Article

RINOE Journal- Public economy

December 2017 Vol.1 No.1 10-23

Analysis of the relationship between the financial and productive sectors, in the context of the financialization process of the Mexican economy

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Received July 03, 2017; Accepted December 11, 2017

Abstract

During the last decades, the Mexican Financial System has undergone several reforms aimed at promoting its development; According to the McKinnon-Shaw theorem, should represent a number of positive impacts on the productive sector, and thus on the entire economy. It is considered that maintaining a restricted financial system represents multiple obstacles to economic growth and development. Thus, it is possible to understand the process of financial liberalization, carried out during the eighties; However, through statistical analysis it is possible to determine; Not only that the expected positive relationship between the sectors involved, has not been able to be configured in the case of the Mexican economy, but also, the financial sector shows a greater development, compared to the productive sector; Which contrasts with orthodox theory and represents a fundamental feature of the financiarization process.

Financiarization, Economic Growth and Finacial Development

Citation: LAPA-GUZMÁN, Javier & ROSAS-ROJAS, Eduardo. Analysis of the relationship between the financial and productive sectors, in the context of the financialization process of the Mexican economy. RINOE Journal- Public economy. 2017.1-1:10-23.

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1. Introduction

The process of financialization in the case of the Mexican economy is based on the implementation of a series of large-scale economic reforms that were part of the process of adopting the neoliberal growth model. Among these reforms, the liberalization of the Mexican financial system (MFS) stands out, whose effects not only covered the financial sphere, but also had repercussions on the productive sector. In fact, one of the main arguments behind this reform was the boost it would represent for the productive sector; since the MFS in the early eighties, was not only considered obsolete, but was identified as a serious obstacle to the economic growth of the country, so it was necessary to transform.

The previous, under the logic of the theorem of Mckinnon (1973) and Shaw (1973), according to which, a restricted financial system, through interest rate caps (active and passive), forced channeling of credit, legal reserve, among other measures; it inhibits the performance of the economy as a whole, by hindering savings and the efficient allocation of capital to the most productive investments. That is, these authors argue that the deregulation of financial transactions allows prices to freely determine savings and investment, stimulating long-term economic growth.

On the other hand, a process of commercial opening was carried out, which was another of the great reforms derived from the adoption of the neoliberal model; that supposed a restructuring of the national productive apparatus; that went from an industrialization model by import substitution, to one oriented mainly to exports, with the objective of taking advantage of the benefits of the free market.

In this way, both the financial sector and the productive sector were subject to a profound transformation; in both cases, with the aim of creating a period of sustained growth; result of the correct interaction between both sectors.

In this sense, there are various aspects that link these two sectors; for example; it was expected that the development of the financial markets would represent a new space for obtaining profits from the companies, which in this way could carry out more ambitious investment projects; that is, productive investment would benefit. On the other hand, competition within the banking sector would promote a reduction in the cost of credit granted to the productive sector, therefore, companies would have a better and greater access to financing of this type.

Similarly, derived from the development of the financial sector; the stock market sector could finally be constituted as a real financing option for companies, which could thus attract private capital, both national and foreign. In addition, it was considered that greater financial depth would also improve the population's access to credit; what would allow the constitution of a powerful internal market; which, in turn, would imply a series of positive effects on the industrial fabric.

That is to say, the reasons for which the development of the financial sector has the capacity to positively influence the productive sector are diverse; Therefore, although it is true, the growth rate of both sectors should not be exactly the same; at least yes it should present a similar behavior; therefore, it could be expected that the abrupt development of the financial sector would be accompanied by a similar one in the productive sector. In this sense, and with the objective of evaluating this supposed positive relationship between both sectors; In the present work, the behavior of each of them is analyzed separately; starting with the productive sector.

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In this way, it will be possible to determine if the performance of this sector is similar to that of the financial sector in recent years. That is, if the reforms, responsible for the abrupt development of the financial sector, have generated the expected effects on the productive sector.

2. Evolution of the Mexican productive sector

It should be remembered that one of the characteristics shared by the now developed countries is that at some point in their history, they went through intense periods of internal industrialization via the introduction of industries with increasing profits and maintaining productivity gains in the form of progressive salaries. Therefore, industrialization should not be seen as an end in itself, but as the main means to take advantage of the benefits of technical progress, and thus achieve true economic growth and development (Prebisch, 1950).

Therefore, the growth of the industrial sector, mainly manufacturing, acquires great relevance, given its influence on the growth of the economy as a whole. That is, the importance of these processes is clear, however, the guidance they must follow is not so much, in fact, it is precisely in this aspect that the theoretical discussion on the subject has focused during the last decades.

In the case of Latin America; The Great Depression and the Second World War led to forced internal industrialization until the 1980s. Under the import substitution model, Mexico experienced an average growth of Gross Domestic Product (GDP) of 6.1% between 1942 and 1982, while from 1983 to 2016, the figure was 2.3% (INEGI, 2016). However, the model was blamed for the low growth during the seventies; the situation was blamed for the external restriction, the lack of savings and the excess of government spending.

Given this, the response was the model of export-oriented industrialization, since the belief was generalized that only by promoting the development of the export sector would a detonated stage of sustained growth really be achieved. This, under the logic that exports would generate a growth in the demand for domestic inputs; they would increase the national income, as much by the income coming from the exports, as from the greater internal demand of inputs; and they would also increase aggregate demand and, therefore, the production of consumer goods.

In addition, to become an important source of foreign exchange for the importation of intermediate goods and capital, necessary to face the increase in domestic production. This should translate into greater stability, which would promote investment, which when combined with significant growth in production, would allow the exploitation of economies of scale and technological development. (Cabrera, 2006)From then on, not only commercial opening was encouraged, but also financial deregulation, under the logic that capital would flow to countries where the value of marginal productivity was high, contributing to the homogenization of the variable.

Thus, the benefits of globalization were based on the profits of trade and on the optimal global positioning of resources. Likewise, an accelerated privatization process was promoted, under the argument that the private initiative would achieve a more efficient allocation of productive factors, which was considered to be the core of export-oriented industrialization. The process of deregulation and trade liberalization was carried out in three stages, the first consisting of the unilateral elimination of the previous import permits on 80% of the tariff fractions and the entry in 1986 of the General Agreement on Tariffs and Trade (GATT).

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The second was linked to the stabilization program (Economic Solidarity Pact) because it was argued that external competition would contribute to the reduction of inflation by means of the "one-price law", with which it was intended to set a limit to the prices of marketable goods and, at the same time, reduce the cost of intermediate goods. And the last one was characterized by the strengthening of bilateral relations with the main trading partners, among which the signing of the Free Trade Agreement between Canada, the United States and Mexico stands out (Kregel, 2009).

In this way, in the first years of the eighties, a restructuring of the national productive apparatus began, whose development was subject to the growth of the export sector. However, the horizontal geographical division of production meant that many processes were reduced to the assembly of imported semi-finished goods, with which the salary distribution became the only benefit for the country, which was also forced to maintain low wages. to continue attracting foreign investment, which due to the characteristics of the country increased the imported content of exports (González, 2010).

Authors such as Kregel (2009), Molina and Zárate (2009), maintain that this investment, despite increasing the level of exports, has not only failed to generate productive linkages forward and backward, which was promoted under the model of import substitution, but also intensified the process of repatriation of profits. What questions the argument about the need for underdeveloped countries to receive resources from abroad to achieve a period of sustained growth.

In addition, these authors point out that the great unemployment of internal resources in these countries constitutes an unequivocal sign of the structural imbalance resulting from the scarce development of the industrial sector, which paradoxically is the result of the prevailing industrialization model. Therefore, the problem can not be solved with external financing in the absence of a plan to build an internal industry that gradually replaces imports of capital goods and restricts imports of consumer goods in the medium term.[1]

In addition, the lack of a strong industrial sector not only promotes a greater supply of unskilled labor, and depressed wages; It also makes any fiscal impulse unviable to generate a period of sustained economic growth, given that the effects of this impulse will end up escaping through the increase in the level of imports.[2]

Therefore, it is imperative to evaluate if the export-oriented development strategy has succeeded in triggering a true industrialization process, which will allow the country to overcome its structural problems, and in this way, advance on a path of sustained growth in the long term. To do this, we must establish the impact that this strategy has had on the composition of the production structure, placing special emphasis on the behavior of the manufacturing sector, given its ability to drag the economy as a whole. And since the increase in the level of exports is generally used as an argument for the proper functioning of the prevailing industrialization model; the analysis begins, precisely for that aspect.

[1] If domestic resources were fully utilized, the reason for attracting external capital is greatly reduced. It must be remembered that foreign capital can only contribute to the growth of the country, if it allows the increase of exports and the reduction of imports, which would make it possible, on the one hand, to amortize and pay interest on past debts, and on the other hand, strengthen the national productive fabric (González, 2010).

[2] According to Furtado (1963), the Keynesian multiplier loses validity in the case of developing economies, given the high dependence on imported capital goods that present.

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The percentage of participation of Mexican exports in the global total in 1983 was 1.41%; a decade later it had not changed; for 2003 it reaches its highest level, 2.24%; in 2011 it is reduced to 1.96%; and finally, in 2014, the percentage is 2.1%. On the other hand, Mexico's participation in merchandise imports worldwide, which in 1983 barely meant 0.66%; it presents a significant growth in the following decade, reaching 1.78%; reaching its maximum level also in 2003, with 2.27%; decreasing to 2% in 2011; while in 2014, the percentage is 2.2% (WTO, 2016). That is to say, there is indeed a growth in the level of exports, but it should not be omitted that it has been accompanied by an even greater increase in the level of imports, which is evidenced in figure 1, at least in what refers to the Manufacturing sector.

In addition, changes in the aggregate value added of manufactured goods exported must be considered, which during the eighties was 23.2%, and that for the second decade of the new millennium was reduced to 17.5%; Therefore, it is logical to question whether, in fact, the industrial fabric of the country has been strengthened; given that it is possible to infer that in the increase of Mexican exports; an important percentage is due to activities related to the assembly of intermediate products; characteristic activity of transnational companies (UNCTAD, 2015).

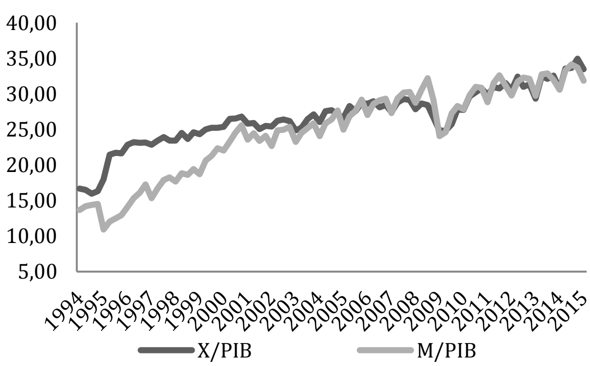

Figure 1 Exports and imports of Mexico (% GDP)
Source: Own elaboration based on OMC Report on trade and international agreements (2016)

On the other hand, table 1 shows that the participation of the industrial sector in the national GDP has been reduced; which increases the doubts about the efficiency of the new model based on exports, as promoter of an industrialization process. In this sense, figure 2 shows a fall in the share of secondary activities, and those related to manufacturing, in total GDP, that is, the evidence indicates that the expected industrialization process has not materialized; and therefore, the positive effects that should accompany it have not been generated either; for example, the increase in employment levels, not only in quantitative terms, but also qualitatively; which constituted the greatest social benefit.

1970-79	1980-89	1990-99	2000-06	2008	2015
25.5	29.8	27.4	26.3	24.3	23.7

Table 1 Percentage of the industrial sector in GDP. México
Source: Own elaboration based on UNCTAD, Handbook of Statistics (2015)

However, neither in this aspect, the evidence is satisfactory, and that is that the population occupied in secondary activities decreased from 1990, year in which it achieved its maximum level (27.79%), because for 2015, the percentage was 24.7 %, unlike the population occupied in tertiary activities, whose growth is remarkable; not to mention the rapid growth of informal activities that the country has registered (ENOE, 2016).

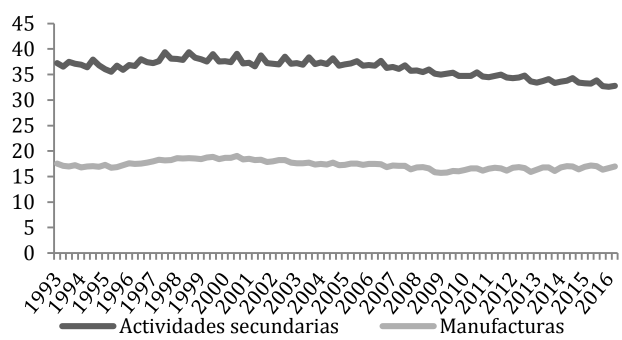

Figure 2 Secondary and manufacturing activities (% GDP)
Source: Own elaboration based on INEGI (2016)

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The above is related to the evolution of manufacturing production in recent decades; in which it has not managed to recover the growth rate that it showed in 1979 (10.9%), or in 1996 (9.36%); and that for 2014 it was only 2.5%; that is, in this case, the rate of growth has also weakened, as well as in the case of exports (see Annex 1).

Therefore, considering the data so far shown, it is difficult to maintain that the increase in the volume of exports has been sufficient to trigger a phase of sustained growth; In fact, it has not been able to strengthen the manufacturing sector.

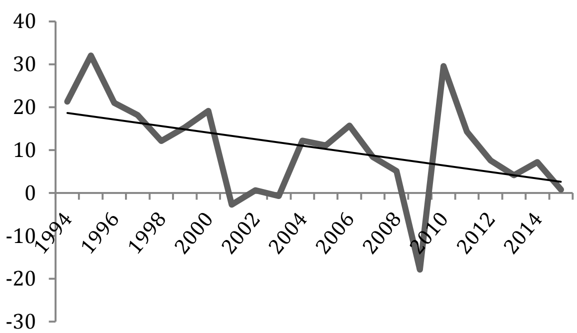

Figure 3 Percentage variation of manufacturing exports. México
Source: Own elaboration based on WTO Report on trade and international agreements (2016)

In fact, according to González (2010), this sector has experienced a process of involution; not benefiting from the increase in the level of exports, which is due to its lack of competitiveness against transnational companies. Figure 4 shows the evident reduction in the number of establishments related to the manufacturing sector.

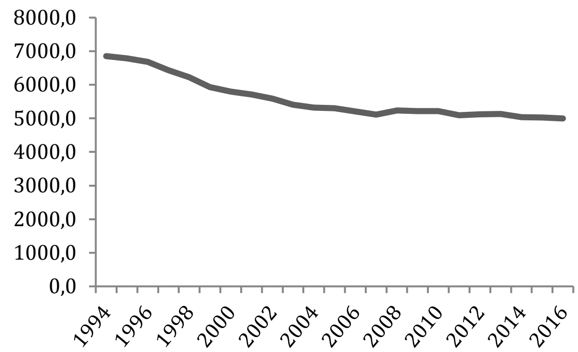

Figure 4 Number of establishments in the manufacturing sector
Source: Own elaboration based on BIE-INEGI (2016)

Based on similar analyzes, authors such as González (2010) have argued that during the last decades, a deindustrialization process has been configured in the Mexican economy; which would explain the erratic behavior in the growth rates of the different industrial branches.

For example, the food industry, in more than a decade has not managed to match, the growth shown in 1998 (6.6%); the textile branch achieved a growth rate of 15.7% in 1996, after which it dropped to -23.9% in 2009; the wood sector obtained a growth rate of 6.9% in the year of 1996, before decreasing in 2014, to -0.65%; the paper branch achieved a growth rate of 12.7% in 1997, and subsequently decreased to -7.2%, in 2009, to stand at 3.14%, in 2014.

For its part, the chemical industry achieved a growth rate of 6.8% in 1997 and then fell to -15.4% in 2009 and 2.11% in 2014; Non-metallic minerals experienced a rate of 8.1% in 1996, to decrease to -8.4% in 2009, while for 2014 the percentage was 1.58%; the metal industries have not come close to the growth obtained in 1996 (18.8%); the case of the branch of machinery and equipment is very similar, in 1996 it obtained 22.3%, and since then not only has it not matched this growth, but it presents negative levels (INEGI, 2016).

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The above, generates doubts about the true results of the new model of export-oriented industrialization, since it is not possible to argue forcefully that the manufacturing sector has been strengthened, and with it the productive apparatus in general of the Mexican economy.

The gross fixed investment is another of the variables, whose analysis becomes opportune, given its implications for the development of the national productive sector; its rate of growth has not been able to overcome the two-digit barrier since 1994, when it was 13%; In fact, both in 2001 and 2009, it presented negative levels, -3.29% and -9.21% respectively. This behavior is in no way consistent with the development and growth needs of the Mexican economy, because far from proving that under the new model of industrialization has been promoted the formation of new stocks of capital, necessary for the increase of productivity, of the industrial dynamism, and therefore of the sustained development, both of the economic activity, as well as of the standard of living of the population.

It is evidenced that there is a weakening in the growth dynamics of the variable in question. In addition, the dominance of imports of machinery and equipment with respect to the total is notorious; when the preferable would be the investment in the national type, by the multiplying effects that could generate via productive chains.

In this sense, according to the Economic Commission for Latin America and the Caribbean, the coefficient of gross capital formation also shows a negative trend, corroborating what was stated in the previous paragraph; The national productive apparatus does not show any strengthening, in fact, as already mentioned, there are different authors who point out the configuration of an inverse process, that is, of deindustrialization.

Referred to in Figure 5, which shows the growing trend of the deindustrialization coefficient; built from the relationship between imports, and industrial GDP. This coefficient was 0.26 in 1986, but, as of 1996, imports significantly exceed industrial GDP, which intensified the process in question, reaching the coefficient to be 2.1 in 2015.

It should be noted that in the case of developing countries, periods of industrialization are usually carried out, with a considerable imported component; in the form of raw materials, machinery, capital goods, intermediate goods and consumer goods (Todaro, 2006). However, in the case of Mexico, the fact that gross fixed investment presents a marked decreasing trend, and that the participation of the secondary sector in total GDP, is lower; allows inferring that a process of such characteristics has not been detonated.

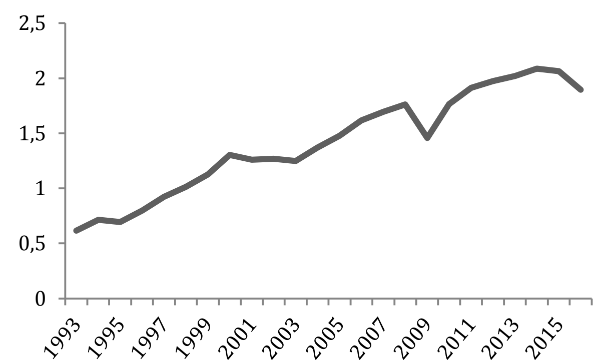

Figure 5 Deindustrialization coefficient
Source: Own elaboration based on INEGI. System of National Accounts (2016)

What has been discussed so far indicates that despite the recommendations of the export-oriented industrialization model were fully complied with; the productive transformation that the Mexican economy went through has not managed to affect the whole economic activity, and therefore has not been enough to overcome the structural problems of the import substitution period. There is a lack of multiplier effects that affect economic growth;

This is due, among other factors, to the type of commercial specialization that has been promoted, based on assembling activities, which limit not only the competence of the national industry, but also the level of participation in the supply of inputs to the transnational companies, which ends up deepening the productive disarticulation and the increasing dependence towards the outside.

And according to Kaldor (1963), Thirlwall (1972) and McCombie (2003), demand from abroad has no effect on economic growth in disjointed economies; which is the case of the Mexican economy; because a gap is created between activities with export capacity and those that are less dynamic; before which, the increase in the volume of exports, is insufficient to trigger a phase of generalized growth. To which also contributes in the case of Mexico, a scarce technological development, propitiated to a certain extent by the prioritization of the advantages associated with labor costs, as an incentive for foreign investment.

According to Cabrera (2006), another characteristic of the Mexican production landscape is that export activities are closely linked to highly importing behavior, given that transnational companies do not find adequate national suppliers to supply their input requirements. That is to say, a set of industries, or highly exporting companies, that do not establish links with the internal dynamics have been promoted, and therefore, they only constitute dynamic branches, but they do not represent an engine for economic growth (Molina and Zárate, 2009).

On the other hand, it must be taken into account that the new industrialization model, accompanied by a process of deregulation and financial liberalization, which among other positive effects.

It was expected to promote better performance of the financial sector; translating into new and better long-term financing mechanisms for companies; which would contribute to the strengthening of the Mexican industrial fabric. This, under the logic that in the absence of financial repression or state coercion, the ideal conditions for the industrialization of an economy are generated, mainly because financial depth is increased, and with this a better allocation of resources is promoted (McKinnon , 1973).

Now is the time to analyze the evolution of the financial sector in recent years; to be able to determine exactly, if the development of both sectors is similar; which would show the existence of a positive link between these, as the orthodox theory maintains; but if it is not, then, you will have an argument in the opposite direction.

3. Evolution of the Mexican financial sector

Historically, the financial sector has had the responsibility to regulate and promote intermediation between savers and debtors; that is, transferring resources from households, businesses and governments that have surpluses (savers), to those that have a deficit (debtors).

For this, a series of financial reforms have been carried out, mainly during the last thirty years; with which it has sought to build a well-capitalized system, with best practices in prudential, risk and accounting matters; whose robustness helps to finance the production, and the investment of the different sectors of society in the most efficient way possible; and that, in addition, be inclusive and have depth to ensure that all segments of the population, as well as companies, can access the services it provides.

ISSN-On line: 2524-2040

The MFS until the beginning of the eighties was characterized by the low development of the stock market and the fact that it prioritized its basic function, that is, to transfer resources from savers to companies; that undoubtedly was altered with the series of changes that it would experience during the following years.

And although these changes were made under the argument of improving financial intermediation; the results in terms of economic growth and development of the national productive sector are in no way as expected, as was concluded in the previous section. What generates serious doubts about the real improvement in terms of financial intermediation.

However, this has not meant that the banking sector or the financial markets have faced a negative period, in terms of profitability, capture, financial margin; among other indicators that will be reviewed below.

3.1 Commercial Bank

Considering the percentage of participation in the total assets of the financial system, commercial banks continue to be the main intermediary; this is despite the fact that this percentage has decreased in recent years, since in 2000 it represented 69.7% of total assets, while in 2016, only 58.7%. On the other hand, development banking went from 22.4% to 10.4% during the same period of time.

Contrary to what happened in the case of the brokerage firms and the Specialized Investment Funds for Retirement Funds (Siefores); that went from 0.6% to 5.2%, and from 7.1% to 25.5%, respectively. It should be noted that during the period in question, the total assets of the financial system show a constant and remarkable growth.

In fact, its average growth rate during the last fifteen years has been 5.64%; while the reference to fundraising is 6.7%, for the same period of time (CNBV, 2016). The increasing behavior of the assets, accounts for the development of the banking sector, which has benefited from the level of concentration that characterizes it, not only in relation to its degree of participation in the financial system, which, as stated above, positions as the main financial intermediary; but also in terms of its composition; since the seven most important banks (Banamex, BBVA Bancomer, HSBC, Banorte, Inbursa, Santander and Socotiabank) have centralized on average over the last fifteen years, 80% of total assets, stockholders' equity and liabilities (CNBV, 2016) .

In this regard, Levy (2009), points out that deregulation and financial globalization in a context of high banking concentration and narrowness of the securities market do not induce the creation of a competitive financial market. On the contrary, it increases the concentration of all financial institutions, which induces a structure of interest rates that threatens economic growth and causes a rentier behavior of financial institutions, reducing credit availability.

And it is that under the current financial structure; the traditional intermediation of commercial banks, which through the mechanisms of regulation and control of credit (legal reserve, credit bins and ceilings at the active interest rate) allowed the financing of the industrialization process; it has been displaced by highly profitable financial operations, such as financial services (sale of insurance, asset management, etc.) and purchase-sale of securities. In parallel, the presence of other non-banking financial institutions, such as the Multiple Purpose Financial Companies, pension funds, investment banks and insurance companies, increased the competition for liabilities and assets.

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That in a context of high liquidity (generated by deregulation and financial liberalization), technological innovations, and the absence of control mechanisms, led to the reduction of bank financing to companies, coupled with the increase in investments of banks in synthetic financial instruments. (See Figure 6). However, this reduction in financing to companies has not prevented commercial banks from keeping their income from interest in constant growth, in fact, the average growth rate of these, during the last fifteen years has been 26.5% , while its average financial margin over this period has been 27.5%. Both indicators show the excellent performance that commercial banking has maintained, even in recessive periods to which the Mexican economy has been subject, for example, the 2008 financial crisis (CNBV, 2016).

Similarly, when analyzing interest income, according to the different items that make up the current portfolio of commercial banks, the importance gained in recent years, by credit for consumption, on the commercial type and the regarding housing. It should be noted that the defaulting rate (IMOR) of commercial banks has been 2.6% on average during the last seven years; so it is also possible to infer some security in the loan portfolio analyzed; with certain reservations given the difficulty of interpretation of said index (CNBV, 2016).

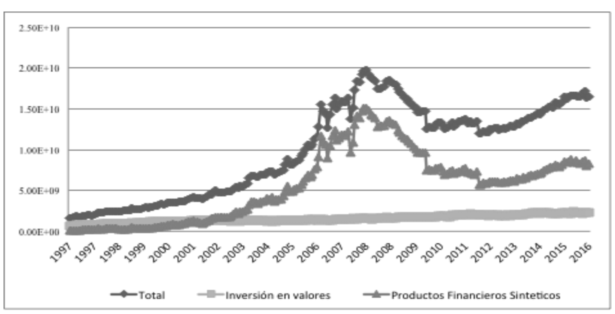

Figure 6 Composition of the resources of the banking sector
Source: Own elaboration based on Banco de México (2016)

However, the foregoing supports what was said by Correa (2006), that commercial banks in Mexico present a series of growth strategies that are due to reasons of profitability exogenous to the development of the national economy, that is, there is no interest, nor commitment to finance the economic development of the country.

It is more important to obtain a high profitability through the management of pension funds or workers' remittances, which expand credit and achieve an effective financial deepening. In addition, the profits obtained by foreign banks in Mexico; that control more than 90% of total assets and profits; they are destined to their respective countries of origin.

In this way, it is possible to explain that despite the low growth registered by the Mexican economy in recent years, the two indicators of financial profitability (ROE-ROA) of the commercial bank, show a positive behavior, as can be seen in the Figure 7. It should be noted that, according to Aglietta (2000), this relationship is one of the main indicators to identify the gestation of a financialization process. Of course, as a result of the financial crisis of 2008, both financial indicators registered a reduction in their levels, however, on average the return on assets was 1.5 over the period in question, while the return on capital invested in average was 14.6, during the same period of time.

In this sense, one of the factors that must be considered in order to understand this good behavior is financial innovation, given that it promoted new activities, of a speculative nature between banks and companies, which evidently offer them attractive profit margins, but which reduce macroeconomic stability.

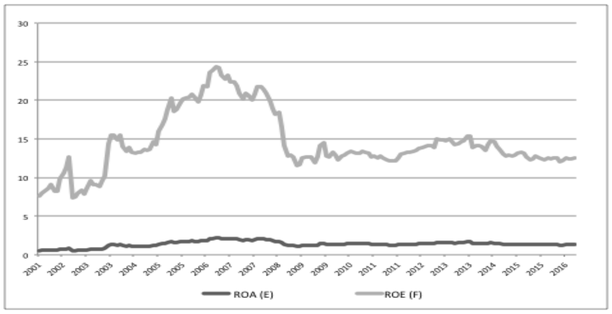

Figure 7 Return on assets (ROA) and on capital invested (ROE)
Source: Own elaboration based on the National Banking and Securities Commission (2016)

This behavior is not endemic to banks; companies, in a context of low economic growth, have increased their investments in financial assets and derivatives, for example; if the volume of derivative transactions is analyzed by type of instrument, only considering the reference to private non-financial companies, it is possible to observe that in the case of swaps, the amount operated by them, went from 437.82 million pesos in January 2007, to 1,074.39 million, in January 2017.

On the other hand, the Forwards went from 527.43 to 6 530.07 million, in the same period; and regarding the Options, its issuance went from 135 to 614.1 million; while the acquisition increased from 185.06 to 742.15 million, during the aforementioned period. Similarly, the volume of operations of the securities market, by type of issuer, shows a growing participation of non-financial private companies, whose total amount in July 2006 was 81,548 million pesos, while for July 2016 , the figure was 180 271 million (Banxico, 2017). This shows the increase in the participation in financial activities by non-financial companies, which not only evidences the development of the financial sector.

It coincides with what authors such as Epstein (2005) and Krippner (2005) say about the potential detraction of resources that such development can mean for the productive sector; that is to say, the productive reinvestment ends up being harmed, given that the companies prioritize their investment in financial instruments such as those previously mentioned. In this sense, synthetic financial instruments accounted for 10.37% of total commercial bank obligations in 1997, and for 2014, the percentage was already 48.28% (Banxico, 2016).

For its part, the capitalization index of commercial banks has been above the minimum requirements of the Basel III Banking Supervision Committee; keeping on average around 16% (CNBV, 2016).

3.2 Stock market sector.

For its part, the stock market was also favored with financial reforms, which is reflected in the price and quotation index (IPC), which went from a level of 145.2 points in 1988, to one of 7 447.1 in 2000, and of 45 642.9 for 2016 (Banxico, 2016).

The growth levels of the stock market contrast with the behavior of the productive sector, in which the first is supposedly based. In this sense, it is enough to analyze the value of the operations carried out in the capital market, whose behavior is growing, in fact, its average growth rate between 1986 and 2016 is 10.6% (Banxico, 2016). While the value of the shares in circulation in the Mexican Stock Exchange (BMV), which is another of the main indicators to determine the behavior of the stock market, shows a remarkable growth during the same period; it is worth mentioning that the average growth during the period considered is 2.65% (CNBV, 2016).

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The foregoing shows the increase in terms of importance acquired by the stock market intermediation; with which the architecture of the financial system has been altered, for example, according to López (2009), this has contributed to the fact that banks fulfill to a lesser extent their traditional function of granting credit to productive activities, while raising their securities issuance and trading operations.

This is partly due to the fact that not always the most profitable investment option is found in production, since speculation would change, administration of the payment system and consumer credit, offer important returns, and even more, in a context of deindustrialization and scarce economic growth, such as that presented by the Mexican economy.

And it is that the theoretical framework behind financial liberalization and deregulation omitted a basic aspect of financial institutions, but that it is essential to understand their evolution detached from the national productive sector; it is about the constant search by these of a higher rate of profit, and for which they are capable of modifying their mechanisms of capture and channeling of resources, if the conditions so require it.

In this sense, it is important to consider the growth of the derivatives and debt markets; the first step of representing 0.07% of the total assets of the stock market in 2007, to 8.65% in 2016; while the second one has a constant growth rate during the last years (CNBV, 2016). However, while it is true that the stock market has grown significantly during the last two decades; its size remains relatively small, particularly the capital market; regarding the banking sector.

4. Conclusion

Throughout this work, two lines of research were developed; the first one related to the national productive apparatus and its evolution over the last years; and the second, focused on the analysis of the behavior of the financial sector. This to determine if the levels of development of both sectors are similar, as established by orthodox theory. In this sense, it was shown that the new industrialization model implied a restructuring of the national productive apparatus; and that although it is true generated the increase of exports and imports of the country

It proved to be insufficient in the promotion of productive linkages, which would allow the strengthening of the national industry. Indicators such as the participation of the industrial sector in the national GDP, account for the weakening of production that has been exacerbated in recent decades, with obvious social costs, pauperization of working conditions, low wages and increased informal employment. In this way, it is possible to sustain that the productive transformation that meant the new industrialization model, failed to contribute in the levels expected to the development of the national productive apparatus.

This reality contrasts with the results that were expected to generate both the commercial opening and the deregulation of the MFS; In fact, the latter sought, among other issues, to improve the financing conditions for productive investment, and with that, to constitute a positive link between the development of the financial and productive sectors. However, the analysis carried out on the behavior of the financial sector during the last years, allows us to infer that this link has not been achieved in the desired levels; and it is that both in the case of the banking sector and the stock market, the development they have experienced is remarkable.

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That is, contrary to what was observed in the analysis of the national productive sector. And to give an account of this, it is enough to review the indicators of financial profitability of the banking sector; both the return on assets (ROA) and the return on investment (ROE) present a positive behavior. And in relation to the stock market, it is enough to review the evolution of the price and quotation index (IPC), whose growing trend is remarkable. Similarly, both the value of the operations carried out in the capital market and the value of the shares outstanding in the BMV show positive and growing behavior; that account for the increase in terms of importance acquired by the stock market intermediation.

Thus, it has been possible to show, on the one hand, the low growth registered by the national productive sector; and on the other, the strengthening of the Mexican financial sector; situation that contrasts with the expected results. It should be noted that in developed countries, with fully established financial systems, the links between the two sectors analyzed in this chapter are closer, given the financial penetration shown by their economies; In addition, the statistical information presented, allows a better analysis of the relationship between both sectors. Which explains to a large extent, the fact that most of the works on the subject are carried out for this type of countries.

And although it is true, the foregoing, represents a series of complications when analyzing the process of financial financialization for the case of developing countries, which do not have the aforementioned characteristics; this in no way detracts from the results obtained, which are in accordance with what authors such as Stockhammer (2009), Orhangazy (2008) and Epstein (2005), have indicated for the case of their respective countries of study; that is to say.

That the remarkable development of the financial sector implies a series of risks for the productive sector; essence of the process of financial financialization.

And in this sense, it becomes imperative to address this issue, because although it is true that the Mexican economy does not present the securitization degrees that other developed countries, it is a fact that the prevailing trend during the following years will be greater financial depth; and therefore, it is essential to analyze the measures and reforms made so far in financial matters, in order to really take advantage of the benefits of financial development; what until now, based on the statistical analysis, have not been achieved.

5. References

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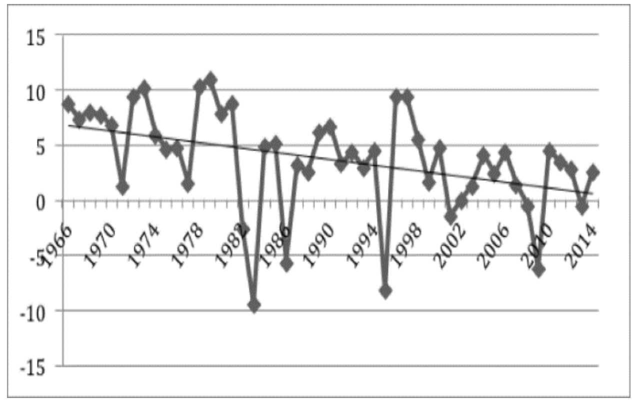
6. Annex



Annex 1 Manufacturing industry growth rate
Source: Prepared by the authors based on ECLAC, Statistical Yearbook for Latin America and the Caribbean (2015).

ISSN-On line: 2524-2040