

## **RESUMEN**

En este trabajo se hace una revisión y análisis de un mercado relativamente nuevo en México, el mercado de las afores. El mercado de las afores tiene una importancia fundamental en el desarrollo social y la vida económica del país; sin embargo, el mercado no se ha desarrollado como se esperaba ni ha dado los resultados que se necesitan. En este trabajo se propone que el lento desarrollo del mercado de las afores se debe a factores institucionales, tanto formales como informales. Se analizan las principales fuerzas del mercado, la demanda y la oferta y se expone el vínculo que se ha encontrado en cada una de ellas y su lento desarrollo con el marco jurídico que las rige y los rasgos culturales de la sociedad mexicana.

Palabras clave: Instituciones formales, mercado, instituciones informales.

## **ABSTRACT**

In this paper it is made a review and analysis of a relatively new market in Mexico, the afores's market. The afores's market is of fundamental importance in the social development and economic life of the country; however, the market has not developed as expected or given the results that are needed. This paper proposes that the slow development of the market is due to the afores's institutional factors, both formal and informal. Major market forces are analyzed, demand and supply and the link found in each of them and slowly developing the legal framework that governs and cultural traits of Mexican society is exposed.

Keywords: Administrative Processes in Public Organizations, market performance, social choice.

# FORMAL AND INFORMAL INSTITUTIONS AND MARKET AFORES

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## INTRODUCTION

The Mexican pension system is in a transitional stage. The sweeping changes made to the system over 16 years ago changed the paradigm that had stood for over 50 years. The new structure has meant a number of complexities that have not been fully resolved. The creation of a new market as it had not existed in Mexico before is an opportunity to broaden the knowledge of organizational economics. Mexican workers face a completely different reality that attacks the deepest cultural traits of financial literacy, which can be understood as informal institutions. Saving and responsibility that fell on them has become a heavy load and difficult to digest for a generation that does not have a financial developed culture.

In the field of national economy, changes in pension system created a very distinctive market where government authority is closely linked to

the ongoing activities on the market. This generates a key market with relevance for Mexicans, employers and government. It also creates a market strongly influenced by the legal institutions where it is worth analyzing the interactions of economic agents conducted within the market and surrounding it.

In this paper it is proposed to exhibit the characteristics of the retired funds' market (Afores) from the perspective of how it is influenced by the institutions, both formal and informal. It has been found to be quite interesting the link between the regulatory framework, expression of government regulations and their impact on the market dynamics and market outcomes. Moreover, in a market that has proven to be so rooted in concepts such as responsibility, self-empowerment, freedom, property rights, it faces serious problems of definition and measurement of these variables. Thus, one of these challenges is to propose strategies to solve problems that are difficult to assess and measure and may be found in understanding the relationship between institutions and the market.

The institutional based-theory is a powerful tool that allows, within the conceptual uncertainty, to analyze these variables so difficult to observe and measure (North, 1991) variables. It must always be remembered that while institutions are forged by men, they end up being forging men. In the case of market Afores, that relationship is empirically visible.

## **METHOD**

The method used in this paper consisted in finding the dialectical relations that exist in the determination of market structure based on the relevant legislation regarding the market of the Afores.

On the demand side, the analysis is based on the study by the AMAFORE in 2011 regarding the characteristics and informal institutions of the Afores' consumer market. Finally, conclusions are drawn on the institutional effects and results on the Afores market performance.

## **CONCEPTUAL AND THEORETICAL BACKGROUND**

The market was established in June of 1997, the date on which initiated

the implementation of the previously issued Act of Savings for Retirement System (LSAR), which was published in the Official Gazette on 23 May 1996 (LSAR, 1997). Starting from that time, all workers were required to have an individual account to be administered by an Afore. This Afore could be chosen at the best convenience within the existing firms and authorized by the competent authority. In any case where workers would not choose one, an Afore will be assigned by National Commission of the Savings System for the Retirement (CONSAR) under criteria of this unit.

The LSAR substantially changed the structure of the pension system in Mexico. The sharing model, where each generation was linked to the previous one was abandoned and left. With the contributions of active workers it was financed the retirement monetary amount of Mexicans who had already acquired the right and were inactive or as they are commonly called “retired”.

The new system adopted, named individual accounting or individual capitalization, is the creation of a portable system with homogenized accounts that will be managed by commercial and private companies. The main differences between the new system and the older system that began to be abandoned lay mainly in the way the resources are obtained for funding pensions. As it was reported by AMAFORE not only starts the transition from a pay as you go (PAYG) system to one of individual accounts, but the groundwork was also laid to engage and share responsibility for each member in planning their retirement savings (Asociacion Mexicana Afore, 2011).

In the new model, each worker has a personal savings account, which is can be assimilated to a bank savings account and investment, long-term in a banking institution. In this account of a mixed nature, it is called mixed, by its public utility and also by its private nature. On this mixed account, monetary contributions made by government, employer and employee contributions in respect of savings and benefits are grouped for retirement. Within the creation of this account, there is a very important accounting item called “voluntary savings.” This item receives all the extra contributions to which the employee is not required, but he/she can make to achieve a greater amount of savings. Amounts made by the worker to this account are tax deductible.

Two important implications are found in the new model. On one hand the federal government’s abandonment of social and public PAYG pensions

and give it to the hands of each worker responsible for handling their own retirement. And on the other hand the retirement as social law gave way to the insurance for retirement, having a commercial and private character. The once important factor is the main features of the new system. Among them, it included the factor that was part of the battle cry of the new input system, the unlinking character sought to be achieved over the previous model of retirement. Now, new generations will not have to pay their contributions to the pensions of those who retired under the previous system.

Two significant effects occurred in the Mexican economy since the start of operations of the new model. First, the composition of financial market changes drastically and enters a new stage. Large amounts entered the financial market by the liberalization of resource savings of workers which today represent almost 14% of GDP (AMAFORE, 2014). As was done previously, these amounts could not get out of their accounts, because their main function was active retirement pay. Now, workers' savings go directly to the financial market through the so called Siefores that are institutional investors representing many workers who do not necessarily know that they are private investors or, as has happened mostly, funders of public spending.

Currently the Afores market is composed of 11 Afores. When it started the new system, this consisted of 17 Afores and in the years 2006 and 2007, reached a record high of 21. Starting in 2008 there has been a gradual reduction of market participants to conclude the current figure. Increasingly away from a structure of perfect competition, this is what is looking for in the first instance the National Commission on Retirement Savings (SAR). With the establishment of the SAR, rules were established for the operation of the market. The main objective was to promote competitiveness, tendency to seek a market structure of perfect competition that permeates its benefits on the amounts of the commissions, the quality and coverage of services in insurance for retirement.

The reality over the past 16 years has shown two contrasting results. One has been effectively reducing commission rates. Some Afores have already reduced up to 23 times their rates. Currently the lowest rate is to the pension of the State Workers Security and Social Services Institute (Pensionisste) which is .99% of annual balance. The other result has been the market concentration in just 11 Afores. The number of existing accounts in the market of Afore is 51 million Mexicans involved in the Mexican pension

system. The market is huge. According to estimates Amafore, the system coverage is 84% for the first quarter of 2013 (AMAFORE, 2014), although personal estimates show a coverage of more than 90% of the EAP.

However, according to the data mentioned above, there are major conflicts in the market of Afores. They are focused on the performance that has taken the market. With regard to performance, there are two very distinct visions; those with positive about vision and those having a more conservative view on the results. In the first case, it is lifted the great amount of a lot of resources found within the system, which is actually a very impressive figure of 147, 000 million dollars. The second largest in Latin America, second only to Chile (AMAFORE, 2014). System coverage is according to the AMAFORE, for the first quarter of 2013 it represented 84% of the PEA (AMAFORE, 2014).

However, if it is analyzed with more detailed these figures, interesting conclusions are obtained. Comprehensive coverage is easily explained by the obligation to bequeath to register the system. About Mexican law requires all Mexican workers and their employers to open an individual account. Even without knowledge of the worker. In this case, CONSAR assigns an account under its criteria along with its resources to an Afore. The current amount of assigned accounts of this type exceeds 11 million accounts (CONSAR, 2014). Table 1 contains the total amounts of the Mexican pension system administered by the Afore.

# Table 1. Resources registered in Afores

Recursos Registrados en las Afores  
(Cifras en millones de pesos al cierre de abril de 2014)

Afore	Recursos Administrados por las Afores					Cuota de mercado
	Recursos de los Trabajadores			Capital de las Afores <sup>4</sup>	Total de Recursos Administrados por las Afores	
	RCV <sup>1</sup>	Ahorro Voluntario y Solidario <sup>2</sup>	Fondos de Previsión Social <sup>3</sup>			
Azteca	23,742.5	29.6		282.7	24,054.8	1%
Banamex	360,620.4	2,725.2		2,953.0	366,298.6	17%
Coppel	87,388.1	181.8		757.3	88,327.2	4%
Inbursa	97,854.1	496.5		1,285.6	99,636.1	5%
Invercap	132,717.1	428.8		1,113.6	134,259.5	6%
Metlife	63,504.7	455.7		560.8	64,521.2	3%
PensionISSSTE	94,618.5	4,685.4		870.1	100,174.0	5%
Principal	139,016.7	445.6		1,231.0	140,693.3	7%
Profuturo GNP	257,987.7	1,596.1		2,328.5	261,912.4	12%
SURA	302,166.1	1,818.1		2,541.7	306,525.9	14%
XXI Banorte	516,688.5	7,453.2	28,147.1	4,474.4	556,763.3	28%
<b>Total</b>	<b>2,076,304.6</b>	<b>20,316.0</b>	<b>28,147.1</b>	<b>18,398.6</b>	<b>2,143,166.4</b>	<b>100%</b>

Cifras preliminares

Montos calculados con los precios de las acciones de las Siefores registrados en la Bolsa Mexicana de Valores el 30 de abril de 2014.

<sup>1</sup> Retiro, Cesantía en Edad Avanzada y Vejez de trabajadores cotizantes al IMSS y al ISSSTE. Incluye los fondos de Retiro del SAR 92 de los trabajadores cotizantes al IMSS y los recursos del SAR ISSSTE.

<sup>2</sup> Incluye Aportaciones Voluntarias, Aportaciones Complementarias de Retiro, Ahorro a Largo Plazo y Ahorro Solidario.

<sup>3</sup> Recursos de Previsión Social de entidades públicas y privadas administrados por las Afores.

<sup>4</sup> Recursos de las Afores que, conforme a las normas de capitalización, deben mantener invertidos en las Siefores.

La suma de las cifras parciales puede no coincidir con el total por redondeo.

Source: CONSAR, own calculation of market share

The Afores market problems are limited to low expectations of the calculated amounts that workers will receive. That is a wide coverage of the system but most of these workers do not expect an adequate pension. Even, it is not expected that retirees meet qualifications for a pension for retirement. Regarding a study conducted by the Economic Commission for Latin American Development, it prepared an index called replacement rate (Durán Valverde & Peña, 2011).

It is necessary to define what an Afore is. According to Article 18 of the Law of the SAR: The Afores are financial institutions that engage in regular and professional way to manage individual accounts and channel resources to subaccounts within them in the integration terms of this law so as well as managing investment companies. The product offered by an Afore is the professional administration of resources deposited in the individual account of each employee who is registered in any of the social insurance systems, or who voluntarily holds an account and contribute to this, money for a retirement plan.

According to the law of the SAR (LSAR, 1997) the service provided by

the Afores is to open, manage and operate individual accounts of workers. Within the law it is contained more services to undertake the Afores. However for the purposes of this study, this feature is really significant for the market. It is a good without perfect substitutes off the market, because by government regulation there are no other institutions outside Afores that can manage resources for retirement not considered private institutional savings plans and the product market is essentially homogeneous (Varian, 2011).

All Afores offer the same service for management of individual accounts. The differentiation is in the additional services that may be granted outside the administration. Basically categories of product differentiation focus on customer contact. The category of voluntary savings is exogenous in one opinion to the Afores performance because it depends on the will of the client, not in an improvement in the Afore service. However, as discussed below, any of these categories actually achieves product differentiation because of the attitude and consumer preferences about the service. Again, it is stressed the fact of a virtually homogeneous tradable service.

With these considerations the bidders can only differentiate their service based on the net return they offer. This is obtained by subtracting the gross income obtained, the costs of fees and inflation. The strategies of the bidders can only focus on achieving a higher net return. Since they cannot control inflation, the bidders must reduce their commissions. The reduction of fees has been the leading strategy of Afores. Each year the Afores, over the past 16 years have reduced the amount of their commissions (CONSAR, 2014). However, in reviewing the literature, it has been found that Afores have no real incentive to reduce commissions on a pure market scenario. The lack of financial literacy coupled with the obligation to have an Afore has placed the Afores in a privileged position.

The incentive of the Afores to reduce their commissions comes from government involvement and the industrial organization of the market (Arenas de Mesa & Earn Cornejo, 2001). That is to say, these reductions are determined by the supply side rather than demand. This is in several ways. Another way of incentives is the allocation by the CONSAR accounts. When a worker is registered at IMSS, but do not choose an Afore, CONSAR assign this account to the Afore that then has the highest net return. These accounts have important characteristics that make them attractive for an Afore.

These accounts do not make a market share, i.e., they are not counted in the market share of the Afore. The accounts can be paid with a lower yield than a normal account but are charged the same commission that a standard account. How relevant is the number of accounts of this nature to be real incentives? The accounts assigned amount to more than 20% of the total market accounts, with a quantity of a total of 11 000'000 accounts. Another important strategy of the bidders has been the constant acquisition of competitors. Companies behave as oligopolists because despite the influence of CONSAR in determining rates of commissions, the Afores are not price takers. Rather, they can determine their fees regardless of demand. Market trend to concentrate on few Afores reinforces this argument.

## **INFORMAL INSTITUTIONS IN THE MARKET DEMAND FOR THE AFORES**

WHO ARE THE CONSUMERS? CONSUMERS ARE ALL SENIORS WHO WORK FORMALLY OR INFORMALLY EITHER FOR THEMSELVES OR FOR SOMEONE ELSE AND WHO JOIN THE RETIREMENT SAVINGS THROUGH AN INDIVIDUAL ACCOUNT. ON THE ISSUE OF DEMAND THE PSYCHOLOGICAL FACTORS AND CULTURAL TRAITS ARE SUBSTANTIAL ON ECONOMIC AGENT'S CONSUMER PARTICIPATION IN THE MARKET. IN THIS REGARD THE STUDIES CONDUCTED BY THE MEXICAN ASSOCIATION AFORE (AMAFORE) IN 2011, SHED LIGHT ON THE ATTITUDES OF CONSUMERS REGARDING THE CHARACTERISTICS OF THE TRADABLE SERVICE, AND SHOW THEIR PREFERENCE INDICATORS.

As a general synthesis, it was obtained that consumers attach little or no importance where they keep they retirement savings. The study conducted by the Amafore throws the following results: 57% of Mexicans save; but it is significant that only 21% of these savings are done in the formal financial system. The main forms of saving are the "batch" and "stash" (Asociación Mexicana Afores, 2011) which are hugely vulnerable to inflationary forces and do not generate income. This speaks of a poor-formal financial culture in the Mexican case.

Most respondents in the study only think of saving as a means of generally short-term goals. Building a heritage resources to cope with unforeseen and buying a car are the priorities of savings. Only 6% of respondents reported having considered saving for retirement (Asociación Mexicana Afores, 2011). The findings are very revealing. 72% of respondents have not thought about retirement. Moreover, 62% of respondents are confident that God will help them in their retirement and another 49% think that their children should take care of them in the future. Finally, the firm belief that the government should take care of people in their old age prevails (Asociación Mexicana Afore, 2011).

It is thought, as a result of these findings that the economic and consumers agents are not visiting traders to the market because they really want; but because they are required to. Moreover, the cultural traits of the Mexican worker in relation to his savings show little concern for their future consumption which it is far outweighed by the desire of present consumption. The result is a market of indifferent and uninformed consumers who do not get or expect to get the best Afores market. The interaction of demand in the Afores market happens when a new employee enters the system. This should be recorded immediately in any Afore. If not chosen one, as mentioned above, CONSAR allocates an Afore to the new employee.

The only new employee's appearance and participation is choosing who will be his bidder, but cannot exit the market. At least, he cannot exit the Afores market without serious damage to his future income. That is to say, there is no incentive to exit the market, when the employee has the chance to be inside and yet no importance is given either to qualitative differentiation which is proposing government agencies or as he is being considered no to be aware and has verified the amount of commissions. The market liability for the demand side is another important to consider when the consumer is generally indifferent to the options presented by the market for cultural reasons and a very low long-term financial culture.

## **REGULATORY FRAMEWORK, FORMAL INSTITUTIONS**

Operating rules that were created to regulate and provide certainty on permitted and impermissible practices are contained in law SAR and operating rules for Afore and Siefores and multiple circular issued by the

CONSAR. The most important element in the catalog of rules established in the LSAR is the imposition of a limit on the market share for Afores. This limit set to 20%, provides a special character to a market that controls resources equivalent to more than 2 trillion dollars, and it is a must to acquire product.

It is firmly believed that a restriction of this kind is naturally opposed to finding a perfectly competitive market and that is by no means the only mechanism, or the most appropriate to find the stated objective. It is also believed that the time came when the market only it is composed of 5 large firms, which control each one its respective market shares of 20% and undoubtedly the commissions tend to rise. Two things will occur in this regard. It will be modified profoundly the operating rules and fees to reach a tipping point where the only way will be rising. This is for the simple nature of demand. Afores have the need to discriminate consumers according to their willingness to pay for the service.

Another important question regarding the restriction on this 20% maximum market share is how this is counted. According to the LSAR, market share should be measured by the number of accounts, not the size of the resources. Clearly there are accounts that represent perhaps monetarily speaking, 2, 3, 4 even 10 times the amount of an individual account of a low-income worker. It is here where it is argued that at some point the Afores tend to the discrimination by the amount of the management fee accounts.

## **REGARDING TO MARKET SHARE LAW**

### **MENTIONS THE FOLLOWING (LSAR, 1997):**

Article 26 of the Act shall be determined on the number of individual accounts registered in the National Database SAR over its expected growth, corresponding to workers affiliated to IMSS and ISSSTE. Shall not be considered in market share:

I. The individual accounts which registration and control carry on the service providers;

II. Pension accounts or

III. The individual accounts identified with the attribute of pensioner account.

The Commission shall notify to the administrators the limit to the market share, and any amendments thereto.

## **FOR PURPOSES OF THE PROVISIONS OF THIS ARTICLE:**

Administrators who have reached the limit for participation in the market may continue to register workers or receive transfers, unless they have authorization from the Commission to exceed it, and

b. Administrators that capture the maximum number of authorized accounts in accordance with the limit to the participation in the market can keep them even if the Commission subsequently determines a lower fee for each Administrator.

The bureaucratic process established for the creation of new Afores is very restrictive. They are effective legal entry barriers. These are contained in the applicable law (DCGMOS, 2012). There is also a concept that determines much of the market dynamics of Afores, the handover. The Afores can pass the individual and their resources to other Afore consumer upon request. This is one of the main drivers of market competition. With little product differentiation and the decreasing remaining market segment, competition must necessarily go towards attracting other Afore accounts. Market forces have actually been distributed between Afores and the regulatory authority. However, it is suspected that the force of the Afores in a moment determined widely at one point exceeded authority. There is a pressing need for the active participation of consumers in the market.

## **CONCLUSIONS**

In this paper we have analyzed the market of Afores. A newly created market and still has not been fully established. It is a market with large areas of opportunity for research.

Mexican workers have not been actively participating in the market Afores since the beginning and have not been great progress in changing the financial culture of the applicants of financial service retirement savings over the years. All by large barriers that it still become inefficient market by demand, the main of them are rooted in cultural traits on the previous retirement model, which despite having more than 16 years of disuse, still

is in the minds of many workers, including youth, as applicable. However despite the passivity of the plaintiffs, from the supply side, the producers have had a constant activity, based on two leading strategies, reducing prices and colluding with competitors.

In this market, government involvement has been very active and ongoing, no decision has been taken on the market where is not engaged CONSAR. This has largely supplemented role as a counterweight to sluggish demand. But it can be thought that in the future it will not be enough and the market will fall to enormous oligopolies that they should take the whole market. Also in the last 4 years has disappeared one Afore at least every year due to excessive government authority over mergers.

Reviewing the history of the formation of the Afores, legal barriers to entry and minimum efficient scale have taken the market and inhibit proliferation Afore. Existing Afores are always backed by large banks and financial institutions. There is no Afore ever born. All of them by such strong legal restrictions that can usually only get around banks. The requirement of the system, very poor unemployment insurance and a lot of workers, are the main causes of such huge amounts that handles the SAR. Unfortunately we could not say that goodness is due to the market. Legal institutions are the ones that have defined this outcome.

Finally, it is concluded that is a market which still needs to develop, where portfolio diversification is pressing. Should be reviewed restrictive conditions of market shares, and create legislation encouraging more market entry of new competitors, with the reduction of entry barriers legal and informal. Also to modify aspects that are opposed to the healthy development of market strategies, such as those assigned accounts that do not make market share and the opening of the authority to mergers.

Finally, it is considered the most important. Steps should be much faster in creating awareness and financial savings culture in the formal financial sector. Informal institutions that are reflected in the cultural traits of Mexicans inhibit the efficient performance of the market Afores. Simply this system of individual accounts cannot function without the active participation of the applicants.

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