

## INVESTMENT INSIGHTS

# TIME IS, INDEED, MONEY!

IT'S OFTEN said that time is money—and when it comes to your finances, that's absolutely true.

The principle of the time value of money is simple: money available today is worth more than the same amount in the future, because it has the potential to earn interest or investment returns over time. Understanding this key concept can help you make better spending, borrowing, saving, and investing decisions.

### Why time matters

When you receive money today, you can put it to work immediately by saving or investing it, earning interest or returns over time.

On the other hand, if you wait until you receive money in the future before you start saving or investing, you lose the opportunity to grow that money in the

meantime.

In other words, a rand in your hand today is worth more than a rand you will receive tomorrow. This is why early saving and investing is so powerful, and why debt can become more expensive if not managed carefully.

This illustration is an example of how interest grows your money over time:

- \* You have R1 000 today, and invest it at an interest rate of 9% per year.
- \* After one year, you will have R1 090
- \* After two years, you will have about R1 188
- \* After five years, you will have about R1 538

The longer you leave your money invested, the more it grows—not just from the original investment, but from the interest that builds up over time. This is called compound interest. If you delay in-

How to make time work for your money

SARAH NICHOLSON

vesting that R1 000 for five years, you miss out on about R538 of potential growth.

This example shows why putting money aside early is one of the most important actions you can take for your long-term financial health. Doing so puts you in a stronger position to reach your financial goals, such as buying a home, funding your children's education, or retiring comfortably.

### Debt and time

When you borrow money, lenders charge you interest for the time you hold onto their money. Paying off debt as soon as possible is crucial, because the longer you carry debt, the more interest you pay—possibly significantly more than the original amount borrowed.

High-interest debt, such as credit card

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Crunching the numbers: How the time value of money is calculated

The example in this article of how R1 000 invested at 9% grows over one, two, and five years makes for juicy reading—but how are these figures actually calculated?

The simplest way of working out how your money increases exponentially over the is to understand it in terms of compounded interest. Simply put, assuming that the interest you earn in a particular year is added at the end of each year, which means that you effectively earn interest on interest.

Year	Interest compounded			Interest not compounded		
	Opening balance	Interest	Closing balance	Opening balance	Interest	Closing balance
1	1,000.00	90.00	1,090.00	1,000.00	90.00	1,090.00
2	1,090.00	98.10	1,188.10	1,090.00	90.00	1,180.00
3	1,188.10	106.93	1,295.03	1,180.00	90.00	1,270.00
4	1,295.03	116.55	1,411.58	1,270.00	90.00	1,360.00
5	1,411.58	127.04	1,538.62	1,360.00	90.00	1,450.00
6	1,538.62	138.48	1,677.10	1,450.00	90.00	1,540.00
7	1,677.10	150.94	1,828.04	1,540.00	90.00	1,630.00
8	1,828.04	164.52	1,992.56	1,630.00	90.00	1,720.00
9	1,992.56	179.33	2,171.89	1,720.00	90.00	1,810.00
10	2,171.89	195.47	2,367.36	1,810.00	90.00	1,900.00
11	2,367.36	213.06	2,580.42	1,900.00	90.00	1,990.00
12	2,580.42	232.24	2,812.66	1,990.00	90.00	2,080.00
13	2,812.66	253.14	3,065.80	2,080.00	90.00	2,170.00
14	3,065.80	275.92	3,341.72	2,170.00	90.00	2,260.00
15	3,341.72	300.75	3,642.47	2,260.00	90.00	2,350.00
16	3,642.47	327.82	3,970.29	2,350.00	90.00	2,440.00
17	3,970.29	357.33	4,327.62	2,440.00	90.00	2,530.00
18	4,327.62	389.49	4,717.11	2,530.00	90.00	2,620.00
19	4,717.11	424.54	5,141.65	2,620.00	90.00	2,710.00
20	5,141.65	462.75	5,604.40	2,710.00	90.00	2,800.00

This is how it works:

- \* You start off by investing your R1 000.
- \* At the end of the first year, interest of R90 (R1,000 x 9%) is added to your investment.
- \* This means that you start off Year 2 with R1 090.
- \* At the end of the second year, the interest you receive is R98.10 (R1,090 x 9%). This is R8.10 more than what you received at the end of the first year.
- \* This means that you start off Year 3 with R1 188.10.
- \* The cycle repeats itself for as long as you remain invested.

The table alongside indicates the dramatic difference over 20 years between compounding your interest each year, and having an investment where your interest is not compounded.

The above obviously assumes that the interest rate and compounding frequency remains unchanged during the period, and that you remained invested throughout the period.

In practice, rates do fluctuate (and, in the case of bonds and equities, rates of return

can even go negative), the rate of compounding differs from one type of investment to another, but this does illustrate the impact that compounding has on one's investments.

balances and personal loans, can quickly spiral out of control, eating into your income and limiting your financial freedom.

By settling your debt quickly, you reduce the total cost of borrowing, free up cash for savings and investments, and take a big step towards long-term financial stability.

Investing tips

The following tips apply once you've paid off debt, and you're ready to start saving—and eventually investing.

- \* **Start with an emergency fund.** Before

investing, build an emergency fund that covers three to six months' worth of essential expenses to protect yourself from falling back into debt during a crisis.

- \* **Define your financial goals.** Set clear short-, medium-, and long-term goals so that your saving and investment decisions align with when you'll need the money.
- \* **Consult a certified financial adviser.** A professional can help you assess your goals, risk appetite, and time horizon to ensure that your choices are well informed, and suit your personal circumstances.

- \* **Understand risk and return.** Savings accounts are best for short-term goals, because they carry less risk. Investing in shares, unit trusts, and retirement funds offers higher returns for long-term goals, but carries more risk.
- \* **Diversify your investments.** Don't put all your money in one place. Spreading it across different investment types helps reduce overall risk.
- \* **Watch fees.** High fees can quietly erode your returns over time. Compare costs, and understand what you're being charged.
- \* **Keep learning and getting advice.** Read personal finance books and newsletters, follow reputable finance websites or podcasts, attend budgeting or investment workshops, and use financial planning apps.



Picture credit: Supplied

Understanding the time value of money gives you a powerful tool to build wealth. Time can either be your best friend or your worst enemy when it comes to your finances.

The earlier you start saving and investing, the harder your money can work for you—and you don't have to work as hard to catch up later.



Sarah Nicholson, operations manager, JustMoney.

