In recent years, demographic pressure, both observed and expected, and the impact of the recent economic crisis on Social Security accounts (see Chart 1) have given rise to several reforms that seek to maintain the financial sustainability of the system, the last of which was approved in 2013.1 This reform introduced two automatic mechanisms for adjusting pension expenditure. First, a new Pension Revaluation Index (PRI) was created, replacing the previous CPI-indexation system. This index, which has been in force since 2014, links annual pension increases to the financial situation of the pension system: if the system records a deficit, pension increases are capped at 0.25%. The PRI also sets a maximum increase of CPI growth in December of the preceding year plus 0.5%. In practice, between 2014 and 2017, application of the PRI has given rise to annual increases of 0.25%. Second, the "sustainability factor" (envisaged in the 2011 reform)2 was established, whereby starting pension would be linked to the observed increase in life expectancy at the age of 67, so that the greater the increase in life expectancy, the lower the starting pension.3 This factor was to come into effect in 2019.

The innovations described above helped to significantly improve the long-term sustainability of the system, as reflected in the projected pension expenditure for the Spanish economy included in the latest European Commission report on ageing. However, in the absence of further legal changes in income or expenditure, the counterpoint to this enhanced sustainability would be a gradual decrease in the ratio of average pension to average wages in order to offset the negative effects of the dependency ratio (see Chart 2), essentially by operation of the automatic adjustment mechanisms introduced in 2013 and, in particular, the PRI. Thus, in the absence of further legal changes, the projections would entail annual pension revaluation of 0.25%, the minimum rate set, for much of the next three decades. With inflation rates around 2% – the ECB's medium-term benchmark – this would entail a gradual erosion of pensioners' purchasing power as they grow older (see Chart 3).

However, in the State Budget Law for 2018 (Law 6/2018 of 3 July 2018), a series of measures were adopted that modify the application of both the above-mentioned automatic adjustment mechanisms, with a significant impact on the pension system accounts. First, the Budget Law stipulated a pension increase in 2018 and 2019 above the 0.25% that would result from applying the PRI (see Chart 4). Specifically, an increase of 1.6% was set for all pensions in 2018, and if no alternative agreement is reached by the committee responsible for monitoring and evaluating the Toledo Pact agreements, that same increase will also apply in 2019. Moreover, minimum and non-contributory pensions rose by an additional 1.4% in 2018. Lastly, in terms of pension revaluation, the Budget Law for 2018 raised the regulatory base of pensions

1 Law 23/2013 of 23 December 2013 regulating the Sustainability Factor and the Social Security Pension System Revaluation Index. for widow(er)s receiving no other income from 52% to 56% in 2018 and from 56% to 60% in 2019. Second, in the case of the sustainability factor, its entry into force was postponed until the Toledo Pact committee comes to a new agreement, or until 2023 at the latest.

Compared with the scenario of a 0.25% increase in pensions according to the PRI, the present government estimates that, in the near term, the revaluation measures will entail additional expenditure of some €2.5 billion in 2018 and some €5.3 billion (0.4% of GDP) in 2019.⁵ In turn, on Banco de España estimates, postponing the entry into force of the sustainability factor until 2023 would entail an increase in annual pension expenditure of 0.1 pp of GDP on average over the next decade (2020-30) and of 0.3 pp over the following decade. This higher expenditure would be a result of the increase in average pension for the cohorts retiring between 2019 and 2022, which are now exempt from application of the sustainability factor, and for the cohorts retiring after 2023, for which the four-year delay in application of the factor would entail a higher starting pension.

More recently, the Toledo Pact parliamentary committee reached an agreement whereby pensions will be revalued, in general, according to observed CPI, which would mean eliminating the current PRI. The potential implications of this agreement for pension expenditure in the long term are much greater than those stemming from the measures already adopted in the Budget Law for 2018. Specifically, compared with the scenario in which the 2013 reform is applied, a simulation of the impact on pension expenditure in the period 2018-50 of a scenario in which average pension is linked to the CPI and the sustainability factor comes into force in 2023 gives an increase in pension expenditure of 1.9 pp of GDP in 2030 and 3.4 pp in 2050 (see Charts 5 and 6).^{6,7}

² Law 27/2011 of 1 August 2011 updating, adapting and modernising the Social Security system.

³ Thus, in cumulative terms, the more years during which a pension is received would be offset by the lower pension level.

⁴ European Commission, *The 2018 Ageing Report,* May 2018.

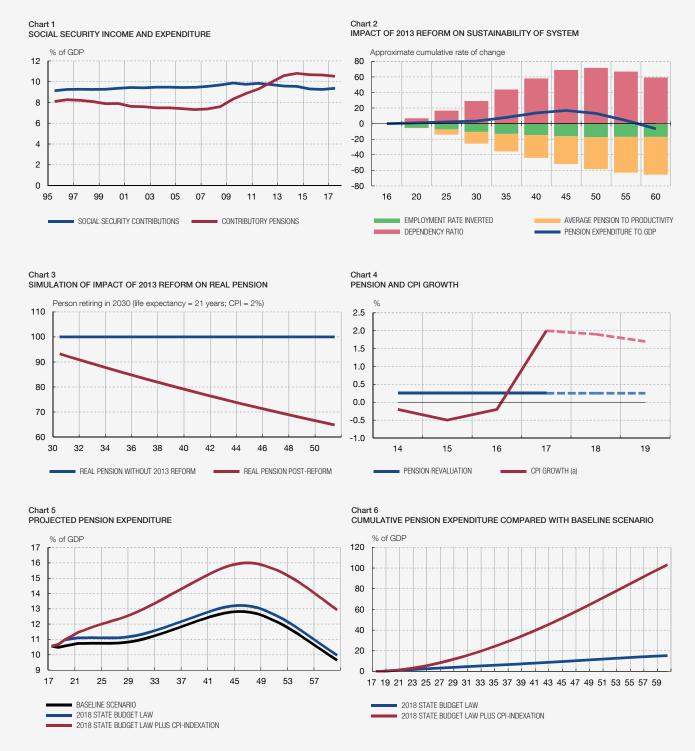
⁵ According to the 2019 Draft Budgetary Plan sent to the European Commission on 15 October.

⁶ The accounting exercise projects future pension expenditure based on assumptions relating to the number of pensions and the average pension amount, considering that the average amount differs for new pensions, pensions leaving the system and existing pensions. Each year, the number of pensions multiplied by their average amount determines the total system expenditure, expressed in the charts as a percentage of nominal GDP. Higher pension revaluation results in higher average pensions both for those already in the system and for those leaving it, generating a net increase in pension expenditure. Assumptions on the behaviour of the different variables are based on the European Commission's 2018 Ageing Report. Specifically, on average in the period 2018-50, real GDP is expected to grow by 1.2%, inflation by 2%, wages by 3.3% and the number of pensions by 1.6%. Lastly, the effect of the sustainability factor on the average pension of new entrants is also taken into account.

A recent paper, based on an overlapping generation model with heterogeneous agents, placed the higher pension expenditure in a scenario of CPI indexation and non-application of the sustainability factor at between 3 pp and 3.6 pp of GDP on average over the next five decades, peaking at more than 5 pp of GDP in 2060 (see De la Fuente, A., M. A. García Díaz and A. R. Sánchez, 2018: "¿Hacia una nueva reforma de las pensiones? Notas para el Pacto de Toledo." Fedea Policy Papers 2018/09).

Although these simulations are subject to a not insignificant degree of uncertainty, given the length of the time horizon considered, it may be concluded that, under the projected demographic and macroeconomic

scenario, the recent pension system measures adopted will require further steps either to increase the income or reduce the expenditure of the system in order to guarantee its financial sustainability.



SOURCES: Seguridad Social, European Commission (The 2018 Ageing Report) and Banco de España.

a For 2018 and 2019, Banco de España projections published in June 2018.