MALTA FINANCIAL SERVICES AUTHORITY

## Appendix 15 - Programmed Withdrawals

- Drawdown Rates


#### Abstract

ANNEX I (Paragraph 5.6 .3 of the Pension Rules for Occupational Retirement Schemes)

\section*{Scope and definitions} 1. The purpose of this Annex is to include instructions and tables on programmed withdrawals to determine the maximum income withdrawal from 'capped' drawdown retirement benefits and instructions in line with paragraph 5.6.3 of the Pension Rules for Occupational Retirement Schemes.


Application: for calculations in respect of dates on or after 11 March 2024

## Introduction

2. From 11 March 2024, 'capped' drawdowns will be introduced as a way in which a Member may take retirement benefits (through income programmed withdrawals) from funds accumulated upon retirement as part of a Retirement Scheme. This Retirement Scheme will be offered by Retirement Schemes Administrators both authorised under the Retirement Pensions Act hereinafter "the Act".
3. The Retirement Scheme Administrator of a Retirement Scheme which makes use of 'capped' drawdowns needs to determine the maximum level of 'capped' drawdown retirement benefits that may be paid to a Member from the pension pot accumulated. The maximum amount needs to be calculated when the Member first becomes entitled to such a retirement benefit and at 3-year intervals thereafter. On reaching age 75 the amount is recalculated annually at the beginning of each pension year.
4. The maximum amount of drawdown retirement benefits that may be paid from a given date is determined by reference to a basis amount calculated at that point, using tables compiled by the MFSA. This document provides the tables and the conjoining
instructions for the use and further details of the assumptions used in constructing the table below.
5. The basis amount shown in the table below (the same table to be used for all genders) is structured to provide a measure of the annual amount of lifetime annuity retirement benefit that the drawdown Retirement Scheme could generate for the Member at the point of calculation. For the first calculation in respect of a drawdown from the Retirement Scheme, the point of calculation must be the date that entitlement to a drawdown retirement benefit first arises, that is, when the Member first designates some of the benefits held in her or his arrangement to be used to provide a drawdown retirement benefit. Subsequent recalculations for drawdown retirement benefits are expected to be carried out on or within a 60-day window of the recalculation reference date.
6. The amount of lifetime annuity that the Retirement Scheme could generate will generally be related to the Member's age and to the yields available on (Maltese) government bonds, which are used as proxy for the main investments expected to be used by Retirement Scheme Administrators which distribute this type of Retirement Scheme in Malta. Hence, to access the correct figure from the relevant table it is necessary to determine the Member's age at the point of calculation, and to access information on Maltese government bond yields at the same date. The procedure to be followed for deriving the appropriate rate will be outlined below.
7. The MFSA will review the applicable drawdown table as it deems necessary. The table in this document should be considered valid until further notice.

## Procedures for determining the basis amount and pension drawdown amounts

Step A Establish the calculation date. For the first calculations for a Retirement Scheme which makes use of 'capped' drawdowns, this is the date the Member first designates some of the retirement held in her or his Retirement Scheme to be used to provide a 'capped' drawdown retirement benefits. As stated above, for subsequent reviews a 60-day window may be used as a maximum deviation from the actual recalculation reference date.

Step B Determine the age in complete years of the Member at the point of calculation (age last birthday, designated B). For ages of 90 and higher, use age 90.

Step C Obtain the yield (designated C) on Maltese government bonds (10 years) ${ }^{1}$ for the 15 th day of the calendar month before the calendar month in which the point of

[^0]calculation falls. If the 15th day of the preceding calendar month is not a working day, obtain the corresponding yield for the working day immediately preceding the 15th.

Step D Yield C must be rounded down to the nearest 0.25\%-step (designated D), with a lower bound of 0\%.

Step E Obtain the basis amount E per 1,000 EUR of fund from the published table below by extracting the figure applicable to age $B$ and yield $D$.

Step F Establish the amount of the Retirement Scheme which makes use of 'capped' drawdowns at the point of calculation (F).

Step G The basis amount is calculated as F / $1000 \times \mathrm{E}$.

## Example

Stephanie, who was born on 1 June 1961, has accumulated 10,000 EUR in her drawdown fund to provide a drawdown pension from 11 December 2022.

Step A The point of calculation is 11 December 2022.
Step B Stephanie's age at the point of calculation is 61.
Step C The yield on Maltese government bonds for 15 November 2022 was $2.926 \%$.
Step D The yield rounded down to the next $0.25 \%$ is $2.75 \%$.
Step E The tabulated drawdown rate for age 61 and yield $2.75 \%$ is 53 EUR per 1,000 EUR.
Step F The amount of drawdown pension fund at the point of calculation is 10,000 EUR.
Step G The basis amount is calculated as: $10,000 / 1,000 \times 53=530$ EUR as annual rate.

Appendix A-Basis amount per 1,000 EUR of fund for drawdown pensions

| ield/Age | .00\% | 25\% | 50\% | 75\% | 100\% | 25\% | .50\% | .75\% | 200\% | 2.25\% | 2.5\% | 2.75\% | 3.00\% | 3.25\% | .50\% | 3.75\% | 4.00\% | 4.25\% | 4.50\% | 4.75\% | 5.00\% | 5.25\% | 5.50\% | 5.75\% | 6.00\% | 6.25\% | 6.50\% | 6.75\% | 7.00\% | 7.25\% | 7.50\% | 7.75\% | 8.00\% |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 20 | ${ }^{13}$ | 14 | 15 | 17 | 18 | 20 | 21 | ${ }^{23}$ | 25 | 27 | ${ }^{28}$ | 30 | 32 | 34 | 36 | 38 | 40 | 42 | 44 | 46 | 48 | 51 | 53 | 55 | 57 | 59 | 61 | 64 | 66 | 68 | 70 | 72 | 74 |
| 21 | 14 | 15 | 16 | 18 | 19 | 21 | 22 | 24 | 25 | 27 | 29 | 31 | 33 | 35 | 37 | 39 | 41 | 43 | 45 | 47 | 49 | 51 | 53 | 55 | 57 | 60 | 62 | 64 | 66 | 68 | 70 | 73 | 75 |
| 22 | 14 | 15 | 16 | 18 | 19 | 21 | 22 | 24 | 26 | 27 | 29 | 31 | 33 | 35 | 37 | 39 | 41 | 43 | 45 | 47 | 49 | 51 | 53 | 55 | 58 | 60 | 62 | 64 | ${ }^{66}$ | 68 | 70 | 73 | 75 |
| 23 | 14 | 15 | 17 | 18 | 19 | 21 | 23 | 24 | 26 | 28 | 29 | 31 | 33 | 35 | 37 | 39 | 41 | 43 | 45 | 47 | 49 | 51 | 53 | 55 | 58 | 60 | 62 | 64 | 66 | 68 | 71 | 73 | 75 |
| 24 | 14 | 15 | 17 | 18 | 20 | 21 | 23 | 24 | 26 | 28 | 30 | 31 | 33 | 35 | 37 | 39 | 41 | 43 | 45 | 47 | 49 | 51 | 53 | 56 | 58 | 60 | 62 | 64 | 66 | 68 | 71 | 73 | 75 |
| 25 | 14 | 16 | 17 | 18 | 20 | 21 | 23 | 25 | 26 | 28 | 30 | 32 | 34 | 35 | 37 | 39 | 41 | 43 | 45 | 47 | 49 | 52 | 54 | 56 | 58 | 60 | 62 | 64 | ${ }_{6} 6$ | 69 | 71 | 73 | 75 |
| 26 | 15 | 16 | 17 | 19 | 20 | 22 | 23 | 25 | 27 | 28 | 30 | 32 | 34 | 36 | 38 | 39 | 41 | 43 | 45 | 48 | 50 | 52 | 54 | 56 | 58 | 60 | 62 | 64 | 66 | 69 | 71 | 73 | 75 |
| 27 | 15 | 16 | 18 | 19 | 20 | 22 | 24 | 25 | 27 | 29 | 30 | 32 | 34 | 36 | 38 | 40 | 42 | 44 | 46 | 48 | 50 | 52 | 54 | 56 | 58 | 60 | 62 | 64 | 67 | 69 | 71 | 73 | 75 |
| 28 | 15 | 16 | 18 | 19 | 21 | 22 | 24 | 25 | 27 | 29 | 31 | 32 | 34 | 36 | 38 | 40 | 42 | 44 | 46 | 48 | 50 | 52 | 54 | 56 | 58 | 60 | 62 | 65 | 67 | 69 | 71 | 73 | 75 |
| 29 | 15 | 17 | 18 | 20 | 21 | 22 | 24 | 26 | 27 | 29 | 31 | 33 | 34 | 36 | 38 | 40 | 42 | 44 | 46 | 48 | 50 | 52 | 54 | 56 | 58 | 60 | 63 | 65 | 67 | 69 | 71 | 73 | 75 |
| 30 | 16 | 17 | 18 | 20 | 21 | 23 | 24 | 26 | 28 | 29 | 31 | 33 | 35 | 37 | 38 | 40 | 42 | 44 | 46 | 48 | 50 | 52 | 54 | 56 | 59 | 61 | 63 | 65 | 67 | 69 | 71 | 73 | 76 |
| 31 | 16 | 17 | 19 | 20 | 22 | 23 | 25 | 26 | 28 | 30 | 31 | 33 | 35 | 37 | 39 | 41 | 42 | 44 | 46 | 48 | 50 | 52 | 55 | 57 | 59 | 61 | 63 | 65 | 67 | 69 | 71 | 74 | 76 |
| 32 | 16 | 18 | 19 | 20 | 22 | 23 | 25 | 27 | 28 | 30 | 32 | 33 | 35 | 37 | 39 | 41 | 43 | 45 | 47 | 49 | 51 | 53 | 55 | 57 | 59 | 61 | 63 | 65 | 67 | 69 | 72 | 74 | 76 |
| 33 | 17 | 18 | 19 | 21 | 22 | 24 | 25 | 27 | 28 | 30 | 32 | 34 | 35 | 37 | 39 | 41 | 43 | 45 | 47 | 49 | 51 | 53 | 55 | 57 | 59 | 61 | 63 | 65 | 67 | 70 | 72 | 74 | 76 |
| 34 | 17 | 18 | 20 | 21 | 23 | 24 | 26 | 27 | 29 | 30 | 32 | 34 | 36 | 38 | 39 | 41 | 43 | 45 | 47 | 49 | 51 | 53 | 55 | 57 | 59 | 61 | 63 | 66 | 68 | 70 | 72 | 74 | 76 |
| 35 | 17 | 19 | 20 | 21 | 23 | 24 | 26 | 27 | 29 | 31 | 33 | 34 | 36 | 38 | 40 | 42 | 43 | 45 | 47 | 49 | 51 | 53 | 55 | 57 | 59 | 62 | 64 | 66 | 68 | 70 | 72 | 74 | 76 |
| 36 | ${ }^{18}$ | 19 | ${ }^{20}$ | 22 | ${ }^{23}$ | 25 | ${ }^{26}$ | ${ }^{28}$ | 29 | ${ }^{31}$ | ${ }^{33}$ | 35 | ${ }^{36}$ | ${ }^{38}$ | 40 | 42 | 44 | 46 | 48 | 50 | 52 | 54 | ${ }_{56}^{56}$ | 58 | ${ }^{60}$ | 62 | $6_{4}$ | ${ }^{66}$ | ${ }_{68}$ | 70 | 72 | 74 | 76 |
| 37 | 18 | 19 | 21 | 22 | 24 | 25 | 27 | 28 | 30 | 32 | 33 | 35 | 37 | 39 | 40 | 42 | 44 | 46 | 48 | 50 | 52 | 54 | 56 | 58 | 60 | 62 | 64 | 66 | 68 | 70 | 72 | 74 | 77 |
| 38 | 19 | 20 | 21 | 23 | 24 | 26 | 27 | 29 | 30 | 32 | 34 | 35 | 37 | 39 | 41 | 43 | 44 | 46 | 48 | 50 | 52 | 54 | 56 | 58 | 60 | 62 | 64 | 66 | 68 | 71 | 73 | 75 | 77 |
| 39 | 19 | 20 | 22 | ${ }^{23}$ | 24 | 26 | 27 | 29 | 31 | 32 | 34 | 36 | 37 | 39 | ${ }^{41}$ | 43 | 45 | 47 | 49 | 51 | 52 | 54 | ${ }^{56}$ | 58 | 60 | 63 | 65 | 67 | 69 | 71 | ${ }^{73}$ | 75 | 77 |
| 40 | 19 | 21 | 22 | 23 | 25 | 26 | 28 | 29 | 31 | ${ }^{33}$ | 34 | 36 | 38 | 40 | 41 | 43 | 45 | 47 | 49 | 51 | 53 | 55 | 57 | 59 | 61 | 63 | 65 | 67 | 69 | 71 | 73 | 75 | 77 |
| 41 | 20 | 21 | 23 | 24 | 25 | 27 | 28 | 30 | 32 | ${ }^{33}$ | 35 | 37 | 38 | 40 | 42 | 44 | 46 | 47 | 49 | 51 | 53 | 55 | 57 | 59 | 61 | 63 | 65 | 67 | 69 | 71 | 73 | 75 | 78 |
|  | ${ }^{20}$ | 22 | 23 | 24 | 26 | 27 | 29 | 30 | 32 | 34 | 35 | 37 | 39 | 40 | 42 | 44 | 46 | 48 | 50 | 52 | 54 | 55 | 57 | 59 | 61 | 63 | 65 | 68 | 70 | 72 | 74 | 76 | 78 |
| 43 | 21 | 22 | 23 | 25 | 26 | 28 | 29 | 31 | 32 | 34 | ${ }^{36}$ | 37 | 39 | ${ }^{41}$ | 43 | 45 | 46 | 48 | 50 | 52 | 54 | 56 | 58 | 60 | 62 | 64 | 66 | 68 | 70 | 72 | 74 | 76 | 78 |
| 44 | 21 | 23 | 24 | 25 | 27 | 28 | 30 | 31 | ${ }^{33}$ | ${ }^{35}$ | 36 | 38 | 40 | ${ }^{41}$ | 43 | 45 | 47 | 49 | 51 | 52 | 54 | 56 | 58 | 60 | 62 | 64 | 66 | 68 | 70 | 72 | 74 | 76 | 78 |
|  | 22 | ${ }^{23}$ | 25 | 26 | 27 | 29 | 30 | 32 | 33 | ${ }^{35}$ | 37 | 38 | 40 | 42 | 44 | 45 | 47 | 49 | 51 | 53 | 55 | 57 | 59 | 61 | 63 | 65 | 67 | 69 | 71 | 73 | 75 | 77 | 79 |
| 46 | 22 | 24 | 25 | 27 | 28 | 29 | 31 | 32 | 34 | ${ }^{36}$ | 37 | 39 | ${ }^{41}$ | 42 | 44 | 46 | 48 | 50 | 52 | 53 | 55 | 57 | 59 | 61 | 63 | 65 | 67 | 69 | 71 | 73 | 75 | 77 | 79 |
| 47 | 23 | 24 | 26 | 27 | 29 | 30 | 32 | 33 | 35 | ${ }^{36}$ | 38 | 40 | 41 | ${ }^{43}$ | 45 | 47 | 48 | 50 | 52 | 54 | 56 | 58 | 60 | 62 | 64 | 65 | 67 | 69 | 71 | 73 | 75 | 77 | 80 |
|  | 24 | 25 | ${ }^{26}$ | 28 | 29 | 31 | 32 | 34 | 35 | 37 | 39 | 40 | 42 | 44 | 45 | 47 | 49 | 51 | 53 | 54 | ${ }^{56}$ | 58 | 60 | 62 | 64 | 66 | 68 | 70 | 72 | 74 | 76 | 78 | 80 |
| 49 | 24 | 26 | 27 | 28 | 30 | 31 | 33 | 34 | ${ }^{36}$ | 38 | 39 | 41 | 43 | 44 | 46 | 48 | 50 | 51 | 53 | 55 | 57 | 59 | 61 | 63 | 65 | 67 | 68 | 70 | 72 | 74 | 76 | 78 | 80 |
| 50 | 25 | 26 | 28 | 29 | 31 | 32 | 34 | 35 | 37 | 38 | 40 | 42 | 43 | 45 | 47 | 48 | 50 | 52 | 54 | 56 | 58 | 59 | 61 | 63 | 65 | 67 | 69 | 71 | 73 | 75 | 77 | 79 | 81 |
| 51 | 26 | 27 | 29 | 30 | 31 | 33 | 34 | 36 | 37 | 39 | ${ }_{41}^{41}$ | 42 | 44 | ${ }^{46}$ | 47 | 49 | ${ }_{51}^{51}$ | ${ }_{53}^{53}$ | ${ }_{55}^{55}$ | 56 57 | 58 | ${ }_{60}^{60}$ | ${ }_{6}^{62}$ | ${ }_{6}^{64}$ | ${ }_{66}^{66}$ | ${ }_{68}^{68}$ | 70 | 72 | 74 | 75 | 77 | ${ }_{89} 7$ | ${ }_{81}^{81}$ |
| 52 | 27 | 28 | 29 | 31 | 32 | 34 | 35 | 37 | 38 | 40 | ${ }^{41}$ | 43 | 45 | 46 | 48 | 50 | 52 | 53 | 55 | 57 | 59 | 61 | 63 | 65 | ${ }_{6}$ | 68 | 70 | 72 | 74 | 76 | 78 | 80 | 82 |
| 53 | 27 | 29 | 30 | 32 | 33 | 34 | 36 | 37 | 39 | 41 | 42 | 44 | 46 | 47 | 49 | 51 | 52 | 54 | 56 | 58 | ${ }^{60}$ | 61 | 63 | 65 | 67 | 69 | 71 | 73 | 75 | 77 | 79 | 81 | 83 |
| 54 | 28 | 30 | 31 | ${ }_{33}^{32}$ | 34 | ${ }^{35}$ | 37 | 38 | 40 | ${ }_{41}^{41}$ | ${ }_{4}^{43}$ | ${ }^{45}$ | ${ }_{47}^{46}$ | ${ }_{48}^{48}$ | 50 | 52 | 53 54 | ${ }_{5}^{55}$ | ${ }_{5}^{57}$ | 59 59 | ${ }_{60}^{60}$ | ${ }_{63}^{62}$ | ${ }_{6}^{64}$ | ${ }_{6}^{66}$ | ${ }_{69}^{68}$ | 70 | 72 | 74 | ${ }_{76}$ | 77 | 79 | ${ }_{81}^{81}$ | 83 <br> 84 <br> 8 |
| 55 | 29 | ${ }^{31}$ | 32 | 33 | 35 | ${ }^{36}$ | 38 | 39 | ${ }^{41}$ | ${ }^{42}$ | 44 | 46 | 47 | 49 | 51 | 52 | 54 | 56 | 58 | 59 | ${ }^{61}$ | $6^{63}$ | ${ }^{65}$ | 67 | 69 | 71 | 72 | 74 | 76 | 78 | 80 | 82 | 84 |
| 56 | 30 | 32 | 33 | 34 | 36 | 37 | 39 | 40 | 42 | ${ }^{43}$ | 45 | 47 | 48 | 50 | 52 | 53 | 55 | 57 | 59 | 60 | 62 | 64 | 66 | 68 | 70 | 71 | 73 | 75 | 77 | 79 | 81 | 83 | 85 |
| 57 | ${ }^{31}$ | ${ }^{33}$ | 34 | 35 | ${ }^{37}$ | 38 | 40 | ${ }^{41}$ | ${ }^{43}$ | 44 | ${ }^{46}$ | 48 | 49 | 51 | 53 | 54 | 56 | 58 | 60 | ${ }^{61}$ | ${ }^{63}$ | ${ }^{65}$ | 67 | 69 | 71 | 72 | 74 | 76 | 78 | 80 | 82 | ${ }^{84}$ | ${ }^{86}$ |
| 58 | 32 | 34 | 35 | 37 | 38 | 39 | ${ }^{41}$ | 42 | 44 | 46 | 47 | 49 | 50 | 52 | 54 | 55 | 57 | 59 | 61 | 62 | 64 | ${ }^{66}$ | 68 | 70 | 72 | 73 | 75 | 77 | 79 | 81 | 83 | 85 | 87 |
| 59 | 34 | 35 | 36 | 38 | 39 | 41 | 42 | 44 | ${ }^{45}$ | 47 | 48 | 50 | 52 | 53 | 55 | 57 | 58 | ${ }^{60}$ | 62 | 64 | 65 | 67 | ${ }^{69}$ | 71 | 73 | 74 | 76 | 78 | 80 | 82 | 84 | 86 | 88 |
| 60 | ${ }^{35}$ | ${ }^{36}$ | ${ }^{38}$ | 39 | 40 | 42 | 43 | 45 | 47 | 48 | 50 | 51 | 53 | 55 | 56 | 58 | 60 | 61 | 63 | ${ }^{65}$ | 67 | ${ }^{68}$ | 70 | 72 | 74 | 76 | 77 | 79 | 81 | 83 | 85 | 87 | 89 |
| 61 | ${ }^{36}$ | 38 | 39 | 40 | 42 | 43 | 45 | 46 | 48 | 49 | 51 | 53 | 54 | 56 | 58 | 59 | 61 | 63 | 64 | ${ }^{66}$ | 68 | 70 | 71 | 73 | 75 | 77 | 79 | 81 | 82 | 84 | 86 | 88 | 90 |
| 62 | 38 | 39 | 40 | 42 | 43 | 45 | 46 | 48 | 49 | 51 | 52 | 54 | 56 | 57 | 59 | 61 | 62 | 64 | 66 | 68 | ${ }^{69}$ | 71 | 73 | 75 | ${ }_{76}$ | 78 | 80 | 82 | 84 | ${ }^{86}$ | 87 | 89 | 91 |
| 63 | 39 | ${ }^{41}$ | 42 | 43 | 45 | 46 | 48 | 49 | ${ }^{51}$ | 52 | 54 | 56 | 57 | 59 | 61 | 62 | 64 | 66 | 67 | 69 | 71 | 73 | 74 | 76 | 78 | 80 | 82 | 83 | 85 | 87 | 89 | ${ }^{91}$ | ${ }^{93}$ |
| 64 | 41 | 42 | 44 | 45 | 47 | 48 | 50 | 51 | 53 | 54 | 56 | 57 | 59 | 61 | 62 | 64 | 66 | 67 | 69 | 71 | 72 | 74 | 76 | 78 | 80 | 81 | 83 | 85 | 87 | 89 | 90 | 92 | 94 |
| 65 | 43 | 44 | 46 | 47 | 48 | 50 | 51 | 53 | 54 | 56 | 58 | 59 | 61 | 62 | 64 | 66 | 67 | 69 | 71 | 73 | 74 | 76 | 78 | 79 | 81 | 83 | 85 | 87 | 88 | 90 | 92 | 94 | 96 |
| 66 | 45 | 46 | 47 | 49 | 50 | 52 | ${ }_{5} 5$ | 55 | ${ }^{56}$ | 58 | 60 | 61 | 63 | 64 | ${ }^{66}$ | ${ }^{68}$ | 69 | 71 | ${ }^{73}$ | 74 | ${ }^{76}$ | 78 | 80 | 81 | 83 | 85 | 87 | ${ }^{88}$ | 90 | 92 | 94 | ${ }^{96}$ | ${ }^{98}$ |
| 67 | 47 | 48 | 50 | 51 | 53 | 54 | 56 | 57 | 59 | 60 | 62 | 63 | 65 | 67 | 68 | 70 | 71 | 73 | 75 | 77 | 78 | 80 | 82 | 83 | 85 | 87 | 89 | 91 | 92 | 94 | 96 | 98 | 100 |
| 68 | 49 | 51 | 52 | 53 | 55 | 56 | 58 | 59 | 61 | 63 | 64 | 66 | 67 | 69 | 71 | 72 | 74 | 76 | 77 | 79 | 81 | 82 | 84 | 86 | 88 | 89 | 91 | 93 | 95 | 96 | 98 | 100 | 102 |
| 69 | 52 | 53 | 55 | 56 | 57 | 59 | 60 | 62 | 64 | 65 | ${ }^{67}$ | 68 | 70 | 72 | 73 | 75 | 76 | 78 | 80 | 81 | ${ }^{83}$ | ${ }^{85}$ | 87 | 88 | 90 | 92 | 94 | 95 | 97 | 99 | 101 | 102 | 104 |
| 70 | 54 | 56 | 57 | 59 | 60 | 62 | 63 | 65 | 66 | ${ }^{68}$ | 70 | 71 | 73 | 74 | 76 | 78 | 79 | 81 | 83 | 84 | 86 | 88 | 89 | 91 | 93 | 95 | ${ }_{96}$ | 98 | 100 | 102 | 103 | 105 | 107 |
| 71 | 57 | 59 | 60 | 62 | 63 | 65 | 66 | 68 | 70 | 71 | 73 | 74 | 76 | 78 | 79 | 81 | 82 | 84 | 86 | 87 | 89 | 91 | ${ }^{93}$ | 94 | 96 | 98 | 99 | 101 | 103 | 105 | 107 | 108 | 110 |
| 72 | 61 | 62 | 64 | 65 | 67 | 68 | 70 | 71 | ${ }^{73}$ | 75 | ${ }^{76}$ | 78 | 79 | 81 | 83 | 84 | 86 | 88 | 89 | 91 | ${ }^{93}$ | 94 | ${ }^{96}$ | 98 | 99 | 101 | 103 | 105 | 106 | 108 | 110 | 112 | 113 |
| 73 | 65 | 66 | 68 | 69 | 71 | 72 | 74 | 75 | 77 | 78 | 80 | 82 | 83 | 85 | 86 | 88 | 90 | 91 | 93 | 95 | 96 | 98 | 100 | 102 | 103 | 105 | 107 | 109 | 110 | 112 | 114 | 116 | 117 |
| 74 | 69 | 70 | 72 | ${ }^{73}$ | 75 | 76 | 78 | 80 | 81 | 83 | 84 | 86 | 88 | 89 | 91 | 93 | 94 | 96 | 98 | 99 | 101 | 103 | 104 | 106 | 108 | 109 | 111 | 113 | 115 | 116 | 118 | 120 | 122 |
| 75 | ${ }^{73}$ | 75 | 76 | 78 | 80 | 81 | 83 | ${ }^{84}$ | ${ }^{86}$ | 87 | 89 | 91 | 92 | 94 | 96 | 97 | 99 | 101 | 102 | 104 | 106 | 107 | 109 | 111 | 113 | 114 | 116 | 118 | 120 | 121 | 123 | 125 | 127 |
| 76 | 78 | 80 | 81 | 83 | 85 | 86 | 88 | 89 | 91 | ${ }^{93}$ | 94 | 96 | 98 | 99 | 101 | 103 | 104 | 106 | 108 | 109 | 111 | 113 | 114 | 116 | 118 | 120 | 121 | 123 | 125 | 127 | 128 | 130 | 132 |
| 7 | 84 | 85 | 87 | 89 | 90 | 92 | 93 | ${ }^{95}$ | 97 | 98 | 100 | 102 | 103 | 105 | 107 | 108 | 110 | 112 | 113 | 115 | 117 | 118 | 120 | 122 | 124 | 125 | 127 | 129 | 131 | 132 | 134 | 136 | 138 |
| 78 | 90 | 92 | ${ }^{93}$ | 95 | 97 | 98 | 100 | 101 | 103 | 105 | 106 | 108 | ${ }^{110}$ | 111 | ${ }_{113}$ | ${ }_{125}$ | 116 | 118 | 120 | 122 | ${ }^{123}$ | 125 | 127 | 129 | 130 | 132 | 134 | 136 | 137 | 139 | 141 | 143 | 144 |
| 79 | 97 | 99 | 100 | 102 | 104 | 105 | 107 | 108 | 110 | 112 | 114 | 115 | 117 | 119 | 120 | 122 | 124 | 125 | 127 | 129 | ${ }^{131}$ | 132 | 134 | 136 | 138 | 139 | 141 | 143 | 145 | 146 | 148 | 150 | 152 |
| 80 | 104 | 106 | 108 | 109 | 111 | 113 | 114 | 116 | 118 | 119 | 121 | 123 | 124 | 126 | 128 | 130 | 131 | 133 | 135 | 137 | 138 | 140 | 142 | 144 | 145 | 147 | 149 | 151 | 152 | 154 | 156 | 158 | 159 |
| 81 | ${ }^{112}$ | 114 | ${ }_{116}$ | 117 | 119 | 121 | 122 | 124 | 126 | ${ }^{127}$ | ${ }^{129}$ | 131 | 133 | 134 | 136 | 138 | 139 | 141 | 143 | 145 | 146 155 | 148 | 150 | 152 | 153 | 155 | 157 | 159 | 161 | 162 | 164 | 166 | 168 |
| ${ }_{82}^{82}$ | 121 | ${ }^{123}$ | 124 | ${ }_{127}^{126}$ | 128 | 129 | 131 | 133 | 135 | ${ }_{136}^{137}$ | 138 | 140 | 141 | 143 | 145 | 147 | 148 | 150 | 152 | 154 | ${ }_{1}^{155}$ | 157 | 159 | ${ }_{172} 17$ | 162 | 164 | 166 | 168 | 170 | 171 | 173 | 175 | 177 |
| 88 | ${ }^{131}$ | 133 | 135 | 137 | 138 150 | 140 | 142 | 143 156 | 145 157 | 147 159 | 149 161 | 150 163 | 152 165 | 154 166 | 156 | 157 170 | 159 172 | 161 | 163 175 1 | 164 | 166 179 | 168 181 | 170 182 | 172 | 173 186 | 175 188 | 177 190 | 179 191 | 180 193 | 182 195 | 184 197 | 186 199 | 188 200 |
| 854 | 143 156 | 145 158 | 147 160 | 149 161 | 150 163 | 152 165 | 154 167 | 156 169 | 157 170 | 159 172 | 161 174 | 163 176 | 165 178 | ${ }_{179}^{166}$ | 168 181 | 170 183 | 172 185 | 173 187 | 175 188 | 177 190 | 179 192 | 181 194 | 182 196 | 184 197 | 186 199 | ${ }_{201}^{188}$ | 190 203 | ${ }_{205}^{191}$ | ${ }_{207}^{193}$ | 195 208 | ${ }_{210}^{197}$ | ${ }_{212}^{199}$ | 200 214 |

## Appendix B - Assumptions used in constructing the table

8. Specific assumptions used in the determination of tabulated rates are detailed below.

## Mortality

9. Past mortality rates that serve as input for projections have been based on data provided by the Malta National Statistics Office for the period 2001-2020 (source data used is available upon request). Deaths and exposure levels have been provided for each calendar year, split by age and gender. No exclusions have been applied for the non-native population. As drawdown rates are gender-uniform, no split has been made in analysis by gender. Due to the small sample for Malta, the MFSA has grouped ages together for statistical analysis purposes ( 0 deaths for a particular cohort may distort results).
10. Mortality rates per age-group, accounting for development over time have been estimated using the Lee-Carter model. This model is widely used as an actuarial model to estimate mortality rates varying by age and time.
11. The MFSA has carried out a variety of sensitivity analyses on the results obtained, both including and excluding the specific Covid-19 affected calendar year 2020.
12. Statistical analysis details on the derivation of mortality rates that enable full replication of results will be made available for market participants through a separate paper.
13. The tables have been generated on the basis of no provision for continuing Member annuity on the death of the Member (that is, it is a single life rather than a joint life contract, also no continuing benefit for children upon death of the Member).
14. For age 98+ mortality rates have been exponentially extrapolated for all calendar years based on the pattern for ages 87-97.
15. For practical purposes, the age definition used is the age attained at the last birthday on or before the point of calculation.

## Rate of Interest

16. The rate of interest used for deriving the annuity rates is set having regard to the gross redemption yield on Maltese 10-year government bonds (see procedures above).

## Expenses

17. In producing the table, a deduction of $4 \%$ of the purchase price of the annuity is assumed to allow for the expenses of the Retirement Scheme and the Retirement Scheme Administrator. In using the tables no further expense adjustment is expected to be applied.

## Other assumptions

18. Annuity rates have been determined on the basis that they would provide level income for Members, with no guarantee period applicable. The frequency of payment allowed for in the annuity rate is monthly in advance.

## Appendix C - Drawdown Rates Table in Excel format


[^0]:    ${ }^{1}$ As publicly available via commercial providers, for instance through https://www.investing.com/rates-bonds/malta-10-year-historical-data

