The impact of pension age changes in Malta: A re-assessment

The scope of this report is to reassess the impact of pension age changes in Malta. This reassessment will take as a benchmark the projections made in Grech (2016)[1] and Grech (2017)[2]. The latter projections were done just as the first complete year of labour market data post the first rise in the pension age had taken place.

Relevant developments that occurred since initial studies

Since these initial studies, there have been three major developments.

First, there have been further rises in the pension age. In fact, the 2016/17 studies only had labour market data up to December 2014, which meant that they captured the retirement behaviour of those born in 1952 and the early exit behaviour of those born in 1953.

Table 1: Retirement age rise in Malta by birth year

Birth year	***Retirement age***	***Early exit age***	***Retirement year***	***Early exit year***
1951	61/60	61/60	2012/2011	2012/2011
1952	62	61	2014	2013
1953	62	61	2015	2014
1954	62	61	2016	2015
1955	62	61	2017	2016
1956	63	61	2019	2017
1957	63	61	2020	2018
1958	63	61	2021	2019
1959	64	61	2023	2020
1960	64	61	2024	2021
1961	64	61	2025	2022
1962	65	61	2027	2023

[1]Grech, A.G. (2016), The possible impact of pension age changes on Malta's potential output, Central Bank of Malta Policy Paper, https://www.centralbankmalta.org/file.aspx?f=21344

[2] Grech, A.G. (2017), The impact of pension age changes – The case of Malta, Intereconomics, 52 (1): 57-62, https://www.intereconomics.eu/contents/year/2017/number/1/article/the-impact-of-pension-age-changes-the-case-of-malta.html

Thus Grech (2016) and Grech (2017) had as their basis just the initial change that which moved the retirement age from 61 for men to 62, and from 60 for women to 62, and that introduced the early exit age. Labour market data now covers the period to December 2021. From Table 1, we can see that this means that the labour market behaviour of all those born till 1958 is now known, while the early exit behaviour of all those born up to 1960 is also available. This means that the projections made then can be compared with actual outcomes for between six and seven single-birth year additional cohorts.

The second development was that in the Budget for 2016 Government introduced a scheme to enhance pensions for those who opt to continue working beyond the early exit age. This is a particularly important scheme as all those born till 1961 can still retire at age 61 with a full pension if they have just 35 years of contributions or credits. It is only for those born after 1962 that the conditions for early exit tighten to 40 years or more. The deferral scheme is expected to have lowered the prevalence of early exit.

The third development was the impact of the pandemic, which studies abroad have demonstrated affected previous trends in employment amongst older workers. Eurofound (2022)[3] indicates that there was a slight decline in the employment rate for people above pension age in the EU, as against the previous large increases, and that while on average in the EU, unemployment rates among the older age cohorts remained stable, there were increases in 19 Member States. That said, older workers in Europe fared much better than their American counterparts, where employment fell very sharply[4] (though even developments for older workers were better than those for their younger colleagues). IMF (2022) suggests that this was due to the different way labour retention schemes were set up in the two blocks.[5] However, Pit et al (2021)[6] points that different labour market impacts may also reflect the implementation of other policies such as the development of new business models, educational activities, and support of community-level actions.

[3] Eurofound (2022), COVID-19 and older people: Impact on their lives, support and care, Research Report, https://www.eurofound.europa.eu/sites/default/files/ef_publication/field_ef_document/ef21053en.pdf

[4] Goda et al (2021), The impact of COVID-19 on older workers' employment and social security spillovers, NBER Working Paper 29083, http://www.nber.org/papers/w29083

[5] IMF (2022), European labour markets and the COVID-19 pandemic: Fallout and the path ahead, IMF Departmental Papers, https://www.imf.org/-/media/Files/Publications/DP/2022/English/ELMCPFPAEA.ashx

[6] Pit et al (2021), COVID-19 and the ageing workforce: Global perspectives on needs and solutions across 15 countries, International Journal for Equity in Health, 20:221, https://equityhealthj.biomedcentral.com/articles/10.1186/s12939-021-01552-w

A comparison of the projections with the actual labour market outcomes

Table 2 presents the projections of full-time employed by single year of age made in Grech (2016).

Table 2: Projections of full-time employed by single year of age

a. Male

	2015	**2016**	**2017**	**2018**	**2019**	**2020**	**2021**
60	2,026	2,095	2,114	2,076	2,088	2,150	2,157
61	1,520	1,609	1,790	1,880	1,846	1,856	1,912
62	605	745	788	1,141	1,387	1,465	1,586
63	506	569	700	644	559	680	718
64	467	472	531	625	605	525	639
65	451	441	446	485	584	565	490
66	389	438	428	413	459	552	534
67	340	373	419	401	400	445	535
68	280	317	347	409	385	384	427
69	217	277	314	328	381	358	357
70	174	208	266	316	324	377	354
60-70	6,973	7,542	8,144	8,717	9,017	9,357	9,710

b. Female

	2015	**2016**	**2017**	**2018**	**2019**	**2020**	**2021**
60	612	681	723	756	786	841	858
61	533	544	606	643	672	699	748
62	231	248	253	544	577	603	628
63	207	205	220	117	253	268	280
64	130	200	198	195	104	224	238
65	112	121	186	192	189	101	217
66	104	108	116	173	178	176	94
67	104	99	103	112	167	172	169
68	77	95	91	98	107	160	164
69	76	76	94	84	90	98	146
70	62	74	74	92	82	89	97
60-70	2,247	2,451	2,664	3,006	3,205	3,430	3,638

Table 3 presents the actual outcomes.

Table 3: Actual full-time employed by single year of age

a. Male

	2015	**2016**	**2017**	**2018**	**2019**	**2020**	**2021**
60	2,028	2,147	2,281	2,248	2,317	2,378	2,403
61	1,380	1,465	1,584	1,718	1,753	1,747	1,865
62	563	706	820	1,391	1,529	1,522	1,525
63	452	507	623	725	969	1,012	1,099
64	438	416	474	596	687	804	877
65	402	399	369	430	550	579	651
66	364	379	386	349	408	473	547
67	317	351	371	365	341	379	450
68	293	297	334	367	352	319	371
69	201	278	289	325	347	318	306
70	173	197	260	272	312	314	316
60-70	6,611	7,142	7,791	8,786	9,565	9,845	10,410

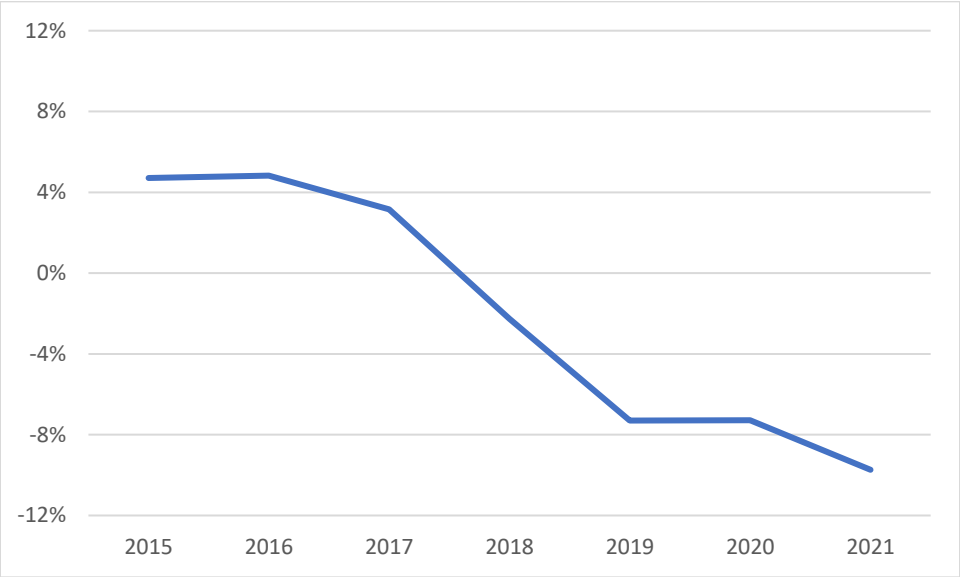
b. Female

	2015	**2016**	**2017**	**2018**	**2019**	**2020**	**2021**
60	630	692	753	811	890	952	1,011
61	543	577	624	680	714	763	855
62	228	264	336	597	619	686	710
63	174	173	222	267	399	417	489
64	113	151	163	202	253	306	360
65	109	103	136	150	193	223	250
66	90	103	101	131	140	169	210
67	105	86	103	96	128	126	161
68	77	97	87	103	97	118	126
69	70	75	90	83	104	93	118
70	56	70	72	89	83	94	88
60-70	2,195	2,391	2,687	3,209	3,620	3,947	4,378

By 2021 there was an underestimation of about 700 persons or 7% in the number of men in full-time employment. For women the underestimation was of 640 persons, or 17%.

For the first three years of the original projection, 2015 to 2017, the outcome for men was overestimated by about 5%, while in 2015 and 2016 the outcome for women was overestimated by about 2.5%. The situation then reversed, with a particular emphasis in 2019 when the pension age rose to 63. The response to that increase was stronger than anticipated in the 2016/17 studies. Once again, as had been indicated in the original studies, the labour market reaction of women tended to be even stronger than that among men. What the original study did not get right was that the gender difference would become even more accentuated.

Chart 1: % difference in projected full-time employment compared to actual



The change in full-time employment drop-out rates

The last cohort where both the retirement age and the early exit age was 61 was that born in 1951. Labour market data show that of those born in that year who were still working at age 60, only 36% were still working at age 61. Full-time labour market participation of this cohort continued to decline, falling to 22% for men and 25% for women by age 65.

The first rise in the pension age affected those born in 1952. The rate of drop-out from the full-time workforce declined significantly, such that 63% of men who had been working at age 60 were still working at age 61, an improvement of about a two-fifths in the drop-out rate (which fell to 36% from 64% a year earlier). For women the impact was much stronger, an improvement of about

four-fifths. For men the impact was limited to age 61, whereas for women there was a distinct improvement for age 62.

Table 4: Proportion of those born in a particular year who were working full-time at age 60 and who were still working full-time by single year of age

a. Male

	61	**62**	**63**	**64**	**65**
1951	36%	28%	26%	24%	22%
1952	63%	30%	26%	24%	21%
1953	68%	31%	28%	26%	24%
1954	71%	36%	32%	31%	28%
1955	72%	40%	36%	34%	29%
1956	74%	65%	45%	37%	30%
1957	75%	67%	44%	38%	
1958	78%	68%	49%		
1959	75%	66%			
1960	78%				

b. Female

	61	**62**	**63**	**64**	**65**
1951	42%	33%	29%	27%	25%
1952	91%	42%	31%	27%	24%
1953	89%	41%	31%	29%	27%
1954	90%	44%	37%	34%	32%
1955	92%	53%	42%	40%	35%
1956	90%	86%	58%	44%	36%
1957	90%	82%	55%	48%	
1958	88%	85%	60%		
1959	86%	80%			
1960	90%				

With each subsequent birth year cohort, the tendency to stay in employment post age 60 strengthened, as can be seen from Table 3. Of men born in 1960 who had been working full-time at age 60, 78% were still working at age 61, whereas 90% of women continued to work. Looking, for instance, at the cohort of men born in 1957, their labour market participation at age 64 was

better than that at age 61 of those born in 1951. In simple terms, 64 was the new 61 even for those whose retirement age was still 63.

The reaction to the second pension age increase, that from 62 to 63, ended up being quite like the first pension age. The proportion of men who stayed in full-time employment went up to 65%, which was just above the increase that had occurred in the first year after the retirement ate had risen from 60 to 61. Among women the impact of the second pension age rise was a bit less pronounced than the first one, but in relative terms the impact of the second pension age on female labour participation remained much stronger than that for men.

One thing that is quite evident from Table 4 is that while there was a significant improvement over time in the proportion of men who remained in full-time employment at age 61, this proportion has remained below 80%. This contrasts with Grech (2016) which had assumed that post-61 labour market behaviour of men would converge to that of women. While there was some convergence, this appears to have stalled somewhat and there is a significant number of men who still opt for the early exit option. While for the most recent birth cohort to reach the early exit age (those born in 1960) the drop-out rate for women is 10%, for men it is 22%. That said, while the full-time employment drop-out rate for women between age 60 and 61 has remained stable since the first cohort to face a rise in the pension age (those born in 1952), that for men has improved by 15 percentage points.

The second rise in pension age, that from age 62 to 63, had a similar impact on drop-out rates as the first rise in pension age, that from age 61 to 62. This was in line with the assumption made in Grech (2016). That said, the latter study had assumed that subsequently the drop-out rates would continue to improveto eventually reach 90%. Available data suggest that this has not occured, with the drop-out rate for men remaining below 70% while that for women remaining well below 90%. It is therefore clear that to a certain extent the immediate impact of the second rise in the pension age was somewhat less than expected. This is in line with the gradual slowdown in the improvement in the proportion of those resorting to the early pension age of 61.

On the other hand, Table 4 indicates that successive cohorts are ending up working for longer after the statutory pension age. For instance 24% of men born in 1952 who faced for the first time the new pension age of 62 were still working at age 65. This was the same proportion as that for men born in 1952 who faced a retirement age of 61. By contrast, 29% of men born in 1955 were still working at age 65, even though they faced the same retirement ages as men born in 1952. This pattern is evident for all cohorts. This diverges from the projections made in Grech (2016) where the bulk of the change in behaviour was related to changes in the pension age. Thus while

the projections made in Grech (2016) for a more pronounced decline in drop-out rates at earlier ages have not materialised, that study did not manage to anticipate enough the fact that a growing proportion of those who stayed to work till the statutory pension age would opt to continue working even beyond it. In fact, if one compares Table 2 and Table 3, the underestimation in the projection of full-time employment was solely due to persons aged 63 and 64 who continued to work. On the other hand, projections for other ages mostly fall below actual outcomes.

It is somewhat difficult to explain this particular development, but it is relevant to note that the pension deferral scheme applies for ages up to 65, and offers quite significant top-ups at ages 63 and 64. One cannot exclude that this financial incentive is leading to a growing proportion of individuals to continue working up to the age when the deferral scheme offers its maximum return. In 2021 the proportion of men still working full-time at age 64 was higher than that of men who were working full-time age 61 just six years earlier. The same result is observed for women.

The impact of pension age changes on part-time employment

An important aspect that previous studies ignored was the impact of pension age changes on part-time employment. For someone to access the early exit age of 61, they must forgo any type of employment between 61 and the statutory pension age. Traditionally, many individuals shift from full-time employment to part-time employment when they retire. However, after 2012 if someone opts to retire at 61, they are unable to work part-time as this would lose them their state pension until they reach the statutory age.

Labour market data indicate that part-time employment among men tended to rise sharply at age 61. For instance, in 2005, that is before the pension age increase was still being debated in parliament, there were 73 men aged 60 who were working part-time, as against 412 men aged 61. This pattern was unchanged until 2013. Then, as can be seen from Table 5, there was a dramatic drop in men aged 61 who work just part-time. In 2013 just 69 men aged 61 opted for this labour market behaviour, and by 2021 this had risen to just 116.

By contrast as from 2013 there started to be an increase in men working just part-time at age 62, i.e. the new statutory age, though the rise was not as pronounced as that which previously had characterised age 61. Then in 2017 this rise shifted to age 63, the new statutory age.

Table 5: Part-time employed by single year of age

a. Male

	‘10	**‘11**	**‘12**	**‘13**	**‘14**	**‘15**	**‘16**	**‘17**	**‘18**	**‘19**	**‘20**	**‘21**
60	73	105	74	88	101	123	109	120	120	128	125	130
61	319	287	323	69	81	94	91	97	105	107	103	116
62	343	334	350	233	246	278	263	93	102	102	95	110
63	340	334	335	338	271	312	280	343	238	205	207	221
64	439	323	338	343	348	293	292	314	339	263	267	263
65	388	406	322	298	343	286	334	313	319	313	318	320
66	433	358	395	333	286	332	332	299	312	294	290	329
67	274	409	337	294	309	316	283	334	299	306	308	301
68	166	250	386	352	273	278	302	308	323	282	280	297
69	176	161	241	309	332	299	271	288	303	300	296	275
70	186	162	153	317	279	270	317	294	286	281	279	290

b. Female

	‘10	**‘11**	**‘12**	**‘13**	**‘14**	**‘15**	**‘16**	**‘17**	**‘18**	**‘19**	**‘20**	**‘21**
60	186	158	173	209	217	217	258	310	294	292	301	318
61	152	167	157	156	191	213	221	261	290	274	260	272
62	139	138	169	137	166	190	206	218	252	267	251	259
63	173	126	135	161	140	161	184	191	217	247	230	236
64	145	163	113	121	152	135	151	177	203	211	219	210
65	119	139	151	112	107	141	133	149	175	206	189	213
66	81	111	127	137	103	111	137	121	138	169	182	178
67	69	77	107	113	137	101	112	124	115	138	154	171
68	41	66	78	87	108	130	100	112	119	115	116	137
69	38	39	64	62	84	107	118	99	112	116	101	113
70	32	35	38	56	60	83	103	122	95	123	103	97

By contrast there are no such age discontinuities among women. Instead, as can be seen in Table 5, the number of women working only part-time declines consistently by age. This implies that among women part-time employment is not influenced by retirement, and is not seen as a means to top up one’s pension. Among women part-time employment tends to be a long-standing choice induced by broader social and economic considerations.

This suggests that if one were to remove the current restrictions on part-time employment between the early exit age and the statutory age there might not be that much of an impact among

women. In constrast, among men there could be some impact. For instance in the nine years before the rise in the pension age, men aged 61 to 64 who worked part-time only averaged nearly 1,450, while in the nine years since they have averaged less than 850. The lowest point was reached in 2020 when just 672 men aged 61 to 64 worked just part-time. This suggests that relaxing the prohibition on part-time employment could raise labour supply, but against that one needs to consider that if it raises once more the drop-out rate at age 61 then there would be impacts for drop-out rates at later ages. This would possibly offset any gain from higher part-time employment in the immediate term.

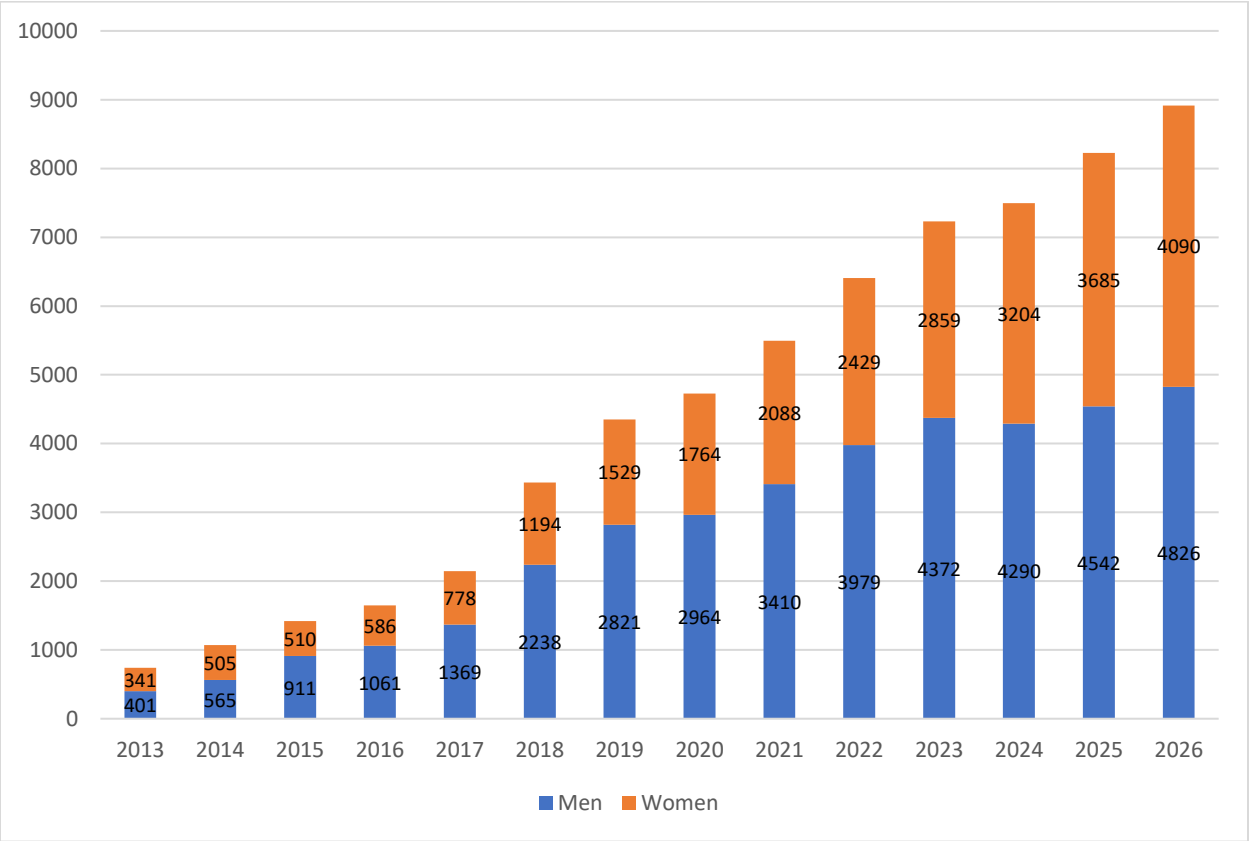
The economic impact of pension age changes: a reassessment

Grech (2016) had estimated the labour market impact of pension age changes by assuming that employment drop-out rates would remain unchanged after 2012. This would still mean that the number of older workers would increase as it captured the impact of higher labour participation of younger cohorts of women in absolute terms. This was contrasted with the actual labour market outcomes between 2012 and 2014, together with forecasts made for the period 2015 to 2026.

The same approach was undertaken again in light of updated labour market data up to 2021, with forecasts made to 2026 adopting the insights on employment drop-out rates that have been described above. In essence, whenever the pension age rises by a year one experiences the same change in the drop-out rates as seen in previous pension age rises. On the other hand, this improvement then stabilises for subsequent cohorts, while there is a positive impact on drop-out rates at ages between the new statutory pension age and age 65 (when the deferral scheme ends).

Chart 2 depicts the results from this analysis. By 2026 when the statutory pension age reaches 65, the number of those working full-time is projected to be 8,915 higher than if the pension age would have stayed at age 61. 55% of these additional workers would be men. As a result, the potential labour supply should be some 3% higher than it would have been, had labour market behaviour post 61 remained as it was in 2012.

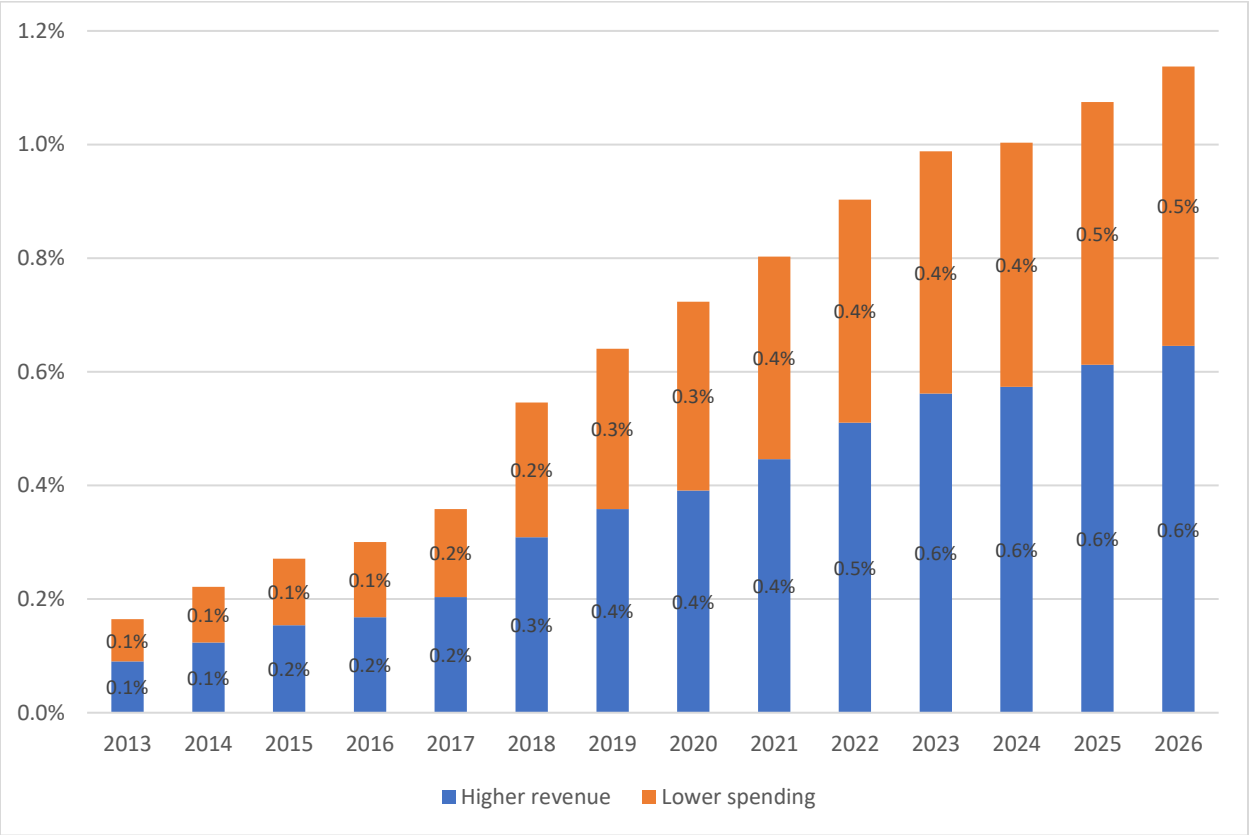
Chart 2: Impact on full-time employment of pension age changes



This implies that Malta's GDP in 2026 would be some 1.7% higher than it would have been in the absence of the pension age changes. This is somewhat lower than the 2.1% projection made in Grech (2016). This reflects mostly a base effect as since that paper was written the Maltese economy grew much more sharply than had been expected, and therefore the base against which the pension age-induced improvements are being compared is much higher. As has been shown in previous sections, in absolute terms the impact of the pension age changes has been higher than had been projected in Grech (2016), which is an impressive result when one considers the fact that since 2019 the pandemic undoubtedly had a stronger impact on the potential labour market participation of older workers. For instance, the wage supplement scheme was not open for those aged above the statutory pension age – something that may have reduced employers' willingness to offer full-time employment to such persons.

The fact that thousands more persons remain in full-time employment instead of drawing a two-thirds pension, of course, also has a strong positive impact on public finances.

Chart 3: Impact on government finances (% of GDP) of pension age changes



Assuming those in full-time employment would have drawn the average two-thirds pension, the annual saving in spending for Government grew from €5.8 million in 2013 to €52.4 million in 2021. If one makes a conservative projection of annual rises in pension rates, till 2026 the saving will have risen to €98.4 million, or 0.5% of GDP.

At the same time the induced increase in GDP from higher employment had a very positive impact on government revenue, starting from €7.1 million in 2013 and reaching €65.5 million in 2021. Assuming the tax-to-GDP ratio remains stable at its 2021 level, by 2026 this positive impact on revenue should rise to €129.2 million, or 0.6% of GDP.

Taken together these two impacts imply that had labour market behaviour post age 61 remained frozen in its 2012 pattern, government would have needed to borrow an additional 9.1% of GDP between 2013 and 2026.

When considering this estimate, one needs a word of caution in that this approach is static and assumes that this additional borrowing requirement could have taken place. Given the large rise

in government debt as a result of the pandemic, this would probably not been possible. In the absence of the positive impact of the pension age changes, the Maltese Government's fiscal options would have been very restricted and the need to implement fiscal austerity measures in the coming years would have been quite strong, resulting in a much worse economic outlook.

Conclusions and policy considerations

This review has indicated the following:

1. Available data show that previous projections for 2021 underestimated by about 7%, or 700 persons, the actual labour market behaviour of people aged 60 to 70.
2. In the first years, studies had overestimated the impact of pension age rises. This reflected the fact that while there was some improvement in the proportion of those who stop working at the early exit age, this was not as much as predicted. Participation for men remained under 80% (as against the forecast 90%). For women results were as expected.
3. The second pension age increase had similar impacts to the first pension age increase. This was as expected in previous studies. However, following the initial improvement, drop-out rates remained stable. This was not in line with predictions that they would converge gradually to drop-out rates for preceding ages. This suggests that the positive impact from raising pension age declines somewhat the higher the pension age rise is.
4. That said, a larger gap between the statutory pension age and the early pension age does not appear to have a negative impact on the proportion resorting to the early pension age.
5. Once someone works to statutory pension age, the likelihood of them working even beyond that age is improving with each subsequent cohort. This could reflect the presence of the deferral scheme which creates a financial incentive to continue working up to 65.
6. The prohibition to work between the early exit age and the statutory pension age appears to have an impact on the number of men working part-time, but not on women.
7. Pension age increases boosted the full-time workforce in absolute terms by more than had been expected in previous studies (due to more people working beyond the statutory pension age), and in relative terms in 2026 the labour force will be 3% larger as a result.
8. By 2026 Malta's GDP should be 1.7% higher than if pension age had remained unchanged, while government would have needed to borrow an additional 9.1% of GDP. In the absence of this saving, pressures for fiscal consolidation would have been strong.

Appendix: Main results – Impacts induced by pension age changes since 2012

a. In absolute terms

	Full-time Employment (number of workers)	GDP (€ millions)	Government borrowing (€ millions)
2013	741	18,617,993	13,064,171
2014	1,070	27,986,480	19,381,962
2015	1,421	40,793,028	27,126,393
2016	1,646	47,170,166	31,672,886
2017	2,148	64,557,452	42,787,452
2018	3,432	105,598,755	70,728,805
2019	4,350	137,119,755	90,016,606
2020	4,728	138,521,900	94,484,150
2021	5,498	174,735,090	117,878,958
2022	6,408	217,930,343	144,578,125
2023	7,232	256,584,449	169,278,708
2024	7,494	277,640,993	182,096,911
2025	8,227	311,320,147	204,922,290
2026	8,915	344,597,407	227,648,319
‘13-26	63,310	2,163,173,958	1,435,665,736

b. In relative terms

	Full-time Employment (% of Employemnt)	GDP (% of GDP)	Government borrowing (% of GDP)
2013	0.4%	0.2%	0.2%
2014	0.6%	0.3%	0.2%
2015	0.7%	0.4%	0.3%
2016	0.8%	0.4%	0.3%
2017	0.9%	0.5%	0.4%
2018	1.4%	0.8%	0.5%
2019	1.7%	1.0%	0.6%
2020	1.8%	1.1%	0.7%
2021	2.1%	1.2%	0.8%
2022	2.3%	1.4%	0.9%
2023	2.6%	1.5%	1.0%
2024	2.6%	1.5%	1.0%
2025	2.8%	1.6%	1.1%
2026	3.0%	1.7%	1.1%
’13-26	23.7%	13.7%	9.1%