

The application of **shared value** in banking:

A focus on interest rates and the potential
benefits for South Africans

March 2021

Executive summary

Significant inertia and commoditisation has historically resulted in clients avoiding changing banks. Our analysis shows that South Africans take 29 years to change their bank – roughly 70% longer than the British and double the time of Americans.

We now see **three major trends** that impact financial services and banking, which result in clients reassessing the status quo and reconsidering their banking relationships more frequently:

- **Nature of risk:** Traditional banks segment and price clients on their socio-economic status, however, the nature of risk in banking is as much behavioural as it is socio-economic. This results in clients who manage their money well often paying more to borrow purely based on their socio-economic segment and subsidising higher risk clients.
- **Technology:** Banking has evolved towards digital and contactless onboarding and payment solutions, making it easier for clients to open additional accounts.
- **Social responsibility:** Clients are demanding that their companies, including banks, do business with focus on societal issues as much as profits.

These trends are transforming banking and highlight the case for a shared-value bank.

A shared-value Banking model considers individual financial behaviours to understand how financially healthy clients are. Clients get rewarded for managing their money well with:

- Lower interest rates on borrowings than what would typically apply based on their socio-economic status. In the case of Discovery Bank, clients have saved over R13 million on interest from their borrowings for managing their money well. Clients can reduce their rates by as much as 6.75% across income segments by managing their money well.
- Higher interest rates on their savings. Clients who manage their money well typically save more for longer periods. Through its shared-value model, Discovery Bank rewards clients with demand and short-term deposits with higher interest rates based on how well they manage their money, and clients have benefited from over R15.5 million in savings rate boosts. Clients can access higher interest rates for on-demand savings of up to 4.75%. These levels are typically only accessible through 18-24 month fixed deposits with conventional banking models.
- Better behavioural alignment and engagement. Engaged clients can earn multiples of their monthly fees back in rewards by using their accounts and managing their money well.

The impact of these factors is a Banking model which is better for clients, banks and society in general. An analysis of the 300 000 Discovery Bank clients shows that clients on Gold and Diamond Vitality Money status are 99% less likely to be in arrears, have deposits more than 17 times the average and spend over 4.5 times more than clients who are unengaged, regardless of income level.



Macrotrends impacting **banking and financial services**

Three major trends which frame the financial services industry today, create the case for a different type of bank:

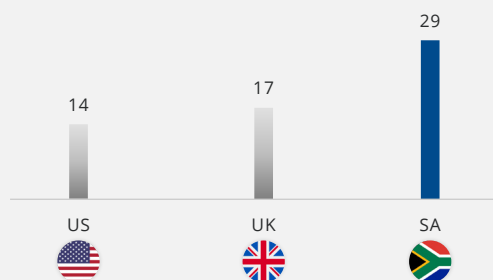
- Nature of risk:** Where banks have traditionally used socio-economic factors to determine an individual's risk of default, our research indicates that while socio-economic factors are relevant, an individual's behaviour has a much higher impact on their risk. Our research shows that over 10% of individuals who earn above R1 million a year find it difficult to make ends meet. We have identified five key controllable financial behaviours, that if left unmanaged lead to 80% of the reasons why individuals do not meet their financial obligations. These behaviours require clients to:
 - 01 | Spend less than they earn.
 - 02 | Have sufficient emergency funds.
 - 03 | Pay off their property.
 - 04 | Invest for the long-term.
 - 05 | Have essential insurance in place.
- Technology:** The banking industry has evolved towards digital banking and payment solutions. In a 24/7/365 world, branches are a legacy and COVID-19 has further put pressure on banks that have been slow to innovate and digitise their solutions.

Similar to the impact of wearable devices on healthy behaviour, mobile banking apps can be powerful tools to measure key financial metrics and behaviours, and that nudge clients to change their behaviour so they manage their money better.

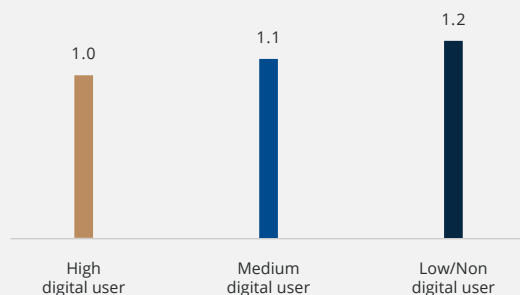
- Social responsibility:** Studies show that South Africans have poor financial habits. Almost 78% of South African household income is spent on debt¹, and the country has one of the lowest rates of saving in the world. These high rates of debt and low savings have contributed to a breakdown of trust between banks and society. Only one third of millennials trust the banks they are with². Reducing major debt and creating a savings culture in South Africa are major socio-economic challenges facing both individuals and society and these are both aspects that banks can help with. As millions of people face hardship due to COVID-19, a social purpose is now a must-have rather than a nice-to-have for all businesses. Companies with high environmental, social, and corporate governance (ESG) are proving more resilient in this crisis, with the focus of stakeholder capitalism shifting to issues of societal protection (for example, payment holidays for clients or working from home). This shift in focus translates into significant new accountability measures for the corporate sector, both during the crisis and in years to come.

Despite our research showing that it takes South Africans about **29 years to change their bank on average**, we see the impact of the three major trends increasing the frequency of clients reconsidering their banking relationships. Younger clients, and those who are digitally engaged, are more likely to switch banks.

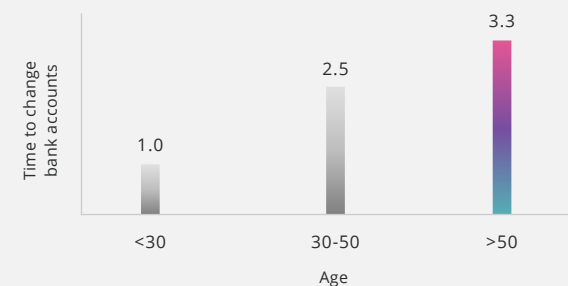
AVERAGE NUMBER OF YEARS TO CHANGE A BANK ACCOUNT



TIME TO SWITCH BASED ON DIGITAL ENGAGEMENT (indexed to high digital engagement)



TIME TO SWITCH BASED ON AGE (indexed to <30)

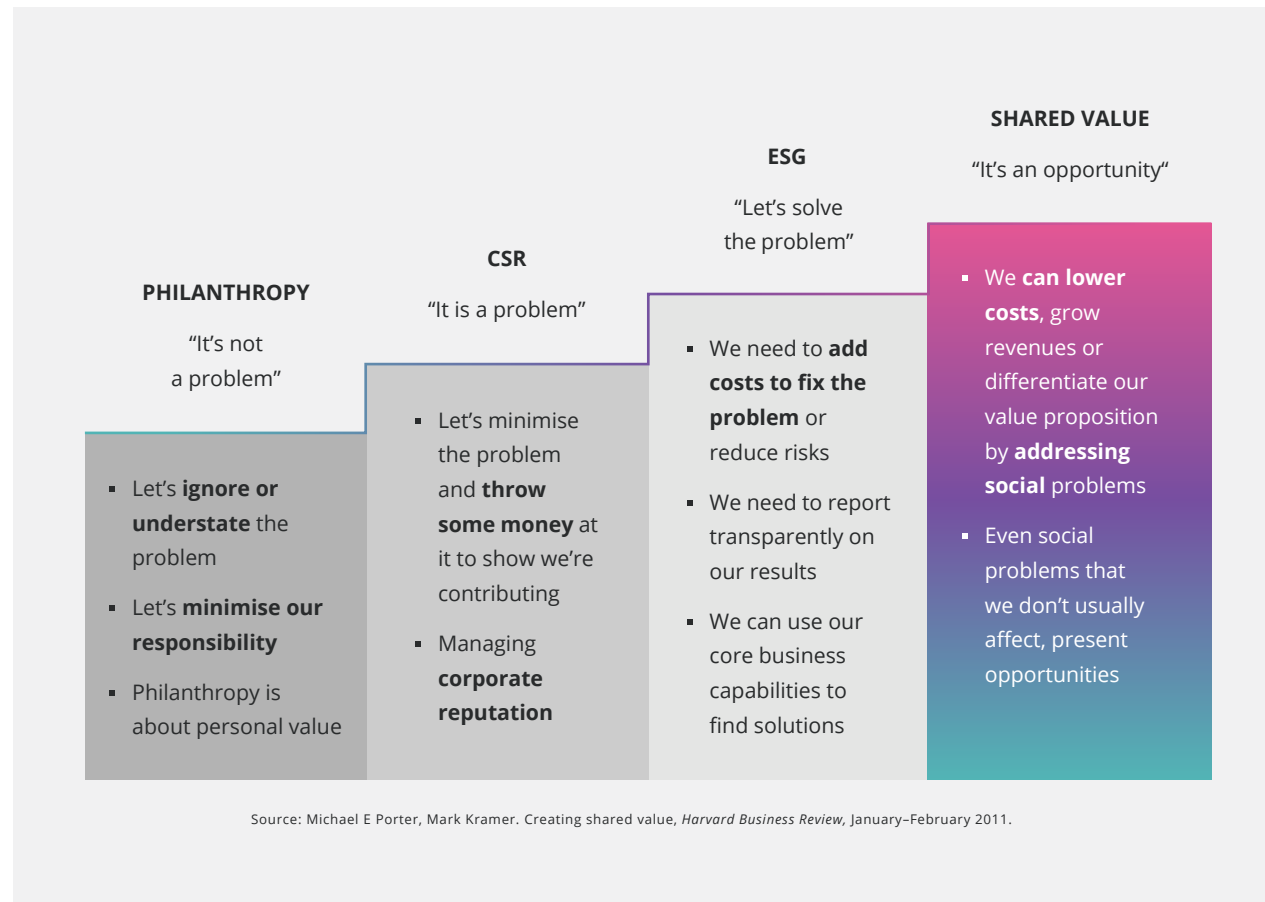


¹ South African Reserve Bank, Statistics South Africa, South African Market Insights, South Africa's Credit Market Analysis, 2019; Trading Economics;

² 2018 World Economic Forum survey on 30 000 millennials

The intersection of **business, purpose and social good**

Recently, there has been a growing need and demand for businesses to have a social purpose that goes beyond that of maximising profitability, largely to the exclusion of other factors. This has contributed to a change in the nature of capitalism and a move away from a narrow shareholder focus toward a more holistic emphasis on stakeholder value with the understanding that businesses which are aligned with their clients and societies will be more sustainable and profitable in the long term.



The intersection of business, purpose and social good can take many forms. Traditionally, this has been concentrated in corporate social responsibility (CSR) activities, which operate outside companies' core strategies, leading to criticism for relegating social issues to the fringe. Increasingly, the investment in and societal impact of a business also consider environmental, social and governance (ESG) criteria, which, while necessary, are often treated as a tick-box exercise to manage reputational and regulatory risk. Both these paradigms demonstrate that models that rely on compliance are often lacking in foresight. In contrast, a model built on shared value enables companies to make the transformative link between strategy, higher purpose, and economic value.

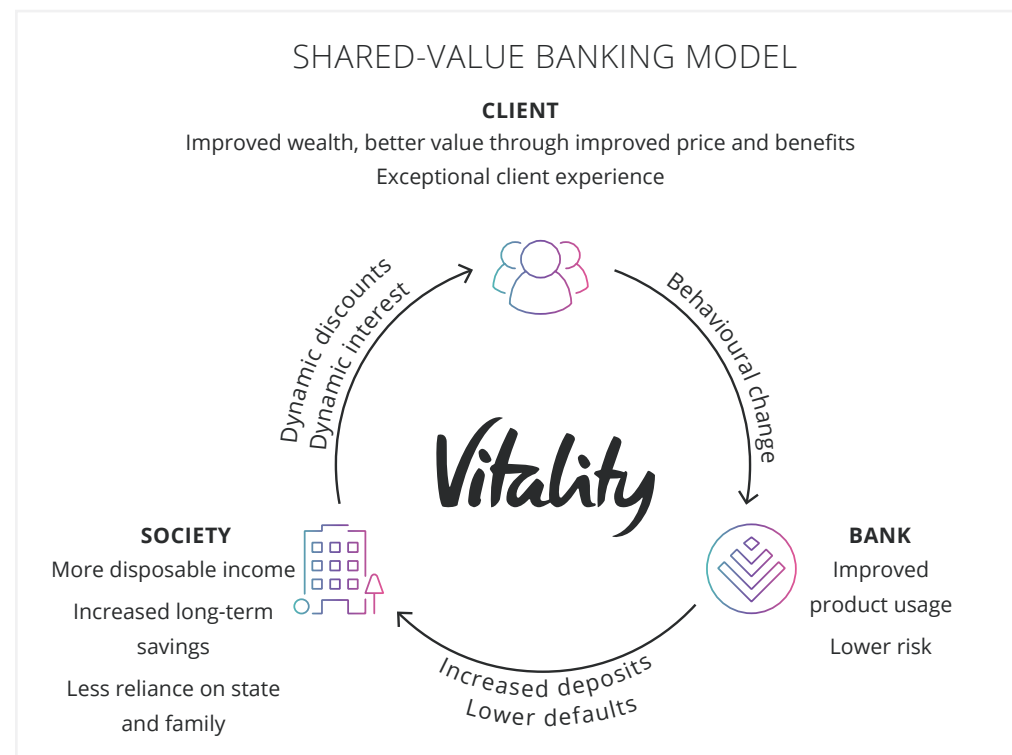
Shared value is a concept described by Professor Michael Porter of Harvard Business School and Mark Kramer, co-founder and Managing Director of FSG³, as "**policies and operating practices that enhance the competitiveness of a company while simultaneously advancing the economic and social conditions in the communities in which it operates.**" Shared value, which integrates social impact with core strategy, has resonated deeply with both the business community and civil society demonstrating the power of connecting social progress to a profitable, scalable business model.

³ Creating Shared Value. Harvard Business Review. 2011.

Shared value in banking

A shared-value model in banking provides an effective platform to initiate the change clients need to make to improve their financial health. By providing incentives for individuals to make better financial decisions, a shared-value model in banking can generate higher savings levels, lower the risk of over-indebtedness, and increase wealth and financial resilience for society as a whole.

In insurance, Vitality's Shared-value Insurance model uses behaviour change to improve the health of clients resulting in lower risk premiums for clients, better persistency and profits for the insurer, and a healthier society in general.



Discovery Bank's Shared-value Banking model leverages the Vitality Money programme to change behaviours in banking.

Discovery Bank's Shared-value Banking model considers individual financial behaviours to understand how financially healthy clients are. In turn, clients get rewards when they exhibit financial behaviours and outcomes that reflect that they are managing their money well.

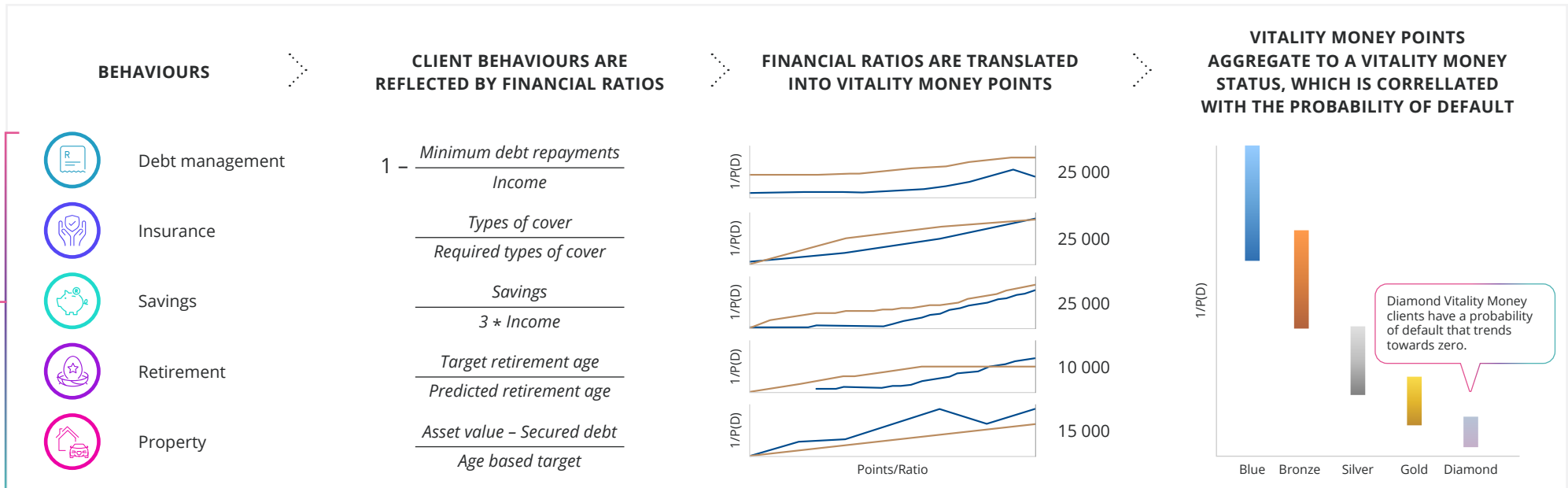
Through the Vitality Money programme, clients get an understanding of behaviours that influence their financial wellbeing and how to manage their money. Vitality Money rewards clients when they:

- 01 | Spend less than they earn.
- 02 | Have sufficient emergency funds.
- 03 | Pay off their property.
- 04 | Invest for the long-term.
- 05 | Have essential insurance in place.

The five controllable behaviours, if left unmanaged, lead to 80% of the reasons why individuals do not meet their financial obligations. Vitality Money uses behavioural science and research that shows how changing these five behaviours can improve overall financial health.

Being able to assess financial health based on behaviour, removes the dependence on statically assessing an individual's financial position by their income level. Vitality Money unlocks benefits for all Discovery Bank clients on the basis of how well they manage their money on an ongoing basis. To make it easy, Discovery Bank measures financial health based on the five behaviours and awards a single Vitality Money status – Blue, Bronze, Silver, Gold or Diamond. The higher a client's Vitality Money status, the clearer the correlation that they manage their money well and exhibit lower risk of credit default.

By identifying and modelling individual behaviours, Discovery Bank can more accurately stratify clients



Spending less than the monthly household income: Debt needs to be carefully managed so that people avoid spending the bulk of their monthly income on paying off debt and not having any money left for short-term saving and long-term investing. In the retail affluent segment, 28% of South Africans spend more than they earn⁴.

Having protection for insurable events: Insurance goes hand in hand with saving to keep financial assets secure when unexpected events happen, such as a car accident or illness. Having insurance that covers these emergencies, means that financial plans can stay intact when life-changing events occur. On average, over a quarter of South Africans do not have insurance, exposing them to catastrophic risks.

Have sufficient emergency funds: Savings offer a safety net for life's unexpected expenses. By having enough savings built up, people do not have to cash in retirement investments or go into debt when these expenses arise. Saving money plays a major part in long-term financial independence and wellbeing. South Africa has one of the lowest household savings rates in the world. This is further demonstrated by the fact that over 50% of emerging middle-class households in South Africa are classified as financially exposed or financially unstable⁵.

Investing for the long-term: When in retirement, people still need an income to pay for monthly expenses. To stop working at some point and not be reliant on a monthly income from a job or state pension, it's crucial to have investment assets that can generate this income in retirement. Many South Africans struggle to maintain their lifestyle, especially in retirement.

Paying off property: Whether buying a house or choosing to rent, it's important to plan for this expense in retirement. Property management and retirement planning are closely related. People either need to have a home that is paid off before retirement or have enough savings built up to cover rent and living expenses in retirement. In South Africa, 50% of people between 55 years and 65 years still have outstanding balances on their mortgages⁴.

⁴ Discovery Retail Affluent survey

⁵ UNISA SA Household Financial Wellness Index 2014

How lending interest rates are determined

Credit interest rates are determined on the basis of the cost of capital paid by banks, the cost of funds necessary to lend money out, target returns on capital, and the credit losses a bank expects.

$$\text{Interest on borrowings} = f(K_e, K_f, C_m, C_d)$$

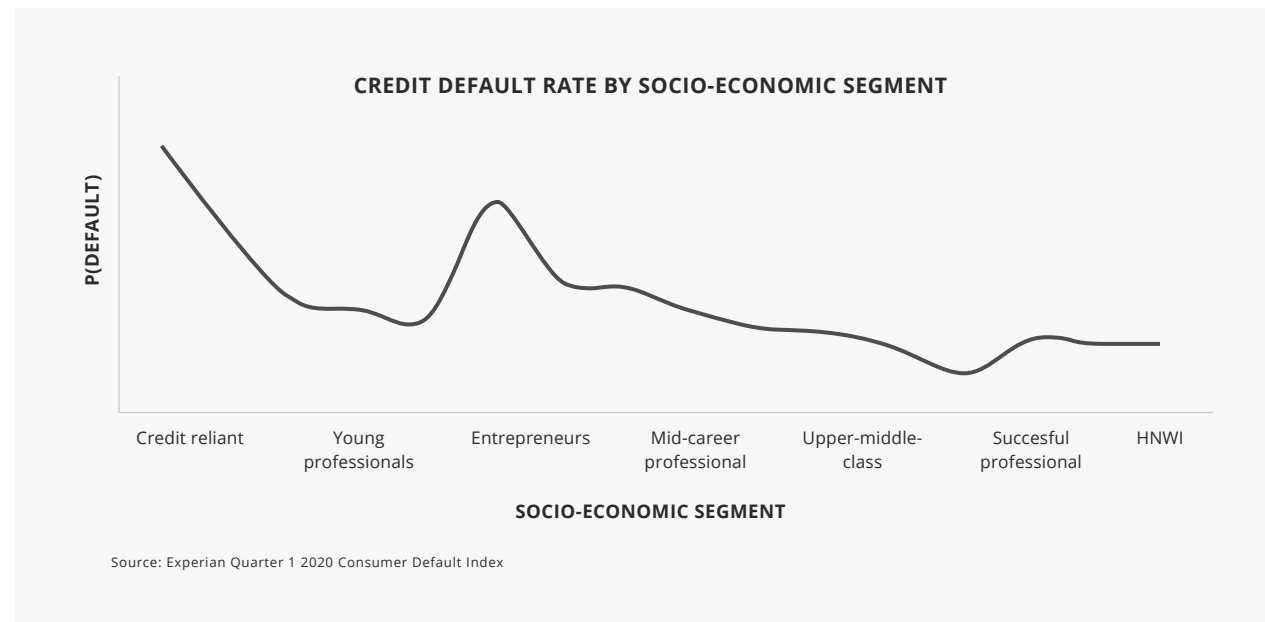
K_e – Cost of capital

K_f – Cost of funds (includes the interest paid on deposits, cost of liquidity, and margin on deposits)

C_m – Credit margin

C_d – Credit losses

The higher the expected credit losses, the higher the required interest rates on credit. Traditional banks use indicators such as income and qualifications to place their clients into socio-economic segments to estimate their probability of defaulting on repayments. For traditional banks, this means the lower a client's socio-economic status, the higher their probability of defaulting on credit and, therefore, the higher their interest rate.

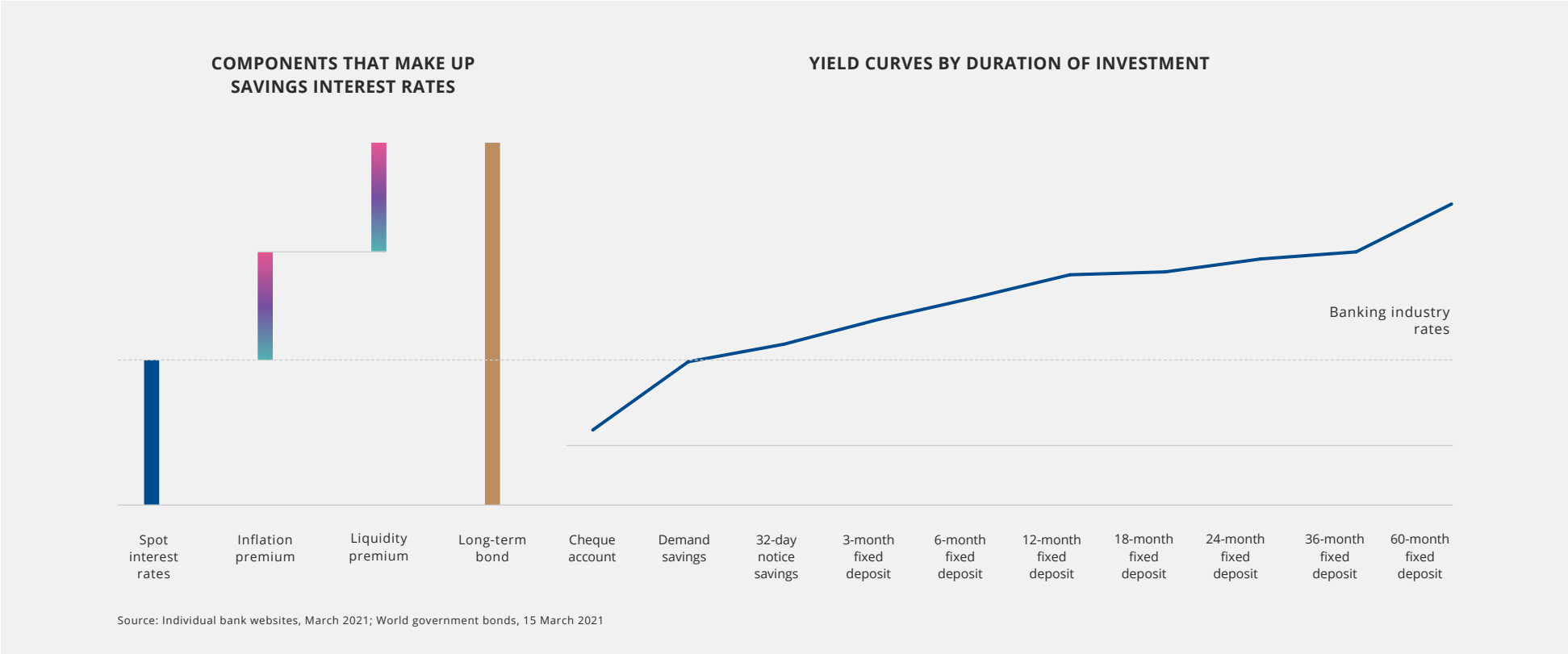


How savings interest rates are determined

Savings interest rates are determined in relation to the risk-free rate. In theory, a five-year fixed deposit should approximate the same returns of a five-year Government Bond, excluding individual circumstances and specific market dynamics. As the duration of savings decreases, the interest is reduced by the cost of inflation and a liquidity premium. The liquidity premium recognises the cost for clients invested in longer duration savings products who may miss opportunities of a higher return during the period. The uncertainty attached to these two factors, inflation and the liquidity premium, result in an upward sloping yield curve that is a function of duration.

$$\text{Interest on deposits} = R_f - F(D) \cdot (I + L)$$

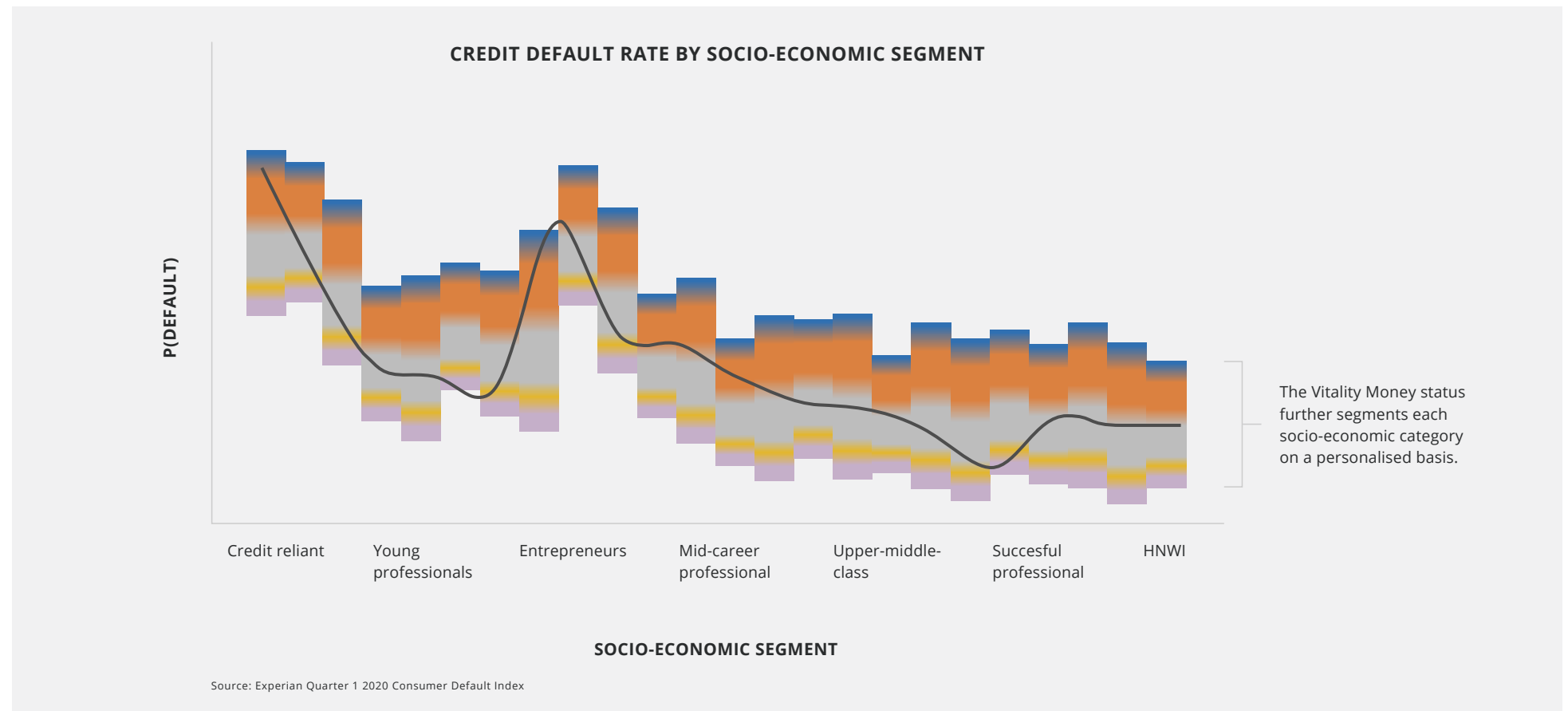
- R_f - Risk-free rate
- I - Inflation
- D - Duration of funds
- L - Liquidity premium



Source: Individual bank websites, March 2021; World government bonds, 15 March 2021

Bending the default curve on borrowings through a shared value approach

Traditional credit models use socio-economic segmentation to determine credit risk. However, Discovery Bank research indicates that behavioural factors can be even more important to determine credit risk and identify when individuals are paying more than they need to on the basis of how well they manage their money. Studies show that 10.4% of individuals earning more than R1 million a year have a credit score typically associated with experiencing material hardship⁶. Typically, these individuals would receive a good interest rate on their credit even though they exhibit risky financial behaviours. Vitality Money gives Discovery Bank a powerful tool to segment clients based on their behaviour and not just their socio-economic status. This additional segmentation identifies clients that are incorrectly priced, and rewards them with better interest rates for managing their money well, and removes the inherent cross-subsidies in traditional credit models to offer those clients with low default risk the lowest possible interest rates.



⁶A look at the New Normal, Experian Quarter 1 2020 Client Default Index

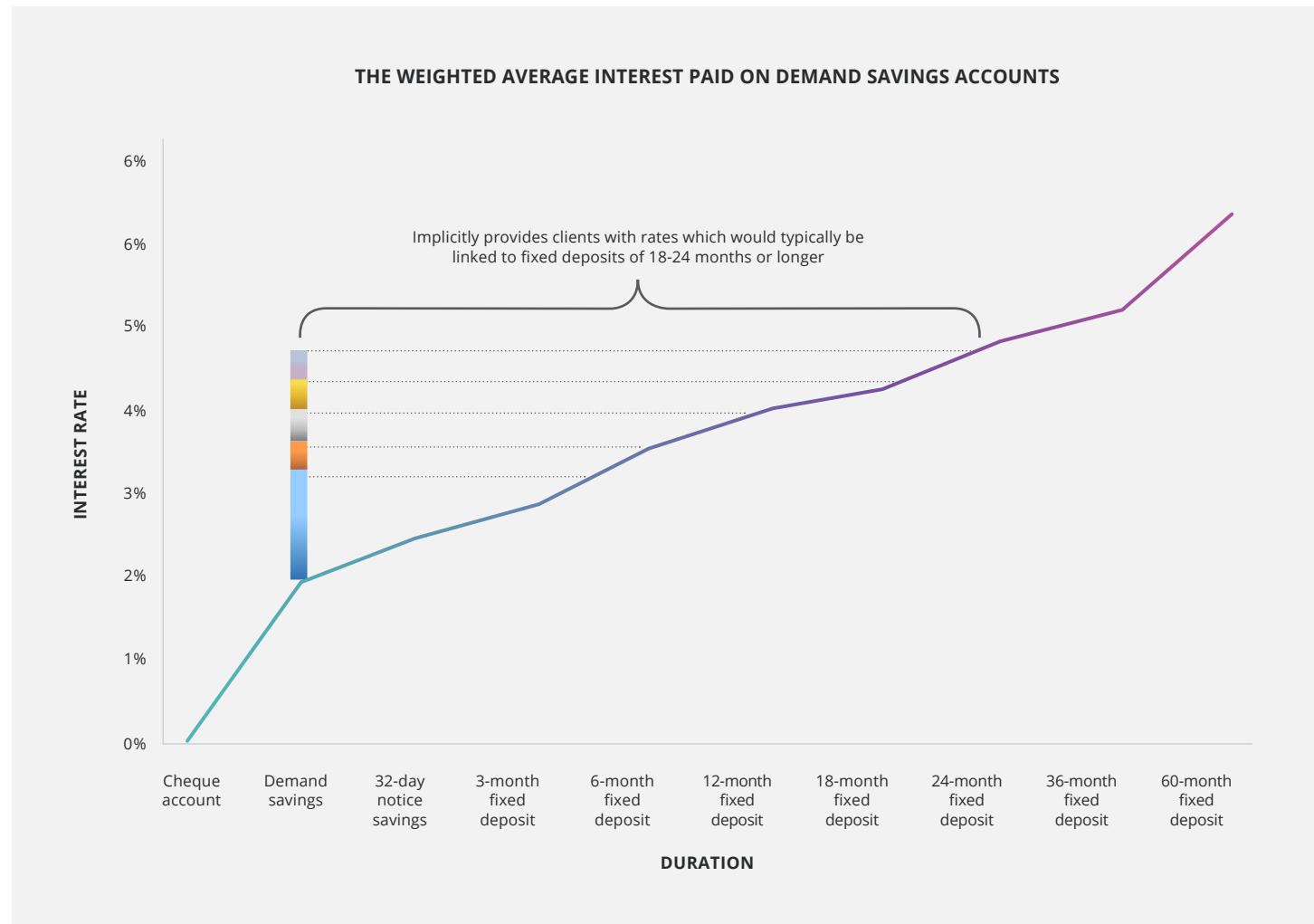
Riding the **interest rate yield curve** on deposits with shared value

Deposit interest rates are determined by the duration that funds are deposited for. The longer the term of the deposit, the higher the interest rate. Traditional banks determine the duration of funds based on the product type. Under this pricing model, money that is instantly available has the lowest interest rates.

Our analysis indicates that the better an individual manages their money:

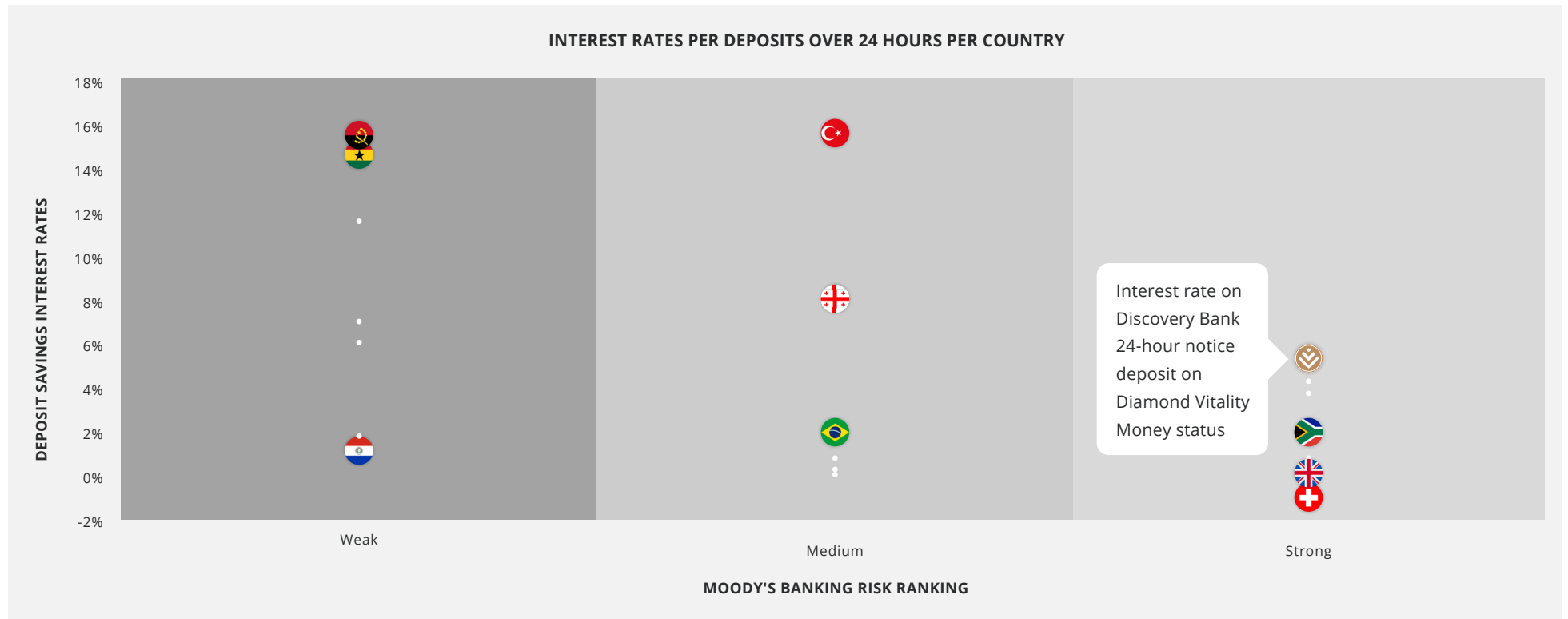
- The longer they save for: Gold and Diamond Vitality Money status clients keep their funds on average 50% longer than clients on Blue Vitality Money status.
- The more they save: clients on Gold and Diamond Vitality Money status save at three times the rate of clients on Blue Vitality Money status.

Clients who manage their money well unlock value that the bank can share with them through market leading rewards and incentives.



The best risk-adjusted interest rate on deposits

We compared interest clients pay on demand deposit accounts across 43 countries, which were segmented by Moody's Banking country risk indicators. Moody's Banking country risk takes into account the macro sovereign risk of a country, which includes its economic strength, institutional strength, and its susceptibility to event risk. This is coupled with the concept of banking risk, which include credit conditions, funding conditions and the banking industry structure.



Banks in countries with higher risk typically have to pay higher interest rates to compensate clients for the inherent risk their funds face.

Higher inflation also results in higher deposit interest rates payments. While consumers in Turkey earn interest of close to 16% with a CPI of 15%, their real interest rate is approximately 1%.

Discovery Bank offers one of the best risk-adjusted savings interest rates in the world among countries that are considered to have the lowest banking risk. A Diamond Vitality Money client with a 24-hour notice account earns more than double the average South African demand savings account interest rate, **and at a higher rate than any other country with a low banking risk.**

Source: IMF, Moody's (Excludes Money Market accounts)

Impact of shared value on banking

Early signs since inception indicate that Vitality Money is effective in incentivising clients to change their behaviours and rewarding clients who manage their money well.

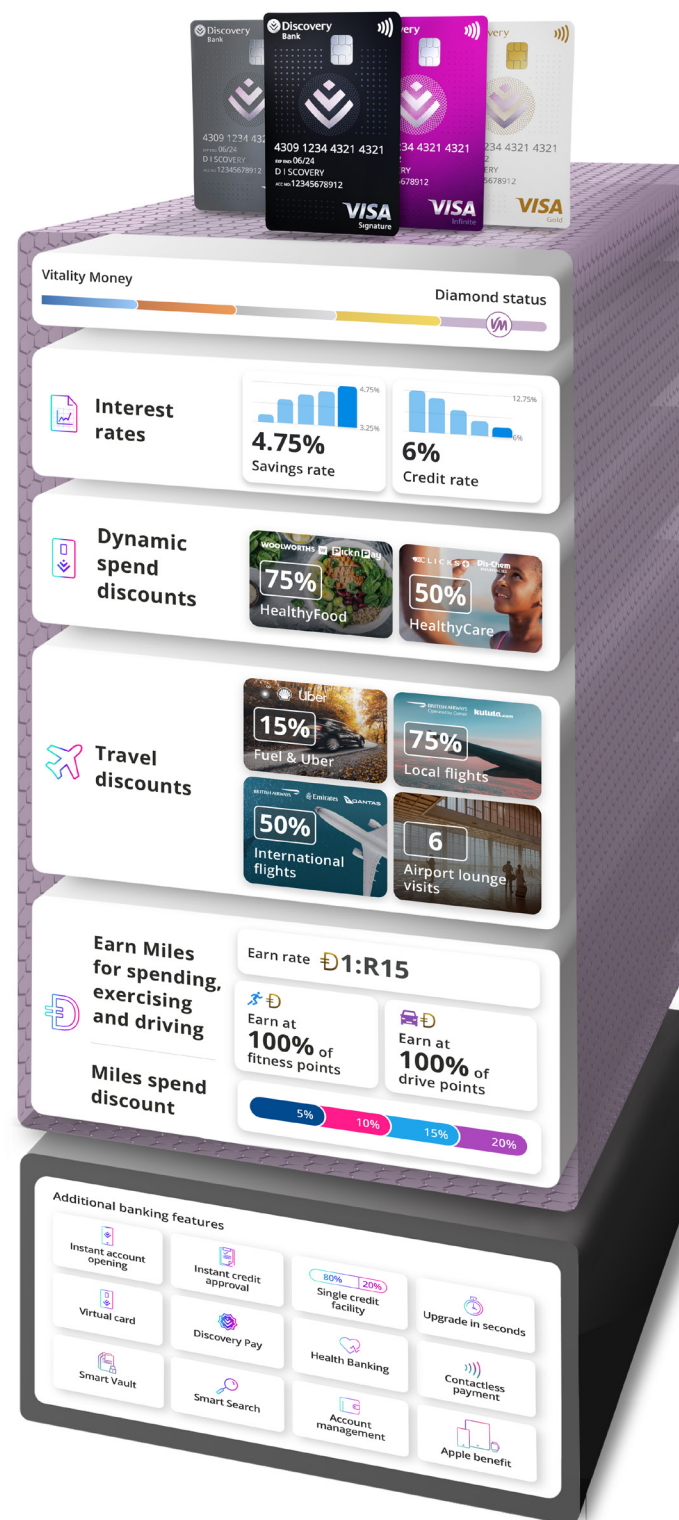
Clients with a higher Vitality Money status are displaying strong signs of financial resilience. Clients on Gold and Diamond Vitality Money status are 99% less likely to be in arrears, have deposits more than 17 times the average, and spend over 4.5 times more than clients that are unengaged, regardless of income level.

This enables a shared-value stack of rewards in four key categories, namely interest rates, spend discounts, travel rewards, and Discovery Miles. Each of these are the richest in the industry in their respective categories.

Through Dynamic Interest Rates, the total client base has benefited with over R15.5 million in savings rate boosts and saved over R13 million on interest from their borrowings. We estimate that if 5% of demand savings account balances were to move to Discovery Bank, the total client base would benefit from an additional R1 billion in interest.

Sharing value through rewards along with a simple and intuitive digital banking experience has resulted in Discovery Bank taking on 300 000 clients and growing to over 500 000 accounts, and having the fastest growing deposit book in the country with over R6.5 billion in deposits.

The Discovery Bank Shared-Value Rewards Stack



Definitions

- **Vitality Money:** Discovery Bank's behavioural-change programme that helps clients improve their financial health and rewards them for managing their money well.
- **Dynamic Interest Rates:** Discovery Bank's personalised interest rates that flex according to a client's Vitality Money status.
- **Vitality Money status:** A composite measure of a client's financial health. Clients are given a status (Blue, Bronze, Silver, Gold or Diamond) based on how well they manage their money.
- **Nominal Annual Compounded Monthly interest rate:** The method of calculating interest that is earned assuming a client remains invested in a product for an entire year but interest is drawn every month.

Disclaimers

- All the data used in the analysis for this report has been anonymised to protect personal and other client information and privacy.
- All interest rates are quoted as Nominal Annual Compounded Monthly (NACM).
- Information is correct as at March 2021. Discovery Bank is not legally responsible for any misrepresentations in the document, with all comparison product and interest information sourced from the respective institutions' websites and available marketing material.
- All Discovery Bank interest rates are correct as at the publication date. Please see www.discovery.co.za for the latest information and terms and conditions.



Annexure

Bank interest rates (NACM), for deposits of R10 000

BANK	CHEQUE ACCOUNTS	DEMAND SAVINGS ACCOUNT	32-DAY NOTICE SAVINGS ACCOUNT	3-MONTH FIXED DEPOSIT	6-MONTH FIXED DEPOSIT
Discovery Bank	3,75%*	Demand savings: 4,75%* 24-hr notice: 5,25%*	4,15%	4,20%	4,90%
1	0%	0.45%	2,50%	3,42%	3,90%
2	2,25%	2.25%	n/a	n/a	4,08%
3	0%	1.98%	2,47%	3,05%	3,40%
4	0.25%	3.50%	n/a	3,14%	3,54%
5	0%	2.00%	2,95%	3,00%	3,45%
6	0%	2.20%	2,00%	2,62%	2,85%

*Rate based on Diamond Vitality Money status

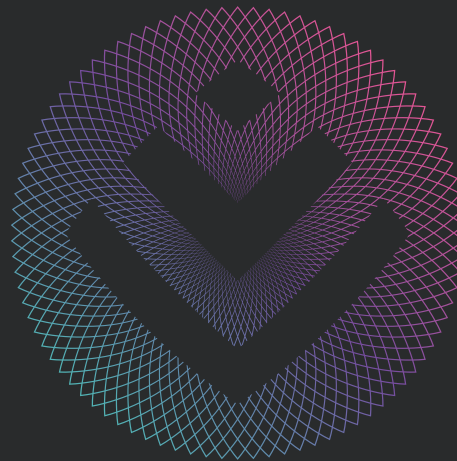
Source: Interest rates from individual bank websites as at 15 March 2020 (rates have been converted to NACM)

Annexure

Bank interest rates (NACM), for deposits of R10 000

BANK	12-MONTH FIXED DEPOSIT	18-MONTH FIXED DEPOSIT	24-MONTH FIXED DEPOSIT	36-MONTH FIXED DEPOSIT	60-MONTH FIXED DEPOSIT
Discovery Bank	5,80%	5,90%	6,60%	6,90%	7,00%
1	4,15%	4,35%	4,63%	5,27%	6,50%
2	4,73%	4,77%	5,77%	6,19%	7,51%
3	3,85%	n/a	4,50%	5,00%	6,15%
4	4,40%	n/a	n/a	n/a	n/a
5	3,90%	4,25%	4,55%	5,15%	6,20%
6	3,04%	3,40%	4,65%	4,08%	5,03%

Source: Interest rates from individual bank websites as at 15 March 2020 (rates have been converted to NACM)



Discovery Bank Limited, Registration number 2015/408745/06, an authorised financial services and registered credit provider. FSP number 48657. NCR registration number NCRCP9997. Limits, terms and conditions apply.