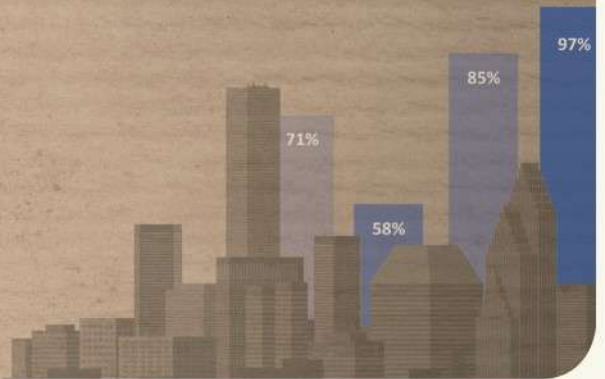


The Adfinity

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The Million Rand Question

How much do you need in order to retire comfortably? How long is a piece of string? The truth is that you cannot know definitively. However, what you should know is that you have to make a plan! Yes, that plan will be based on assumptions, however without a careful strategy for your retirement you can be assured of one assumption...and it isn't a pretty picture.

Most people who are able to save don't save enough because they don't realise how much they are going to need for retirement. Part of the problem is that retirement planning is somewhat mystical and clouded with terminology like "annuities" and seemingly complex tax implications.

The reality is that all you have to do is save enough, during your working years, so as to have sufficient capital for investment so as to provide a return in income that will satisfy your monthly needs when no longer working. It really is that simple! Of a somewhat more complex nature is calculating how much capital you will need at some point in the future, based on certain assumptions, to provide said income.

The "how much is enough" question

If you retired today at the age of 65 and you had R1 million in retirement savings, you could buy an inflation-linked annuity (pension) of only R4 300 a month if you were a woman, or R5 100 a month if you were a man (hang on ladies, there is a reason you get less and it will be explained).

The first question you are likely to ask

when you are told that you need to save for retirement is "How much?", and the Actuarial Society of South Africa has published some benchmarks against which you can measure your savings goals.

The Actuarial Society, has calculated what type of monthly income you could expect if you had R1 million, R5 million or R10 million to buy an inflation-linked guaranteed annuity. He also calculated how much you would have to save over 40 years to accumulate those amounts.

The "how does it work" question

With a guaranteed annuity, a life assurance company pays you an income for as long as you live. If your annuity is inflation linked, your income will increase every year in line with the inflation rate. Initially, your pension will be lower than a level annuity, which remains the same throughout your retirement.

A 65-year-old man who retires today could buy an inflation-linked guaranteed annuity of R5 176 a month with R1 million; R5 million would buy a monthly pension of R25 980; and R10 million would buy a pension of R51 986.

Women, on average, have a longer life expectancy than men, so a woman will

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receive a lower pension for the same amount of capital. An amount of R1 million would buy a 65-year-old woman a pension of R4 392 a month; R5 million would buy a pension of R22 059 a month; and R10 million would buy a pension of R44 142 a month.

The monthly pensions are before tax. In the 2015/16 tax year, people over 65 have to earn a taxable income of more than R9 567 a month (or R114 800 a year) before they pay tax.

The “how much a month” question

The Actuarial Society also calculated how much money you would have to put away each month for 40 years to save R1 million, R5 million or R10 million. The calculation is based on the assumptions that each year, you increase your monthly contribution in line with an annual salary increase of seven percent; the inflation rate is six percent a year; and you earn a net return of 10 percent a year.

In order to have accumulated R1 million by today, you would have had to put away R800 a month to start with (increasing at seven percent a year) for 40 years, R4 000 a month for R5 million and R8 000 for R10 million.

The “what if it’s too late” question

Pensioners who realise that they have not accumulated enough money to buy a guaranteed annuity that will be able to meet their monthly income requirements often opt for a living annuity, because it enables them to draw a higher monthly income. However, this will rapidly erode an already low capital base, and the mon-

ey will possibly eventually run out completely.

With living annuities, also called investment-linked living annuities, you choose the investments – usually unit trust funds – and carry the risk that your investments fail to generate sufficient income to last throughout your retirement, which could be as long as 30 years.

With a living annuity, neither your income nor the preservation of your capital is guaranteed.

The Actuarial Society says that if you opt for a living annuity, to sustain your income you should not withdraw more than five percent of your capital a year. This means that, if you need R25 000 a month (or R300 000 a year) from your annuity, you will need a lump sum of at least R6 million.

The answer

Retirement planning is not a definite science. Anything based on assumptions about the future will not, and cannot be, exact. However, the old saying that if you fail to plan, you plan to fail could not be more true when it comes to planning for your golden years. Sitting down with a Financial Advisor, armed with all the tools and expertise to make those assumptions, do the calculations and advise you on a way to achieve your goals will be a valuable investment of your time.

Ready, steady, go...



How to get Money Motivated

Set Specific Financial Goals

Use numbers and dates, not just words, to describe what you want to accomplish with your money. How much debt do you want to pay off—and when? How much do you want saved, and by what date?

Adopt a Spending Mantra

Pick out a positive phrase that acts like a mini rule of thumb for how you spend. For example, ask yourself, “Is this [fill in purchase here] better than Bali next year?” or “Do I really need this?”

Make Bite-Size Money Goals

One study showed that the further away a goal seems, and the less sure we are about when it will happen, the more likely we are to give up. So in addition to focusing on big goals (say, buying a home), aim to also set smaller, short-term goals along the way that will reap quicker results.

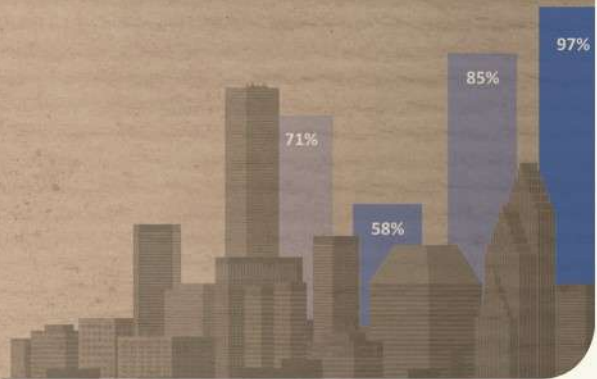
Banish Toxic Money Thoughts

Hello, self-fulfilling prophecy! If you psych yourself out before you even get started (“I’ll never pay off debt!”), then you’re setting yourself up to fail. Don’t be a fatalist, and switch to more positive mantras.

Learn How to Savour

Savouring means appreciating what you have now, instead of trying to get happy by acquiring more things.

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Know your number

What do credit card numbers mean and how are they generated?

Before we understand how credit card numbers are generated, here is a brief explanation of what a typical credit card number means.

Out of the 16 numbers on a typical credit card, the set of first 6 digits is known as the issuer identifier number.

The last digit, known as the “check digit”, is generated in such a way as to satisfy a certain condition (the Luhn check). The term sounds intimidating, but it’s really a very simple (and elegant) concept.

Taking away the 6 identifier digits and the check digit leaves us with 9 digits in the middle that form the “account number”.

There are 10 possible numbers (from 0 to 9) that can be arranged in these 9 places. This gives rise to 1 billion possible account numbers (per issuer identifier).

With each account number, there is always an unique check digit associated (for a given issuer identifier and an account number, there cannot be more than one correct check digit)

Taking credit

The concept of credit is almost as old as the history of money itself. Credit was first used in Assyria, Babylon and Egypt 3000 years ago, long before the Chinese invented paper money. Today, for most of us the most convenient and readily available form of credit is our “plastic” - the ubiquitous credit card.

How plastic money works

A credit card is essentially a system of payment allowing the cardholder to use a pre-approved credit facility. The cardholder is granted credit after an account has been approved by a credit provider, and is given a credit card with which the cardholder is able to make purchases from merchants accepting that credit card up to the credit limit. When a purchase is made, the cardholder legally agrees to pay the card issuer. From the merchant’s perspective, being able to offer its potential customers the ability to use credit cards can be very attractive because the card issuer guarantees to pay the merchant the moment the transaction is authorised, regardless of whether the cardholder defaults on their credit card payment (except for legitimate disputes which can result in charge-backs to the merchant). Besides changing the cardholder interest, the bank charges a commission to the merchant on each purchase.

The forgetful diner

The concept of a card functioning as money is relatively new in the history of money. The idea of using a card to make payments was first mentioned in Edward

Bellamy’s 1887 novel “Looking Backward”. It wasn’t until the 1920’s though that a variety of individual stores and hotels issued “charge” cards to customers to purchase goods on credit, but only at the issuing store.

The universal card

However, the concept of a universal credit card really only took off a few years later. The idea of issuing a card which could be used to purchase goods on credit from a multiple of vendors is said to have been thought out in 1949 when Frank McNamara, head of the Hamilton Credit Corporation, went out to eat with two friends at Major’s Cabin Grill, a famous New York restaurant situated next to the Empire State Building. At the end of the meal, McNamara discovered that he had forgotten his wallet. The story goes that McNamara came up with a new idea - a credit card that could be used at multiple locations. The three diners decided to form a new company – the Diners Club. The innovative part of the new concept was that the Diners Club would be a middleman between the vendor companies and their customers. Instead of individual companies offering credit to their own customers, the Diners Club was going to offer credit to individuals for many companies (and then bill the customers and pay

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the companies). Previously, vendors would make money with their charge cards by keeping customers loyal to their particular store, thus maintaining a high level of sales. The Diners Club needed a different way to make money since they weren't actually selling anything. To make a profit without charging interest (interest-bearing credit cards came much later), the companies who accepted the Diners Club card were charged 7 percent for each transaction while the subscribers to the credit card were charged a \$3 annual fee. The first Diners Club credit cards were given out in 1950 to 200 people, mostly friends and acquaintances of McNamara, and were accepted by 14 restaurants in New York. Diners Club would pay the restaurant and the cardholder would repay Diners Club. The original cards were not made of plastic; instead, the first Diners Club credit cards were made of cardboard with the accepting locations printed on the back. By the end of 1950, 20,000 people were using the Diners Club card.

Though Diners Club continued to grow and by the second year was making a profit, McNamara thought the concept was just a fad. In 1952, he sold his shares in the company for \$200,000 to his two partners. The Diners Club card continued to grow more popular and didn't have any competition until 1958 when both American Express and the Bank Americard (which later became VISA) entered the market.

"Don't leave home without it"

Established in 1850 in Buffalo, New York,

the American Express Company was initially not a financial services company but an "express" delivery business transporting parcels, freight, gold and currency across an expanding USA. Soon the company would scale down its parcel and freight delivery business in favour of creating and selling its own financial products. The company made its name by developing travellers' cheques but following the success of the Diners Club cards, American Express launched their own credit cards in 1958. In 1959 they became the first company to issue plastic credit cards.

A growing trend

In 1958, Bank of America launched its BankAmericard credit card in California. Some years later it struck one of their branch managers, who observed clerks in a back room preparing customers' monthly bills, how much time and money was spent preparing and collecting bills that were often for small amounts. He wondered whether the process could be efficiently centralised, with the bank's computers preparing the bills after hours. By 1965 the bank began concluding licensing agreements with other banks to use their BankAmericard, forming a network system across the USA. The network enabled its member banks to issue credit cards on a widespread basis at a lower cost and to

3 write down the rest of the numbers directly

2 double every second number

1 skip the last one

4	5	5	2	7	2	0	4	1	2	3	4	5	6	7	8
8	10	14	0	2	6	10	14								
8	5	1	2	5	2	0	4	2	2	6	4	1	6	5	8
Total															
61															

4 If doubled numbers are two digit, then add up the digits.
 $10 \rightarrow 1+0 = 1$ and $14 \rightarrow 1+4 = 5$

5 sum up these numbers

The Luhn Algorithm

settle transactions amongst themselves. In 1976, the organisation changed its name to VISA. A similar network, first set up by a group of banks to counter BankAmericard later renamed itself Master Card.

Plastic rules

In the early days credit cards were made of paper, metal or celluloid (the same stuff that tennis balls are made from) but now of course they are made from plastic. The number imprinted on your credit card has a certain amount of internal structure, and shares a common numbering scheme with all other credit cards. The first number or couple of numbers identify the issuer of the card: American Express cards start with 34 or 37, Diners Club International's with 33, VISA's with a 4 and MasterCard's with 51 through to 55. Every credit card number conforms to the Luhn algorithm, a patented checksum formula which distinguishes valid numbers from collections of random digits. This formula is used to protect against accidental errors when one records a number.