

# **5. Switching investments in defined contribution retirement savings arrangements**

---

This chapter provides options to policy makers to address the potential negative consequences of frequent switching of investment strategies within defined contribution retirement savings arrangements. It discusses the drivers and impacts of frequent switching. It also provides an overview of how jurisdictions are approaching this problem and the measures that they have taken to limit the negative impact of switching.

---

Members in individual defined contribution (DC) pension arrangements often have significant flexibility in deciding how to invest their retirement savings. They also can, under certain conditions, change their decision over time and transfer their accumulated balances to different investment strategies or different pension providers. The ability for savers to make their own investment decisions intends to allow individuals to invest in a manner consistent with their own risk tolerance and investment horizon. However, in reality, individuals have low levels of financial literacy and may not necessarily be well equipped to make these types of investment decisions on their own. As such, they may look for external information or advice to help them make investment decisions.

International evidence shows that frequent trading typically results in worse investment outcomes. The vast majority of those switching retirement savings investments would have had better investment returns by either staying invested in their original fund or investing in the default investment option. The possibility of frequent switches in large volumes leads pension providers to hold more liquidity, which may prevent them from taking a long-term view of their investment strategy and lead them to forego earning higher potential term and liquidity premiums. In addition, frequent trading in high volumes can destabilise the market by affecting asset prices over the short term and increasing market volatility. Furthermore, external influences that may lead individuals to try to ‘time the market’ or have short-term reactions to market downturns, can exacerbate the negative implications of transfers between investment strategies and providers.

Policy interventions may therefore be necessary to deter frequent switching and make sure that switching investment strategies is not likely to result in lower retirement income for participants or decrease stability in the financial markets. Such interventions could target individuals, the design of the system itself, or potential external influences.

This chapter first investigates the main drivers that can lead individuals to transfer their assets from one investment strategy to another. It then looks at the implications that these transfers can have for retirement savings and the financial system as a whole. The third section provides an overview of how jurisdictions are approaching this problem and the measures that they have taken to limit the negative impact of switching. The final section discusses the policy options available to address the problem of frequent switching of retirement savings investments given international experience.

## 5.1. Drivers of switching of retirement savings investments

Numerous factors can lead individuals to change investment strategies. Contextual elements matter and savers demonstrate different trading behaviour in different investment settings. Certain demographics may be more prone to switching investments than others. Various behavioural biases can also lead to trading strategies that may not be optimal, and past trading experience may influence an individual’s tendency to trade in the future. Financial advisors can also affect whether individuals switch investments and the various behavioural biases may also contribute to the influence their recommendations have in switching investments.

### *Investment context*

Individuals tend to trade less with retirement savings compared to other types of investment accounts. Indeed, those having a discount brokerage account in the United States traded over five times more than individuals traded within their 401(k) DC retirement savings account (Agnew, Balduzzi and Sundén, 2003<sup>[1]</sup>). This result is not surprising, as people with brokerage accounts are self-selected and are not likely to be representative of the larger investment population (Biliias, Geogarakos and Haliassos, 2010<sup>[2]</sup>). Retirement savings accounts cover a broader proportion of the population, particularly where this saving is mandatory.

The majority of individuals do not regularly switch investments within their DC retirement savings accounts. Over a four-year period in the late 1990s, 87% of the individuals in a sample of 401(k) participants made no trades, and only 7% traded more than once. On average, the sample traded once every 3.85 years with an average annual turnover of 19% (Agnew, Balduzzi and Sundén, 2003<sup>[1]</sup>). A later study on 401(k) participants confirmed this tendency, showing that 80% of participants made no trades and only 9% traded more than once over a period of two years (Mitchell et al., 2011<sup>[3]</sup>). Another study showed that nearly three-quarters of the participants in the TIAA-CREFF plan for academics made no changes to asset allocation over a longer period of ten years (Ameriks and Zeldes, 2000<sup>[4]</sup>). In Chile, only 6.6% of participants made active changes to their pension investment over a period of ten years from 2007 to 2016 (Villatoro et al., 2019<sup>[5]</sup>).

The existence of a default investment strategy within DC retirement savings arrangements may reinforce individuals' tendency to not actively make an investment choice. Default investment strategies use individuals' tendency towards inertia to provide an investment strategy that protects those who do not choose one for themselves. The extent to which individuals remain invested in the default investment strategy varies significantly from one jurisdiction to the next, though in all cases the proportion that do remain in the default is significant. In Sweden, around 99% of new enrollees to the Premium Pension do not actively choose their investment strategy (Frankkila and Lantz, 2020<sup>[6]</sup>). In Peru, 92% of pension savers invest in the default fund for their age (Superintendencia de Banca, Seguros y AFP, 2019<sup>[7]</sup>). In Singapore, over 90% of non-housing savers stay in the default fund. In Chile, the proportion of savers invested in the default is large but has rapidly declined over time. In 2002, 84% of participants remained invested in the default option, but by 2006 this proportion had fallen to 66% (Tapia and Yermo, 2007<sup>[8]</sup>). Other jurisdictions demonstrate a lower but still significant proportion of savings that stays in the default investment strategy. In the United States, investment in the default exceeds 60% in some cases, though other studies have shown lower levels of around 30% (Madrian and Shea, 2001<sup>[9]</sup>; Beshears et al., 2006<sup>[10]</sup>). In Latvia, 25% of participants in the mandatory plan remain fully invested in the conservative default fund, either by default or by choice (OECD, 2018<sup>[11]</sup>).

### ***Demographics***

Certain demographic groups are more prone to active trading than others. In particular, active traders tend to be men with higher incomes. Higher income males demonstrate more active trading behaviour within their 401(k) investments and brokerage accounts in the United States (Mitchell et al., 2011<sup>[3]</sup>; Agnew, Balduzzi and Sundén, 2003<sup>[1]</sup>; Barber and Odean, 2001<sup>[12]</sup>). Active traders also tend to be older and married (Agnew, Balduzzi and Sundén, 2003<sup>[1]</sup>). Higher income men in Singapore also tend to more actively trade their pension savings, however in contrast to the United States, they are more often young and single (Fong, 2020<sup>[13]</sup>). Similarly in Chile, active traders tend to be young men with more wealth and education (Villatoro et al., 2019<sup>[5]</sup>; Da et al., 2017<sup>[14]</sup>). Two-thirds of those switching their investment strategies in Chile have been men, and the average age is around 42 (Superintendencia de Pensiones, 2020<sup>[15]</sup>).

While men have a tendency to more actively trade, they are not necessarily more inclined on average to actively choose an alternative investment strategy to the default. Younger women in Sweden are more likely to actively choose their pension investment (Cronqvist and Thaler, 2004<sup>[16]</sup>). Women in Chile are more likely to not be in the default investment fund (Kristjanpoller and Olson, 2015<sup>[17]</sup>). Nevertheless, in Peru a higher proportion of women than men remains invested in the default fund (Superintendencia de Banca, Seguros y AFP, 2019<sup>[7]</sup>).

### ***Investor biases***

There are numerous biases that can lead individuals to overtrade, and potentially be more susceptible to following recommendations to time the market or reallocate their investments during large market movements. Biases include overconfidence, anchoring, and herding. Individuals' past trading experience can also affect their propensity to continue to trade in the future. However, while the prevalence of

behavioural biases on investment decisions is well documented, most studies have taken place in the context of brokerage accounts.<sup>1</sup> Finally, some biases may be more acute with certain demographics, such as wealthier men, which can contribute to their propensity to actively trade.

### *Overconfidence*

Overconfidence is an overestimation of one's skills and knowledge, and is a widely documented bias among retail investors, particularly those with brokerage accounts (Odean, 1999<sup>[18]</sup>). Overconfidence typically leads to excessive trading and increased market volatility (Odean, 1999<sup>[18]</sup>). This bias can manifest itself through the overextrapolation of past returns, leading individuals to react slowly to recent relevant information and resulting in positive feedback trading to buy past winners and sell past losers (Kim and Nofsinger, 2007<sup>[19]</sup>). As such, overconfident traders tend to follow short-term observed trends and to demonstrate a strategy independent from market fundamentals. Investors tend to demonstrate more overconfidence in bull markets, and exhibit higher frequency of trades following gains (Chuang and Susmel, 2011<sup>[20]</sup>).

Certain demographics may be more prone than others to demonstrating certain biases. In particular, it is widely documented that men exhibit higher levels of overconfidence than women. This tendency extends itself in the context of investment (Barber and Odean, 2001<sup>[12]</sup>). Indeed, two-thirds of Chileans switching their pension investment at least once since 2014 have been men, indicating that overconfidence may be playing a role in trading activities (Superintendencia de Pensiones, 2020<sup>[15]</sup>). Interestingly, however, financial education does not seem to be linked to the extent to which biases interfere with investment behaviour, and some studies have shown financial education to be an independent variable (Novianggie and Asandimitra, 2019<sup>[21]</sup>). Indeed, those who trade most tend to have more education and/or income.

Trading experience over time may also serve to reinforce or contradict existing biases, in particular that of overconfidence. There is some evidence that turnover reduces with experience, indicating that as individuals become more familiar with investing their overconfidence is somewhat mitigated (Meyer et al., 2012<sup>[22]</sup>). However, other studies indicate that experience may reinforce overconfidence, as confident investors rely on naïve indicators to learn, in particular the over extrapolation of past returns (Hoffmann and Post, 2016<sup>[23]</sup>). Nevertheless it does seem that if individuals conclude with experience that they are not successful at trading, they are more likely to stop (Barber et al., 2017<sup>[24]</sup>; Seru, Shumway and Stoffman, 2009<sup>[25]</sup>).<sup>2</sup>

### *Anchoring*

Anchoring is the tendency to rely primarily upon recent or salient information in one's assessment of a situation, regardless of its relevance to the problem at hand. In an investment context, this can lead investors to place too much importance on recent prices in making their investment decisions. As an example, in Chile there was a substantial transfer of funds from the aggressive Fund A to the conservative Fund E following a large drop in equities in October 2008 (Berstein, Fuentes and Torrealba, 2011<sup>[26]</sup>). Anchoring may also lead investors to overreact to dramatic news events or salient pieces of information, and overweight the event in their trading decision (De Bondt and Thaler, 1985<sup>[27]</sup>). Indeed, investors tend to buy more stocks that are featured in the news than those that are not (Barber and Odean, 2007<sup>[28]</sup>).

### *Herding*

Herding is the tendency for individuals to follow and trust others' actions and judgement, leading to collective movement in the same direction. It can be either rational or irrational. Informational herding can be rational, and results from people following others whom they believe to be more informed than themselves. Irrational herding includes investors copying others blindly in spite of any information that they themselves have. Herding driven by imitation can impact prices and lead to increased volatility (Ouarda, el Bouri and Bernard, 2013<sup>[29]</sup>). There is also evidence that herding can increase the bid-ask spread and negatively impact liquidity in the market (Dewan and Dharni, 2019<sup>[30]</sup>).

Extreme markets can exacerbate people's tendency to herd. During crises, this can lead to collective selling and pro-cyclical investment that could aggravate market downturns (Mobarek, Mollah and Keasey, 2014<sup>[31]</sup>). During the financial crisis, one study of 401(k) investors in the United States found that there was an initial move away from equity, in line with following a herd mentality. However, the strategy later seemed to change as investors adopted a contrarian strategy, investing again in more equities (Tang, Mitchell and Utkus, 2011<sup>[32]</sup>). Similarly, Chilean investors moved away from equities during the peak of the financial crisis. Following a 20% drop in the most aggressive fund in October 2008, 3% of participants in that fund transferred their assets into the most conservative fund. However, once equities started to recover, 7.3% of those in the conservative fund transferred their assets back to the aggressive fund (Berstein, Fuentes and Torrealba, 2011<sup>[26]</sup>).

### ***The influence of financial communication and advice***

Financial advice can have a significant influence on the investment decisions of individuals. The extent of this influence depends in part on the way the advice is marketed and how the messages are conveyed. Certain target groups may be more prone to following financial advice. The investor biases discussed in the previous section can also play into individuals' inclinations to follow the advice.

Marketing and communication campaigns can have a significant influence on the financial decisions that individuals make. Consumers are likely to perceive such campaigns as a form of generic financial advice, even though following the advice does not necessarily lead to better outcomes, nor is it necessarily intended to. Incentivised sales in particular can lead to negative consumer outcomes. In Mexico, sales agents for the pension funds operating in the mandatory DC pension system convinced pension participants to change providers even if it was not in their best interest to do so. Over the period from 2011 to 2014, over half of the annual transfers were to a pension fund offering a lower net return (OECD, 2016<sup>[33]</sup>).

Even well-intentioned communication campaigns can lead people to choose less optimal strategies. When Sweden introduced the Premium Pension, a communication campaign encouraged participants to make active decisions as to their investment strategy rather than to stay invested in the default strategy. As a result of this campaign, combined with the advertisements by pension funds, over two-thirds of new participants actively chose an alternative investment strategy, compared to less than 10% actively choosing once the campaign ended. However, compared to the default investment, these individuals tended to choose strategies that invested more in equities and had more active management, higher fees, and more home bias. Existing biases, such as the over extrapolation of recent returns, contributed to these choices (Cronqvist and Thaler, 2004<sup>[16]</sup>).

Lack of action may also provide evidence of the influence of marketing and communication. One study demonstrated that minorities tended to trade less frequently and attributed this to the fact that these groups tend to be less targeted by the financial sector that would encourage them to trade more (Bilias, Georarakos and Haliassos, 2010<sup>[2]</sup>).

Other factors may play a role in the extent to which individuals choose to follow financial advice or not. One informative study looks at which individuals are inclined to follow standardised financial advice in a setting where potential conflicts of interest have been mitigated. The study found that two-thirds of advice recipients ignored the advice completely, and that individuals with higher financial literacy were less likely to follow the advice. Nevertheless, the advice was much more likely to be followed when it was perceived to be solicited by the individual (Stolper, 2018<sup>[34]</sup>).

Investor biases can contribute to the tendency for individuals to follow external advice. Box 5.1 discusses evidence from Chile where unregulated financial advisors have been a significant driver of observed increase in switching investments of retirement savings accounts. The business models of these advisors seem well designed to exploit such biases.

### Box 5.1. Investor biases, financial advice, and frequent switching in Chile

Unregulated financial advisors in Chile exploit overconfidence by advertising their recommendations as intending to time the market. Investors trade more often when they attempt to time the market, following unregulated financial advice. This indicates that overconfidence in trading abilities (and ability to beat the market) contributes to excessive trading in Chile (Villatoro et al., 2019<sup>[5]</sup>). The proportion of participants actively trading has increased from 6.3% in 2014 to a high of 18.7% in 2018, decreasing slightly to 17.7% in 2019. The volume of transfers has correspondingly increased, reaching 28.5% of total assets invested in 2019, and daily switching requests in the same direction have represented up to 20% of a fund's value. In addition, 59% of individuals transferring during this period have done so more than once (Superintendencia de Pensiones, 2020<sup>[15]</sup>).

Anchoring may also be playing a role in the higher frequency of trading observed in Chile. The success of one of the unregulated financial advisors in attracting a large following can be in part attributed to the profitability of one of their first recommendations, which happened to precede a large decline in the stock market (Da et al., 2016<sup>[35]</sup>). Investors may therefore be using this success as a reference for the likelihood of profitability of subsequent recommendations, thereby overestimating this likelihood, which in reality seems largely due to chance.

There is also evidence that the trading volumes following the recommendations of the unregulated financial advisors in Chile are at least partially a result of herding behaviour, rather than investors simply following informed financial advice. Their marketing campaigns on social media and reliance on word of mouth advertising plays into people's tendency toward herding behaviour and imitating the observed strategies of others. Switching requests tend to remain high several days after recommendations made by one such advisor (Da et al., 2017<sup>[14]</sup>). This implies that those making later requests may be imitating the trading of friends and family. Consistent with irrational imitation herding, this behaviour should be against their better judgement given the daily volume limits on trading that are in place. If requested trades exceed 5% of total assets under management of a pension fund, the remaining trades are executed over the following days, and would therefore benefit less from any change in prices.

## 5.2. Implications of frequent switching of retirement savings investments

Frequent switching between investment strategies in large volumes can have a wide-ranging impact on the retirement system. At an individual level, frequent switching will likely result in worse net investment performance, reducing the level of retirement income that savers can ultimately receive. At the pension fund level, the need to sell large volumes of assets in a fund will reduce the expected duration and investment horizon of the strategy that they are able to employ. At the level of the financial markets and macro economy, large transfer volumes can move asset prices and create excess volatility in the markets, which may not reflect fundamentals.

### ***Impact on expected retirement income levels due to changing investment strategies***

Frequent trading generally tends to result in inferior net returns for individual investors compared to staying invested over a long period. Active traders in households with discount brokerage accounts in the United States earned a full 6.5 percentage points less in annual returns compared to the market return (Barber and Odean, 2000<sup>[36]</sup>). In Chile, over the ten year period from 2007 to 2016, there is a negative correlation between the frequency of transfers and investment performance, with each additional trade implying a reduction in performance of 62 basis points (Villatoro et al., 2019<sup>[5]</sup>). Since 2014, 25.3% of

individuals switching their investments have experienced lower returns than they would have had remaining in the original fund that they were invested in, with an average cumulative loss of 5.6% over the observation period (Superintendencia de Pensiones, 2020<sup>[15]</sup>). A recent report from the Swedish Pensions Agency showed no value creation from switching investment funds (Pensions Myndigheten, 2020<sup>[37]</sup>). Gender differences in returns have also been attributed to overtrading, with men earning lower returns than women because they trade more to their detriment (Barber and Odean, 2001<sup>[12]</sup>).

More specifically, active investment management strategies, particularly those having a riskier profile or trying to time the market, generally underperform relative to passive strategies for retail investors. For a large sample of brokerage accounts in the United States, profit-seeking trading resulted in underperformance compared to not trading (Odean, 1999<sup>[18]</sup>). Investors in 401(k) DC plans in the United States that reacted to market changes were not able to time the market (Agnew, Balduzzi and Sundén, 2003<sup>[1]</sup>). In Taiwan, individuals placing aggressive orders in the Taiwan stock market to buy stocks with high prices and sell them with low prices earned 20 basis points less over six months than they would have earned holding on to the stock they sold (Barber et al., 2009<sup>[38]</sup>). Recommendations by one unregulated financial advisor in Chile that claims to be able to time the market only outperform the contrarian strategy around half of the time (Da et al., 2017<sup>[14]</sup>). Another study tests the ability of a technical trading algorithm to outperform the market, and finds that it does not result in better performance and that even small transaction costs make investors worse off (Bajgrowicz and Scaillet, 2012<sup>[39]</sup>).

Lifecycle default strategies typically employed for retirement savings are more effective at protecting the retirement incomes of individuals than more risky strategies. One study shows that most individuals would be worse off relative to a target retirement income when given the choice of portfolio allocation between equities and bonds, and would be worse off still if also given a choice regarding which equity investments to make (Ahmed, Barber and Odean, 2016<sup>[40]</sup>). Lifecycle default strategies generally perform better than more risky strategies, in particular following a financial crisis. In Chile, riskier strategies are found to only perform substantially better if the crisis occurs within the first years of pension saving, and regardless, riskier strategies result in significantly more volatility and risk of shortfall than lifecycle strategies (Berstein, Fuentes and Torrealba, 2011<sup>[26]</sup>). Since 2014, 72.6% of those switching investment strategies in Chile would have been better off if they had remained invested in the default strategy, as they earned on average 4.4% less in cumulative returns. In addition, those switching more frequently were relatively worse off compared to the default (Superintendencia de Pensiones, 2020<sup>[15]</sup>).

### ***Impact on investment strategies of pension providers***

The objective of the investment strategy of a pension provider should be to grow the assets to provide an income in retirement, and as such it normally has a very long investment horizon. Investing in assets with a longer average duration can provide superior returns, as investment strategies can benefit from term and illiquidity premiums. An appropriately calibrated long-term strategy can also protect from losses due to market downturns as assets would not need to be sold when prices fall, thereby avoiding locking in and thus materialising any short-term losses.

The allocation to short-term assets seems to be related to the volume of transfers between pension funds and across investment strategies, though not everywhere. Over the observation period 2005-2015, the correlation of annual allocations to short-term assets and volume of transfers between providers exceeded 0.5 in Chile, Colombia and Mexico. The correlation with respect to the volume of transfers between funds was lower in all countries, except for Chile, where the correlation was 0.58 (Pedraza et al., 2017<sup>[41]</sup>).

Frequent and large trades require that pension funds sell assets more frequently or that they hold more liquidity. Selling assets more frequently and in larger volumes materialises short-term losses, preventing any benefit from a recovery in prices (Chapter 1). This can lead pension funds to act pro-cyclically, selling in downturns and buying in upturns, potentially exacerbating market downturns. Holding more liquidity or liquid assets means that they lose the potential higher returns of more illiquid long-term assets. In Chile,

the recent increase in the frequency and volume of trading has resulted in a shift towards more liquid investments. Since 2012, providers have shifted investments of the riskiest fund from equities to more liquid ETFs. In addition, the two funds most impacted by recent switching – the most aggressive and conservative funds – have experienced an increase in cash holdings. For the pension fund with the largest transfer volumes, the increase in cash is twice as large as that for other pension funds (Da et al., 2017<sup>[14]</sup>).

### ***Impact on the macro economy***

The implications of frequent and large volumes of switching may affect not only financial market variables but may also have spillover effects in the macro economy. Frequent trading tends to increase volatility in financial markets, and large volumes of trading in the same direction can move markets and impact prices well beyond fundamentals. These impacts may then have knock-on effects to market stability, exchange rates, and other macroeconomic variables.

Large trading volumes in the same direction can move asset prices due to the supply and demand dynamics of the market. The potential impact on price can be significant when the concentration of assets within the pension system is high. In Chile, pension providers hold around 30% of equities and government bonds. In addition, the largest ten stocks account for half of their domestic equity portfolio (Da et al., 2016<sup>[35]</sup>). Thereby, large volumes of trading within the pension system will also represent a large volume of trading for particular assets, so can have a greater price impact. Indeed, large volumes of switches between the most conservative and aggressive funds have impacted equity market prices by 1% in the first three days following the trades. However, this price impact indicates a lower elasticity than has been observed in the US market. In addition, the impact on bond prices is not statistically significant, likely due to the larger cash holdings of the conservative fund (Da et al., 2017<sup>[14]</sup>).

Following the initial price impact, herding tends to result in return reversion or even lower future returns, implying that price changes are not related to fundamentals and that the herding behaviour can be destabilizing in the long term. Indeed, in Chile the 1% price impact largely disappears within five days, and prices revert completely within ten days, indicating that the fund switches are largely noise trading and not trading on fundamentals (Da et al., 2017<sup>[14]</sup>). While sell herds can be particularly destabilizing, this does not seem to be the case in Chile where the sell recommendations affect prices more gradually (Kremer and Nautz, 2013<sup>[42]</sup>; Da et al., 2017<sup>[14]</sup>).

The impact that large trading volumes and price movements can have on the exchange rate will largely be a function of supply and demand dynamics driven by the allocation between domestic and foreign assets held by the pension funds. While strong equity markets can be linked to increased foreign investment, this is not likely to be a mechanism of transmission given that the price movements are brief and temporary. Furthermore, conclusions are mixed as to the relationship between exchange rates and equity prices, with some evidence indicating that the two are independent (Suriani and Kumar M., 2015<sup>[43]</sup>).

Large switches to assets denominated in foreign currencies could lead to a depreciation of the domestic currency. If this depreciation does not revert over time, it could potentially lead to an increase in import values and a reduction in nominal GDP growth. Alternatively, it could lead to adjustments in the medium term of imports directed for consumption, but increase the cost of producing domestically when some of the inputs needed come from abroad.

The increased volatility of prices as a result of frequent trading could potentially have other spillover effects on the macro economy. Increased uncertainty may lead to reduced consumption and could negatively impact hiring by firms. It could also potentially lead to a decline in output, with a 1% increase in uncertainty (i.e. the volatility of daily equity prices) associated with a slightly larger than 1% decline in output (Claessens and Kose, 2017<sup>[44]</sup>). Evidence is mixed, however, with respect to the impact that volatility has on investment.



### 5.3. Approaches to limit the negative impact of switching investments

Explicit limits or implicit barriers to frequent transfers between investment funds or pension providers are quite common in jurisdictions with widespread DC retirement income arrangements. Limits and barriers can apply to transfers between funds within a given provider and/or transfers between different providers. Limits often apply to only certain types of plans, for example those for mandatory contributions or plans offered through an employer.

Explicit limits are built into the design of the retirement system itself, and aim to align investment with the objective of the system to provide financial resources in retirement. The most common explicit limits are limits on the frequency of transfers, but explicit limits can also relate to which investment strategies certain individuals can switch to. Certain types of funds may be restricted to specific age groups, for example, with individuals nearing and in retirement forbidden from investing in the most aggressive strategies.

Implicit barriers intend to deter individuals from switching frequently, even if it is allowed. Implicit barriers that can deter frequent transfers without prohibiting them include administrative procedures, processing times, and additional fees that providers can charge.

In addition, regulation tries to ensure that any external information that can influence switching behaviour, in particular financial advice, will lead to positive outcomes for members. It does this by defining what information qualifies as financial advice and imposing requirements around how this advice is determined and communicated to consumers.

#### ***Limits on transfers between funds within a given provider***

Providers of DC retirement savings arrangements generally have a range of investment options of varying risk profiles available for members to choose from, and often allow members to transfer between the different available options. However, many jurisdictions regulate the types of investment funds that each provider can offer. Furthermore, the regulatory framework often imposes explicit limits on the frequency of transfers and the types of investment strategies that individuals can transfer to. Administrative procedures, slow processing times, and fees are also potential barriers to frequent transfers within a provider, though to a lesser extent than for transferring between providers.

Most countries have limits on transfers between investment strategies within a given provider. Table 5.1 summarises the explicit limits and barriers in place to transfer between investment options in 31 selected jurisdictions.<sup>3</sup> The second column (“Arrangement”) indicates to which type of retirement income arrangement within the jurisdiction the limits apply. The third column (“Funds offered”) shows the investment fund types that regulation allows or requires the providers to offer.<sup>4</sup> The remaining columns describe limits and barriers to changing investment strategies within a given provider. “Frequency” indicates any limit as to how often the individual can transfer investments. “Investment strategies” indicates any limit with respect to certain types of investment strategies into which individuals can transfer. “Administrative procedures” detail any time-consuming steps required to transfer investments. “Processing time” indicates any delay in fully executing the transfer. Finally, “Fees” indicates whether providers can charge members for the transfer of funds.

**Table 5.1. Limits on transfers between investment strategies within a given provider**

Jurisdiction	Arrangement	Funds offered*	Frequency	Investment strategy	Administrative procedure	Processing time	Fees
Australia	Mandatory and Voluntary Personal	Unlimited	Provider may impose limits				Provider may charge on cost recovery basis
Canada	Voluntary Occupational	Unlimited, and providers are not required to have more than one option	Provider may impose limits				Commonly imposed if switching within a minimum holding period
Chile	Mandatory	5 funds of different risk profiles		Cannot invest in the most aggressive fund from 10 years before retirement; cannot invest in the two most aggressive funds in retirement		Trades executed 4 days after request based on the price two days after; daily volume limits of 5% of invested assets for each pension provider each day; if requests exceed this limit trades are delayed to the following day	
Colombia	Mandatory	3 funds of different risk profiles	Every 6 months			Up to 10 days	Up to 1% of the last base monthly salary subject to a maximum of 1% of 4x the monthly minimum salary
Costa Rica	Mandatory	1 fund per provider		No other option unless changing provider			
Czech Republic	Voluntary Personal	At least a conservative fund					Charge up to CZK 500 if transfer more than 1/year
Denmark	Quasi-Mandatory	Unlimited, but many offer only one option					
Estonia	Mandatory	Unlimited	3/year in January, May and September for existing assets		2 different applications for moving existing funds and future contributions	3 days for future contributions	To move existing funds, the fee on assets is limited to 0.1% and not allowed for those older than 5 years less than the retirement age, but in practice no exit fees are charged

Jurisdiction	Arrangement	Funds offered*	Frequency	Investment strategy	Administrative procedure	Processing time	Fees
							Application fees are EUR 1-2 for existing funds and EUR 0.65 for future contributions
Europe	Voluntary Personal (PEPP)	TBD	After 5 years, or less if the provider allows				
Hong Kong (China)	Mandatory	At least 3 funds: a Capital Preservation Fund, an Age 65 Plus Fund and a Core Accumulation Fund				Up to several days	Not allowed
Hungary	Voluntary Personal	Unlimited	Provider may impose limits		Request in writing		Up to 0.1 % of the transferred amount, to a maximum of HUF 2 000
Ireland	Voluntary Occupational	Unlimited					
Ireland	Voluntary Personal	Unlimited			Minimum balance may be required		Allowed, but providers typically offer a maximum number of free switches
Israel	Mandatory	Providers must offer at least 3 lifecycle funds plus one for beneficiaries as a default; in addition they may offer up to 10 other specialised funds			Employers must approve change to switch from the default strategy for savings relating to severance	Up to 3 days	
Italy	Voluntary Occupational	Unlimited					
Japan	Voluntary Occupational	Unlimited	Providers must offer switching opportunities at least once every 3 months				
Japan	Voluntary Personal (iDeCo)	Unlimited	Providers must offer switching opportunities at least once every 3 months				

Jurisdiction	Arrangement	Funds offered*	Frequency	Investment strategy	Administrative procedure	Processing time	Fees
Korea	Quasi-Mandatory	Providers must offer at least 3 funds of different risk profiles, including at least 1 fund with a guarantee	Once every half-year				
Korea	Voluntary Personal (IRP)	Providers must offer at least 3 funds of different risk profiles, including at least 1 fund with a guarantee	Once every half year				
Latvia	Mandatory	Unlimited	2/ per year				Exit fees not allowed
Lithuania	Auto-enrolment	Lifecycle funds			Request in writing; risk warning		Costs incurred if transfers more than once per year
Mexico (After January 2020)	Mandatory	Target-date funds	After 3 years		Request form and final confirmation	5 days	None
Mexico (Before January 2020)	Mandatory	Age-appropriate funds of varying risk profiles	After 3 years	Automatically transferred to age appropriate funds on birthdays unless the individual opts out	Request form and final confirmation	5 days	None
New Zealand	Auto-enrolment (Kiwisaver)	Unlimited					
Peru	Mandatory	4 funds of different risk profiles		Over 60 cannot invest in the most aggressive fund			
Poland	Voluntary Personal (IKE, IKZE)	Unlimited					Depends on product type; may have exit charges
Romania	Mandatory	1 fund per provider		No other option unless changing provider			

Jurisdiction	Arrangement	Funds offered*	Frequency	Investment strategy	Administrative procedure	Processing time	Fees
Singapore	Mandatory	A minimum balance is required in the interest-bearing account of the central provider. Beyond this balance, assets can be invested in a variety of available investment products, but the investment products available under the Special Account are of lower risk compared to those under the Ordinary Account		Maximum investment limits in equities (35%) and gold (10%) for Ordinary Account	Investment knowledge questionnaire for first-time investors	Up to 7 days depending on type of investment vehicle	Subject to caps depending on the type of product
Slovak Republic	Voluntary Personal (2 <sup>nd</sup> Pillar)	At least two different risk profiles (equity fund and guaranteed bond fund)		Can save in two different funds, but one must be a guaranteed bond fund, and after the age of 52, 10% must be allocated to the guaranteed fund, increasing by another 10% each year until the age of 61, but individuals can reduce this allocation by half	Based on an amendment to the old-age pension scheme agreement	Up to 3 working days	Not allowed
Slovak Republic	Voluntary Personal (3 <sup>rd</sup> Pillar)				Based on an amendment to the participant agreement	Up to 5 working days	Not allowed
Slovenia	Voluntary (Supplementary)	3 funds of different risk profiles	1/year	Cannot invest in a fund targeted at a younger cohort			
Spain	Voluntary Personal	Unlimited					
Sweden	Mandatory (Premium Pension)	Unlimited					
Sweden	Quasi-Mandatory Occupational	Unlimited		Collective agreements can impose restrictions			

Jurisdiction	Arrangement	Funds offered*	Frequency	Investment strategy	Administrative procedure	Processing time	Fees
Turkey	Voluntary Occupational (EPS) & Personal (IPS)	Unlimited	6/year			Up to 2 days	
Turkey	Auto-enrolment	Unlimited	6/year after two months			Up to 2 days	
United Kingdom	Auto-enrolment	Unlimited					
United States	Voluntary Occupational	Unlimited					

Note: \* Unlimited means that there are no explicit limits on the number or investment profile of funds that each provider can offer, but that is not to say that general investment limits and guidelines do not apply.

Explicit limits to transfer between investment strategies are more common in jurisdictions where regulation limits the types of investment options that providers can offer. Seven out of eight jurisdictions that regulate the allowable investment options also have explicit limits on transfers between funds.<sup>5</sup> Three of these limit the frequency of transfers (Colombia, Mexico, Slovenia) and five have restrictions around which funds can be transferred to (Chile, Peru, Singapore, the Slovak Republic, Slovenia). Only one jurisdiction regulating the allowable investment options has no explicit limits on switching between funds (Lithuania).

Similarly, mandatory arrangements tend to impose limits on transfers slightly more often than voluntary arrangements. Of the 15 jurisdictions with mandatory or quasi-mandatory plans, five have limits for the frequency of transfers and three have limits with respect to the investment strategy. This compares to four jurisdictions with frequency limits and two with limits on the investment strategy among the 14 jurisdictions with voluntary arrangements, and one jurisdiction with a frequency limit of the four jurisdictions with auto-enrolment.

Jurisdictions where providers have more freedom to decide the profiles of their investment options also tend to freely allow individuals to switch between these options, though minor administrative hurdles and exit fees can still apply. Eighteen out of twenty-two jurisdictions that have no restrictions on the investment options offered do not have explicit limits on switching between options. Two jurisdictions only allow for one investment strategy per provider, so members are not able to change strategies without changing providers (Costa Rica, Romania). Only four jurisdictions (Estonia, Korea, Latvia, Turkey) impose explicit limits on the frequency of switching between investment strategies despite not having any regulatory limits on options offered.

The most common explicit limit to switching between funds is the frequency with which investors can do so. Eight jurisdictions impose maximum limits on frequency, ranging from six times per year (Turkey) to after five years on the same fund (PEPP in Europe), though this latter limit is imposed as a maximum, and individual providers can allow more frequent transfers. The limits can be on the number of transfers within a calendar year, or alternatively the minimum holding period after switching before the member can switch again. In Latvia, individuals cannot transfer between investment strategies in mandatory plans more than twice per year, whereas transfers are allowed every half year in Korea and after 6 months in Colombia. In Slovenia, transfers can only be made once per year, and in Estonia transfers for existing assets are executed only three times per year. In Mexico, individuals are required to remain invested in the recommended fund for at least 3 years for their mandatory savings. Japan stands out as the only jurisdiction where a minimum limit is imposed, and employers must offer opportunities for members to switch investment strategies at least once every three months.

Six jurisdictions impose limits on certain types of investment strategies, namely those of a more risky profile. These types of limits commonly apply to individuals near or in retirement. Chile forbids those up to 10 years before the retirement age from investing in the most risky funds. Mexico previously automatically

transferred members aged 60 and over to the most conservative fund. In Peru, those aged 60 and over are not allowed to invest in the most aggressive fund. Similarly in Slovenia, individuals cannot invest in a fund targeted at a younger cohort. In the Slovak Republic, individuals are gradually transitioned to the conservative fund, though they may opt to retain some equity exposure. Singapore imposes quantitative limits on investment in equities and gold, and requires members to set aside certain balances in their CPF accounts first before investing. While Sweden does not impose any limits for occupational plans, the collective agreements made with the social partners may impose such limits.

Indirect barriers can also slow the process of transferring and potentially create a psychological barrier to transferring. Processing times to transfer funds remain under a week in all jurisdictions except Colombia, where transfers can take up to ten days. Hungary, Lithuania and Mexico require requests to transfer funds in writing, and Mexico requires an additional confirmation from the member that they agree for the transfer to be executed. Estonia requires separate applications to transfer existing assets or future contributions. Singapore requires members who want to invest funds outside of the central provider for the first time to take a questionnaire assessing their financial knowledge to ensure that they are aware of the risks they will be taking. Israel requires employer approval to transfer the savings relating to severance from the default strategy.

Exit fees may also deter frequent switching. In Canada, for example, exit fees are commonly imposed if individuals switch within a minimum holding period. Other jurisdictions charge fees if the number of transfers exceeds a certain frequency (the Czech Republic, Ireland, Lithuania). Some jurisdictions impose limits on the level of fees that can be charged (Colombia, the Czech Republic, Estonia, Hungary, Singapore, the Slovak Republic).

### ***Limits on transfers between providers***

Limits are also commonly imposed on how often members can transfer their assets between different providers. The ability to switch between providers can promote competition. However, frequent switching can also be a barrier to implementing long-term investment strategies and result in aggressive marketing and sales tactics that can result in worse investment outcomes due, for example, to higher fees to cover marketing and sales costs.

Limits on the frequency of transfers between providers is common, particularly in jurisdictions with mandatory arrangements. Table 5.2 shows that 10 jurisdictions out of 31 impose such limits (excluding plans linked to an employer when members can only change providers when changing employment). The majority of jurisdictions with such limits (8 out of 11) have mandatory or quasi-mandatory DC arrangements. These limits range from changing once per month (Romania, and Costa Rica after one month with a provider) to after five years (PEPP in Europe), though this latter limit is a maximum and providers can allow more frequent switching. Colombia and Latvia both limit changes to once per year, and Estonia allows three times per year but transfers are only processed in January, May and September. Members having personal plans in Italy can change after two years with their provider. In Turkey, transfers are allowed after two years of the initial contract for all plans, and one year after the last transfer for occupational plans. Both Mexico and Peru allow members to change providers before the minimum waiting periods of one and two years, respectively, if returns have been exceptionally poor. In Hong Kong (China), transfer of scheme members' assets between different providers is allowed under certain circumstances or for certain types of accounts. An employee may transfer their mandatory contributions attributable to current employment in an MPF scheme to another MPF scheme elected by the employee, once per calendar year (or more than once per year if permitted by the governing rules of the transferor scheme).

**Table 5.2. Limits on transfers between providers**

Jurisdiction	Arrangement	Frequency	Administrative procedure	Processing time	Fees
Australia	Mandatory and Voluntary Personal				Entry and exit fees banned, but processing fees may apply
Canada	Voluntary Occupational	Changing employment or plan termination			
Chile	Mandatory			Transfer effective the first day of the following month	
Colombia	Mandatory	Within the private system, once per year; between the public and private systems every 5 years up to 10 years before retirement		Up to 30 days	Up to 1% of the last base monthly salary subject to a maximum of 1% of 4x the monthly minimum salary
Costa Rica	Mandatory	After 1 month		Weekly	Not allowed
Czech Republic	Voluntary Personal				Charge of up to CZK 800 if switch within 5 years
Denmark	Quasi-Mandatory	Changing employment, unless changing to employer under same collective agreement		No more than 5 days	Pots under DKK 20 000 can be transferred free of charge up to 3 years after employment terminates. Otherwise, fees are normally DKK 1 500-1 900, but the receiving entity usually covers these fees.
Estonia	Mandatory	3/year, in January, May and September for existing funds	2 different applications for moving existing funds and future contributions	3 days for future contributions	To move existing funds the fee on assets is limited to 0.1% and not allowed for those older than 5 years less than the retirement age, but in practice no exit fees are charged. Application fees are EUR 1-2 for existing funds (normally paid by acquiring provider) and EUR 0.65 for future contributions.
Europe	Voluntary Personal (PEPP)	After 5 years, or less if the provider allows			
Hong Kong (China)	Mandatory	For employees: (1) for employer contributions: when changing employment; (2) for employee contributions attributable to current employment: once per year (or more than once per year if permitted by the governing rules of the transferor scheme);		Within 30 days	Not allowed



Jurisdiction	Arrangement	Frequency	Administrative procedure	Processing time	Fees
		(3) for contributions in a contribution account that are attributable to former employment(s): anytime;  For self-employed persons: anytime;  For assets held in personal accounts: anytime.			
Hungary	Voluntary Personal		Request in writing		Fees up to HUF 3 000
Ireland	Voluntary Occupational	Changing employment			
Ireland	Voluntary Personal				Exit fees not allowed for Personal Retirement Savings Accounts, but can be applied to other types of personal plans
Israel	Mandatory	There may be a vesting period in some cases, particularly relating to insurance coverage		Transfer only takes place after individual has contributed to new provider	
Italy	Voluntary Occupational	After 2 years or for collectively agreed plans when changing employer		Up to 6 months	Limited to the administrative cost of processing the switch; If arrangement is collectively agreed, future employer contributions could be lost.
Japan	Voluntary Occupational	Changing employer			
Japan	Voluntary Personal (iDeCo)			Up to a few months	
Korea	Quasi-Mandatory				
Korea	Voluntary Personal (IRP)				
Latvia	Mandatory	1/ year			Exit fees not allowed
Lithuania	Auto-enrolment				Transfer costs
Mexico (After January 2020)	Mandatory	After 1 year; a second change within the year if poor returns	Request must be submitted to the new provider, including the sales agent's details, the net return, and the contract. Individuals must also submit a video in which they express a desire to transfer.  The process has been slightly simplified since 15 May 2020.	Maximum 50 working days following the request	None
Mexico (Before January 2020)	Mandatory	After 1 year; a second change within the year if poor returns	Same procedure as currently	Maximum 50 working days following the request	None

Jurisdiction	Arrangement	Frequency	Administrative procedure	Processing time	Fees
New Zealand	Auto-enrolment (Kiwisaver)		Application with new provider, with proof of address and bank account		Potential exit fee from existing provider
Peru	Mandatory	After 24 months; 180 days if poor returns		2 months	
Poland	Voluntary Personal (IKE, IKZE)			Up to 14 days	Changing provider before 12 months can incur additional fees
Romania	Mandatory	Effectively once per month	Written request with validated application to another fund	Transfers take place once per month	Can be charged if transferring within 2 years up to 5% of value
Singapore	Mandatory (Provident Fund)	Not possible - a single, centralised provider			
Slovak Republic	Voluntary Personal (2 <sup>nd</sup> pillar)	Cannot switch during the period following the application for a pension benefit until the offer is no longer binding	The individual must have a signed an agreement with the new provider, but then must apply in person for the Acceptance Certificate from the Social Insurance Agency, which is issued in printed form. Employees must also inform their employer.	Depends on the date of transfer between providers, up to one and a half months	If less than one year has elapsed since the individual last switched from one provider to another, the individual shall pay the Social Insurance Agency (that is responsible for issuing the acceptance certificate) a fee of EUR 16 due to the issuance of the acceptance certificate
Slovak Republic	Voluntary Personal (3 <sup>rd</sup> pillar)	Cannot switch during pay-out period or after the date on which the individuals conclude a pension insurance contract or scheduled pension payment agreement	The individual must have a signed an agreement with the new provider, and apply for the change in writing	Up to 30 days to process application	Up to 5% if changing during the first year; not allowed thereafter
Slovenia	Voluntary (Supplementary)	Changing employment (collective); no limit (individual)	Written request	Up to 3 months	Administrative cost up to EUR 15
Spain	Voluntary Personal		Written request	Up to 7 days to order transfer	Not allowed except those derived from partial termination of contracts signed with insurance or financial entities in relation to the valuation of transferred assets linked to risks and benefits
Sweden	Mandatory (Premium Pension)				
Sweden	Quasi-Mandatory Occupational	For collective plans, can change to another provider in the same collective agreement. In non-collective agreements, it depends on the type of plan.			There is a current proposal to limit transfer fees for plans under a collective agreement

Jurisdiction	Arrangement	Frequency	Administrative procedure	Processing time	Fees
Turkey	Voluntary Occupational (EPS)	The contract must have remained with the same company for at least two years from the effective date, or at least one year from the last transfer. This right is exercised by the employer unless transferred to the participant in the terms of the contract.	Written request with validated application to another pension company	Up to 10 days	Entrance fees are typically charged, up to a total of 8.5% of the gross minimum monthly wage during the first five years
Turkey	Voluntary Personal (IPS)	The contract must have remained with the same company for at least two years from the effective date, or at least one year from the last transfer, and this right may be exercised only by the participant	Written request with validated application to another pension company	Up to 10 days	Entrance fees are typically charged, up to a total of 8.5% of the gross minimum monthly wage during the first five years
Turkey	Auto-enrolment	Possible for the individual upon changing employment. For the employer, this right can be exercised provided that at least two years have passed from the effective date of the contract, and at least one year since the last transfer.	Written request with validated application to another pension company	Up to 10 days	
United Kingdom	Auto-enrolment		Financial advice required for pots >30k with a guarantee		Exit fees allowed
United States	Voluntary Occupational	Changing employment			

Note: The column “Arrangement” indicates to which type of retirement income arrangement within the jurisdiction the limits apply. “Frequency” indicates any limit as to how often the individual can transfer investments. “Investment strategies” indicates any limit with respect to certain types of investment strategies into which individuals can transfer. “Administrative procedures” detail any time-consuming steps required to transfer investments. “Processing time” indicates any delay in fully executing the transfer. “Fees” indicates whether providers can charge members for the transfer of funds.

Long processing times can serve as indirect limits on the frequency of transfers, and processing times for changing providers tend to be longer than those to change investments within a provider. Transfers can take up to several months in Italy, Japan, Mexico, Peru, and Slovenia and over a week in Chile, Colombia, Hong Kong (China), Poland, Romania, and the Slovak Republic. In Israel, the transfer only takes place after the individual has made contributions to the new provider.

Other administrative procedures requiring individuals to make more effort or spend more time, can slow the transfer process and act as a deterrent for frequent transfers. In the United Kingdom, members are required to receive financial advice when transferring an account over GBP 30 000 that offers a guarantee. Hungary, Romania, Turkey, Slovenia, and Spain require that transfer requests be submitted in writing and the Slovak Republic requires an application in person for the 2<sup>nd</sup> pillar arrangement. Estonia requires two

separate applications for transferring future contributions and transferring existing assets. Mexico requires individuals to submit a video in which they express their desire to transfer.

Additional costs or fees can also make transfers less appealing. Providers in numerous jurisdictions can charge exit fees for transferring providers. Some jurisdictions have imposed caps on how much can be charged (Colombia, the Czech Republic, Hungary, Italy, Romania, Slovenia, Turkey). Additionally, jurisdictions may impose certain conditions for exit fees to be charged (the Czech Republic, Denmark, Estonia, Poland, Romania, the Slovak Republic, Spain). While in principle, individuals in collectively agreed plans in Italy can switch freely after two years, they would lose future employer contributions if they leave their industry's pension scheme. Some jurisdictions have banned exit fees altogether (Australia, Costa Rica, Hong Kong (China), Ireland for Personal Retirement Savings Accounts, Latvia).

### ***Regulation of financial advice for retirement***

Financial advice is regulated in many jurisdictions as it can play a key role in the decision to switch investment. The regulatory framework for financial advice includes tools that regulators and supervisors can use to ensure that financial advice for retirement savings is appropriate and not harmful to consumers. The regulatory framework for financial advice needs to address several aspects of the provision of this advice. First, it needs to define to which type of advice the regulations apply. Afterward, it can specify qualification requirements for individuals to be able to provide financial advice, the type of information financial advisors need to disclose, duty of care standards, and the type of remuneration that financial advisors can receive. Several jurisdictions are also looking at how to ensure that the regulatory framework covers requirements for advice provided via different distribution channels, in particular digital platforms.

#### *The definition of financial advice*

The types of advice differ in the extent to which they are tailored to specific individuals. The most basic type of financial advice is guidance, which provides only objective factual information without any specific recommendation. General advice goes further by providing a recommendation, but with no consideration of personal circumstances. Personalised advice is tailored to the specific characteristics of the individual, including their demographic profile, family situation, financial situation, risk tolerance and financial knowledge. Personalised advice can distinguish between simplified (or scaled) advice, and comprehensive advice. Simplified advice provides advice for a specific financial question without necessarily considering an individual's full financial situation. This could be the case, for example, in considering how to invest one's contributions. Comprehensive advice goes further by considering an individual's entire situation, and could include, for example, how much additional contributions are needed to be comfortable in retirement given other income sources and expected expenses. Different regulations can apply to different types of advice, with personalised advice generally subject to stricter regulation than guidance.

The clarity of the definitions of different types of advice matters, because different requirements can apply to different types of advice. In the United Kingdom and Australia, regulation applies to any type of advice where a recommendation is given, regardless of whether it is personalised, though stricter standards can apply to personalised and comprehensive advice. In the European Union, only personalised advice is considered to be in scope.

The purpose of the advice may also determine the applicable regulation. In the United States, for example, advice related to retirement plans is subject to a separate legal provision and regulation than financial advice for other objectives. As such, advisors providing financial advice for certain retirement plans are subject to different requirements (e.g. fiduciary standards) than broker/dealers or financial advisors that provide advice for other purposes.

The regulatory perimeter of advice, the definition of the scope within which the regulations apply, is a subject of debate in several jurisdictions. First, the line between guidance and general advice has proven

to be a concern in Canada and the United Kingdom. Employers in these jurisdictions have been reluctant to provide guidance or information to their employees related to their pensions for fear of not complying with the stricter regulatory requirements for general advice. As a result, authorities in these jurisdictions have had to clarify the boundary between guidance and general advice and what information the employer can safely provide. In other jurisdictions, there has also been a reluctance by financial advisors providing personalised advice to provide simplified advice with limited scope due to fears of regulatory liability. Both New Zealand and the United Kingdom have had to clarify the boundary between simplified and comprehensive advice in order to provide comfort to advisors that they are complying with the necessary regulations.

Where doubt remains about the regulatory perimeter, many jurisdictions prioritise the likely perception of the client, regardless of any disclaimers that may be offered suggesting that the advice is not within the regulatory perimeter. This is the case in Australia, where any disclaimer cannot diminish legal compliance with the rules, and the substance of the recommendation will override any disclaimer. Avoiding regulatory liability through disclaimers has been an issue in particular for advice offered through digital platforms. European regulators have likewise responded by considering how consumers are likely to perceive the recommendations in their application of regulatory requirements.

Regulation can address many facets of the provision of financial advice. The first question the regulatory framework should address is who can provide advice and what requirements they need to meet to do so. Secondly, it should define the information the advisor is required to disclose to consumers. Third, regulation should determine how much care advisors need to put into the advice they provide. Finally, there may be limitations regarding the type of remuneration that advisors can receive for providing financial advice to avoid conflicts of interest.

#### *Requirements for the provider of financial advice*

Financial advisors that provide recommendations are generally required to be registered with the supervisory or regulatory body to obtain a license to operate. Australia, for example, requires even advisors giving general advice to operate under a license.

Requirements to obtain a license can include minimum levels of education, completion of exams or other requirements, fit and proper requirements, or ongoing education to maintain skills and knowledge.

Many jurisdictions have moved to increase the minimum qualification requirements for financial advisors. Efforts to do so have been carried out in Australia, Canada, the European Union, New Zealand and the United Kingdom.

Continued professional development requirements are also becoming more common, with requirements introduced in several of these jurisdictions. Additional requirements may be imposed for certain types of products. Not all financial advisors may be allowed to recommend certain complex products such as derivatives (e.g. New Zealand).

There tend to be fewer requirements around advisors providing only guidance. In several jurisdictions, such as Australia and the United Kingdom, the governments have set up low-cost agencies to ensure that the public has access to accurate information regarding financial and retirement planning. Pension funds also commonly provide general guidance on their websites in the form of calculators and other tools that can help individuals determine the expected outcomes from different savings and investment strategies.

However, it can sometimes be complicated to determine whether some information sources should or do provide guidance or general advice, particularly when there is a commercial interest behind the suggestions made. There is a fine line, for example, between these types of advice and commercial marketing. Several jurisdictions have moved to limit marketing materials in response to specific consumer protection concerns that have arisen. In Lithuania, any advertisement relating to pension accumulation may only contain factual information that are included in the official periodic reports issued. Romania

forbids agents to interfere in the process of a member switching a pension provider. In France, the Sapin II law forbids any marketing of forex products to retail consumers due to their risky and complex nature.

### *Disclosure requirements for financial advice*

Disclosure requirements are important to further the transparency of the content and nature of the advice provided, the cost of this advice and any potential conflicts of interest that the financial advisor faces. Clearly defining the type of advice provided clarifies the regulation that should be applicable. Disclosure of all applicable fees is important for the consumer to understand how much they will be paying for the advice. Disclosure of any conflicts of interest, including any commissions that the advisor will receive from the sale of a financial product, may encourage advisors to avoid conflicts of interest and help consumers to understand the incentives of the advisor to recommend certain products. More jurisdictions (e.g. United Kingdom) are also requiring that the advisor provides a suitability report explaining why the recommendation is appropriate for the client.

Regulators and supervisors are increasingly recognising the limitations of disclosure. Most jurisdictions have historically relied primarily on disclosure to address the issue of conflicts of interest in financial advice. Jurisdictions are now trying to simplify disclosures and make them more understandable (e.g. Canada, the European Union, New Zealand, the United States). Some jurisdictions are also increasing the disclosure about ongoing advice and assessment of suitability (e.g. Australia, the European Union). They are also trying to address challenges related to the conflicts of interest in financial advice through other mechanisms such as requirements for a written policy to manage conflicts of interest and restrictions around how advisors are compensated for their services.

### *Duty of care for the financial advisors*

Duty of care standards require financial advisors to act ethically when providing recommendations to consumers. The requirements as to the extent of care that the advisor must take can vary depending on the type of advice provided. However, an advisor making any recommendation, regardless of whether it is personalised, normally cannot mislead or deceive the client and must act with care, skill and diligence. For example, in Lithuania, pension funds cannot publish anything incorrect, unclear or misleading, and any advisory service is required to base communications on a pension calculator that is correct and transparent about its assumptions.

On top of providing clear and correct information, advisors providing personalised advice are required to understand the client's profile and financial situation in order to determine whether the recommendation provided is appropriate. Factors to take into account include age, family situation, financial situation, financial knowledge, investment experience and objectives, as well as risk appetite.

Given an assessment of these factors, regulation generally requires that the financial advisor provides advice that is either suitable for the client or in their best interest. A suitable recommendation is one that is reasonable given the client's needs. One that is in their best interest requires that the advice is free from bias and the advisor to put the interests of the client above their own interest. As such, it expressly forbids advisors to make a recommendation because they themselves would benefit more (through commissions or otherwise). Written conflicts of interest policies may also be required to ensure that any potential bias is either managed or eliminated (e.g. Canada, the European Union, the United States). Chile requires that pension advisors, who are either individuals or entities whose role is to advise individuals regarding financial decisions within the pension system (mainly their pay-out option), have insurance coverage in case they provide misleading advice.

Jurisdictions vary as to whether and how they apply requirements for advice to be either suitable or in the best interest of the client, and many have also faced challenges relating to how such standards should apply to different types of advisors. Australia, for example, requires that pension advice be in the best

interest of clients, whereas Mexico requires only suitability. In the United States, only advisors providing workplace pension advice are currently held to a fiduciary standard. Other advisors and broker/dealers are now subject to Regulation Best Interest, which requires a reasonable justification for the appropriateness of the advice and the disclosure of conflicts of interest, but does not require that they follow a fiduciary standard.

Jurisdictions are also considering how duty of care standards should apply to new channels of advice that are emerging. For example, electronic trading platforms have emerged that allow subscribers to copy, or mirror, the trading strategies of other 'expert' traders. Such platforms often fall through the cracks of existing regulatory frameworks, which tend to classify them as simple brokers executing the desired trades. However, new EU regulation (MIFID II) now classifies platforms that automatically perform trades as asset managers. This places additional regulatory requirements on these platforms not only with respect to disclosure but also with respect to due diligence. Investors are now required to fill out a profiling questionnaire to determine their financial knowledge and risk tolerance in order to establish a minimum level of suitability of the investment strategy that they will copy. Furthermore, the traders that investors are allowed to copy must meet some minimum criteria relating to trading experience and having reasonable trading strategies. Platforms that require the individual to confirm execution of each trade rather than automating the process are classified as providing simplified advice under MIFID II. As such, they are subject to the relevant due diligence and suitability requirements, and it must be clear that determining suitability is the responsibility of the platform and not of the client.

#### *Remuneration for financial advisors*

Some jurisdictions have imposed limits as to how financial advisors can be remunerated for their services in order to eliminate some of the conflicts of interest that they face. Australia, the Netherlands and the United Kingdom have banned conflicted remuneration for advisors, including commissions as well as volume targets and kickbacks. Denmark and Finland have banned commissions for independent insurance brokers only. Several jurisdictions have also specifically targeted trailing commissions due to their opacity. Canada has banned these types of commissions, and Australia has imposed a cap on insurance-related trail commissions. Mexico has introduced a claw back of the commission that agents receive to switch pension providers, reducing the total compensation if the client does not remain with the new provider for at least 30 months, providing a disincentive for advisors to recommend frequent switching. Mexico also forbids financial advisors from receiving kickbacks from the advice they provide.

#### **5.4. Policy options to address frequent investment switching for retirement savings**

Authorities could approach the problem of frequent switching of investments from three different angles. First, they could direct policy interventions at individuals so that they themselves have an incentive to trade less frequently. Secondly, they could introduce policies to adjust the design of the retirement savings system itself to limit or prevent inappropriate switching. Thirdly, authorities could direct policy interventions at the external influences that could lead to increased switching. Several different interventions could potentially be implemented together to ensure the best outcomes for retirement savers, and some interventions are likely to be more effective than others depending on the drivers identified. In choosing the appropriate interventions, policy makers should target switching that is not likely to be in an individual's best interest, while still allowing those who have a justified interest in switching to do so.

## ***Policy options that target individuals***

Policy options that target individuals aim to get retirement savers themselves to reduce the frequency with which they switch their retirement investments. International evidence suggests that such interventions could influence people implicitly by imposing barriers that make it harder or less interesting to trade frequently, or explicitly by trying to convince individuals that frequent trading is not in their best interest. Such interventions do not prevent those who would like to switch from doing so, rather they aim to avoid impulsive switching and to ensure that individuals who do switch have reflected on their reasons for doing so.

### *Impose implicit barriers to switching*

Implicit barriers that increase the effort that individuals have to put into switching or decrease the potential benefit from doing so can be effective in discouraging switching behaviour, especially when it is likely to be against their best interest. Such barriers could involve making the administrative procedure to follow more cumbersome, increasing the time windows to process and execute the trade request, or imposing fees that would make switching less attractive financially.

Introducing more demanding administrative procedures for switching from any position are likely to reduce impulsive switching because of the additional effort required to change. Switching influenced from the tendency towards herd behaviour and copying others' investment decisions is likely to be impulsive. Measures to increase administrative burdens to deter this are typically related to the paperwork required. There are several examples of jurisdictions that require individuals to send the request to switch in writing or make the request in person. Estonia requires multiple applications depending on whether the individual is transferring past or future contributions.

Additional requirements for switching requests towards more risky investments not only reduce impulsive switching, they may also encourage individuals to question whether their intention to switch is the right decision. The United Kingdom requires an additional step of acquiring financial advice when switching from a likely beneficial position – being in a sizable pension fund offering a guarantee – to a more risky position of not having a guarantee. Singapore requires individuals to complete a questionnaire to assess their financial knowledge and be aware of the investment risks before commencing investment.

Larger time windows to process and execute trade requests may be effective in deterring switching from individuals trying to time the market by reducing the expected benefit of doing so. Processing times tend to be longer for switching providers and can last up to several months, but several jurisdictions impose delays for switching investment funds of up to a week.

Fees to switch would increase the cost of switching thereby reducing potential short-term gains, helping to deter frequent switches following short-term strategies. Nevertheless, fees are likely to be less effective where overconfidence is a driver of frequent switching, as overconfident investors would expect that switching would make up for this loss and not be deterred. Several jurisdictions allow fees for switching, potentially under certain conditions such as exceeding a certain number of switches, though many jurisdictions also impose a cap on the maximum fee that providers can charge.

### *Communicate to individuals the potential negative impact of switching*

Communicating to individuals about the likely negative impact of switching may help them to realise that it may not be in their best interest to do so. Such communication could be directed specifically at individuals requesting to switch, or take the form of a broader communication campaign.

Individualised communication regarding the increased risk related to a request to switch investment funds could encourage people to reconsider their decision and remain invested for the long term. For example, a request to switch from the default investment option to a more risky strategy could highlight the lower bad-case scenario of projected income at retirement compared to the default strategy. Mexico takes a



comparable approach for individuals requesting to switch pension providers by requiring them to sign a form showing the differences in the investment returns of the providers. To be effective, such communication should simply and effectively convey the risk so that the individual can easily understand and process the information. For example, using a single risk indicator will limit potential confusion, and visual aids such as colour codes can also facilitate understanding the information provided. However, while disclosure is an important tool, it is not likely to be sufficient alone in solving a problem of frequent switching and should be combined with other measures.

General communication campaigns can also be effective in encouraging specific investment behaviours for retirement savings. Such campaigns could promote the benefit of the default investment strategy and warn against the risks of frequent switching. Sweden effectively encouraged the majority of new enrollees into the Premium Pension to actively choose their investment strategy through a public communication campaign. Nevertheless, the effectiveness of such communication also depends on the public's trust in the source of information and the institutions of the retirement savings system. Trust in Sweden's public institutions is very high.

### ***Policy options that target the design of the retirement savings system***

Policy options that target the design of the retirement savings system would change the rules or design of the retirement investment framework to limit or prevent inappropriate speculation with retirement savings. Such options include imposing explicit limits that would prevent certain individuals from switching, or reframing the design of the investment options available.

#### *Impose explicit barriers to switching*

Explicit barriers to switching involve limits that prevent individuals from switching in a way that is unsuitable for the retirement objective. Such barriers often take the form of limits to the frequency of switching or limits to certain strategies that involve more risk than is appropriate given the objective of the pension system. These types of limits are very common in jurisdictions that also explicitly regulate the types of investment options that providers can offer within the retirement savings system (e.g. Mexico, Slovenia). Such policies are coherent as this level of regulation indicates an objective around the retirement income that the system should deliver. Investment strategies within the retirement savings system should therefore be in line with that objective.

Limits on the frequency with which individuals switch their retirement investments will prevent overtrading while still allowing individuals some discretion if they really want to switch. Frequency limits can either take the form of a maximum number of switches in a given time period, or a minimum holding period before another switch can be made. While the former type is more common and may prevent overtrading, the latter is more in line with the objective to prevent speculation and encourage a long-term investment strategy by ensuring that the assets remain invested for a minimum period of time.

Limits relating to the investment strategy prevent certain types of switching that authorities consider to be inappropriate given the objective of the retirement savings system to provide a target level of income in retirement. Strategies that would unduly increase the probability that this objective would not be achieved are therefore not allowed. The most common restriction of this type is age limits for investment in equities that limit the level of equities in which individuals approaching retirement can invest. Another option would be to limit switching between funds having very different risk profiles, since drastic changes in investment risk profiles are not in line with the lifecycle approach that gradually reduces investment risk as retirement approaches.

### *Reframe the design of investment options*

Reframing the design of the investment options available in retirement savings systems would present the options in a way that is more in line with the objective to promote taking a long-term lifecycle investment strategy. For example, moving from multi-fund arrangements to target date funds could reframe the investment choice to focus on the objective of retirement income in the long term rather than the level of risk being taken in the immediate future. Mexico is one jurisdiction that has recently moved from a multi-fund system to target date funds. Such a framework is less conducive to switching investments to time the market.

### ***Policy options that target external influences***

Policy options to target the sources of influence to switch that is external to the retirement savings system aim to prevent such influence from harming retirement savers. External influence can take the form of information, marketing or financial advice. Financial advice is generally subject to the highest standards. However, the definition of what qualifies as financial advice needs to be clear. For other types of communication on financial issues, requirements still need to be in place to ensure that the information provided does not harm consumers.

### *Establish standards and requirements for financial advisors*

Individuals providing financial advice to consumers should be held to certain standards to ensure that the advice they provide is not harmful for consumers. These standards include qualification and registration requirements, the management of any conflicts of interest, and necessary due diligence to demonstrate the appropriateness of any advice or recommendations provided.

Any individual providing financial advice should be registered with the relevant authority. Several OECD jurisdictions have such requirements in place (e.g. Australia, the United Kingdom). Registration allows the supervisor to monitor the conduct of the advisor over time and sanction instances of misconduct resulting in harm to consumers. It also allows consumers to be able to verify that the person advising them is appropriately qualified and that the relevant consumer protections will be legally enforceable.

Financial advisors should achieve a certain level of qualification to demonstrate that they have the adequate knowledge to provide financial advice, and this should be a basic requirement for them to become registered. Qualification requirements will set a higher standard for individuals who are allowed to provide financial advice, and discourage those without sufficient capabilities from entering the field. Following an increase in qualification standards in the United Kingdom, the professionalism of the financial advice industry also increased.

Financial advisors should also be required to manage any potential conflicts of interest that would lead them to provide certain recommendations over others. The most common requirement for managing conflicts is to disclose them. While disclosure is not necessarily effective in deterring individuals from following the advice, there is some evidence that disclosure requirements can encourage advisors to avoid any conflicts. Other requirements may include conflicts of interest policies that detail how advisors mitigate any conflicts. Where these types of requirements have not been effective, some jurisdictions have gone further to eliminate conflicts of interest, for example by banning the payment of sales commissions on financial products. Firms providing financial advice can have a significant conflict of interest to the extent that they are pre-empting their own recommendations and benefiting from the movement in asset prices following the large trading volumes following their recommendations (e.g. the practice of scalping). This may be considered fraudulent as it violates the nature of the advisor-client relationship and deceives the client.

Any advice or recommendation that financial advisors give to individuals should be required to be appropriate. The advisor should do adequate due diligence to determine whether the recommendation is

suitable given the profile of the individual. Many jurisdictions require advisors to issue suitability reports for personalised advice to the client to explain why the recommendation is appropriate for their particular situation. Suitability requirements are in place even in the case of social trading platforms in Europe, where individuals copy the investment strategies of other traders.

*Set the regulatory boundaries for financial advice to ensure adequate protection for consumers*

Regulation needs to clearly define what type of financial advice is included. The requirements imposed on financial advisors discussed above generally apply to personalised advice targeted at specific individuals, as opposed to generic advice, which is factual guidance. Distinguishing characteristics include the nature of the recommendation made, the perception of the client, and/or the financial purpose that the advice pertains to.

A key distinction between different types of financial advice is that between generic and personalised advice, because financial advisors are typically held to higher due diligence standards and disclosure requirements for personalised recommendations. Generic advice is factual, and can be advice that is considered objectively suitable for a certain category of individuals. Personalised advice takes into account the profile and needs of a specific individual.

The application of regulatory requirements for personalised advice should take into account the likely perception of the client. If the person could reasonably feel that the advice is specific to their situation, regulation should treat it as personalised advice. This is the approach taken in Europe. The way that the advice is communicated can influence perception, for example if it is provided in a personalised email. The fact that the client paid for the advice may also have implications for whether it could be considered as personalised advice.

The financial purpose of the advice, such as whether the advice pertains to investing for retirement, may also justify stricter regulatory requirements. The United States holds advice provided for occupational pension arrangements to a fiduciary duty standard requiring it to be in the best interest of the client.

*Regulate harmful communication outside of the regulatory boundaries for financial advice*

While stricter requirements may pertain to advice falling within the regulatory boundaries for financial advice, regulation must still ensure that other financial advice and communication does not harm consumers and those saving for retirement. These other types of communication could take the form of generic financial advice or even marketing.

Regulation should prohibit any communication, regardless of whether it is regulated as financial advice, from misleading or deceiving clients. Generic communication around retirement savings and investment should remain factual. Any advice involving judgement should also provide reasons and justifications for the recommendation being made. In Lithuania, for example, any communication relating to retirement savings accumulation may only contain factual information that are included in the official periodic reports issued.

Regulators should take a stronger stance where communication is deemed to be particularly harmful to those saving for retirement, and prohibit those types of communication. For example, agents cannot interfere in the process of a member switching a pension provider in Romania.

## References

- Agnew, J., P. Balduzzi and A. Sundén (2003), “Portfolio choice and trading in a large 401 (k) plan”, *American Economic Review*, Vol. 93/1, pp. 193-215, <http://dx.doi.org/10.1257/000282803321455223>. [1]
- Ahmed, J., B. Barber and T. Odean (2016), “Made poorer by choice: Worker outcomes in social security vs. private retirement accounts”, *Journal of Banking and Finance*, Vol. 10, pp. 1-12, <http://dx.doi.org/10.1016/j.jbankfin.2016.08.003>. [40]
- Ameriks, J. and S. Zeldes (2000), “How Do Household Portfolio Shares Vary with Age?”, TIAA-CREF, <https://ssrn.com/abstract=292017>. (accessed on 4 May 2020). [4]
- Bajgrowicz, P. and O. Scaillet (2012), “Technical trading revisited: False discoveries, persistence tests, and transaction costs”, *Journal of Financial Economics*, Vol. 106/3, pp. 473-491, <http://dx.doi.org/10.1016/j.jfineco.2012.06.001>. [39]
- Barber, B. et al. (2017), *Do Day Traders Rationally Learn About Their Ability?*. [24]
- Barber, B. et al. (2009), “Just How Much Do Individual Investors Lose by Trading?”, *The Review of Financial Studies*, Vol. 22/2, <http://dx.doi.org/10.1093/rfs/hhn046>. [38]
- Barber, B. and T. Odean (2007), “All That Glitters: The Effect of Attention and News on the Buying Behavior of Individual and Institutional Investors”, <http://dx.doi.org/10.1093/rfs/hhm079>. [28]
- Barber, B. and T. Odean (2001), “Boys Will Be Boys: Gender, Overconfidence, And Common Stock Investment”, *Quarterly Journal of Economics*. [12]
- Barber, B. and T. Odean (2000), “Trading is Hazardous to Your Wealth: The Common Stock Investment Performance of Individual Investors”, <http://dx.doi.org/10.2139/ssrn.219228>. [36]
- Berstein, S., O. Fuentes and N. Torrealba (2011), *La Importancia de la opcion por omision en sistemas de pensiones de cuentas individuales : estrategias de inversion de ciclo de vida*, <http://www.spensiones.cl>. [26]
- Berstein, S., O. Fuentes and F. Villatoro (2013), “Default investment strategies in a defined contribution pension system: A pension risk model application for the chilean case”, *Journal of Pension Economics and Finance*, Vol. 12/4, pp. 379-414, <http://dx.doi.org/10.1017/S1474747213000073>. [46]
- Beshears, J. et al. (2006), “The Importance of Default Options for Retirement Savings Outcomes: Evidence from the United States”, No. 12009, National Bureau of Economic Research, Cambridge, MA, <http://dx.doi.org/10.3386/w12009>. [10]
- Bilias, Y., D. Geogarakos and M. Haliassos (2010), “Portfolio Inertia and Stock Market Fluctuations”, *Journal of Money, Credit and Banking*, Vol. 42/4, pp. 715-742, <http://dx.doi.org/10.1111/j.1538-4616.2010.00304.x>. [2]
- Chen, G. et al. (2007), “Trading performance, disposition effect, overconfidence, representativeness bias, and experience of emerging market investors”, *Journal of Behavioral Decision Making*, Vol. 20/4, pp. 425-451, <http://dx.doi.org/10.1002/bdm.561>. [45]

- Chuang, W. and R. Susmel (2011), “Who is the more overconfident trader? Individual vs. institutional investors”, *Journal of Banking and Finance*, Vol. 35/7, pp. 1626-1644, <http://dx.doi.org/10.1016/j.jbankfin.2010.11.013>. [20]
- Claessens, S. and M. Kose (2017), *Asset prices and macroeconomic outcomes: a survey*, Bank for International Settlements, <http://www.bis.org> (accessed on 23 April 2020). [44]
- Cronqvist, H. and R. Thaler (2004), “Design choices in privatized social-security systems: Learning from the Swedish experience”, *American Economic Review*, Vol. 94/2, pp. 424-428, <http://dx.doi.org/10.1257/0002828041301632>. [16]
- Da, Z. et al. (2017), *Destabilizing Financial Advice: Evidence from Pension Fund Reallocations*. [14]
- Da, Z. et al. (2016), *Coordinated Noise Trading: Evidence from Pension Fund Reallocations*, NBER, <http://www.nber.org/papers/w22161>. [35]
- De Bondt, W. and R. Thaler (1985), “Does the Stock Market Overreact?”, *The Journal of Finance*, Vol. 40/3, pp. 793-805, <http://dx.doi.org/10.1111/j.1540-6261.1985.tb05004.x>. [27]
- Dewan, P. and K. Dharni (2019), “Herding Behavior in Investment Decision Making: A Review”, *Journal of Economics, Management and Trade*, Vol. 24/2, pp. 1-12, <http://dx.doi.org/10.9734/JEMT/2019/v24i230160>. [30]
- Fong, J. (2020), “Taking control: Active investment choice in Singapore’s national defined contribution scheme”, *Journal of the Economics of Ageing*, Vol. 17, p. 100249, <http://dx.doi.org/10.1016/j.jeoa.2020.100249>. [13]
- Frankkila, D. and L. Lantz (2020), *Premiepensionen: Pensionsspararna och pensionärerna 2019*, <https://www.pensionsmyndigheten.se/statistik/publikationer/premiepensionsrapporten-2019/premiepensionen-pensionssparare-och-pensionarerna-2019.pdf>. [6]
- Hoffmann, A. and T. Post (2016), “How does investor confidence lead to trading? Linking investor return experiences, confidence, and investment beliefs”, *Journal of Behavioral and Experimental Finance*, <http://dx.doi.org/10.1016/j.jbef.2016.09.003>. [23]
- Kim, K. and J. Nofsinger (2007), “The Behavior of Japanese Individual Investors During Bull and Bear Markets”, *Journal of Behavioral Finance*, Vol. 8/3, pp. 138-153, <http://dx.doi.org/10.1080/15427560701545598>. [19]
- Kremer, S. and D. Nautz (2013), “Causes and consequences of short-term institutional herding”, *Journal of Banking and Finance*, Vol. 37/5, pp. 1676-1686, <http://dx.doi.org/10.1016/j.jbankfin.2012.12.006>. [42]
- Kristjanpoller, W. and J. Olson (2015), “The effect of financial knowledge and demographic variables on passive and active investment in Chile’s pension plan”, *Journal of Pension Economics and Finance*, Vol. 14/3, pp. 293-314, <http://dx.doi.org/10.1017/S1474747214000213>. [17]
- Madrian, B. and D. Shea (2001), “The Power of Suggestion: Inertia in 401(k) Participation and Savings Behavior”, *The Quarterly Journal of Economics*, Vol. CXVI/4. [9]
- Meyer, S. et al. (2012), “Do Individual Investors Learn from Their Mistakes?”, *SSRN Electronic Journal*, <http://dx.doi.org/10.2139/ssrn.2122652>. [22]

- Mitchell, O. et al. (2011), "The Inattentive Participant: Portfolio Trading Behavior in 401(K) Plans", *SSRN Electronic Journal*, No. 2006-115, Michigan Retirement Research Center, <http://dx.doi.org/10.2139/ssrn.1094834>. [3]
- Mobarek, A., S. Mollah and K. Keasey (2014), "A cross-country analysis of herd behavior in Europe | Elsevier Enhanced Reader", *International Financial Markets, institutions and Money*, Vol. 32, pp. 107-127. [31]
- Novianggie, V. and N. Asandimitra (2019), "The Influence of Behavioral Bias, Cognitive Bias, and Emotional Bias on Investment Decision for College Students with Financial Literacy as the Moderating Variable", *International Journal of Academic Research in Accounting, Finance and Management Sciences*, Vol. 9/2, pp. 92-107. [21]
- Odean, T. (1999), "Do Investors Trade Too Much?", *The American Economic Review*, <http://www.nyse.com/public/> (accessed on 22 April 2020). [18]
- OECD (2018), *OECD Reviews of Pension Systems: Latvia*, OECD Reviews of Pension Systems, OECD Publishing, Paris, <https://dx.doi.org/10.1787/9789264289390-en>. [11]
- OECD (2016), *OECD Reviews of Pension Systems: Mexico*, OECD Reviews of Pension Systems, OECD Publishing, Paris, <https://dx.doi.org/10.1787/9789264245938-en>. [33]
- Ouarda, M., A. el Bouri and O. Bernard (2013), "Herding Behavior Under Markets Condition: Empirical Evidence on the European Financial Markets | Ouarda | International Journal of Economics and Financial Issues", *International Journal of Economic and Financial Issues*, Vol. 3/1, <https://www.econjournals.com/index.php/ijefi/article/view/229> (accessed on 7 May 2020). [29]
- Pedraza, A. et al. (2017), *Pension Funds and the Impact of Switching Regulation on Long-term Investment*, <http://econ.worldbank.org>. [41]
- Pensionsmyndigheten (2020), *Bra värdeutveckling för premiepensionen under 2019*, <https://www.pensionsmyndigheten.se/nyheter-och-press/pressrum/bra-vardeutveckling-for-premiepensionen-under-2019>. [37]
- Seru, A., T. Shumway and N. Stoffman (2009), *Learning By Trading*, <http://dx.doi.org/10.2139/ssrn.891694>. [25]
- Stolper, O. (2018), "It takes two to Tango: Households' response to financial advice and the role of financial literacy", *Journal of Banking and Finance*, Vol. 92, pp. 295-310, <http://dx.doi.org/10.1016/j.jbankfin.2017.04.014>. [34]
- Superintendencia de Banca, Seguros y AFP (2019), *Boletín Estadístico de AFP (Mensual)*, [https://www.sbs.gob.pe/app/stats\\_net/stats/EstadisticaBoletinEstadistico.aspx?p=31#](https://www.sbs.gob.pe/app/stats_net/stats/EstadisticaBoletinEstadistico.aspx?p=31#) (accessed on 4 May 2020). [7]
- Superintendencia de Pensiones (2020), *Nota Técnica N° 6 Evolución y desempeño de los cambios de fondos Mayo 2020*. [15]
- Suriani, S. and D. Kumar M. (2015), "Impact of Exchange Rate on Stock Market", *International Review of Economics & Finance*, Vol. 5, [https://www.researchgate.net/publication/282815700\\_Impact\\_of\\_Exchange\\_Rate\\_on\\_Stock\\_Market](https://www.researchgate.net/publication/282815700_Impact_of_Exchange_Rate_on_Stock_Market) (accessed on 15 May 2020). [43]

- Tang, N., O. Mitchell and S. Utkus (2011), "Trading in 401(k) Plans during the Financial Crisis", *Wharton Pension Research Council Working Papers*, No. WP2011-11, Pension Research Council, [https://repository.upenn.edu/prc\\_papers/175](https://repository.upenn.edu/prc_papers/175) (accessed on 22 April 2020). [32]
- Tapia, W. and J. Yermo (2007), "Implications of Behavioural Economics for Mandatory Individual Account Pension Systems", *OECD Working Papers on Insurance and Private Pensions*, No. 11, OECD Publishing, Paris, <https://dx.doi.org/10.1787/103002825851>. [8]
- Villatoro, F. et al. (2019), *Mislearning and (Poor) Performance of Individual Investors*. [5]

## Notes

<sup>1</sup> It is important to highlight that trading in the context of retirement savings presents a key difference from this context in that the investment normally does not allow for trading in individual stocks.

<sup>2</sup> There is evidence of this in Chile, where participants who believed that they were successful on past trades tended to trade more. This effect was stronger if success was measured with a naïve rule of thumb that the trade resulted in a positive return, indicating that this learning reinforced the overconfidence bias. However, over time most participants that were trading unsuccessfully following the trade recommendations from a particular unregulated financial advisor did not continue to follow the advice, with less than 0.5% of those trading following the recommendations for at least half of their trades (Villatoro et al., 2019<sup>[5]</sup>). This could indicate that individuals learned that this strategy was not profitable and adapted.

<sup>3</sup> Australia, Canada, Chile, Colombia, Costa Rica, the Czech Republic, Denmark, Estonia, the European Union, Hong Kong (China), Hungary, Ireland, Israel, Italy, Japan, Korea, Latvia, Lithuania, Mexico, New Zealand, Peru, Poland, Romania, Singapore, the Slovak Republic, Slovenia, Spain, Sweden, Turkey, the United Kingdom, the United States.

<sup>4</sup> Unlimited means that there are no explicit limits on the number or investment profile of funds that each provider can offer, but that is not to say that general investment limits and guidelines do not apply.

<sup>5</sup> The Czech Republic, Hong Kong (China), Israel, and Korea are not counted here as restricting the allowable investment options, as while they are required to have a specific minimum fund offering they can offer additional funds without limits.



**From:**  
**OECD Pensions Outlook 2020**

**Access the complete publication at:**

<https://doi.org/10.1787/67ede41b-en>

**Please cite this chapter as:**

OECD (2020), "Switching investments in defined contribution retirement savings arrangements", in *OECD Pensions Outlook 2020*, OECD Publishing, Paris.

DOI: <https://doi.org/10.1787/ed47ae07-en>

This work is published under the responsibility of the Secretary-General of the OECD. The opinions expressed and arguments employed herein do not necessarily reflect the official views of OECD member countries.

This document, as well as any data and map included herein, are without prejudice to the status of or sovereignty over any territory, to the delimitation of international frontiers and boundaries and to the name of any territory, city or area. Extracts from publications may be subject to additional disclaimers, which are set out in the complete version of the publication, available at the link provided.

The use of this work, whether digital or print, is governed by the Terms and Conditions to be found at <http://www.oecd.org/termsandconditions>.