

**K-ASEAN RMI Conference – ESG, Finance, and Consumer**



**SKKU**

**Global Insurance and Pension Research Center  
(GIPRC)**

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# **The Italian Pension System: Structure and Key Attributes**

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# Introduction

*Few Data About Italy*



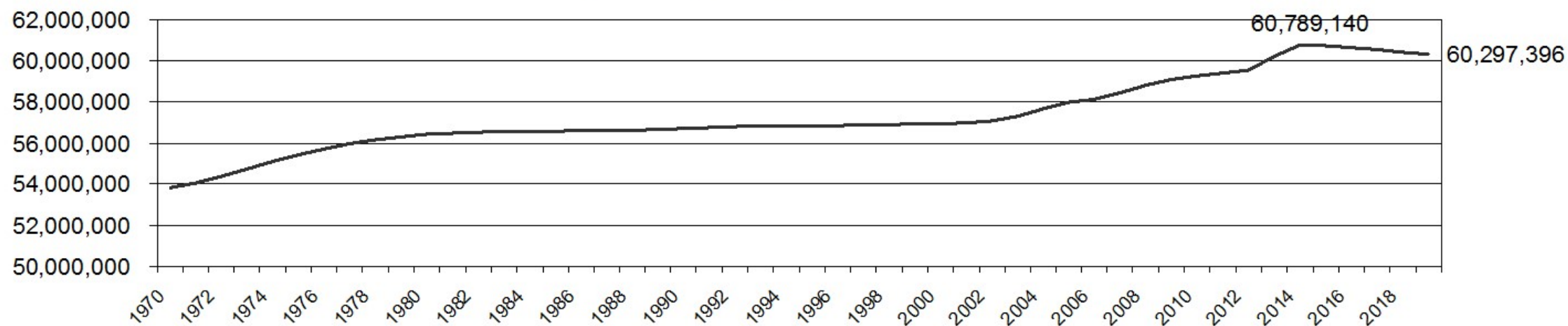


# Introduction

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**Population (Total)**



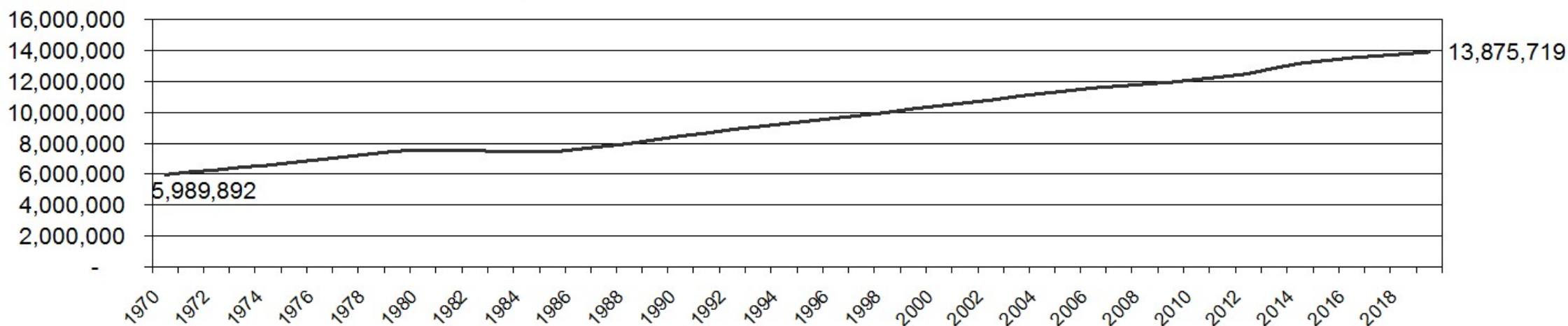


# Introduction

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**Population ages 65 and above (Total)**



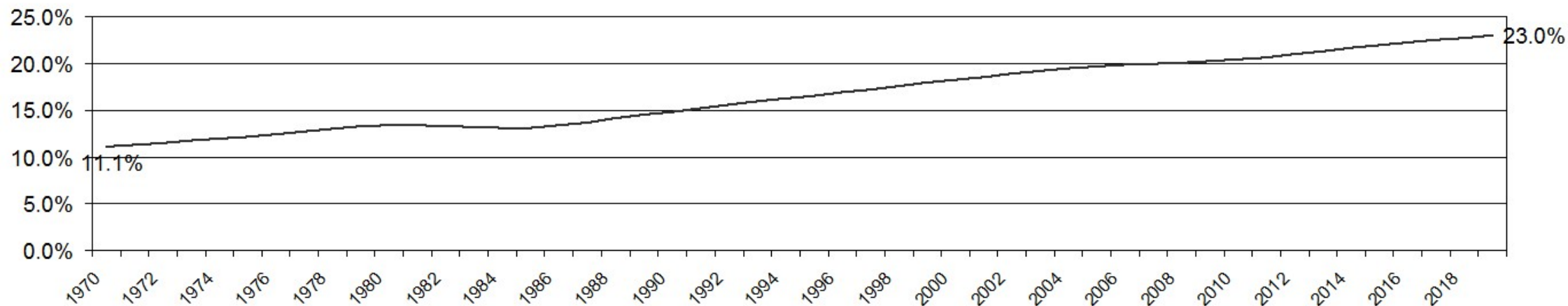


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**Population ages 65 and above (% of total population)**



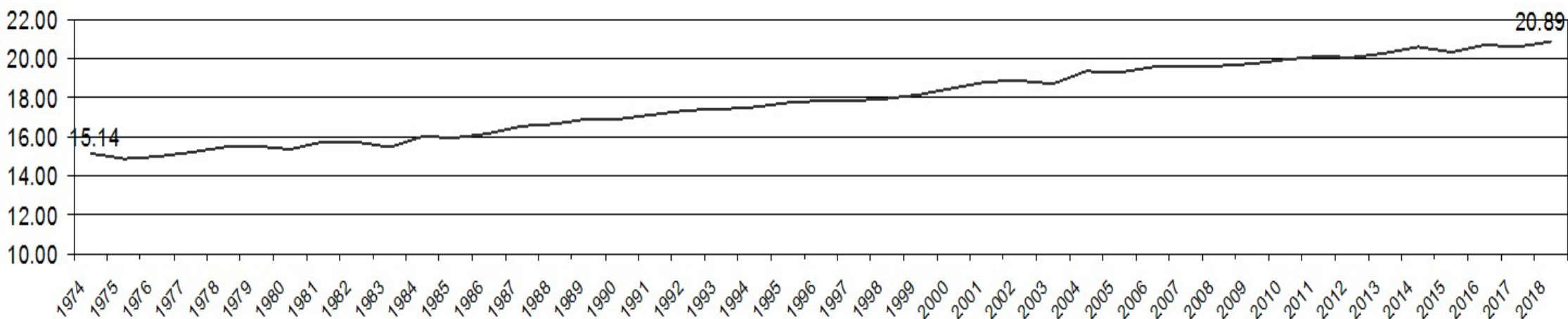


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Life Expectancy at 65 (in years)



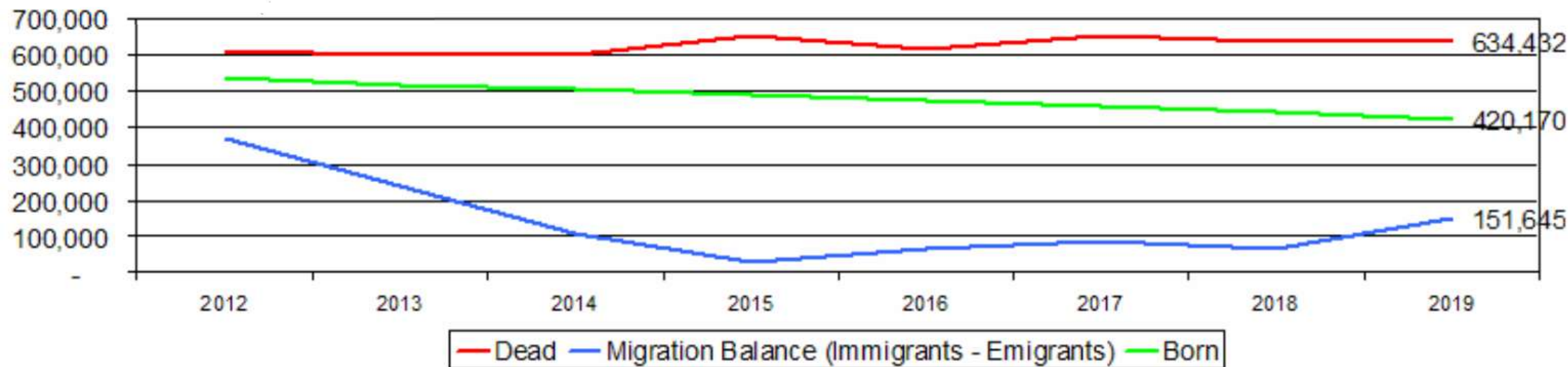


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## Born, Dead, and Migration Balance



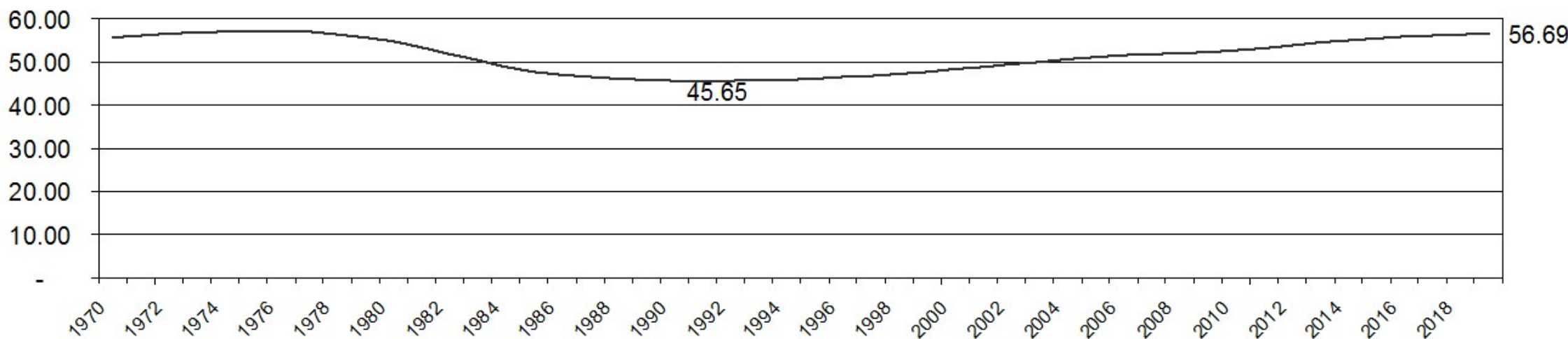


# Introduction

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**Age dependency ratio (% of working-age population)**





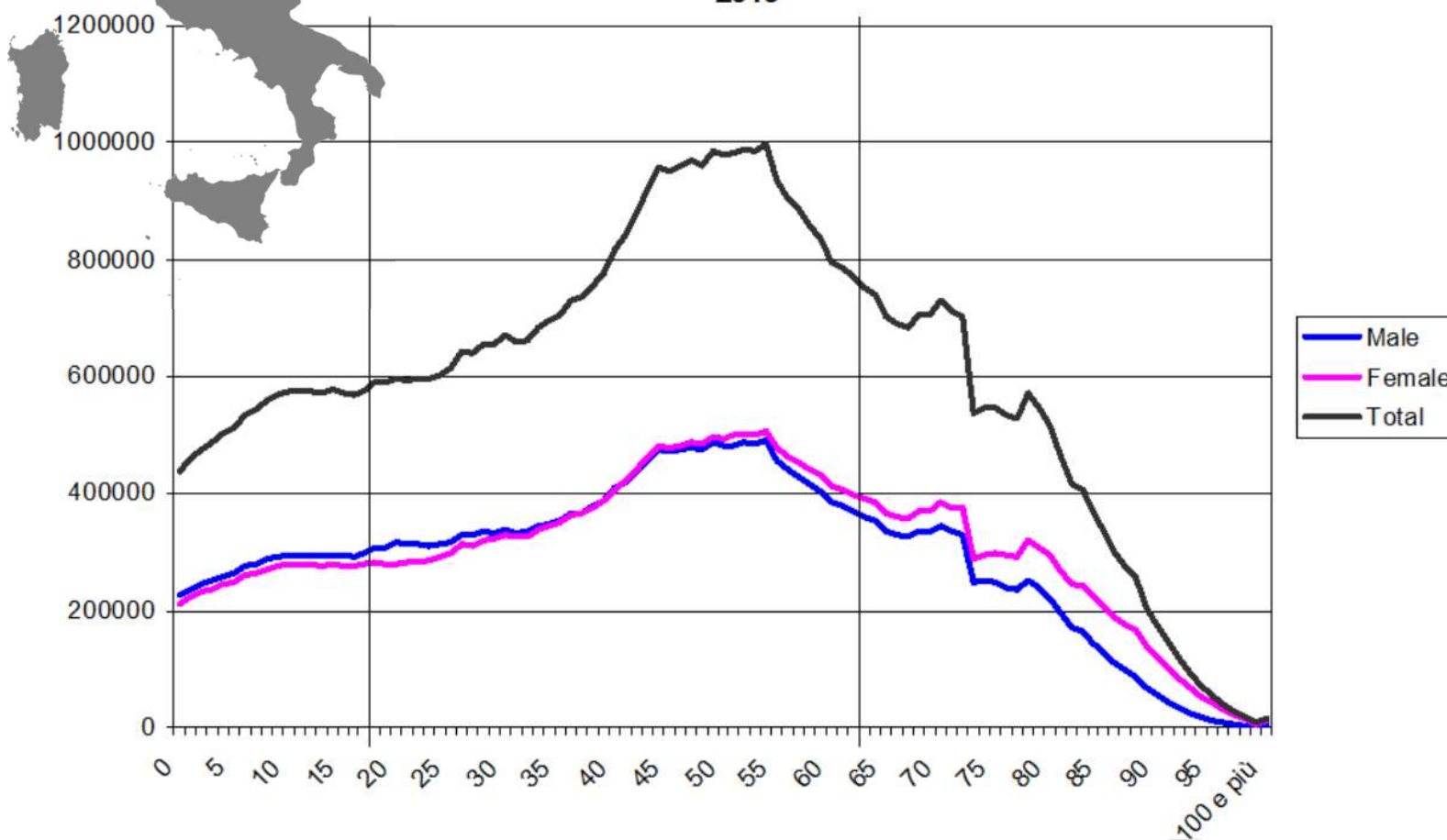


# Introduction

## *Few Data About Italy*



Age Distribution of the Italian Population  
2019



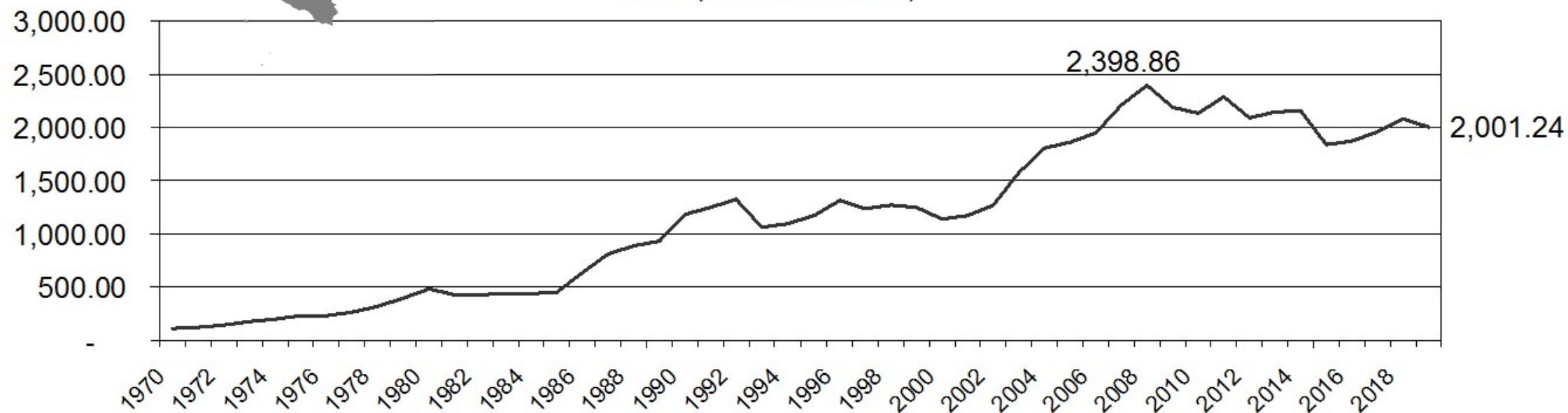


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GDP (current US\$ BN)



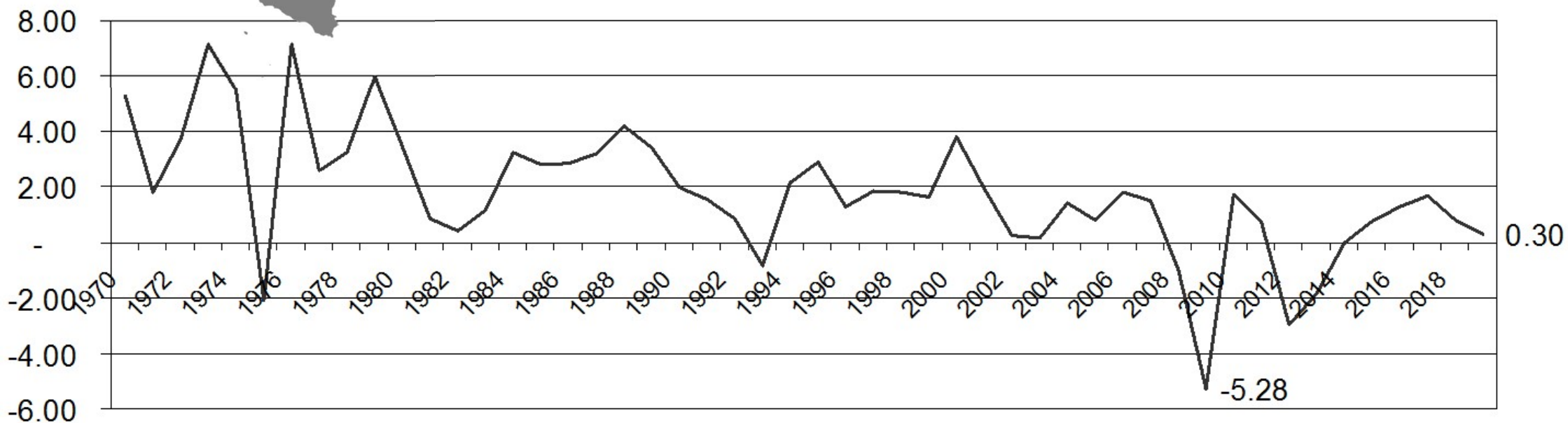


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GDP growth (annual %)



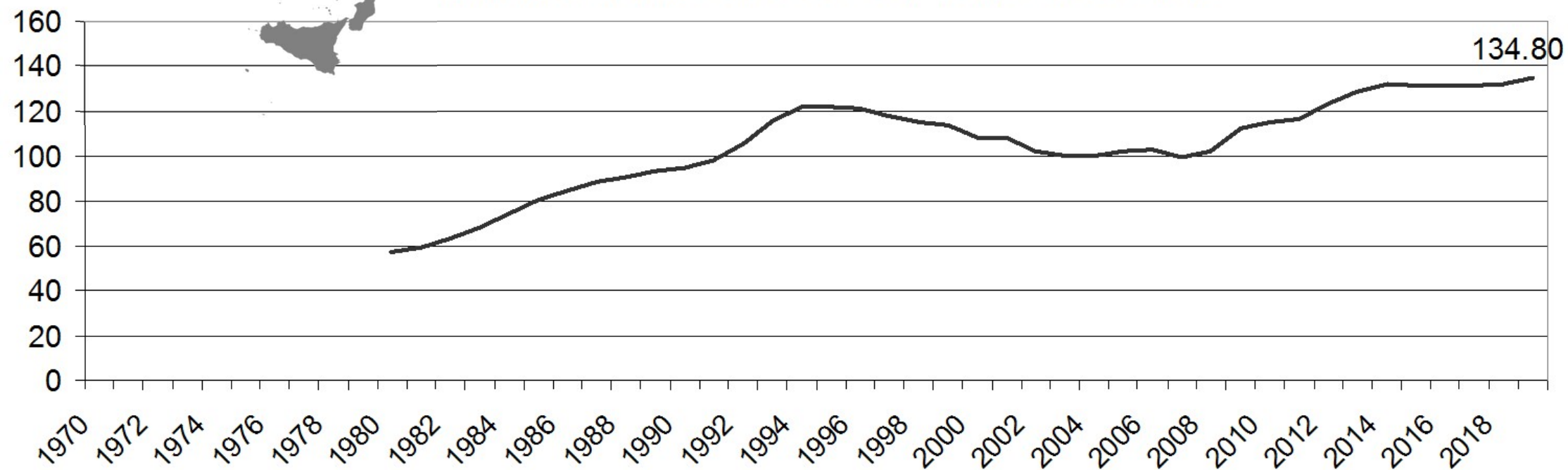


# Introduction

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**Italian Public Debt to GDP ratio 1980-2019**



# Introduction

*Few Data About Italy*

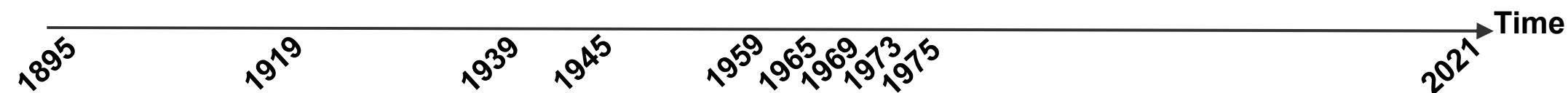


## The Big Picture

- Aging Population
  - ... Increasing Life Expectancy*
  - ... Low fertility rate*
- Expected "Big wave" on retirement age
- Big Public Debt (to GDP ratio)
- Lack of Economic Growth



# The Evolution of the Italian Pension System



1895 – First pension system (only for public employees) (Defined contribution system)

1919 – Heavy-industry workers and agricultural workers join the system (mandatory)

1939 – Old age provision (60 years for men, 55 years for women) + survivor's pension

1945 – Double system (introduction of Defined Benefit system funded by additional contribution to high income workers to provide pension to low income workers)

1959 – Craftmen and self-employed are included in the system

1965 – Retirement pension... Private workers (35 years of contribution), Public workers (25 y.o.c.), central Government workers (20 y.o.c)

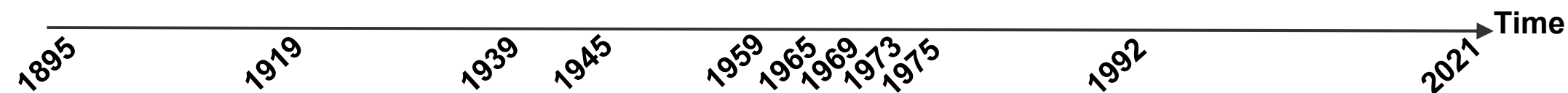
1969 – Social pension... for low income individual (regardless contribution)

1973 – "Baby pension"... Woman (married with children) working in the public sector... 14.5 y.o.c.

1975 – Pension equal to 80% of last salary before retirement (regardless contribution)



# The Evolution of the Italian Pension System



## 1992 – “Amato reform”

-Retirement age rises from 60 to... 61 (1992)...62 (1998)... 63 (2000)... 64 (2004)...65 (2004).

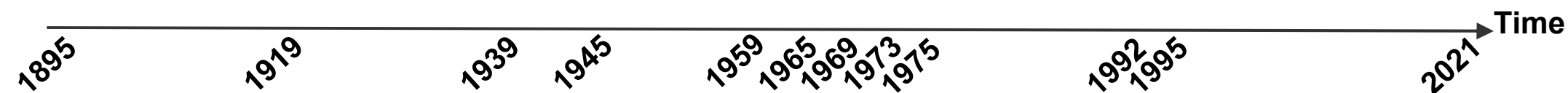
-Minimum of 35 y.o.c. for all (not anymore 25 y.o.c. for public workers, and 20 y.o.c. for central Government workers)

-Pension is a percentage of the average annual salary of the last 10 years (no the last one)... and for new workers it is the average of the entire working life.

1993 – Introduction of Pension Funds and IRAs (“second pillar” and “third pillar”)



# The Evolution of the Italian Pension System



## 1995 – “Dini reform”

- Pension as the 50% of the last salary (average of last 10 years)... not anymore 70% or 80%
- Minimum 57 years old to go on retirement OR 40 y.o.c.
- New workers... full defined contribution system\*
- Pre-1996 workers (less than 18 y.o.c.) defined benefit up to 1995, defined contribution here after
- Pre-1996 workers (more than 18 y.o.c.) still full defined benefit system

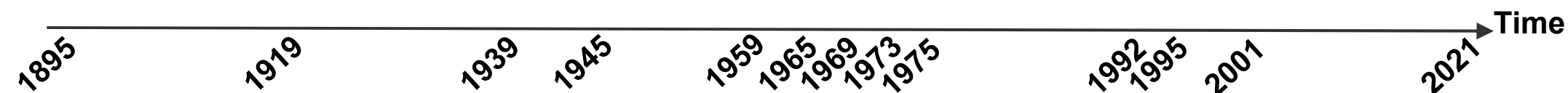
(Transition to the new rules are smoothed in order to complete the transition in 2008)

*\*The system is a “virtual defined contribution” system (current contribution are not invested but used to pay current pensions to guarantee the financial sustainability of the system)*





# The Evolution of the Italian Pension System

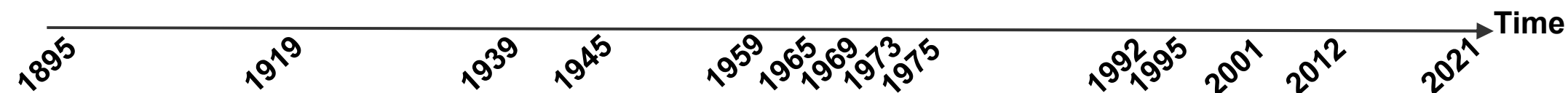


## 2001 – “Maroni reform”

- Minimum 65 years old to go on retirement AND 35 y.o.c. | OR 40 y.o.c. (no age requirement)
- Early exit with haircuts
- Pension funds funded by severance indemnity (“Trattamento di fine rapporto”)



# The Evolution of the Italian Pension System

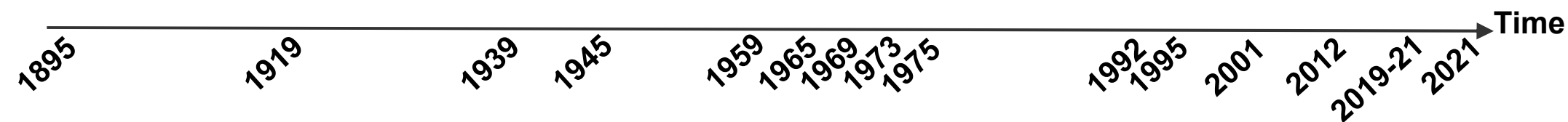


## 2012 – “Fornero reform”

- Retirement age at 66 and self-adjusted according to new data on life-expectancy of the Italian population
- Minimum 66 years old to go on retirement | 62 years AND 42.5 y.o.c.
- Early exit up to 57 years old with severe haircuts
- Even pre-1996 workers (with more than 18 y.o.c.) switch to a defined contribution system for the post 2012 period – The entire system is now a defined contribution system
- Contributions in the DB scheme are compounded according to the average Italian GDP growth rate



# The Evolution of the Italian Pension System



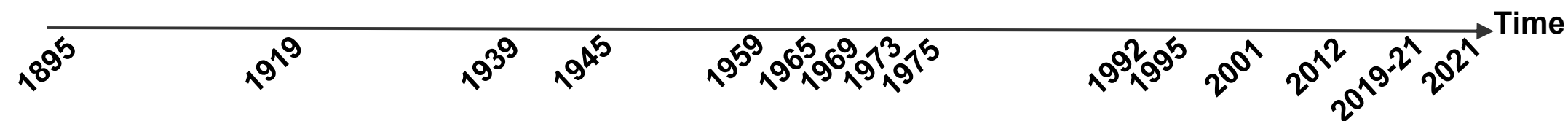
## The Temporary Experiment of “Quota 100” (2019-2021)

-Retirement for any combination between (1) age and (2) y.o.c. which sum equal to 100... if at least 62 years AND 38 y.o.c.\*

*\* 38 y.o.c. includes work times even with no real contribution (e.g. sickness or redundancy) but a minimum of 35 years of real contributions are required.*



# The Evolution of the Italian Pension System

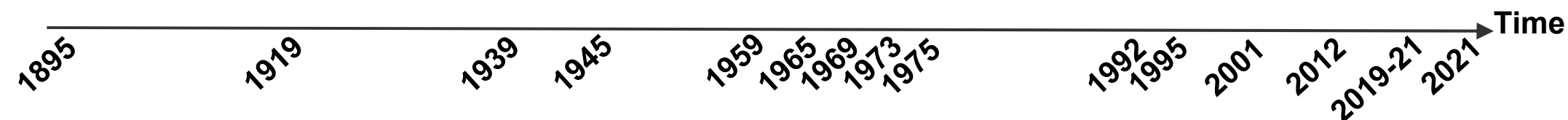


## The Current Scenario (2021)

- The system is pure DC system for almost all the participants (100% for post 1995 new workers, pre-1996 workers with <18 y.o.c. -at the end of 1995- DC from 1996, pre 1996 workers with >18.y.o.c. -at the end of 1995- DC from 2012)
- Retirement age at 67 AND 20 y.o.c.
- Post-1995 new workers can go on retirement (with 67 and 20 y.o.c.) only if the pension is at least 690.42€ a month (the 1.5 times the poverty check equal to 460.28€ in 2021)
- Old age “contribution” Pension at 71 if at least 5 y.o.c.
- Early exit pension – men with 42 years and 10 months of contribution (no age requirements) (41 and 10 months for woman)



# The Evolution of the Italian Pension System



## The Current Scenario (2021) – Additional options

- **Reverse Mortgage** (since 2016) if at least 60 years old and owner of a residential home with a value up to 350,000 € and the loan can not exceed th 50% of that value.
- **“Opzione Donna”** – On retirement without haircuts if woman with at least 58 and 35 y.o.c.
- **“Anticipo PEnsionistico (APE) sociale”** – Subsidy/Aid cheque up to the retirement age if at least 63 and 30 y.o.c. and no other subsidies received.



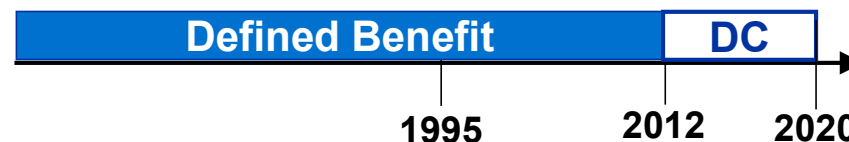
# The Estimation Process

## *An Example*



Individual with **67 years in 2020** (... born in 1954) that started to work since his 20s (... 1974) and had more than 18 y.o.c. at the end of 1995.

- Years of contribution: 43
- Gender: male
- Age of applicant: 67
- Annual contributions from 2012 to 2019 (equal to 33% of the annual income):



Year	Income	Contributions	Rate	Total amount
2012	€ 41,000	€ 13,530	1.134%	€ 13,683.48
2013	€ 41,000	€ 13,530	1.016%	€ 27,490.09
2014	€ 41,000	€ 13,530	-0.193%	€ 40,941.04
2015	€ 43,000	€ 14,190	0.506%	€ 55,409.90
2016	€ 43,000	€ 14,190	0.468%	€ 69,925.90
2017	€ 43,000	€ 14,190	0.521%	€ 84,553.73
2018	€ 46,000	€ 15,180	1.348%	€ 101,077.94
2019	€ 46,000	€ 15,180	1.825%	€ 118,380.11

- Average income in the last 5 years before retirement: 44,852€\*<sup>1</sup>

- Average income in the last 10 years before retirement: 44,361€\*<sup>1</sup>

\*<sup>1</sup>Already adjusted by inflation with Italian National Institute of Statistics (ISTAT) parameters.



# The Estimation Process

## *An Example*

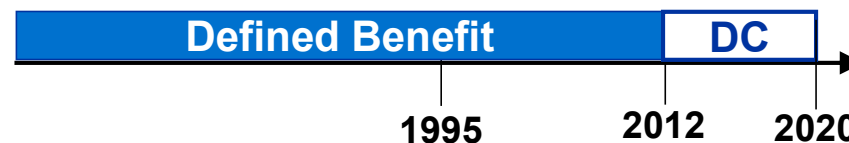


From the input data we know that the years of contributions of the worker in the different time frames are organized as follow:

Part A "Until 1992": 16 y.o.c.

Part B "1993-2011": 19 y.o.c.

Part C "2012 to retirement": 8 y.o.c.



### Part A "Until 1992"

We have 2% for each of the 16 years of contribution ( $16 \times 2\% = 32\%$ ). That number is applied to the average income in the last 5 years (44,852€). Hence, **part "A" is 14,353€** ( $44,852\text{€} \times 32\%$ ).

### Part B "1993-2011"

We have 2% for each of the 19 years of contribution ( $19 \times 2\% = 38\%$ ). That number is applied to the average income in the last 10 years (44,361€). Hence, **part "B" is 16,857€** ( $44,361\text{€} \times 38\%$ ).



# The Estimation Process

## *An Example*

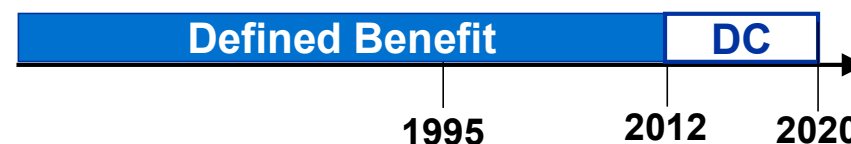


From the input data we know that the years of contributions of the worker in the different time frames are organized as follow:

Part A "Until 1992": 16 y.o.c.

Part B "1993-2011": 19 y.o.c.

Part C "2012 to retirement": 8 y.o.c.



### Part C "2012 to retirement"

We have to assess the total amount of contribution under the compound interest regime, using the rates provided by ISTAT. Each annual contribution amount is compounded according to the corresponding rate for that year, and the new contributions are added. That amount will be compounded in the next year and the new contributions will be added, and so on up to the last year. Hence the structure of the calculation is...

$$(\dots(((13,350 * (1+0.0134) + 13,350) * (1+0.01016) + 13,350) * (1+ -0.00193))+ 13,350) * (1+0..00506) + \dots$$

The total amount - as reported in the table above - is equal to 118,380.11€. We know that the coefficient for a male employee that applied to retirement in 2020 at age of 67 is 5.604%. Hence the **part "C" is 6,477.51€** (118,380.11€ × 5.604%).





# The Estimation Process

## *An Example*

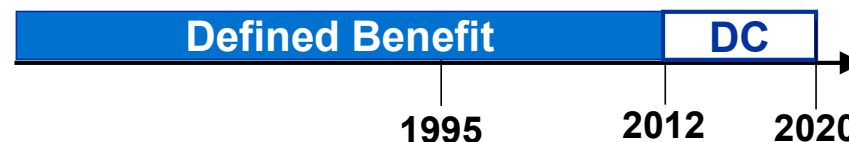


From the input data we know that the years of contributions of the worker in the different time frames are organized as follow:

Part A "Until 1992": 16 y.o.c.

Part B "1993-2011": 19 y.o.c.

Part C "2012 to retirement": 8 y.o.c.



The **total annual pension** will be equal to the sum of **part A** (14,353€), **part B** (16,857€), and **part C** (6,477.51€), and equal to **37,687.25€**.

It will be paid on a monthly base 13 times a year. Hence **each monthly payment will be 2,899€**.

That amount will be **taxed according to the individual tax rate brackets**.

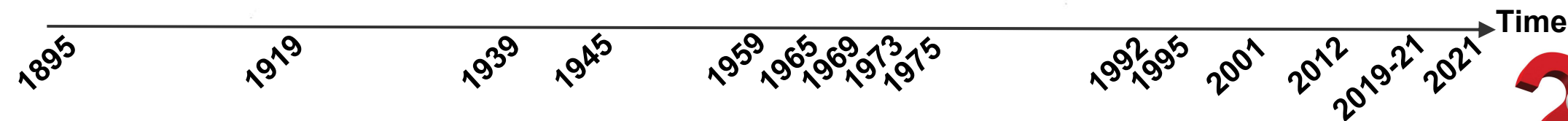
*(It can be noted how that amount is close to the 80% of the last income before retirement.)*

Income brackets	Tax rate
0€-15,000€	23%
15,000€-28,000€	28%
28,000€-55,000€	41%
Above 55,000€	43%

In case the retired individual does not have other incomes the net monthly payment is around **2,048€** (with a double payment in December.)



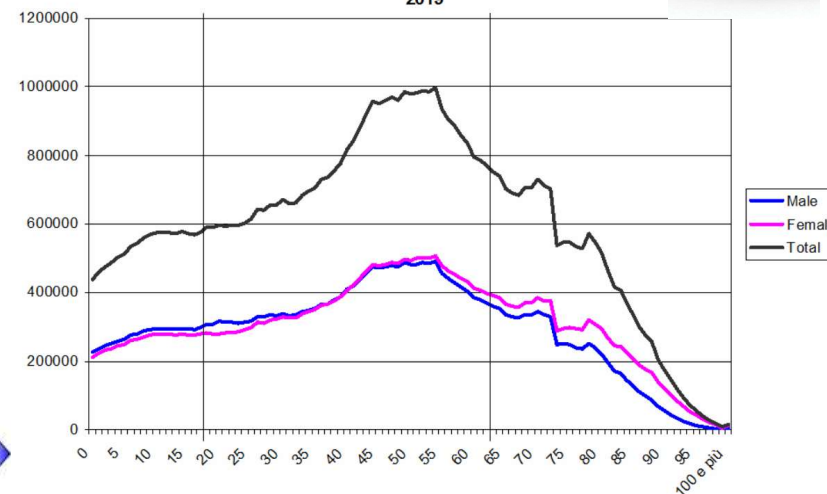
# What Next?



The aging in population and the “big wave” of new retirees in the next 10 years will require additional cuts, such...

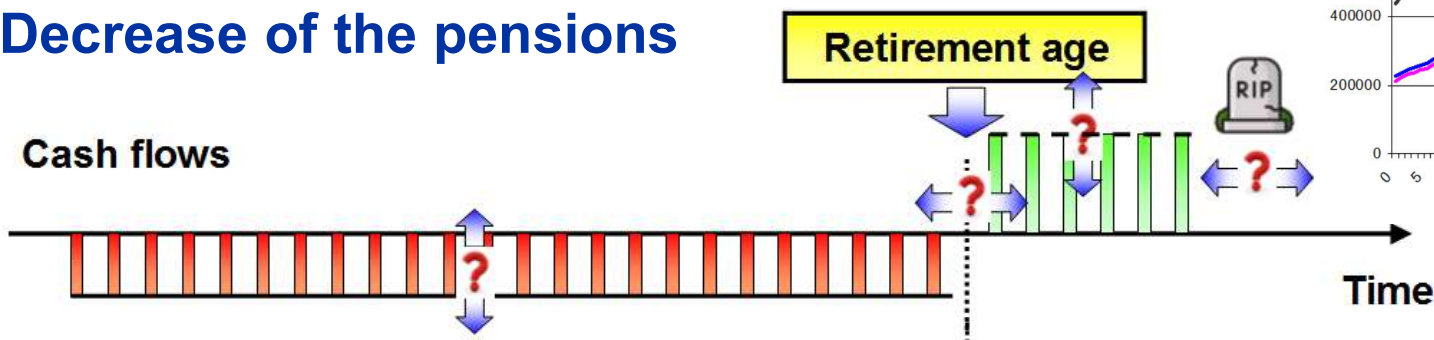
- Increase in the contributions
- Increase in the retirement age
- Decrease of the pensions

Age Distribution of the Italian Population 2019



Retirement age

Cash flows



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