



MINISTRY OF
EMPLOYMENT AND
SOCIAL SECURITY



SOCIAL SECURITY

Public Pension System

First Pillar

CHALLENGES

UE-China Social Protection Reform Project
International Workshop (Brussels – January 2015)

Agenda

- ❑ Structure of the Spanish Social Security System
 - Public Pension System. First Pillar
- ❑ Pensión System evolution is linked to demographic and economic changes
 - Identify futures challenges
- ❑ System reforms
- ❑ Revenues. Reforms in proccess

Public Spanish Social Security System

MODALITIES	BENEFITS	APPLICATION FIELD	FINANCING
a) BASIC NON CONTRIBUTORY	<p>Non contributory pensions</p> <p>Health care</p> <p>Family benefits</p> <p>Social services</p> <p>Employment promotion</p>	All residents who haven't enough resources	Tax financed by State allocations to the Social Security budget
b) CONTRIBUTORY AND PROFESSIONAL	<p>Pensions (income replacement, proportional to wages) with guaranteed minimum amounts</p> <p>Other economic benefits (Temporary incapacity, Maternity, Risk during pregnancy, Unemployment, etc.)</p> <p>Accidents at work and occupational diseases</p>	Mandatory for all employees or self-employed, with minimum and maximum amounts for benefits and contributions	<p>With contributions of employers and employees, with tax financed for minimum pension supplements</p> <p>With social contributions and some State allocations to some of the unemployment benefits</p>

Non contributory pensions (NCP)

- Article 41 of the Spanish Constitution mandates the Government to maintain a public Social Security for all citizens.
- In compliance with constitutional mandates, adequate and comprehensive income must be provided to people who haven't enough resources. Protective formulas were established with non-contributory supplements which complement the contributory mechanisms in the field of Social Security System. Others benefits are non-contributory pensions.

Non contributory pensions (NCP)

(Created in 1990)

(Non-earnings related)

- Old age and permanent incapacity pensions

- Requirements:

- Minimum period of residence

- Permanent Incapacity with a degree of disability $\geq 65\%$ (5 years)
- Retirement (10 years)

- Age

- Disability (between 18 and 65 years old)
- Retirement ≥ 65 years

- Limit of income depending on family composition

- $L = K (C + 0,7 * C * (M - 1))$

L = limit of total revenues

C = pension amount

M = number of cohabitants

$$K = \begin{cases} 1 & \text{(If no descendants or ascendants of first degree)} \\ 2,5 & \text{(if there are descendants or ascendants of first degree)} \end{cases}$$

- Fixed amount established annually by the State Budget Act.

- C = € 5,136.60 a year in 2015

- Funding State (general taxation)

Non contributory pensions (NCP)

Basic data

- Beneficiaries: 447,000 (number very stable since 1990)
- % of PNC pensioners / Total population = 1 %
- Annual expenditure (2015) = 2,402.86 Millions of euros
- % of PNC expenditure / GDP = 0.2 %
- National regulation but managed by the autonomous communities

Contributory retirement pensions

Pensions are the main source of income after retirement for older people. In Spain is 97.7%

The effectiveness of the pension system is measured by their ability to replace pre-retirement earned income and to prevent poverty risks

OBJECTIVE

- Maintain a mandatory “*pay as you go*” public pension system for all workers

The system must achieve:

- 1 – Sustainability
- 2 - Adequacy of pensions

The funding requirements and the adequacy of benefits are analyzed with **projections in the medium and long term of revenues and expenditures**. These **forecasts** drive to reforms in the Social Security System.

Contributory retirement pensions System

(Earnings related)

- ❑ It's based in a compulsory system with contributions by:
 - ❑ Common contingencies
 - ❑ Professional contingencies
 - ❑ All employees and self-employed workers must be included
 - ❑ There are different kinds of contributory pensions:
 - ★ Retirement
 - ★ Widowhood
 - ★ Permanent Incapacity
 - ★ Orphanage and relatives
 - ❑ There are different regimes:
 - ❑ **R. General** for employees (*)
 - ❑ **R. Self-employed**
- (*) The new civil and military public servants belong to the R. General

Contributory retirement pensions (Earnings-related)

Defined benefits system with fifteen years of contributions.

There exist a minimum pension (€ 8,883.00 / year)

Age of retirement is “**increasing**”

2015

65 years (with 35 years and 9 months of contributions)

or

65 years and 3 months (with less contribution)

2027

65 years (with 38 years and 6 months of contribution)

or

67 years (with less contribution)

Retirement pension formula

$$P = Br * (\% \text{ contributed years}) * FS \leq \text{Ceiling amount}$$

Br

(Regulatory Base)

- 50% with 15 years (it's required at least 15 contributed years)
- 100% (increasing from 35 years in 2012 to 37 years in 2027)

FS

(Sustainability Factor)

After 2019

€ 35,852.32
in 2015

$$B_r = \frac{\sum_{i=1}^{24} B_i + \sum_{i=25}^{216} B_i \left(\frac{I_{25}}{I_i} \right)}{252} \text{ in 2015}$$

The **Regulatory Base** is the average of the last years of contributions. The period used will gradually increase from the last 15 years in 2012 to 25 years (by 2022).

The **Contribution Base (Bi)** is the earned income in a range between the minimum salary €9,079.20 /year, and the ceiling contribution amount, equal to € 43,272.00/ year in 2015.

The *Bi* corresponding to the 24 month just prior to retirement are considered nominal values and the remaining *Bi* are up-dated according to the evolution of the Consumer Price Index.

Contributory retirement pension

Early retirement

- Workers who
 - Have fulfilled 33 years of contributions
 - Are **involuntarily** unemployed may apply for a **reduced pension 4 years** before the legal age of retirement.
- Workers who
 - Have fulfilled 35 years of contribution
 - The pension amount exceed the minimum pension may apply voluntarily for a **reduced pension 2 years** before the legal age of retirement.
- Workers who
 - Have work tasks specially risky and painful: for maritime workers and coal mining
 - Have reduction of the age required in proportion to the period worked
 - Have other professions, like firemen, that have early retirement **with additional contribution** in order to maintain the financial balance of the system.

Contributory retirement pension

Late retirement

- **Late retirement**

Increase the following accrual rate for each year of late retirement:

- For careers below 25 years+ 2%
- “ “ between 25 and 37 years.....+ 2.75 %
- “ “ over 37 years.....+ 4%

- **Active retirement**

Compatibility between retirement pension and active life. With any work, both wage-and self-employment, both full-time and part-time, provided the pensioner has reached the statutory retirement age, the pension benefit will be equivalent to half of the amount the pensioner would be entitled to, excluding minimum complements.

Contributive System

Financing

- ❑ Employers' contributions: 23.60%
- ❑ Employees' contributions: 4.70%
- ❑ Complements to make up minimum pensions amounts (financed by The State): about 0.69% GDP

Common contingencies, for all contributory benefits

“Pay as you go financial system”

There is a Reserve Found, which currently amounts to 4.01% of GDP, which is provided with the surplus of each budget exercise. In exercises with deficit, funds can be detracted from it.

Regarding the future

Demographic trends as undisputed fact

- Increasingly we live longer.
 - Life expectancy at age 65 will go from the current 19 years to 23 in 2060.
- Every time we have fewer children.
 - The fertility rate shows that did not reach the population replacement. Fertility rate of 1.35 children per woman and the replacement rate is 2.1.
- Every time you access the labour market later.
 - Increase the training period.

Regarding the future

Explanatory variables of the pensions expenditure

Sustainability

Mayor risk factor

Adequate Pensions

	Dependency Ratio	Coverage Ratio	Labour market Ratio	Benefit Ratio	Residual Ratio
$\frac{\text{Pension Expenditure}}{\text{GDP}}$	$= \frac{\text{Population} \geq 65}{\text{Population } 20 - 64}$	$\times \frac{\text{Number Pensions}}{\text{Population} \geq 65}$	$\times \frac{\text{Population } 20 - 64}{\text{Workers } 20 - 64}$	$\times \frac{\text{Average Pension}}{\text{GDP per Hours Worked}}$	$\times \frac{\text{Population } 20 - 64}{\text{Hours Worked}}$
ψ	$= \delta$	$*\alpha$	$*\lambda$	$*\beta$	$*\varphi$

$$\Delta\psi = \left[\frac{\Delta\delta}{\delta} + \frac{\Delta\alpha}{\alpha} + \frac{\Delta\lambda}{\lambda} + \frac{\Delta\beta}{\beta} + \left(\frac{\Delta\varphi}{\varphi} + \gamma \right) \right] \psi$$

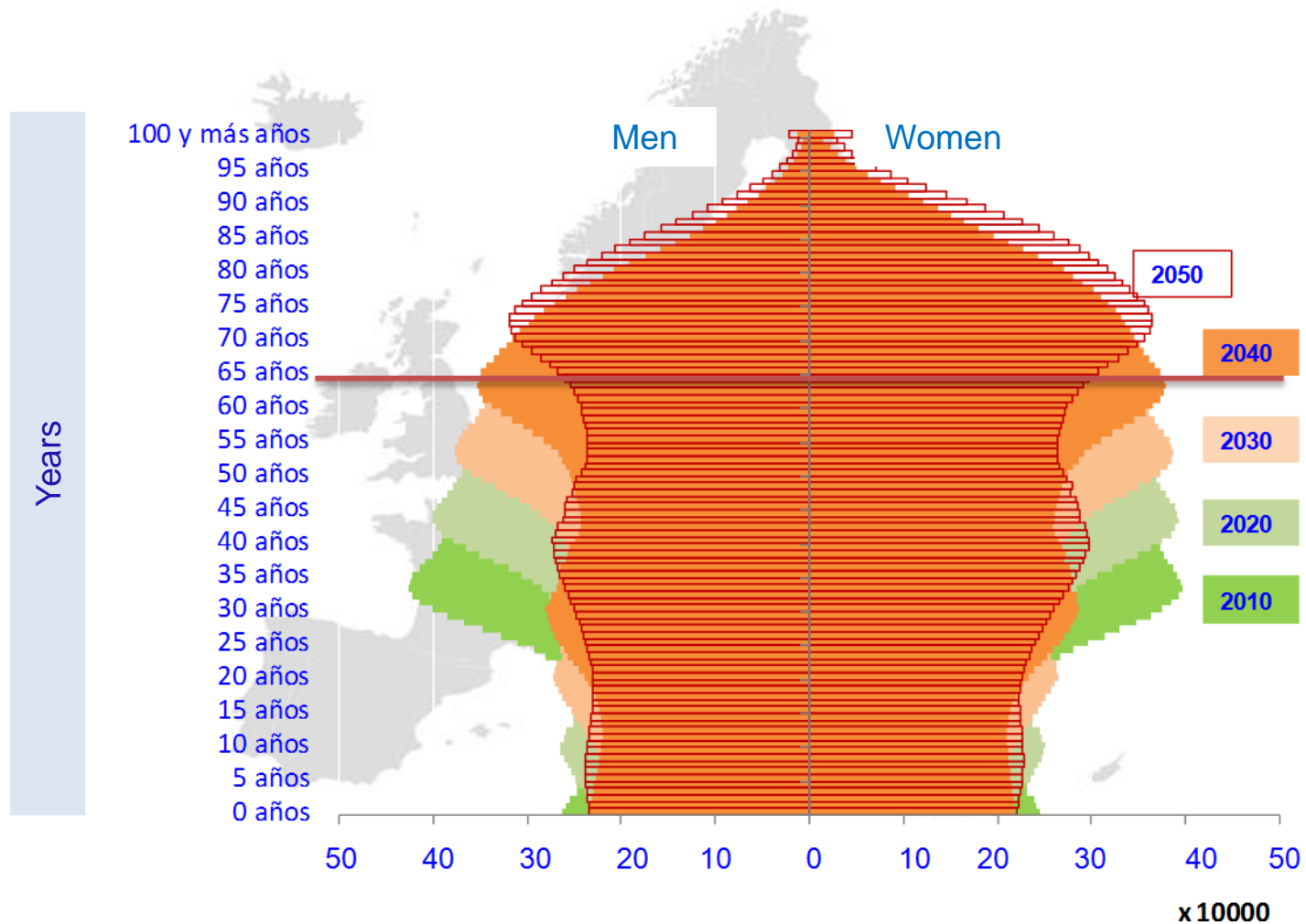
There is also a residual interaction effect between explanatory variables

Adequate Pensions

- Keep a standart of living similar to active life. (Replacement rates)
- Keeping older out of poverty

Mayor Risk Factor

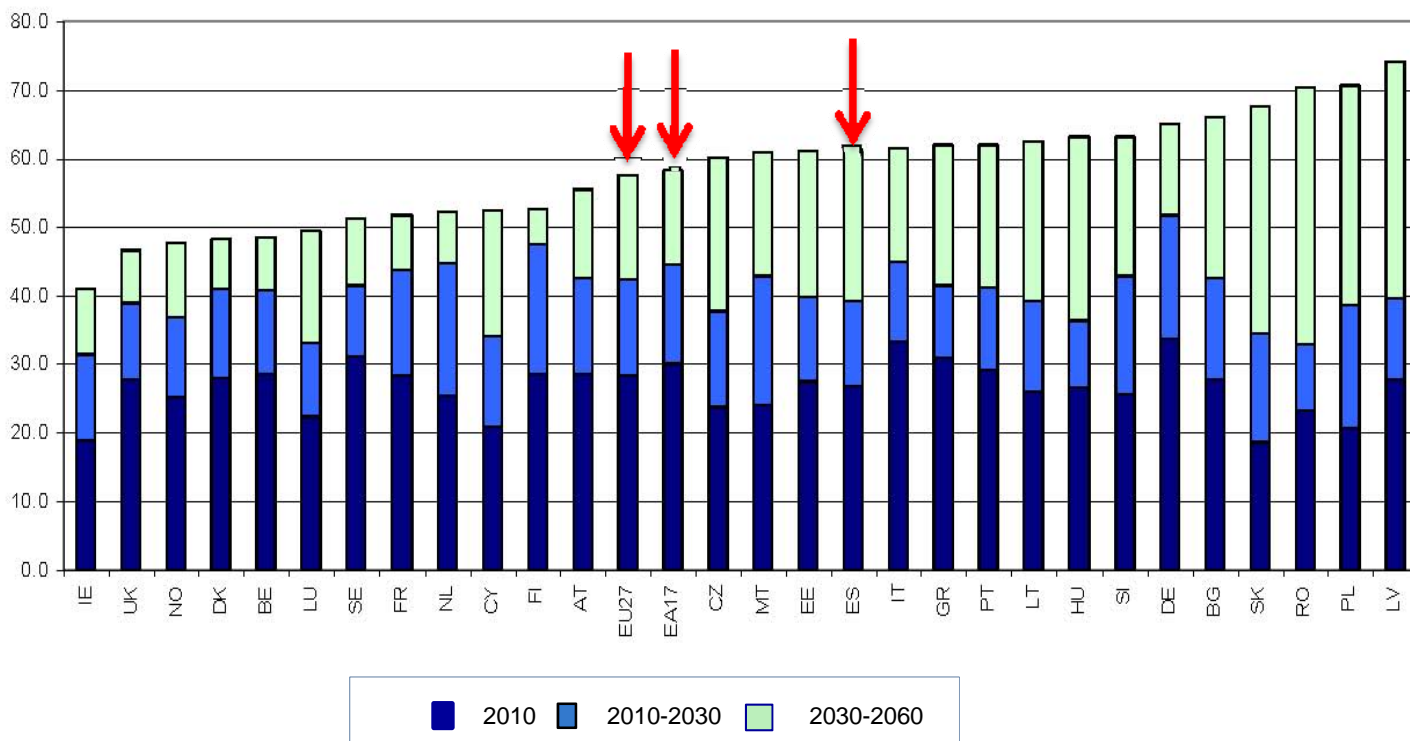
Pyramid Population Of Spain



Mayor Risk Factor

Old-age dependency rate

(ratio of people ≥ 65 relative to the working age population)



The Old-age Dependency Rate will increase in all EU countries, although with different schedule. In Spain, it will be from the current 27% to 40% in 2030 and will reach 60% in 2060.

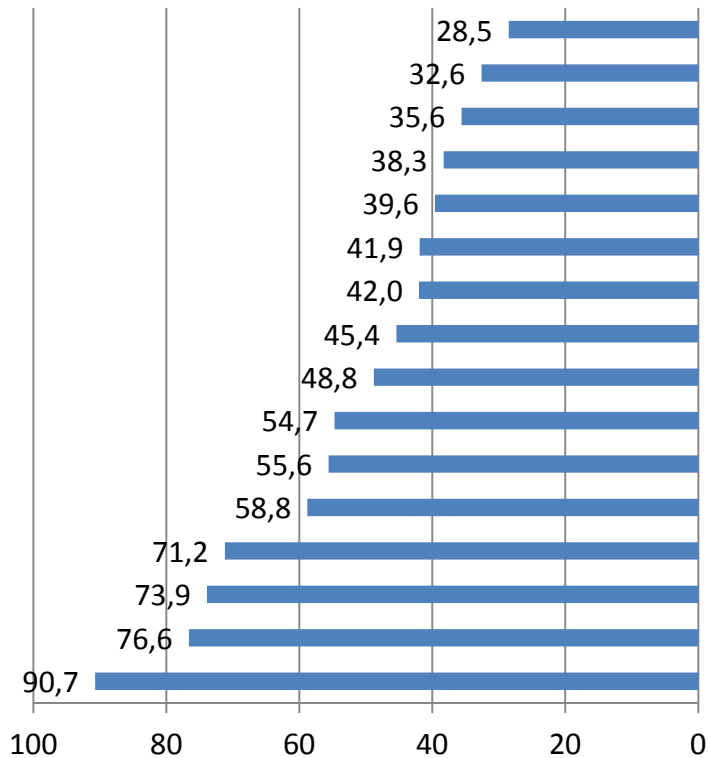
Source: Commission Services, Eurostat, EUROPOP 2010.

Adequate Pensions

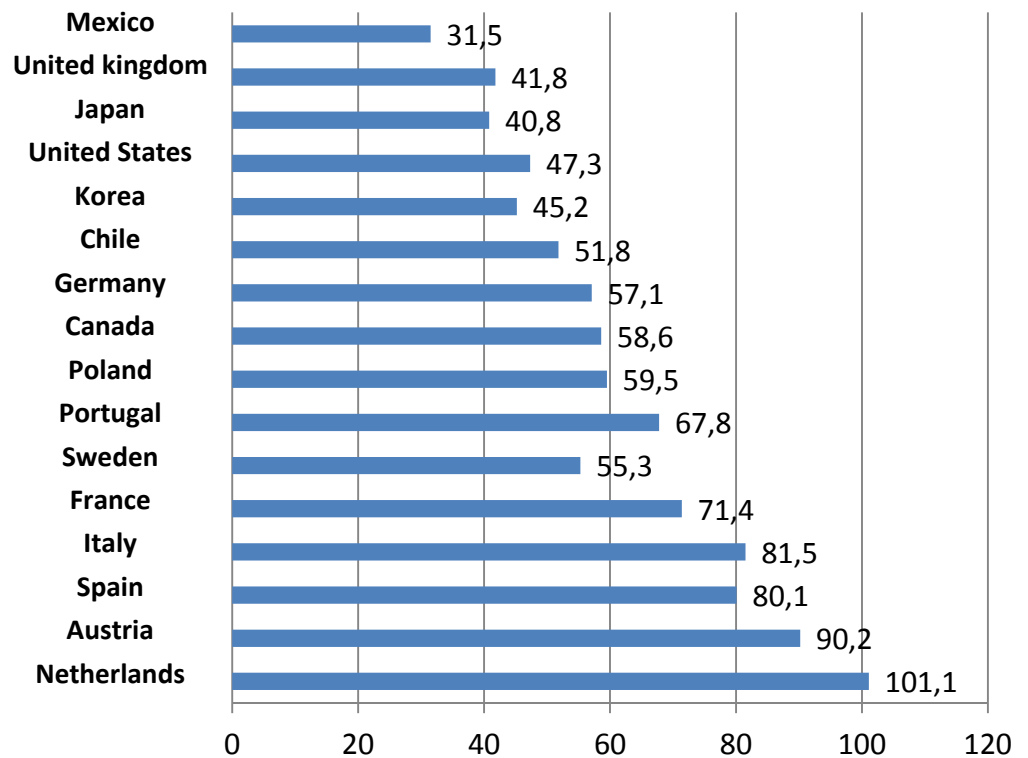
Prospective pension replacement rate

Averages earners and full careers

Gross replacement rate



Net replacement rate



In Spain the level are among the highest in the UE.

Source: OECD PaG 2013 data

Main reforms

- In Spain the Government wants to guarantee a public pension system that will anticipate and face the economical and demographical threats that the Spanish society will have in the middle and long term, assuring the economical sustainability of the Social Security:
 - **Sustainability Factor (*FS*)**
 - **Adjustment Pension Index (*IR*)**

Reforms

Sustainability factor

The **Sustainability Factor (FS)** is an automatic link between the amount of retirement pension benefits and developments in life expectancy of pensioners. The mathematical formulation of the Sustainability Factor:

$$FS_t = FS_{t-1} * e_{67}^*$$

*Pension = Regulatory Base * % years contribution * FS ≤ Maximum Pension*

Being:

$$FS_{2018} = 1$$

t = the year of the factor, taking values from the year 2019 onwards.

e_{67}^* is the annual change in a five year period life expectancy at age 67, according to the mortality tables of the population covered by Social Security, calculated using the following formula

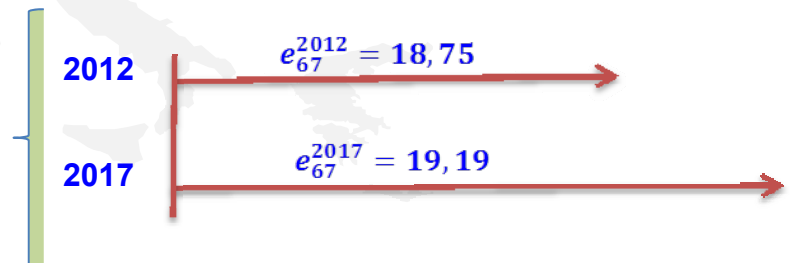
$$e_{67}^{2012-2017} = \left[\frac{e_{67}^{2012}}{e_{67}^{2017}} \right]^{\frac{1}{5}}$$

Fixed value applicable for the calculation of FS in the years 2019 to 2023 = 0.9953

$$e_{67}^{2017-2022} = \left[\frac{e_{67}^{2017}}{e_{67}^{2022}} \right]^{\frac{1}{5}}$$

Fixed value applicable for the calculation of FS in the years 2024 to 2028 = 0.9960

Link benefits to life expectancy



Reforms

Adjustment pensions index

The yearly adjustment of the pensions system, IR , is established annually by the State Budget Act, according to the following mathematical formula:

$$IR_{t+1} = \underbrace{\bar{g}_{I,t+1}}_{\text{Indexation}} - \underbrace{\bar{g}_{p,t+1}}_{\text{Income variation of the system}} - \underbrace{\bar{g}_{s,t+1}}_{\text{Number of pensioners variation}} + \underbrace{\alpha \left[\frac{I_{t+1}^* - G_{t+1}^*}{G_{t+1}^*} \right]}_{\substack{\text{Substitution Effect} \\ \text{Surplus distribution} \\ \text{Deficit reduction}}}$$

$\Delta \text{ Revenues } (I) = \Delta \text{ Expenses } (G)$

$\Delta \text{ Revenues} = \Delta \text{ Number of pensioners} * \Delta \text{ Average pension}$

$\Delta \text{ Revenues} = \Delta \text{ Number of pensioners} * \text{Indexation} * \text{Substitution Effect}$

$\text{Indexation} = \Delta \text{ Revenues} - \Delta \text{ Number of pensioners} - \text{Substitution Effect}$

Minimum value of $IR = 0.25$

Maximum value of $IR = CPI + 0.50$

The accrued indexation is more than a quarter of the pension expenditure

Budgetary result

$I - G > 0$ Surplus

$I - G < 0$ Deficit

$I - G = \text{Balanced}$

$$\left(\frac{I - G}{G} \right) \begin{matrix} > 0 \text{ surplus} \\ < 0 \text{ deficit} \end{matrix}$$

α distribution of the surplus

α reduction of the deficit

Economic objectives. Indicators

Adequacy

Indicators	Current	Future
Risk of poverty or social exclusion rate for people 65+	6.8% (2013)	6.5% – 6.7%
Ratio between the number of pensions of retirement with minimum pensions income	25.69% (2014)	25%
Relative median income ratio for people 65+ (Persons aged ≥ 65 compared to persons aged less than 65)	1.00	0.93 – 1.00
Net theoretical replacement rate	96.2% (2013)	86.78% (2053)
Gross theoretical replacement rate	88.2% (2013)	79.54% (2053)

Economic objectives. Indicators

Sustainability

Indicators	Current	Future
Old-age dependency ratio (population aged 65+ as a percentage of the population aged 20-64)	29.26% (2014)	78.10% (2050)
The life expectancy at age 67	18.8 (2015)	23.4 (2050)
The demographic factor has the strongest downward effect on gross public pension expenditure.		
Public Pension expenditure/GDP%	10.6% (2015)	Without reforms 14% (2060) With reforms 11.0% (2060)
Ratio contributors / pensioners	2.26 (2014)	2.2
Average effective retirement age	64.01 (General Scheme) 64.33 (Total System)	66.1 66.5

Revenues. Reforms in process

A new management of the collection of contributions “CRET@”

- The new direct system of payment of social contributions will allow to take an active role in the collecting process to the enterprises, moving from a model of self-settlement to a new billing model.
- The priorities are to minimize the mistakes in the implementation of the contribution rules, to compare the data in advance and to facilitate the payment of the contributions through telematic means.
- The system will automatically apply the price increases and/or reductions, achieving greater legal security, and will give an individual calculation for each worker contribution. In conclusion, the system will be guarantee against possible irregular situations in the collection of quotas.
- The system apply to 12,314,519 companies with 1,420,412 employees, and more than 3,000,000 self-employed workers.

Revenues. Reforms in process

Software CRET@

OBJECTIVE: Proactive billing by the General Fund of Social Security (TGSS)

Replacing self-liquidation by billing

Abolition of paper forms and face to face administrative managements

Simplification of the duty of collecting contributions by the companies

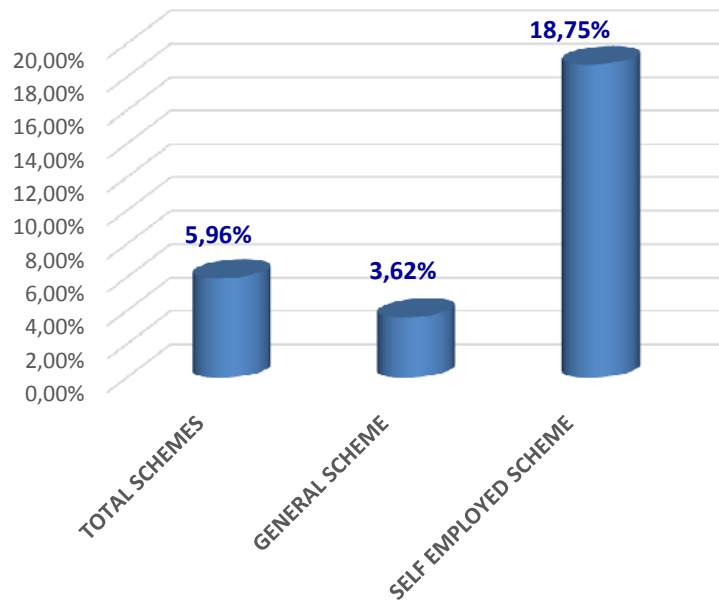
Increase the supply of services offered to the employer

Reduce administrative burdens to the employers, communicating less data than before.

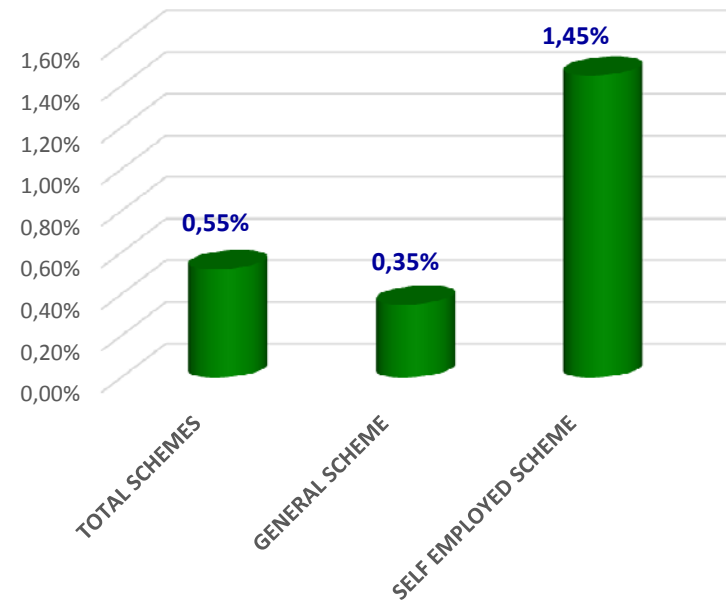
Comprehensive procedure by telematic services

Members of the Spanish Social Security with Chinese nationality

Percentage of Chinese workers to total foreign workers



Percentage of Chinese workers to total workers



Ministry of Employment
and Social Security

非常感谢你，再见

Thank you