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### **ACTUARIAL FACTORS FOR THE GEPF**

The GEPF has updated its actuarial interest factors following the recently published statutory actuarial valuation report as at 31 March 2021. Actuarial interest factors are used to determine the actuarial interest benefit which represents the value of a member's share in the Fund as formulated in the Fund's rules. The actuarial factors are calculated by the Fund's valuator and are loaded on the administration system where they are then used to calculate the benefits due to members. Payment of a member's actuarial interest can occur on certain types of exits such as on resignations or other exits where members have less than ten years of pensionable service.

Actuarial interest and actuarial interest factors are not well understood by members and have previously been a cause for concern and misunderstanding. This article aims to explain how the factors work and why they need to be updated.

### What is actuarial interest?

GEPF members earn a pension benefit, that is payable on retirement, for each year that they work. This pension benefit depends on a member's pensionable salary and the years of service they have in the Fund. This pension is only payable once a member retires. A member can however choose to leave the Fund before they reach retirement age. In such instances, the member would have already earned some form of benefit and it would only be reasonable for them to be paid the fair value of what they have earned to date when they leave the Fund.

Actuarial interest represents this fair value of the pension benefit earned to date and is an estimate of the amount that needs to be set aside now to provide members with the pension that would be due to them in retirement.

# What are actuarial interest factors and why are they needed?

Actuarial factors convert a regular pension benefit payable in the future to an equivalent lumpsum value that is paid out in today's terms. Actuarial factors simplify the calculation of the actuarial interest benefit and are needed to help quantify how much a member should be paid today to compensate them for the future pension they are going to forego when they exit before retirement.

### What affects actuarial interest and actuarial interest factors?

Actuarial interest factors are based on a set of financial and demographic assumptions as recommended by the Fund's valuator in the statutory actuarial valuation report. These assumptions are expected to reflect the experience of the GEPF membership and its investments. The assumptions are based on reasonable expectations about future events and are guided by actual experience and statistics. The main driver of the factors is the investment returns above inflation, which the Fund's investments are expected to earn from now until the pension benefits are payable.



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When future returns are expected to be high, a smaller amount needs to be set aside now to provide for the pension in retirement. This is because the higher returns allow this money to grow more quickly. On the other hand, more money would be required to be set aside now when future returns are expected to be low.

# Why must actuarial factors be updated?

Members have previously queried why the actuarial factors are changed after each valuation. This is best explained by first looking at a simplified example. Suppose that instead of earning a pension benefit for each year of service, a member earns a physical asset instead (e.g. a cow). If a member retires with 20 years of service, they would be paid 20 cows. Let's also assume that the legislation is such that you only get paid the cows in retirement and that If a member leaves before retirement, they will be paid a cash amount that is sufficient to buy the number of cows earned in the current market. Let us assume that a cow cost R5 000 in the previous year.

In such a case, a member who decides to resign after 5 years of service would have earned 5 cows as a benefit. It would be unfair to expect them to wait until retirement age to receive these cows. What would be reasonable would be for the member to be paid the cash lump sum that could buy 5 cows in the market at the point of exit. If the cost of a cow was still R5 000, then this member would be paid R25 000 (5\*R5000). If, however, the cost of a cow was now only R4 500 in the market, then the member would be entitled to a cash value of R22 500. If the member was paid R25 000 then this would not be fair for the Fund as it would have paid the member a higher benefit than they have earned. This additional amount would effectively have been paid for by the members who remain in the Fund.

On the other hand, if the cost of a cow was now R5 500, then the member would be entitled to a benefit of R27 500. If the Fund paid them R25 000, then the member would have been underpaid and would be disadvantaged.

What this example shows is that the Fund guarantees you the benefits payable if you retire within the Fund. Looking back at the example, the Fund guaranteed that the member would receive 5 cows in retirement. The Fund did not guarantee the value of these 5 cows at the point of exit as this depends on the market conditions at that point in time.

The GEPF applies a similar principle for actuarial interest factors. The GEPF guarantees the pension benefit amounts that will be payable once a member reaches retirement age. **The GEPF does not guarantee what these future pensions are worth today.** The current value depends on the valuation assumptions, such as inflation and expected returns from investments, which are based on market conditions as at the respective valuation dates. Economic conditions change from time to time and as a result, the actuarial interest benefits can rise or fall. However, the actuarial interest always represents the amount of money needed now to provide the pension earned to date in full.



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# How often does the GEPF update the actuarial factors?

The Fund updates the actuarial factors following the approval of the statutory actuarial valuation. This could be every two or three years depending on when the statutory actuarial valuation is conducted, but not a period exceeding 3 years as provided for in the Government Employees Pension (GEP) Law and rules thereto. The actuarial factors of the Fund were last updated as at 31 March 2018 and were effective from 1 July 2019.

# What process is followed before the implementation of the new factors?

The GEPF consults with the different labour unions on the proposed factors before implementation. This is a requirement of the GEP Law, 1996. Once the consultation process is completed, and a decision is made on the actuarial factors, an instruction is sent to the administrators to update the actuarial factors. In terms of this requirement, the GEPF has consulted with the relevant stakeholders as required by the law.

# What is the implication of the proposed 2021 actuarial interest factors?

The actuarial factors based on the 31 March 2021 statutory actuarial valuation are lower across all ages compared to the 2018 factors. This is due to the gap between the Fund's expected long-term returns and the salary and pension increase being higher than before. This translates to actuarial interest values that are on average 14% lower than those that would result from the 2018 factors. The extent to which individual members' actuarial interest values will differ between the 2018 and 2021 factors depends on their age and category (i.e., whether they are Service members or not).

If the actuarial factors are not updated to the 2021 factors, then members who exit will be paid more than their fair share of the Fund's assets. This will prejudice the members who stay in the Fund. It is important to note that the Fund aims to pay its members their fair share and has an ultimate responsibility to protect the benefits of members who continue with the Fund.

# When will the new factors be implemented?

The 2021 factors will be implemented effective 1 November 2022. Updating the factors means that the benefits where actuarial interest is payable, will change in the benefit statements. The benefits for members who resign or who exit the Fund with less than 10 years of pensionable service, will also be affected. This change reflects the adjustments to the long-term assumptions used in the valuation and does not mean that the Fund has changed its benefit structure. It is important to highlight that changes in actuarial interest factors only affect exits where actuarial interest is payable. Members who stay in the Fund until retirement and have at least 10 years of pensionable service will not be affected by the change.

It is also important to remind members that the factors have to be updated to ensure that members get paid their fair value which allows the Fund to remain financially sound and sustainable.



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# Who is affected by the changes in the actuarial interest factors?

The updated actuarial factors are applicable to all active members. However, only the benefits where actuarial interest is payable will be affected. This affects mainly resignation benefits and other exits where a member has less than 10 years of pensionable service. **Members who retire with at least ten years of pensionable service will be unaffected by changes to actuarial factors.** 

# Why are the new factors lower than the previous ones?

The assumptions have been updated to reflect the Fund's expectation of higher investment returns and inflation in the future as compared to the past. The returns that the Fund expects to generate from its investments in the future are now higher than what was expected when the 31 March 2018 valuation was conducted. Furthermore, the margin of the expected returns above the inflation expected in the future is higher than what it was previously.

This means that the assets of held by the Fund are expected to grow at quicker rate to meet the pension benefits that would have been paid in retirement for members. Therefore, the Fund now needs to set aside a lower amount today to pay the pensions that members who exit now, would have received in retirement. As a result, the actuarial interest entitlement for members is lower, leading to lower actuarial factors being adopted.

### Does this mean that I now have a lower benefit?

Actuarial interest factors affect benefits where actuarial interest is payable. Actuarial interest depends on actuarial interest factors, pensionable salary and pensionable service. A change in actuarial factors leads to a change in the actuarial interest benefit.

It is possible for a lower actuarial interest benefit to be reflected in the future but this will not be the case for every member. The extent to which your actuarial interest benefit will change will depend on your pensionable service and salary at the point of exit. It is important to remind you that members who retire within the Fund and with at least 10 years of pensionable service will be unaffected by any changes to actuarial factors.

### Why are the benefits previously communicated reducing? Is the Fund in trouble?

No, the Fund is not in financial trouble and per the statutory valuation as at 31 March 2021, the Fund is fully funded. The Fund continues to guarantee the pension due to you in retirement. However, the current value of these future pensions depends on economic conditions and can change over time. The revision of the factors is a timing issue and has been done to align the factors with the changing economic conditions.

Actuarial factors are mainly affected by the difference between the investment returns expected to be earned by the Fund on its assets in the long term and the level of salary and pension increases that are expected to be granted in the future. When this difference is higher, the amount required to be set aside now to compensate members for the pension they are



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foregoing in the future is lower. As a result, the actuarial interest benefits, as well as the actuarial interest factors, are lower.

In the 31 March 2021 statutory actuarial valuation, the difference between the long-term return assumption and the salary and pension increase assumptions was higher than in the previous valuation. The 2021 factors are lower than the 2018 factors at each age, as a result.

Failure to update these factors will result in exiting members being paid more than the true value of their benefits thus prejudicing members who retire in the Fund. This will negatively impact the funding position and security of the Fund.

The GEPF has generated a positive return over the past two years and has grown its assets. Why then are the factors reduced yet the Fund is growing?

It is correct to point out that the Fund is growing and generating positive returns. As a defined benefit fund, there is no direct link between the benefits due to members and the growth in assets. The benefits due to members are specified by the rules of the Fund and depend on the pensionable salaries and years of pensionable service.

The Fund is growing and expects to generate higher returns from its investments in the long term than what was previously anticipated. In addition, the expected returns are now a higher margin above the expected future inflation than before. This then means that the Fund is required to hold a smaller amount now to meet the pension benefits that are promised in retirement. This is because the Fund expects the amounts set aside to grow at a faster rate to match the amounts required in retirement. As a result, the actuarial factors have been lowered.

The statutory valuation at 31 March 2021 has allowed for higher salary increases than what public servants have received in the last few years. What would be the impact on actuarial factors if we allow for the lower increases?

As previously mentioned, actuarial interest always represents the amount of money needed now to provide the pension earned to date. Using a lower salary increase assumption would lead to lower expected pension benefits which would also reduce the actuarial interest benefits. As a result, even lower actuarial factors would be adopted.

### **Summary**

The Fund guarantees the benefits payable on retirement but cannot guarantee the value of these benefits in today's terms as these depend on the valuation assumptions. After a comprehensive review, the assumptions have been updated to reflect our expectation of



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higher investment returns and inflation in the future compared to the past. The expected long-term returns as at 31 March 2021 have a higher margin above expected inflation than the assumptions used in the 2018 valuation. The proposed actuarial interest factors are therefore lower than the ones used in the 2018 valuation. Changing the assumptions ensures that members get paid their fair share of benefits when they exit. This helps ensure the sustainability and financial soundness of the Fund in the long term. Though the factors have reduced, members are not prejudiced as they are paid their fair value for the benefits earned based on current economic conditions.