## THE VOLUNTARY CONTRIBUTIONS MODEL – STUDY REGARDING THE COMPLETION OF THE LENGTH OF SERVICE

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### Abstract

In this article we present the study on "Buying years of service (seniority)" which is a particular case of the voluntary contributions model proposed by the author in a previous work.

In the case study presented in this article, we show the groups of people addressed by Law no.186/2016 for "buying years of service", we quantify the results of applying this legislative measure and we estimate the implications on the evolution of pensions and on the price of the contributions' refunding for the categories of people with incomplete length of service.

**Key words**: pensions, years of service, contributions, length of service, public system, invalidity.

JEL Classification: H55, J32

## Introduction

Filling in social security contributions, proposed by the author since 2012 as the voluntary contributions model, we find it applied today in a more commercial than social variant, also termed by the legislator as "purchasing years of service".

Thus, with the emergence and implementation of the Law no.186/2016 from 27.10.2016, it had been created the legal framework and the possibility of completing the length of service, the working period in current terminology, for a category of people that meets three cumulative conditions:

- not a pensioner and does not have yet the standard retirement age
- they have periods without contributions to the public pension system and they didn't have this obligation in those periods
- the periods without contributions, which they wish to ensure, are included in the last 5 years preceding the starting date of the insurance contract for completing the length of service.

We emphasize the limited enforcement of this law for a period of 6 months, respectively from 27.10.2016 until 27.04.2017.

### 2. Literature review

This study is developed on the foundation of the model built by the author and presented in a previous work (Carp, 2012). Anghel (2015) develops on the instruments of financial-monetary analysis. Anghelache, Manole and Anghel (2014, 2015) are preoccupied with economical, financial-monetary and informatic modeling. Anghelache et.al. (2014) analyze the correlation between population and labor force, following the evolution of the two indicators. Anghelache and Diaconu (2016)

present the evolution of pensions and the number of pensioners. Anghelache (2016), in the context of describing the economical status of Romania, realizes an analysis on the pensions system, private pensions and pensioners. Mitruţ et.al. (2012) consider the benefits of the public pensions system.

## The Analysis of the Public Pensions' System

The analysis of the Public Pensions' System shows that more than 25% of the retired people for the reasons of completing the necessary number of years or of reaching the age limit have failed to complete the working period contributions and have pensions much lower than the average pension.

Statistics show that in 2010 there were 727.560 people receiving pension because of completing the necessary number of years or of reaching the age limit who have not realized the complete length of service. With the increase of the complete length of service in the years 2012-2014, there were over 900.000 people in the position to benefit from pension without having achieved the complete length of service.

Number of pensioners in the state system at the end of 2010-2011

Table nr.1

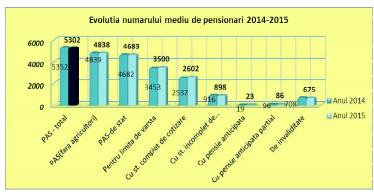
Years	Number of Pensioners- age limit	With complete length of service	With incomplete length of service	
2010	3,226,851	2,499,291	727,560	
2011	3,239,922	2,519,776	720,146	
2012	3,282,244	2,381,731	900,513	
2013	3,316,920	2,415,869	901,051	
2014	3,360,361	2,457,849	902,512	
2015	3,414,956	2,534,558	880,398	

Source: INS

At the end of 2015, from the total number of social insurance pensioners, 3.414.956 people [1] were retirees with state system pensions for old age, of which only 2.534.558 pensioners have achieved complete length of service. The average values are shown in Figure no. 1 - Evolution of the average number of pensioners in 2014-2015.

## **Evolution of the average number of pensioners in 2014-2015**

Figure 1



Data source: INS, data processing by the author

We know that from the time of enforcement of Law no.263/2010 concerning the public pensions' unitary system, to benefit of the old age pension is necessary to achieve two conditions: standard age and the minimum length of service. Since 01.01.2011, the minimum length of service for both men and women was 13 years, increasing in stages according to the law, reaching today to 15 years, while the full length of service currently reached 30 years and 5 months for women and 35 years for men. The complete length of service for women will gradually increase to 35 years, level to be reached in 2030, which obviously will be increasingly more difficult

The standard retirement ages were entitled to be obtained for women who reached 59 years and for men who reached 64 years. These standard conditions evolved in stages, reaching today:

- 60 years 5 months; 30 years 5 months; 15 years for women
- 65 years; 35 years; 15 years for men.

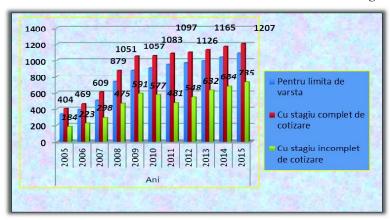
In terms of the contributions that the system allows to be received from insured people in the past 6 years, accordingly from 01.01.2011, I point out that the system has accepted the collection of a maximum contribution calculated on a basis equal to 5 gross average wages in the economy, thus trying to avoid the existence of future pensions higher than the equivalent value of 5 pension points. The social security contribution rates remained constant during 01.01.2011- 30.09.2014. For activity in normal working conditions, the total contribution to social security was 31.3%, split between employer -2/3 – and employee -1/3. As of October 2014, the social insurance contribution owed by the employer was reduced by 5 percentage points, from 20.8% to 15.8% of the monthly income realized by an employee working in normal working conditions. While reducing the employer's contribution rate, Pillar II continued to collect percentage rates which rised from 3.5% in 2012 to 5% in 2015.

By limiting social security contributions owed by the employees in 2016, also by the appearance and implementation of the Law no.186/2016 starting with the date of 27.10.2016, it has emerged the possibility of completing the length of service for a limited period of time. For 2015, the old age pension for the state system retirees

with complete length of service was 1207 lei, while the old-age pension in the same system was on average 735 lei for incomplete length of service. I bring into close analysis the evolution of the old-age pension's amount considering the data provided by INS.

## The evolution of the old-age pension's amount considering the period 2005-2015 in Romania

Figure no. 2



Source: INS, processing done by the author

## Accumulation of length of service

According to Law no.186 / 2016, "the owed social security contribution is calculated by applying to a monthly base rate the social insurances' contribution quota in conditions of normal work, governed by the law in force for each month of the months in between the periods for which payment is requested, thus to be considered length of service in the public pension system."

As with the voluntary contributions model proposed by the author, if this legislative measure is applied the payment of contributions is independent to the payment of other tax obligations, because the Social Insurances' Budget is the only collector.

Although in the preamble of the case study I made a presentation to the class of pensioners with complete length of service compared to that of pensioners with incomplete length of service, I emphasize that contrary to the voluntary contributions' model, current law does not address these people, but those people who have no social security amount paid for the periods chosen as base of future contributions.

# We thus identify that if length of service is completed, we have people in one of the categories a and b:

- a) Persons who have achieved or will achieve the minimum length of contribution to the retirement date without "purchasing length of service" or without completing the length of service
- b) People that without the maximum 5 years of added length of service would not obtain any pension at reaching the standard retirement date, eventually

having the length of service between 10 years and 14 years and 11 months. It is pointed out that in the realized length of service are also included the stages assimilated, the additional years of service for superior work categories (military, college, disability pensions).

Assuming an average pension of 735 lei for the first variant, the purpose of the contributors is to obtain a pension higher than 735 lei. In this case, the possibilities offered by the law are:

• In case of completing with 5 years of service, the person can pay contributions to a maximum of 5 years and has already the minimum condition assured.

Calculations show that if the person completes 5 years of service by paying social contributions to the gross minimum wage guaranteed for payment, he would obtain a total of 1.83564 points. At current values of the pension point and the correction index for the year of entering the pension system, accordingly 871.7 lei and 1.09, the pension advantage would be 56 lei for women and 48 lei for men. The annual average rate that would increase the average annual score is 0.05863 points for women (for a full length of service of 30 years and 5 months) and 0.05095 points for men (for a full length of service of 35 years). Results are shown in Table no. 2 – The benefit obtained by buying years of service – minimum contributions.

The benefit obtained by buying years of service – minimum contributions

Table no. 2

							The	The
							The	The
							average	average
							annual	annual
							score-for	score-for
2011	2012	2013	2014	2015	2016	Total	women	men
0.05246	0.32845	0.34409	0.37101	0.39614	0.34349	1.83564	0.05863	0.05095
				Value of the pension point*			871.7	871.7
				Value of pension advantage*			51	44
				Correction coefficient*			1.09	1.09
				The pension advantage			56	48

• In the variant of paying contributions at the maximum of 5 gross average wages in the economy, the pension benefit would be a substantial one. Women should earn 733 lei, the equivalent value of 0.77185 points, while men should earn 637 lei, the equivalent value of 0.67077 points. The capping of the CAS base of calculation is illustrated by the values in Table no. 3.

## The capping of the calculation base

Tabel no. 3

,	,			
Years			The value	
	The gross average wages	The CAS base	of	
			individual	
			contributi	
			}	
			on	
2011	2022	10110	1062	
2012	2117	10585	1111	
2013	2223	11115	1167	
2014	2298	11490	1206	
2015	2415	12075	1268	
2016	2681	13405	1408	

The results of the maximum variant are shown in Table no. 4 – The maximum benefit achieved by buying years of service - maximum contributions.

## The maximum benefit achieved by buying years of service - maximum contributions

Table no. 4

							Cota	Cota
							medie-	medie-
2011	2012	2013	2014	2015	2016	Total	femei	barbati
0.79157	4.96670	4.96512	4.87433	4.72929	3.94167	24.26869	0.77185	0.67077
				Valoarea punctului de pensie*			871.7	871.7
				Valoarea pensie*			673	585
				Coeficient de corectie*			1.09	1.09
				Cuantum valoric pensie			733	637

In terms of the amount of contributions paid, calculations show that in the first case the contributions amount is approximately 14.948 lei, while in the maximum variant the amount paid is 196.300 lei, without taking into account the amounts resulting from updates with indexes of inflation at the payment date.

In terms of length of amortization for the amounts paid as contributions, the survey results show that the person who adheres to this insurance contract by buying years of service should receive pension for a period between 22 years and 25 years, where appropriate, to recover the amounts paid as contributions.

In this context, the need to supplement the years of service is acute for people who need these years of service in order to achieve the minimum length of service in order to open pension rights.

## The price of recovering the already paid contributions, in the second variant

That is in fact happening nowadays – the price of recovering the years of service that many people lose, leaving the contributions to the public pension system, because of not achieving the minimum length of service required to be entitled to the pension at the date of reaching the standard age of retirement.

In these situations there are people who have so far realized a length of service of between 10 and 14 years, 11 months and need a month to reach 15 years and to open the pension rights. I expect during the 6 months of law enforcement that a number of people to be included in the future pension beneficiaries. Another effect of the law is that contributions' reserve consisting of so-called lost contributions should return to the entitled beneficiaries, which through paying a minimum contribution will benefit of the pensions.

I revisit the study case for category b) of people that without completing the years of service would not be entitled to any pension rights.

Because the maximum amount of paid contributions is 196.300 lei and the minimum amount is 14.948 lei, we hypothesize that a person with no income can pay the minimum level of contribution for 5 years of service.

In this case, the study results show that if the entire 15 years of service, which should entitle them to pension, was achieved with a minimum level of contributions, the pension amount would be 160 lei, which means that, in fact, the contributor's benefit is not between 48 and 56 lei, because in this case operates the GO no. 6/2009 on pensioners' social allowance. In 2016, the social allowance for pensioners under Government emergency Ordinance no. 6/2009 on creating the minimum guaranteed pensioners' social allowance, approved by Law no. 196/2009, is 400 lei.

Amortization length of the paid contributions is approximately 4 years, while the recovery of the 10 years of existing contributions estimated at a price of 14.948 lei is favorable to the taxpayer. The benefit of the price paid is accordingly 400 lei / month in this case.

### Conclusions

The presented study's results and the 6 months limited nature of the law lead us to conclude that this legislative measure is beneficial for persons not entitled to receive any pension at reaching standard retirement age.

These individuals, through paying minimum contributions for supplementing 5 years of service, recover in fact 10 years of already paid contributions that they would otherwise permanently lose. For these people the law is advantageous.

The benefit for the minimum level of contribution lies in the fact that most people would be entitled to the guaranteed minimum social pension.

The law does not address every category of potential contributors. In a social security system, all methods and sources for collecting contributions must be found and there can not be present any limits to the insured people contributions.

The long amortization of the amount of paid contributions for the categories identified in the case study may discourage those categories of voluntary adherence to this type of insurance contract.

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