DRW Investment Research

To RA or TFSA – which one is better?

An evaluation of investing in a retirement annuity product versus a tax-free savings account – which investment product yields the highest possible value for money considering various marginal income tax rates and investment horizons?

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1. What do we know?

In a nutshell…

Criteria	Tax-free savings account	Retirement annuity
Max contributions during tax year	R30,000 lump sum or R2,500 per month (a lifetime limit of R500,000 applies and it will require a minimum period of 16 years and 8 months to reach the maximum limit)	Up to 27.5% of taxable income; max R350,000 per year
Excess contributions	Taxed at a once-off penalty of 40%	Will be carried forward as deductible contributions for tax periods in the future
Deductibility of contributions	No	Yes; tax benefit is equal to contributions x one's marginal tax rate
Taxability of lump sum withdrawals	No	Yes; determined by specific rules and tax scales applicable to retirement benefits
Taxability of regular/systematic withdrawals	No	Yes; forms part of one's taxable income
Investment portfolio	Any (depends on funds made available by product provider)	Governed by Regulation 28; specific exposure limits to equities, properties, and offshore holdings
Taxability of investment portfolio (interest, dividends, capital gains)	No	No
Accessibility to capital	Yes	No, not available until age 55 and then typically limited to one-third of fund value
Investment term	No specific period	No specific period, but no access to any capital before age 55

2. Framework for a comparison between the products

It is obviously not that simple to compare an RA with a tax-free savings account because different rules apply in each case. Therefore, to make such a comparison meaningful one must assume the same after-tax contributions, investment portfolios, investment periods, and after-tax withdrawal amounts.

Criteria	Tax-free savings account	Retirement annuity
Contributions per annum	R30,000	Effective contribution[1] depends on one's marginal tax rate: 18% >>> R36,585 26% >>> R40,540 31% >>> R43,478 36% >>> R46,875 39% >>> R49,180 41% >>> R50,847
Contribution periods considered	10 years or 15 years or 16 years 8 months	10 years or 15 years or 16 years 8 months
Holding periods (before making withdrawals)	10 years, 15 years, 20 years, 30 years	10 years, 15 years, 20 years, 30 years
Withdrawals	After each holding period lapsed, either lump sum or systematic withdrawals	After each holding period lapsed, either lump sum or systematic withdrawals
Lump sum withdrawal	No tax implication[2]	Taxed per retirement tables[3]
Systematic (regular) withdrawals	No tax implication, initial withdrawal amount equals 5% of capital value; thereafter withdrawal escalates each year with inflation	Taxable as per normal income tax; used an average tax rate of 30%; gross withdrawal amount less income tax payable equals the same net withdrawal amount as per tax-free savings account
Period of systematic withdrawals	20 years; remaining balance paid out as lump sum	20 years; remaining balance taxed as per retirement table and balance paid out

[1] For example, a person paying tax in the 26% marginal tax bracket, and who contributes R40,540 towards an RA will receive a tax deduction of R11,540 (26% x R40,540), thus an effective contribution of R30,000 towards the RA, and the same as the maximum contribution towards a TFSA.

[2] TFSA investments form part of a deceased's estate and thus are not exempt from estate duty, unlike retirement fund investments. I ignored in this exercise, however, possible estate duty implications, because generally it is only applicable for relatively high net worth estates (dutiable estates exceeding R3.5 million).

[3] Typically, only one-third of capital is available as a lump sum and the remainder must be used to buy a compulsory living or life annuity. For the purposes of this comparative exercise, however, I assumed the full amount is available as a lump sum and then taxed as per retirement tables, which is also the case in the event of death.

3. Evaluation of RA versus TFSA

Objective:

Determine which product yields the highest internal rate of return (IRR); i.e. considering the specific impact of tax liabilities where applicable

Assumptions applicable to both products:

Contributions are made in the beginning of each year

Portfolio return during contribution and/or holding period = 11% p.a.

Portfolio return during withdrawal period = 8% p.a.

Inflation = 6% p.a.

No withdrawals are made during contribution and/or holding period

Practical example:

Consider the situation where an investor pays a marginal tax rate of 31% (earning between R293,601 and R406,400 per annum). She is considering an after-tax investment premium of R30,000 per annum and plans to contribute for the next ten years in either a TFSA or RA. The contributions towards the RA will qualify for a tax deduction. Which product will yield the best outcome?

Criteria	TFSA	RA
Contribution per annum	R30,000	R43,478
After-tax contribution per annum	R30,000	R30,000
Investment term	10 years	10 years
Fund value after ten years	R556,843	R807,019

Full withdrawal	TFSA	RA
Full withdrawal at the end of 10th year	R556,843	R807,019
Tax implications	R0	(R64,895)
Net amount available	R556,843	R742,124

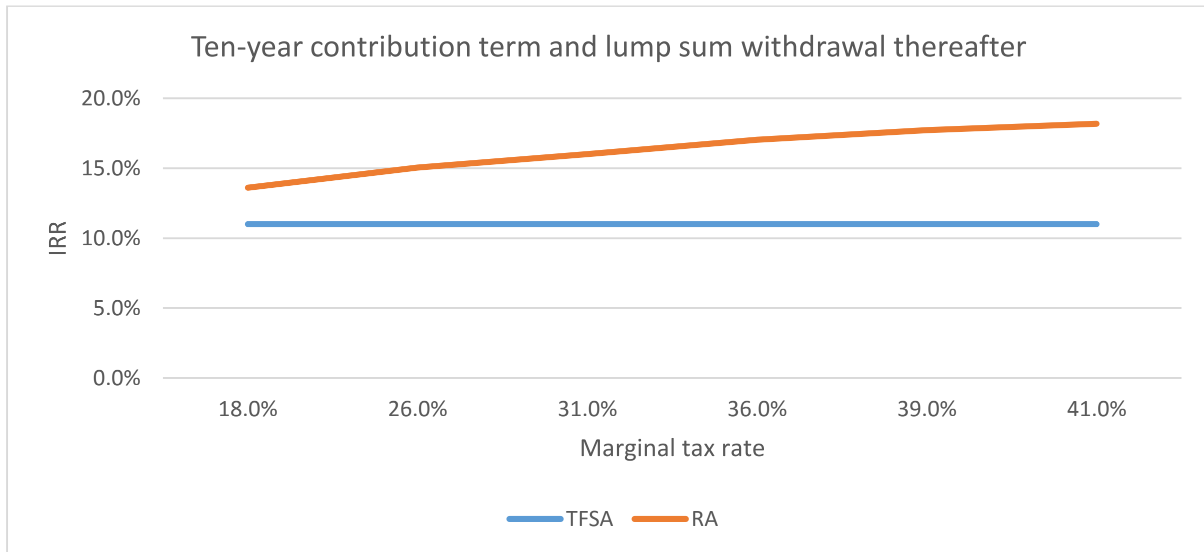
Internal rate of return	11%	16%

Systematic withdrawals	TFSA	RA
Initial withdrawal	R27,842	R39,774
Tax implications	R0	(R11,932)
Net initial withdrawal made	R27,842	R27,842
Balance available after 20 years of systematic withdrawals	R409,635	R638,928
Tax implications	R0	R25,007
Net amount available	R409,635	R613,921

Internal rate of return	9.1%	9.6%

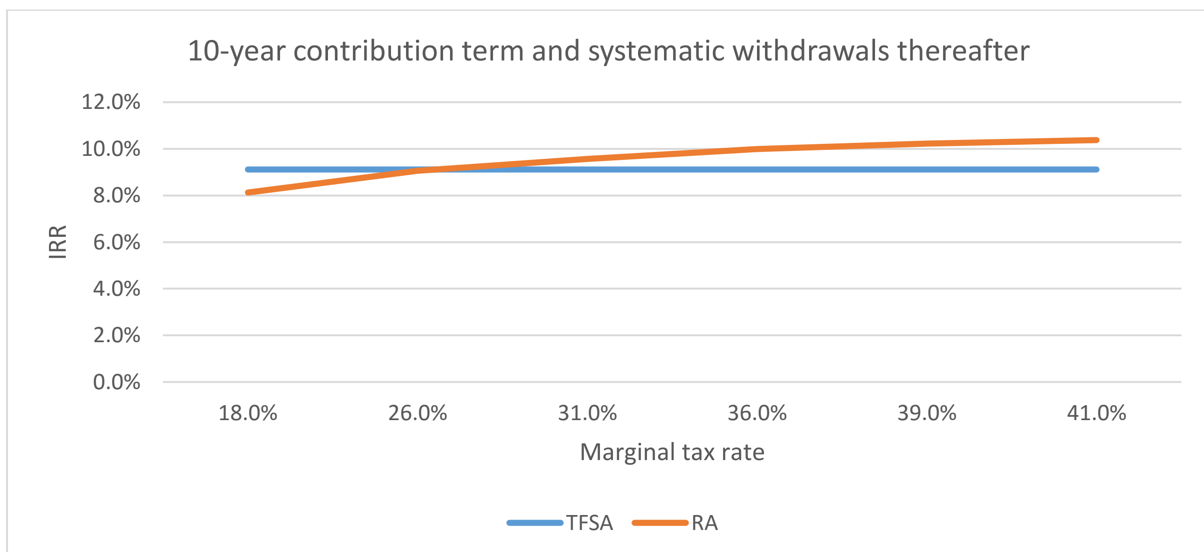
4. Results:

A. Contribution period of ten years; lump sum withdrawal at the end of the 10th year



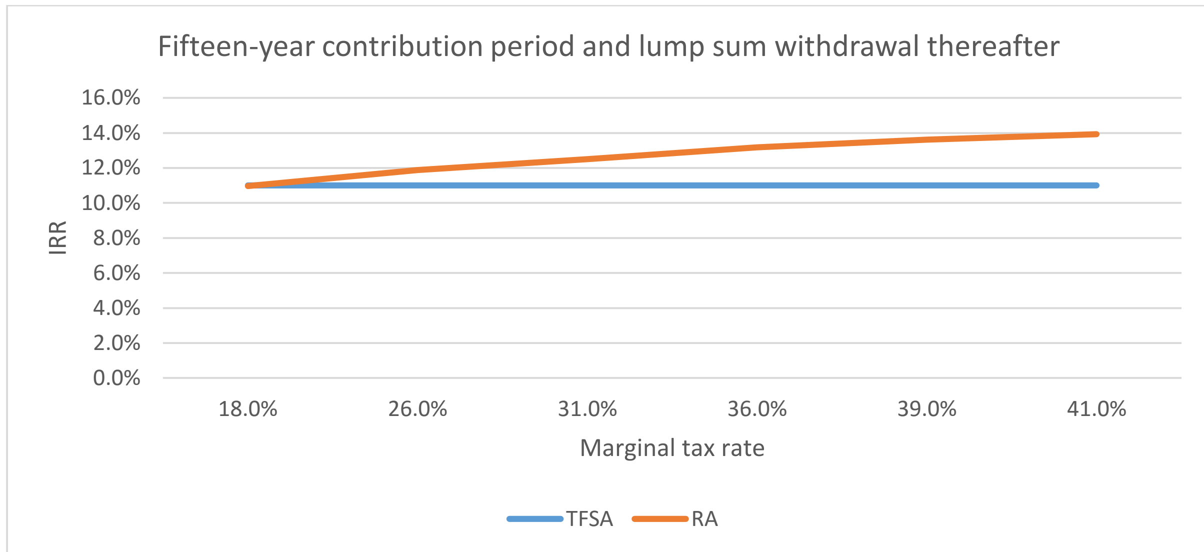
Outcome: In all instances the RA investment would have been the better choice.

B. Contribution period of ten years; systematic withdrawals thereafter for the next twenty years



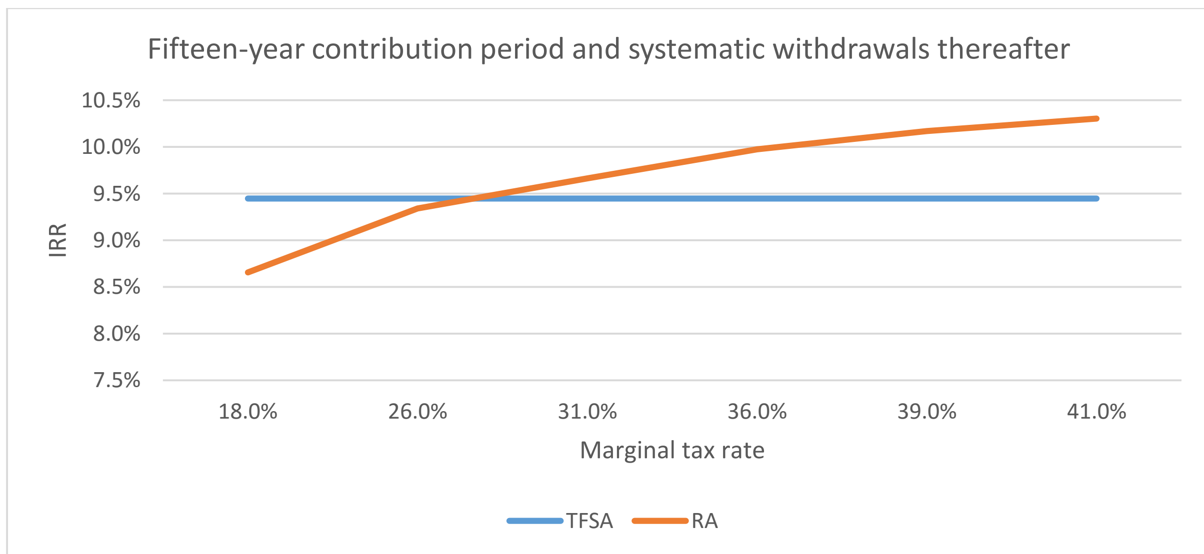
Outcome: Only when the low marginal tax brackets (18% or 26%) apply, the TFSA would yield better results than the RA product.

C. Contribution period of fifteen years; lump sum withdrawal at the end of the 15th year



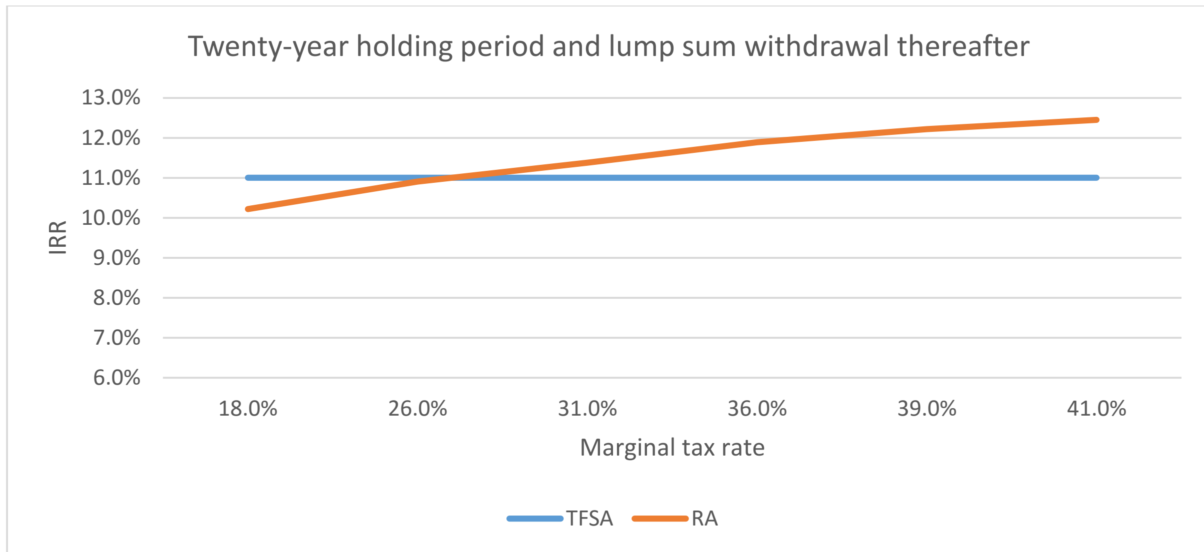
Outcome: For the lowest marginal tax bracket (18%) no real difference exists, thereafter a RA is the better choice.

D. Contribution period of fifteen years; systematic withdrawals thereafter for the next twenty years



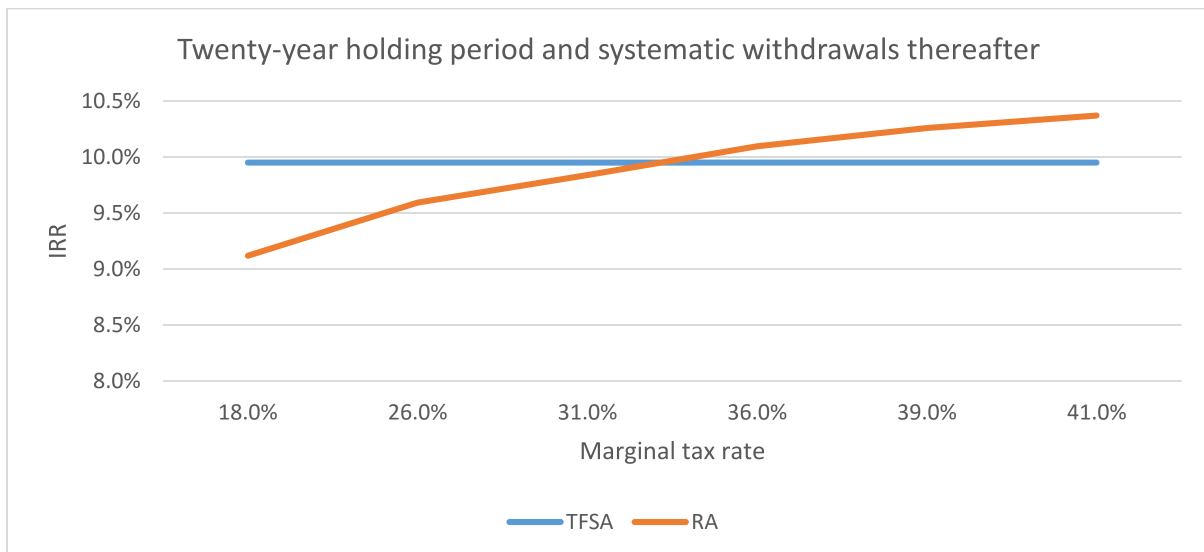
Outcome: The RA product will yield better results than TFSA for the higher marginal tax brackets.

E. Holding period of twenty years; lump sum withdrawal at the end of the 20th year



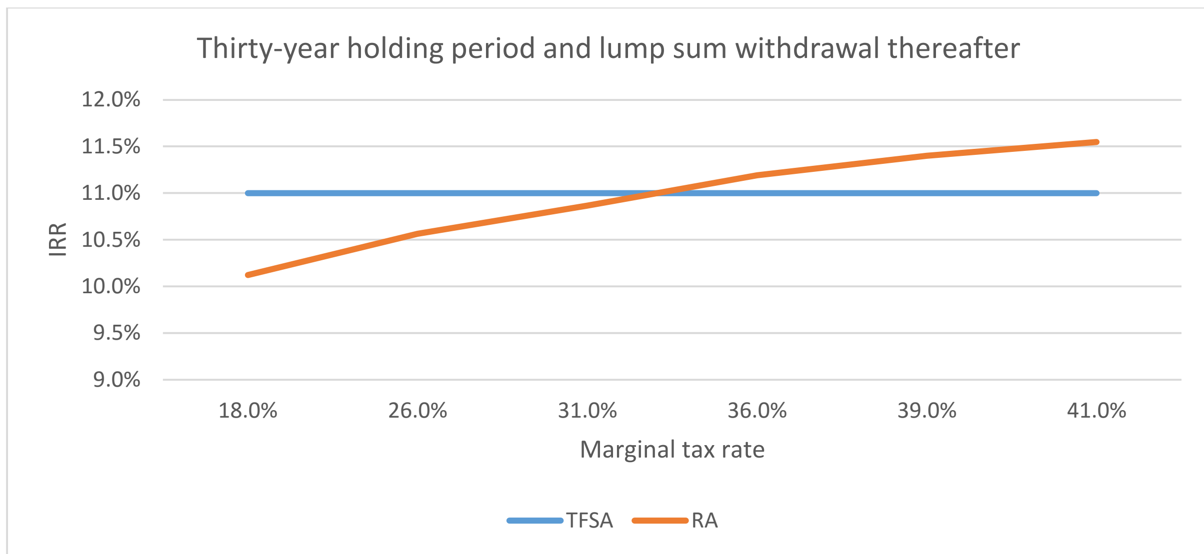
Outcome: RA is a better choice for the higher income tax brackets, but at the lower marginal tax rates the TFSA yield better outcomes.

F. Holding period of twenty years; systematic withdrawals thereafter for the next twenty years



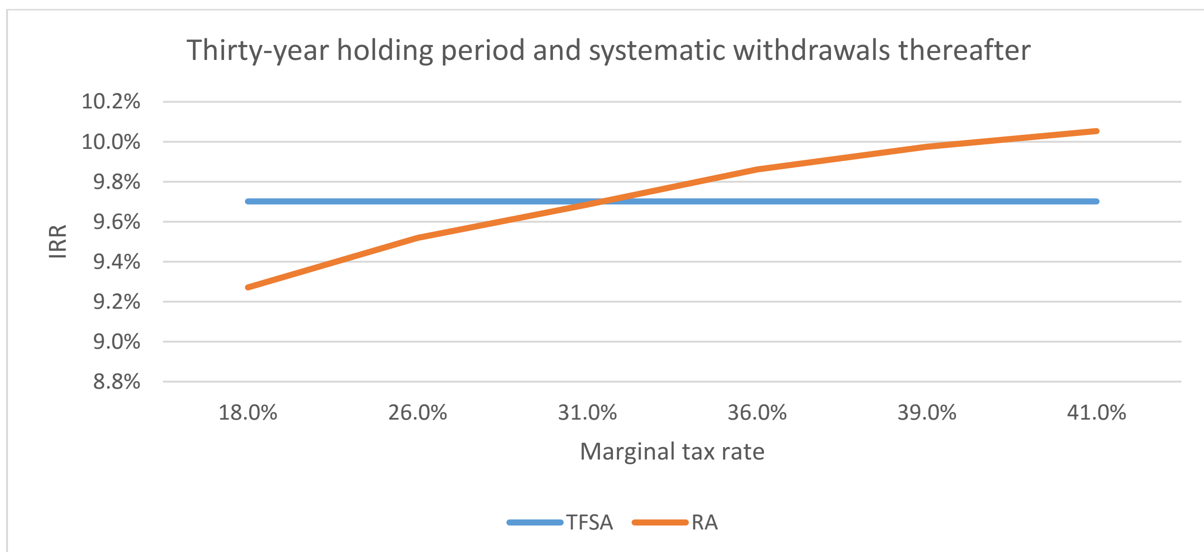
Outcome: The TFSA is a better choice for lower-taxable income earners, but RA is preferred for the high-income tax payers.

G. Holding period of thirty years; lump sum withdrawal at the end of the 30th year



Outcome: RA is more beneficial for high-income tax payers, otherwise TFSA better.

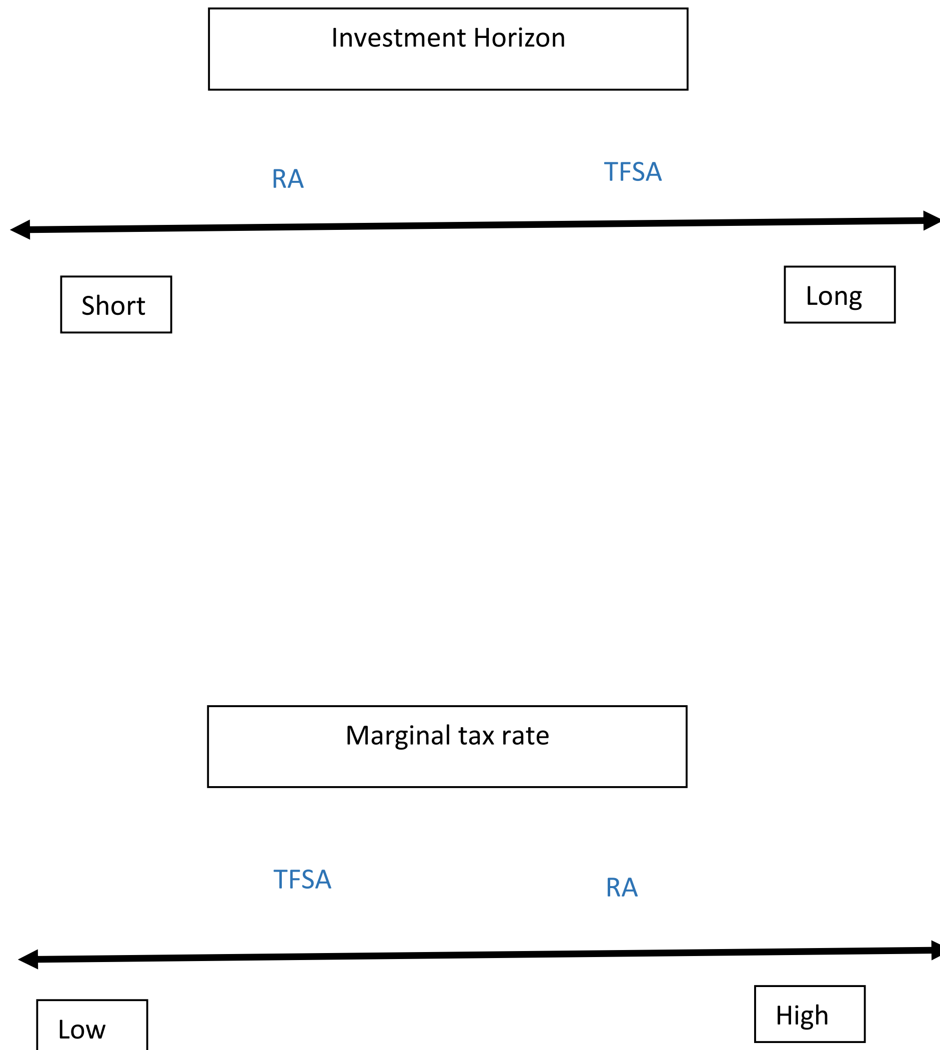
H. Holding period of thirty years; systematic withdrawals thereafter for the next twenty years



Outcome: RA is more beneficial for high-income tax payers, otherwise TFSA better.

5. Conclusion:

One's investment horizon and marginal tax rate play a key role which option will yield the best outcome.



6. Synopsis:

Lower-income taxpayers will be best served by utilising the TFSA first before making contributions towards a RA plan.

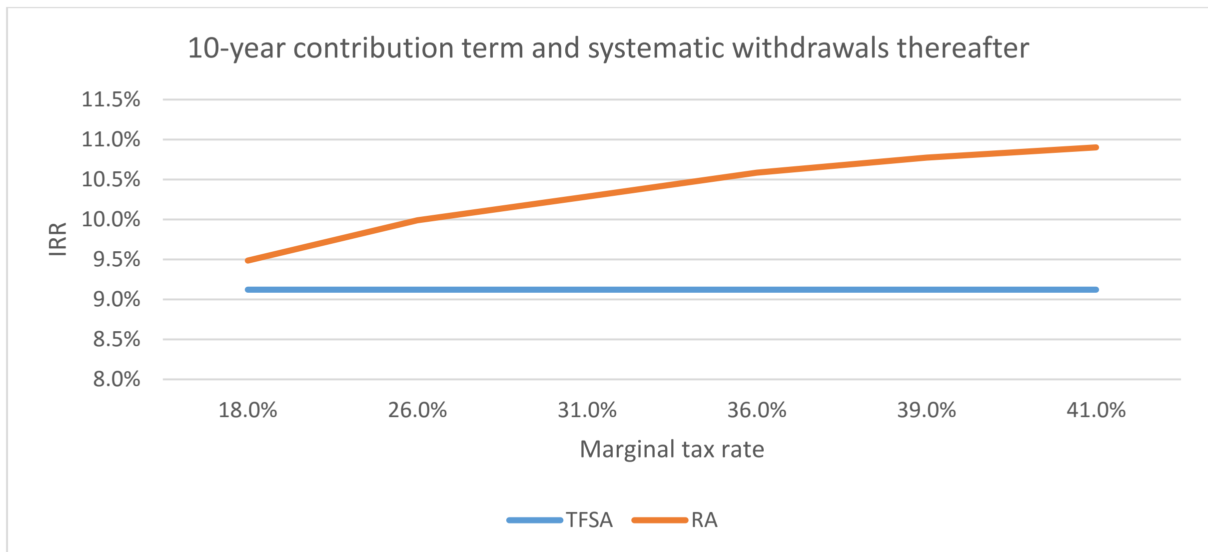
Higher-income taxpayers will do better to make use of tax-deductible contributions towards a RA plan.

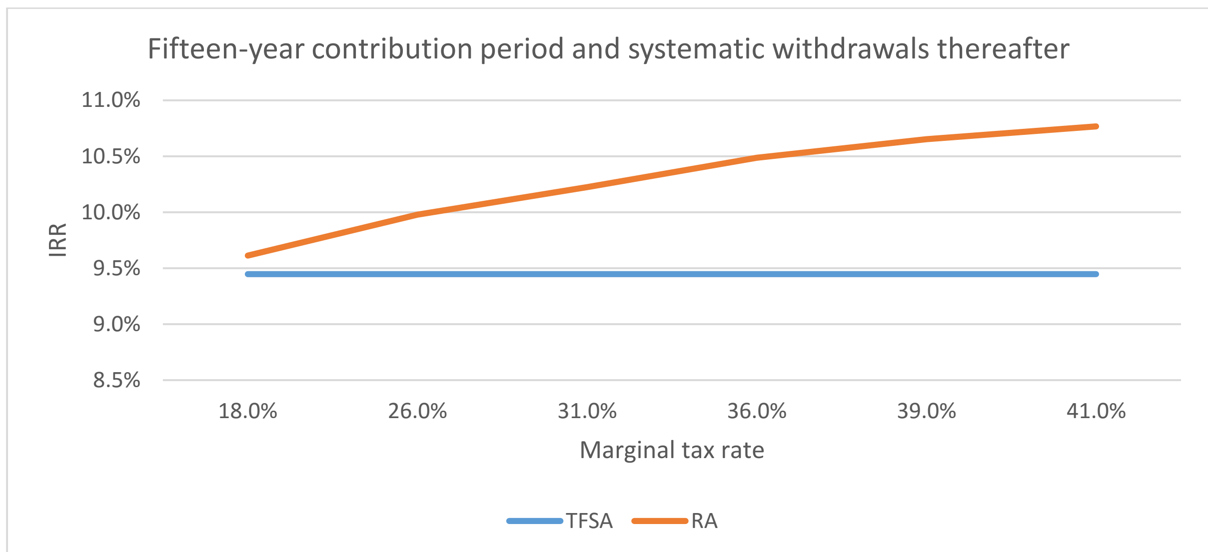
Note, however, that RAs do offer some implicit benefits that cannot be easily quantified, but nonetheless significant, for example, no withdrawals are allowed until reaching retirement age whereas it can be effected with a TFSA at any stage.

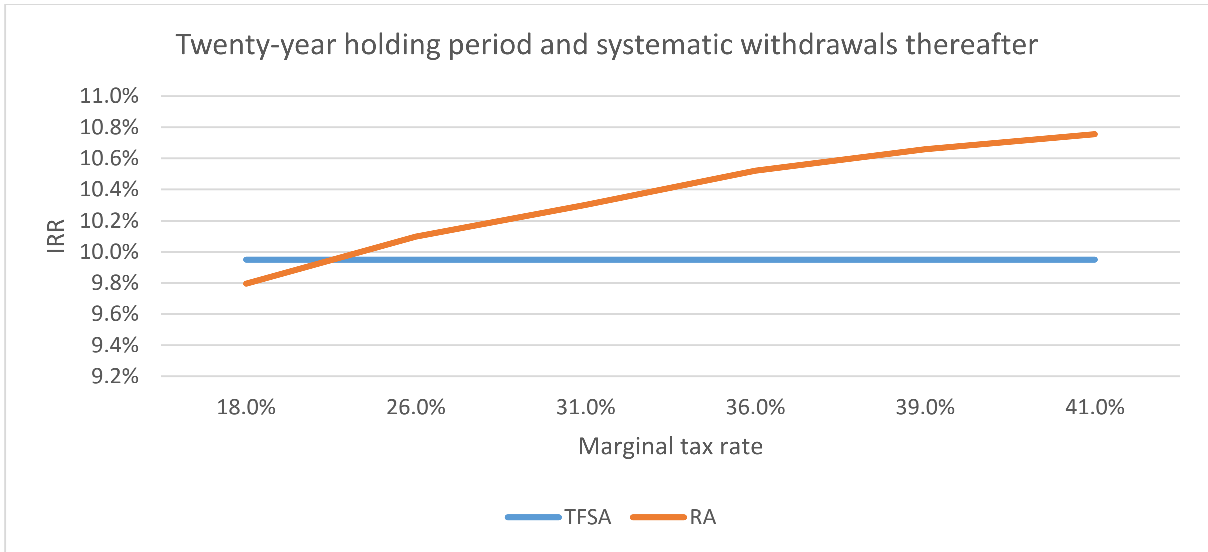
7. Alternative scenarios

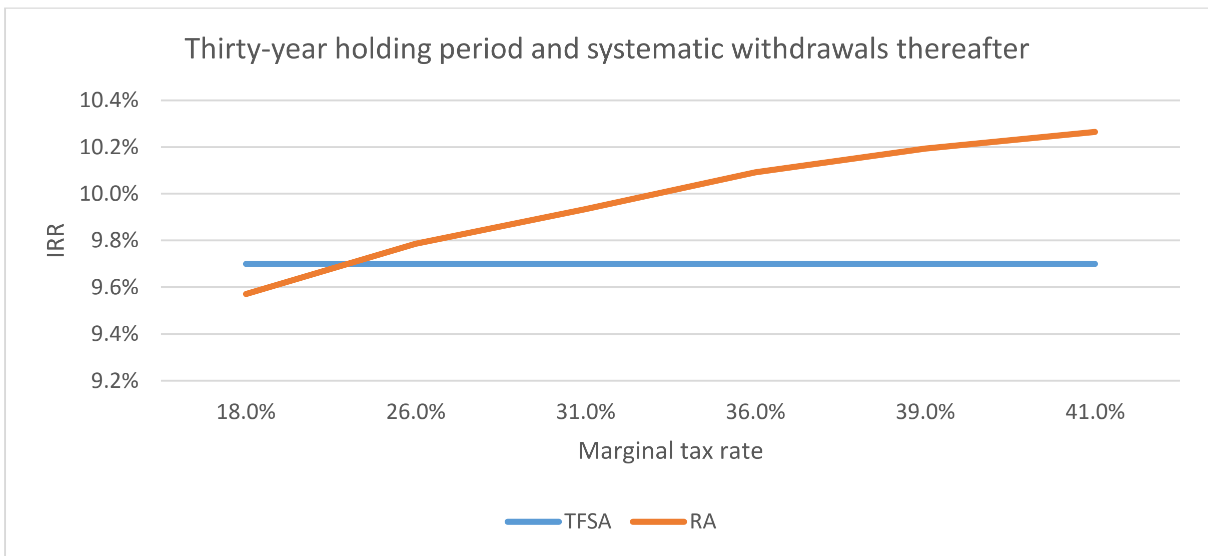
In the previous analysis I used an average tax rate of 30% applicable for systematic withdrawals – what if…

Average tax rate = 15%

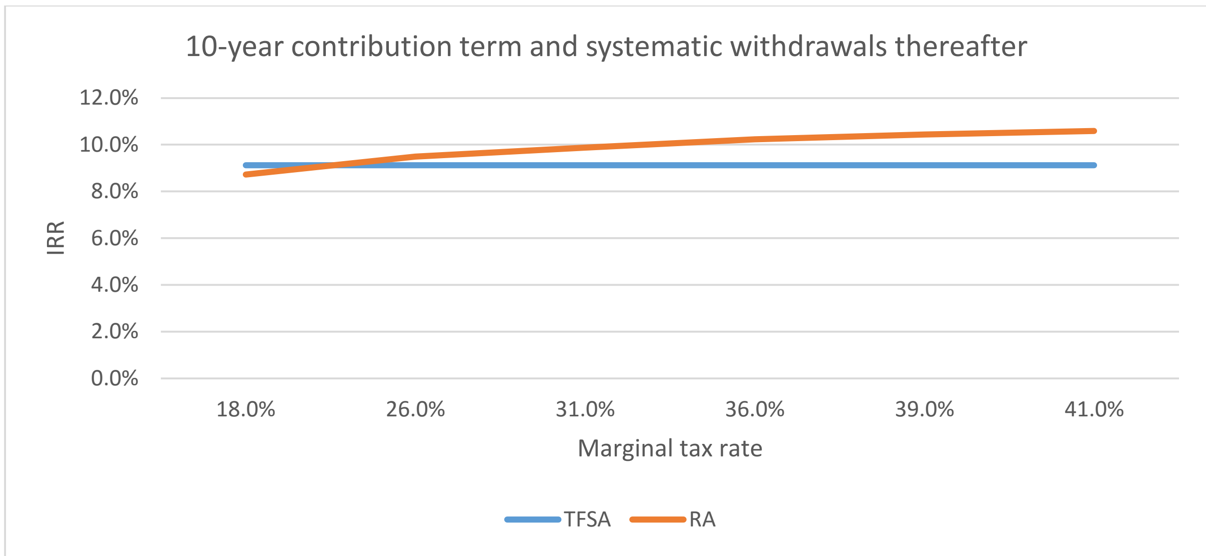


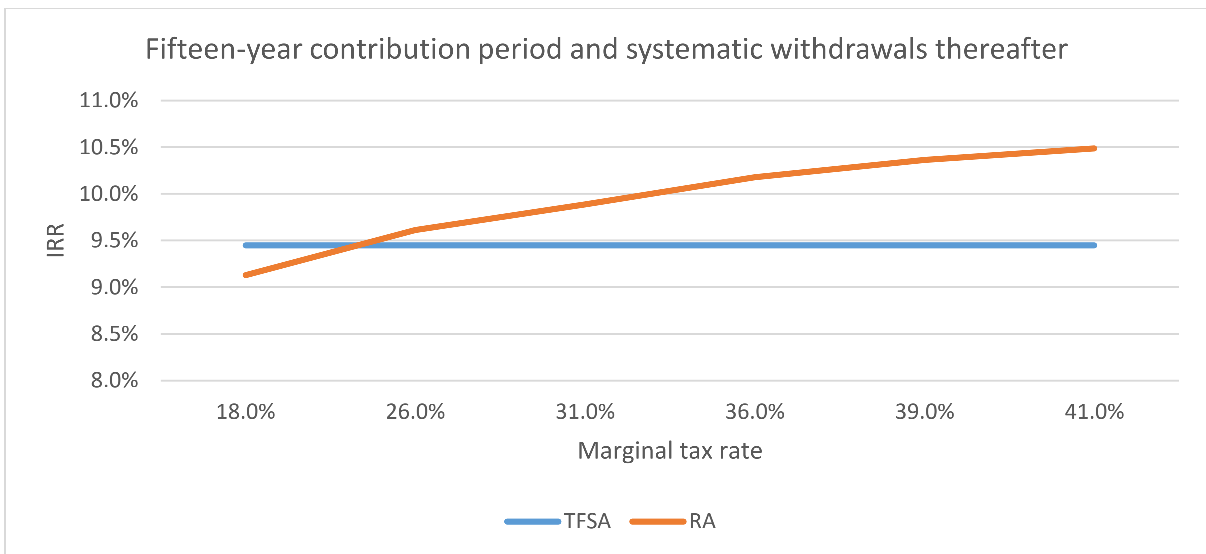


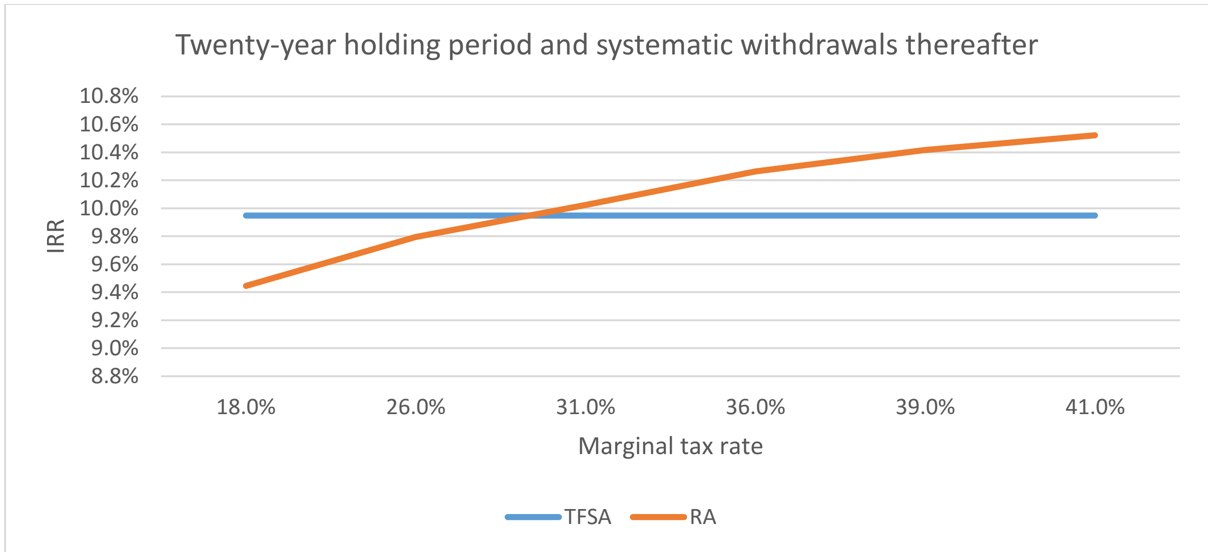

Twenty-year holding period and systematic withdrawals thereafter
IRR
11.0%
10.8%
10.6%
10.4%
10.2%
10.0%
9.8%
9.6%
9.4%
9.2%
18.0%
26.0%
31.0%
36.0%
39.0%
41.0%
Marginal tax rate
TFSA
RA

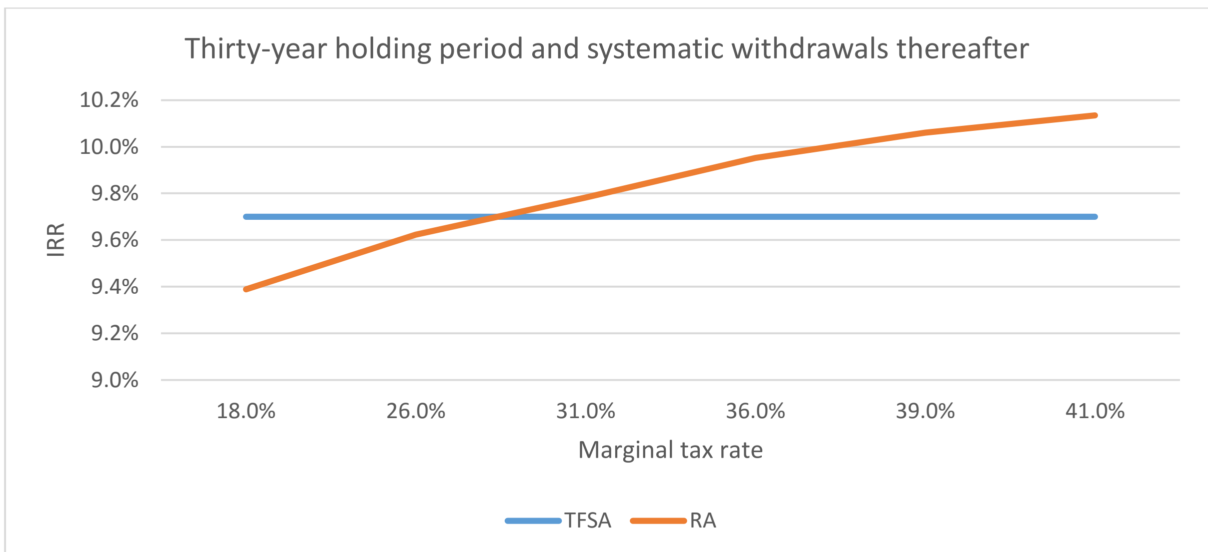

Thirty-year holding period and systematic withdrawals thereafter
IRR
10.4%
10.2%
10.0%
9.8%
9.6%
9.4%
9.2%
18.0%
26.0%
31.0%
36.0%
39.0%
41.0%
Marginal tax rate
TFSA
RA

Average tax rate = 25%






Twenty-year holding period and systematic withdrawals thereafter
IRR
10.8%
10.6%
10.4%
10.2%
10.0%
9.8%
9.6%
9.4%
9.2%
9.0%
8.8%
18.0%
26.0%
31.0%
36.0%
39.0%
41.0%
Marginal tax rate
TFSA
RA


Thirty-year holding period and systematic withdrawals thereafter
IRR
10.2%
10.0%
9.8%
9.6%
9.4%
9.2%
9.0%
18.0%
26.0%
31.0%
36.0%
39.0%
41.0%
Marginal tax rate
TFSA
RA

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