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The compilation of administrative records on the Mexican industry of light and heavy vehicles: an experience for providing detailed and timely data to users

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Abstract

Since 2018, INEGI has disseminated the Administrative Record of the Light Vehicle Automotive Industry (RAIAVL by its acronym in Spanish), which provides information in the short term about the production and trade of new vehicle units. This was possible due to the agreement established among INEGI and the Mexican Association of the Automotive Industry (AMIA by its acronym in Spanish). AMIA comprises 22 companies which provide administrative records to INEGI, contributing to the analysis by offering additional insights for the evaluation and monitoring of the automotive sector in Mexico. It is important to point out that RAIAVL also include information about two enterprises that are not affiliated to AMIA, although are incorporated due to the special interest of complementing and strengthening the Administrative Record.

This public-private partnership was the first successful experience of communication and data exchange among companies and INEGI.

Moreover, INEGI signed a Collaboration Agreement with each of the associated companies in AMIA to allow the publication of these data. This agreement establishes the commitments of the affiliated companies and INEGI for the timely delivery of monthly information.

Likewise, with the aim to do not damage the competitiveness of the sector and by consulting the economic competition authority in Mexico, it was agreed to only disseminate figures on volume of sells, production, and exports, without considering monetary values, due to RAIAVL submits information at vehicle brand level.

Based on this experience and the positive results of the RAIAVL, INEGI launched in 2020 the Administrative Record of the Heavy Vehicles (RAIAVP by its acronym in Spanish) in agreement with nine companies affiliated to the National Association of Bus, Truck and Tractor Producers (ANPACT by its acronym in Spanish). The RAIAVP has similar characteristics to the register of light vehicles, publishing data referring to the retail and wholesale trade, production, import and export of heavy vehicles in Mexico.

This process developed by INEGI for these administrative records which provide detailed and timely data for the automotive industry, was useful to establish direct communication channels with companies, including legal and technological aspects to ensure the delivery of data and its protection. As a result, the most important achievement was the signing of Agreements between INEGI and the light and heavy vehicle companies.

In conclusion, this approach for presenting data changes paradigms regarding the generation of information within INEGI, showcasing innovative alternatives to disseminate information. Likewise, these data provide a full overview of the development of the automotive industry in the country and are part of the timeliest economic information offered by INEGI.





The automotive industry is one of the economic activities with the largest contributions to the GDP in Mexico. Therefore, compiling and disseminating these records at such a granular level is crucial. Finally, it is important to mention that all companies involved in these registers are part of Multinational Enterprises with operations in Mexico.





The compilation of administrative registers on the Mexican industry of light and heavy vehicles: an experience for providing detailed and timely data to users

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The automotive industry is one of the activities with the most significant contribution to the Mexican economy. Therefore, compiling the records of the enterprises of this industry at granular level is extremely useful. It is important to mention that all companies involved in these registers are subsidiaries of Multinational Enterprises with operations in Mexico.

With the aim of ensuring the preparation of timely and quality figures on the automotive industry, as well as for providing input for the calculations of National Accounts and several experimental statistics, INEGI took responsibility of producing the Administrative Record of the Automotive Industry of Light and Heavy Vehicles.

Background

Before 2018, the data on sales, production, import, and export of vehicles in Mexico was disseminated by two institutions: information on light vehicles was published by the Mexican Association of the Automotive Industry (AMIA, by its acronym in Spanish), while data related to heavy vehicles was disseminated by the National Association of Bus, Truck and Tractor Producers (ANPACT, by its acronym in Spanish)

INEGI and AMIA held several meetings, in which it was agreed that as of October 2018, INEGI would take on responsibility for disseminating data on the light vehicle industry. In this sense, users could benefit from increased reliability since an autonomous agency would disseminate data to impartially produce this information with the required quality and timeliness.

Based on the institutional arrangements with AMIA and each one of the 21² involved enterprises, INEGI has disseminated the Administrative Record of the Light Vehicles (RAIAVL by its acronym in Spanish) since 2018. This record provides short-term information on the production and trade of new light vehicle units as contribution to the analysis, evaluation and monitoring of the automotive sector in Mexico. The AMIA-INEGI public-private partnership was the first successful experience of this kind of arrangements among the companies of the automotive industry and INEGI.

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² It corresponds to the number of enterprises affiliated to AMIA in 2018



With the positive results of the RAIAVL, INEGI launched the Administrative Record of the Heavy Vehicles (RAIAVP by its acronym in Spanish) in 2020, in agreement with nine companies affiliated to ANPACT. The RAIAVP has similar characteristics to the record of light vehicles, publishing data on sales, production, import and export of heavy vehicles in Mexico.

With this information, users have a complete overview of the terminal automotive industry in Mexico and these records are also useful for supporting policy making in the country.

The relevance of both registers is evident; for example, based on foreign trade statistics, it is observed that during the first half of 2021 the share of automotive industry products (including auto-parts) is approximately 30 percent of the total value of Mexican exports.

The way to publish the records

Before disseminating the RAIAVL and the RAIAVP, the Federal Economic Competition Commission (COFECE by its acronym in Spanish) was consulted on the consequences of disseminating this information in order to avoid having negative effects on the competitiveness of the sector. In response to these requests, COFECE informed INEGI that it was agreed to only disseminate sales figures, production, imports, and exports, without considering monetary values, so the agreement was publishing number of vehicles for all cases.

Subsequently, INEGI signed collaboration agreements with AMIA, ANPACT, and each affiliated company to enable data publication. This agreement establishes the commitments of the affiliated companies and INEGI for the timely delivery and dissemination of monthly information. It is important to note that all companies gave their approval for the dissemination of these data. It was established that any sector company could participate in RAIAVL and RAIAVP regardless of not being affiliated to AMIA or ANPACT. In this case, these companies must commit to providing information by signing a collaboration agreement with INEGI.

Another commitment was to establish a data collection and publication schedule, which must be previously defined with AMIA, ANPACT, and the companies that provide data a year prior to the publication of the data.

Furthermore, it was established that the companies would revise the information previously provided, and that INEGI would update it during the defined periods for the dissemination of the figures.

On the other hand, it was necessary to give a different perspective to the dissemination of these figures due to the confidentiality restrictions established in the Mexican Law of the National Statistical and Geographic System. For that matter,



the solution was to publish the information of RAIAVL and RAIAVP as raw data with the characterization of "Administrative Register" and considering that these records are not subject to the analysis and validation processes that have the rest of INEGI's statistical programs.

With the situation described above, INEGI created a special section on the website to publish RAIAVL and RAIAVP, to ensure that they would be appropriately disseminated, distinguishing them from the rest of the statistics produced. Additionally, it is important to note that INEGI developed an on-line information collecting system for the automotive enterprises, with the aim to facilitate the timely response from all.

Characteristics of the administrative records of light and heavy vehicles

Currently, the RAIAVL is generated from data provided by 23 companies affiliated to AMIA and 2 companies that are not part of this Association. There are 35 brands marketed by these companies and they are organized as follows:

Companies and brands affiliated to AMIA		
Companies	Brands	
AUDI Mexico S.A. de C.V.	AUDI	
BMW de Mexico, S.A. de C.V.	BMW	
	MINI	
FCA Mexico, S.A. de C.V.	Alfa Romeo	
	Chrysler	
	Fiat	
Ford Motor Company, S.A. de C.V.	Ford	
	Lincoln	
General Motors de Mexico, S. de R.L. de C.V.	General Motors	
Honda de México, S.A. de C.V.	Honda	
	Acura	
Hyundai Motor de Mexico, S. de R.L. de C.V.	Hyundai	
Isuzu Motors de Mexico, S. de R.L.	Isuzu	
Jaguar Land Rover Mexico S.A.P.I. de C.V.	Jaguar	
	Land Rover	
Kia Motors Mexico S.A. de C.V.	KIA	
Mazda Motor de Mexico, S. De R.L. de C.V.	Mazda	
Mercedes Benz Mexico S. de R.L. de C.V.	Mercedes Benz	
Daimler Compra y Manufactura Mexico, S. de R.L. de C.V.	Smart	
Nissan Mexicana S.A. de C.V.	Nissan	
	Infiniti	
Mitsubishi Motors de Mexico S.A. de C.V.	Mitsubishi	
Peugeot Mexico, S.A. de C.V.	Peugeot	
Renault Mexico, S.A. de C.V.	Renault	



SAIC Motor Mexico, S. de R.L. de C.V.	MG Motor
Subaru Automotriz Mexico, S.A. de C.V.	Subaru
Suzuki Motor de Mexico S.A de C.V.	Suzuki
Toyota Motor Sales de Mexico, S. de R.L. de C.V.	Toyota
Volvo Group Mexico, S.A. de C.V.	Volvo
Volkswagen de Mexico, S.A. de C.V.	Bentley
	Porsche-Rover
	Seat
	Volkswagen

Companies and brands not affiliated to AMIA		
Companies	Brands	
Autos Orientales Picacho S.A. Promotora de Inversión	BAIC	
Giant Motors Latinoamérica S.A. de C.V.	JAC	

Main characteristics of the data

- The data dissemination is carried out twice per month; in the first publication INEGI provides information on aggregated sales by brand about the month of reference. The second publication presents the breakdown of sales, production, and exports of vehicles by brand and model, identifying the type of automobiles, segment, and country of origin or destination. On average, the information is disseminated between the second and fourth weekday after the month of reference.
- As mentioned above, data reported by the companies is disseminated without applying any statistical treatment, keeping the nature of raw data. If a company does not provide information, it is published as Not Available (NA), therefore there is no any imputation.
- The statistical series of sales, production, and exports begins with the data from January 2005.
- For hybrid and electric vehicles, the series begin with data from January 2016. Also, information is disseminated by state and type of technology.

On the other hand, the RAIAVP is generated from data provided by 9 companies affiliated to ANPACT and 1 that is not member of this Association. There are 14 brands marketed by these companies, organized as follows:



Companies and brands affiliated to ANPACT		
Companies	Brands	
Daimler Vehículos Comerciales Mexico, S. de	Freightliner	
R.L. de C.V.	Mercedes-Benz Autobuses	
Dina Camiones, S.A. de C.V.	Dina	
Hino Motors Sales Mexico, S.A. de C.V.	Hino	
Isuzu Motors de Mexico, S. de R. L.	Isuzu	
Kenworth Mexicana, S.A. de C. V.	Kenworth	
Volvo Group Mexico S.A. de C.V.	Volvo Buses	
	Volvo Trucks	
	Mack Trucks	
Man Truck and Bus Mexico S.A. de C.V.	Volkswagen Camiones y	
	Autobuses	
	MAN	
Navistar Mexico, S. de R. L. de C. V.	International	
Scania Comercial, S.A. de C.V.	Scania	

Company and brand not affiliated to ANPACT		
Razón social	Marca	
LDR Solutions S.A. de C.V.	Foton	

Main characteristics of the data

- RAIAVP provides information on wholesale and retail sales, as well as on production, import and export of heavy vehicles in Mexico. On average, RAIAVP data are disseminated within 9 to12 weekdays after the month of reference.
- Data reported by the companies is also disseminated without applying any statistical treatment, keeping the nature of raw data. If a company does not provide information, it will be reported as Not Available (NA), therefore there is no any imputation.
- Data is broken down by brand, segment, energy source, and type of truck or bus, identifying the country of origin or destination.



 The statistical series of sales, production, imports and exports begins with the available data from January 2018.

Usefulness of RAIAVL and RAIAVP

RAIAVL is particularly one of the timeliest economic data published by INEGI (two weekdays after the month of reference), and this is a key issue for contributing to the preparation of other economic indicators. The timely data provided by RAIAVL and by RAIAVP is useful for the activities of other government agencies as the Central Bank and the Ministry of Economy, to follow up on the trend and evolution of the automotive industry.

It is important to point out that AMIA, ANPACT and the Mexican Association of Automotive Distributors (AMDA by its acronym in Spanish) are also frequent and intensive users of this information; they produce analytical reports with the data published by INEGI to keep their members informed.

On the other hand, the information is essential for every company in the sector, in order to monitor its own market strategy and measure their performance in the context of the overall automotive industry.

All the information produced is public and free of charge. It is simultaneously released to the public. Thereby, no one has access to this data before its dissemination. All the tables, historical series, and reports are available on INEGI website at: https://www.inegi.org.mx/datosprimarios/ Furthermore, the dissemination calendar for these two administrative registers is available a year in advance at: https://www.inegi.org.mx/app/saladeprensa/calendario/default.html.

Towards new arrangements

It is intended to continue incorporating companies belonging to this sector with presence in the country, even if they are not affiliated to both Associations with which INEGI has an agreement with.

Based on the success of RAIAVL and RAIAVP, INEGI and COFECE will analyze the expansion of the number of variables and characteristics of the information currently disseminated, and on the other hand, INEGI will explore the interest of other Associations (related to other sectors of the Mexican economy) for disseminating information on the affiliated companies, under the characteristics of raw data.

Finally, in the context of the COVID-19 pandemic, the collection and dissemination of raw data through RAIAVL and RAIAVP show how the arrangements with the



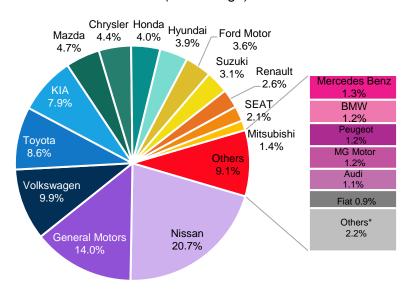
private sector contribute to the preparation of timely figures on a relevant sector of the Mexican economy.

Some results

Administrative Record of the Light Vehicle of Automotive Industry

SALES OF LIGHT VEHICLES IN THE MEXICAN DOMESTIC MARKET BY BRAND

January-July 2021 (Percentage)



Others*: Acura, Alfa Romeo, Bentley, Fiat, Infiniti, Isuzu, JAC, Jaguar, Land Rover, Lincoln, Mini, Motornation BAIC, Porsche, Subaru, Volvo



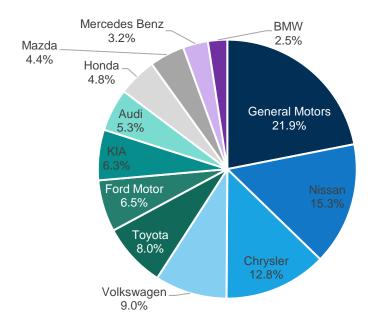
TOTAL PRODUCTION OF LIGHT VEHICLES IN MEXICO

January-July, 2019-2021 (Number of vehicles)



MEXICAN EXPORTS OF LIGHT VEHICLES BY BRAND

January-July 2021 (Percentage)

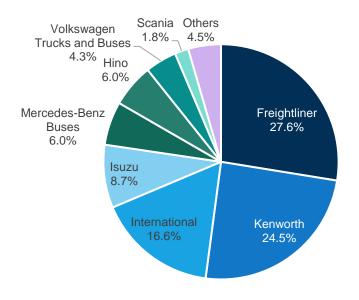




Administrative Record of the Heavy Vehicles of Automotive Industry

RETAIL SALES IN THE MEXICAN DOMESTIC MARKET BY BRAND

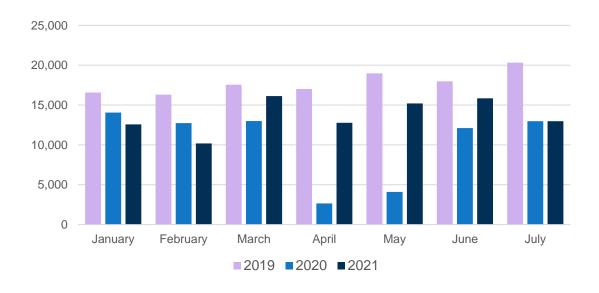
January-July 2021 (Percentage)



Others: Dina, Foton, Mack Trucks, MAN, Volvo Buses, Volvo Trucks

TOTAL PRODUCTION OF HEAVY VEHICLES IN MEXICO

January-July, 2019-2021 (Number of vehicles)





MEXICAN EXPORTS OF HEAVY VEHICLES BY BRAND

January-July 2021 (Percentage)

