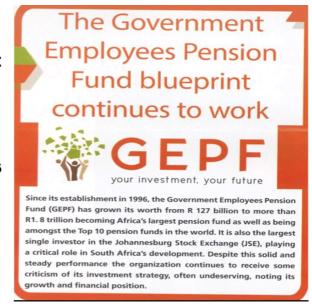
THE GEPF and its BLUEPRINT - INVESTMENT EXPENSES

The GEPF released some information in September 2018 about how successful their Blueprint was.

They used the Fund balance at the end of 2018 and compared it with the balance in 1996 to illustrate this massive "growth."

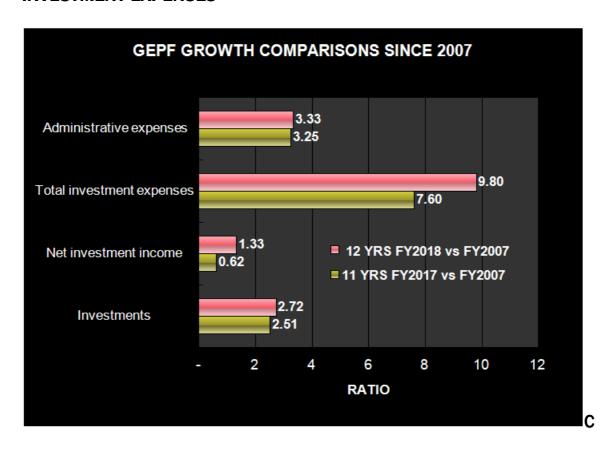
When approached for the 1996 information, I was told no Annual reports [AR] existed at that time.



The 2018 AR was released in December so the previous analysis could now be updated. (See below) Now we can focus on one of the standout indicators previously identified, namely INVESTMENT EXPENSES.

NOTE	GEPF "GROWTH" COMPARISON [R'Billion]	11 YRS FY2017 vs FY2007	12 YRS FY2018 vs FY2007	1 YEAR moveme nt [2018]
1	Investments	2.51	2.72	0.21
2	Net investment income	0.62	1.33	0.70
3	Total investment expenses	7.60	9.80	2.20
4	Administrative expenses	3.25	3.33	0.08

INVESTMENT EXPENSES



Costs with investments matter, In fact, for Pension Funds its a cancer. We can see that the cost of implementing the Blueprint is OUTGROWING everything else investment related.

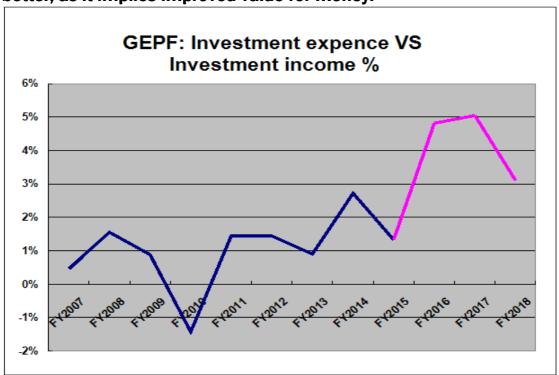
At this time it appears that the Blueprint is working nicely for what appear to be a growing list of investment managers, advisers, administrators, executives and officials who extract management fees, consultants and advisory fees, salaries and bonuses from the FUND at levels far exceeding inflation on the one hand and produced results on the other hand.

The graph clearly shows that the GROWTH in investment expenses is VISIBLY OUT OF LINE with the growth in the investment balance and the productiveness of those underlying assets [the Net Investment income].

Expenses increased 9 fold since FY2007, this whilst investment, the GEPF's pride and joy, has "GROWN" by 2.7x.

Comparing the investment expenses to the investment income

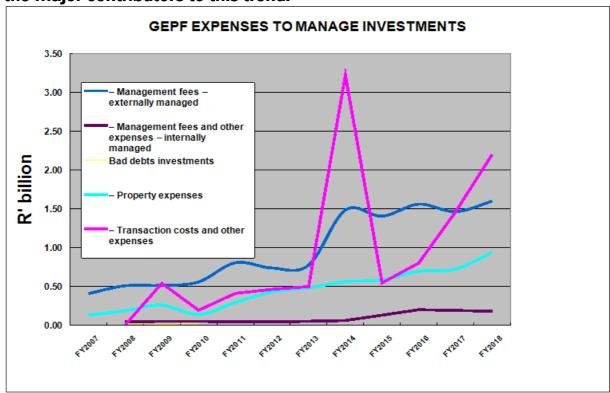
Comparing the investment expenses to the investment income provides an indicator of how much the GEPF has spent to get a return (productiveness) on the underlying investments. The lower the ratio the better, as it implies improved value for money.



The graph shows an increasing trend over time with the period from FY2015 visibly growing out of proportion. The ratio used to average around 1% BUT now it has ballooned to between 3-5%. No explanation is provided in the GEPF AR for this.

Investment expenses - line items

Lets look at the various line items of investment expenses and identify the major contributors to this trend.



Although all line items have gradually increased over time, the standout item is <u>transaction costs and other expenses</u>.

There is also a R1bn increase in the external management fees in FY2013/4 which requires further analysis and explanation. The GEPF annual report is silent on the amounts paid to the various other asset managers apart from the PIC. It is debatable whether having so many asset managers involved is the most cost effective and efficient arrangement. Perhaps this is one of the drivers of increased volumes of transactions i.e. Each asset manager needs to be active AND it follows the more asset managers there are being active, the higher the transaction volumes.

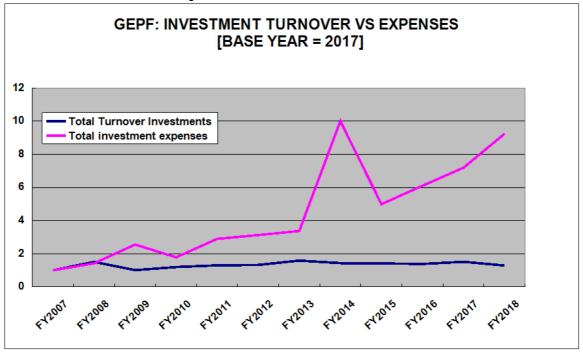
Transaction costs and other expenses

Considering that these costs falls outside the GEPF's budget and is regarded as direct costs incurred by the various asset managers, its not surprising to see the escalation and fluctuations on the graph.

Transaction costs are driven by volumes of buying and selling of investments. The GEPF follows a core satellite approach. As mentioned above, via the PIC, the GEPF uses various asset managers to actively manage a part of the investment portfolio. There is no further detail provided on this in the annual report, so a calculation was made from available information to determine what the turnover can be.

Investment turnover

The sale of assets plus new investments made was added together to get to a investment turnover amount. Below the comparison over time with 2007 as the Base year..

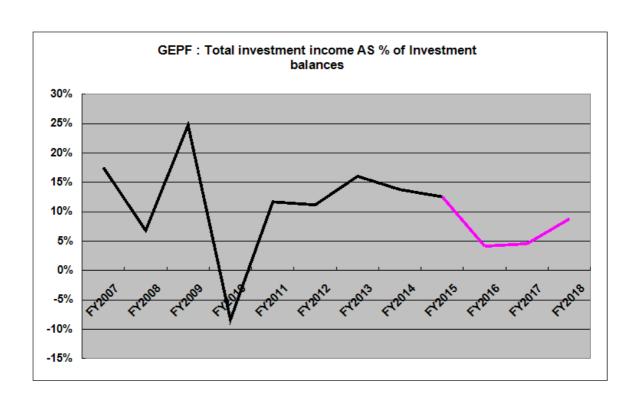


From this, it does not appear as though turnover as calculated is driving the increasing investment expenses. There must be some other reason(s)

It is further assumed that increased volumes/transactions as part of active management is done to ensure improved returns for the Fund.

Again, the AR does not provide detail as to how the various asset managers has produced, so we have to use what information is provided.

When we compare the investment income to the investment balances over time we actually see a declining trend. So, whilst expenses are increasing exponentially, returns are not forthcoming. This appears to be an ineffective arrangement. Again, the period of relative poor returns VS escalated transaction costs is from FY2015 onward. Are we getting value for money?



CONCLUSION

The GROWTH in investment expenses is VISIBLY OUT OF LINE with the growth in the investment balance and the productiveness of those underlying assets [the Net Investment income].

Comparing the investment expenses to the investment income WE SEE an increasing trend over time with the period from FY2015 visibly growing out of proportion. The ratio used to average around 1% BUT now it has ballooned to between 3-5%.

It is debatable whether having so many asset managers involved is the most cost effective and efficient arrangement.

Investment expenses - the individual line items that required further analysis is the external management fees increases since FY2013/4 BUT the standout item is the transaction costs and other expenses.

Transaction costs and other expenses actually falls outside the GEPF's budget control and is regarded as direct costs incurred by the various asset managers. With the number of asset managers involved combined with no budget constraint it is not surprising to see the degree of escalation and fluctuations.

Investment turnover was compared to expenses BUT the analysis indicates the costs increase regardless of the investment turnover. From this, it does not appear as though turnover as calculated is driving the increasing investment expenses.

There must be some other reason(s)

When we compare the investment income to the investment balances over time we actually see a declining trend. So, whilst expenses are increasing exponentially, returns are not forthcoming.

The abovementioned suggests that SIGNIFICANT INEFFICIENCIES have been building up over a number of years in managing the investments. That trend continued in 2018, and is most noticeable since FY2014 AND FY2015 onwards.

WORKSHEETS WITH CALCULATIONS Data sheet 1

NOTE	GEPF "GROWTH" COMPARISON 12years [R'Billion]	FY2007	FY2018	RATIO FY2018 vs FY2007	% Increas e 12year s	% Increa se Ave p.a
1	Investments	662.3	1,801.0	2.7	172%	14.3%
2	Net investment income	115.6	153.4	1.3	33%	2.7%
3	Total investment expenses	0.5	4.9	9.3	828%	69.0%
4	Administrative expenses	0.3	1	3.3	233%	19.4%
	PERCENTAGES					
5	Net investment income/investments	17%	9%	0.49	-51%	-4.3%
6	Investment expenses/investments	0.08%	0.27%	3.41	241%	20.1%
7	Investment expenses/investment income	0.46%	3.21%	7.00	600%	50.0%
8	Investment expenses/Admin expenses	177%	492%	2.78	178%	14.9%
	BENEFITS TO MEMBERS					
9	Benefits Paid [R'Billion]	21.2	94.0	4.4	343%	28.6%
10	Investment income /Benefits RATIO	5.5	1.6	0.3	-70%	-5.8%

Datasheet 2						Base year 2007	Base year 2007
Turnover Investments vs Investment expenses [R'bn]	Profit on sale of investments	Loss on sale of investments	New Investm ents	Total Turnove r Investm ents	Total investm ent expens es	Total Turnove r Investm ents	Total investm ent expense s
FY2007	25.14	15.68	20.14	60.97	0.53	1.00	1.00
FY2008	47.55	8.99	35.40	91.94	0.76	1.51	1.42
FY2009	4.83	4.47	52.29	61.59	1.36	1.01	2.55
FY2010	28.53	0.21	44.23	72.97	0.95	1.20	1.78
FY2011	26.36	0.59	52.37	79.33	1.54	1.30	2.90
FY2012	22.79	1.82	56.31	80.92	1.67	1.33	3.13
FY2013	32.60	0.10	64.01	96.71	1.80	1.59	3.37
FY2014	39.38	3.72	44.51	87.61	5.33	1.44	10.00
FY2015	62.82	1.66	21.80	86.28	2.66	1.42	4.99
FY2016	36.57	2.30	45.73	84.60	3.25	1.39	6.10
FY2017	64.75	0.98	26.66	92.40	3.83	1.52	7.19
FY2018	20.47	1.75	56.48	78.70	4.92	1.29	9.24

Datasheet 3

GEPF ANALYSIS OF INVESTMENTS, INVESTMENT INCOME, AND EXPENCES [R'Bn]	Non current assets [Investmen ts]	Total invest ment incom e	Total investme nt expenses	Net investment income	Investme nt expence VS Investme nt income %
COMPARE FY2007 VS FY2018	2.72	1.36	9.23	1.33	677.0%
FY2007	662.33	116.10	0.53	115.57	0.5%
FY2008	715.52	48.70	0.76	47.94	1.6%
FY2009	621.94	153.90	1.36	152.54	0.9%
FY2010	798.35	-66.80	0.95	-67.75	-1.4%
FY2011	911.56	106.50	1.54	104.96	1.4%
FY2012	1,036.32	115.70	1.67	114.03	1.4%
FY2013	1,237.93	198.50	1.80	196.70	0.9%
FY2014	1,422.91	195.85	5.33	190.52	2.7%
FY2015	1,596.50	200.09	2.66	197.43	1.3%
FY2016	1,637.59	67.49	3.25	64.24	4.8%
FY2017	1,664.03	75.94	3.83	72.10	5.0%
FY2018	1,801.82	158.33	4.92	153.41	3.1%