Parametric Reforms in the Public PAYGO Pension Programs[1] 1995 - June 2016

This document compiles the main parametric reforms (approved or under discussion) introduced between 1995 and June 2016 in the new reformed pension systems with public PAYGO programs and the unreformed public PAYGO programs.

[1] Document prepared by FIAP based on information from different specialized pensions media, consulting firms, international agencies and press reports. We are grateful to FIAP member associations for the information and comments provided.

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Introduction

Many countries that have not introduced structural reforms to their pension systems and have kept a public PAYGO system open to new workers entering the labor market, have carried out parametric reforms to their social security systems to make them financially sustainable over time. These reforms have naturally tended to increase the revenue of the PAYGO systems (e.g., through an increase in contribution rates or through an increase in the number of years of contributions required for entitlement to a pension) and to reduce their costs (for example, by freezing benefits or by adjusting the index formulae to make pension less generous) in order to reduce the fiscal burden that the payment of State pensions entails.

Another of the recurrent modifications that affects both the costs and the revenue of the PAYGO system is the retirement age. As a result of the economic crises (that affect the treasuries of Governments) and longer-term demographic trends, a large number of countries have opted to increase the official retirement age. This increase, on the one hand, increases the amount of the contributions to be paid during working life (and therefore increases the revenue in the PAYGO system), and on the other hand, decreases the number of years during which the State pension is received (and therefore the costs of the PAYGO system decrease).

There are also countries in which the new reformed pension systems include both a public PAYGO and an individually funded program, with both systems complementing one another (as in Costa Rica and Uruguay and in most of the Central and Eastern European countries). Parametric reforms have also been introduced in the pension systems of these countries in order to make the PAYGO programs that are part of the new pension system more financially sustainable over time.

The purpose of this document is to conduct a survey or inventory of the main parametric reforms approved or implemented in the last nineteen years, between 1995 and June 2016, in countries with unreformed PAYGO systems and countries with PAYGO programs complemented by individually funded programs. For this purpose, an initial survey included as part of a study by the World Bank for the period between 1995 and 2005 was considered[2]. Subsequently, using different media and sources of information, including the regular reports of the United States Social Security Administration on the reforms to social security systems worldwide[3], as well as the intelligence reports of international consulting firms such as AON Hewitt[4], and other specialized agencies and media in the pensions and social security sphere, an assessment of the main parametric reforms adopted or approved between 2009 and June 2016 is performed. Finally, an overall assessment of the reforms introduced or adopted between 1995 and June 2016 is performed, which is a valid exercise for illustrating the general trends observed, even though information for the period between 2006 and 2008 is lacking.

The document is organized as follows: First of all, it provides a summary of all the changes, organizing the parametric reforms according to their type, by country, and at the same time, an account of the major reforms worldwide between 1995 and June 2016. Subsequently, the main reforms introduced between 2009 and June 2016 are described in detail by country and continent.

[2] "Reform Option I: Parametric Changes", David A. Roballino, World Bank, 2009.

[3] "International Update", Social Security Administration; available at: http://www.socialsecurity.gov/policy/docs/progdesc/intl_update//

[4] "Global Retirement Update", AON Hewitt, available at: http://www.aon.com/human-capital-consulting/thought-leadership/leg_updates/global_reports/reports-pubs_global_retirement_update.jsp

I. Overview

A. ***Review of parametric changes between 1995 and 2005***

Historical reviews in this regard are scarce in the available literature. One of the few documents that address this issue is a 2009 World Bank report (Reform Option I: Parametric Changes, David A. Roballino). This document states that in a period of ten years, between 1995 and 2005:

- 57 countries increased the contribution rate in their PAYGO programs
- 18 increased the retirement age, and
- 28 adjusted the parameters of the benefits formula and cut back or froze old-age pension amounts in order to reduce fiscal costs.

B. ***Review of some of the parametric reforms for increasing the financial and fiscal sustainability of the Public PAYGO Programs - 2009-June 2016***

Based on the information compiled by FIAP through the different sources of available information, it was found that between 2009 and June 2016 (see Tables No. 1 and No. 2):

- 18 countries increased the contribution rates in their PAYGO programs
- 34 increased the retirement age, and
- 36 adjusted the parameters of the benefits formula and cut back or froze old-age pension amounts in order to reduce fiscal costs.

C. ***Global assessment of the parametric changes approved between 1995 and June 2016***

In order to be able to carry out a long-term assessment of the main parametric changes in the public PAYGO systems, a reliable source of historical information is necessary. Hence, the survey referred to in A will be updated on the basis of the World Bank document, with the information presented in Tables No. 1 and No. 2, for the periods between 2009 and June 2016[5].

The simple sum of the figures provided in A and B shows that in overall terms, between 1995 and June 2016:

- 75 countries increased the contribution rate in their PAYGO programs
- 52 increased the retirement age, and
- 64 adjusted the benefits formula (or directly reduced benefits) in order to reduce fiscal costs.

[5] Note that the global survey of the reforms introduced or approved between 1995 and June 2016 lacks information for the 2006-2008 period. Nonetheless, it is a valid exercise for illustrating the general trends observed.

Main parametric changes in the past 20 years

(1995 - June 2016)

- **Within a span of 20 years, from 1995 to June 2016 (*), in order to reduce fiscal costs:**
  - **75 countries increased the contribution rate in their PAYGO programs (example: France, Norway, Russia, Portugal).**
  - **52 increased the retirement age (example: Germany, South Korea, Denmark, Spain, France, Greece).**
  - **64 adjusted the benefits formula or reduced the benefits plan (example: Brazil, Belgium, Italy, Netherlands, United Kingdom).**

(*) Updated information takes into account reforms approved as of June 2016. In some cases, such approved reforms stipulate that the changes come into effect as of 2014 or later, but they have never the less been included in the assessment of cases. Please see section "I. "Description of reforms by continent and country," for more specific details regarding the regulations. The assessment does not include proposed reforms or recommendations by experts, but only already legislated and approved changes.
Sources: FIAP based on

- ✓ **"Reform Option I: Parametric Changes", David A. Robalino, World Bank Core Course on Pensions, 2009."**
- ✓ **"Crisis of the PAYGO Systems and Infringement of the Benefits Promise: Recent Developments in the Complex World Scenario," Angel Martinez-Aldama, in the FIAP 2012 book "Opportunities and Challenges of the individually Funded Systems in a Globalized World" (FIAP Mexico Seminar, May 2012)."**
- ✓ **"The impact on workers of parametric changes in the PAYGO programs (FIAP document, 2009).**
- ✓ **"International Update", Social Security Administration; available at: http://www.socialsecurity.gov/policy/docs/progdesc/intl_update/**
- ✓ **"Global Retirement Update", AON Hewitt, available at: http://www.aon.com/human-capital-consulting/thought-leadership/leg_updates/global_reports/reports-pubs_global_retirement_update.jsp**
- ✓ **Towers Watson – Global News in Briefs: https://www.towerswatson.com/en/Insights/Newsletters/Global/global-news-briefs**

Table No. 1

Main Parametric Changes in the Public PAYGO Programs - Type of Parametric Change by Country (2009-June 2016)

Type of Reform				
Increases in contribution rates destined to the public PAYGO program	***Increases in the normal retirement age***	***Adjustment of parameters in the benefits formula***	***Cutbacks or freezing of the amount of the old-age pension***	***Increases in Taxable Income or Maximum Taxable Ceiling***
Andorra	Australia	Andorra	Andorra	Belgium
Cape Verde	Azerbaijan	Australia	Greece	Czech Republic
Bulgaria	Belarus	Belgium	Italy	Germany
Curacao	Belgium	Belarus	Latvia	Guyana
Slovakia	Bulgaria	Brazil	Portugal	Nicaragua
Estonia	Croatia	Bulgaria	Romania	Vietnam
Finland	Curacao	Curacao	Slovenia	
France	Denmark	Czech Republic		
Guyana	Slovakia	Ecuador		
Kenya	Slovenia	Finland		
Monaco	Spain	France		
Nicaragua	Estonia	Greece		
Norway	Finland	Guatemala		
Oman	France	Hungary		
Philippines	Germany	Italy		
Poland	Greece	Latvia		
Portugal	Guatemala	Luxembourg		
Russia	Hungary	Monaco		
	Ireland	Netherlands		
	Italy	Nicaragua		
	Kazakhstan	Norway		
	Latvia	Portugal		
	Lithuania	Romania		
	Madagascar	Russia		
	Malta	Slovenia		
	Norway	Spain		
	The Netherlands	Ukraine		
	Poland	United Kingdom		
	Portugal	Vietnam		
	Czech Republic			
	Romania			
	South Korea			
	Ukraine			
	United Kingdom			
18	**34**	**29**	**7**	**6**

Source: FIAP based on Table No. 2.

Table No. 2

Main Parametric Changes in the Public PAYGO Programs - Detail by Continent and Country (2009-June 2016)

Continent	***Country***	***Type of Reform***				
		Increases in contribution rates destined to the public PAYGO program	***Increases in the normal retirement age***	***Adjustment of parameters in the benefits formula***	***Cutbacks or freezing of the amount of the old-age pension***	***Increases in Taxable Income or Maximum Taxable Ceiling***
Africa	*Cape Verde*	From 15% to 16% for employers, and from 8% to 8.5% for workers (from April 2016).				
	Kenya	From 5% to 6%, for workers and employers (from May 2014; approved in December 2013)				
	Madagascar		Once only for women: from 55 to 60 (equals the age for men). (Approved and in force since July 2013)			

Source: FIAP.

Continues

Table No. 2

Main Parametric Changes in the Public PAYGO Programs - Detail by Continent and Country (2009-June 2016)

Continent	*Country*	*Type of Reform*				
		Increases in contribution rates destined to the public PAYGO program	*Increases in the normal retirement age*	*Adjustment of parameters in the benefits formula*	*Cutbacks or freezing of the amount of the old-age pension*	*Increases in Taxable Income or Maximum Taxable Ceiling*
Latin America and the Caribbean	*Brazil*			Elimination of the sustainability factor for the adjustment of pensions, replaced with rule 85/95. Under rule 85/95, between 2015 and 2017 the sum of age and the number of years of Social Security contributions must be 85 for women and 95 for men. The law includes an increase of one point every two years in the rule, from 2018 to 2026, when the formula will change to 90/100, (90 points for women and 100 for men).		
	Curacao	From 13% to 15% (increase financed solely by the employer). (Approved and in force since February 2013)	Once only for women: from 55 to 60 (equals the age for men). (Approved and in force since July 2013)	(i) Indexation of pensions is no longer automatically subject to the variation of the CPI; now the pension is adjusted only if the growth of the GDP is > 1%; (ii) the number of years of contribution required for qualifying for a pension increases from 45 to 50 years. (Approved and in force since Feb. 2013)		
	Ecuador			Benefits will be adjusted only by the average rate of inflation of the previous year, starting in 2016. (Approved in April 2015).		
	Guatemala		Once only: 60 to 62 (new workers entering the labor market). (In force since Jan. 2011).	The number of years of contribution required for qualifying for a pension increases from 15 to 20 years. (In force since Jan. 2011).		
	Guyana	Rates funded by workers: from 5.2 to 6.2% (self-employed workers); 11.5% to 12.5% (self-employed workers). (In force since June 2013)				The maximum taxable ceiling almost doubled to reach USD 11,503. (In force since June 2013)
	Nicaragua	Gradual increase in the rate funded by the employer: 7% (2013) to 10% (2017) (Approved in Dec. 2013)		The formula for calculating the pensions of workers with income > US$ 272 is modified, reducing their benefits with respect to prior rules. Minimum pensions will be calculated based on the average salary and not on the minimum wage. (Approved in Dec. 2013)		The maximum taxable ceiling almost doubled, reaching US$ 2,816 per month. (Approved in Dec. 2013)

Source: FIAP.

Continues

Table No. 2

Main Parametric Changes in the Public PAYGO Programs - Detail by Continent and Country (2009-June 2016)

Continent	***Country***	***Type of Reform***				
		Increases in contribution rates destined to the public PAYGO program	***Increases in the normal retirement age***	***Adjustment of parameters in the benefits formula***	***Cutbacks or freezing of the amount of the old-age pension***	***Increases in Taxable Income or Maximum Taxable Ceiling***
	Australia		Gradual: from 65 to 67 from 2017 to 2023. In May 2014 was approved another increase from 67 to 70 by 2026.	(i) Pensions will be adjusted to the CPI only. (ii) Tighten the asset test to access an public pension from AUD 46,600 (USD 43,982) to AUD 30,000 (USD 28,257) for a single person and from AUD 77,400 (USD 72,902) to AUD 50,000 (USD 47,094) for a couple. (Approved in May 2014, in force from Sep. 2017).		
Asia-Pacific	*Azerbaijan*		Gradual: from 62 to 63 (men); from 57 to 60 (women) (approved in Oct. 2008; in force as of Jan. 2010)			
	South Korea		Gradual increase from 60 to 65 years of age, from 2016 to 2033. (Approved in 2013; applicable as of January 2016 in private enterprises with more than 300 employees and all public companies; applicable to all other enterprises as of 2017.			
	Kazakhstan		Gradual: from 58 to 63 (women), matching the age for men. (Approved in June 2013; in force as of Jan. 2018).			
	Oman	From 21% to 24%: from 6.5% to 7% (workers); from 10.5% to 11.5% (employers); from 4 to 5.5% (State). (Approved Nov. 2013, in force since Jul. 2014).				
	Philippines	From 10.4% to 11% (approved on Oct. 2013; in force as of Jan. 2014).				

Source: FIAP.

Continues

Table No. 2
Main Parametric Changes in the Public PAYGO Programs - Detail by Continent and Country (2009-June 2016)

Continent	Country	Type of Reform				
		Increases in contribution rates destined to the public PAYGO program	*Increases in the normal retirement age*	*Adjustment of parameters in the benefits formula*	*Cutbacks or freezing of the amount of the old-age pension*	*Increases in Taxable Income or Maximum Taxable Ceiling*
Europe	*Andorra*	From 2.5% to 3.5% (worker); from 7.5% to 8.5% (employer). (Approved in July 2013; in force as of Jan. 2014).		(i) The number of years of contribution required for qualifying for a pension increases from 15 to 20 years; (ii) pension indexing will be based on the variation of the CPI, salaries and the sustainability factor (contributors/pensioners ratio). (Approved in July 2013; in force as of Jan. 2014)	Reduction of pensions greater than 150% of the minimum monthly wage. (Approved in July 2013; in force as of Jan. 2014).	
	Belgium		Gradual: from 65 to 66 by 2025, and 67 by 2030. (Approved in August 2015).	The number of years of contributions required for obtaining an early pension increase from 40 to 41 in 2017, and to 42 in 2019.		Definition of taxable income extended: now includes monetary compensation for termination of employment relationship or breach of contract (retail workers). (In force since Oct. 2013)
	Belarus		Gradual: from 60 to 63 (men) and from 55 to 58 (women) by 2023 (6 months per year; approved in April 2016, in force since Jan. 2017).	The minimum number of years of contribution required for accessing a pension increases from 5 to 10 years. (Approved in September. 2013; in force as of Jan. 2014).		
	Bulgaria	Increase of the overall old age, disability and survival contribution rate (employer + employee) of 1 percentage point per year in 2017 and 2018, from 17.8% to 19.8% of the gross salary of the worker (approved in July 2015; in force as of January 2016).	Gradual until 2029: from 63 to 65 (men); from 60 to 63 (women). (Initially approved in December. 2010; and reapproved in July 2015; in force as of January 2016). The retirement age for both men and women will be 65 starting in 2037. Thereafter the retirement age will be linked to the increase in life expectancy. Workers with insufficient contributions will be allowed to take early retirement at 65 years and 10 months, until 2016, increasing gradually to 67 years of age as of 2017.	The required minimum number of years of contributions for accessing a full pension will increase gradually from 34 to 37 for women, and from 37 to 40 for men. (Approved in December 2010; and reapproved in July 2015; in force as of January 2016).		

Source: FIAP.

Continues

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Europe	*Croatia*		From 65 to 67, since 2028. (Approved in April 2016; in force since 2018).			
	Czech Republic		Gradual: from 62 years & 2 months up to 65 years (men) and from 57 to 65 (women without children), by 2028. (In force since Jan.	(i) The number of years of contributions required for accessing a full pension increases gradually from 25 to 35 years by 2019 (in force since Jan. 2010); (ii) From 2013 to 2015, pensions will be adjusted automatically by 33.3% of the variation in the CPI and 33.3% of the growth of the average wage (formerly pensions were adjusted only according to the change in the CPI and by 33.3% of the growth of the average wage) (approved in September 2012).		Increase in the maximum taxable ceiling, from 48 to 72 times the national average monthly wage. (In force since Jan.
	Denmark		From 67 to 68 years, since 12.29.2015, for those born from 1963 onwards; future automatic adjustments of one year every 5 years.			
	Estonia	Transitory increase from 16% to 20% in 2010; drops from 20% to 18% in 2011; and from 18% to 16% in 2012. (Approved in 2009).	Gradual: from 63 to 65 (men) and from 60 to 65 (women), by 2026. (Approved in April 2010, will be enforced as of 2017).			
	Finland	Gradual increase the joint worker/employer contribution from 23.3% to 24.4% for workers under the age of 53. (Reform not approved yet, but expected to be in force in 2017).	Gradual increase in minimum retirement age from 63 to 65 by 2025, and maximum retirement age from 68 to 70. From 2025 onwards, the retirement age will be adjusted according to life expectancy, with maximum increases of 2 months per year (reform approved in February 2016, in force since 2017).	The discount factor on income throughout working life will be standardized at 1.5% and income earned from the age of 17 will be considered. (Reform not approved yet, but expected to be in force in 2017).		

Source: FIAP.

Continues

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Main Parametric Changes in the Public PAYGO Programs - Detail by Continent and Country (2009-June 2016)

Continent	***Country***	***Type of Reform***				
		Increases in contribution rates destined to the public PAYGO program	***Increases in the normal retirement age***	***Adjustment of parameters in the benefits formula***	***Cutbacks or freezing of the amount of the old-age pension***	***Increases in Taxable Income or Maximum Taxable Ceiling***
	France	Gradually, from 6.75% to 7.05% (workers) and from 8.4% to 8.7% (employer), from 2014 to 2017. (Approved in Dec. 2013)	Gradual: from 60 to 62 (for reduced early pension); from 65 to 67 (for normal full pension), by 2017. (Approved in Dec. 2011).	The minimum number of years of contribution required for accessing a pension increases gradually from 41.5 to 43 years, from 2020 to 2035. (Approved in Dec. 2013).		
	Germany		Gradual: from 65 to 67, by 2029. (Approved in March 2007; in force since 2012).			Increase of the tax ceiling from 72,600 EUR (approx. US$ 79,562) to EUR 74,400 (approx. US$ 81,534) in Western Germany and from EUR 62,400 (approx. US$ 68,384) to EUR 64,800 (approx. US$ 71,014) in Eastern Germany (in force as of January 2016).
	Greece		(i) Gradually, from 60 to 65 (women) from 2011 to 2013 (approved in May. (ii) Gradual increase, from 65 to 67 by 2020; from then on and every 3 years, the retirement age will be adjusted on the basis of life expectancy (approved in Nov. 2012).	The minimum number of years of contribution required for accessing a pension increases gradually from 37 to 40 years, as of 2015. (Approved in June 2010); (ii) As of 2014, pensions will be indexed according to the variations of the CPI and will be calculated by taking the average salary of the entire career as a reference (instead of taking the 5 years of best wages of the last 10 years prior to retirement).	(i) Freezing of pensions in 2011-2013 (Approved in June 2010); (ii) Freezing of pensions extended to 2015 (approved in June 2011); (iii) Reduction of monthly pensions > US$ 1,299, between 5% - 15%.	
	Hungary		Gradual: from 62 to 65, by 2022. (Approved in May 2009).	Change in the way that pensions provided in the PAYGO system are indexed, subject to conditions of economic and wage growth. (Approved in May 2009).		

Source: FIAP.

Continues

Table No. 2
Main Parametric Changes in the Public PAYGO Programs - Detail by Continent and Country (2009-June 2016)

Continent	***Country***	***Type of Reform***				
		Increases in contribution rates destined to the public PAYGO program	***Increases in the normal retirement age***	***Adjustment of parameters in the benefits formula***	***Cutbacks or freezing of the amount of the old-age pension***	***Increases in Taxable Income or Maximum Taxable Ceiling***
Europe	*Ireland*		Gradual: from 66 to 67 by 2021; and from 67 to 68 by 2028. (Approved in June 2011).			
	Italy		Gradual: (i) from 61 to 65 (women in the public sector), as of 2015. (Approved in July 2010); (ii) from 65 to 66 (men) and from 60 to 62 (women), starting in 2012; will increase to 67 by 2022; from 2013 the retirement age will be adjusted in accordance with the variation in life expectancy (approved in Dec. 2011).	Increase in the number of years of contributions necessary for obtaining an early pension, to 42 years and one month for men and 41 years and one month for women, based on life expectancy (+ 3 months, starting in 2013).(Approved in Dec. 2011).	Freezing of pensions exceeding USD 1,825) during 2012 and 2013. (Approved in December 2011).	
	Latvia		Gradual: from 62 to 65, between 2014 and 2025 (approved in May 2012).	The number of years of contributions required for accessing a pension increases from 10 to 15 years by 2014, and from 15 to 20 years by 2025.	Reduction of pensions by 10% between July 2009 and Dec. 2012; pensioners who work will only receive 30% of the State pension (Approved in 2009).	
	Lithuania	(i) Increase from 23.85% in 2008 to 26.35% until June 2009; from July 2009 to Dec. 2011, increased to 27.35%; in 2012 rose to 27.85%; and in 2013 dropped to 26.85% (for workers who pay a % of their social security contribution to individual accounts). (Approved in 2009; amendments in 2011); (ii) Increase from 26.85% to 27.35% in 2014 (approved in Nov. 2012).	Gradual: from 62.5 to 65 (men) and from 60 to 65 (women), from 2012 to 2026. (Approved in June 2011).			

Source: FIAP.

Continues

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	Luxembourg			Gradual modification (by 2052) of the benefits formula in two parts: (i) fixed portion, which depends on the number of years of paid-in contributions, which will increase slightly; and (ii) variable portion, which depends on the level of income, and will decrease significantly. As a result, workers must work 3 years more than what they work today in order to obtain a pension equal to the levels granted in 2012. (In force since Jan. 2013)		
	Malta		Gradual: from 61 to 65 (men) and from 60 to 65 (women), from 2007 to 2027. (In force since 2007).			
	Monaco	From 6.15% to 6.55% (workers) and from 6.15% to 6.95% (employers). (In force since Oct. 2012).		The pension calculation formula will be based on a points system, making it less generous. (In force since Oct. 2012).		
	Norway	From 18.8% to 19.6%: from 7.8 to 8.2% (workers) and from 11% to 11.4% (employers). (In force since Jan. 2011).	Introduction of flexible retirement between age 62 and 75; workers can collect a pension and continue working; (under the current rules, the retirement age is 67, but it can be deferred up to age 70, gaining a credit to obtain a higher pension). (In force since Jan. 2011)	(i) Changes in the benefits calculation formula, based on the average contributions throughout working life from age 13 to 75, plus credits for periods with no paid-in contributions due to unemployment; (ii) Pensions will be adjusted annually based on the growth of wages, less 0.75 percentage points (benefits will not be adjusted downwards in case of wage reductions); (iii) pensions will be adjusted in accordance with the "longevity factor" based on the age of the individual at the time of retirement. (In force since Jan. 2011)		

Source: FIAP.

Continues

Table No. 2
Main Parametric Changes in the Public PAYGO Programs - Detail by Continent and Country (2009-June 2016)

Continent	***Country***	***Type of Reform***				
		Increases in contribution rates destined to the public PAYGO program	***Increases in the normal retirement age***	***Adjustment of parameters in the benefits formula***	***Cutbacks or freezing of the amount of the old-age pension***	***Increases in Taxable Income or Maximum Taxable Ceiling***
Europe	*Netherlands*		Gradual: from 65 to 66 by 2018; to 67 by 2021. The retirement age will be adjusted automatically starting in 2022, based on the changes in life expectancy. (Approved in Jan. 2015).	The maximum benefit has been lowered through the modification of the benefit formula by further reducing the maximum annual accrual rate from 2.15% to 1.875% of average earnings. Another measure will set a ceiling on pensionable earnings at EUR 100,000 (USD 108,248) a year. (Approved in Jan. 2015).		
	Poland	From 18.22% to 23.22% as of May-Dec. 2011 (due to the reduction in the contribution to individual accounts by 5 pp); in 2012 it rose by 2 pp to 25.22% (due to the increase of the part destined to the disability and survival insurance managed by the State); in 2013 it dropped to 24.72% (since the contribution to individual accounts increased by 0.5 pp). (In force since May 2011). Starting in 2014, for workers who choose to keep contributing to a private fund, the contribution rate to individual accounts will increase by 0.12 pp, and therefore the part destined to the public system will drop to 24.6% (signed into law by the President in Dec. 2013; pending final approval).	Gradual: from 65 to 67 by 2020 (men) and from 60 to 67 by 2040 (women). (Approved in May 2012; in force since 2013).			

Source: FIAP.

Continues

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Continent	***Country***	***Type of Reform***				
		Increases in contribution rates destined to the public PAYGO program	***Increases in the normal retirement age***	***Adjustment of parameters in the benefits formula***	***Cutbacks or freezing of the amount of the old-age pension***	***Increases in Taxable Income or Maximum Taxable Ceiling***
Europe	*Portugal*	From 11% to 11.2% for all workers (announced in April 2014).	From 66 to 66 years and 3 months (automatic increase, approved in April 2016, in force since January 2017).	(i) Modification of the sustainability factor for calculating pensions starting in 2015 (now life expectancy in 2010 and not 2006 will be used as the basis), which implies a reduction in the initial pension of 12.34%. (Approved in Dec. 2013). (ii) Introduction of a balance factor—a new way of adjusting pensions—based on the relationship between revenues and expenditures (announced in April 2014, but no implementation date was established).	(i) Freezing of public pensions since 2010; ((ii) Introduction of special pension tax on pensions > USD1,985 per month. (Approved in 2010).	
	Romania		Gradual: from 63 years & 9 months to 65 (men) and from 58 years and 9 months to 60 (women), by 2015; and from 60 to 63 (women) by 2030. (Approved in Dec. 2010).	The number of years of contributions required for accessing a full pension increases from 36 years & 6 months to 35 years (men) and form 27 years & 6 months to 30 years (women) (In force since Jan. 2010); (ii) The public pension indexation system changes to a much less generous system (public pensions will now increase according to the CPI plus the growth of wages). (Approved in Dec. 2010).	Freezing of pensions for 2011. (Approved in Dec. 2010).	
	Russia	From 20% in 2010 to 26% in 2011 (approved in Jul. 2009; in force since 2010). Starting in 2014, in the case of workers who do not choose a non-State private Fund (contributing to the State fund manager, by default), the contribution rate to the PAYGO pillar will increase by 4 percentage points. (Approved in Dec. 2013)		Gradual increase in the minimum number of years of contributions required to qualify for a public pension, from 6 to 15 by the year 2024. (Approved in Jan. 2015).		

Source: FIAP. **Continues**

Table No. 2
Main Parametric Changes in the Public PAYGO Programs - Detail by Continent and Country (2009-June 2016)

Continent	***Country***	***Type of Reform***				
		Increases in contribution rates destined to the public PAYGO program	***Increases in the normal retirement age***	***Adjustment of parameters in the benefits formula***	***Cutbacks or freezing of the amount of the old-age pension***	***Increases in Taxable Income or Maximum Taxable Ceiling***
Europe	*Slovakia*	From 9% to 14% (increase financed only by the employer). (In force since Sept. 2012).	Gradual: from 60 to 62 (men by 2007); from 53/57 to 62 (women; by 2015). (Approved in 2003)			
	Slovenia		Increase linked to the number of years of paid-in contributions: from 58 to 60 years (men) and from 57 years &4 months to 60 years (women), with at least 40 years of contributions; from 63 to 65 (women), with at least 15 years of contributions. (In force since Jan. 2013)	Less generous indexation of pension: the 24 years of highest income will be taken into account (instead of 18). (In force since Jan. 2013)	Freezing of pensions in 2011 (they increase in 2012 only if inflation > 2%). (Approved in September 2010)	
	Spain		Gradual: from 65 to 67, by 2027. (Approved in Aug. 2011; in force since Jan. 2013)	The minimum number of years of contribution required for accessing a pension increases gradually: from 15 to 25 years by 2022 (reduced pension); from 25 to 38.5 years by 2025 (full pension). (Approved in Aug. 2011; in force since Jan. 2013); (ii) Introduction of "Sustainability Factor," linking the pension to the evolution of life expectancy (approved in final form in December. 2013; applies from 2019); (iii) Introduction of "Appreciation Rate" which adjusts pensions by a minimum of 0.25% and a maximum equivalent to the CBI of the previous year + 0.5% if economic situation is favorable.		

Source: FIAP. **Continues**

Table No. 2

Main Parametric Changes in the Public PAYGO Programs - Detail by Continent and Country (2009-June 2016)

Continent	***Country***	***Type of Reform***				
		Increases in contribution rates destined to the public PAYGO program	***Increases in the normal retirement age***	***Adjustment of parameters in the benefits formula***	***Cutbacks or freezing of the amount of the old-age pension***	***Increases in Taxable Income or Maximum Taxable Ceiling***
Europe	*Ukraine*		Gradual: from 55 to 60 (women), from October 2011 to 2020; 60 to 62 (male public servants) from January 2013 to 2016. (Approved in Sep. 2011).	The number of years of contributions required for accessing a full pension increases from 20 to 30 years (women) and from 25 to 35 years (men).; (ii) The number of years of contributions required for accessing a minimum pension increases from 5 to 15 years; (iii) from 2012, the average national salary of the last three years will be used for calculating the pension (approved in Sep. 2011); (iv) As of July 2013, pensions are indexed with a flexible formula, which considers the variation of the CPI and always an adjustment of at least 20% of the wage increase.		
	United Kingdom		Gradual: from 66 to 67 between 2026 and 2028. Additionally, the government will be required to review the state pension age every 6 years starting in 2017. (Approved in May 2014)	(i) Increase in the number of contribution years required to access to a full benefit from 30 to 35. (ii) Benefits will be indexed annually by at least the increase in average earnings (Currently benefits are adjusted to the growth in average earnings and price increases, or by 2.5%, whichever is higher) (Approved in May 2014, in force from April 2016).		

Source: FIAP.

II. ***Description of some parametric reforms introduced or approved (2009-June 2016 period)***

A. Africa

Cape Verde

- Social Security contributions increased as of April: from 15% to 16% of the gross wage for employers; and from 8% to 8.5% for workers. (Source: Global Retirement Update AON; Date: May 2016).

Kenya

- On December 24, 2013, the Government signed the National Social Security Fund (NSSF) Law No. 2013, which increases the contribution rate of workers and employers from 5% to 6% of the employee's gross salary, respectively. According to available information, the change should have been implemented as of January 1, 2014, but has now been postponed to May 31, 2014. Further details here. (Source: www.towerswatson.com;) Date: 29.01.2014).

Madagascar

- On July 2, 2013, the National Social Security Fund issued a Decree immediately increasing the retirement age for women from 55 to 60, making it equal to the retirement age for men. Women can still retire at 55, but with a reduced state pension. The law came into effect on July 16, 2013 (see official Circular). (Source: www.mercer.com; www.cnaps.mg;) Date: 18.10.2013).

B. Latin America and the Caribbean

Brazil

- At the beginning of November, 2015, President Dilma Rousseff vetoed aspects of Law 13.183 that creates new alternative rules of retirement. From now on, rule 85/95 is in force, allowing workers to retire without the reduction applied for the safety factor in place until now (formula applied to the value of the pension, which takes into account the number of years of contribution, the age and the life expectancy of the insured). Under rule 85/95, the sum of the retirement age and the number of years of Social Security contributions must be 85 for women and 95 for men. The law, already published, includes an increase of one point every two years in the rule, from 2018 to 2026, when the formula will change to 90/100, (90 points for women and 100 for men). The minimum contribution period will remain unchanged at 35 years for men and 30 years for women. This 85/95 progressive rule is expected to save up to USD 16,386 million in pension expenditure by 2016, i.e. savings equivalent to 0.5% of the country's GDP. (Source: www.reportesur.info; http://mundo.sputniknews.com; Date: 05.11.2015).

Curacao

- On February 26, 2013, the country's Parliament approved the following changes to its public PAYGO system: (i) An increase in the retirement age for accessing the basic State pension from 60 to 65 (for workers aged 55 or less) ; (ii) An increase in the contribution rate from 13% to 15% of the worker's salary (the two additional percentage points are entirely funded by the employer); (iii) An increase in the maximum annual salary with which a person is eligible to access the basic State pension, from ANG 93,000 (approx. USD 51,000) to ANG 100,000 (approx. USD 55,000), which implies a more generous minimum pension; (iv) Increase the minimum number of years of contributions required for a full pension, from 45 to 50 years; (v) The basic State pension will be indexed only if there is real annual economic growth of at least 1%, as opposed to automatic indexation in accordance with inflation, implying that there will be greater restrictions in the granting of basic pensions. The law approving these new changes became effective on March 1, 2013. (Source: www.ssa.gov;) Date: March 2013).

Ecuador

- The Labor Justice Law, which amends the country's Labor Code, was passed last April 5. Three provisions of the Law refer to pensions. (i) Coverage of the public PAYGO system is extended to unpaid housewives. Once implemented, female members will contribute to the system according to their family income, as a percentage of the Unified Basic Salary (SBU), which is currently US$ 354 per month. Female members may opt for an old-age pension once they turn 65 and have paid in at least 240 contributions (20 years of membership). The requirements for qualifying for a disability pension vary according to age: for women between 15 and 25, a minimum of 6 monthly contributions are required, whereas women over 46 must have at least 60 monthly contributions. (ii) Tthe government's mandatory 40% contribution to the old age, disability and survival insurance is eliminated. On the other hand, the Government will only contribute when the Ecuadorian Institute of Social Security (IESS) does not have the resources to meet its obligations in the payment of social security benefits. This measure in particular has generated much controversy in the country, since it jeopardizes the financial sustainability of the public PAYGO system. Among the proposals for covering the shortfall generated by the absence of the government contribution, are increasing the retirement age, increasing the contribution rate of workers and employers, and reducing the level of benefits. (iii) The law provides for the modification of the indexation of benefits methodology. Since 2010, the adjustments in benefits ranged from 4.31 to 16.6%, depending on the level of benefits (with lower-income retirees receiving the largest adjustments). From now on, benefits will be adjusted only by the average rate of inflation of the previous year. (Source: Social Security, International Update, May 2015).

Guatemala

- As of January 1, 2011, some modifications to the public PAYGO system became effective, among them: (i) An increase in the minimum retirement age from 60 to 62 for new workers entering the labor market; (ii) An increase in the minimum number of years of contributions required for accessing a pension, from 15 to 20. In the meantime, all workers covered by the system to December 31, 2010, may retire at age 60, although the minimum number of years of contributions required of them for accessing a pension will be increased by 1 year for each year, to finally reach 20 years in 2015. (Source: International Update, Social Security Administration, March 2011).

Guyana

- On June 1, 2013, the contribution rate to the public PAYGO system financed by workers increased by one percentage point, from 5.2% to 6.2% of salary for dependent workers, and from 11.5% to 12.5% of salary for self-employed workers (the contribution rate financed by employers remained unchanged at 7.8%). Furthermore, in order to protect low-income workers, the Government will subsidize the increase in the contribution rate of workers with a monthly income of less than GYD 50,000 (USD 243). (Source: International Update, Social Security Administration, June 2013).

Nicaragua

- Executive Decree No. 39-2013 was published on December 20, 2013. It reforms the Nicaraguan Social Security Institute (INSS) Law, which is the legal framework of the country's public PAYGO system. The plan includes:
  - (i) A gradual increase in the employer's contribution rate, from 7% in 2013 to 10% in 2017 (it will increase by one percentage point (pp) in 2014 and 2015, and by 0.5 pp in 2016 and 2017). Although the contribution rate for workers will remain the same, at 4%, by 2015 the contribution tax ceiling for both workers and employers will almost double to NIO 72,140 (approx. USD 2,816) per month. As of 2016, the INSS will adjust the tax ceiling on the basis of the average salary of all workers enrolled in the INSS.
  - (ii) A change in the formula for calculating benefits, for about 25% of workers enrolled in the INSS (those who earn more than NIO 7,000, approx. USD 272 per month). The changes to the formula will result in lower benefits than those obtained under the previous rules (analysts estimate that these workers will have to work 8 years more to maintain the same level of benefits).
  - (iii) Calculate minimum pensions based on the average salary and not the minimum wage (studies have shown that the 135% jump in the minimum wage in the last five years has put intense pressure on resources in the INSS for the

next couple of years).

The Government expects that with all these measures the INSS can project its sustainable existence to at least 2036. The Government did not propose rising the retirement age, which is currently 60, nor the number of weeks of contributions (750). The IMF has proposed that Nicaragua should increase the retirement age from 60 to 65 and double the number of weeks of contributions from 750 to 1,500 (increasing from 14.4 to 28.84 years), and reduce informality in its labor market, which is currently at 70%. This segment receives low wages, does not have access to social security and remains below the poverty threshold, according to official figures. (Source: International Update, Social Security Administration, Feb. 2014).

C. Asia - Pacific

Australia

- The rate used for calculating revenue from financial investments for the payment of State pensions dropped as of November 4, 2013. For a single pensioner with income of up to AUD 46,600 (approx. USD 41,246), and for couples with income of up to AUD 77,400 (approx. USD 68,507), the rate used will drop from 2.5% to 2.0% per year. For incomes exceeding these thresholds, the rate will drop from 4% to 3.5%. Thus, State pensions will become more generous. The estimated income is added to other sources of income and is then used to calculate the pension rate of the individual or couple. (Source: www.mercer.com; Date: 04.11.2013).
- On May 13, 2014 the government presented its 2014–2015 budget to Parliament, which affects many social programs, including pensions. Proposals in the budget related to pensions include the following:
  - (i) Gradual increase in the retirement age to 70 by 2035, for those born after July 1, 1958.
  - (ii) Change the indexation method. Currently, twice a year, first-pillar pensions (Age Pension[6]) are adjusted to changes in the consumer price index (CPI), the beneficiary living cost index; and the male total average weekly earnings. Beginning in September 2017, the Age Pension would be adjusted to the CPI only, twice a year.
  - (iii) Tighten the asset test to access an Age Pension. Currently, the asset-test thresholds for the Age Pension are AUD 46,600 (USD 43,982) for a single person and AUD 77,400 (USD 72,902)[7] for a couple and are indexed annually to changes in the CPI. Beginning in September 2017, the budget proposal lowers those thresholds to AUD 30,000 (USD 28,257) and AUD 50,000 (USD 47,094), respectively, and it maintains the same value (no adjustment) for 3 years. (Source: Social Security, International Update; May 2014).

Azerbaijan

- On October 27, 2008, the Legislature approved a law modifying the country's social security program by gradually increasing the retirement age for accessing a full pension. As of January 2010, the retirement age will increase by 6 months each year until it reaches 63 for men and 60 for women. Men currently retire with a full pension at age 62 and women at 57. The Government also announced that there will be no legal indexing of pensions in 2010 due to the negative rate of inflation expected for 2009 (benefits are adjusted annually in proportion to the changes in the consumer price index of the previous year). (Source: International Update, Social Security Administration, Dec. 2009).
- On August 28, 2013, the State Social Protection Fund (SSPF) announced plans to modify the distribution of contributions to mandatory social insurance. The total contribution rate is currently 25%, of which 22 percentage points (pp) are financed by employers and 3 pp by workers; the proposal stipulates that now employers will finance 18 pp and workers 7 pp, maintaining the total contribution rate unchanged. The SSPF aims to introduce the change at the end of 2013. Further details here. (Source: www.mercer.com; Date: 12.09.2013).

[6] Age Pension is a non-contributory pension, financed entirely by the State, seeking relief from poverty for the elderly. To qualify for this benefit, the retiree must meet a series of requirements: legal retirement age, at least 5 years of contributions and meet the test of value of its assets (the value of the assets held must not exceed certain limits).

[7] At the exchange rate on 30.06.2014 of 1 USD= AUD 1.0617.

Kazakhstan

- On June 21, 2013, the President signed a pension reform law which stipulates, inter alia, that: (i) 11 pension funds (10 private funds and the State-managed GNPF) will merge into a state-managed Unified Accumulation Pension Fund (UAPF). The UAPF will operate in the premises of the former GNPF; (ii) All investments will be under the custody of the National Bank of Kazakhstan; (iii) Men and women will retire at the same age (the retirement age for women will increase from 58 to 63 years, at the rate of 6 months per year starting in January 2018); (iv) The retirement age for workers in industries with heavy duty and hazardous working conditions will be reduced from 58 to 50 and employers must contribute 5 additional percentage points (pp) to their accounts (starting on January 1, 2014); (v) There will be a Pension Assets Management Board, supervised by the President of the Republic, which will act as an advisory and consulting agency, among other matters, to propose the list of financial instruments in which the UAPF's resources can be invested; and (vi) the guarantee of minimum return on investment remains unchanged. The Government will also consider the following modifications at a future date: (i) Increase the mandatory contribution rate to the UAPF from 10% to 15% (the increase will be funded by the employer); (ii) The State will finance the contribution of 10% in the case of female employees on maternity leave (it currently only finances 4%). Ordinance No. 356 of the President of the National Bank of the Republic of Kazakhstan, dated September 24, 2013, approved the reception-transmission calendar for the pension assets and liabilities of the Accumulative Pension Plans (AFPs) within the framework of the agreement on pensions in the UAPF. Thus, the transfer of pension assets from the APFs to the UAPF began as of October 11, 2013. It is expected that all procedures concerning the opening of individual accounts in the UAPF, the registration of pension savings in individual accounts and the transfer of investment portfolios from the APFs, should be finalized by April 2014. (Source: FIAP based on information sent by GNPF; www.worldfinance.com; www.ssa.gov; www.enbek.gov.kz; www.mercer.com; www.afn.kz; Date: November 2013).

Oman

- On November 3, 2013, the Public Authority for Social Security of Oman announced a series of amendments to the public PAYGO system, including increases in contribution rates and changes in the way in which benefits are calculated. The amendments, which came into effect from July 1, 2014, include the following changes:
  - (i) The social security contribution rate (which includes the financing of the of old-age pension and disability and survival benefits), will increase for both workers (from 6.5% to 7% of their gross salary) and employers (from 9.5% to 10.5% of the gross wage of the worker), and the State (from 4% to 5.5%), totaling an increase of 3 percentage points (from 20% to 23% of the gross wage of the worker).
  - (ii) The accrual factor used for the calculation of old-age pensions will increase. Hence, old-age pensions will now be calculated on the basis of 3.5% of the average wage of the worker in the last 5 years of work, multiplied by the total number of years of contribution (the accumulation factor was formerly 2.5%). This means that the old age pension granted by the State becomes more generous.
  - (iii) The minimum old-age pension will increase from OMR 150 (approx. USD 390) to OMR 202.5 (approx. USD 527) per month. Furthermore, pensions higher than OMR 202.5 will increase by 5% (the maximum old-age pension remains unchanged at 80% of the worker's salary at the time of retirement). (Source: Global Social Security Newsletter, PricewaterhouseCoopers (PwC); www.mercer.com; Date: 04.11.2013).

Philippines

- On October 10, 2013 the country's Social Security System (SSS) reported that the contribution rate to this program will increase from 10.4% to 11% as of January 1, 2014. Of this 11%, 7.37 percentage points (pp) will be financed by the employer and 3.63 pp by the worker. This measure would enable extending the life of the Social Security Fund (SSF) for 4 years (from 2039 to 2043). Further details here. (Source: www.mercer.com; Date: 15.10.2013).

South Korea

- The Government will gradually raise the standard social security retirement age from 60 to 65 by 2033. This measure was adopted in 2013 and will come into effect as of January 2016 in all public companies and private enterprises with more than 300 employees. All other enterprises must comply with the measure as of January 1, 2017. (Source: Towers Watson;) Date: 04.11.2015).

D. Europe

Andorra

- On July 16, 2013 the Cabinet approved a series of changes (which will be implemented as of January 1, 2014) to the country's public PAYGO system, in order to make it financially sustainable. According to the Government, if no modifications were made, the pension system would be in deficit as of 2017. Some of the changes stipulated in the law are the following[8]: (i) The contribution rate for an old-age pension will increase by 1 percentage point for the worker (to 3.5%) and the employer (to 8.5%); whereas the contribution for financing the other benefits will be reduced by 1 percentage point for the worker (to 2%) and the employer (to 6%); (ii) The minimum number of years of contributions will increase from 13 to 15 years; the age limit for obtaining a deferred pension will be abolished; and the early retirement age will increase to 61; (iii) Pensions greater than 150% of the monthly minimum wage will be reduced (approx. 1,443 EUR or USD 1,914), and the complementary pension for the spouse will also be eliminated; and (iv) Benefits will be adjusted on the basis of a combination of changes in the consumer price index, wages and a sustainability factor (ratio between contributors and pensioners), which will make the benefits provided less generous than before. (Source: www.ssa.gov; Date: August 2013).

Belgium

- On January 1, 2013, new measures came into effect with regard to the early retirement age, which will progressively increase from 60 to 62 years of age between 2013 and 2016, and the number of years of work required for such early pension, which will increase from 35 to 40 years within the same period (the normal retirement age is 65 for men and women, with at least 45 years of contributions). (Source: www.issa.int; Date: January 2013).
- New regulations came into effect as of October 1, 2013, which define the payments that are subject to social security (public PAYGO system), and that therefore form part of the definition of "taxable income" from now on: (i) Monetary compensation to workers by their former employers (by virtue of agreements concluded between the parties),during the 12 months following the termination of the employment contract 1; (ii) The monetary compensation for "indemnities" for retail sales personnel (referred to as "clientele indemnity" in the Belgian legislation (see details here), as well as those for "compensation" for breach of contract by the employer. (Source: Global Social Security Newsletter, PricewaterhouseCoopers (PwC); Date: December 2013).

Belarus

- On September 3, 2013, the President of the Republic signed a decree (Russian) that increases the minimum contribution period for qualifying for an old age pension in the public PAYGO system, from the current 5 years to 10 years, a measure that will come into effect on January 1, 2014. According to the Government, the change is necessary for improving the long-term sustainability of the country's public pension system[9] in view of the rapid aging of the

[8] At present, and until December 31, 2013: (i) Workers can choose between 3 levels of contribution rates for their old age pension: 2.5%; 5%; or 7% of gross salary (for the benefits of disability, survival, disease, maternity and work accidents, the contribution is 3% of gross salary); (ii) Employers contribute 7.5% of the gross salary of the worker to the old-age pension, and 7% for other benefits (there is no State contribution); (iii) The full old-age pension is paid at 65 with a minimum of 40 years of contributions (the reduced pension applies with at least 13 years of contributions); (iv) Early retirement is allowed from age 58 with 40 years of contributions, and deferred retirement is allowed up to 72 years of age.

[9] Belarus' PAYGO pension system covers all employed individuals with permanent residence in the country and is financed with a worker contribution of 1% of gross salary, and a variable employers contribution, depending on the sector and industry concerned (most employers contribute 28% of the worker's salary). The retirement age is 60 for men and 55 for women. The full pension is paid against 25 years of contributions (men) or 20

population. Further details here. (Source: www.nalog.by; www.mercer.com; www.ssa.gov; Date: 04.09.2013).

- On April 2016, it was decreed that as of January 2017, the retirement age will rise gradually from 60 to 63 for men and from 55 to 58 for women, by 6 months per year over a period of 6 years. The decree also calls on employers and workers to participate in voluntary pension schemes. (Source: Global Retirement Update AON; Date: April 2016).

Bulgaria

- On July 28, 2015, Parliament passed a pension system reform law that increases the retirement age, the contribution rate and the number of years of contributions required for obtaining a pension. The law also changes the status of second pillar accounts from mandatory to voluntary. These changes are designed to make the PAYGO program more sustainable. The deficit is expected to drop from an estimated 2.4% of GDP in 2015 to 1.2% of GDP by 2037. A law passed in 2012 had gradually increased the standard retirement age for men and women (to 65 and 63, respectively) and the number of years of contributions required for a pension to 40 and 37 for men and women, respectively, by 2017. Nonetheless, there were no increases in these parameters in 2014 and 2015. Hence, the new law resumes the gradual increases in 2016, at a slower rate (ending in 2029), making the retirement age for men and women equal at 65, by 2037. Thereafter, the retirement age will be linked to the increase in life expectancy. Workers with insufficient contributions will be allowed to take early retirement at 65 years and 10 months, until 2016, increasing gradually to 67 years of age as of 2017. The new rules also: (i) increase the overall old age, disability and survival contribution rate (employer + employee) by 1 percentage point per year in 2017 and 2018, from 17.8% to 19.8% of the gross salary of the worker; (ii) allow workers born after 1959 to switch from the second pillar individual accounts program to the first pillar PAYGO program as often as they please, until 5 years before retirement (new workers entering the labor market who fail to make a choice are automatically assigned to the PAYGO program). (Source: Social Security International Update; Date: August 2015).

Croatia

- On December 13, 2013, the Legislature approved the Pension Insurance Act, which provides for: (i) A gradual increase in the retirement age from 65 to 67 by 2038 (between 2014 and 2030, the retirement age will remain unchanged at 65 years of age, but as of January 2031, it will increase by 3 months per year until 2037, reaching 67 years of age by January 1, 2038); (ii) An early old-age pension for workers with at least 41 years of service at age 60 (as of January 1, 2014, they can retire without their pensions being reduced). (Source: http://macedoniaonline.eu;) Date: 15.12.2013).
- On April 2016, a reform came into force to accelerate the increase in retirement age; now the retirement age will increase from 65 to 67 years from January 1, 2028, 10 years earlier than originally stipulated. (Source: Global Retirement AON Update May 2016; http://www.total-croatia-news.com/).

Czech Republic

- Changes to the social security system came into effect on January 1, 2010. The main changes are as follows: (i) A gradual increase in the retirement age to 65 for women without children and men, by 2028 (in 2010 the retirement age was 62 years and 2 months for men, and 57[10]-61 years for women, depending on the number of children); women with children may retire between 62 and 65, depending on the number of children; (ii) A gradual increase in the number of years of contributions required for a full old-age pension, from 25 to 35 by 2019; (iii) An increase in the maximum taxable income from 48 to 72 times the national average monthly wage. (Source: International Update, United States Social Security Administration, January 2010).
- On September 12, 2012, the President approved an amendment to the Pension Act, which temporarily modifies the method of indexing old-age, survival and disability pensions of the public PAYGO system, in order to make them less generous and help to reduce the fiscal deficit. From 2013 to 2015, pensions will be adjusted automatically by 33.3% of

years (women), while partial pensions are paid to individuals with fewer years of contributions. Those who do not work are not eligible to receive social security benefits, but men over 60 and women over 55 can receive a state-financed non-contributory social security benefit.

[10] The mandatory retirement age for women without children is 57, according to the rules and regulations prior to these reforms.

the variation in the CPI and 33.3% of the growth of the average wage (formerly pensions were adjusted only according to the change in the CPI and by 33.3% of the growth of the average wage) (Source: International Update, United States Social Security Administration, Nov. 2012).

Denmark

- In late 2015 and early 2016, reforms that delay transition from work to retirement stage were implemented. Reforms include: (i) increase of the mandatory retirement age by one year, from 67 to 68, for everyone born from 1963 onwards; future adjustments to the retirement age will be automatic (increase of one year every 5 years); agreement stipulates that duration of old-age pensions should be about 14.5 years, based on the life expectancy of a person at 60; (ii) prohibition of incorporating a mandatory retirement age in existing and future employment contracts10. (Source: Social Security International Update; Date: April 2016).

Estonia

- A law that reduces the contributions financed by the employer to the second mandatory individual accounts pillar and increases the contributions to the first public PAYGO pillar until 2011 came into effect On June 1, 2009. Workers can also choose to reduce their contributions to the second pillar during this period. Under the new law, the employer's contribution rate to the second pillar will be 0% until 2010, will rise to 2% in 2011 and will then remain stable at 4% in 2012. Since the total contribution rate financed by the employer (20% of the worker's wages, the sum of the contributions to the first and second pillars) remains constant, the contribution rate to the first pillar will increase to 20% in 2010, and then drop to 18% in 2011 and to 16% in 2012. Workers who opt to reduce their contribution rate to the second pillar in this period, will contribute 0% until 2010, 1% in 2011, and 2% in 2012. Finally, workers who decide to continue paying contributions during this period will receive a 6% employer's contribution to their second pillar individual accounts and 14% to the first State pillar from 2014 to 2017. However, this measure may be postponed for a year if the GDP growth rate falls below 5%. Under the previous rules, employers contributed 4% to the second pillar individual accounts and employees 2%, totaling 6%. (Source: United States Social Security Administration publication International Update, August 2009).
- On April 7, 2010, the Legislature passed a law that will gradually increase the retirement age for men and women to age 65 by 2026, starting in 2017. Men can currently retire at age 63 with at least 15 years of contributions and women at 60 and 6 months with at least 15 years of contributions. (The retirement age for women is gradually increasing by 6 months each year until it equals the retirement age for men at 63 in 2016). The law also requires the Government to carry out a study in 2019 to determine whether additional measures may be necessary, such as a greater increase in the retirement age to ensure the sustainability of the pension system. (Source: United States Social Security Administration publication International Update, May 2010).

Finland

- On September 26, 2014, the Government and representatives of society reached an agreement to reform the pension system as of 2017. The changes include the gradual increase in the minimum and maximum retirement ages, as well as a change in the formula for calculating old age pensions. The minimum retirement age would increase by 3 months per year, from 63 to 65 in 2025. At the same time, the maximum retirement age would increase from 68 to 70. This measure would only affect those who were born in 1955 or later; the minimum and maximum retirement ages remain at 63 and 68 for people born before 1955. Additionally, from 2025 onwards, the retirement age will be adjusted according to life expectancy, so that the ratio between the number of years of work and the time in retirement will remain at the level existing in 2025. Every 5 years checks will be performed to ensure that this ratio remains constant; otherwise the necessary adjustments to the retirement age will be made. Regarding the formula for the calculation of benefits[11], the

[11] At present, the formula for calculating pensions is the average annual income multiplied by the discount factor, multiplied by a coefficient of life expectancy. A discount factor of 1.5% for the income received from 18 to 52 years of age is currently applied; and 1.9% for the income received from 53 to 62 years of age and 4.5% for income received from 63 to 67 years of age. With the new formula, a sole discount factor of 1.5% will be applied.

discount factor on income throughout working life will be standardized at 1.5% and income earned from the age of 17 will be considered. Another one of the proposals is to gradually increase the joint worker/employer contribution from 23.3% to 24.4% for workers under the age of 53. The Government hopes that these changes will help public finances onto a more sustainable path, while providing suitable benefits to retirees. The next step is to submit a bill of law to Parliament; it is expected to be ready in 2015. The reform should come into effect as of 2017. (Source: Social Security International Update, Nov. 2014).

- On Febrary 2016, the parliament approved a gradual increase in retirement age: as of January 2017, the minimum retirement age will increase from 63 to 65, at a rate of 3 months per year; the maximum age will also increase, from 68 to 70, at the same rate. The minimum and maximum retirement ages will subsequently be indexed to life expectancy, with maximum increases of 2 months per year. (Source: Global Retirement Update AON; Date: April 2016).

France[12]

- On October 27, 2010, the French National Assembly finally approved the pension reform Bill of Law that increases the minimum retirement age (for men and women) from 60 to 62 and the age for receiving full retirement benefits (for men and women) from 65 to 67 (Source: Progress of the Pension Funds No. 2, 2010).
- On 21 December, 2011, the Legislature approved a new law accelerating the increase in the retirement age that had been previously approved in the pension reform in 2010. The new legislation stipulates that the retirement age for men and women will increase by 4 months per year, from 60 to 62 (in the case of the reduced early pension), and from 65 to 67 (in the case of the full pension), one year prior to the date stipulated in the Law of 2010. (Source: Progress of the Pension Funds No. 1, 2012).
- On December 18, 2013, the National Assembly approved a reform of public pensions that primarily adopts the following measures, among others: (i) The contribution rates for workers and employers will gradually increase by 0.3 percentage points (pp) by 2017 (0.15 pp in 2014, and in 0,05 pp per year from 2015 to 2017; the contribution rates were previously 6.75% for workers and 8.4% for employers); (ii) The number of years of contributions required for accessing a full pension will increase gradually from 41.5 years to 43 years in the 2020-2035 period (a law promulgated in 2003 raised the contribution requirement from 40 to 41.5 years by 2020); (iii) As of 2014, most of the benefits will be indexed to changes in the cost of living in October of each year (the minimum retirement benefit will be adjusted twice a year (in April and October); the benefits were previously adjusted once a year (in April). Further details here. (Source: www.ssa.gov; Date: January 2014).

Germany

- As of 2012 the official retirement age will increase gradually from 65 to 67 (for men and women) by 2029, ("Law of adaptation of the pension insurance retirement age", approved on March 9, 2007). Individuals born in 1947 will retire in 2012 at age 65 and one month in order to guard against reductions in the amount of the pension. The retirement age will increase by one month per year until 2023 and two months per year between 2024 and 2029. (Source: Labor and Social Affairs Commission, Informative Note, March 2007).
- As of January 1, 2016, the tax ceiling for old age, disability and survival pensions will increase from EUR 72,600 to EUR 74,400 in Western Germany (approx. USD 79,562 to USD 81,534) and from EUR 62,400 to EUR 64,800 in

[12] With the reforms approved to 2013, the number of years of contributions required for people born prior to 1952 to be able to take normal retirement is 164 quarters. They will be able to retire between the ages of 60 and 65 depending on when they meet the required contribution term. People born after 1955 will require 166 quarters of contributions to take normal retirement, according to the latest reform of 2011, between 62 and 67 years of age (gradual increase between 2017 and 2022). Early retirement for those born prior to 1952 is at the age of 60 if they do not qualify for a full pension under the General Regime and quarterly reduction coefficients are applied. For those born after 1956, there is an early retirement option at the age of 56, which is intended for those with long-term contribution careers and who, among other aspects, meet the conditions for a full pension under the General Regime and started working before the age of 18 (43 years of contributions as of 2012). Source: Social Security Magazine "Pensions in Europe: review of countries", July 2013.

Eastern Germany (approx. USD 68,384 to USD 71,014)[13]. (Source: AON Global RetirementUpdate; Date: September 2015).

Greece

- On June 25, 2010, the Government approved a reform of the public pension system, which, inter alia: (i) increases the minimum early retirement age from 53 to 60; (ii) increases the retirement age for women from 60 to 65 in 2013, equaling the retirement age for men (beginning in 2020, the retirement age will be adjusted every 3 years according to changes in life expectancy); (iii) increases the minimum number of years of contributions for qualifying for a full pension from 37 to 40 by 2015; (iv) freezes pension amounts between 2011 and 2013; (v) changes the formula for calculating benefits; as of 2014 pensions will be indexed according to the variations of the CPI and will be calculated considering the average salary of the entire professional career (instead of considering the 5 years of best salaries in the last 10 years prior to retirement). (Source: International Update, Social Security Administration, August 2010).
- At the end of June 2011, the Government approved changes to the social security system as part of its 5 year austerity plan (2011-2015) for assuring loans for about EUR 12 billion (US$ 17 billion) and being able to meet its debt obligations. With regard to pensions, the changes: (i) Increase the means testing of solidarity pensions; (ii) Reduce lump sum pension payments to civil servants by at least 10% as of 2011; (iii) Extend the freezing of public pensions, from 2011 to 2015; (iv) Reform the disability pension system in order to reduce spending on disability benefits through more rigorous medical certifications. (Source: International Update, Social Security Administration, August 2011).
- In November 2012, this country's Legislature approved a series of pension reforms (among other laws), as a precondition for the monetary aid agreement for EUR 49 billion (approx. USD 64 billion). The new measures concerning pensions that began to be implemented as of January 1, 2013, include: (i) increasing the mandatory retirement age for obtaining a full pension from 65 to 67 (as of 2020, the legal age will be automatically adjusted according to the increase in life expectancy every 3 years); (ii) Reduce monthly pensions that exceed EUR 1,000 (approx. USD 1,299), between 5% and 15%, depending on the income level (the general freeze on the level of pensions, which began in 2011, will be maintained until 2015); (iii) Reduce by up to 83% the bonus paid to public-sector employees earning less than EUR 2,500 (approx. USD 3,247) (in 2011, bonuses for workers in this sector with high wages were eliminated). (Source: International Update, Social Security Administration, Dec. 2012).
- During May and June, the parliament enacted a series of tax and pension reforms to secure loans from global creditors worth USD 11.5 billion. The measures are part of the bailout program agreed to last year with the EU, the European Central Bank and the IMF. These policies are aimed at generating a budget surplus in 2018 and reducing pension spending to 15% of GDP by 2019. The pension reforms implemented were: (i) a gradual phasing out of the means-tested social solidarity benefit (EKAS) by 2020 for approximately 380,000 low-income pensioners; (ii) a reduction in benefits by as much as 40% for the approximately 200,000 pensioners who receive pensions of more than €1,300 (US$1,453) a month; (iii) the introduction of a national flat-rate minimum pension of €384 (approx. USD 437) per month for workers who have at least 20 years of contributions at the normal retirement age of 67. (Source: International Update, Social Security Administration, June 2016).

Hungary

- On May 11, 2009, the Legislature passed a public pension reform package, which mainly established the following measures: (i) Gradually increase the retirement age from 62 to 65 by 2022 (this change affects workers born in 1957 or later); (ii) Eliminate the so-called "13-month pension " (equal to one month's full pension) to replace it with a pension bonus linked to economic growth. The bonus, which ranges between $20,000 and $80,000 forints (between USD 101.13 and USD 404.66) depending on the level of economic growth, will be paid when GDP reaches an annual growth of 3.5%; (iii) Change the way pensions are indexed in the PAYGO system, subject to economic and wage growth

[13] At the exchange rate used to 30.12.2015: 1 EUR = 1.09589 USD.

conditions[14]. (Source: International Update, Social Security Administration, June 2009).

Ireland

- At the end of June 2011, the Government promulgated two laws making the following four principal changes to the Social Security system: (i) Eliminates the transient state pension as of January 1, 2014, which means that the retirement age will be 66 for all workers (previously, workers born after 1947 could retire at age 65 if they met all the eligibility requirements; (ii) Increases the normal retirement age for accessing a State pension, from 66 to 67 by 2021, and from 67 to 68 by 2028; (iii) Reduces the contribution rate financed by the employer, from 8.5% to 4.25% of the worker's salary, as of July 2 and until the end of 2013 (the contribution rate for workers, ranging from 4% of salary to 5% of salary, depending on the level of income, will remain unchanged); (iv) Introduces a tax of 0.6% on the assets of occupational pensions, in order to finance the creation of 20,000 new jobs and provide financial assistance and training. (Source: www.ssa.gov;) Date: August 2011).
- On October 15, 2013, the Minister of Finance announced, within the context of the Budget Law for 2014, that a new tax of 0.15% on the assets of the occupational pension funds will be introduced (for two years as of 2014). The previous tax of 0.6% will only be enforced until 2014, so that the overall tax burden for that year will be 0.75%. As of 2015, the tax will only be 0.15%. Due to the improvement in the public finances, this levy will be eliminated by the end of 2015. (Source: Budget 2014: Pension related announcements, Irish Life Corporate Business; International Update, Social Security Administration, March 2014)..

Italy

- On July 29, 2010, a new law was passed that gradually increases the retirement age for women in the public sector from 61 to 65 (the current retirement age form men in the public and private sectors). The first adjustment will be implemented on January 1, 2015, increasing the retirement age for a maximum of 3 months; the second adjustment will occur in 2019, and every 3 years thereafter. (Source: International Update, Social Security Administration, Sept. 2010).
- On December 22, 2011 the Italian Legislature passed a package of austerity and growth measures (including pension reforms). The changes involves: (i) Freezing of pensions exceeding EUR 1,400 (approx. USD 1,825) in 2012 and 2013; (ii) An increase in the retirement age from 65 to 66 for men, and 60 to 62 for women as of 2012; the retirement age will then gradually increase to 67 in 2022, for men and women (the retirement age for both men and women should be 66 by 2018); (iv) As of 2013, the retirement age will be adjusted according to the variation in life expectancy (adjustments will be every three years starting in 2013, and will be based on the average data of the last three years with respect to the previous three years, and from the current retirement age of 65/60 for men and women, respectively); (v) Stricter requirements for access to the so-called "seniority pensions" as of 2012; (vi) An increase in the number of years of contributions required for an early pension, at 42 years and one month in the case of men and 41 years and one month for women, taking life expectancy into account (+ 3 months starting in 2013). (Source: www.ssa.gov; Activa Social Security Magazine "How is the Sustainability Factor Applied in Europe? Date: January 2012).

Latvia

- According to a Law passed in 2009, as of July 1, 2009, and until December 31, 2012, the amounts of public pensions will be reduced by 10%, and retirees who work (dependent and self-employed) will only receive 30% of their State old-age pension. Early retirement benefits will also be reduced by 30% for those who retired before June 30, 2009, and 50% for those who retired after July 1, 2009. (Source: www.issa.int; Date: July 2009).
- On June 14, 2012 the Legislature passed a law, which: (i) Gradually increases the retirement age from 62 to 65, by 3 months per year between 2014 and 2025; and (ii) Increases the minimum Number of years of contribution for accessing

[14] If GDP growth is less than 3%, pensions will be fully indexed in accordance with the variation of the CPI; If GDP growth is between 3% and 4%, pensions will be indexed by 80% of the variation of the CPI and 20% of the growth of wages; if GDP growth is between 4% and 5%, pensions will be indexed by 60% of the variation of the CPI and 40% of the growth of wages; if GDP growth is higher than 5%, pensions will be indexed by 50% of the variation of the CPI and 50% of the growth of wages.

a pension, from 10 to 15 years in 2014, and to 20 years in 2025. (Source: International Update, Social Security Administration, Aug. 2012).

- On October 23, 2013, the Legislature approved Law 727 (Latvian), which introduces a series of measures with regard to the country's budget. Among others, the measures stipulate that: (i) As of January 1, 2014, the total contribution rate to the Social Security system will be reduced by one percentage point (pp) from 35.09% to 34.09% (the contribution rate paid by the worker will be reduced by 0.5 pp, from 11% to 10.5% and the employers contribution rate will also drop 0.5 pp (from 23.59% 24.09%); and (ii) the contribution rate paid into the second individually funded pillar will be increased from 4% in 2013-2014 to 5% in 2015 and to 6% in 2016. Further details here. (Source: www.mercer.com; Date: 08.11.2013).

Lithuania

- On July 1, 2009, the Government of Lithuania reduced the contributions to the second individual accounts pillar and correspondingly increased the contribution to the first public PAYGO pillar. The contributions paid into individual accounts dropped from 3 percentage points (pp) to 2 pp from July 1, 2009 to 2011, and were 1.5 pp in 2012 and 2.5 pp in 2013 (in January 2009, said contribution was reduced from 5.5 pp 3 pp, until June 2009[15]). (Source: United States Social Security Administration publication International Update, August 2009; Sustainability of the Public Finance System via Optimization of Strategic Management, 2012).
- On June 9, 2011, the Legislature passed a law that will greatly increase the retirement age from 62.5 to 65 (men), and from 60 to 65 (women), by 2026. The retirement age will increase by 2 months per year for men, and by 4 months per year for women, as of January 1, 2012 (in order to receive a full pension, workers must also have contributed for 30 years). (Source: International Update, Social Security Administration, July 2011).
- On November 14, 2012, the Legislature passed a law that changes the percentages of contributions financed by employer/worker that are paid into the individual accounts of the second pillar, allows workers who make additional contributions to the second pillar to be compensated with State contributions, and allows workers to opt out of the second pillar of individual accounts (participation in the second pillar is voluntary; however, once the worker has taken the decision to contribute to an individual account, it cannot be reversed). The new law reduces the contribution to the second pillar to 2 pp as of 2014, but allows workers to contribute an additional 1% to their individual accounts. Workers who make additional contributions will receive a government subsidy equal to 1% of the national average wage (as of 2017, the additional contribution will rise to 2% of the worker's salary, and the subsidy granted by the State will increase to 2% of the national average wage). Workers currently enrolled in the second pillar and those who enroll before the end of 2012 will have from April to September of 2013 to declare their intention of paying the additional contributions; new workers entering the labor force as of 2013 will be automatically enrolled to make additional contributions. The new law also allows workers to choose to opt out of the second pillar between April and September of 2013. Workers who opt out of contributing to an individual account will have the option of transferring the balances of their individual accounts to the PAYGO program of the first pillar, or leave the balances of the second pillar individual accounts intact, paying only future contributions into the PAYGO program. (Source: United States Social Security Administration publication International Update, December 2012).

Luxembourg

- A pension reform law which encourages workers to remain in the labor market for a longer period of time and establishes a mechanism for adjusting the benefits provided by the PAYGO system came into effect on January 1, 2013. The law establishes a gradual modification (by 2052) of the benefits formula of the PAYGO system, comprising two parts: (i) A fixed portion, which depends on the number of years of paid-in contributions, and (ii) A variable portion, which depends on the level of income. As a result, the fixed portion will increase slightly (on average, 0.44% per year), from EUR 433.86 (USD 572.81) in October, 2012; the variable portion, in turn, will decrease from 1.85% to 1.60% of

[15] In 2004, this contribution was 2.5%; in 2005, 3.5%; in 2006, 4.5%; and in 2007-2008, 5.5%. Initially, in June 2009, it had been decided that the reduction of the contribution to the individual accounts in 2009 would be reversed until again reaching 5.5% as of 2015. However, in early 2011, the Authority decided that this would not be the case. Source: Sustainability of the Public Finance System via Optimization of Strategic Management, 2012).

the adjusted wages of the complete work trajectory. Once the law is fully implemented, workers will have to work 3 years more than what they work today in order to obtain a pension equal to the levels granted in 2012; workers who do not delay their retirement, will receive a pension 10% lower than the levels granted in 2012. (Source: International Update, Social Security Administration, Jan. 2013.

Macedonia

- In December 2013, the legislature passed amendments to the Social Security Law stipulating that the contribution rate (for pensions and disability insurance) will be 18% by 2014, and will drop to 17.6% in 2015 (this rate was previously scheduled to drop from 18% to 17.6% in 2014, and to reach 17.5% in 2015). In other words, the approved amendments delay the scheduled reductions of such rate. Meanwhile, the unemployment insurance contribution rate will remain unchanged at 1.2% (instead of being reduced to 1.1% in 2015, as planned), whereas the health insurance contribution (7.3%) and the work accident insurance commission (0.5%) will remain unchanged until 2015. Further details here. (Source: www.mercer.com;) Date: 16.12.2013).

Malta

- As of January 1, 2007, the retirement age began to increase gradually from 61 to 65 for men, and from 60 to 65 for women, by 2027. (Source: PriceWaterHouseCoopers News Alert; February 2007; "Retirement Ages in Member States", Finish Centre for Pensions, January 2004).
- In December 2013, the Government introduced amendments to the Social Security legislation, the most significant being the reduction in the retirement pension in the amount of the so-called "Pension Service" (paid by the employer). For such purposes, the amount of the Pension Service that is excluded from the calculation of old-age social security pension increases by EUR 200 (from EUR 1,266 to EUR 1,466). (Source: Global Social Security Newsletter, PricewaterhouseCoopers (PwC); Date: December 2013).

Monaco

- As of October 1, 2012, a law came into effect that: (i) Increases the contribution rate to the public PAYGO system, for employers and workers, from 6.15% to 6.95% and 6.55%, respectively; if necessary in future, the law stipulates that the employers contribution could be increased by 1.3 percentage points and that of the workers by 0.7 percentage points; (ii) Modifies the formula for calculating pensions by means of a points system, in order to make it less generous; this points-based system must be reviewed every 7 years to determine whether it requires further adjustments. (Source: International Update, Social Security Administration, Nov. 2012).

Norway

- Important changes to the PAYGO system came into effect as of January 1, 2011. The reforms aim at reducing benefits (especially for higher incomes), introducing a flexible retirement age and modifying the rules and regulations governing the indexation of benefits, for the purpose of encouraging the extension of working life and adjusting pensions in line with longevity trends. The changes include: (i) A flexible retirement age, between 62 and 75; workers can collect a pension and continue working; the amount of the pension will be adjusted in accordance with a "longevity factor" based on the age of the individual at the time of retirement (under the existing rules, the retirement age is 67, but it can be deferred until age 70, earning a credit for obtaining a higher pension;) (ii) A change in the benefits calculation formula, based on the average contributions throughout working life from age 13 to 75, plus credits for periods with no paid-in contributions due to unemployment; furthermore, pension benefits will be adjusted annually based on the growth of wages, minus 0.75 percentage points (benefits will not be adjusted downwards in case of wage reductions). Pensions are currently calculated on the 20 years of highest income (for a full pension, after working a maximum of 40 years), and the benefits are indexed to changes in the average national wage; (iii) A means-tested pension will replace the current universal minimum fixed public pension. (Source: International Update, Social Security Administration, Dec. 2010).
- In December 2013, the Government announced that the contribution rate to the public PAYGO system would increase as of January 1, 2014, for workers (from 7.8% to 8.2% of gross salary) and employers (from 11% to 11.4% of the gross

wage of the worker), totaling an increase of 0.8 percentage points (from 18.8% to 19.6% of the gross wage of the worker). (Source: Global Social Security Newsletter, PricewaterhouseCoopers (PwC); Date: December 2013).

Netherlands

- On February 7, 2012, the Legislature passed a law that: (i) Increases the retirement age for accessing pensions in the first public PAYGO pillar. Under the new law, the retirement age for men and women will increase from 65 to 67 in 2023. However, in January 2015 the Lower House of Parliament approved a bill to accelerate the increase in the retirement age. Thus, the retirement age will be 66 in 2018 and 67 in 2021. Furthermore, from 2022 onwards, the retirement age will be modified according to changes in life expectancy. (ii) Establishes a reduced pension for workers who opt for early retirement (but not before age 65) and an increased pension for those who retire after the normal retirement age (up to 5 years later). The pension will be reduced by 6.5% for every year of early retirement, and will increase by 6.5% for each year of delayed retirement. (Source: International Update, Social Security Administration, April 2012; Global Retirement Update, Hewitt Associates, January 2015).
- Effective January 1, 2015, a new law will be implemented that makes a number of changes to occupational pension plans. Particularly. The new law lowers the maximum benefit through the modification of the benefit formula for most occupational pension plans (career average) by further reducing the maximum annual accrual rate from 2.15 percent to 1.875 percent of average earnings. Another measure will set a ceiling on pensionable earnings at EUR 100,000 (aprox. USD 108,248) a year (except for disability pensions). For those workers who earn more than the maximum amount, a new type of voluntary supplementary plan will be established. (Source: Social Security International Update, Dec. 2014).

Poland

- On May 25, 2012, the President signed a bill of law to gradually increase the retirement age to 67 (65 to 67 by 2020 for men; and 60 to 67 by 2040 for women), with partial benefits available for those who take early retirement (prior to the promulgation of this law, the retirement age was 65 for men and 60 for women). As of 2013, the retirement age will increase by three months every year. "Partial retirement" will be available to women at age 62 if they have contributed for at least 35 years, and for men at age 65 if they have contributed for at least 40 years. Nonetheless, those who opt for partial retirement will be eligible to receive only 50% of the pension they would receive at the normal retirement age (at 67 years of age they can apply to increase their pension benefit, but it will not be 100% of the former base pension). The new law also changes the pension rules and regulations for the uniformed services such as the police and the army (new recruits cannot retire until they turn 55 and have served for 25 years (as opposed to current members of the uniformed services who can retire after 15 years of service without any age limit). (Source: "Poland: New Law Increases Retirement Age", Towers Watson, Jun. 2012; International Update, Social Security Administration, July 2012).
- On December 27, 2013, the Polish President, Bronislaw Komorowski, signed the Private Pension Funds Reform law (OFEs, by its Polish acronym). The law provides that:
  (i) The part corresponding to the OFE system will no longer be mandatory, but rather voluntary, so that existing workers and new workers entering the labor market must decide between April 1 and July 1, 2014, whether they want all their pension insurance contribution (19.52% of the worker's gross salary) to remain in the State Social Security System (ZUS, by its Polish acronym) and be managed thereby, or whether they would prefer the ZUS to transfer a portion of the total contribution to the OFE of their choice (if the worker does not choose, the default option is for the entire contribution to remain in the ZUS). Should the employee choose to allocate a part of the contribution to the OFE, the ZUS will transfer 2.92 percentage points (pp) of the total contribution to the OFE, and the remaining part (16.60 pp) will be managed by the ZUS (12.22 pp in the Social Security Fund (FUS) and 4.38 pp in a special sub-account of the FUS). This decision may again change in 2016, and from then on every 4 years (should someone wish to destine a portion of the contribution to the OFE, it will only be possible for new contributions and not for those accumulated in the ZUS, since they are part of the PAYGO system based on Notional Defined Contribution Accounts)[16].

[16] In 2013, the amount transferred by ZUS to the OFE (before this reform was implemented), was 2.80 pp, and is was legally scheduled to increase to

(ii) 51.5% of all net assets under management in the OFEs were transferred to the ZUS on February 3, 2014.

(iii) The OFEs will be forbidden from investing in Treasury bonds and fixed income securities guaranteed thereby, but they will be free to invest in shares and in municipal and corporate bonds. In addition, the minimum limit of investment in variable income (shares) will gradually decrease from 75% of the net assets under management in 2014, to 55% in 2015, 35% in 2016, and 15% from 2017 onwards.

(iv) As of February 1, 2014, the funds of individuals who decided to pay one part of their contribution into the OFEs system will be gradually transferred from their OFE to the ZUS over a period of ten years prior to retirement (the funds transferred from the OFEs to the ZUS will be 1/10 of the accumulated funds of the workers, every year, in the last 10 years prior to retirement, until the individual account in the OFE has a zero balance).

(v) The pension fund managers will be legally prohibited from advertising in the period in which the workers must choose whether to contribute to an OFE or whether they will remain in the ZUS. There will be serious fines/penalties for any advertising by the fund managers.

(vi) There will be no minimum return guarantee.

(vii) There will be some changes to the guarantee fund. Prior to the reform, this consisted of two parts: one managed by the Domestic Securities Deposit (0.1% of the value of the net assets under management had to be paid by the fund manager from its own capital as collateral) and another part managed by the same fund manager (0.4%). Now, with the reform, the second part of the guarantee fund was eliminated, while the first was increased to 0.3% of the value of the net assets under management.

(viii) As of February 1, 2014, the maximum Commission on the contribution that the OFEs may charge for the management of resources was reduced from 3.5% to 1.75% (and the commission paid to the ZUS on this amount dropped from 0.8% of the value of the contribution to 0.4%). The OFEs will be allowed to charge members different commissions, depending on how long they have been enrolled in the system (an "award" or "bonus" system for those workers enrolled in the fund for a long time).

(ix) The foreign investment limit for the pension funds will be 30% of the value of the net assets under management. (Source: http://english.eastday.com; www.premier.gov.pl, Date: 27.12.2013).

Portugal

- On April 5, 2012, the Government suspended early retirement for dependent workers covered by the public PAYGO system until the end of 2014. Only workers with long periods of unemployment and older workers receiving unemployment insurance benefits will be able to take early retirement. Other measures that have been adopted to help reduce the tax burden include: (i) The freezing of public pensions in 2011; (ii) The introduction of a special tax for pensions exceeding EUR 1,500 (1,985 USD) per month; (iii) The elimination of the 13th and 14th months of pension payments for retirees with incomes exceeding EUR 1,100 (US $ 1.456) per month. (Source: International Update, United States Social Security Administration, May 2012).
- On December 31, 2013, "Decree-Law No. 167-E/2013" was published in the Official Gazette. This law introduces changes to the public PAYGO system as of January 1, 2014. The following are some of the more important measures adopted:
  (i) Increase the retirement age from 65 to 66 as of January 2014. Workers can retire at 65 with a full pension if they are "legally disabled" to work beyond that age (early retirement was suspended in May 2012, and this is expected to continue until June 2014; the only exceptions are individuals with long periods of unemployment, who will continue to retire at age 57). The Government plans to link future increases in the retirement age to changes in life expectancy.
  (ii) Increase the special tax on contributions (introduced in 2011) for high-income individuals. The tax rate is in the range of 3.5% - 10% of the total taxable income.

3.10 pp in 2014, to 3.30 pp in 2015 and to 3,50 pp in 2016, and to remain at that level from 2017 onwards, but due to the new law that was passed, this will no longer be so. The new law also establishes the following changes. It must be pointed out that on May 1, 2011,a law reducing ZUS's transfer to the OFE from 7.3 pp to 2.3 pp came into effect (the 5 pp difference remained in a special sub-account of the FUS). (Source: International Update, Social Security Administration, May 2011).

(iii) Modify the sustainability factor used for calculating the initial pension as of 2015 (it was previously calculated as the quotient between life expectancy in 2006 and life expectancy in the year prior to retirement; life expectancy in 2010 is now taken as the basis). Thus, taking the life expectancy of the year 2000 as a reference, the new sustainability factor for 2014 implies a reduction in the initial pension of 12.34% (instead of a lesser reduction, of 5.43% when considering the year 2006 under the previous rule). Hence, a 65 year old individual who retires in 2014 must work another year in order to receive a pension equal to the one he would have received under the previous rules. (Source: International Update, United States Social Security Administration, March 2014).

- On April 30, 2014 the government announced a number of measures to reform the public pension system in order to reduce the fiscal deficit, including the following:
  (i) An increase in the contribution rate for all workers from 11% of gross earnings to 11.2%.
  (ii) Introduction of a balance factor—a new way of adjusting pensions—based on the relationship between revenues and expenditures and considering demographic and economic changes. However, no implementation date was specified. Currently, they are adjusted annually according to changes in the social support index (IAS), which is based on changes in the consumer price index plus growth in the country's GDP. However, this index has been frozen since 2010. (Source: USAID, Global Experience in Pension Reform; Sept. 2014).

- On April 2016, provisions governing the automatic increase in the retirement age were published; based on these provisions, and considering an average life expectancy of 65 between 2014 and 2015, the retirement age should increase from 66 to 66 and three months since January 2017. (Source: Global Retirement Update AON; Date: April 2016).

Romania

- In 2009, the contribution rate destined to the second pillar of individually funded accounts was frozen at 2.0% of the gross wages of workers, despite the fact that the pension reform of 2008 stipulated that it should have increased to 2.5% (an increase of 0.5 percentage points (pp) was planned for each year, in order to reach 6% by 2016). However, the measure adopted in 2009 was temporary, and in 2010 the contribution rate destined to the second pillar increased by 0.5 pp (totaling 2.5%, following the scheduled growth trajectory and reaching 3.5% in 2012). This, In turn, meant that the contribution rate destined to the first public PAYGO pillar continued to decline proportionately (dropping from 28.8% in 2010 to 27.8% in 2012)[17]. (Source: FIAP based on Romanian Association of Private Pension Funds (APAPR);) International Headlines Mercer January 8, 2009; Global Retirement Update Aon Hewitt; y Pensions in Crisis: Europe and Central Asia Regional Policy Note, World Bank, 2009).
- A law reforming the public pension system was passed on December 15, 2010. It came into effect on January 1, 2011. Among other aspects, the Law: (i) gradually increases the retirement age, from 63 years and 9 months to 65 for men (by 2015), and 58 years and 9 months to 60 for women (by 2015); the retirement age for women will be 63 by 2030; (ii) increases the number of years required for a full pension from 32 years and 6 months to 35 years (for men) and from 27 years and 6 months to 30 years (for women) (the number of years of contributions required for accessing the minimum pension will also increase from 12 years and 6 months to 15 years for men and women); (iii) the public pensions indexation system will also be changed for a much less generous system than the existing one (public pensions will now increase on the basis of the consumer price index plus wage growth); (iv) many categories of public sector workers, special and non-contributory workers will be incorporated into the public PAYGO system; (v) the penalties for early retirement will increase and the granting of disability pensions will be more strictly controlled; (v) public pensions will be temporarily frozen in 2011,as part of the government's efforts to contain the massive 50% deficit in the public pensions budget. (Source: Progress of the Pension Systems FIAP No. 1, 2011) "Progress of the Pension Systems, FIAP No. 1, 2011; "Romania: Pension Fund Changes Made", Towers Watson, Jan. 2012; www.ssa.gov).

[17] In 2013 the contribution rate destined to the second individually funded pillar was 4%, and will be 4.5% in 2014 (it is expected to increase to 6% by 2017). The contribution rate destined to the first public PAYGO pillar in 2013, in turn, is 27.3% and will be 26.8% in 2014 (it is expected to drop to 25.3% in 2017). Source: Romanian Association of Private Pension Fundss (APAPR).

- On December 3, 2013, the Government approved a bill of law amending "Law 263/2010 regarding the unified public pension system", whereby:
  - (i) Women born after January 1971 must retire at age 65 from 2035 onwards, in order to qualify for retirement benefits, thus matching the retirement age of men (in the period from January 2011 to January 2015, the retirement age for women will increase from 59 to 60, and the retirement age for men from 64 to 65; as of February 2015, the gradual rise in the retirement age will continue only for women, from 60 to 63 by 2030; as of January 2035, women will retire at the same age as men (65).
  - (ii) The number of years of contributions required for obtaining a full old-age pension will gradually increase from 28 years (women) and 30 years (men), to 35 years as of 2030;
  - (iii) The minimum number of years of contribution will increase from the current 13 years to 15 years for men and women as of 2030. It must be pointed out that this bill of law must still be approved by the Legislature. Further details here and here. (Source: www.aonhewitt.com; www.agerpres.ro; www.hotnews.ro;) Date: 04.12.2013).

Russia

- On July 24, 2009, the President signed into law a proposal that modifies the financing of Social Security benefits as of January 1, 2010. The law replaces the sole social tax system with a fixed contribution financed by the employer, changes the collection process, increases the contribution rate and introduces a cap on the contributions of the employer. Under the sole regressive social tax system, employers pay up to 26% of taxable income to the tax supervision authority, and this percentage decreases as the annual income of workers increases. No mandatory contribution by workers is required. The tax inspection authority then distributes these contributions to the Pension Funds, the Social Security Fund, and the Mandatory Medical Insurance Fund. The new law abolishes this tax system and replaces it with a fixed contribution financed by the employer (which was 26% in 2010 and will increase to 34% as of 2011), payable on the first 415,000 rubles (approx. USD 13,037) of the annual income (this tax ceiling will be indexed annually to the changes in the average salary). Employers will have to pay these contributions directly to the three funds. In 2010, the combined 26% contribution will be assigned as follows: 20% to the Pension Fund, 2.9% to the Social Security Fund, and 3.1% to the Mandatory Medical Insurance Fund. The increase of the combined contribution rate to 34% in 2011 will mainly benefit the Pension Funds, by increasing their allocation to 26% (the Social Security Fund will receive 2.9%, and the Mandatory Medical Insurance Fund will receive 5.1%). (Source: International Update, Social Security Administration, Sept. 2009).
- A new pension law came into effect on January 1, 2014, after its approval by the State Duma (Lower House), the Federal Council and its signing by President Putin at the end of December, 2013. The Law provides that, among other issues: (i) All the non-State pension funds (NPFs) will have to change their current status of "non-profit organizations" to "corporations" (at the beginning of 2016 for those offering mandatory pensions and as of 2019 for the voluntary funds), and must be approved by the Bank of Russia, the Central Bank and the pensions regulator (the NPFs that do not convert by the established deadlines will be liquidated;) (ii) workers can choose to pay a contribution of 6% of their salary to the private fund or finance the full contribution of 22% of the salary to the first pillar - also defined as the default option (the deadline for exercising this option expires at the end of 2015; meanwhile, in 2014, the contribution rate to the second pillar of individual accounts of those members who do not choose an NPF (and who therefore by default contribute to the State Fund Manager VEB), will be reduced by 4 percentage points (from 6% to 2%), and this part will be destined to the first public PAYGO pillar). It should be noted that this law does not change the mandatory retirement age of 55 for women and 60 for men. Further details here, here and here. (Source: www.mercer.com; www.aon.com; Date: January 2014).
- A new public pensions law came into effect on January 1, 2015. This law gradually increases the minimum number of years of contributions required to qualify for a defined benefits pension, from 6 to 15 by the year 2024. The law maintains the structure of the pension system, based on a 1st Pillar (defined benefits and State-run) and a second individually funded pillar (defined contribution and privately managed). Workers must contribute 10% to the first pillar and 6% to the second pillar. The former private pension fund managers must make a series of adjustments in the light of the new law: (i) change from being non-profit to joint stock companies; (ii) obtain a license from the Bank of Russia to

operate; (iii) establish a reserve fund and a guarantee fund. Furthermore, the accounts managed by the Vnesheconombank (VEB), the State institution that managed the 2nd Pillar accounts of individuals who did not chose a private fund manager, must gradually be transferred to the private fund managers between 2015 and 2017. This includes the contributions that have been frozen by the Government since 2013. (Source: Social Security, International Update, Feb. 2015).

Slovakia

- The 2003 pension reform Law (Act No. 461/2003 Coll. on Social Insurance), introduced a gradual increase in the retirement age from 60 to 62 for men by 2007, and from age 53-57 to 62 for women (depending on the number of children) by 2015 (in 2008 women could retire at age 56 and 9 months). (Source: Pension Funds Online; http://www.issa.int/; Social Security Programs Throughout the World: Europe, 2012).
- On September 1, 2012, a law was promulgated that reduces the contribution to the individually funded program (from 9% to 4% of the worker's salary), and correspondingly increases the contribution destined to the public PAYGO program (from 9% to 14%). Contributions to the individually funded program are financed only by the employer, from its total contribution to the system (14%: 10% to the PAYGO program and 4% to the individually funded program); the worker only contributes to the PAYGO program (4%). (Source: International Update, Social Security Administration, Sept. 2012).

Slovenia

- On September 28, 2010, the Government approved the budget Bills of Law for 2011 and 2012, which freeze pensions at existing levels for the year 2011, with an increase in 2012 only if inflation exceeds 2%. This austerity measure is an attempt to reduce the projected public deficit of 5.8% of GDP in 2010 to less than 3%, as required under the European Union's Growth and Stability Pact. (Source: International Update, Social Security Administration, Oct. 2010) .
- A law increasing the retirement age for men and women and modifying the formula for calculating the pensions of the public PAYGO system came into effect on January 1, 2013. Under the previous legislation, the retirement age varied according to gender and years of contributions: 63 years of age (men) or 61 years of age (women), with at least 20 years of contributions; 58 years of age (men) with at least 40 years of contributions, or 57 years and 4 months (women) with at least 37 years and 9 months of contributions; and 65 years of age (men) or 63 years of age (women), with at least 15 years of contributions. The new law changes the conditions of the last two categories, so that workers (men and women) will be able to retire at age 60 with at least 40 years of contributions, or at age 65 with at least 15 years of contributions. Furthermore, the pension calculation formula will be less generous: instead of calculating pensions considering the 18 years of highest wages, the 24 years of highest income will be taken into account. (Source: International Update, Social Security Administration, Jan. 2013).

Spain

- A series of changes to the public pension system approved in August, 2011 (Law 27/11) will start being enforced as of January 1, 2013. The changes include the following: (i) The official retirement age increases from 65 to 67, by one month per year until 2018, and 2 months per year until 2027 (ii) The minimum number of years of contribution required for a pension increases from 15 to 25, at the rate of 1 year per year until 2022; (iii) The number of years of contribution required for receiving a full pension increases from 35 to 38.5 years, by 6 months every 3 years until 2025 (workers can retire at age 65 if they meet these contribution requirements); (iv) The benefits for workers who remain in the labor market beyond the normal retirement age will increase between 2% and 4%, depending on the number of years of contribution. For workers with less than 25 years of service, the incentive will be 2%; for those with between 25 and 36 years of service, the incentive will be 2.75%; and for those with 37 or more years of service, the incentive will be 4%. Furthermore, as of 2027 the law establishes the introduction of a "sustainability factor" which will automatically adjust all the relevant parameters of the system based on changes in life expectancy, every 5 years. (Source: www.ssa.gov;) Date: January 2013).
- On December 19, 2013 the Chamber of Deputies gave its final approval, following passage through the Senate, of the Law Regulating the Sustainability Factor and the Revaluation Rate of the Pension System, which will become effective as of January 1, 2014. It provides that: (i) The Sustainability Factor, which links the evolution of pensions to life

expectancy, will be applied starting in 2019, will be used in the calculation of the initial pension and will be reviewed every five years; (ii) There will be a new Revaluation Rate, ensuring the annual increase in pensions at a minimum rate of 0.25% (the maximum rate is fixed as the CPI of the previous year plus 0.50%, when the economic situation is favorable). The law envisages two impact control and measurement mechanisms: (i) Every 5 years the Government will submit an assessment report to the Chamber of Deputies and social agents that will enable verifying the adequacy of pensions; (ii) The opinion of an Independent Fiscal Liability Authority will be sought regarding the values calculated by the Ministry of Employment and Social Security for the Pension Revaluation Rate, applicable in each fiscal year, and the Sustainability Factor. The new public supervisory authority will be dependent on the Ministry of Finance and Public Administration. Further details here. (Source: www.lamoncloa.gob.es;) Date: 19.12.2013).

Ukraine

- On September 9, 2011, the President signed the Law of Ukraine "On Legislative Measures for Pension Reform" No. 3668-VI, which establishes the following measures to be applied to the public PAYGO program (1st pillar): (i) Gradually increase the retirement age of: (i) women, by 6 months per year, from October 1, 2011, from 55 to 60 by 2020; (ii) male public servants by 6 months per year, starting in January 1, 2013, from 60 to 62 by 2016.; (iii) increases the number of years of contributions for obtaining a full old age pension for women from 20 to 30 years, and from 25 to 35 years for men; (iv) increases the minimum number of years of contributions for obtaining a minimum pension from 5 to 15 years; (v) establishes a maximum pension of 10 minimum wages for disabled individuals; (vi) the average national wage of the last three years will be used for calculating pensions as of January 1, 2012. (Source: Legislation Monitoring: Law of Ukraine 'On Pension Reform Legislative Measures", USAID, http://www.finrep.kiev.ua/October 2011).
- A series of provisions approved in May 2013 through a law reforming the public PAYGO system began to be applied as of July 1, 2013. The main measures are: (i) The periods of maternity leave and those in which unemployment benefits are received will be taken into account when calculating pensions; (ii) A new mechanism will be considered for filling in incomplete periods of service in the benefits formula; (iii) Pensions will be indexed annually using a flexible formula, whereby the pension is never adjusted below the level of inflation and takes into account at least 20% of wage increases. Further details here. (Source: www.mlsp.gov.ua; www.mercer.com; Date: 08.07.2013).

United Kingdom

- On May 14, 2014, the Pensions Act 2014, which includes various provisions covering both the state pension system and private pensions, received Royal Assent. The Act outlines key features of the new state pension system, to be implemented on April 6, 2016 and modifies the scheduled increase in retirement ages. The main measures include: (i) introducing a new single-tier state pension (STP). The current basic state pension (BSP) and earnings related state second pension will be replaced by a flat-rate pension for new pensioners. The STP will be set above the existing basic level of means-tested support (GBP 148.40/USD 252.55 per week); the full benefit will be based on 35 qualifying years (currently 30 years for a full BSP). A reduced benefit will be paid with at least 10 years of contributions. Benefits will be indexed annually by at least the increase in average earnings. (Currently, BSP benefits are adjusted to the growth in average earnings and price increases, or by 2.5 percent, whichever is higher.) (ii) Accelerating the increase in the state pension age. The state pension age will rise gradually from 66 to 67 between 2026 and 2028 — 8 years earlier than currently scheduled. The government will be required to review the state pension age every 6 years starting in 2017. (Source: USAID, Global Experience in Pension Reform; Sept. 2014).