successful videos during 2019 were:

1. 125 years of #LaBolsaDeMéxico with 83,615 views
2. Exchange Thursday: My 1st Stock Market Investment with 16,410 views
3. What are FIBRAS? with 6,740 views

- The main geographical regions that viewed our contents are: **Mexico 90%, United States 1.9%, Peru 0.6%, Colombia 0.5% and Spain 0.2%**.

## LinkedIn / bolsa-mexicana-de-valores

- At the end of 2019, **we recorded an increase of 172.1%** in the number of followers, which translates into **52,528 more people**.
- **The impressions grew 33.9%, creating a total of 3,134,668** and reaching a total of 192,833 users of this network.
- **Participation increased by 214.5%**, achieving 192,833 actions of users, understood as: 'Like', comments, shared content and clicks on our content.

## Instagram / bolsamexicana

- The information that is published in our profile consists of rings, issuers' anniversaries, Exchange Experience, Exchange's Thursdays and specific subjects of the Mexican Exchange School. During 2019, there was an increase of 87.8% followers, in relation to the previous year, with a total of **42,031 people**.

In our social networks we achieved almost 37 million impressions, a percentage growth of 34.1% compared to the previous period and the number of users that follow us increased 24.5%, equivalent to **735,994 people**.



## We promoted our Blog “Hablemos de Bolsa”

- We have completed the first year of the official blog of the Mexican Stock Market “**Hablemos de Bolsa**”, a channel dedicated to the dissemination of financial and stock market education, topics that are explained in a simple way and directed to both beginners and experts.

The blog covers three segments of the public:

- Students
- Specialized public
- Public interested in the stock market

It consists of eight categories:

- **Bolsa Mexicana de Valores (Home)**, from which the following subcategories emerge:
  - **Understanding BMV**, where different areas of the group like MexDer and Issuers collaborate.
  - **History**, where we tell the history that the Stock Market has gone through and the celebrations of its 125 years.
  - **Analysis**, where experts from institutions such as Monex, HR Ratings, BX+, Banorte and independent analysts collaborate.
- **Our companies**. Where there are success stories of some of our companies that, through the financing they obtain from BMV, consolidate their projects and collaborations.
- **Financial Education**. Where there are success stories of some of our companies that, through the financing they obtain from BMV, consolidate their projects and collaborations.
- **Investment and financing**. Practical advice to start investing and how to do it.
- **Sustainable markets**. Information about the socio-environmental actions that are promoted in the stock market.
- **Art/Cultural program**. It shows and invites the public in general to the cultural activities that take place in our facilities: Exchange Museum (MUBO), art exhibitions and lectures.
- **Social and corporate responsibility**. Informs about the various activities that we carry out for the benefit of society.
- **News**. We share with our audience the most relevant events and immediate information about the stock market and financial sector.

## We renewed Exchange Thursdays

- **“Jueves de Bolsa”** is BMV’s activity with the most contact and interest within university students and the general public. The lectures are free and given in the Auditorium by specialists who address topics such as investment, instruments, new trends in the markets and trading on the Exchange.
- During 2019, **we relaunched Exchange Thursdays with a makeover**, which included a total renewal of the scenery, a **registration website and an APP that will maintain frequent contact with attendees, in addition to offering a rewards program** that will reward attendance and interaction with our digital content, which will be available as of February, 2020.

**Web registration for Exchange Thursdays:** [juevesdebolsa.com.mx](http://juevesdebolsa.com.mx)

**App:** Available in Play Store and App Store as of February, 2020

**We held 20 conferences, with an attendance of 4,130 people.**

Some of the topics with the most interest among the audience were: **“What is a FIBRA and why does it make sense to invest in them?”**, **“Economic Challenge of Climate Change”**, **“Fintech Law applied to Banking in Mexico”** **“Investing in global companies”**, **“Blockchain applications”**, **“Grow your finances, invest in investment funds”**, **“Do not let emotion control your investment”**, among others.

### Brokerage Firms

We support Brokerage Firms for the dissemination of initiatives, putting them in contact with more than 35,000 university students. The events that were most widely disseminated were:

- A) Actinver Challenge Sponsor
- B) Exchange School Financial Day - Actinver





# STRENGTHENING OUR MANAGEMENT, CONTROLS AND SECURITY

At BMV Group we have a great responsibility to make possible the operation of the securities and derivatives market in Mexico, and to do it in the best way, we have strengthened our control areas. They are listed below:

## Regulatory Compliance

In BMV Group, regulatory compliance and the promotion of ethics and values are part of the institutional philosophy of each one of the companies that comprise it, as well as the daily actions of its collaborators.

Efforts to consolidate this philosophy and the BMV Group's Compliance Management System (SGC) are coordinated through the Compliance (Compliance) area, by the Deputy General Directorate of Regulation and Compliance (DGANC, formerly the Executive Directorate of Regulatory Compliance), which has the support of the Board of Directors and Senior Management of BMV Group.

Thus, in 2019 Compliance carried out various activities, including: (i) promoting business ethics and institutional values among employees, and (ii) continuous verification of the regulatory framework applicable to BMV Group, with the purpose of strengthening the developed SGC.

Regarding the first point, the Compliance area provided training to BMV Group's personnel in November, 2019 on the topic of "Institutional Philosophy", through which they were given an approach on the mission, vision and institutional values that the Organization has defined as priorities.

On the other hand, regarding the verification of the regulatory framework applicable to the Group, during the second semester of 2019 the Compliance area carried out a simplification of the regulatory obligations to be verified during 2020; for this purpose, it took as a basis the impact and probability criteria of a legal risk matrix also designed by this area, with the sole purpose of making the annual review exercises with the responsible areas more efficient and close. It should be noted that the foundations of the new review exercise were raised in the new Methodology for verification of compliance with regulatory obligations of BMV Group, a document prepared by the Compliance area.

## A) BMV GROUP'S ETHICS' AND CONDUCT CODE

BMV Group's Ethics' and Conduct Code (Ethics' Code) provides employees with the principles that guide their conduct and that they must follow in the performance of their duties, especially with clients, suppliers, shareholders, government entities, before society, the environment and in their own interaction, as well as in the operation of the business, in order to avoid inappropriate actions or actions contrary to the achievement of the Group's objectives and business, which could affect the healthy coexistence among employees.

In order to keep this document updated, in 2019 the Compliance area (Compliance) conducted the annual review of the Ethics' Code, which resulted in a proposal for amendment that was submitted to BMV's Chief Executive Officer, Audit Committee and Board of Directors for approval in April.

Compliance addresses the enquiries and notices that collaborators formulate on issues related to the Ethics' Code, in order to provide them with the necessary guidance to act in accordance with the Group's compliance culture.

On the other hand, in order to permanently promote ethics and values within BMV Group, we carry out activities of dissemination of contents regarding these issues through institutional mails and through BMV Group's monthly Informative Bulletin, constantly disseminating the contents of the Ethics' Code among collaborators, including new staff, emphasizing the principles that must be observed in the daily development of activities, as well as the prevention and transparency of conflicts of interest.

In turn, all collaborators express their commitment to observe the principles of the Ethics' Code by signing a letter of understanding and adherence that is renewed every year.

In addition, in order to assess the degree of knowledge of the employees and strengthen the culture regarding the Ethics' and Conduct Code, compliance with the provisions of the Manual of Transactions with Securities and adequate treatment of personal data in BMV Group, Compliance conducts permanent dissemination activities and periodic evaluations based on the contents disseminated throughout the year. In this regard, the most representative figures of these efforts (by the end of 2019) are shown below:



## ◆ BMV Group's Ethics' and Conduct Code

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Number of new employees who were given information sessions.	82
Number of enquiries on issues related to the Ethics' Code, Manual of Transactions with Securities and/or various subjects..	36
Number of notices on topics related to the Ethics' Code, Manual of Transactions with Securities and/or various subjects.	13
Number of mails sent.	33
Number of notes published in BMV Group's monthly Informative Bulletin	12
Number of evaluations to all collaborators	2

### B) TREATMENT OF PRIVILEGED INFORMATION AND CONFIDENTIAL INFORMATION

BMV Group sees adequate treatment of Privileged Information and Confidential Information as a daily and priority activity; therefore, there are mechanisms and controls based on the applicable regulations to limit the knowledge, use and disclosure of said information.

Firstly, all the information generated within BMV Group's employees' scope of functions, as well as that which is received or known by any means, is considered as Confidential Information; therefore, in accordance with the provisions of the Ethics' Code, this information is used exclusively for the purposes of the Group's companies.

On the other hand, there are control mechanisms for the treatment of Privileged Information that limit access to such information so that it is only known to employees who, due to their functions, should have access to it. Also, "designated managers" have been appointed by areas, who administer such mechanisms and periodically update their content for Compliance. This is consistent with the regulations issued by the National Banking and Securities Commission (CNBV) in the matter.

In accordance with CNBV's regulations and BMV Group's Manual of Policies applicable to Transactions with Securities, transactions with securities that employees intend to carry out are subject to the prior analysis by Compliance, with the purpose of preventing the holding of transactions when Privileged Information is available. In 2019, a comprehensive review of the Manual of Transactions with Securities was carried out, concluding that there were no substantive aspects that required a modification.

Additionally and in observance of the principles contemplated in the Ethics' Code, collaborators must avoid at all times the publication (on social networks or by any

other means) of data or personal opinions that involve labor or business issues that may include the disclosure of Confidential and/or Privileged Information, or information that could be harmful to the image or reputation of the company, so that external institutional communication is only carried out through the channels established in the internal regulations and by the officials authorized for that purpose.

## c) PRINCIPLES AND PRACTICES AGAINST CORRUPTION AND MONEY LAUNDERING

In terms of the Ethics' Code, in BMV Group it is strictly prohibited to make or allow, directly or indirectly, improper payments or to bribe any third party or authority in an effort to influence any decision that could help the companies of the Group obtain or retain some business or undue advantage, so the collaborators refrain from participating in activities that could be understood as bribery, extortion or corruption.

In this regard, in order to prevent any misconduct, Compliance addresses and documents all the inquiries made by the collaborators, in order to guide them to make the most appropriate decision that preserves BMV Group's good image and reputation.

The Ethics' Code states that BMV Group is committed to assisting the competent authorities by providing the information that is required, in order to investigate, detect, prevent and prosecute crimes regarding transactions with resources of illegal origin and financing terrorism. In addition, there is BMV's Group Policy against Corruption and Money Laundering (Anti-Corruption Policy), which concentrates in a single document the institutional commitments against corruption and acts or transactions with illicit resources (money laundering).

There is also a communication mechanism (Anonymous Reporting Line) available both to collaborators and third parties external to the Organization, to report any act of bribery, extortion or corruption regarding the functions or activities of any of the Group's employees.

In the event that any practice of this nature is presented, the conditions, consequences and severity of the conduct are assessed and, where appropriate, the applicable measures are adopted in terms of the Ethics' Code, the Anti-Corruption Policy and the applicable regulations.

Finally, it is worth mentioning that, in the first half of 2019, the DGANC authorized BMV Group's Manual for the Prevention and Identification of Transactions with Resources of Illicit Origin, a document that includes the commitment and lines of

action of the Organization to avoid being used or involved in money laundering transactions in the execution of certain actions that the company performs lawfully to achieve its corporate purposes, but that the regulations have identified as vulnerable activities.

#### d) TREATMENT AND PROTECTION OF PERSONAL DATA

In BMV Group we understand the importance of the protection of personal data; therefore, we take care, control and protect the personal data subject to treatment by the Organization's companies.

For this purpose, the Organization has (i) BMV Group's Policy for the Treatment and Protection of Personal Data and (ii) the Criteria for the Creation and Administration of Personal Databases in possession of BMV Group. Both documents establish the frame of reference for the treatment of personal data and include the institutional commitments necessary for the optimal development of this function. In particular, the aforementioned Criteria define uniform and homogeneous guidelines applicable to all areas in which databases with this type of information exist, as well as to all those collaborators who, by virtue of their activities or functions, are responsible for the creation and/or administration of said databases.

It is noteworthy that in compliance with the regulations in this matter, Compliance is the area authorized to address requests for Access, Rectification, Cancellation and Opposition (ARCO rights) formulated by the collaborators and any third party whose data is processed by the Group's companies, as well as to attend any inquiry related to the treatment and protection of personal data.

Additionally, Compliance continuously disseminates contents among BMV Group's employees, to promote the protection and due treatment of personal data held by the Group's companies.

#### e) TREATMENT OF DOCUMENTS AND ELECTRONIC INFORMATION

In terms of the Ethics' Code, proper management of information and efficient use of the Organization's resources are fundamental principles that guide the conduct of all employees in the development of their activities. Similarly, it is recognized that the information generated in BMV Group is its exclusive property, constituting an intangible asset of great value and confidential nature, including all documentary, electronic, graphic, image, audio and video information, among others.

Therefore, BMV Group's Policy for the Treatment of Documents and Electronic Information establishes the uniform criteria that promote adequate control, information security, cost reduction and the use of available information technologies.

## f) TRANSPARENCY MAILBOX (Anonymous Alert Line)

In response to the best national and international practices in matters of corporate governance and compliance, and in order to promote and reinforce the active participation of personnel through mechanisms that allow reporting illegal behavior or inappropriate behavior, such as bribery, corruption, harassment (sexual, in the work place, among others), undue work practices, discrimination, etc., the Group has an electronic tool known as “Transparency Mailbox”, available to collaborators and external users, which allows knowing and identifying opinions, proposals and concerns of interested third parties.

The Transparency Mailbox works by means of reports that are generated by clicking on the link or icon that is available on BMW Group’s Internet and Intranet sites, or by telephone, calling toll-free number 01-800-288-2872 and entering the access code 888-703-0291, available 365 days a year, 24 hours a day.

Once the report is generated, the system automatically sends an electronic notice to Compliance, so that the authorized personnel can review the details of the matter and take the necessary steps, depending on the nature of the report. The follow-up of each topic is carried out in conjunction with the areas involved and/or interested, until the conclusion of the matter.

In addition, the members of BMW Group’s Audit Committee have direct access to this tool, so they can review the evolution of each report in real time; furthermore, Compliance periodically submits to such body a detailed report of the anonymous reports.

During 2019, 8 complaints were received and were addressed in their entirety, 3 of them were anonymous and there were 5 in which the complainant identified himself/herself voluntarily.



# Business Continuity

BMV Group's Business Continuity Management is aligned with international standard ISO 22301 and with best practices of the DRI Institute, which allows it to establish an agile and effective structure to minimize the risk of business cessation in the event of possible interruptions, which applies to all of the Group's companies, taking into account the particularities of each one.

BMV Group has generated regulations to support its Business Continuity Management, which considers the following information:

- Reference framework considering standards, best practices and regulations of the authorities
- Continuity Government, Groups, teams and critical personnel
- Qualitative and quantitative impact, business impact and testing methodologies
- Business Impact Analysis (BIA) and Continuity Risks (RA)
- Continuity Plans, scenarios and strategies
- Communication protocols and crisis management
- Test Calendars
- Alternate operation and data headquarters
- Dissemination, awareness and training programs
- Bulletins, communications
- Continuity Conferences
- Workshops, evaluations
- Information management tool

It is important to highlight that **BMV Group's Business Continuity Plans have the main objective of protecting critical processes against disasters or major failures**, so, in order to guarantee their efficiency, they are tested under various interruption scenarios and involving the participation of all BMV Group's collaborators.

Additionally, the organizational culture on Business Continuity has been achieved through dissemination, awareness and training campaigns that encourage employees to be interested in the subject and to create synergies to be better prepared for possible contingencies.

All of the above strengthens BMV Group's Business Continuity Management, which makes it a resilient organization, that is; that can overcome any adversity.

## Internal Control

The Group's Internal Control system is developed in accordance with best practices, which have continued to be strengthened as follows:

1. Identification and analysis of risks, as well as monitoring of critical controls, under the scheme of the three lines of defense.
2. Review and update of its regulatory framework, which includes:
  - a. Control functions and responsibilities at institutional level.
  - b. Risk management and internal control methodology.
  - c. Internal Control Policies.
  - d. Table of Faculties, which establish the main actors of each process, the concepts to be authorized and the main guidelines for the proper administration of the process.
3. Continuous maintenance of the process inventory according to the value chain considering a constant search for continuous improvement.
4. Permanent reports of the internal control system, its development and results to the governing bodies for their approval.

The internal control system is focused on contributing to the achievement of defined objectives and maintaining efficient and effective processes.

## Operational Risk

During 2019, Operational Risk became relevant, for which various qualitative and quantitative methodologies were strengthened and designed, whose application to the various Group's companies support the effective and efficient development of strategies that mitigate operational risk and ensure business continuity. Additionally, it strengthened and aligned its frameworks, methodologies, procedures, policies and manuals with international standards, including a robust analysis of interdependence risks in order to control and manage them to guarantee stability in its business processes.

The integration of the second line of defense allowed BMV Group to carry out a holistic management and join efforts to shield all the edges of Operational Risk, working hand in hand with Internal Control, Business Continuity and Information Security.

The scheme developed in 2019 promotes the active participation of those responsible for the process, permeating a Risk Management Culture, improving the knowledge and identification of risks, to evolve to more advanced controls.

The Operational Risk culture extended to all levels; nowadays, quantitative methodologies and valuation criteria are developed to leave subjectivity and seek objective metrics that are relevant to all levels of the organization.

## Information Security

BMV Group recognizes Information Security in its business processes and services, considering it as one of its most important axes for the achievement of its objectives, respecting the principles of Confidentiality, Integrity and Availability of Information.

The main objective is that BMV Group achieves a reasonable level of Information Security in the various layers of IT, with state-of-the-art technological tools, as well as procedures that prevent and, where appropriate, respond in a timely manner before any incident regarding Information Security.

### **Implementation of new tools and services**

In BMV Group, new Cybersecurity tools and services are constantly implemented, in order to continue improving our monitoring and response coverage in the event of any incident.

### **Structure Strengthening**

Human Factor must have the necessary skills; therefore, investments have been made to increase the structure of the personnel responsible for Information Security, which allows us to increase specialization and improve our service levels.

### **Continuous evaluation**

Vulnerability analysis and penetration tests are carried out periodically in order to measure the level of detection and response of the various technological tools, as well as of the personnel responsible for possible cyber-attacks, in order to continue strengthening the security in our IT infrastructure.

### **Constant awareness and training**

The subject of awareness and training regarding matters of Information Security is very important; therefore, a permanent awareness campaign is carried out through several means, such as controlled tests, user certification in aspects of information security, as well as implementation of learning management technological tools, in order to maintain and improve awareness among all BMV Group's users.



## COMPLIANCE OFFICE

### Mexder

In compliance with the General Audit and Activities Plan for 2019 approved by the Board of Directors, consisting of the exercise of the MexDer's surveillance powers, in charge of the Compliance Office, review procedures were carried out for 40 participants, 34 through questionnaires and 6 through the execution of audits, reaching 97.56% of the active market's participants.

In disciplinary matters, during 2019, 21 disciplinary procedures were substantiated. Derived from procedures corresponding to 2018 and 2019, the Compliance Office imposed 15 disciplinary measures consisting of reprimand, requested the imposition of 1 warning to the Legal and Regulatory Department, a delegated area of the Board of Directors for these purposes, and sent 5 cases to the Disciplinary and Arbitration Committee for their resolution, regarding the imposition of disciplinary measures consisting of economic penalties.

Additionally, during 2019, the Compliance Office validated the compliance of MexDer's Brokers regarding the delivery of monthly and annual audited financial information, as well as compliance with the minimum capital requirements of the obligated participants.

Finally, during 2019, we worked with the Chief Executive Officer's Office on a draft of the Stock Market Law, which is in the process of revision and commentaries with the market authorities. Such information was made known to the National Banking and Securities Commission through monthly reports, as well as to the Audit Committee and MexDer's Board of Directors in each of its sessions.

### Asigna

In order to monitor compliance with the applicable regulations of the Clearing House, Asigna's Technical Committee approved a new general audit plan that includes regulatory, administrative, client, operation and relevant information issues. In this sense, during 2019, the Compliance Office executed audits to the financial institutions in charge of managing a Proprietary Position Clearing Member, a Third Party Position Clearing Member, an Integral Clearing Member and a Broker that manages Global Accounts, generating reports for the participants with the details necessary to strengthen their processes.

Additionally, a review was carried out within Asigna, to ensure that the procedures of the area are carried out in accordance with the provisions of the Clearing House's Regulations and Manuals. An opinion with the findings and observations was issued from the previous review, establishing follow-up dates for their attention.



In the second semester of the year, the first supervisory exercise was carried out, limited to relevant issues of the Clearing House, such as the maintenance of credit ratings and the validation of controls related to the reporting of the equity situation. Additionally, a specific questionnaire was integrated to review issues related to operational risk and business continuity and a practical exercise to validate the report on the net worth status of Clearing Members, one of the layers used in the priority of network resources of financial safeguards of Asigna's safety net.

There are undoubtedly several ways to ensure compliance with the regulations by the participants, which is why the Compliance Office, throughout the year, has sought to automate the review of information through more sophisticated compliance tests that allow the validation of their full compliance in a shorter period.

As a Compliance Office, in disciplinary matters, disciplinary procedures are part of the agenda since it is the tool that Asigna uses to give warnings to the participants or, where appropriate, to establish corrective measures and economic penalties derived from defaults, which is why in the current year the procedures that were detected were concluded, contributing to a better understanding of the obligations.

In 2019, various modifications came into effect that allow for a more efficient and market-based supervision, the power of the Compliance Officer to impose warnings under certain administrative assumptions was established and the statute of limitation and expiration procedures were incorporated to the disciplinary scheme, providing agility in the application and achievement of the standard. The regulatory framework is constantly improving and being updated, which is why the Compliance Office will invariably continue to review and issue modifications to the framework.

It is of great importance for us to address the visits of the Authorities and thereby address the corrective actions that they establish. This year we complied with each of them, both those formulated by the National Banking and Securities Commission and those by Banco de México.

Contributing to Asigna's strategic projects is an important subject for this office, so, within the scope of our competence, we have focused on contributing to the review of regulatory projects, the integration of a manual for the administration of defaults, arrears schemes, monitoring of agreements and procedures of Asigna's collegiate bodies and participation in the exercises of the Safety Net.

Finally, during 2019, Asigna's Compliance Office validated compliance with the provision of monthly and annual audited financial information, as well as compliance with the minimum equity requirements. Such information was sent to the National Banking and Securities Commission through monthly reports, as well as to the Audit Subcommittee and the Technical Committee in each of their sessions.

We will continue working on a continuous improvement scheme for the benefit of our participants, our Authorities and our own Clearing House in Mexico.



# MARKET SURVEILLANCE, SELF-REGULATION AND TRANSPARENCY

## Monitoring of Global and Domestic Markets

2019 was a challenging year derived from the Global Economic situation. With the clear objective of ensuring transparency and healthy market practices, we focused on the analysis of our systems and new tools that allow us to carry out our activities in the best way:

- After an analysis, the contract with SMARTS was renewed, which allows us to stay ahead and thus have a differentiator in terms of systems in Mexico. The renewal includes the update of the SMARTS which integrates improvements in the queries, new functionalities, graphs and reports.
- Regarding SMARTS alerts that help us detect unusual movements in the Market, there was a decrease of -43.18% compared to what was alerted in 2018, considering the new alerts.

Monitoring Activities	2017	2018	2019	Var % 2018 vs 2019
SMARTS alerts (unusual transactions)	3,136	6,112	3,473	(43.18)

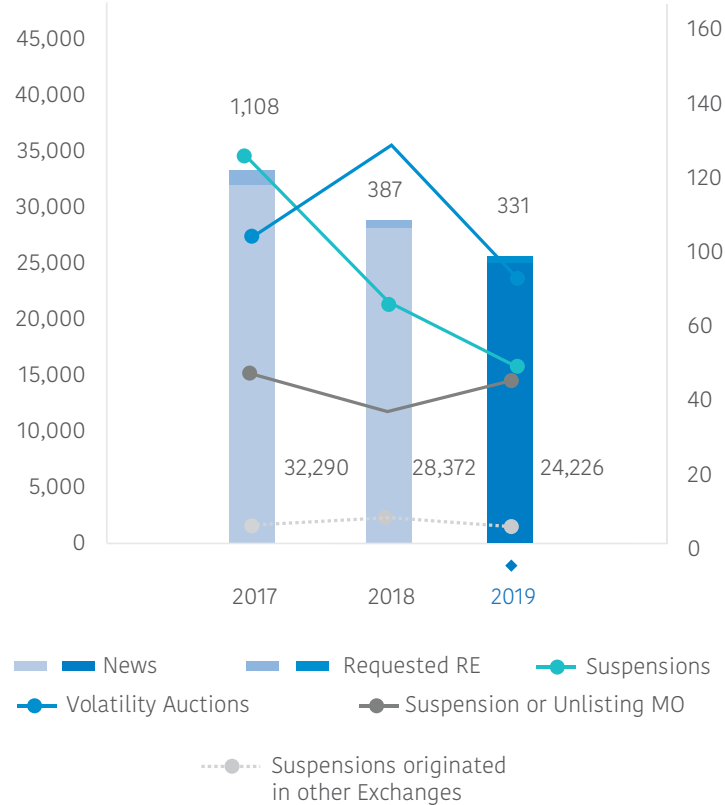
- Communication continued to be strengthened with the other Managements of the Market Surveillance Directorate, which results in better monitoring, with the support of the SMARTS system for the identification of improper market behavior and better communication with both Issuers and Brokerage Firms.

This year we recorded the following comparative figures, with respect to the previous year:

- a) The total of registered news in 2019 was 24,226, which corresponds to a decrease of 14.61% with respect to the levels of 2018. This is because we search for news more efficiently, including information not properly disclosed in EMISNET that could influence the quotation price and we have considered more sources of information such as alerts from vendors, newspapers, etc.
- b) In order to maintain transparency in the market, in 2019 we received a total of 282 Relevant Events derived from the requirements made regarding price/volume movements (including the volume originated in the other Exchange) or from information published in the media and that had not been disclosed by BMV of the 331 requirements made; which represents 85.19% of the response of the issuers to the sending of information.
- c) The number of suspensions due to the breakdown of parameters continued to decrease by 30.77% with respect to 2018 and the volatility auctions decreased by 35.92% with respect to the previous year.
- d) Through the timely detection of the suspensions that occur in the market of origin or main quotation of the SIC issuers, we registered that during the year a total of 76 suspensions were presented, which derived in 56 suspensions in our market; this represents an increase of 55.56% with respect to the previous year.
- e) As part of the regulatory changes and system modifications, there was one suspension in a SIC issuer originated in the other Exchange, resulting in an automatic suspension in BMV; which represents a decrease of 66.67% with respect to the previous year.

Monitoring Activities	2017	2018	2019	Var % 2018 vs 2019
News registered	32,290	28,372	24,226	(14.61%)
Relevant events requested	1,108	387	331	(14.47%)
Suspensions for "breakdown of parameters"	145	91	63	(30.77%)
Suspensions originated in other Exchanges	N/A	3	1	(66.67%)
Volatility Auctions	103	142	91	(35.92%)
SIC Auctions	N/A	N/A	93	N/A
Suspension or unlisting in the market of origin	42	36	56	55.56%
Number of resources allocated to activities	3	3	3	

## ◆ Monitorings Performed



## Investigation

With the clear mission of continuing to guarantee improvements and/or fields of opportunity, investigation has focused on strengthening and promoting healthy practices in the stock market, preventing undue practices and ensuring the correct use of the Exchange's Electronic Trading System, in order to promote an efficient and equitable market, as well as to contribute to the integrity and transparency thereof, maintaining the investors' trust.

According to the research process and the conditions of the stock market during 2019, 22 atypical situations were analyzed and valued in the market, from which 4 investigation files were derived, so the level of analysis is more fruitful and accurate. This implied a greater scope and quality in the analysis by the Market Surveillance Directorate and the Investigation area in the detection of undue behavior in the stock market and in the effort to procure an adequate performance by the participants of the market, in accordance with sound practices and legal provisions.

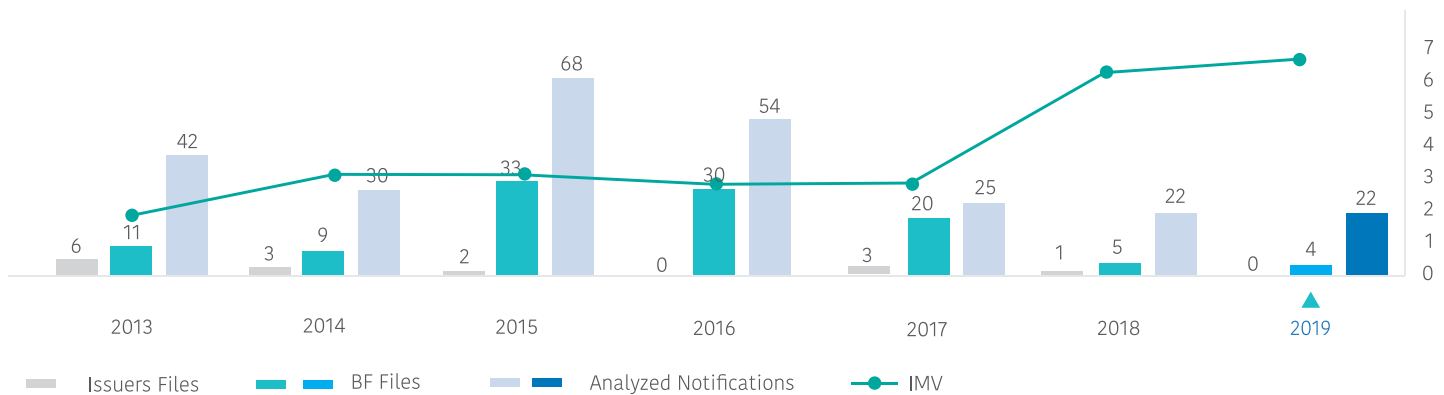
In addition to this process, we perform a daily analysis of the alerts of the SMARTS Surveillance System in order to identify situations that could be indications of possible misconduct, such as market manipulation or simulation of transactions.

During 2019, 12,316 situations derived from these Alerts were analyzed.

This year we assisted Brokerage Firms to strengthen their alarm management and logical filters in their trading desks. There were also internal communication processes in the Capital area to validate and authorize orders prior to sending the instruction and prevent possible capture errors; we also assisted an issuer to reinforce its internal controls for a timely disclosure of relevant information to the investing public.

The graph shows a comparison over time of the way in which the Market Surveillance Directorate has managed its follow-up processes in investigation cases on relevant activity for the development of the market, measured through an indicator on the Impact on the Stock Market (IMV), which has been maintained at an ascending quality level.

### ◆ Files Opened and Analyzed Notifications



# Market follow-up

## Corporate and financial information

During 2019, the report of financial and corporate information increased by 5.21% with respect to 2018. The documentation provided by the issuers to the Market was received and validated in order to identify any defaults, in accordance with applicable regulations.

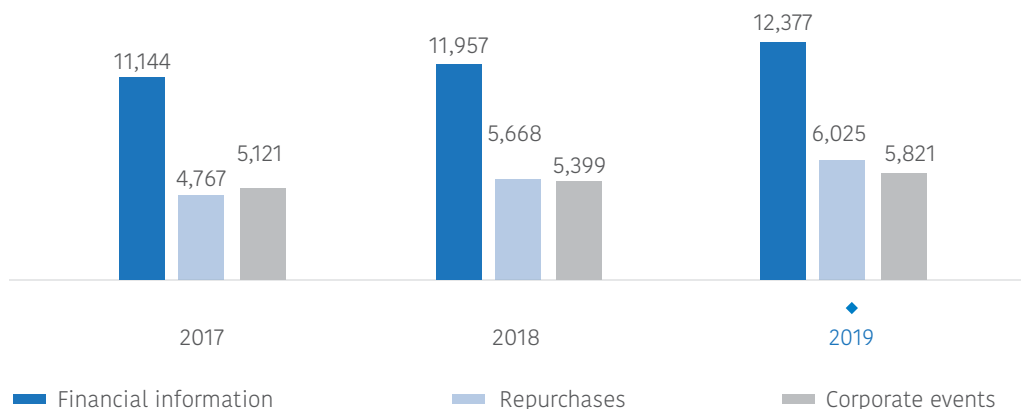
The figures corresponding to information deliveries of 2019 and previous years are shown below:

<b>OBLIGATIONS</b>	2017	2018	<b>2019</b>
Quarterly Information	2,496	2,498	2,479
Liability Letter	1,990	2,166	2,409
Annual Report	678	1,032	1,056
Annual Report's Documentation	2,213	2,540	2,919
Code of Best Corporate Practices	195	205	204
Monthly Information	1,786	1,758	1,655
Liability Letter Annex T	1,786	1,758	1,655
<b>Subtotal Financial information</b>	<b>11,144</b>	<b>11,957</b>	<b>12,377</b>
Repurchase transactions	4,767	5,668	6,025
Corporate events	5,121	5,399	5,821
<b>Total Revised Information Packages</b>	<b>21,032</b>	<b>23,024</b>	<b>24,223</b>

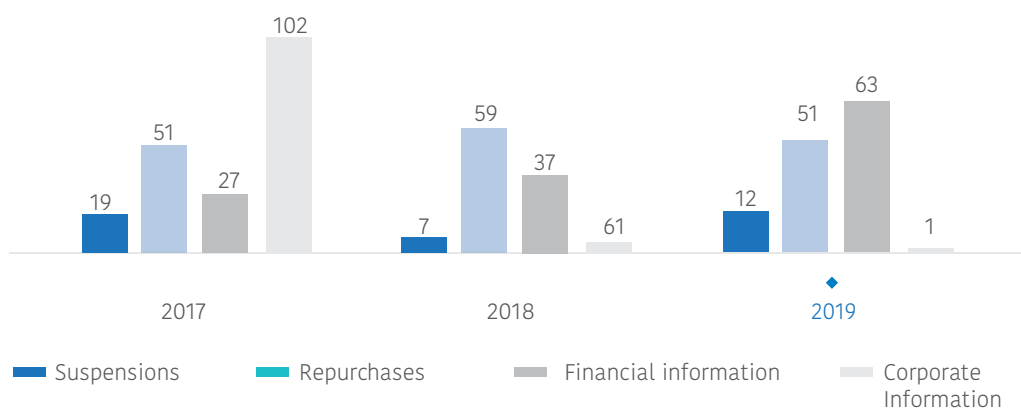
<b>COMMUNICATIONS IN WRITING FOR DEFAULTS AND SUSPENSIONS</b>	2017	2018	<b>2019</b>
Suspensions	19	7	12
Repurchases	51	59	51
Corporate information	102	6	1
Financial information	27	37	63

It is important to note that the figures presented include issuers that during the year presented a notice of extemporaneous delivery of information, making use of the extension granted by the CNBV.

### ◆ Follow-up on the delivery of information



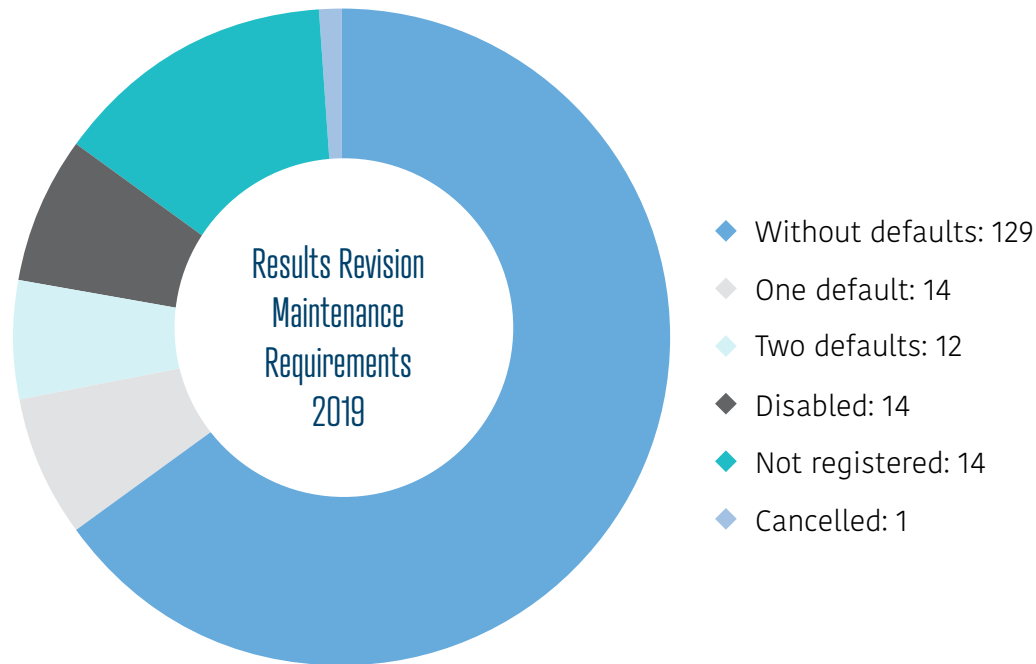
### ◆ Communications in writing for defaults and suspensions



The delivery of information includes communications in writing, requirements, suspensions and referrals (correction of figures, explanatory notes, etc.) that allow the issuer to provide greater quality and clarity in the information they generate towards the investing public.

## Listing maintenance requirements

As a result of the annual review of compliance with maintenance requirements for 197 series of share issuers, it was detected that 23 of them failed to comply with at least one of the requirements established by the Exchange.

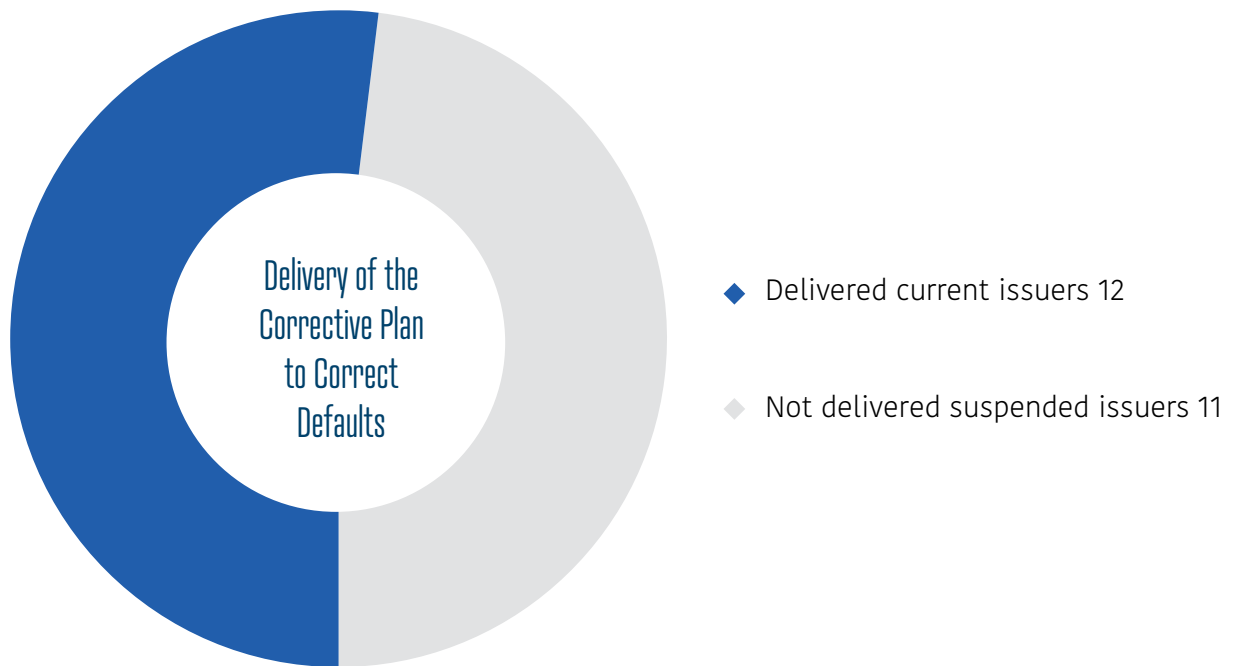


The 23 issuers with defaults were required to present a corrective program in order to propose a way to correct their shortfall.

- 11 active issuers delivered their program to correct defaults within the months of August, September and October, 2019.
  - 2 issuers indicated that they are in the process of delisting in RNV.
  - 9 emisoras presentaron planes estratégicos para poder subsanar en un plazo de un año los incumplimientos observados durante la evaluación.
- 12 communications from suspended issuers that do not receive information were returned.

Additionally, a change in the trading status was made to three issuers by auction due to maintenance requirements and the return of two issuers to continuous trading.





## Intermediaries Audit

Due to the technological changes that have occurred in the Stock Market Sector, Intermediaries have implemented new electronic trading tools, which require greater controls and Operative Systems that allow greater clarity in the trading process, as well as supervisory schemes that allow the identification of misconduct and/or market abuse practices.

Therefore, the Market Surveillance Directorate (DVM) has contributed through audits to prevent disorderly conditions in the Stock Market, and to encourage Intermediaries to establish internal controls that allow them to have a structure capable of identifying possible misconducts in a timelier manner and informing them to the corresponding areas for their prompt attention.

From January to December, 2019, the DVM carried out 21 audits to Integral Members of the BMV, in order for them to act in accordance with healthy stock market practices in the formulation of positions and in the conclusion of transactions, subject at all times to the provisions established in BMV's Internal Regulations.

As a result of these audits, 67 Observations and/or Recommendations were issued, classified as follows:

81% corresponded to Operative Aspects, referring to:

- Information security policies.
- Supervision at the Capital and Promotion Desk.
- Officials (Art 87 CUCB).
- Market Filters (price, volume and amount).
- Certification of Desk Brokers and Supervisors.
- Update of Short Sales balances.

6% were on Technical Aspects that guarantee the continuity of the operation in the event of technological incidents.

- Disaster Recovery Plan (DRP)
- DRP Annual Testing Plan

The remaining 13% corresponds to Contingency Aspects about the plans and processes to follow in case they are not able to operate in their Main Site.

- Business Continuity Plan (BCP).
- BCP annual testing plan.

In addition, during the aforementioned period, the Market Surveillance Directorate has followed up on the corrective actions that the Integral Members carry out in order to address and/or correct the observations and/or recommendations made, so in 2019 Brokerage Firms implemented 94% of the recommendations issued by the DVM.

## Derivatives Surveillance

Regarding the surveillance of the Derivatives Market's transactions, in 2019 and through the VIGIA MexDer system, we supervised the totality of the transactions entered into with Futures and Exchange Contracts (Swaps), and the supervision of the transactions concluded through Option Contracts. Additionally, the review of brokers' capitalization levels for MexDer was carried out daily.

In terms of innovation, an analysis was carried out for the incorporation of new alerts in the Surveillance system which were tested in 2019, as well as the automation of various processes. On the other hand, during 2019, we participated in the control review exercises of some areas

of Asigna, limiting the review to the Operations area. Issues related to compliance in the production of reports and accounts, operative flows and documentation thereof were analyzed, as well as the corresponding findings.

During 2019 we addressed the requirements for the execution of audits carried out by MexDer's Compliance Office, presenting information for a total of 5 audits to Market Participants in matters of regulatory compliance, related to the sufficiency of capital of the participants, monitoring of positions and transactions held. With regard to the audits carried out by Asigna's Compliance Office, three requirements were addressed, which correspond to a clearing member, a broker and one within Asigna.

## Challenges and objectives 2020

In accordance with BMV Group's institutional guidelines and addressing the lines of work approved by the Surveillance Committee, the Market Surveillance Directorate will maintain a high level of compliance with its internal obligations and with the authorities, thereby confirming its permanent commitment to the continuous improvement of its processes.

Also, we shall redouble efforts to implement efficiencies and thus increase the added value offered to the Stock Market. Additionally, and within a competitive framework, we will reinforce each of the functions we perform, so that the services generated maintain a level of excellence.

In addition, we will seek to integrate some of the procedures that are not yet automated, so that the operative risk is even lower, while increasing the efficiency of reviews and execution of tasks.

- Review of the current operative rules of transactionality.
- Adaptation and updating of the Operative Rules based on the structure of the operation of the intermediaries, as well as the different types of clients that Brokerage Firms have, in order to have better supervision tools.
- Improve the quality in terms of reviewing information from both issuers and intermediaries in order to provide investors with reliable, timely and quality information.
- Encourage the participation of the members of the stock market in improving regulatory processes.
- Incorporate new technologies in regulatory matters.
- Early detection of weaknesses of all market participants to be corrected.



## SUSTAINABILITY

In BMV Group we are convinced of the importance of promoting growth and long-term sustainability, implementing initiatives that consider Environmental, Social and Corporate Governance factors.

The pillars of our sustainability strategy are:

- **Corporate Axis:** Optimize the investment of our shareholders, strengthening efficiencies and synergies in all our internal processes, in order to contribute to the development of the Mexican financial market with sustainable corporate growth strategies in the long term.
- **Social Axis:** Generate an organizational culture of equality, participation and fair competition, in order to obtain high performance, improve the quality of life of our employees and market participants and spread the financial and stock market culture in Mexico.
- **Environmental Axis:** Promote with our stakeholders actions, market mechanisms and investment vehicles that promote corporate and environmental responsibility, involving both the issuer companies and the various areas of the Group.

In this context, **during 2019 we focused on continuing with the sustainability efforts in our businesses, with market participants and with the community in general.**

### Corporate Axis:

Our activities are guided by the best practices of Corporate Governance and ethics, taking into account: diversity in our Board of Directors, measures to prevent conflicts of interest with both collaborators and suppliers, among others.

We have implemented policies and guidelines that aim to strengthen our good governance processes, and we reinforce our institutional values through communication campaigns.

### Social Axis:

We strengthened the Financial Culture through:

- **Bolsa Mexicana School**, which benefited approximately 28,000 people in one year, through 152 courses, 31 events and 6 strategic alliances.
- **The creation of the Exchange Museum**, which in less than a year has been visited by almost 100,000 people.
- **Jueves de Bolsa**, where experts in their fields gave free conferences in our Auditorium biweekly, benefiting almost 5,000 attendees.

We seek to offer our collaborators more benefits, career plans and training. Additionally, we strengthened our organizational culture and improved the level of internal satisfaction.

Through the volunteer program, we were able to help various causes, both social and environmental, and further strengthened the links of the staff and their families with the organization.

### **Environmental Axis:**

We created an environmental strategy with 5 objectives in mind:

- Waste handling
- Neutralization of emissions
- Saving water
- Energy efficiency
- Be an example in the market

On the other hand, MÉXICO2, the company that promotes environmental markets, continued promoting various initiatives to accelerate the development of sustainable finances in the market during 2019, with the aim of directing capital to those assets and projects that generate positive impacts in the environment and in society as a whole.

The green and sustainable bonds market continues to grow, we witnessed the return of FIRA to the market with another green bond for 2,500 million pesos (FEFA19V), Banobras with another sustainable bond for 7,000 million pesos (BANOB19X, BANOB 19UX) and Vinte with its second sustainable issuance for 700 million pesos (VINTE19X, VINTE19-2X).

As regards the voluntary carbon market, MÉXICO2 offset emissions of around 12,356 tons of CO2 through the purchase of certified emissions reductions by various corporations committed to the environment that are interested in mitigating their carbon footprint.

MEXICO2 has exposed the importance of greening the financial system through awareness among various market actors and capacity building at the local and regional level. So we participated in various forums and workshops on sustainable finances, achieving strategic alliances with the Lima Stock Exchange, the Buenos Aires Stock Exchange, the British Embassy in Mexico, the British Embassy in Colombia, the British Embassy in Peru, the British Embassy in Costa Rica, the United Nations Framework Convention (UNFCCC) and the Iberoamerican Federation of Exchanges (FIAB).

The above mentioned is reflected in our Sustainability Report in greater detail, which can be viewed at:

[www.bmv.com.mx](http://www.bmv.com.mx) > **Relación con Inversionistas.**

Finally, BMV Group continues to be aware of the importance of continuing to strengthen the ESG (Environmental, Social and Corporate Governance) issues; therefore, we have created the Sustainability area, and in 2020 we will carry out an organizational strategy that allows us to ensure that all the services provided by BMV Group are built under international standards of Corporate Governance, contribute to the strengthening of the Financial and Stock Market Culture and become the main platform in which issuers can obtain green financing, as well as minimize the Group's impact on climate change.



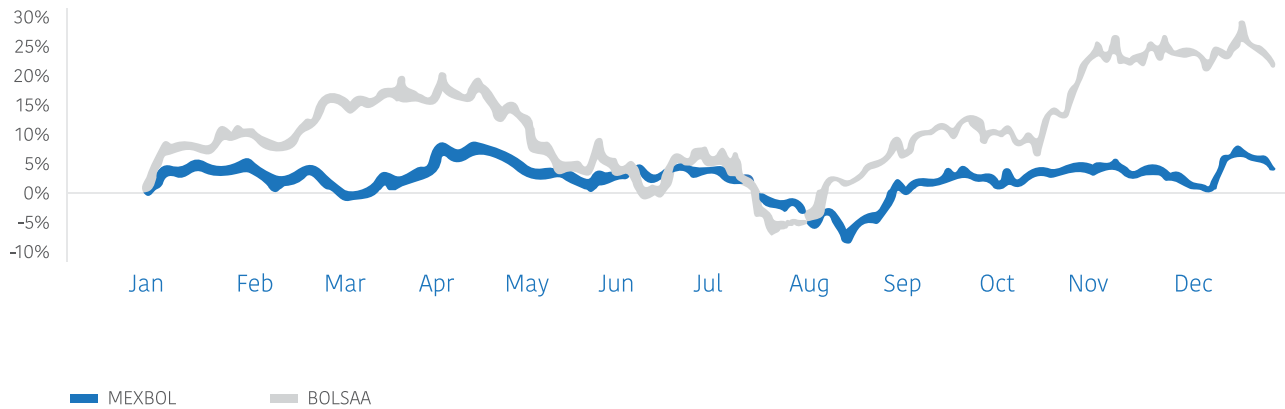


# RELATIONSHIP WITH INVESTORS

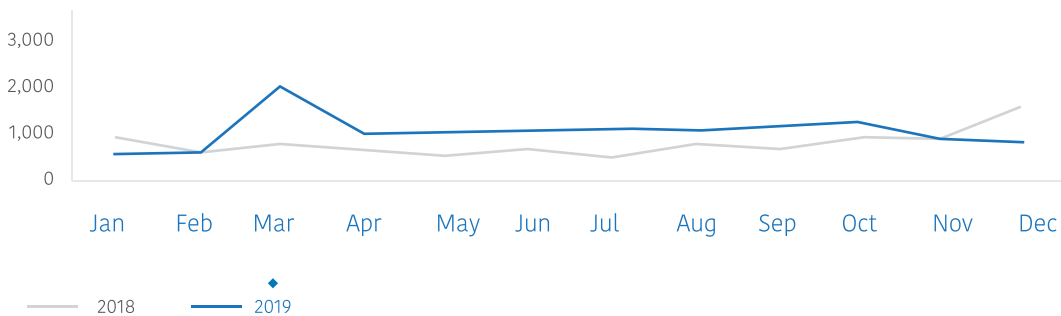
## Share Performance

In 2019 BOLSA A had an average price of \$37.86 and an average daily volume of 1,267 thousand securities, recording a value at the end of the year of \$41.34. It is important to note that in 2018 the average price was \$34.96. In May, 2019 BMV paid a dividend of \$1.78 for each share in circulation, which represented a dividend yield of 4.70%. The total return of the shareholder during 2019 was 25.5%, while the S&P/BMV IPC (MEXBOL) registered 5.6%.

◆ Evolution of the Price of BMV Share during 2019

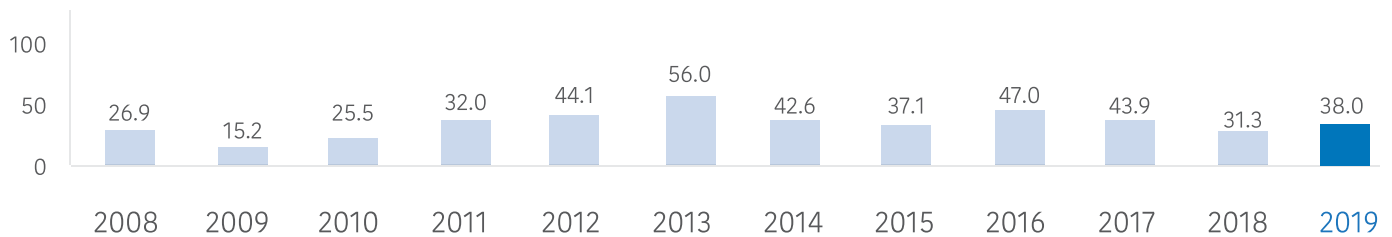


◆ Average Volume of Bolsa 2018 vs 2019



Since the Initial Public Offering in 2008, the share has presented an increase in its compound annual liquidity, which has allowed it to have access to regional and specialized funds that have certain minimum liquidity requirements. In order to continue strengthening the liquidity of the share, during 2019 we continued with the Market Maker services that we have used since 2008.

### ◆ Average Liquidity Daily Annual



During the year, the BOLSA A share was covered by specialized analysts from the following institutions: Itaú BBA Securities, Bank of America, Bradesco BBI, Credit Suisse, HSBC, JP Morgan, UBS, Vector, Santander Group and Barclays.

Analyst	Recom.	Target Price	Date
Grupo Santander	Maintain	46	nov/18/2019
J.P. Morgan	Buy	43	jan/24/2020
HSBC	Maintain	35	jan/21/2020
Credit Suisse	Buy	43	oct/15/2019
Itau BBA Securities	Buy	47	nov/24/2019
Barclays	Maintain	42	jan/22/2019
Bradesco BBI	Buy	51	jun/03/2019
Bank of America	Buy	39	oct/07/2019
UBS	Maintain	36	jan/21/2020
	Average	42	

## Presence with Investors

During 2019, the Investor Relations area represented BOLSA A in over 260 meetings distributed in reunions 1x1 and conferences organized by various financial institutions with investors from North America, Latin America and EMEA, seeking to give more timely attention to investors and analysts and increase the presence of BOLSA A in specialized events.

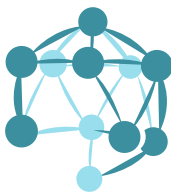




# OPINION OF THE CONSOLIDATED FINANCIAL STATEMENTS

The company responsible for auditing the 2019 consolidated financial statements was “Ernst & Young Global Limited”.

To access the document prepared by “Ernst & Young Global Limited” please access BMV Group’s **official website** or copy the following link:



<https://www.bmv.com.mx/docs-pub/reporteAnualDictaminado/BMV%20dictamen%20EF%20consolidado%202019%20firmado.pdf>

Or use your phone to scan the QR code below





# FINANCIAL STATEMENTS

## ◆ FINANCIAL STATEMENTS Summary of Consolidated Income Statements

	◆ 2019**		2018**	
<b>Operating activities</b>				
<b>Customer revenue</b>				
Cash Equities	\$	485,226	\$	552,874
Issuers		614,675		694,126
Derivatives		178,078		199,672
OTC (SIF ICAP)		580,744		565,470
Central Securities Depository		994,370		886,557
Information services		546,074		468,719
		3,399,167		3,367,418
Other non-operative income		177,362		180,725
Total income		3,576,529		3,548,143
<b>Expenses</b>				
Personnel	(	853,632)	(	832,020)
Technology	(	249,010)	(	356,187)
Depreciation and amortization	(	190,429)	(	83,494)
Rent and maintenance	(	64,285)	(	64,871)
Fees	(	171,748)	(	212,245)
CNBV fees	(	29,018)	(	27,712)
Allowance for doubtful accounts	(	753)	(	4,036)
Other	(	143,200)	(	102,844)
Total expenses	(	1,702,075)	(	1,683,409)
<b>Operating Profit</b>		1,874,454		1,864,734
Interest income (Note 23)		277,921		270,218
Interest expense (Note 23)	(	102,414)	(	83,346)
Share of profit of associates (Note 9)		6,839		7,296
Dividend income		7,863		10,425
Consolidated profit before income tax		2,064,663		2,069,327
Income tax	(	619,170)	(	590,752)
Consolidated net profit		1,445,493		1,478,575
Other comprehensive income, net of income tax				
Items that will not be reclassified to profit or loss				
Actuarial gains (losses)	(	5,725)		550
Valuation allowance on equity instruments	(	62,955)	(	6,937)
Items to be reclassified to profit or loss				
Foreign currency translation reserve of foreign subsidiaries	(	23,130)	(	15,249)
Consolidated comprehensive income	\$	1,353,683	\$	1,456,939

\*Thousand pesos

\*\*For the years that ended on December 31, 2019 and 2018

◆ BOLSA MEXICANA DE VALORES, S.A.B. DE C.V. AND SUBSIDIARIES  
Consolidated Balance Sheet \*

		◆ 2019*		2018*
<b>Assets</b>				
Current assets:				
Cash and cash equivalents (Note 3)	\$	3,099,950	\$	2,764,422
Trade receivables, net (Notes 4 and 11)		417,250		420,095
Total current assets		3,517,200		3,184,517
Non-current assets:				
Goodwill, net (Note 6)		3,083,600		3,123,600
Property, furniture and equipment, net (Note 7)		479,340		471,776
Right-of-use assets (Note 8)		195,172		-
Equity instruments (Note 5)		166,475		229,443
Intangible assets, net (Note 10)		274,844		289,218
Deferred income tax (Note 14)		48,823		42,320
Equity investments in associates and joint ventures (Note 9)		39,377		31,390
Employee benefits (Note 13)		8,468		10,952
Other assets, net		54,820		46,284
Total non-current assets		4,350,919		4,244,983
<b>Total assets</b>	\$	<b>7,868,119</b>	\$	<b>7,429,500</b>

\*Thousand Pesos

\*For the years that ended on December 31, 2019 and 2018

The accompanying notes are an integral part of these consolidated financial statements.

◆ BOLSA MEXICANA DE VALORES, S.A.B. DE C.V. AND SUBSIDIARIES  
Consolidated Balance Sheet \* (continuation)

	◆ 2019**		2018**
<b>Liabilities</b>			
Current liabilities:			
Lease liabilities (Note 8)	\$ 98,290	\$	-
Suppliers and other accounts payable (Note 12)	455,463		468,802
Income tax payable	69,097		59,144
Related parts (Note 11)	8,353		11,489
<b>Total current liabilities</b>	<b>631,203</b>		<b>539,435</b>
Non-current liabilities:			
Employee benefits (Note 13)	5,569		2,257
Lease liabilities (Note 8)	107,523		-
Other accounts payable	63,765		47,090
<b>Total non-current liabilities</b>	<b>176,857</b>		<b>49,347</b>
<b>Total liabilities</b>	<b>\$ 808,060</b>	<b>\$</b>	<b>588,782</b>
<b>Equity (Note 15)</b>			
Share capital	\$ 4,507,303	\$	4,507,303
Accumulated results (Note 17)	122,130	(	32,130)
Reserve for repurchase of shares (Note 17 b)	500,000		402,600
Share premium on repurchased shares (Note 17 c)	211		206
Legal reserve	423,323		354,529
Legal reserve	1,338,105		1,375,879
Net profit	653	(	5)
Other components of equity	( 80,044)	(	445)
Other items of comprehensive result			
Equity holders of the parent			
Controller	6,811,681		6,607,937
Non-controlling interest (Note 18)	248,378		232,781
<b>Total equity</b>	<b>7,060,059</b>		<b>6,840,718</b>
<b>Total liabilities and equity</b>	<b>\$ 7,868,119</b>	<b>\$</b>	<b>7,429,500</b>

\*Thousand Pesos

\*\*For the years that ended on December 31, 2019 and 2018

The accompanying notes are an integral part of these consolidated financial statements.

## ◆ Consolidated cash flow statements

	◆ 2019**		2018**	
<b>Cash flows from operating activities</b>				
Consolidates net profit	\$	1,445,493	\$	1,478,575
Adjustments for:				
Depreciation and amortization		190,429		83,494
Share of profit of associates	(	6,839)	(	7,296)
Impairment of assets		40,000		-
Income tax recognized in profit or loss		619,170		590,752
		2,288,253		2,145,525
<b>Changes in operating assets and liabilities:</b>				
Financial assets at fair value		-		198,089
Trade receivables and prepaid expenses	(	44,119)	(	33,298)
Suppliers and related parties	(	43,840)	(	32,662)
Employee benefits	(	394)	(	3,433)
Long-term accounts payable		16,675		17,313
Income tax paid	(	581,199)	(	490,568)
Net cash flows used in investing activities	(	652,877)		1,800,966
<b>Investment activities</b>				
Purchase of furniture and equipment	(	38,119)	(	31,335)
Investments in project development	(	46,070)	(	63,447)
Acquisition of non-controlling interests	(	14,278)	(	9,631)
Dividends received		7,863		9,188
Net cash flows used in investing activities	(	90,604)	(	95,225)
<b>Financing activities</b>				
Dividends paid	(	1,055,520)	(	895,413)
Cash dividends paid to non-controlling interests	(	68,456)	(	65,496)
Bank loans		-	(	589,063)
Financial lease payments	(	85,268)		-
Interest paid		-	(	40,537)
Net cash flow used in financing activities	(	1,209,244)	(	1,590,509)
Net increase in cash and cash equivalents		335,528		115,232
Cash and cash equivalents at the beginning of the year		2,764,422		2,649,190
Cash and cash equivalents at the end of the year	\$	3,099,950	\$	2,764,422

\*Thousand pesos

\*\*For the years that ended on December 31, 2019 and 2018



Bolsa Mexicana  
de Valores

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