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The Semiconductor Industry And Its Economic, Political, And Social Impact In Mexico

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ABSTRACT

The semiconductor industry has become a cornerstone of the digital economy and a crucial element in global technological progress. Mexico, thanks to its strategic location, trade agreements such as the USMCA, and a growing industrial base, is well-positioned to enhance its role in this value chain.

This study examines the impact of the semiconductor industry on Mexico's economy, focusing on key aspects such as foreign direct investment, exports, job creation, and technological infrastructure. It also explores the theoretical, political, and economic frameworks supporting digital transformation, emphasizing the importance of human capital, innovation, and collaboration among academia, industry, and government.

Additionally, the analysis highlights nearshoring as a historic opportunity for Mexico, facilitating the relocation of manufacturing plants closer to the North American market. By leveraging this trend, the country can attract significant investment and strengthen its industrial capabilities.

Finally, the study outlines strategies to consolidate Mexico's leadership in the semiconductor sector, including the development of specialized talent, improvements in public policy, intellectual property protection, and the strengthening of international partnerships. The findings suggest that, with a comprehensive strategy, Mexico has the potential to become a key player in the global semiconductor industry, significantly contributing to economic growth and technological positioning.

KEYWORDS: *Semiconductors, Industry, Technologies, Economy, Politics.*

1. INTRODUCTION

In recent years, the technological industry has undergone significant transformations, with semiconductors standing out as a key driver of social and industrial change. These advancements have led to the emergence of new companies, jobs, professions, and innovative technological products that have profoundly influenced people's lives across the globe.

Semiconductors, the tiny chips that enable modern technology, play a crucial role in various applications. They ensure the safe operation of automobiles, support advanced medical and

pharmaceutical equipment in saving lives, and empower military radar systems to detect threats efficiently.

The term semiconductor generally refers to materials that have the ability to both conduct and insulate electrical currents. However, in the technological context, it also applies to the highly sophisticated products manufactured from these materials, commonly known as "chips" or "electronic circuits."

The long-term outlook for the semiconductor industry remains strong. As the world advances, the demand for high-performance semiconductors will continue to grow, powering everything from household appliances and autonomous vehicles to aircraft and artificial intelligence systems.
Semiconductors play an essential role in nearly all productive activities and daily life, solidifying their position as the backbone of the modern economy. Their continued development and integration into various industries will shape the future of technological innovation and global economic growth.

2. METHODOLOGY:

This research adopts a qualitative and exploratory approach to comprehensively understand the factors influencing the development of the semiconductor industry in Mexico. Given the complexity and evolving nature of this sector, a methodological strategy based on scientific literature review was selected, focusing on academic, institutional, and governmental sources at both national and international levels.
The research process was structured into four sequential phases, aimed at building a systemic vision of the phenomenon:

- **Phase 1 – Theoretical, Political, and Social Framework Review:** Academic publications, institutional reports, and relevant public policies were collected and analyzed to establish the conceptual, political, and social foundations framing the semiconductor industry within the Mexican context.
- **Phase 2 – Historical Background Exploration:** A critical review of historical sources and specialized reports was conducted to identify key milestones and transformations that have shaped global technological evolution and their connection to Mexico.
- **Phase 3 – Economic Growth Analysis:** Economic databases, sectoral studies, and specialized literature were examined to describe the current and potential impact of the semiconductor industry on Mexico's development.
- **Phase 4 – International Trade Assessment:** Trade reports, international agreements, and analyses from organizations such as the OECD, the Mexican Ministry of Economy, and the Bank of Mexico were reviewed to understand the dynamics of exports, imports, and regional integration.

The collected information was analyzed through thematic coding, allowing the identification of recurring patterns, causal relationships, and gaps in existing literature. This qualitative approach facilitated the construction of contextualized interpretations aimed at generating informed strategic recommendations.

3. RESULTS:

As a result of the study, strategic recommendations are proposed for the design of public policies, the strengthening of the business ecosystem, and the development of specialized talent, all of which are essential for positioning Mexico as a key player in the global semiconductor value chain.

3.1Theoretical Framework

Solow (1956) argued that technological progress enhances production relations and drives economic productivity. Grossman and Helpman (1995) identified a positive relationship between international trade and technological learning, emphasizing the role of trade openness in

facilitating technology transfer and strengthening intellectual property rights. Entrepreneurial acumen plays a critical role in innovation, as it enables the transformation of external knowledge into increased productivity and operational efficiency (Nelson & Winter, 1982).

From a policy perspective, basic economic theory characterizes technology as applied knowledge in production—encompassing information related to products, processes, and applications (Reddy & Liming, 1990). Markus and Tanis (2000) broaden this definition to include essential production-related information, while Afriyie (1988) describes technology as a subsystem integrating knowledge, technical support, and physical capital.
Economically, innovation involves product design improvements, the launch of new products, or the adoption of novel methods. These processes may be driven by industrial policies or market signals aimed at improving productivity and fostering economic growth. While neoclassical theory assumes firms operate under perfect competition and complete information, market failures frequently necessitate government intervention. Schumpeter (1997) proposed that innovation propels capitalist evolution through entrepreneurial efforts aimed at achieving scientific recognition. As such, innovation is positioned as a competitive asset intrinsically linked to firm-level initiatives (Jiménez, 2018).

3.2 Historical Background of the Semiconductor Industry in Mexico

Mexico's entry into the electronics industry dates to the 1960s, with the state of Jalisco emerging as a pioneer in hosting electronics firms. Companies such as Mexican Burroughs and Motorola de México commenced operations in 1968, facilitated by the PITEX program (Temporary Import Program for Export), which later evolved into the maquiladora regime (Sandoval, 2012). By the 1990s, Mexico had integrated into the international division of labor in the electronics and IT sectors. This integration supported the development of a new export-oriented electronics industry, centered on the manufacturing of end products like computers, peripheral devices, televisions, and telecommunications equipment, while also extending—albeit to a lesser degree—into semiconductor exports (Ordoñez, 2005).

3.3 Mexican economy in semiconductors

Mexico could experience accelerated growth in the semiconductor sector due to nearshoring (an outsourcing strategy in which a company transfers part of its production to third parties located in nearby countries with similar time zones). This strategy involves the construction of new plants and contributes to the country's economic growth.
Within the framework of the USMCA, Mexico has been identified as having the opportunity to design, train, assemble, and package semiconductors.

3.3.1 Behavior of the electrical and electronic industry in Mexico

In Mexico, only 0.08% of economic units in the manufacturing sector are dedicated to semiconductor manufacturing.
The electronics industry has experienced very favorable development over the past decade, transitioning from a domestic-oriented industry to a competitive industry whose production is primarily destined for export.

The electronics sector generates almost 0.2% of the national Gross Domestic Product and approximately 330,000 direct jobs. Between 2015 and 2022, cumulative Foreign Direct Investment in this sector reached more than $9 billion, and annual exports exceeded $85 billion (Concamin, 2024).

The products with the largest share of Mexican exports are audio, video, computers, cell phones, and measuring instruments, among others. Currently, the global market for this sector is estimated

at approximately $537.028 billion USD, but in five years, it could reach $664.053 billion USD, representing a 4.34% Compound Annual Growth Rate (CAGR) growth rate per year.

In Mexico, more than 3,500 companies are involved in the electronics sector. In 2024, according to the Ministry of Economy, the electronics sector could grow between 2.5% and 3.5% (CLELAC, 2024).
Total trade (including international purchases and sales) of electrical and electronic equipment was US$223.357 billion. Figure 1 shows Mexico's sales and purchases of electrical and electronic equipment.

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International trade exchange of purchases and sales of electrical and electronic equipment

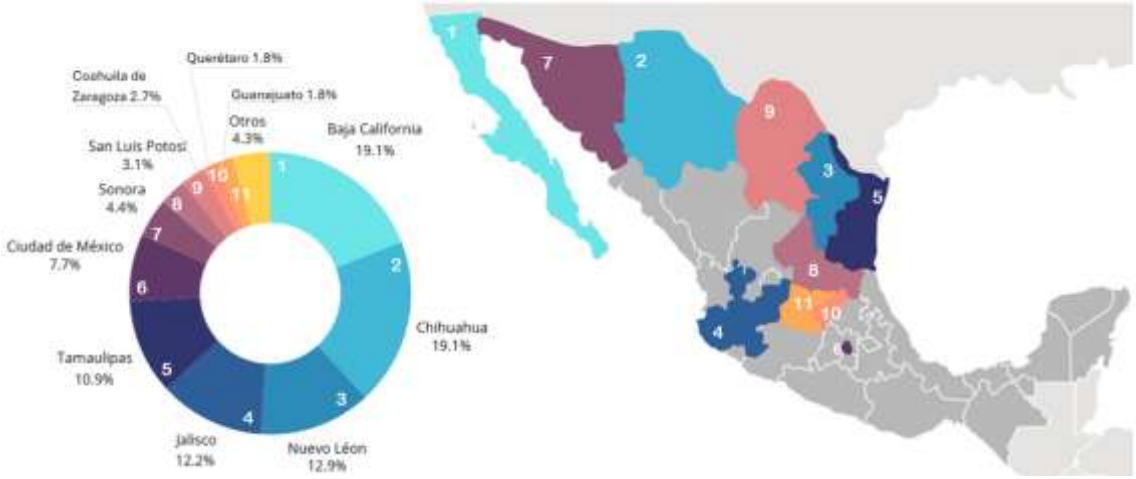

Fig. 1(a) International Sales by federal entity (2023), US$102,732 M (DATA México y del INEGI, 2023.)

Fig. 1(b) International sales by country (2023), US$102,723M (DATA México y del INEGI, 2023.)

The state of Baja California has the highest sales. Furthermore, the country with the largest sales of electrical and electronic equipment is the United States.

On the other hand, in 2023, the 10 federal entities with the largest international purchases of Electrical and Electronic equipment were those shown in Figure 3, with figures in millions of dollars and corresponding percentage.

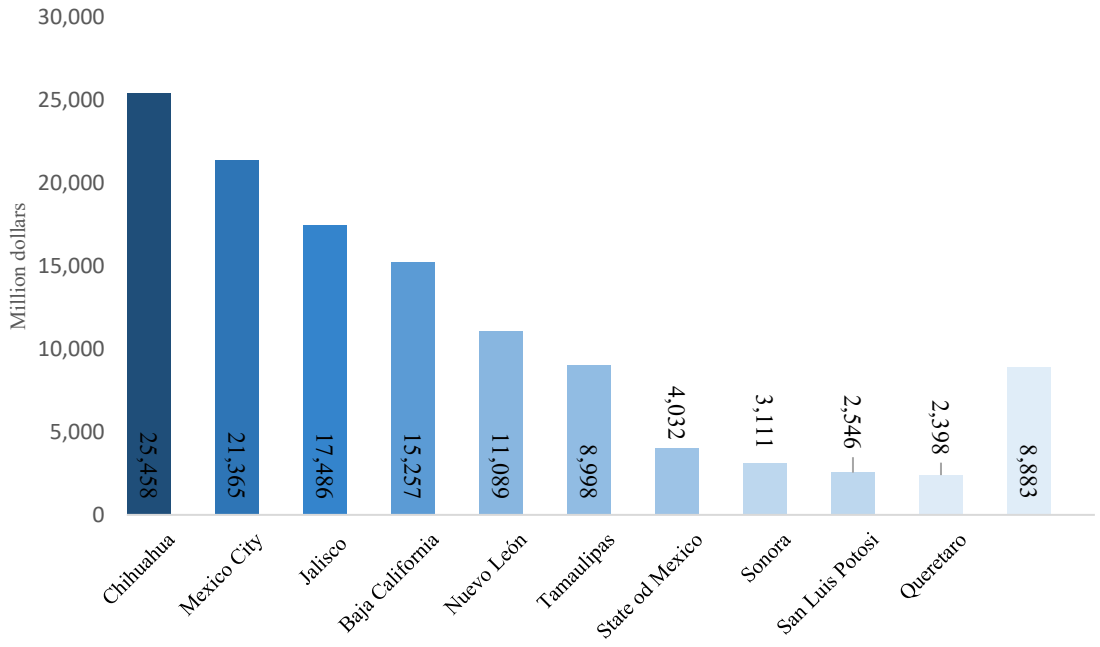

Fig. 2(a) Federal entities with the largest international purchases of electrical and electronic equipment (DATA México y del INEGI, 2023.)

We note that the state of Chihuahua, with $25.458 billion dollars, is the state that makes the largest international purchases of electrical and electronic equipment.

Table 1 shows the global market for electrical and electronic equipment. Mexico's share is highlighted to identify its contribution to the export and import market.

Table 1. Origins and commercial destinations of electrical and electronic equipment

Commercial origins of electrical and electronic equipment, 2022		Commercial destinations for electrical and electronic equipment, 2022	
Country	Commercial value	Country	Commercial value
China	$ 1,157.72 M	Estados Unidos	$ 459.73 M
Taiwán (República de China)	$ 314.59 M	China	$ 453.35 M
Corea del Sur	$ 248.81 M	Hong Kong	$ 345.85 M
Estados Unidos	$ 170.14 M	Alemania	$ 201.33 M
Vietnam	$ 169.22 M	Singapur	$ 139.16 M
Alemania	$ 163.87 M	Corea del Sur	$ 125.47 M
Malasia	$ 153.45 M	Taiwán (República de China)	$ 123.27 M
Japón	$ 149.39 M	Vietnam	$ 122.60 M
México	$ 102.24 M	Japón	$ 118.22 M
Singapur	$ 95.23 M	México	$ 107.41 M
Resto de Países	$ 826.51 M	Resto de Países	$ 1,354.78 M

It is observed that the commercial origin of electrical and electronic equipment is China, with $1,157.72 million dollars; while the commercial destination of this same equipment is the United States, with $459.73 million dollars, which is almost a third of what Mexico imports.

3.3.2 Manufacturing of electronic components in Mexico

The Gross Domestic Product (PIB) is the most widely used indicator to characterize the state of the economy and represents productive activity. It also measures the value of all goods and services produced and is the indicator used to determine a country's wealth. In the first quarter of 2024, the manufacturing industry recorded a GDP of $6.26 trillion pesos, indicating steady growth in the electronics sector.

Figure 4 shows net international trade, with international sales of Integrated Circuits and Controllers, Converters, Logic Circuits, and Amplifiers totaling US$82.5 million, while international purchases reached US$1,442 million. This results in a negative trade balance of minus US$1,360 million.

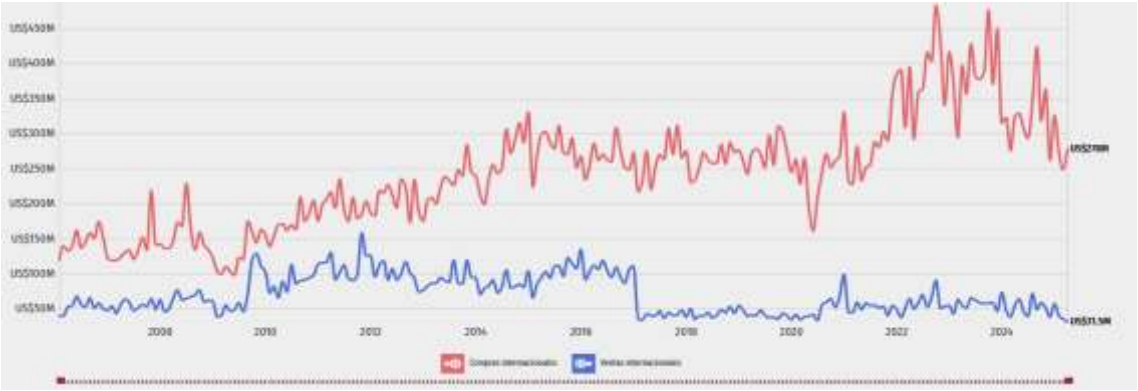

Fig 3 (a). Net international trade in Integrated Electronic Circuits and Controllers, Converters, Logic Circuits, Amplifiers. (DATA México y del INEGI, 2023.)

The gap in international trade is very noticeable, this is because what Mexico buys is more than 17.5 times what it sells.

3.3.3 Foreign Direct Investment in the Manufacture of Electrical Components

Foreign Direct Investment in Electrical Component Manufacturing
In addition to Foreign Direct Investment (FDI), from January to March 2024, FDI in Electronic Component Manufacturing amounted to US$90.4 million, distributed through intercompany accounts (US$73 million) and reinvested profits (US$17.4 million).
Historically (from January 1999 to March 2024), the states that have received the most FDI are Jalisco (US$3.75 billion), Baja California (US$2.87 billion), and Chihuahua (US$2.05 billion). Likewise, from 1999 to 2024, the countries that contributed the most FDI were the United States (US$8.11 billion), Taiwan (US$2.02 billion), and South Korea (US$1.94 billion).

3.4 Economic Growth Analysis Linked to the Semiconductor Industry

Mexico holds a strategic opportunity to expand its role in the global semiconductor industry, driven by nearshoring trends, the USMCA (T-MEC), and a skilled labor force. Major firms such as Intel, Qualcomm, and Samsung have already established operations in the country, and the Mexican government has designated the sector as a national strategic priority.

The electronics sector accounts for approximately 2% of Mexico's GDP and employs over 330,000 people. Between 2015 and 2022, the sector attracted over USD 9 billion in foreign direct investment (FDI). In Q4 of 2023, Mexico's electronic equipment exports totaled USD 18.1 billion, with Baja California, Chihuahua, and Nuevo León as leading states in export activity.

In 2019, Mexico hosted 444 economic units focused on the production of electronic components, with Baja California, Jalisco, and Chihuahua leading in terms of output and revenue. As of Q1 2024, the manufacturing sector reported a GDP of MXN 6.26 trillion, reflecting sustained growth.

At the municipal level, the highest revenues in electronics were recorded in Zapopan (MXN 13.98 billion), Aguascalientes (MXN 13.59 billion), and Tijuana (MXN 13.17 billion). In terms of employment, Tijuana led with 56,900 workers, followed by Zapopan (42,600) and Ciudad Juárez (41,200).

During Q1 2024, FDI in the electronic component manufacturing sector reached USD 90.4 million. From 1999 to 2024, Jalisco (USD 3.75 billion), Baja California (USD 2.88 billion), and Chihuahua (USD 2.06 billion) were the top recipients. The principal investing countries were the United States (USD 8.12 billion), Taiwan (USD 2.02 billion), and South Korea (USD 1.94 billion).

3.5 Evaluation of Mexico's International Semiconductor Trade

In response to growing geopolitical tensions and China's dominance in semiconductor manufacturing, the United States unveiled a new policy to reduce reliance on East Asia, which currently accounts for 75% of global production. As part of this shift, Mexico has emerged as a key trade partner. In 2023, Mexico's total trade in diodes, transistors, and other semiconductor devices reached USD 5.31 billion.

International Semiconductor Sales

Table 2. Main exporting states and purchasing countries

Federal Entity	**Sales (US$ millions)**	**Buyer Country**	**Amount (US$ millions)**
Baja California	470	United States	602
Coahuila	52.9	China	18.3
Chihuahua	52.2	Thailand	9.99
México City	46.5	Brazil	8
Jalisco	32	Hong Kong	6.94
Total	**653.6**	**Total**	**645.23**

International Purchases of Semiconductors

Table 3. States with the largest imports and supplier countries

Entidad Federativa	**Compras (US$ millones)**	**País Vendedor**	**Monto (US$ millones)**
Baja California	1,464	China	1,613
Jalisco	844	Malaysia	850
Tamaulipas	787	Singapure	519
Chihuahua	537	Japan	341
Nuevo León	340	United States	257
Total	**3,972**	**Total**	**3,580**

Between January and March 2024, Mexico's semiconductor sector attracted $90.4 million in Foreign Direct Investment (FDI). This investment was allocated as follows: $73 million in intercompany transactions, $17.4 million in reinvested profits, and $0 million in new investments.

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3.6 Incorporation into the semiconductor value chain

Mexico's participation in the electronics sector was achieved thanks to the introduction of the maquiladora system in the 1960s, the North American Free Trade Agreement in 1994, and the liberalization of trade in the sector's production chain in 2002. This sector has evolved due to the high global demand and its capacity to meet the needs of this market.

In Mexico, there are currently 26 public research centers and 20 universities and technological institutes that offer various electrical engineering and related fields. In the semiconductor sector, Mexico has 150 high-level researchers specializing in semiconductors and system structures. Mexico has been studying integrated circuits for 35 years (SE, 2022).

Table 3 shows that Mexico actively participates with chambers, associations and research centers dedicated to the electronics sector, among the most important are the following:

Table 4. States with the largest imports and supplier countries

Chamber, Associations or research center	**Description**
National Chamber of the Electronics, Telecommunications and Information Technology Industry (CANIETI)	It is responsible for achieving the competitive development of the Electronic Telecommunications and Information Technology Industry
National Institute of Astrophysics, Optics and Electronics (INAOE)	Center for research, technological development, and training of cutting-edge human resources, and certified quality, nationally and internationally, in the disciplines of astrophysics, optics, electronics, computer sciences, and areas Training of high-level researchers and the generation of cutting-edge scientific and technological knowledge in the areas of Bioelectronics, Communications, Solid State Electronics and Mechatronics
Center for Research in Advanced Materials (CIMAV)	Conduct scientific research, technological development, innovation, and human resource training with excellence in the areas of Materials, Energy, and the Environment, to help drive the country's sustainable development.

Center for Scientific Research and Higher Education of Ensenada, Baja California (CICESE).	Orientations offered: Instrumentation and Control, High Frequency Electronics and Telecommunications
Electronic Standardization and Certification, A.C. (NYCE)	National Standardization Organization (ONN) in the Electronics, Telecommunications, and Information Technology industry, which consolidated its leadership in conformity assessment for Mexican Official Standards (NOM) and Mexican Standards (NMX).
Center for Nanosciences and Micro and Nanotechnologies (CNMN) of the National Polytechnic Institute	Center for technological, scientific, and innovation services and development that generates value and growth in nanosciences and micro/nanotechnologies
Center for Nanosciences and Nanotechnologies (CNYC) of the National Autonomous University of Mexico.	Conduct scientific research in nanoscience and nanotechnology, generate basic knowledge and technological applications associated with new materials
Computing Research Center (CIC) – Microtechnology and Embedded Systems Laboratory (MICROSE).	It promotes innovation in Electronics and Communications, Embedded Systems, Computer Architecture, Multicore Architectures, Interconnection Networks, VLSI Design, RTL Design (FPGA), and MEMS Sensor Design and Microfabrication.

The table above shows that Mexico has the potential to promote the participation of the government, academia and industry to create a common front for the country to join the semiconductor value chain.

3.7 Semiconductor value chain

The semiconductor value chain has four central links: design, manufacturing, assembly and testing.

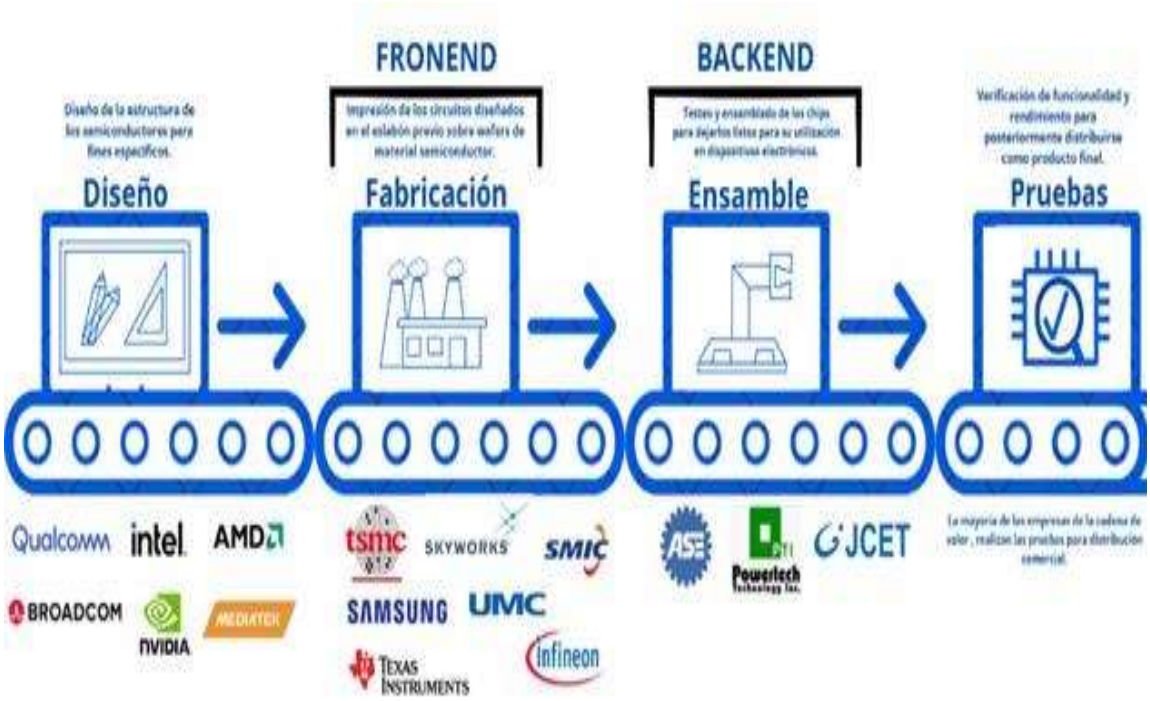

Fig 4 (a). Stages of the semiconductor value chain

3.7.1 Semiconductor Design

In the design stage, the semiconductor structure is planned for specific purposes, such as electrical, thermal, and mechanical specifications for components. A mask is then created, which paves the way for circuit manufacturing. More than half of the research and development (R&D) expenditure is spent during this phase. Prominent design companies include Intel, Texas Instruments, Qualcomm, Nvidia, Broadcom, AMD, Mediatek, and others.

3.7.2 Semiconductor manufacturing (frontend)

This process begins with semiconductor materials called "wafers" or silicon wafers, on which materials are deposited. The circuit design is then printed using lithography between hundreds and thousands of times. The wafer is then cut into individual chips, the final product. Prominent manufacturing companies include TSMC, UMC, Samsung, Texas Instruments, SMIC, Global Foundries, and others.

3.7.3 Semiconductor Assembly (Backend)

Once the individual components have been obtained, they must be assembled into a single piece. This is the process of attaching the device to the board. Here, appropriate mounting methods must be chosen for the device, based on environmental conditions and performance requirements. For example, soldering, hermetic sealing, thermal management, shielding, and strain relief techniques must be used to prevent moisture, heat, radiation, and mechanical stress from affecting the device. Companies involved in assembly and testing include ASE, JCET, Amkort, Powertech, and TT.

3.7.4 Semiconductor testing

It is the process of verifying the functionality and performance of the device under different environmental conditions, thus certifying that the device complies with the specifications and standards of its application, for example, they must test the device to determine the temperature

cycles, thermal shock, vibration, shock, pressure, humidity and radiation exposure, in addition, it must be characterized for parameters such as current and voltage curves, power dissipation, frequency response, noise and gain.

3.8 Semiconductor value chain in Mexico

There are companies that span the entire value chain (design, manufacturing, testing, packaging), but technological complexity has led companies to specialize in just one or two links in the value chain. Figure 8 shows the semiconductor companies operating in Mexico.

Fig 5 (a). Companies established in Mexico that have one or more stages of the semiconductor value chain (design, manufacturing, characterization, encapsulation)

Companies with integrated production include Intel, Samsung, Micron, Texas Instruments, SK hvnix, Kioxia, Analog Devices, NXP, Infineon, ST, and Renesas.

3.9 Development of human talent in semiconductors

The federal government's Ministry of Economy is formalizing collaboration agreements for the transfer of innovation resources and the long-term training of highly specialized Mexican technology talent nationwide (SE, 2022).

The objective is to boost Mexico's leadership as a hub of innovation in the region and strengthen its role in the complex global semiconductor supply chain. This collaborative effort focuses on three pillars:

1. Develop the required talent in the institutions defined by the Ministry of Economy.
2. Increase the competitiveness of Mexican companies through the transfer of knowledge and best practices.
3. Promote global training programs in the semiconductor value chain.

Through an annual framework, whose points of agreement can be scaled based on identified needs and available resources, initiatives are expected to emerge that increase the availability of highly specialized local talent.

4. DISCUSSION

Mexico's participation in the global semiconductor value chain remains limited, restricting its technological and economic growth despite its favorable strategic conditions. This issue arises from the complex interaction of industrial, educational, political, and economic factors, requiring a systemic approach to identify integrated and sustainable solutions.

4.1 Mexico's Integration into the Semiconductor Value Chain

Mexico's electronics industry began in the 1960s, facilitated by the maquiladora model. Its integration accelerated with the North American Free Trade Agreement (NAFTA) in 1994 and the liberalization of the sector in 2002, progressively incorporating the country into the global semiconductor value chain.

Today, Mexico hosts an institutional ecosystem supporting sector development, including business chambers, research centers, and industry associations such as CANIETI, INAOE, CINVESTAV, CIMAV, CICESE, NYCE, CNMN-IPN, CIDESI, and CNYN-UNAM. These organizations provide expertise in research, standardization, innovation, and talent development.

4.2 Semiconductor Value Chain

The semiconductor value chain consists of three key segments:

- Design: A research and development (R&D)-intensive phase where functional circuit architectures are created. Leading companies: Intel, Qualcomm, Nvidia, AMD.
- Fabrication (Frontend): Silicon wafer processing using advanced lithography techniques. Major players: TSMC, Samsung, GlobalFoundries.
- Assembly and Testing (Backend): Includes packaging, mounting, and operational testing. Key firms: ASE, JCET, Amkor.

Some companies, such as Intel, Samsung, and Texas Instruments, maintain vertically integrated production chains, though specialization by segment remains the industry standard due to the sector's technological complexity.

4.3 Economic Impact

In 2021, Mexico's semiconductor-related exports totaled $9.024 billion, while imports amounted to $35.358 billion, resulting in a trade deficit of over $26 billion. However, semiconductor export growth (14% annually) exceeded import growth (5% annually), indicating a positive trend toward reducing the trade deficit.

Among the most relevant product segments are equipment, semiconductor devices, and passive components. Notably, passive components—although technologically less complex—yield a trade surplus favorable to Mexico.

4.4 Talent Development and International Cooperation

Mexico's Ministry of Economy has initiated agreements for technology transfer and specialized semiconductor workforce development, aiming to position Mexico as a regional hub for technological innovation. The strategy prioritizes three key areas:

1. Talent development through specialized education and training.
2. Business strengthening via knowledge transfer and innovation programs.
3. Global training initiatives to enhance Mexico's competitiveness in the international semiconductor market.

5. PROPOSED SOLUTIONS

Mexico must raise its awareness of the semiconductor market by training new talent, creating infrastructure, and supporting and providing incentives to facilitate semiconductor trade. Among the most important factors to address are the following:

5.1 Leadership in semiconductor programs

Implement policies and programs to provide investment credit for semiconductor design, manufacturing, and testing. Facilitate foreign direct investment so that companies in this sector can establish themselves in Mexico.

5.2 Strengthen National Technology

Implement a national strategy, supported by appropriate investments and in consultation with educational leaders and the private sector, to improve our education system, increase the number of Mexicans graduating in Science, Technology, Engineering, and Mathematics (STEM) fields, support academies and students pursuing microelectronics careers, and guarantee training and education opportunities to fill vacant positions. Reform Mexico's highly skilled immigration system to allow access to the world's best and brightest, including foreign students with graduate degrees in STEM fields. Secure funding to strengthen the semiconductor workforce at all levels.
The population in Mexico focused on STEM careers is the highest among OECD countries located in the Americas. Twenty-five percent of people between 25 and 64 years of age with higher education have this specialty. Furthermore, Mexico is among the seven OECD countries with the highest proportion of STEM graduates. Before countries like Chile, Canada, the United States, Poland and Spain.

5.3 Promote Free Trade and Protect Intellectual Property

Approve and modernize free trade agreements that eliminate market barriers, protect intellectual property, and allow for fair competition. Expand the Information Technology Agreement on customs duties and electronic transmissions.

5.4 Cooperate Closely with Like-Minded People

Align policies and regulations with like-minded allies, promoting growth, innovation, and supply chain resilience.
National laboratories, universities, and businesses should work together to promote innovation; in other words, the gap between universities and semiconductor factories should be narrowed.

6. CONCLUSION

Mexico stands at a pivotal moment to position itself as a key player in the global semiconductor industry, driven by nearshoring strategies and the framework established under the USMCA. Although the country's current participation in semiconductor manufacturing remains limited, it holds a unique opportunity to expand its role through infrastructure development, talent training, and the implementation of supportive government policies.

Strategic leadership will be essential to ensure the effective implementation of initiatives such as the CHIPS and Science Act, as well as to generate investment incentives that strengthen the domestic semiconductor ecosystem. In parallel, enhancing education and training in STEM fields will be critical to developing a competitive and specialized workforce capable of driving technological innovation within the country.

International trade and the protection of intellectual property will serve as foundational pillars for industry growth, underscoring the importance of modern trade agreements and regulatory

frameworks that promote fair competition in global markets. Furthermore, collaboration among universities, research laboratories, and industry partners will play a central role in advancing technological development and closing the gap between academic training and industrial needs.
With the right strategy in place—one that promotes investment, technological development, and international cooperation—Mexico has the potential to become a significant contributor to the global semiconductor value chain. The country's geographic location, trade agreements, and emerging talent pool collectively position it as a strong candidate to lead the development of the semiconductor industry in Latin America.

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