

Parametric Reforms in the Public PAYGO Pension Programs 1995 – June 2025

This document compiles the main parametric reforms approved in pension systems worldwide, between 1995 and June 2025.

I. Executive Summary

Main parametric changes in the last 29.5 years (1995 – June 2025)

In the last 29.5 years, between 1995 and June 2025(*), to reduce the fiscal costs of public PAYGO systems:

- 89 countries increased the contribution rates
(recent examples: South Korea, Kazakhstan, Rwanda).
- 68 increased the retirement age
(recent examples: China, Denmark, Czech Republic).
- 70 adjusted the benefits formula, or simply reduced benefits
(recent examples: Cuba, United Arab Emirates, Czech Republic).

(*) Updated data includes reforms approved to June 2025. Please see document "[APPENDIX 2: Parametric Reforms in the Public PAYGO Pension Programs 1995 – June 2025](#)", for more specific details defined in the regulations.

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 Breach of the Benefits Promise: Recent Evolution in the Complex Global Scenario," Ángel Martínez-Aldama, in 2012 FIAP Book "Opportunities and Challenges of the Individually Funded Systems in a Globalized World" (FIAP Mexico Seminar, May 2012).
- ✓ "Impact of parametric changes in PAYGO programs on workers (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>
- ✓ Progress of the Pension Systems, FIAP: <https://www.fiapinternacional.org/en/publications/marcha-de-los-sistemas-de-pensiones/>

II. Introduction

Demographic changes (increase in life expectancy and lower birth rates) are affecting the finances of pension systems worldwide, especially in the PAYGO programs. In response, many countries have been forced to carry out parametric reforms in their pension systems, such as increasing contribution rates, the retirement age, the number of years of contribution necessary for being able to access a pension, as well as freezing pension benefits, or making adjustments to the indexing formula to make pensions less generous, in order to reduce the tax burden of public pension expenditure.

The purpose of this document is to summarize the main parametric reforms aimed at increasing the the system's revenue and/or reducing its expenditure, approved or implemented in the last 29.5 years, from 1995 to June 2025, in the PAYGO programs of worldwide pension systems.

III. Methodology

This document is based on an initial summary in a World Bank study for the period 1995-2005¹, and information from different media, such as the United States *Social Security Administration's* periodic report on the reforms introduced in the social security systems worldwide², as well as the reports of international consultants such as AON Hewitt³, and other agencies and media specialized in pensions and social security, to summarise the main parametric reforms adopted or approved between 2009 and June 2025. Finally, it provides a summary of the reforms introduced or approved between 1995 and June 2025. It is important to note that although this summary does not include information for the 2006-2008 period, it is a valid exercise for showcasing the general trends of PAYGO systems worldwide.

A. Summaries of parametric changes between 1995 and 2005

The available literature on historical summaries in this area is scarce. One of the few documents that addresses this issue is a 2009 World Bank report (Roballino, David, 2009, "Reform Option I: Parametric Changes"). It states that, over a period of ten years, between 1995 and 2005:

- **57** countries increased the contribution rate in their PAYGO programs
- **18** raised the retirement age, and
- **28** adjusted the parameters in the a/or cut or froze old-age pension amounts, to reduce fiscal costs.

¹ Roballino, David (2009), "Reform Option I: Parametric Changes", World Bank.

² Social Security Administration, "International Update", Social Security Administration; available online: http://www.socialsecurity.gov/policy/docs/progdsc/intl_update/

³ AON Hewitt, "Global Retirement Update," available online: http://www.aon.com/human-capital-consulting/thought-leadership/leg_updates/global_reports/reports-pubs_global_retirement_update.jsp

B. Summary of some Parametric Reforms to increase the financial and fiscal sustainability of Public PAYGO Programs – 2009 – June 2025

Based on the information gathered by FIAP (see Appendix 1 at the end of this document), it has been detected that between 2009 and June 2025:

- **32** countries increased the contribution rate in their PAYGO programs
- **50** raised the retirement age, and
- **42** adjusted the parameters in the benefit formula and/or cut or froze old-age pension amounts, to reduce fiscal costs

C. Global summary of approved parametric changes between 1995 and June 2025

Finally, the document provides an overall summary of parametric changes by adding the reforms detailed in the World Bank document, plus the information presented in Appendix 1 and in the detail of the document "[Appendix 2: Parametric Reforms in the Public PAYGO Pension Programs 1995 – June 2025](#)," between 2009 and June 2025.

Thus, it found that, in global terms, between 1995 and June 2025:

- **89** countries increased the contribution rates in their PAYGO programs
- **68** increased the retirement age, and
- **70** adjusted the benefit formula (or directly reduced benefits) to reduce fiscal costs.

Appendix 1

Main Parametric Changes in the Public PAYGO Programs - Type of Parametric Change by Country (2009 – June 2025)

<i>Type of Reform</i>				
<i>Increases in contribution rates destined to the public PAYGO program</i>	<i>Increases in the normal retirement age</i>	<i>Adjustment of parameters in the benefits formula</i>	<i>Cutbacks or freezing of the amount of the normal and/or early old-age pension</i>	<i>Increases in Taxable Income or Maximum Taxable Ceiling</i>
Andorra	Argentina	Andorra	Andorra	Belgium
Bahrain	Australia	Argentina	Austria	Canada
Bulgaria	Azerbaijan	Australia	Greece	Czech Republic
Canada	Belarus	Bahrain	Italy	Germany
Cape Verde	Belgium	Belgium	Latvia	Guyana
South Korea	Brazil	Belarus	Nicaragua	Lithuania
Costa Rica	Bulgaria	Brazil	Portugal	Nicaragua
Curacao	China	Bulgaria	Qatar	Spain
United Arab Emirates	Costa Rica	Costa Rica	Romania	Qatar
Egypt	Croatia	Cuba	Russia	Vietnam
Slovakia	Curacao	Curacao	Slovenia	United Arab Emirates
Spain	Denmark	Czech Republic		
Estonia	Egypt	Denmark		
Philippines		Ecuador		
France	Slovakia	Egypt		
Guyana	Slovenia	Finland		
Irak	Spain	France		
Iceland	Estonia	Greece		
Kazakhstan	Finland	Guatemala		
Kenya	France	Hungary		
Monaco	Germany	Italy		
Morocco	Greece	Irak		
Nicaragua	Guatemala	Japan		
Norway		Latvia		
Oman	Hungary	Lithuania		
Poland	Ireland	Luxembourg		
Portugal	Israel	Monaco		
Qatar	Italy	Netherlands		
Rwanda	Japan	Nicaragua		
Russia	Kazakhstan	Norway		
Saint Vincent and the Grenadines	Latvia	Portugal		
Venezuela	Lithuania	Romania		
	Madagascar	Russia		
	Malta	Slovenia		
	Morocco	Spain		
	Nicaragua	Ukraine		
	Norway	United Kingdom		
	Netherlands	Uruguay		
	Portugal	Vietnam		
	Czech Republic	United Arab Emirates		
	Romania			
	Russia			
	Saudi arabia			
	South Korea			
	St. Maarten			
	Sweden			
	Switzerland			
	Ukraine			
	United Kingdom			
	Uruguay			
	Vietnam			
	United Arab Emirates			
32	50	40	11	11

Source: FIAP (see the document "[Appendix 2: Parametric Reforms in the Public PAYGO Pension Programs 1995 – June 2025](#)").