



#### «Quota 100» three years after its launch

#### A joint INPS-UPB analysis examines how many and which workers have taken advantage of the early retirement programme

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## What is «Quota100»

- Employees and self-employed who, in 2019-2021, reach the combined requirements: age of at least 62 y and seniority of at least 38 y
- Pensioners have to wait additional three/six months before receiving the first instalment (so called «finestre»)
- *Q100* pensions cannot be combined with working incomes (till the perfection of standard requirements)
- Main goal: (re)introduce some, albeit temporary, flexibility in the exit





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- Descriptive statistics based on INPS monitoring
- Monitoring *vs.* TR of DL 4/2019
- Logit analysis of the determinants of the decision to retire using the *Q100*











Retirees in the private sector with Q100 by last occupational status



Including public employees, the employed count for 81%, recipients of unemployment benefits and salary supplementations count 8%, the inactive not retired count 9%, and the rest 2%.





Age and seniority at the first payment (effective date)

Coniority	Age							
Semonty	62	63	64	65	66	Total		
38	10,3	6,3	4,9	3,7	1,6	26,8		
39	9,4	3,7	3,0	2,3	1,1	19,5		
40	10,8	4,1	3,1	2,5	1,1	21,6		
41	10,7	3,9	3,0	2,2	1,1	20,9		
42	5,6	2,1	1,7	1,2	0,6	11,2		
Total	46,8	20,1	15,7	11,9	5,5	100,0		

The joint distribution by age and seniority at the effective date shows that **approximately 63 percent of beneficiaries made use of Q100 with at least one of the two requirements** equal to the minimum threshold (62 years of age or 38 years of seniority).

Average age = 63,1 y

Average seniority = **39,6 y** 

2.500

2.000

1.500

1.000

500

0

Old age



#### New pensions by category and effective date



Seniority

= 2018 = 2019 \cdot 2020 = 2021

## Gross monthly amounts, by category and effective date



INPS

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Q100

### **Comparison of take-up rates** For those meeting eligibility requirements in 2019

	TR DL 4/2019	INPS monitoring <sup>(1)</sup>			
	In year eligibility				
	are met				
Inactive but not retired	100	40			
Active - private sector	85	40			
Active - public sector	70	36			
	In seco	nd year			
Inactive but not retired	0	12			
Active - private sector	40	13			
Active - public sector	45	18			
	In thir	rd year			
Inactive but not retired	0	2			
Active - private sector	40	5			
Active - public sector	45	6			

Take-up rates are: **39%** in 2019, **14%** in 2020 and **4%** in 2021, for an overall value of **49%** in the three years





## Monitoring vs. Technical Report

Take-up less than forecast 

(374,000 *vs.* 678,000, with effective date in 2019-2021)

- Pension benefits in line with forecasts
- Duration of benefits greater than expected 1 ۲

In the TR, the take-up rate is not broken down by duration of maximum possible anticipation, while actual data show a take-up rate of **4** per cent for people who can anticipate at most by **1** month, rising steadily to a peak of 74 per cent for people who can anticipate at most by 20-25 months

Actual data show the propensity to use 90% of the maximum possible anticipation

- In 2019-2021, expenditure was €12.3 billion (including application backlog), lacksquare€1,7 billion less than the estimates presented in the TR as corrected with the 2019 Update and the 2020 Budget Act (€14 billion compared with)
- Over the longer period 2019-2025, expenditure projected based on monitoring amounts to €23.2 billion, €5.8 billion less than the estimates









## Econometric analysis - Logit

Which variables had the greatest impact on take-up of the pension programme?

**Pool**: Sample of people who became eligible for *Q100* in 2019 (about 37,000 individuals) enriched with information from INPS monitoring on *Q100* (using fiscal identification numbers)

**Individual characteristics**: gender, age and contributory history at the earliest moment of eligibility for *Q100*, region of residence, employment status, pension fund, last annual working income, decision on opting for *Q100* in 2019-2021

v	ariable	Composition
Condor	Male	71%
Gender	Female	29%
	62	33%
	63	25%
Age	64	19%
	65	15%
	66	8%
	38	26%
Voorsof	39	20%
rears of	40	21%
contributions	41	20%
	42	13%
	North	42%
Geographical area	Centre	23%
	South	35%
	Active	93%
	Unemployed	4%
Status	Voluntary contributors Inactive but not	0%
	retired	2%
	Private sector	
	employees	33%
	Agricultural workers	3%
	Artisans	13%
INPS pension	Retail traders	14%
fund	Cen. govt. employees	
	(excluding schools)	6%
	Local govt. employees	19%
	Public school	
	employees	13%
Income decile	1° - 10°	-
Early exit decile	1° - 10°	-



### Findings: marginal probabilities

#### **Regressors:**

gender, seniority, activity status, pension fund, decile of income, decile of anticipation, interaction gender/pension fund, interaction income deciles/seniority

To understand which variables most impact takeup for *Q100*, we need to look at **marginal probabilities**:

How does the probability of opting for *Q100* change as specific variables change

		Baseline		1st var	iant	2nd variant		3rd variant		4th variant	
	Age	-0.042	***	0.002							
	Contribution history	-0.026	***	0.034	***	0.032	***	0.031	***	0.032	***
Status	Unemployed	0.212	***	0.218	***	0.220	***	0.217	***	0.213	***
	Voluntary contributors	0.378	***	0.391	***	0.389	***	0.387	***	0.399	***
	Inactive but not retired	0.185	***	0.135	***	0.137	***	0.136	***	0.142	***
Gender	Women	-0.066	***	-0.019	***	-0.022	***	-0.031	***	-0.025	***
а	Agricultural workers	-0.219	***	-0.216	***	-0.217	***	-0.213	***	-0.217	***
ū	Artisans	-0.161	***	-0.159	***	-0.163	***	-0.154	***	-0.153	***
sion 1	Retail traders	-0.169	***	-0.169	***	-0.173	***	-0.167	***	-0.166	***
pen	(excluding schools)	-0 212	***	-0.228	***	-0.225	***	-0.227	***	-0 235	***
PS	local govt employees	-0.090	***	-0.108	***	-0.104	***	-0.096	***	-0.235	***
Z	Public school employees	-0 106	***	-0 109	***	-0 107	***	-0.122	***	-0.136	***
	2°	0.100	***	0.069	***	0.068	***	0.071	***	0.130	***
	- 3°	0.132	***	0 1 3 4	***	0.132	***	0.130	***	0.136	***
S	ر ۵°	0.123	***	0.127	***	0.132	***	0.130	***	0.130	***
scile	۰ ۲°	0 1 4 1	***	0.145	***	0 1 4 1	***	0.135	***	0.143	***
ede	6°	0.136	***	0.141	***	0.138	***	0.128	***	0.137	***
a me	7°	0.160	***	0.165	***	0.162	***	0.149	***	0.156	***
nco	8°	0.134	***	0.136	***	0.132	***	0.127	***	0.131	***
_	9°	0.036	***	0.041	***	0.037	***	0.030	***	0.048	***
	10°	-0.085	***	-0.078	***	-0.083	***	-0.093	***	-0.080	***
	2°	0.005		0.089	***	0.089	***	0.087	***	0.087	***
ary	- 3°			0.134	***	0.133	***	0.131	***	0.135	***
exit din	0 4°			0.217	***	0.217	***	0.214	***	0.218	***
rly ent	5°			0.252	***	0.251	***	0.247	***	0.252	***
f ea vith	6°			0.292	***	0.290	***	0.287	***	0.290	***
ed v	- 7°			0.330	***	0.327	***	0.323	***	0.327	***
cile bare rec	- 8°			0.352	***	0.348	***	0.345	***	0.349	***
De	9°			0.360	***	0.354	***	0.351	***	0.356	***
00	10°			0.361	***	0.354	***	0.349	***	0.355	***
ea	South					-0.009					
Are	North					0.010					
	Regional per capita GDP							-0.00000361	***		
	Regional relative poverty								ale ale ale		
	rate						-0.005	***			



## Probabilities by segment and gender

Highest probabilities: private-sector employees Lowest probabilities: Central Government employees and agricultural workers

Only male private-sector employees (the largest category) are more likely to retire than women; in the other categories the probabilities of retirement are similar, with women being slightly more likely to retire



INPS



#### Probabilities by income decile and contributory history

The **probability increases as the number of years of contributions increases** (effect attributable to short careers impacting benefits) ...

... except for high-income workers (less concerned about the amount of benefits)



INPS



## Probabilities by income decile and gender

#### The probability curve is hump-

**shaped**: it rises until the third decile, levels off and then declines for the last two deciles, falling below that for the first decile:

- Growing incomes generate higher pensions and high pensions make early exit more affordable
- Highest incomes are associated with gratifying and better paying jobs that encourage postponing retirement



### Probabilities by income decile and employment status

Compared with the active population, voluntary contributors, the unemployed and the inactive but not retired are more likely to retire with Q100

 $\rightarrow$  possibility of acquiring an income



INPS

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### Some conclusions

- Retirees with Q100 numerous albeit less than forecast
- Expenditure less than forecast but by a smaller percentage than for retirees (duration of benefits compensates)
- However, it was the first time a Technical Report tried to adopt take-up rates different from 100%
- Estimated probabilities can help future design of flexible retirement (net of special circumstances in which Q100 was introduced and stayed available)

Annex if there are some seconds left





#### Geographical distribution at regional level

#### Number of retirees with Q100

% of employed

INPS



In 2019-2021, retirees with Q100 are more numerous in the North. Expressed as percent of the employed, the incidence is on the contrary larger in the South. However, take-up rates are substantially homogeneous across territories. As regressor in a Logit model, the Region of residence reveals not statistically significant when used in combination with other characteristics.

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## Take-up rates

#### For those meeting eligibility requirements in 2019

		2	Seniority (y	)		
Age (y)	38	39	40	41	42	Total
62	53	56	53	47	39	50
63	56	56	53	47	39	51
64	52	53	52	45	37	49
65	39	44	45	44	35	42
66	19	26	28	32	34	26
Total	48	51	49	45	38	49

Income quintiles	Active workers	Unemployed	Voluntary contributors	Non active & non retired	Total
1	35	60	75	58	37
2	52	74	91	57	55
3	52	73	86	62	53
4	51	87	75	74	52
5	37	89	95	90	38
Total	45	73	87	60	49



Take-up rates per maximum number of months of anticipation





% of usage of anticipation per maximum number of months of anticipation





0

## Expenditure

#### at 31 December 2021 and projected to 2025

The projection includes the application backlog and prudentially uses the growth rates set out in the TR (they take account of the continuation of the accumulated stock of *Q100* pensions, their gradual transformation into ordinary old-age or early retirement pensions, the lower value of the latter as a result of opting for *Q100* and new *Q100* pensions)

	Technical Report DL 4/2019	2019 Update	2020 Budget Act	TR adjusted for Update and BA	INPS monitoring data	Expenditure (column (e) plus application backlog and projection to 2025)	Difference with TR DL 4/2019	Difference with 2020 BA
	(a)	(b)	(c)	(d) = (a) + (b) + (c)	(e)	(f)	(g) = (a) - (f)	(h) = (d) - (f)
2019	3,453	-1,200		2,253	1,794	1,794	1,659	459
2020	7,334	-1,700	-300	5,334	4,901	4,901	2,433	433
2021	7,763	-400	-900	6,463	5,148	5,648	2,115	815
2022	7,310			7,310	n.d.	5,318	1,992	1,992
2023	5,034			5,034	n.d.	3,663	1,372	1,372
2024	2,324			2,324	n.d.	1,691	633	633
2025	251			251	n.d.	183	68	68
Total	33,469	-3,300	-1,200	28,969	11,843	23,198	10,272	5,772

#### Two major considerations:

- The take-up rate assumptions in the TR are appropriately conservative (there were no precedents)
- We cannot rule out a priori the possibility that in coming years the take-up rates could be higher than those seen so far (both those for the first year of eligibility and those deferred for one or more years)



