Lockdown: A review of KiwiSaver member behaviour in response to COVID-19

Report prepared for the Financial Markets Authority

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This report has been prepared by PwC for the Financial Markets Authority. The report is delivered in accordance with our Consultancy Services Order dated 20 July 2020 and should be read in conjunction with the terms of that agreement and the important notice contained in Annex 5 of this report.

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Executive Summary

The effects of the COVID-19 pandemic were not confined to health. The crisis also brought significant uncertainty and anxiety in financial markets. This hit a peak in March 2020, as reports of job losses mounted, borders closed, and stock markets fell.

Widespread coverage of the financial impact of COVID-19 was accompanied by analysis of the impact on KiwiSaver balances, and reports of investors switching to more conservative funds. This switching behaviour occurred despite commentary that longer-term investors should sit tight and 'ride out the storm', even in dramatic downturns.[1]

As the regulator of KiwiSaver providers, the Financial Markets Authority (FMA) wanted to understand the extent of switching and whether there were any patterns to switching behaviour, for example by age, gender or KiwiSaver provider. The FMA also wanted to understand whether there were unreported peaks in other transaction types such as withdrawals.

Analysis undertaken

On behalf of the FMA, PwC undertook desktop analysis based on anonymised data for 2.4 million KiwiSaver members (around three quarters of all accounts in New Zealand). This information was obtained from 11 KiwiSaver providers and covered the period from 1 January 2019 to 31 August 2020. In practice, due to data limitations we were only able to compare 1.5 million KiwiSaver members' data from seven providers. For further information on the analysis and limitations of this research, see Annexes 2 and 3.

The aim of this research was to identify how many switches and other transactions took place between February and April 2020 at the height of the market volatility associated with COVID-19 (referred to throughout this report as "during COVID-19") compared with a baseline of switches made in 2019, and the main characteristics of those who switched (for example, age or gender).[2]

Key observations from the data sample

3.9 per cent of members switched[3] during COVID-19

- Between February and April 2020, 58,356 KiwiSaver members (3.9 per cent) in our sample made a fund switch – 2.7 times more than switched during the same period in 2019 (21,608).

[1] See, for example, this 2015 article on the Global Financial Crisis https://tandemfinancial.co.uk/tandem-thinking/investing-lessons-from-the-global-financial-crisis/

[2] Other demographic data such as ethnicity, location or socio-economic status are not collected on KiwiSaver so are outside the scope of this report. As a regulator, the FMA may wish to consider additional data requirements or alternative data sources, to ensure it can support the wellbeing of the financially vulnerable and fulfil the Crown's obligations as a partner of Te Tiriti o Waitangi.

[3] Throughout this report, we refer primarily to the number of fund switches made, rather than the number of members who switched. These numbers differ, as some members made multiple fund switches during the period of interest, and it is important the research reflects the extent of all switching activity. Where necessary, the report makes clear when referring to the number of members who switched.

- Collectively, those members made 88,112 different KiwiSaver fund switches between February and April 2020. This is 3.4 times higher than for the same period in 2019.
- The peak month for switching was March 2020, with 6.4 times the volume in March 2019.
- Between May and August 2020 (the end of our dataset), the rate of switching was 33.3 per cent higher than the same period in 2019.

Table 1: Comparison of fund switches out during COVID-19 and the same period in previous year

Total number of fund switches out	2019	2020	Change from previous year
February to April	26,338	88,112	3.4 times higher
March	10,026	63,622	6.4 times higher

Over two thirds of switches were to lower risk funds, and most stayed there[4]

- 70.5 per cent of these switches (41,148) made by investors during COVID-19 were to a lower risk fund. 11.0 per cent (6,401) were to equivalent and 18.5 per cent (10,810) to higher risk funds.
- This compares with 27.0 per cent of lower risk switches in the same period in 2019.
- 5,634 (0.5 per cent) KiwiSaver members in our sample made multiple switches. Of these 3,745 were 'boomerang' switches into a lower risk fund as the market dropped, and then back to one with a higher risk profile as the market recovered.
- Only 9.1 per cent of people who switched to a lower risk fund during COVID-19 had switched back to a higher risk fund by August 2020 – meaning 90.9 per cent effectively locked down their losses from that time.

Members aged 26 to 35 were most likely to switch (especially to lower risk funds)

- Investors aged between 26 and 35 made 30.8 per cent of all fund switches in the period analysed, despite holding just 23.0 per cent of accounts.
- 26-35 year-olds made 21 times more lower risk switches during COVID-19 than in the same period in 2019.
- 75.4 per cent of switches made by this age group during COVID-19 were to lower risk funds, compared to just 16.4 per cent over the same period in 2019.
- Among those aged between 26 and 35, men made 61.6 per cent of all higher risk switches during COVID-19. This is more than twice the normal rate of these switches.
- Men (across all age groups) made 59.4 per cent of 'boomerang' switches to a lower risk fund during COVID-19 and then back to a higher risk fund.

[4] Due to the format of the data received, it was not possible to determine the direction of all fund switches. Throughout this report, when we refer to the direction of fund switches, this relates to only those switches for which we could determine a direction, which is a subset of the data received. In total, we know the direction of 58,359 switches in our sample that were made during COVID-19. See 'What we did' on page 16 and the high-level methodology in Annex 2 for further explanation.

- During COVID-19, 26-35 year-olds with banks made over 26 times more switches to lower risk funds than in the same period in 2019, while those with non-bank providers made around six times more switches.

Table 2: Comparison of switches made by 26 to 35 year olds during COVID-19 and the same period in previous year

Switches made between February and April	2019	2020	Change from previous year
Total number of switches made by 26 to 35 year olds	5,195	26,057	5.0 times higher during COVID-19
Lower risk switches made by 26 to 35 year olds	605	12,694	21.0 times higher during COVID-19
Lower risk switches made by 26 to 35 year old bank customers	450	11,737	26.1 times higher during COVID-19

KiwiSaver withdrawals for first homes and hardship increased

- The number of KiwiSaver withdrawals for both first home deposits and significant hardship increased slightly during and after COVID-19 compared to 2019.
- The biggest increase in first home withdrawals was among younger people, with a 14.7 per cent increase for those aged between 26 and 35, and an 81.8 per cent increase for those aged between 18 and 25.
- First home deposit withdrawals are substantially lower than switches for these age groups, and more consistent with the same period in 2019. This suggests there is no clear link between withdrawals and KiwiSaver switches.
- Significant hardship withdrawals were 20 per cent higher between February and April 2020 compared to the same period in 2019. Younger people saw the biggest increase, with those aged between 26 and 35 increasing by 47.2 per cent and those aged between 18 and 25 by 97.3 per cent.

Table 3: Comparison of KiwiSaver first home and hardship withdrawals during COVID-19 and the same period in previous year

Withdrawals between February and April	2019	2020	Change from previous year
Total number of first home withdrawals	6,874	7,606	1.1 times higher during COVID-19
First home withdrawals by 26 to 35 year-olds	3,753 (54.6% of all first home withdrawals despite making up 23.0% of members)	4,305 (56.6% of all first home withdrawals)	1.2 times higher during COVID-19
Total number of significant hardship withdrawals	2,707	3,024	1.1 times higher during COVID-19
Significant hardship withdrawals made by 26 to 35 year-olds	528 (19.5% of hardship withdrawals made by this age group)	777 (25.7% of hardship withdrawals made by this age group)	1.5 times higher during COVID-19

Behavioural science offers potential explanations for investor behaviour

Decades of studies into people's behaviour and decision-making (including in financial contexts) provide hypotheses to potentially explain the findings in the data:

Table 4. Behavioural science concepts and hypotheses based on data observations

Observation	Related behavioural science concepts	Hypothesis
 **Increased switching in response to volatility**	**Action bias** refers to people's tendency to prefer action over inaction, especially in situations where they may want to feel more in control.	Some investors switched funds as the market fell, out of a desire to feel in control.
	Salience suggests that messages that are vivid or emotionally charged might be easier to remember.	The framing of media coverage and social media chatter may have contributed to a sense of panic for some investors.
	Social norms suggest people tend to do what others do.	Increased public discussion of KiwiSaver switching led investors to follow what they heard others were doing.

	Mental accounting describes how people treat money differently depending on where it came from, where it is kept or how it is to be used.	Online access to KiwiSaver balances alongside other accounts may mean people see it as part of their everyday money (and increase salience of any fall in value).
 **Few of those who switched to lower risk made a 'boomerang' back as the market rose** **The majority of KiwiSaver members stayed with their existing scheme**	**Regret aversion** describes how the desire to avoid something we think we will later regret can be a strong motivator of behaviour. **Status quo bias** explains how the power of inertia can act as a driver of inaction.	The wish to avoid future regret may have encouraged some people to stay in their newly-chosen fund (to avoid regretting doing the wrong thing).
 **Most switches were to lower risk funds** **Those aged 26-35 were most likely to switch**	**Present bias** relates to people's tendency to give more weight to short-term payoffs than longer-term ones.	Some investors who switched, particularly younger ones, may have focused on mitigating short-term losses rather than considering future returns.
 **Those with lower balances were more likely to switch**	**Bandwidth** describes our limited cognitive capacity for decision-making, which can be reduced by other distractions and stressors – including financial worries.	People with less of a financial buffer tended to make more fund switches in response to shocks.
 **First home withdrawals increased**	A combination of factors may have been at play to influence first home withdrawals, including **action bias** in response to anxiety and **regret aversion** at not wanting to miss out.	Anxiety and worry may have encouraged some KiwiSaver members to act, and buy a 'secure' asset.

Potential Implications

We also considered the implications for providers or regulators of the behavioural hypotheses in this report (recognising that these hypotheses would need to be validated before action is taken).

Table 5. List of implications for further investigation

Implication	Description	For who
Gear up for turbulence	Clear, concise, off-the-shelf information during a time of market turbulence can support investors to make better-informed decisions. Providers should be ready to help members to make informed choices about their KiwiSaver funds in response to sudden market shifts. This could be supported with regular education in periods of calm to help investors plan for market turbulence.	Providers
Highlight the risks and unknowns of switching	The balance a KiwiSaver member sees on-screen may differ from the price when the switch goes through. Providers could give clearer information to members about the risks and unknowns of their fund choices. This includes being transparent about the time-lag between initiation and action of fund switching, the possibility of further drops while switches are processed, and the potential impacts of future market activity on balances.	Providers
Give customers access to commitment devices	Goal-setting tools and commitment devices[5] could be used to remind people of their savings goals to help them make the best decision for their circumstances. Providers could explore making commitment devices such as prompts and notifications available to members on an opt-in basis. This could support investors to achieve their long-term savings goals.	Providers
Follow up with customers	People's situations and their goals change, and KiwiSaver members can adjust their savings approach to suit their needs. Especially following a major event like COVID-19, providers and advisers should follow up and check in with their members to ensure they understand the impacts and outcomes of the choices they have made.	Providers
Understand the needs of different investors	Tailored information for specific groups of investors is more likely to help them make decisions. Providers could test the effectiveness of different communication channels, messengers and messages to understand the best way to connect with and support their KiwiSaver members.	Providers

[5] The term 'commitment device' refers to a range of tools designed to help lock themselves into doing something they otherwise might not.

Consider how risk profile tools are being used	Investors' true risk tolerance may differ from their stated risk tolerance when using tools to make fund choices. Regulators could check in with providers to assess how they are using risk profile tools and the other mechanisms to support investors' fund choices.	Providers and regulators
Make informed decision-making easy	There is a trade-off between giving investors more control over their money and ensuring they can make the best long-term decisions. Without interfering with KiwiSaver members' ability to manage their own savings, providers could investigate accessible information and interventions that can support this decision-making.	Providers
Evaluate customer engagement efficacy	The sources used for this research could not establish the effectiveness of provider communications. Providers and regulators could conduct further research to test the impact provider communications have on member behaviour.	Providers and regulators

Findings in this report should be treated with caution

While the data from KiwiSaver providers offers insights into what customers did in response to COVID-19, readers of this report should bear in mind that there are also practical limitations to this analysis and avoid overgeneralising the findings.

The data analysis assumes that 2019 is a representative baseline, and that most 'boomerang' switches would have taken place by August 2020. Differences between providers meant that the 2.4 million members' data used for this work could not always be compared or analysed consistently across all dimensions:

- It was only possible to compare switching data between seven of the providers who supplied data, accounting for 1.5 million KiwiSaver members.
- The data on fund switches does not allow for analysis of those who considered switching but didn't, or actively chose to stick with their existing fund.
- Data on provider communications and interventions was not available in a way that allowed for analysis of impacts or comparisons between different providers.

There are also wider reasons to be cautious. While with hindsight it was clearly unwise to switch, for some investors the security of switching to a lower risk fund may have been the best decision, even if they lost money by doing so. Nor does the data explain why people switched, and future market volatility might not follow a similar pattern.

It is also worth noting that while switching was significantly higher than in 2019, 96.1 per cent of members did not switch.

Further evidence should be collected to test, validate or disprove the hypotheses in this report

Before acting on any of the findings, the FMA or providers should seek more data that provides better insights into some of the explanations behind the switches. Specifically, ethnicity is absent from the data used for this work. An exploration of any trends relating to ethnicity, particularly any differences between Māori and non-Māori KiwiSaver members, will allow a more thorough understanding of the implications of these findings. Likewise, the dataset from many providers excluded non-binary gender options.

In addition, before rolling out any large-scale change, there is scope to test or trial interventions to investigate their efficacy and potential unintended consequences.

1. Introduction

Why the Financial Markets Authority (FMA) commissioned this research

In response to dramatic falls in stock market indices driven by COVID-19 there were widespread reports of KiwiSaver members switching funds during February to April 2020 (for simplicity, referred to as 'during COVID-19' in this report). As a regulator, the FMA wanted to understand what really happened. Key research questions included

- Who switched?
- What was the direction of switching (towards or away from risk)?
- Did any members who switched during COVID-19 subsequently switch back?
- Did switching differ between providers?
- What impact did communications, advice and the external environment have?
- Were there unreported peaks in other transaction types, such as withdrawals?

As the research required both data analysis and a robust understanding of saver behaviours, the FMA commissioned specialists from PwC's behavioural science team to assist with the research.

What's in the report

This report sets out the findings from that research. It confirms there was a significant increase in fund switching in March. Some types of investors were far more likely to switch than others and some types of providers saw more switching than others. The data does not allow us to identify the impact of specific messages or processes on switching behaviour.

This report also explores what types of switches occurred, develops hypotheses based on behavioural science for what might have driven people to switch (despite it being against conventional financial advice for long-term investors), and identifies implications and opportunities for policymakers, regulators and providers to support KiwiSaver members to make better decisions.

Why apply a behavioural science lens?

Effective regulation is ultimately about understanding and influencing human behaviour. As set out in the FMA's 2016 White Paper, behavioural science can "create safer and more transparent financial markets so investors can better choose and use appropriate financial products and make informed investment decisions" by understanding what drives investors' behaviour and guides their decision-making, and ensuring that investors are unfairly exploited.[6]

Over the past decade, regulators around the world have increasingly looked to behavioural science to help them fulfil their responsibilities. Sophisticated regulators understand that people's behaviour often deviates systematically and predictably from traditional assumptions. Put simply, people don't always make perfect, 'rational' decisions.

[6] Financial Markets Authority. (2016). Using behavioural insights to improve financial capability.

This report draws on extensive studies and real-world trials from behavioural science relating to financial decision-making and considers them alongside the data on what people actually did in response to COVID-19.

Context

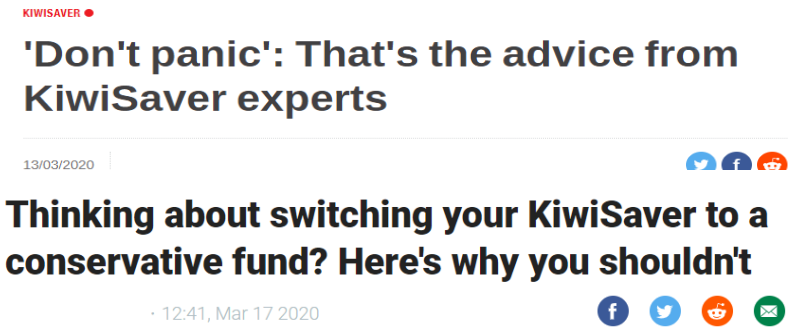
As COVID-19 swept across the world in early 2020, governments and businesses took unprecedented actions – closing borders, enforcing curfews and lockdowns. New Zealand went into a full "level 4" lockdown on 25 March 2020. For many people, their situations changed dramatically almost overnight – along with their plans for the future.

Even before lockdown, COVID-19's economic impact was immediate and severe. Financial markets fell and unemployment rates jumped. Anxiety, and even panic set in, reinforced by extensive media coverage of the falling market and of KiwiSaver members switching to more conservative, 'safer' funds – despite later reports encouraging people to wait. The headlines in Table 1 below illustrate the mood in New Zealand from this period.

Figure 1. Selected media headlines of coverage of KiwiSaver balances [7]

Earlier headlines with alarming messages

Later headlines seeking to calm investors



[7] Headlines retrieved from Newshub.co.nz, Radio New Zealand and Stuff.co.nz. https://www.newshub.co.nz/home/money/2020/02/coronavirus-kiwisaver-warning-as-markets-tank.html. https://www.rnz.co.nz/news/national/411534/coronavirus-first-home-buyers-brace-for-

Having observed an uptick in the number of fund switches being made, the FMA and KiwiSaver providers communicated with investors to encourage them to stay calm and keep funds where they were. Despite these efforts, there were reports of a significant number of fund switches occurring throughout March.

From late March, as governments around the world announced unprecedented levels of fiscal stimulus and economic support, the market rebounded. By August 2020, the market had returned to the level it had been at in February. It has continued to rise since, hitting all-time record levels by December 2020.[8]

What we did

Many people from across both the FMA and the sector were engaged in the development of this report. This report is the result of extensive support from the Investor Capability and Intelligence and Analytics team at the FMA and the data generously provided by a range of KiwiSaver providers. The PwC research team is grateful to all of those who supported this work.

We conducted a co-design approach with the FMA to:

- define the research questions
- explore what data we could feasibly get from providers
- consider what other data we could potentially use.

We collectively agreed the approach, using mixed-methods research, including analysis of both primary data sourced directly from KiwiSaver providers and other data sources, the FMA's media and social media analysis and a brief literature review of behavioural science concepts. The principal research questions, along with a high-level research methodology can be found in Annex 2.

A draft data request was tested with providers, refined, then issued in August 2020. The FMA received data from 11 KiwiSaver providers, accounting for more than three quarters of all KiwiSaver members representing a broad cross-section of the KiwiSaver population. There were seven providers whose data it was possible to compare, covering 1.5 million members. We analysed this data to identify who was most likely to make fund switches and what types of providers had higher rates of switching.

Overall data was received from 11 providers, accounting for nearly 2.4 million KiwiSaver members. Data that could be used to analyse fund switching was received from seven providers, accounting for around 1.5 million members.

Throughout the report, when we refer to switches, this refers to the number of fund switches made. Where members made multiple switches in a given time period, each one will be counted towards the number of switches. So switch counts do not refer to the number of members who switched, rather it is the number of switches made.

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impact-on-kiwisaver-funds. https://www.newshub.co.nz/home/money/2020/03/don-t-panic-that-s-the-advice-from-kiwisaver-experts.html. https://www.stuff.co.nz/national/health/coronavirus/120336527/thinking-about-switching-your-kiwisaver-to-a-conservative-fund-heres-why-you-shouldnt

[8] https://www.rnz.co.nz/news/business/433564/nzx-sharemarket-continues-streak-at-record-high

It is worth noting that switches can consist of more than one withdrawal or deposit. For example, some members split their KiwiSaver from one fund to two or more new funds. For the purposes of analysing the direction of fund switches, we confined analysis to switches to and from single fund types, as it was impossible to work out the exact switch direction or distribution of funds across multi-fund switches. Switch direction was categorised as either higher risk, lower risk or neutral.

As well as provider data, we also used data from other sources (such as Inland Revenue) and the FMA's analysis of COVID-19-related mainstream and social media coverage of the drop in the market or KiwiSaver balances and fund switching. We also conducted a pragmatic literature review of key behavioural science concepts to map this to our data findings and suggest factors that may have been driving investor choices.

This was not an in-depth behavioural study and there is limited evidence in the data to clearly link the findings with behavioural research. As far as possible, we have used the data and behavioural science to form hypotheses and suggest implications for providers and regulators.

These implications should be read with caution. Limitations in the scope, methodology and data underpinning this research are set out in detail in Annex 3. They include only being able to compare between seven of the eleven providers who supplied data, meaning only 1.5 million members' data was used in the analysis. And demographic information in the data is limited to age and gender only.

We are also mindful that the research has been conducted after the market rebounded, meaning we are viewing decisions made at a time of extreme uncertainty through the lens of perfect hindsight.

For all these reasons, in many cases a key first step will be to validate or test the findings from this research and determine next steps.

2. There was a substantial increase in KiwiSaver fund switching in response to COVID-19

This section sets out our research findings into fund switching as the market dropped, discusses some of the drivers behind it and explores potential implications for the FMA and providers.

The number of switches was 3.4 times higher during COVID-19 than in the previous year.

The market began to fall in late February, bottoming out in late March then bouncing back over the next few months. There is a clear correlation between fund switching and market value.

Figure 2. Timeline of market value and fund switches

February to April 2020 saw the most market volatility, and the most fund switching. During this period, 88,112 fund switches were made – over three times the volume made during the same period in 2019.

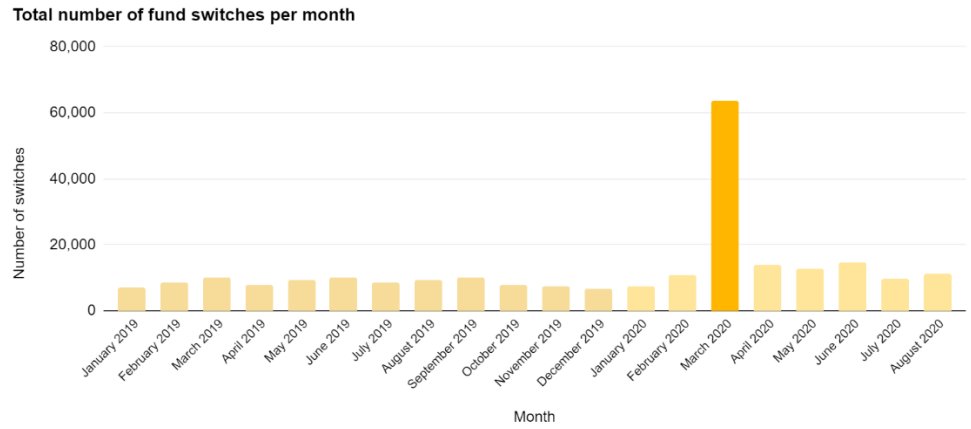
These switches were made by 58,536 members, or 3.9 per cent of our sample of 1,480,151 members. While that means 96.1 per cent of KiwiSaver members did not switch, the increase in switching and the impact on future savings balances for those who did switch explain the FMA's attention to this issue.

Fund switching peaked in March, just as the market was bottoming out. Compared to the usual monthly number of switches in 2019, fund switches were **seven times higher** in March 2020 (63,622 switches compared to a monthly average of 8,587 in 2019).[9]

On 22 March 2020 there were 6,156 switches totalling $136 million in just one day, which is the equivalent of around 20 days' worth switches in 2019.[10]

[9] Switches out of funds and switches into funds are recorded as separate transactions in the data, and not all switches are completed on the same day, so switches out and switches in may differ in value.
[10] Calculated based on average number of switches and average values in February to April 2019.

Figure 3. Total number of fund switches per month

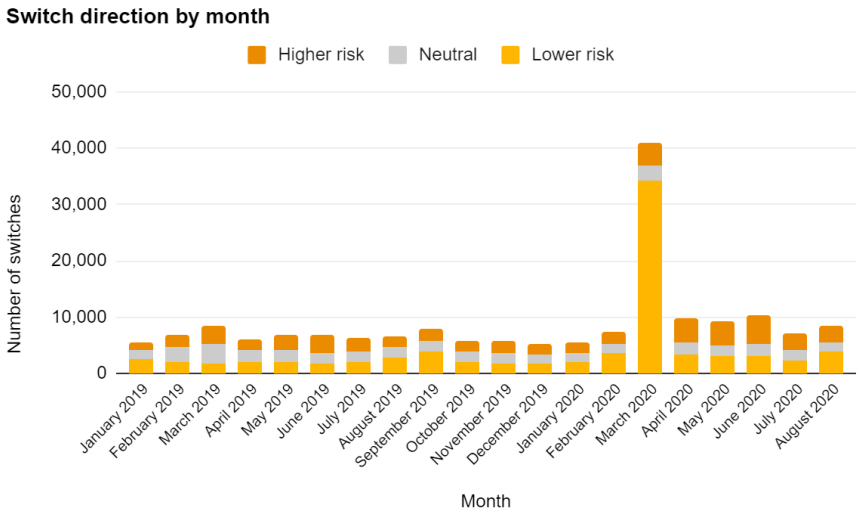


70.5 per cent of switches during COVID-19 were to lower risk funds.

Table 6. Switches to lower risk funds during COVID-19 compared with same period in previous year

Switches to lower risk funds between February and April	2019	2020	Change from previous year
Number of switches to lower risk funds	5,828	41,148	7.4 times higher during COVID-19
Proportion of total switches made	27.0%	70.5%	

Figure 4. Switch direction by month[11]



[11] Note this graph includes only the switches for which we could determine the direction, so numbers differ from those in Figure 3

During a time of uncertainty, more people may have switched because of action bias.

Action bias refers to people's tendency to favour action over inaction, especially in situations where they may want to feel more in control. The observed increase in fund switching may be an illustration of action bias influencing member behaviour.

As a response to wider uncertainty and falling KiwiSaver balances, members might have sought to take action to minimise their losses. While standard financial advice says long-term investors will be better off not switching, those who switched may have been seeking psychological reassurance through taking action.

As the market rebounded, there was a small amount of 'boomerang' switching back to higher risk funds.

From May to August 2020, the level of switching remained higher than it had been in the year before. Through to June, switching was nearly double the usual monthly volume.

Many of these switches were investors switching back as the market recovered. In fact, even as early as March a substantial number of investors looked to take advantage of the market dip. That month there were 4,223 switches to a higher risk fund, more than twice the monthly 2019 average for 2019 of 2,212.

3,745 members in our sample switched to a lower risk fund when the market dropped during COVID-19 and then subsequently switched back to a higher risk fund, 9.1 per cent of the 41,148 total switches to lower risk funds.

A third of those who made 'boomerang' switches were aged between 26 and 35 years old (1,234 of 5,634).

The value of switches made to lower risk funds during COVID was $1.2 billion. However only $121 million was moved back to higher risk funds – meaning over $1 billion of KiwiSaver funds that had been moved missed out on the subsequent market rebound .

Case study: The impact of fund switching on balance at retirement

This case study demonstrates the potential impact of three switching scenarios on one KiwiSaver member's long-term savings.

A 28-year-old woman, earning $65,000 annually from full-time employment, has $22,000 in a growth fund in March 2020.

The table below shows what her balance at retirement would have been under three scenarios:

- A: She switched to a conservative fund when financial markets fell and stayed there until retirement
- B: She switched to a conservative fund when financial markets fell, then switched back to growth in June 2020.
- B: She stayed in growth throughout (no switch).

Table 7. KiwiSaver balance at retirement by scenario

Scenario	A: Growth to Conservative	B: Growth to Conservative to Growth	C: Growth (no switch)
Balance at retirement	$ 215,089	$325,020	$328,569

Source: All numbers from Sorted.org calculator: https://sorted.org.nz/tools/kiwisaver-savings-calculator. Assumption of 3% contribution rate.

She would have lost $1,461 in the short term (between March and June) and in the longer term she would be $3,549 worse off by retirement if she had switched back to growth. However, she would have missed out on $109,931 at retirement by remaining in a conservative fund.

Even if action bias drove members to seek safer havens, it is important they understand the long-term implications of their decisions. Providers can help ensure their investors can make fully informed decisions.

While switching was much higher than normal, it was still only a small minority of investors.

Although there was a significant increase in the number of switches in early 2020, only a very small percentage of investors actually switched.

Between February and April 2020, there were nearly 88,112 fund switches in our sample, made by 3.9 per cent of the KiwiSaver members in our dataset. 96.1 percent of investors made what is usually considered to be the 'best' decision and stayed the course. But even they may have benefitted from more support to reduce their anxiety and encourage them to stay the course.

Investors may have been motivated by a desire to avoid regret.

Regret is one of the strongest emotions that factors into people's decision-making. 'Anticipated regret' can be a powerful motivator of behaviour and may have driven some investors towards lower risk funds.

Implications

Based on some of the potential behavioural explanations for the fund switching we observed, providers and regulators could explore how to better support the decisions of KiwiSaver members, particularly during times of extreme market volatility.

For providers, **gear up**. KiwiSaver providers should be prepared for market turbulence and have a set of tools and clear, concise, off-the-shelf communications ready to be used in response.

The most appropriate response will be situation-specific, but having a suite of pre-prepared information, messages and interventions across a range of channels can help investors

make appropriate and informed decisions about their investments. This could be supported with regular education over time about planning for market turbulence.

For providers, **highlight the risks and the unknowns**. There is a clear correlation between the timing of market volatility and the period of increased switching. This suggests:

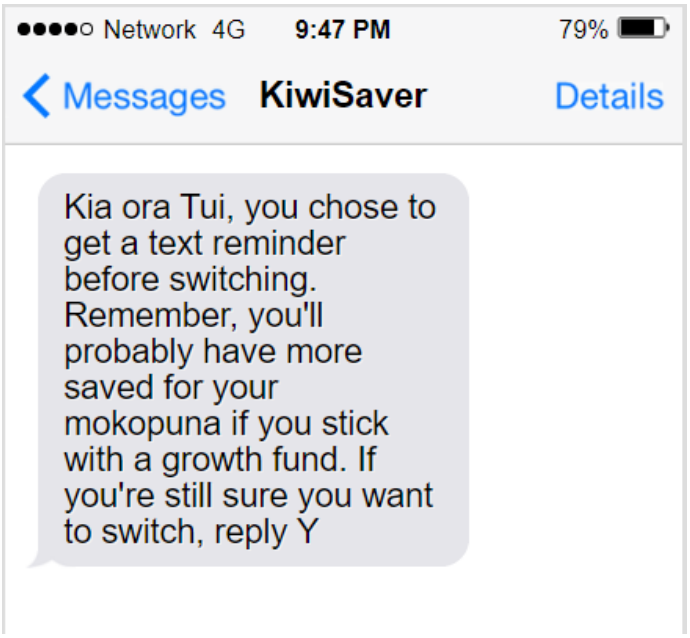
i. some investors were spooked by the market drop and reacted to mitigate their losses and
ii. other investors may have tried to time the market.

For those who might try to time the market, there's a point when it might be possible to dissuade them, as KiwiSaver fund switches do not happen instantaneously. Most providers will use the next day's unit price, although some take longer. That means there's no such thing as a spot price: the balance you see online is not necessarily the balance you'll have when the switch goes through.

This means it can be difficult to make informed KiwiSaver changes. Providers could highlight the risks and uncertainties of their fund choices, including the time-lag between initiation and action of fund switching and the potential impacts of future market activity on balances.

For providers, give customers access to goal setting and commitment devices. Providers could explore making behavioural goal setting and commitment devices available to members. Members could select additional prompts and notifications to help achieve their long-term savings goals or prompt them to think carefully before switching. A wide variety of commitment devices have been shown to be effective in improving people's ability to stick with savings plans.[12] Members could, for example, opt to receive messages based on their long-term goals. A sample text message prompt is shown below.

Sample text message of a commitment device



[12] Burke, J., Luoto, J., & Perez-Arce, F. (2014). *Soft versus Hard Commitments: A test on savings behaviors.* RAND Labor & Population.

Providers could follow up with members who switched and check if their current fund is aligned with their savings goals. Providers could give information about the impact of switching on long term outcomes and offer advice on alternative options.

3. Younger people were more likely to switch funds

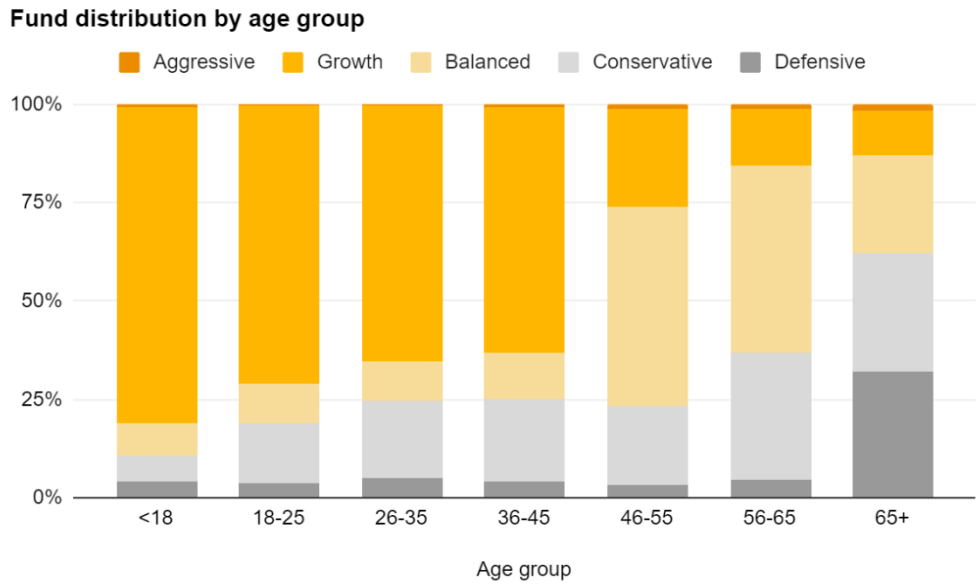
This section explores which people were more likely to switch funds, looks at why that might be the case and explores what the FMA and providers can do in light of this.

The age group most likely to make a fund switch is 26 to 35 year-olds.

Younger people are more likely to be in a higher risk fund

The data shows that younger KiwiSaver members are more likely to be in higher risk funds. 70.2 per cent of 18 to 25 year olds, and 64.2 per cent of members aged between 26 and 35are in a growth fund. This fits with the general advice that growth funds are more appropriate for young people. However, it also means that younger people are exposed to more risk and may be more likely to switch funds to mitigate their losses.

Figure 5. Fund distribution by age group[13]



[13] Note: this graph shows the distribution of KiwiSaver investors in each age group. The number of members and value of balances is different for each age group.

Investors aged between 26 and 35 made more than five times more fund switches during COVID-19 than usual.

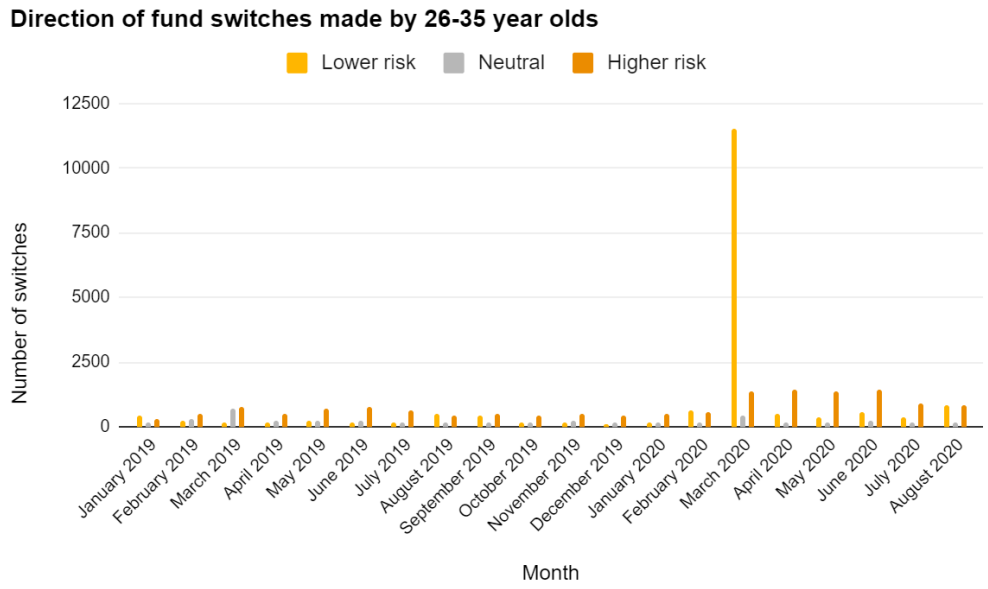
Table 8. Comparison of switches made by 26 to 35 year olds during COVID-19 and the same period in previous year

Switches made by 26 to 35 year olds (February to April)	2019	2020	Change from previous year
Total number of switches	5,195	26,057	5.0 times higher during COVID-19
Lower risk switches)	605 (16.4% of switches by this cohort)[14]	12,694 (75.4% of switches by this cohort)[15]	21.0 times higher during COVID-19

While the 26-35 year old age group makes up 23.0 per cent of all KiwiSaver members, they made 30.8 per cent of all lower risk switches during COVID-19.

49.4 per cent of switches by these members were from a growth fund to either a conservative or defensive fund (8,322 of 16,842 switches), bypassing balanced funds altogether.

Figure 6. Direction of fund switches made by 26-35 year olds



This raises questions including:

- is a link between age and risk too simplistic?

[14] Due to the format of the data received, we were not able to tell the direction of all fund switches, so numbers relating to the direction of switches do not reconcile with all fund switches.
[15] See above

- are young investors over-estimating their ability to handle risk and might this point to a gap between perceived and actual risk tolerance?
- were the investors who switched making a sensible decision because they were thinking about buying a first home and wanted to avoid further losses?

We provide some behavioural hypotheses about these questions below.

Short-term goals may have been taking priority over the longer-term picture for young people.

Behavioural science research tells us that people are short-sighted and tend to give more weight to short-term payoffs than longer-term ones. This is known as present bias.[16] Given younger people are further from retirement than older people, we hypothesise that this may be contributing to their higher switching rates. It is possible young people place greater weight on the certainty of avoiding an immediate drop in their KiwiSaver balance than the prospect of achieving a higher balance at retirement.

Later in this report, we explore the increase in KiwiSaver first home withdrawals and find that such withdrawals are largely from lower risk funds. However, it appears that many KiwiSaver members making first home withdrawals only switched to a lower-risk fund very shortly before withdrawal, rather than the one to three years the FMA generally recommends. This is discussed further in Section 6.

Behavioural science suggests financial status could affect people's decision-making.

Cognitive bandwidth is a behavioural science concept that relates to people's limited cognitive capacity for decision-making. Research shows that bandwidth can be limited even more by distractions and stressors. Increased financial stress contributes to 'tunnelling' on immediate issues instead of considering the long term. The table of household financial wellbeing shows that younger people are likely to be less well off than others.

Table 9. Household financial wellbeing by age group[17]

Age of main respondent	18 to 34 years (%)	35 to 54 years (%)	55 to 64 years (%)	65+ (%)	New Zealand Average (%)
Secure	15	17	27	48	22
Exposed	47	41	38	32	41
In difficulty	27	26	22	16	24
In serious difficulty	11	16	13	4	12

[16] Xiao, J. (2019). Present bias and financial behaviour. Retrieved from: https://onlinelibrary.wiley.com/doi/full/10.1002/cfp2.1048

[17] Source: Te Ara Ahunga Ora/ Commission for Financial Capability (2020) *Impact of COVID-19 on Financial Wellbeing Findings from the second wave of a national survey*

Younger men were more likely to make higher risk switches during COVID-19.

While men account for 50.4 per cent of the 26 to 35 year olds in our sample, they made 61.6 per cent of all switches to higher risk funds between February and April 2020.

Table 10: Comparison by gender of switches made by 26 to 35 year olds during COVID-19 and the same period in previous year

Switches made by 26 to 35 year olds (February to April)	2019	2020	Change from previous year
Higher risk switches (males)	965	2,004	2.1 times higher during COVID-19
Lower risk switches (males)	315	6,816	21.6 times higher during COVID-19
Higher risk switches (females)	834	1,247	1.5 times higher during COVID-19
Lower risk switches (females)	275	5,699	20.7 times higher during COVID-19

Men in this age group made twice as many switches to higher risk funds during COVID-19 compared to the same period in 2019 (2,004 compared to 965 in 2019). Women made 49.5 per cent more switches to higher risk funds during COVID compared to the same period in 2019.

Implications

Given the long-term effect of switching to a more conservative KiwiSaver fund, it is important younger people are informed and supported in their financial decision-making.

For providers, the types of information often given to young people may not be working effectively. We hypothesise that younger people may be more concerned with their short-term or immediate financial goals, which could be amplified by the increased salience of KiwiSaver balances through online platforms. Messages may work better if they can be linked to more immediate priorities or evoke sentiments like regret aversion.

This research suggests stated risk tolerance may differ from revealed risk tolerance. Regulators could work with providers to assess how they are using risk profile tools and the other mechanisms to support investors' fund choices and build evidence on which tools work best for which customers. This could involve behavioural trials to test different options in real life or realistic simulations.

4. Customers of banks and those without access to financial advisers were more likely to switch

This section investigates the cross-section of providers and their customer bases and explores how different provider models might have influenced investors' decisions. It focuses primarily on younger investors who were the most common group to switch.

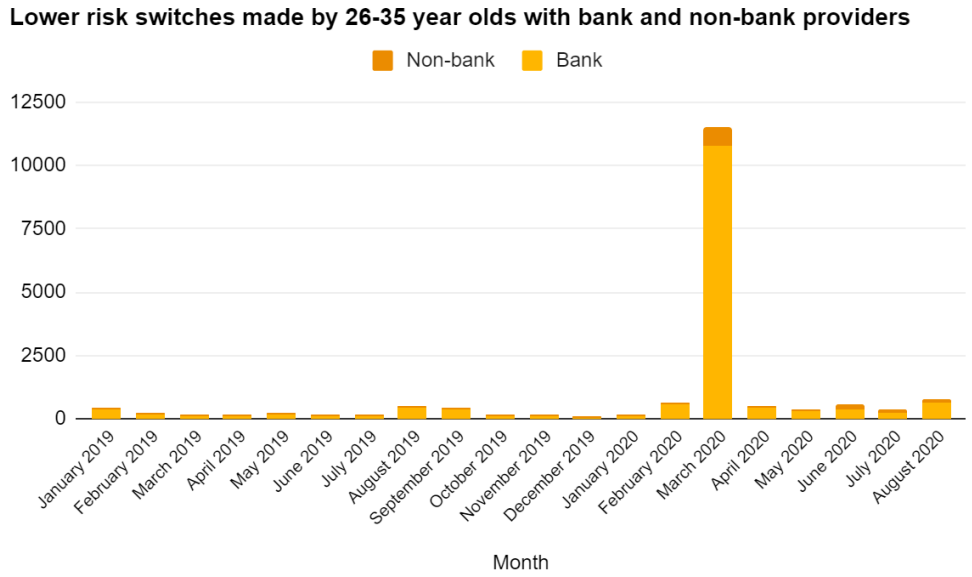
Younger bank customers were more likely to switch than their peers with non-bank providers.

Younger people with non-bank KiwiSaver providers made 36.9 per cent of fund switches in 2019, while making up just 7.5 per cent of the sample for this age group.

Table 11: Comparison by provider type of switches made by 26 to 35 year olds during COVID-19 and the same period in previous year

Switches made by 26 to 35 year olds (February to April)	2019	2020	Change from previous year
Lower risk switches (bank customers)	450	11,737	26.1 times higher during COVID-19
Lower risk switches (non-bank customers)	155	957	6.2 times higher during COVID-19

Figure 7. Lower risk switches made by 26-35 year olds with banks and non-bank providers



Banking apps may be used more frequently than other investment apps.

Many young people run their lives cash-free and manage their money through banking apps. Since KiwiSaver balances are displayed alongside other balances, any changes in balance are more immediately noticed by bank members.

Both banks and non-banks offer fund switches via their apps. If a member checks a banking app more often, they may be more likely to switch.

Investors may treat their KiwiSaver differently if it's with a bank.

Mental accounting is a behavioural concept that suggests that people treat their money differently depending on where it came from or where it will be spent. It's also possible that they treat it differently depending on where it's displayed. KiwiSaver is meant for retirement (or a first home deposit). However, seeing your balance alongside current accounts and credit cards could affect how people treat it.

We hypothesise that mental accounting may play a part in increasing fund switches, especially when dropping balances were highly salient to investors.

Younger people are about half as likely to have an adviser, and advised people made fewer switches than those without.[18]

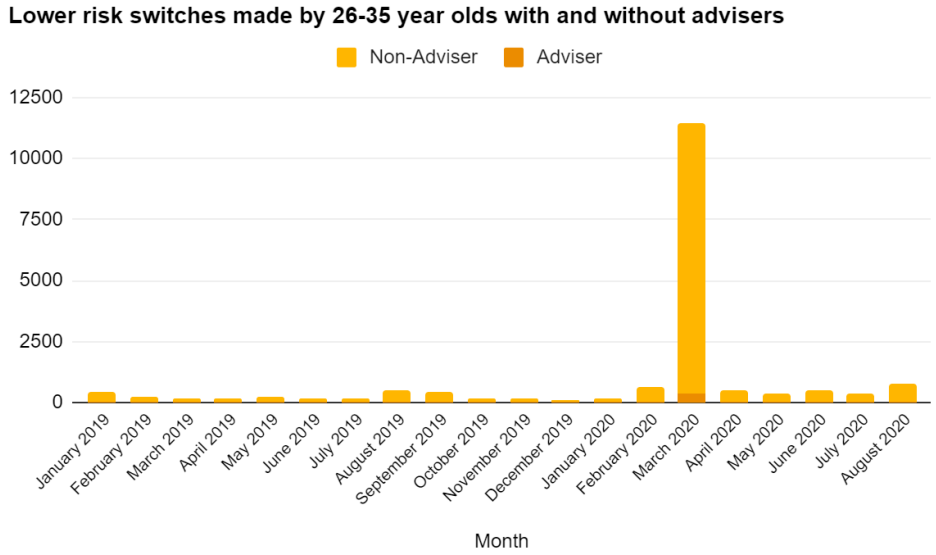
Younger people are less than half as likely to have advisers than older people and those without advisers were nearly twice as likely to switch than those with. Just 5.6 per cent of members aged between 26 and 35 have advisers.

Table 12: Comparison by advisor of switches made by 26 to 35 year olds during COVID-19 and the same period in previous year

Switches by 26 to 35 year olds (February to April)	2019	2020	Change from previous year
Lower risk switches (without advisers)	484	12,129	25.1 times higher during COVID-19
Lower risk switches (with advisers)	114	489	4.3 times higher during COVID-19

[18] Advised members are based on the data received where the KiwiSaver provider records indicate the member has an adviser who helps them with their KiwiSaver decisions

Figure 8. Lower risk switches made by 26-35 year olds with and without advisers



We did not receive any data showing if the actions of individual advisers contributed to less switching by their clients. However, it seems many more people than normal sought advice. Data from providers given to the FMA indicated that the call volumes into their contact centres increased during COVID-19, and waiting times increased dramatically. While some of that increase was likely due to branches being closed during level 3 and level 4 lockdowns in New Zealand, providers reported to the FMA that many calls were about whether to switch funds.

It is worth noting that most advised members are also non-bank members. From the available data, it is not possible to determine whether availability of advice, the increased salience of dropping KiwiSaver balances via banking apps, or other factors affected switching rates.

Advisers play an important role and can use behavioural concepts to support investors' decisions.

Status quo bias is well-documented in behavioural science research. It suggests the most effective way of encouraging a desired behaviour is to make it as easy as possible by removing all friction or, even better, making the desired behaviour the easiest option. These theories suggest there may be an additional role for advisers to play in supporting investors to make decisions that are in their best interests.

Providers that offer advised funds could get investors initiating a fund switch to speak to an adviser before completing. The advisor could encourage the member to reflect and highlight potential downside risks. All providers could offer new KiwiSaver members a one-off session with an adviser to discuss savings goals and the most suitable approach to meeting those goals and help determine an effective commitment device for them.

Implications

For providers, consider the trade-off between giving investors more control over their KiwiSaver and the impact on their decisions. There could be ways to encourage members to think harder about switching, such as adding a pop-up that asks, “are you sure you want to switch?”.

Such approaches could be especially effective if the pop-up message combined with messages highlighting the risks of switching, or an automatic calculation of the impact on balance at retirement. We have heard that some providers did try interventions such as pop-ups, but do not have the data to evaluate their content or examine their efficacy.

It is important that any friction does not make switching too difficult, as it can still be the best choice for an investor, even if they lose money.

For providers, targeting segments of their customer base will allow more effective communication and interventions. This might mean taking different approaches for investors with advisers and for those without, and considering different messages, channels or messengers for younger age groups. Providers could also take investors’ wider financial situation into account, especially if they have other investments.

As advisers seem to have made a difference, providers should consider whether there is more that could be done to target members without advisers.

Providers reported substantial increases in call centre volumes and wait times, and providers may need to be better prepared to support customers at such times. Cross-training of call-centre staff and regular refreshers could help ensure additional staff are available internally.

5. There is no clear impact on investor behaviour from provider communications

This section looks at information on social and other media, both directly from providers and more generally, and gauges how that may have impacted people's decisions to switch or not switch and explores ways regulators and providers can support investors.

Most providers communicated with their members, but it wasn't clear what effect this had.

We were informed that all the providers in our sample increased their communications during COVID-19, but the data from providers didn't allow us to assess whether their communication campaigns or other interventions made a difference to the levels of switching by their members. Some providers advised that marketing and customer transactional data is normally not connected in their systems.

Providers used a range of communication methods including webinars; Facebook live events; letters; emails; and social media posts. A brief analysis by the FMA of provider Facebook posts during the period of market volatility shows that almost all providers posted about the drop in balances, often alongside a message to stay the course.

Generally, non-bank providers made more posts and provided more information in their posts. Many non-bank providers posted multiple times, sometimes several days in a row and tended to provide more informative and interactive posts.[19]

Investor decisions may have been influenced more by their peers than by providers.

Social norms and herd behaviour suggest that people tend to follow what others do. No matter how providers tried to influence their members, the herd mentality might have just been too strong, leading many investors to follow in the footsteps of what others were doing.

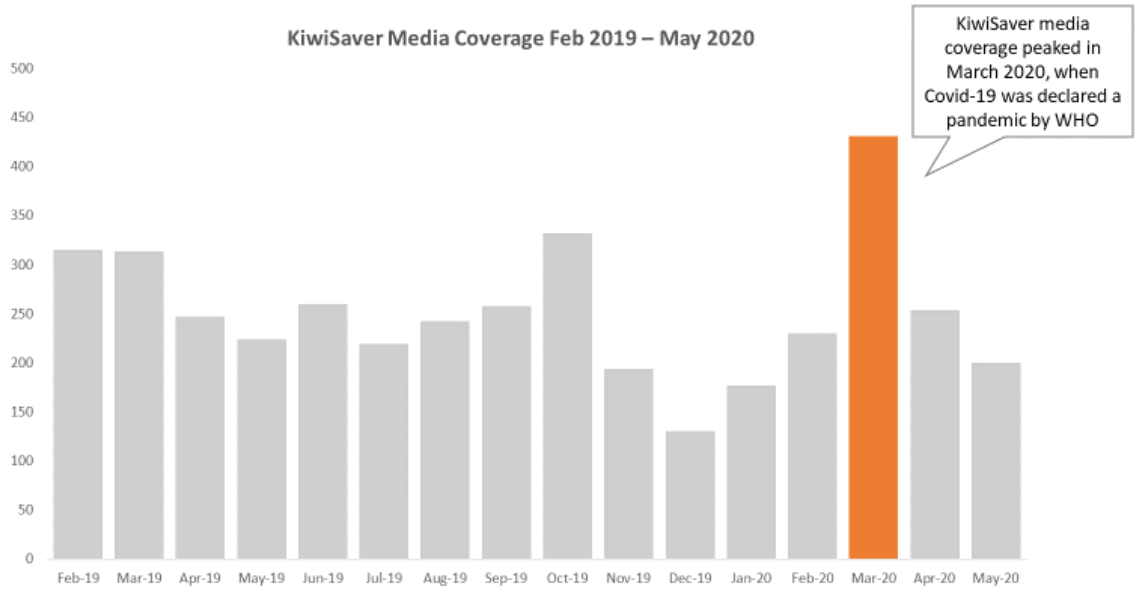
Not all people follow their KiwiSaver provider on social media, and some ignore letters and emails. However, they pay attention to what their friends and others they trust are doing. For some investors, seeing others switching their funds may have enticed them to do the same, despite expert advice not to.

Media coverage of KiwiSaver increased substantially during COVID-19.

The FMA conducted brief research and analysis into the media coverage around this time to understand how this may have impacted investors' choices. In general, there was significantly heightened media coverage of KiwiSaver during March 2020 compared to other months, with a specific focus on volatility, dropping balances and financial advice.

[19] Source: FMA analysis of provider social media posts.

Figure 9. KiwiSaver media coverage in March 2020[20]



KiwiSaver members were also talking to each other via social media.

The FMA also analysed social media channels and found that consumers were using social media to seek clarity about staying in growth KiwiSaver funds or changing to conservative funds. The most mentions of COVID-19 and switching were on Reddit, but comments were also prevalent on blogs, Instagram, Twitter and websites. While early sentiment was largely negative, later 'chatter' became more focused on staying the course to meet longer-term investment goals.

Increased provider, media and social media comment may have made falling KiwiSaver balances more salient.

Salience relates to how easy information is to recall. People are more likely to remember and act on information that is vivid or emotionally charged. While providers were quick to encourage investors to stay calm and stay the course, and media and social media picked up on these themes, the sheer volume of communications could have incited panic in some.

Negative framing probably influenced investors' decisions.

The sentiment of falling' KiwiSaver balances in many headlines may have had a bigger influence on investors than the detail of the reports. Even good advice can be misconstrued when it is framed poorly.

Behavioural research indicates that messages that are more personalised or draw on social norms are more effective at influencing people's behaviour. While data limitations mean we

[20] Source: FMA analysis. Statistics include New Zealand based online news media, broadcast media (TV and radio) and NZME & Stuff newspapers. Data does not include blogs, magazines or media releases

can't observe how specific messages or channels influenced people's behaviour during COVID-19, it seems likely this may have played some part in the increased switching.

Implications

For both providers and regulators, the importance of communication in supporting investors' decisions cannot be overstated. It is crucial that investors have access to the right information, and that they can easily process it.

Providers could use careful, timely, targeted communications. Behavioural science trials show the way messages are framed can have a big impact on their effectiveness. Even if the overall message is one of caution, if it starts by referencing panic, market volatility or dropping balances, it may elicit a stronger negative reaction and cause investors to switch for emotional, rather than 'rational' reasons.

A targeted message can be more effective than a generic one. If providers want to effectively communicate with younger people who may need more support, for example, they may be better to use a message along the lines of "we know uncertainty can be worrying, but more than nine out of ten 26-35 year-old Kiwis are following the advice to stay the course with their KiwiSaver". Even better, providers could draw on significant behavioural research into personalisation of communications.

For tailored and group messages, there is considerable scope to test the impact of specific messages through trials and build an evidence base of what works, along the lines of the 2019 the FMA and ANZ trial on the impact of letters on KiwiSaver member behaviour.[21]

For providers, use different channels to get messages heard. The message, messenger and the way it gets across are all important. Providers should know who they're targeting with their communications and how different customer groups will respond to different messages through different channels. There is no simple 'one size fits all' approach.

For providers, use trusted messengers and peers to share your messages. Using relatable people who are 'like' your target audience (or role models) can help convey your messages to those who are harder to reach through traditional means. Peers can achieve greater cut-through and persuade us to follow their example than outside influencers – hence the widespread use of 'refer-a-friend' bonuses. Following the example of social media badges for voting, providers or the FMA could test ways to encourage younger KiwiSavers to share their decision to stay with their fund.

For regulators, encourage more effective evaluation of engagement. Based on this research, there is no way of assessing the impact of communications on member behaviour. This was a key limitation of the data used in this study. Regulators could ask providers to link marketing and member data and encourage more effective evaluation of marketing and communication efforts.

[21] https://www.fma.govt.nz/assets/Reports/ANZ-Behavioural-Insights-Trial-Final-2.pdf

6. Younger people made increased KiwiSaver withdrawals

The FMA wanted to explore if any other transactions shifted during COVID-19. This section finds that younger people made slightly more withdrawals from KiwiSaver during COVID-19 both for home deposits and for significant hardship, and that withdrawals increased significantly afterwards.

First home withdrawals increased significantly during and post-COVID-19.

The age group most likely to switch – 26 to 35 year olds – also made more first home withdrawals during and after COVID-19 than the year prior. In general, the number of first home withdrawals for this age group is higher during and after COVID-19 than it was the year before, with 47.1 per cent more first home withdrawals made per month in 2020 than in 2019.

Table 13: Comparison of KiwiSaver first home withdrawals during COVID-19 and the same period in previous year

First home withdrawals	2019	2020	Change from previous year
Total (February to April)	6,874	7,606	1.1 times higher during COVID-19
26 to 35 year olds (February to April)	3,753 (54.6% of first home withdrawals made by this age group, 23.0% of members)	4,305 (56.6% of first home withdrawals made by this age group, 23.0% of members)	1.2 times higher during COVID-19
Total (May to August)	9,412	13,047	1.4 times higher after COVID-19
26 to 35 year olds (May to August)	5,020	7,101	1.4 times higher after COVID-19

First home withdrawals have increased each year since KiwiSaver began, as balances built up. This trend continued despite COVID-19, especially in May to August 2020, after New Zealand's lockdown had lifted.

The increase was slight, and far smaller than the number of first home withdrawals during COVID-19 was far smaller than the number of fund switches.

First home withdrawals are most often from defensive or conservative funds.

KiwiSaver investors are regularly cautioned to be in a more conservative fund if they need money soon (for a first home withdrawal or retirement). Analysis by the FMA of withdrawal data shows members generally heed this advice, but typically only switch one to three months before withdrawing[22]. Both before and after COVID-19, most KiwiSaver investors were withdrawing from a defensive or conservative fund.

One hypothesis for increased fund switching during COVID-19 was that members were withdrawing for a first home. However, the low numbers of withdrawals relative to switches and the similar pattern of switching pre-COVID-19 suggests this was not the case.

A higher proportion of hardship withdrawals were made by younger people during COVID-19.

Throughout 2019, people aged over 45 made 49.7 per cent of all hardship withdrawals, and during and after COVID-19 the amount of hardship withdrawals made by this age group remained steady.

Younger people, however, saw an increase in hardship withdrawals, with 50 per cent more during and after COVID-19 than normal.

Table 14: Comparison of KiwiSaver hardship withdrawals during COVID-19 and the same period in previous year

Significant hardship withdrawals	2019	2020	Change from previous year
Total (February to April)	2,707	3,024	1.1 times higher during COVID-19
26 to 35 year olds (February to April)	528 (19.5% of hardship withdrawals who make up 23.0% of members)	777 (25.7% of hardship withdrawals)	1.5 times higher during COVID-19
Total (May to August)	3,428	4,406	1.3 times higher after COVID-19
26 to 35 year olds (May to August)	715	1,135	1.6 times higher after COVID-19

Younger people may have been more likely to be employed in roles and sectors that were impacted by COVID-19. FMA research cited in Section 3 showed households headed by young people are most likely to be financially exposed, facing greater risk of hardship.

[22] Analysis conducted by FMA provided for this research.

Implications

For regulators, the increase in withdrawals during COVID-19 suggests the **design of KiwiSaver is probably helping New Zealanders achieve their goals**.

However, there are inherent tensions between saving for a first home deposit and retirement. This dual purpose is underscored by there being very little overlap between 26-35 year olds who switched and those who made withdrawals during COVID-19, when in theory first home buyers should be the group most likely to switch. Members could be encouraged into lower risk funds much earlier in their home buying journey.

In the meantime, regulators could ask providers to remind members about the need to choose a lower risk fund as they approach a first home withdrawal.

7. Conclusion

Provider data confirms contemporaneous reports of a large increase in KiwiSaver members switching funds as the stock market indices and value of investor funds fell. The level of switching was unprecedented for KiwiSaver, although 96.1 per cent of members did not switch during that period.

While such behaviour may not fit a rational economic model of long-term financial investment, it is understandable that some KiwiSaver members would want to contain their losses. Indeed, professional investors use stop-loss orders for that purpose.

Surprisingly, people aged between 26 and 35 were significantly more likely to switch to more conservative funds than older investors. This did not appear to be because most were planning to withdraw for a first home. Instead it may be due to other reasons, including:

- the shock of a stock market crash that this cohort hadn't seen before
- product innovations that increase the salience of KiwiSaver balances and make switching easier
- greatly increased communication on KiwiSaver losses.

For those who had switched to lower risk funds, they collectively moved over $1 billion into conservative funds. Those funds missed out as the market rebounded, which affects people saving for a first home deposit or longer term for their retirement.

An additional lesson is that KiwiSaver providers do not collect the data to assess the effectiveness of their communications. There is widespread evidence that behaviourally informed customer communications can increase their impact, and it is relatively straightforward to design trials to test different types of message or channel. A more nuanced understanding of customers can help providers support their wellbeing, and potentially improve providers' bottom lines.

Finally, there were limitations and inconsistencies in the data used for this research. Without data on ethnicity, it was not possible in this research to understand the impact of COVID-19 on KiwiSaver members for different ethnic groups, including tangata whenua. As administrators of KiwiSaver, the FMA and IRD should work with providers, iwi and hapū to regularise and increase the scope of data it routinely collects on Māori. This can help the FMA to honour the Crown's responsibilities under Te Tiriti o Waitangi (the Treaty of Waitangi). Similarly, data on gender collected by many providers is binary – male or female. This does not reflect Stats NZ guidance on the collection of gender statistics.[23]

These data limitations underscore the importance of validating the findings and hypotheses in this report through applied behavioural science and rigorous data collection to build the FMA's understanding KiwiSaver members behaviour and what best helps them.

[23] Stats NZ (2021) *Statistical standard for gender, sex, and variations of sex characteristics*

Annex 1: Selected behavioural science concepts in the context of financial decision-making

Below we describe the core behavioural science concepts used to explain some of the decisions and actions outlined in this report.

Generally, we explore three main types of behavioural science concepts: inertia, locus of control and attention.

Table 15. Selected behavioural science concepts

Concept	Type
Action bias	Locus of control
Bandwidth	Attention
Default choices	Inertia
Friction	Inertia
Herd behaviour	Attention
Mental accounting	Attention
Present bias	Locus of control
Regret aversion	Attention
Salience bias	Attention

Action bias

Action bias refers to our preference to do something over doing nothing. There are times we feel compelled to act, even if it may not lead to a better outcome than doing nothing.

A common example of action bias is soccer goalkeepers. Most goalies will dive to either side to attempt to stop an opposition player from scoring – even though their chances of successfully blocking the goal can be statistically better if they don't move beforehand.[24]

Action bias relies on the belief that doing something is better than doing nothing. We often feel that people will judge our failures less harshly if we prove we tried. Often, even if the action doesn't pan out how we hoped, we rationalise that things would have been worse if we'd done nothing. This serves to fuel action bias.

Bandwidth

Bandwidth refers to our cognitive capacity and the ability to pay attention, stick with our plans, resist temptations and make good decisions. Research shows that stress, even when

[24] Bar-Eli, M., Azar, O., Riov, I., Keidar-Levin, Y., & Schein, G. (2007). Action bias among elite soccer goalkeepers: The case of penalty kicks. Retrieved from: https://www.sciencedirect.com/science/article/abs/pii/S0167487006001048

subconscious, can substantially reduce our cognitive capacity and ability to make good decisions, especially when that stress is caused by our finances.[25]

Generally, those that are better off are more likely to take their time and be able to think clearly about the risks, benefits and consequences of their decisions. This is because they have fewer other factors disrupting their thought and decision-making processes.

This has important implications for financial service providers, as it is often those who are less well-off that will require the most support to make the best decisions. Making decisions easy and reducing the amount of effort required is important for helping people make better financial decisions.

Default choices

People have a strong tendency to stick with the 'default' option, which occurs unless there is an active choice to do something else. It is important for policymakers and regulators to understand which defaults exist, and how they can be used to improve desired outcomes.[26]

KiwiSaver has a range of default settings – automatic enrolment upon beginning employment, a set of default providers, default fund choices – that are all designed to maximise uptake assuming people don't always make active choices.

KiwiSaver – harnessing the power of auto-enrolments

KiwiSaver itself remains a world-leading 'nudge' to increase retirement savings. As enrolment in KiwiSaver is automatic on employment, KiwiSaver membership has increased significantly since it was introduced.

This demonstrates the power of automatic choices, compared to other incentives, especially financial ones. Studies have shown that tax incentives, for example, make little difference to the uptake of savings schemes. One study in Denmark found that around 85 per cent of people are 'passive savers', who do not increase their savings in response to incentives such as subsidies or tax breaks.[27] However policies or schemes that do not rely on people taking action can increase savings substantially. In this way, making the desired behaviour – such as being enrolled in a retirement scheme – the default option, can help to encourage people to make better choices.

Friction

The best way to encourage certain decisions or actions is to make them as hassle-free as possible. The effort associated with taking an action is known as friction, and it can work in two ways. Removing friction can help to make an action easier, thereby increasing uptake, while conversely adding friction can be a way to discourage undesirable behaviour.[28]

[25] Novotney, A. (2014). The psychology of scarcity. https://www.apa.org/monitor/2014/02/scarcity
[26] Behavioural Insights Team (2014). EAST: Four simple ways to apply behavioural insights.
[27] Chetty, R., Friedman, J., Leth-Petersen, S., Nielsen, T., & Olsen,m T. (2013) Active vs. passive decisions and crowd-out in retirement savings accounts: Evidence from Denmark. Retrieved from: http://nrs.harvard.edu/urn-3:HUL.InstRepos:27304884
[28] Behavioural Insights Team (2014). EAST: Four simple ways to apply behavioural insights.

Often, one small step in a process can discourage people from following through. For example, including a link to a survey in an email, rather than directing people to go to the website, has been shown to significantly improve response rates. By removing just one click, we can remove friction and make it easy for people to do what we want them to do.

Herd behaviour

Herd behaviour is about people's tendency to follow their peers. People rely on what others are doing to help them make decisions, rather than using their own information.[29] This is particularly relevant in finance, where it has long been observed in relation to the collective irrationality of investors, including stock market bubbles.[30]

Social influence can be a powerful force in decision-making. There are several instances where it can be useful, such as when animals move in groups to avoid danger. However, the challenge comes when the best decision for a person contradicts what others are doing.

Mental accounting

Rational economic models are based on the idea that money is fungible – and it is. $100 is $100 regardless of where it came from, where it's kept or where it goes. Behavioural science suggests, though, that people tend to assign money for different purposes, and treat it differently as a result. This is mental accounting.[31]

Often, mental accounting helps people to budget. Think of allocating money to different jars for rent, groceries, a holiday or to save. Separating funds makes it easier for most of us to manage our money and meet our financial goals.

Present bias

People are predisposed to focus on the present over the future. Research shows that people tend to give stronger weight to payoffs that occur sooner. People are generally short-sighted and can struggle with long-term planning.[32] This can be illustrated by a simple example:

> Given a choice between $100 now and $120 in a month, most people would choose to take the $100 now. However, when the choice is between $100 in 12 months and $120 in 13 months, most people are willing to wait the extra month.

The desire for instant gratification can cloud our judgement and entice us to make decisions that work against our long-term interests. While there are no instant payoffs in KiwiSaver – either way, investors can usually only access their money when they turn 65 – the ability to check an app and see if the balance has gone up or down can make this money seem more 'real' and accessible than it really is. People may be more likely to make decisions that impact the short-term balance of their savings, without thinking about the longer-term impact on the balance at retirement.

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[29] Baddeley, M. (2010). Herding, social influence and economic decision-making: socio-psychological and neuroscientific analyses. Retrieved from: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2827453/

[30] Behavioural economics.com. https://www.behavioraleconomics.com/resources/mini-encyclopedia-of-be/herd-behavior/

[31] The Decision Lab. Why do we think less about some purchases than others? Mental accounting explained. https://thedecisionlab.com/biases/mental-accounting/

[32] Xiao, J. (2019). Present bias and financial behaviour. Retrieved from: https://onlinelibrary.wiley.com/doi/full/10.1002/cfp2.1048

Regret aversion

Regret aversion occurs when a decision is made to avoid the feeling of regret. Regret is one of the more powerful emotions when it comes to impact on our decision-making.[33] And regret aversion works both ways, through fear of regretting doing something or regretting *not* doing something.

People are worried about doing the wrong thing or not doing the right thing, and sometimes think less about making a good decision and more about avoiding a bad one.

Regret aversion may be even stronger in decisions with significant consequences, such as decisions that impact our financial wellbeing. This makes regret aversion an important bias for financial service providers and regulators to be aware of.

Salience bias

Salience bias describes the way people focus on information that is noteworthy or memorable, even if it is less relevant than other information. It can be a way to cope with information overload, to pick through large amounts of information when making decisions.

The ability to quickly detect what is important and deserving of our attention is important. However, we are generally predisposed to focus on the most prominent or emotionally striking details, which sometimes leads us to ignore vital pieces of information.[34]

[33] Gazel, S. (2015). The regret aversion as an investor bias. Retrieved from: https://www.researchgate.net/publication/312525979_THE_REGRET_AVERSION_AS_AN_INVESTOR_BIAS

[34] Clinehens, J. (2020). Salience: The psychology of an experience you can't ignore. https://uxmag.com/articles/salience-the-psychology-of-an-experience-you-can%E2%80%99t-ignore

Annex 2: High-level methodology

This report ultimately sought to answer five questions through data from KiwiSaver providers:

1. What was the scale of the increase in fund switching during COVID-19?
2. Who were the most likely investors to make a fund switch?
3. What types of providers saw more fund switching?
4. What was the choice environment in which this switching was happening?
5. Did other transaction types also increase during COVID-19?

The answers to these questions were then supplemented by a pragmatic literature review into relevant behavioural science concepts that may help to explain what was driving the decisions investors made to switch funds.

We first needed to define both the period of interest and a baseline period to compare against. The period of interest was defined as between February and April 2020, during the height of the market volatility associated with COVID-19. In order to ensure the data request was as easy as possible for providers to fulfil, we decided that 2019 was an appropriate baseline year. This allowed us to ask providers for switching data for a continuous period from 1 January 2019 through to 31 August 2020.

Overall data was received from 11 providers, accounting for nearly 2.4 million KiwiSaver members. Data that could be used to analyse fund switching was received from seven providers, accounting for around 1.5 million members.

Throughout the report, when we refer to switches, this is in reference to a switch out of or into a fund. Where members made multiple switches in a given time period, each one will be counted towards the number of switches. So switch counts do not refer to the number of members who switched, rather it is the number of switches made.

It is worth noting that switches often consist of more than one withdrawal or deposit. For example, some members switch from one fund to two or more new funds. For the purposes of analysing the direction of fund switches, we confined analysis to switches to and from single fund types as it was impossible to work out the exact switch direction or distribution of funds across multi-fund switches. Switch direction was categorised as either higher risk, lower risk or neutral depending on the funds switched out of and into.

To understand who was most likely to switch and the types of providers that saw the most switching, switching rates during the COVID-19 period were compared against the baseline time period across combinations of variables including gender, age and provider types.

Annex 3: Limitations of this report

Data inconsistency

While it was great to receive data from 11 providers for this research, each provider had a different understanding of the data requested, different format for storing and providing the data and different ability to fulfil the request. As a result, there were significant inconsistencies between datasets that limited our ability to align the data of different providers and compare between them.

In addition, providers did not necessarily have all the data we would have liked. For example, we were unable to explore ethnicity as a factor in switching patterns as some providers did not have or provide this data.

Not all KiwiSaver members are captured

Provider data covered around 2.4 million KiwiSaver members – over three quarters of the total population of KiwiSaver members. However, we could only compare data from 7 of those providers, covering 1.5 million members. This is still a very large sample, and probably representative. But the data may not capture the experience of all KiwiSaver members.

Hindsight bias

The research and report were both developed with the benefit of hindsight. It is easy to conclude that people who switched to a lower risk fund made a worse long-term decision than those who stayed put. In part, this is due to the speedy recovery in financial markets. This also accords with investment theory that people should hold on to longer term investments, rather than making short-term decisions.

It is worth acknowledging that for many investors switching to a lower risk fund could still be the right choice as it gave them a sense of comfort and security over their investment, even if ultimately leads to lower returns.

Research methodology

This report is largely based on data analysis and a pragmatic behavioural literature review. This work was commissioned some time after March 2020, so was not conducted at the time people made decisions. Nor was there scope to conduct qualitative research with KiwiSaver members to explore their thinking or financial decisions.

Focus on switches

This research focuses on those who switched their KiwiSaver funds when the market dropped in early 2020. However, this was only a very small minority of investors, and a far larger proportion *didn't* make any fund switches. It is important to acknowledge that most people stayed the course.

Time lag

There is a variable time lag between initiating a switch and it being enacted between providers, and even between funds. This is not evident from the data. Our data analysis is based on the timing of when switches were made in provider systems, not when customers first requested a fund switch.

Annex 4. Comparison of switches by bank and non-bank customers

Table 16. Bank and non-bank customer switching by age group in February to April 2019 compared to February to April 2020

Age group	Non-bank switching 2019	Non-bank switching 2020	Difference	Bank switching 2019	Bank switching 2020	Difference
18-25	909	1,257	1.38	1,176	7,352	6.25
26-35	2,318	3,153	1.36	2,877	22,904	7.96
36-45	2,848	3,302	1.16	3,406	17,071	5.01
46-55	3,493	3,092	0.89	2,745	11,897	4.33
56-65	1,380	2,948	2.14	3,261	11,392	3.49
66+	622	824	1.32	1,144	2,381	2.08
Total	11,635	14,782	1.27	14,703	73,330	4.99

Annex 5. Disclaimer

This report has been prepared solely for the purposes stated herein and should not be relied upon for any other purpose.

This report is strictly confidential and (save to the extent required by applicable law and/or regulation) must not be released to any third party without our express written consent which is at our sole discretion.

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We have not independently verified the accuracy of information provided to us and have not conducted any form of audit in respect of the Financial Markets Authority. Accordingly, we express no opinion on the reliability, accuracy, or completeness of the information provided to us and upon which we have relied.

The statements and opinions expressed herein have been made in good faith, and on the basis that all information relied upon is true and accurate in all material respects, and not misleading by reason of omission or otherwise.

The statements and opinions expressed in this report are based on information available as at the date of the letter.

We reserve the right, but will be under no obligation, to review or amend our report, if any additional information, which was in existence on the date of this report was not brought to our attention, or subsequently comes to light.

This report is issued pursuant to the terms and conditions set out in our Consultancy Services Order dated 20 July 2020.