

# The industry of Pension Fund Administrators in Honduras

*La industria de los administradores de fondos de pensiones en Honduras*

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## ABSTRACT:

The objective of this paper is to analyze the Pension Fund Administrators (AFP) industry in Honduras and its impact on the economic system and the Economically Active Population (EAP) of the country. To carry out this research, a cross-sectional approach was used, using bibliographic sources and statistical data from Honduran governmental entities. The study focuses on examining the data provided by these governmental institutions to analyze the economic behavior generated by the PFAs. The results reveal a growth in investments and in the generation of employment for the EAP, indicating a positive impact on the country's economy.

Keywords: Pension Fund Administrators, Economically Active Population, Investment.

## 1. Introduction

An analysis of the Pension Fund Administrators (AFP) industry reveals that its functioning and operations are based on the model of contributions from the Economically Active Population and the investment of funds in various financial instruments regulated in the country (Toan, *et al*, 2023). This financial structure contributes to the development of the financial markets by promoting the administration and regulation of the funds, which implies that the AFPs must comply with rigorous requirements and standards for making investments. This supervision guarantees diligence in the management of resources and seeks to protect the interests of members and the economic development of the country.

The direct relationship between the contributions made throughout the working life and the benefits granted is one of the fundamental pillars of the pension system. This approach provides adequate incentives to work, save and contribute during the active stage of working life. In this way, an important stock of financial savings is generated in the economy, which contributes to financing a higher level of capital, stimulates the growth of the Gross Domestic Product (GDP) and increases wages in the country, generating actions that contribute to

sustainable development (Saiz-Álvarez, *et al.*, 2020). This accumulation of financial savings strengthens the national economy by providing additional resources for investment and the development of productive projects.

In addition to the economic impact, PFAs also play an important role in generating employment, knowledge management and improved learning in institutions if they are well managed (Acevedo, 2014). The growth of the AFP industry implies a greater demand for professionals and experts in the financial field, which contributes to the generation of new jobs in the sector. Likewise, the investment of pension funds in various financial instruments promotes economic activity in different sectors, which translates into greater dynamism and economic development at the national level. In this sense, the AFPs not only have a direct impact on the EAP through the generation of employment, but also contribute indirectly to the development of other economic sectors through the investment of their resources (Villar, *et al.*, 2019).

This document performs an analysis of the Pension Fund Administrators (AFP) industry in Honduras, examining its behavior at the global, regional and national levels. The operation of the AFPs is based on member contributions and the investment of funds in various financial instruments. The objective of the research is to evaluate the economic impact that this industry has had in Honduras, showing inclusive growth for the Economically Active Population. As Morales Carrasco (2017) points out, pension funds contribute to the development of financial markets by having funds under regulated management, which implies that private administrators must act diligently and comply with rigorous requirements to make investments.

Following the literature review and the comparative analysis of the PFAs, it is concluded that their functioning and operation are based on the contributions of the EAP and the investment of capital in different regulated financial instruments in the country. Furthermore, additional benefits are observed, such as the generation of employment, greater investment and growth in the Gross Domestic Product (GDP), which implies a general growth of the country's economy. By directly linking contributions throughout the working life with the benefits granted, the pension system provides adequate incentives (work, savings, contributions) during the working stage, generating an important stock of financial savings in the economy. This, in turn, allows financing a higher level of capital, GDP and wages (Central Bank of Chile, 2016).

## 2. Background

### 2.1. World Pension Fund Administrators

The transition from social insurance to social protection begins with the creation of social insurance in Germany, among the main milestones is the protection of workers against social risks of old age, disability, survival, accidents (at work) and illness it was the beginning of social insurance in Germany and the world (Organización Internacional de Trabajo, 2009). The Pension Fund Administrators (AFP) are in charge of collecting and managing the funds corresponding to pension contributions (Federacion de Internacional de Administradoras de Fondos de Pensiones, 2013).

It could be argued that the level of contributions is not controlled by the pension fund, but rather by the sponsor of the plan and the participants, that is why the flexibility

of the contribution rates is a factor that determines the ability of the pension fund to make against possible losses in the asset portfolio (Kouwenberg, 2001). The author expresses that the restricted contribution policies are limitations on the amount invested in risk assets, starting from wanting to remain up to date with the solvency requirements, for his part, said interdependence between the contribution policy and investment policy must be explicitly modeled to provide valuable information.

As a result of the investigation Mayer, Schoors, & Yafeh (2005), they suggest that the relationship of the geographical focus with the sources of financing is more pronounced in Germany, at least with regard to the four countries of the study taken as a sample, nor the general patterns of investment nor the relationships between funding sources and activities suggest that international differences in Venture Capital (VC) activities are attributable to commonly used classifications of financial systems. The authors note that, in particular, there are no evidence that financial institutions invest in riskier early-stage investments in bank-oriented economies thus indicates that these represent only a small proportion of the total cross-country and within-country variations in VC activities.

In contrast to the previous paragraph, the CR is the temporal stability existing between the relationship of profitability and systematic risk (Fructuoso, 1998). In the reform process to the pension funds in Europe Bonoli & Palier (2007) they classify it in four stages where the first one was financed by means of debt (before some deficit in the pension plans in the 80's), followed by an increase increasing contribution rates that forced policy makers to act and adopting moderate reductions, then another factor called provision financed and

finally the reforms aimed at strengthening financing through compulsion or stronger incentives (Vergara, *et al.*, 2019).

On the other hand, Lodge (2007), analyzes the Open Coordination Method, which is based on 3 basic components in pensions and society: 1 standard setting, 2 information gathering and 3 behavior modification, also concludes that governance does not Hierarchical also occupies a prominent place and is based on the voluntary provision of information, directives and other norms among the participants.

In terms of pension provision, this change triggers unprecedented flows of loanable money capital into the capital markets in the form of retirement savings, where banks are at the center of these processes, offering Thus, mutually beneficial and fully competitive investment banking services are provided to companies, on the other hand, they pursue the provision of various investment fund instruments to ordinary savers, who systematically receive very unfavorable conditions in these services (Dos Santos, 2009).

On the other hand, the pension system in Nigeria is defined by: 1 Principle [income from the labor market], 2 Coverage [the EAP except the informal sector], 3 Contribution [made up of 15 % of monthly income, employer and employee], 4 Financing of the system, 5 Global payment benefits [periodic monthly or annuity purchase], 6 Replacement of objective income [freedom of income decision], 7 Administrators Depositories of Pension Funds and Administrators of Pension Funds 8 Regulatory body National Pension Commission (Federal Government of Nigeria, 2004).

On the other hand, in Ghana 1 Principle [jobs and income or individual], 2 Coverage [mandatory to the entire EAP formal or

voluntary sector all citizens], 3 Contribution [employer and employee], 4 Financing of the system, 5 Benefits global payment [periodic monthly or single payment], 6 Replacement of objective income [risk income and intergenerational transfer, encourage savings in the informal sector], 7 Administrators, Pension Fund Managers and custodians 8 Regulatory body National Pensions Regulatory Authority (Government of Ghana, 2008).

Based on the previous paragraphs, Kpessa (2011) concludes that despite the reform and coverage of the pension programs in both countries, this covers less than 20 % of the EAP, they attribute it to the fragility of the national financial markets. and from the private sector, the excessively bureaucratic institutional design of the new pension systems, the lack of adequate knowledge about markets and financial instruments, as well as general administrative weaknesses are important factors that need to be addressed.

In conclusion, it focuses on the dominant political logic in Western Europe, in which it is highlighted that market-oriented pension funds, their sustainability resides in personal savings, commercially invested in financial markets under Professional business management leads to a number of stated advantages including flexibility, actuarial fairness, portability, potentially high returns, and freedom of personal choice (Ebbinghaus & Whiteside, 2012).

For their part, Zandberg & Spierdijk (2013) conclude that in developing countries increases in financing rates could lead to moderate long-term economic growth, countries with low levels of pension assets seem to grow faster than countries high income according to the convergence literature. The authors indicate a positive effect of changes in the degree of financing on economic growth,

although in reality it is due to the nature of the measure used.

In an investigation carried out in Austria Staubli & Zwimuller (2013), they conclude that the early retirement age has moderate repercussions in disability programs (and other welfare programs), on the other hand, in employment it was higher among healthy workers and High-wage compared to low-wage workers in poor health retired through the disability insurance program or closed the gap to the new early retirement age by getting unemployment benefits plus the annual reduction in public spending.

Like Austria, Australia carried out similar reforms in the retirement age of women [characterized chronologically by year of birth], with this change a decrease in social security wealth was observed, in turn An inversely proportional relationship is determined between the age of eligibility for the old-age pension with respect to the probability of retirement, the overall reduction in public spending on liabilities was substantially less than that implied by the confiscation of the mechanical age pension. The authors, in turn, set out to further examine the effect of security reforms on joint decision-making within families [for example, do the rights of a family member affect labor supply?] (Atalay & Barret, 2015).

It is appropriate to incorporate risk measures [due to the need to evaluate it], three objectives are reflected: the first to illustrate some types of risk measures, the second to provide a more intuitive definition to the decision maker and finally to propose risk measures. in multiple periods, based on the above, the authors conclude that there is an advantage in the modeling of Expected Conditional Risk Measures, allowing the flexibility to choose different risk levels at

different stages, despite facing a neutral problem with additional variables (Homem-de-Mello & Pagnoncelli, 2016)

In Denmark, the early retirement plan was raised, it guides people with poor health and limited work capacity, therefore, the expectation of working life. The authors hypothesize that lack of membership in early retirement would force people in poor health to use more sick leave or put them at greater risk of unemployment (Pedersen, Bjoner, & Jakob, 2017).

In relation to the information on the three basic components of pensions according to Klimek, Kucera, Necasky, & Dusan (2018), externalizes that the Czech Social Security Administration (CSSA) is the organization of the social Administration, in charge of collecting security premiums social security [including pension insurance, health insurance and the state employment policy], said institution published yearbooks in PDF to be printed, these include transcendental information such as types of pensions, number of pensions paid, among other.

## 2.2. Regional Pension Fund Administrators

As they conclude Sayce & Gold (2011), about pension funds, where they indicate that they are the result of a considerable amount of available patient capital and the long-term orientation of the return on investment, likewise, the socialization of capital contrasts sharply with the individualized and deregulated status that capital occupies in the Anglo-American model, and undermines the general applicability of that model to Canada as a whole (Kumar *et al.*, 2021).

The intensified fiscal austerity, due to increases, has an effect on the three parts of the budget in GDP, pension spending and

investment spending, in addition, the fiscal pressure causes cuts in discretionary types of public spending, such as public investments, conversely, the share of the budget spent on social benefit programs such as pensions may still increase, as they are protected by institutional lock-in and strong client groups (Breuning & Busemeyer, 2012).

## 2.3. Pension Fund Administrators of Honduras

The Pension Fund Administrators (AFP) are an entity constituted and organized in accordance with the Law in charge of the management of the Pension Funds, Ley del Regimen Opcional Complementario para la Administration de Pensiones (2002) the objective of the pension funds is to pay a monthly payment, in the form of a "salary", by way of retirement, old age, orphanhood, death or disability to people who throughout their productive lives contributed to this fund, these can be from public administration (controlled by the state) or private (controlled by companies) (Sandino, 2013).

The objective of the pension funds in terms of economic growth is to strengthen the capital market by offering increasing amounts of savings, which are distinguished by being long-term as they are collected throughout active life of wage earners, unconsumed income must be valued, or at least maintain its real value, in order to return to workers at the end of their working lives. The author indicates that the valuation takes place through the appropriation of a proportion of the companies' profits in exchange for providing long-term financing (Levy, 2006).

It is appropriate to indicate that in order to operate an AFP, it must establish a fixed capital corporation for an amount of L. 20,000,000.00, in accordance with the existing rules of the



Commercial Code, be authorized by the Central Bank of Honduras, subsequently obtain favorable opinion of the National Banking and Insurance Commission; the pension plan that it establishes, as well as the returns that the investments of said Fund produce, after deducting the corresponding commissions according to the respective affiliation contract reflected in the CIC, the AFPs will charge the

ordinary or extraordinary commissions of in accordance with the Law and the respective affiliation contract, which are generated from the management of contributions, investment of the fund, distribution of the profitability generated by the fund, among others (Ley del Regimen Opcional Complementario para la administracion de Pensiones, 2002).

**Table 1.** Pension Funds in Honduras

Institute	Publics	Privates	
	Legislative Decree No.	Institutions	Resolutions
Instituto Nacional de Previsión del Magisterio (INPREMA)	247-2011	AFP Atlántida, S.A.	Resolutions No. 215-6/2003
	267-2013 (reform)		
Instituto de Jubilaciones y Pensiones de los Empleados y Funcionarios del Poder Ejecutivo (INJUPEMP)	357-2013	FICOHSA, Pensions, S.A.	Resolutions No. 534-12/2014
	130-2014 (reform)		
Instituto de Previsión Militar (IPM)	167-2006	BAC Pensions, S.A.	Resolutions No. 80-2/2016
Ley de Seguro Social (IHSS)	140 (year 1959) 80-2001 (Reform)	AFP Occidente S.A.	
Institución Nacional de Previsión del Social de los Empleados de la Universidad Nacional Autónoma de Honduras.	209-2004 (Organic Law of the UNAH).		
	Regalement General del INPREUNAH		

Source: Prepared by the researcher based on the Statement on Authorized Institutions (Comisión Nacional de Banca y Seguros, 2020).

The AFPs must have an information system for the registration and management of individual accounts, register separately the accounting of the Managed Fund and the

corresponding managing entity, carry out periodic actuarial evaluations of the systems and plans in accordance with the CNBS, for this The financial statements and the main

indicators of the Fund will be published every three months in two national newspapers (Ley del Régimen Opcional Complementario para las Administracion de Fondos Privados de Pensiones, 2002). The collection model, based on a set of processes and activities that range from the receipt of payment forms and culminates with the deposit and sending of funds (Federacion Internacional Administradoras de Fondos de Pensiones, 2011).

Based on the above, the International Federation of Pension Fund Administrators (2011), lists the collection models: 1) Centralized Collection in this there is an entity (public or private), different from the administrators, responsible for collecting pension contributions and distribute them to the different AFPs. 2) Decentralized Collection, here the intermediary (Centralized Collection Institution) is eliminated, and it becomes the responsibility of each AFP from typing, debugging data to crediting the individual accounts of affiliates.

The AFPs are an industry that generates higher returns for their affiliates and thus obtain a better quality of life at the time of retirement, for this, investments are made in financial instruments, such as shares, bonds, certificates of deposits, among others, likewise, it is a multi-fund system because there are different pension funds such as capital protection [very low return, like risk], capital preservation [low return, like risk], and a mixed [higher return and higher risk] (Profuturo, 2020). In addition, joining an AFP has the benefit of obtaining an Individual Capitalization Account CIC [profitability produced by the AFP], profitability or performance generated by contributions and paid into the CIC, decent pensions [for contributions made in working life (Asociación de AFP, 2018).

As indicated by Attanasio & Rohwedder (2003), the wealth effect of pensions depends on age, for large fractions of the population the substitutability between pension and financial wealth is relatively high, this result agrees with the prediction basic life cycle model. However, it does not apply to younger consumers, who are likely to be affected by liquidity constraints, nor to the Basic State Pension (Ullah *et al.*, 2021).

Increased size of pension funds and their ability to make changes to their investment portfolio, large pools of capital that will invest in pension funds severely restrict their freedom to move in and out of individual stocks without risking a destabilization in security affecting prices, therefore, pension funds should strive to improve their returns in line with macroeconomic factors that impact the general health of the economy (Sethi, 2005).

The design of pensions affects the labor market, economic growth, risk distribution and income distribution, even by generation and gender, therefore, there is no efficiency gain in designing a part of the system without distortions if the distortions are elsewhere to achieve insurance and redistributive objectives (Vimal, Kandasamy, & Duque, 2021). The authors suggest that there is no gain in obsessing over a second-tier actuarial pension given the need for a first-tier poverty alleviation element, analysis of distributional effects must consider the progressivity of the system as a whole, plus than that of each element (Barr & Peter, 2009).

### 3. Materials and Methods

The Pension Fund Administrators in Honduras are growing industries, they were established in the private sector from September 2015 to date in Honduras, mandatory for workers in that sector, as well as workers in the public sector. This document is developed to review

the modalities, forms of operation, among other topics about the new industry (González-Díaz *et al.*, 2021). Specifying the concept of secondary sources according to Lafuente Ibáñez & Marín Egoscozábal (2008), in its publication *Methodologies of Research in the Social Sciences*, defines secondary sources as data coming from governmental, industrial, or individual institutions. Consequently, from the above, for the preparation of this document, a broad review of journals, state reports and other bibliographies was carried out, so it is documentary in nature and is developed through a non-experimental design because variables are not manipulated, with a collection of data with secondary sources described above.

All of the above, based on the growth of the AFPs, which are contained in the Tertiary Sector, which despite the family protection and that it has had an impact, in the three economic sectors of the country, in the tertiary sector we can say that financial intermediation remains positive, as indicated by BCH in the Quarterly Report on Gross Domestic Product. Additionally, to the documentary review, the interview was used as a data collection instrument applied to the AFP agents and to obtain a benchmarking of them, for which Lafuente Ibáñez & Marín Egoscozábal (2008) y Acevedo-Duque *et al.*, (2021), defines all information as primary sources re-collected directly with the data for the development of our.

It is appropriate to indicate that the design of this is transversal or transectional because for the verification of the phenomenon it is only required that they be measured once in time, making use of the exploratory, descriptive types, it is convenient. Transectional or cross-sectional research designs collect data at a single moment, at a single time. Its purpose is to describe variables and analyze their incidence and interrelationship at a given

time. It is like “taking a picture” of something that happens (Liu & Tucker, 2008). It should be added that for Jansen (2013), and Müller *et al.*, (2021), in his contribution to the *Paradigma* magazine, he provides a concept about the population under study, it can include the inhabitants of a city or a country, or members of a specific category, such as teachers or players. of left-handed tennis, among others (Gonzalez-Diaz *et al.*, 2022).

#### 4. Results

With the approval of the Social Protection and Security Framework Law in 2015, movements arose in the national bank, where financial groups carry out the necessary processes to establish an AFP and obtain the operating permit from the Central Bank of Honduras. as stated in the Law on the Optional Supplementary Regime for the Administration of Private Pension Funds. With said approval, a 100% increase in the creations of the AFPs was generated, it can be seen that by 2015 there were only two, the oldest is the AFP of Atlántida with more than twenty years of being in the market and being the most recent to join the AFP Occidente, which has been operating since December 2019. In turn, it is possible to convert the market from a monopoly to an oligopoly, where there is healthy competition between them.

With the events of the creation of more AFPs, the increase in offices and jobs generated between 2015 and 2019 was directly proportional, with a percentage variation of 0.48 in employment. Otherwise, when carrying out the analysis between the range of years endorsed in the Honduras report in figures from 2017 to 2019, a negative percentage variation of 0.38 is reflected, in other words, the unemployment that occurred during those years.

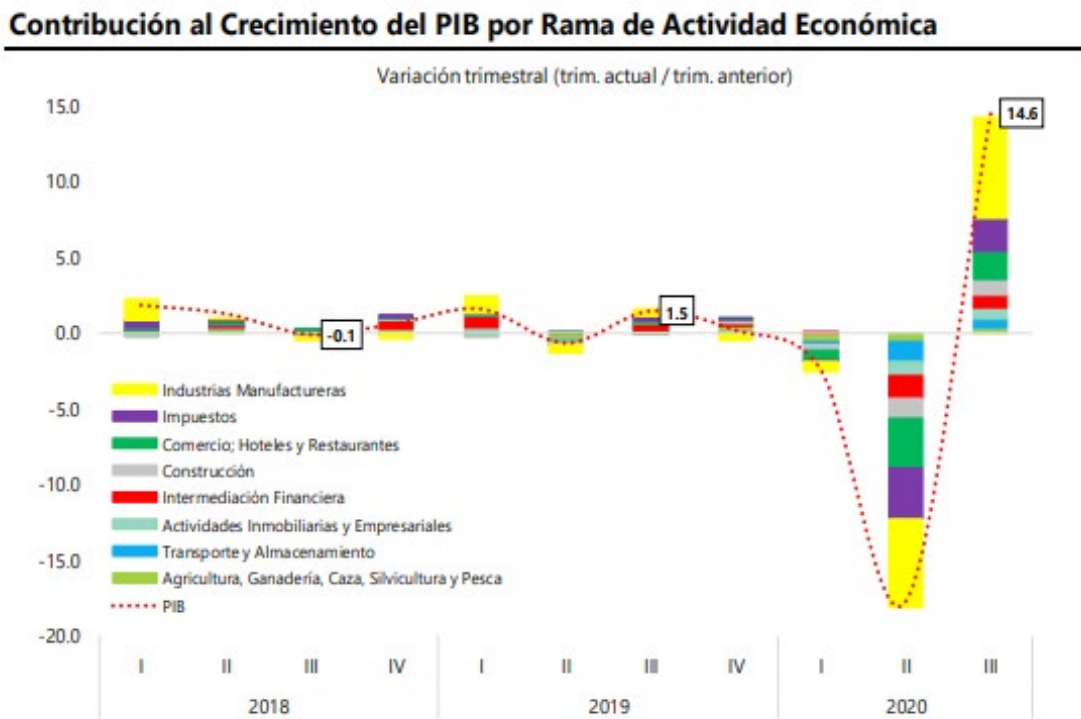


The GDP for Financial Intermediation, Insurance and Pension Funds increased 2.7%. The behavior in Financial Intermediation was favored by the increase in commissions on the credit portfolio of the banking system, especially those related to loans, credit cards, deposits, and other financial operations. Likewise, the increase in the GVA of Insurance and Pension Funds was associated with the greater contracting of collective life insurance policies and allied lines, together with the improvement in the interest received on the investments made by the pension funds (Banco Central de Honduras, 2016, p.3).

In its Annual Report Honduras in Figures 2017-2019 by Banco Central Honduras (2019), it explains the increase in GDP as follows: the gross added value of Financial Intermediation, Insurance and Pension Funds registered growth of 3.8%, explained by higher disbursements of loans granted for consumption, real estate, commerce and

industry, contributing to the generation of income from interest and commissions, coupled with the commercial movement that boosts commissions from the use of credit cards. Insurance companies and pension funds reflected a smaller drop —compared to the previous quarter— in income from group life premiums, accidents and illnesses, and motor vehicles; however, expenses for compensation increased —particularly— those related to collective life, health and hospitalization insurance.

An interesting fact is that with the entry into force of the Framework Law on Protection and Social Security is the rise in the Gross Value Added of Insurance and Pension Funds, this due to the direct relationship between the two, due to the contracting of policies group life insurance and allied lines, coupled with the improvement in interest earned on investments made by pension funds (Banco Central de Honduras, 2016).



Source: National Accounts Division, Department of Macroeconomic Statistics, BCH

In the third quarter of 2020, an increase in the country's economic system is denoted, due to the reopening (end of the family shelter), where everything equivalent to financial intermediation where the AFPs are observed in red they are implicit and due to the fact that they, in the same way that banks grant consumer loans. According to the annual report of Honduras in Figures 2020, insurance companies and pension funds reflected a smaller drop - compared to the previous quarter - in income from group life premiums, accidents and illnesses, and motor vehicles; however, the expenses for indemnities increased —particularly— those related to collective life, health and hospitalization insurance (Banco Central de Honduras, 2020).

Despite the family protection to which the population was subjected since March 16, 2020, it is observed that Financial Intermediation, Insurance and Pension Funds continued to increase from the IV quarter of 2019 to the I first quarter of 2020, for the In the second quarter, the drop in GDP is denoted, this due to the family protection, which meant the total closure of the country except for the health and mass consumption item, despite the health emergency, the country was reopened for the third quarter, this lead to an increase. This is related as mentioned in previous paragraphs, at the time that trade was activated, loans and investments increased.

DEMOGRAFIA Y VIVIENDA	2013	2014	2015
Population Economically Active Employed (in thousands of people)	3,487.0	3,460.9 <sup>1/</sup>	3,647.6

Source: National Accounts Division, Macroeconomic Statistics Department, BCH.

**Table 3.** Horizontal Analysis PEA 2014-2015

2014	2015	Variation	Variation %
3,406.90	3,647.60	240.70	7.07
2014	2015	Variation	Variation %
3,406.90	3,647.60	240.70	7.07

Source: Prepared by the researcher based on the Report of Honduras in Figures 2013-2015

In 2015, the contributions to the AFPs were implemented in a mandatory manner, with the report of Honduras in figures we can see that the EAP Employed increased by 7.07 %,

in accordance with Table number 3, that indicates the growth of employment in the Finance and Insurance category.

**Table 4.** Population Economically Active Employed 2017-2019

DEMOGRAPHY	2017	2018	2019
<b>Economically Active Population Total <sup>1/</sup></b> (in thousands of people)	<b>4,093.5</b>	<b>4,336.4</b>	<b>4,220.3</b>
<b>Population Economically Active Employed <sup>1/</sup></b> (in thousands of people)	<b>3,820.0</b>	<b>4,090.7</b>	<b>3,979.8</b>
<b>By Economic Activity</b>	<b>3,820.0</b>	<b>4,090.7</b>	<b>3,979.8</b>
Agriculture, Livestock, Hunting, Forestry and Fishing	1,262.5	1,294.6	1,212.3
Exploitation of Mines and Quarries	13.1	6.3	13.9
Manufacturing industries	518.7	549.8	537.1
Supply of Electricity, Gas, Steam and Air Conditioning	4.9	4.6	10.9
Water Supply, Wastewater Disposal, Waste Management and Decontamination	22.5	18.7	28.8
Construction	216.8	230.0	245.5
Wholesale and retail trade, repair of motor vehicles and motorcycles	699.6	749.6	762.8
Transport and Storage	119.7	126.5	120.0
Lodging and Food Service Activities	182.2	210.6	184.8
Information and Communications	27.2	32.7	27.8
<b>Financial and insurance activities</b>	<b>38.3</b>	<b>44.3</b>	<b>42.9</b>
Real estate activities	8.2	5.7	5.1
Professional, scientific and technical activities	25.5	35.9	38.4

**Table 5.** Horizontal Analysis PEA 2018-2019

Description	2018	2019	Variation	Variation %
PEA	4,336.40	4,220.30	-116.10	-2.68%
PEA employed	4,090.70	3,979.80	-110.90	-2.71%
By heading				
Financial and insurance activities	44.3	42.9	-1.40	-3.16%

Source: Own elaboration of the researcher based on the Honduras Report in Figures 2017-2019

In the BCH report that covers 2017-2019, it has undergone changes from the period 2015 to 2019, this is due to the fact that the EAP and Occupied EAP are reflected, their distinction is the fact that the latter are people who have a job. It can be concluded that there

was a 2.71 % drop, this is due to personnel cuts, which was faced due to the 2019 health emergency. The Employed EAP that works in the Financial and Insurance sector represents 1.08 % of the total.

**Table 6.** Difference between the EAP and the EAP employed

PEA	PEA employed	% Employees
4,336.40	4,090.70	94
4,220.30	3,979.80	94

Source: Own elaboration of the researcher based on the Honduras Report in Figures 2017-2019

Starting from the base, with the Report of Honduras in Cifra 2017-2019 and with the new information that is added, it is observed that 94 % have a job, distributed in different areas in which agriculture stands out, livestock, forestry, and fishing, which belongs to the informal sector and represents 30 % of the Employed EAP, as can be seen in Table 4.

For affiliation, you need to fill out the application and present identification, define in which currency you want to contribute to Lempiras the minimum amount is \$10.30 (equivalent in national currency) that generates 9.5% interest and in dollars the minimum amount of \$20.00 that generate 4.5 % interest and a charge is made for administrative expenses of 10 % and 3.65 % respectively of the monthly contribution. Contributions can be made by payment over the counter, debit to a card (credit or debit), by not contributing for 6 consecutive months the account is inactivated and returns are halved (Agente Atlantida, 2020).

In the case of AFP Ficohsa, you need to fill out the affiliation form, present the RTN and identity, define in which currency you want to contribute in Lempiras that generate 9.7 % interest and in Dollars that generate 5.9 % interest and makes a charge for administrative expenses of 9 % and 4.65 % respectively of the monthly contribution, there are no minimum contribution amounts. One benefit of obtaining a pension fund is the tax shield (Agente FICOHSA, 2020).

For affiliation, you need to fill out the application and present identification, define in which currency you want to contribute in Lempiras the minimum amount is \$10.30 (equivalent in national currency) that generate 10 % interest and in dollars the minimum amount of \$20.00 that generate 7 % interest and a charge is made for administrative

expenses of 9.65 % and 4.65 % respectively of the monthly contribution. Contributions can be made by paying over the counter, debit to a card (credit or debit) and through the payroll. By being a member for a minimum of one year, you can request a loan under the following conditions: 1) 85 % of the contributions, 2) with an interest rate of 11.5 %, 3) the term will depend on the amount requested. Finally, the affiliate will receive an electronic user and thus review his Account Statement and senior citizens do not pay administrative expenses (Agente BAC | Pensiones, 2020).

With its recent entry into the AFP market, Occidente provides its services to affiliates offering rates of return of 8.82 % and 4 %, depending on the denomination of the account in Lempiras and Dollars respectively, the minimum contributions are \$10.30 (currency equivalent). national) and \$20.00. Contributions can be made by payment over the counter, debit to a card (credit or debit) and through a labor payroll, it does not yet have any kind of financing.

## 5. Discussion

As indicated by Defau & De Moor (2019), the results analyzed with the findings: confirm the importance of portfolio diversification behavior and the positive effect of interest rates on alternative assets, and more specifically on hedge funds, the results show that the pension funds with more active participants have more active risk. This observation is in line with life cycle investment theory according to Campbell & Viceira (2002): pension funds with younger participants may have more active risk, since younger workers—compared to older workers—may benefit more diversification between its human capital and financial capital.

An increase in the guaranteed minimum return on the savings pension is bad for the

intergenerational distribution of risks; in fact, this change has a negative impact on the certainty of the equivalent return on the pension plan (Rajak *et al.*, 2022). Because shareholders are more exposed to financial risk to the downside, the initial equilibrium equity is reduced, with this the optimal exposure to portfolio risk is also reduced, since this risk is shared less efficiently. With future generations, in other words, it translates into a considerable reduction in the expected benefits paid to future retirees (Gollier, 2008).

In the different investigations generated around the pension funds in the different areas studied by the authors, the importance of the investments that are directly provided with the capital growth of the AFP that manages these funds is reflected. The investment policy of the funds in alternative assets indicates a contribution in the following fields: a) a growing interest of pension funds in alternative assets and the drivers of this process, b) the investment behavior in assets alternatives is compared to other risky assets, and c) this is one of the first studies to analyze the different subcategories of alternative assets (Banco Central de Honduras, 2016).

The institutional designs and governance structures of the new pension show that although the defined contribution is framed as a policy instrument to offer adequate levels of retirement benefits, there are significant contextual and contingency factors in both countries that undermine this objective, Kpessa (2011) and Ramírez-Castillo *et al.*, (2022), as indicated by the author, there are different factors for the optimal operation of the AFPs that are difficult to control, such as natural disasters, global economic policies that directly affect a country, especially those in the third world, pandemics like the one we are currently facing called COVID-19.

## 6. Conclusions

The Pension Fund Administrators in Honduras, are part of the tertiary sector specifically contained in financial intermediation, according to the classification of the Central Bank of Honduras, currently they are capitalized through the contributions of their affiliates and by investments in debt markets or public sector bonds. The pension funds are directly influenced by the investment and financial risk committees, specifically by their buying and selling strategies for financial instruments based on the returns they want to obtain and the risks they assume (Cornejo Lopez & Bermudez Pacheco, 2020).

With the support of the bibliography consulted about the AFPs worldwide, they indicate that they are governed by contribution and investment policies, these institutions arise with the need to provide quality of life to the elderly and in turn this it realizes an economic growth where it strengthens the capital markets. With the creation and operation of the AFPs, collateral benefits arise, such as the creation of jobs for the EAP, economic growth, risk distribution, savings options, quality of life and security. Cultural satisfaction is a subjective element of measurement that depends on the perception of fellow citizens in terms of complex aspects such as affective and emotional, the following dimensions are observed: cultural satisfaction within the territories and mobility and security are components of Good live (Acevedo-Duke, Gonzalez-Diaz, Salazar-Sepulveda, & Castillo, 2021).

With a strong emphasis on promoting economic growth, the World Bank (2014), publication emphasized the positive effects that pension privatization could have on capital markets by supporting investment



growth; and claimed that it would provide higher levels of benefits and better incentives for people to contribute; however, it explained neither the very high transition costs nor the many risks for retirees.

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