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Chapter 1

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1.1 Notices

1.1.1 OSC Staff Notice11-778 Behavioral Insights – Key Concepts, Applications and Regulatory Considerations

OSC Staff Notice11-778 *Behavioral Insights – Key Concepts, Applications and Regulatory Considerations* is reproduced on the following separately numbered pages. Bulletin pagination resumes at the end of the Staff Notice.

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BEHAVIOURAL INSIGHTS

KEY CONCEPTS, APPLICATIONS AND
REGULATORY CONSIDERATIONS

March 29, 2017

INVESTOR OFFICE
OSC Staff Notice 11-778

OSC

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SECURITIES
COMMISSION

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EXECUTIVE SUMMARY

There are numerous factors that influence the decisions that people make. Behavioural insights (BI) recognizes this and, through a combination of psychology, economic and more recently other behavioural research, examines how people are often neither deliberate nor rational in their decisions in the way that traditional models, strategies and policies assume.

In order to lay the foundation for enhancing the OSC's capacity and competency in the application of behavioural insights in securities regulation, the Investor Office undertook a year-long multifaceted research study that included reviews of literature, interviews with leading academics, and interviews with other regulators and governments that incorporate BI into their work.

This report describes key principles of behavioural insights and examines how leading practitioners are using these behavioural concepts to improve government policy and regulation. The report also includes a detailed review of how various regulators around the world are applying these concepts to address financial market issues and improve investor outcomes.

Having conducted the research outlined in this paper, the OSC will continue to build its capacity and understanding in the use and application of behavioural insights, as well as identify opportunities to apply behavioural insights in OSC policy development and operational processes. Over the coming year, the OSC will also conduct pilot projects for testing using a behavioural insights lens, and will use the report to build awareness, understanding and capacity in the use of behavioural insights both within the OSC and amongst stakeholders, with a view to identifying further practical applications of behavioural insights that will lead to better investor and market participant outcomes.

KEY FINDINGS AND CONCLUSIONS

Behavioural insights recognize how people actually behave versus traditional economic and market theory of people as rational actors.

People use rules of thumb in much of their decision-making, which are essential for routine tasks and decisions that are made every day. These mental shortcuts are often accurate, but they can lead to poor choices and mistakes, particularly for more challenging tasks.

Automatically using these mental shortcuts in our decision-making can create serious problems when people are faced with choices that involve complex calculations or have little impact in the near term but have significant long-term consequences. We often behave less rationally when we are given too much information, feel especially emotional or when social factors are a salient part of our decision-making context. Social factors hold sway in numerous situations, including when we rely on or are impelled to take action because of social norms and societal expectations or when we are exposed to social influences.

This report reviews how research and experience has shown how most choices are not made with careful deliberation. Rather, people are:

- **influenced by readily-available information, whether that information is novel or relevant, and whether it automatically generates good or bad feelings;**
- **making decisions in the moment, as many people prefer to continue with their current behaviour and often do not consider the future impact of their choices;**
- **poor predictors of future behaviour and are subject to people's distorted memories;**
- **affected by physiological conditions and emotional states;**
- **shaped by social norms and expectations (such as trust, reciprocity and fairness) and social emotions (such as shame or empathy), and are susceptible to social influences (such as peer pressure); and**
- **affected by social biases and mental models, such as stereotypes.**

The use of behavioural approaches in the public and non-profit sectors has increased significantly over the past decade.

Since 2008, BI's adoption around the world has grown remarkably. In 2011, only the UK Behavioural Insights Team and, in practice but without the formal BI designation, the US Office of Information and Regulatory Affairs existed. By 2016, the number of BI units worldwide had surged to the point where it is difficult to account for all of them without overcrowding a map.

Lessons from the behavioural insights activities of various jurisdictions around the world include:

The importance of distinguishing between strategy (the first mile) and tactics (the last mile)

Most governments and regulators focus time, resources and effort on strategy and much less on tactics. The last mile requires careful BI implementation because of the large variation in people's behaviour. This involves understanding specific touch points (such as how direct interaction occurs with consumers in person or electronically), how to disclose information in a behaviourally-informed manner and how to help consumers make better choices.

The effectiveness of using the EAST Framework when applying behavioural insights

Make it easy, make it attractive, make it social, and make it timely.

Testing and trialling, and instilling a culture of evidence-based approaches, is a key component of applying a behavioural lens

Among the most sophisticated of behavioural experiments are randomized controlled trials (RCTs). These trials are highly valuable as they test whether a causal relationship exists between one particular variable and an outcome.

Other securities regulators have increasingly applied behavioural insights in their work and have had practical success in improving outcomes.

This report reviews the behavioural insights activities and applications of various jurisdictions around the world, including the U.K. Financial Conduct Authority, the Australia Securities and Investments Commission, New Zealand Financial Market Authority (FMA), the European Commission (EC), the European Securities and Markets Authority (ESMA), the US Securities and Exchange Commission (SEC), the Financial Industry Regulatory Authority (FINRA), the Department of Labor (DoL), the Monetary Authority of Singapore (MAS) and Hong Kong's Investor Education Centre (IEC).

The use of behavioural insights in financial regulation has merit, though it is not a panacea.

It is clear that the use of behavioural insights in financial policy-making and regulation has benefits for investors and market participants alike. Understanding human behaviour enables regulators to better comprehend, diagnose and address ongoing market problems, in a more cost-effective way. Even when formal BI units are not present, the behavioural awareness and understanding that these insights bring to financial regulation complements a regulator's toolkit. Whether the activities are market or registrant regulation, or investor education and outreach, applying a behavioural lens to the OSC's work increases the likelihood of achieving better outcomes.

We would like to thank all those who contributed to the development of this report and welcome any feedback from stakeholders and interested parties.

Tyler Fleming

Director, Investor Office, Ontario Securities Commission

INTRODUCTION AND REPORT OVERVIEW

A lot of our policy models traditionally are based on a rather naïve understanding of what drives behaviour. But if you have a more intelligent, nuanced account of how people make decisions, you can design policy that is more effective, less costly, and makes life easier for most citizens.

David Halpern, Director, U.K. Behavioural Insights Team¹

Introduction

The use of behavioural approaches in the public and non-profit sectors has increased significantly over the past decade. According to one 2014 report,² over 100 countries are using behavioural disciplines in some areas of public policy, while more than 50 nations have centrally-directed initiatives using these approaches. Policy makers and regulators around the world have been increasingly applying these disciplines through “nudges” and other behavioural initiatives that take a fundamentally different approach to consumer markets.

While these concepts have been used in the private sector for decades, informing everything from marketing campaigns to communications strategies and product placements, it was not until the global financial crisis of 2007-08 that behavioural insights began to take hold among the public sector. In particular, behaviourally-based regulation in financial markets has grown rapidly since 2013, beginning with the United Kingdom’s Financial Conduct Authority and expanding to regulators in Australia, Asia, Europe and the United States in subsequent years. Importantly, the digital era has opened up new frontiers to use the behavioural disciplines with the masses of data and advanced analytics available to the public, private and non-profit sectors.

By way of a brief overview, there is a great and wide-ranging number of factors that influence the decisions that people make. Behavioural insights recognizes this and, through a combination of psychology, economic and more recently other behavioural research, examines how people are often neither deliberate nor rational in their decisions in the way that traditional economic models and associated strategies and policies assume.

People use rules of thumb (otherwise known as heuristics) in much of their decision-making, which are essential for routine tasks and decisions that are made every day.³ These mental shortcuts are often accurate, but they can lead to poor choices and mistakes, particularly for more challenging tasks.⁴ Automatically using these mental shortcuts in our decision-making can create serious problems when people are faced with choices that involve complex calculations or have little impact in the near term but have significant long-term consequences. We often behave less rationally when we are given too much information, feel especially emotional or when social factors are a salient part of our decision-making context. Social factors hold sway in numerous situations,

including when we rely on or are impelled to take action because of social norms and societal expectations (such as trust, fairness or reciprocity) or when we are exposed to social influences (such as peer pressure).

Behavioural insights recognize that people's thinking is subject to insufficient expertise and often involves uncertainty when making choices that reflect the limits on their rationality and willpower⁵. Similarly, social expectations, identities, networks, norms and preferences influence their behaviour,⁶ and mental models frame the ways in which they perceive different concepts, identities and worldviews.⁷ Behavioural insights build upon these concepts and findings from the behavioural sciences and applies these to better understand how people actually behave and make decisions to improve the approaches of business, non-profit and public sector organizations. Behavioural economics applies behavioural insights to markets and their constituent parts (individuals, firms et al). Behavioural finance applies these behavioural insights to financial markets and offers potential advantages for consideration by the Ontario Securities Commission (OSC).

Understanding human behaviour enables governments and regulators to better comprehend and diagnose ongoing problems within consumer markets. This report by the OSC's Investor Office begins with how behavioural economics and finance, together with other behavioural disciplines, led to behavioural insights that are reshaping government policy and regulation in a growing number of financial markets. This report describes key principles of both behavioural economics and finance as the forerunners of behavioural insights, including their intersection with other behavioural sciences, and examines how leading practitioners are using these behavioural concepts to improve government policy and regulation. What follows is a detailed review of how various regulators around the world are applying these concepts to address financial market issues and improve investor outcomes.

In doing so, this report's literature review and its survey of behavioural practitioners will highlight the merits that behavioural insights have for government policy and regulation. It looks at how behavioural disciplines established the rationale and benefits of "nudges" to improve people's ability to make better decisions. Nudges have proven to be effective as instruments for changing automatic defaults, simplifying communication and reducing hassle costs for consumers.

Behavioural approaches also provide frameworks for assessing market developments and evaluating guidelines, regulations and rules, so as to address areas where much more than nudging is required.⁸ The role of behavioural insights includes streamlining the environments in which consumers make choices. Behavioural approaches have other essential uses including protecting consumers from behavioural exploitation by firms and enhancing how economic policies are designed and implemented.

This report will show that behavioural insights should be an essential component of any government's and regulator's toolkit. They are crucial to policy-makers and regulators' success in improving tactics (the so-called last mile) whereas the public sector's focus and resources have often exclusively focused on the first mile (policy and regulation).⁹ It includes a staunch commitment to testing and trialling policy initiatives and regulations as experiments are essential to determine whether and how much these interventions are working and where they can be improved.

In doing so, it is important to stress that behavioural insights are not a cure-all solution nor are they the only lens for policy and regulatory evaluation. Rather, behavioural disciplines complement and improve traditional economics and legal analysis to enhance policy and regulation. As one leading practitioner of behavioural economics and finance states, their benefits are greatest when combined with other behavioural disciplines, data sciences and technologies.¹⁰

Report overview

The first chapter is a literature review of the core elements of behavioural economics (BE) and finance (BF) and how these concepts and findings can be applied through nudges and other policy initiatives. It outlines the foundations and major academic advances of BE and BF to understand their growth and decades of academic and applied research that culminated in behavioural insights (BI) and their use by governments and regulators. It includes an in-depth look at why BE and BF displaced the dominant economic models based on rational individual choice, highlighting how traditional approaches have often failed to achieve their desired consumer outcomes.

The chapter examines the key principles and insights of these behavioural disciplines for consumer markets, especially finance. It explores many of BE and BF's essential concepts and findings for these markets, and looks at their overlap with other disciplines under the umbrella of behavioural science and BI. It looks at the success and challenges of nudges and other behavioural applications, noting their merits as well as their limits. The chapter also reviews the different behaviours of people online as compared to in-person, examining how technology is influencing their choices and thought processes. It concludes by summarizing BI lessons for regulated consumer markets, with a focus on BF's applications within financial markets that are prone to people's systematic errors in decision-making.

The second chapter is a summary of how behavioural units and networks have reshaped consumer policy implementation and other regulatory approaches across the globe since 2008. It focuses upon how three different organizational approaches are used for behavioural insights units (BI units) and behavioural sciences teams (BSTs). It explores how these practitioners have adapted behavioural principles from theory and research to use behavioural insights to better understand market problems and to more effectively tailor policy initiatives. It looks at what frameworks and approaches they have developed to effectively translate BI findings into practice in the last mile of tactics. It includes the crucial role of testing and trialling in applying behavioural research concepts and insights in practice both for market assessment and for policy implementation. It concludes with a summary regarding BI's successes and lessons for leading government practitioners, as well as other policy and strategic considerations of relevance to the OSC.

The third chapter is an in-depth review of BF's accelerating international adoption in leading markets such as the U.K., Australia, European Commission, Hong Kong, Singapore and through 2016 the US. It explores the policy approaches and regulatory initiatives of leading practitioners and highlights how these regulators have adopted behavioural frameworks and employed BI in regulatory implementation. It focuses on the leading regulators' use of BF to assess challenges with consumer behaviour – and in certain areas, professional behaviour – and to create behaviourally-informed solutions on their own and in tandem with other disciplines.

The conclusion identifies next steps being considered by the Ontario Securities Commission (OSC)

Approach and scope

The content of this report was developed through an extensive review of the behavioural academic literature, a survey of the published reports, speeches and studies of major BI units, BSTs and financial regulators, and a series of interviews with government practitioners, financial regulators, applied researchers and academics.

The literature review in this report is not exhaustive. The sheer scale and surge in behavioural studies and applications of BE, BF and BI make a detailed and comprehensive commentary on the complete range of research well beyond the intent and scope of the report.¹¹ Instead, this report focuses on the components of behavioural sciences that are most applicable to the OSC, concentrating on economic policies and financial market applications that offer insights, opportunities and other considerations for the OSC's regulation of securities and derivatives markets.

The report does not explore the behavioural aspects of financial firms and professionals beyond certain aspects of the advisor-retail client relationship. The additional research required is beyond its purpose and scope, but we would note that others are investigating intermediaries and professional behaviour.¹² It also does not look at how BI can be applied to policy makers and regulators. Readers interested in this topic can look to the recent World Bank report¹³ that explores how practitioners are also subject to selected biases and 'cognitive illusions.' Other financial regulators have also cited public sector challenges from the action bias¹⁴ which refers to the potential for intervention before the causes and nature of market problems are well understood.

Terminology

As outlined above, BE and BF intersect with cognitive psychology, social psychology, neuroscience and other disciplines in behavioural sciences,¹⁵ which has led academics, governments and other institutions to use the terms "behavioural insights" (BI) or "behavioural sciences."¹⁶ This report uses the term BI throughout given its usage by leading organizations such as European Commission, the Organisation for Economic Cooperation and Development (OECD) and the World Bank. BI is a core part of the first behavioural unit, the UK Cabinet Office Behavioural Insights Team (BIT) and most successful practitioner through early 2017 as the BIT transitioned to a multi-national entity since 2014.

The critical roles of BE and BF in establishing BI and their ongoing use by leading financial regulators such as the U.K.'s Financial Conduct Authority and Australia's Investment and Securities Commission mean that this report will also use all three of these terms as appropriate. The report also uses the terminology of behaviourally-informed initiatives and policies as it examines how governments, regulators and supranational organizations apply behavioural findings generally.

BEHAVIOURAL INSIGHTS

CHAPTER 1

CHAPTER 1: SETTING THE FOUNDATIONS — THE CORE CONCEPTS, PRINCIPLES AND SUCCESSES OF BEHAVIOURAL INSIGHTS

“Moving forward in behaviour change should be a mix of applying insights from literature and learning from application.”

Daniel Kahneman¹⁷

"Behavioural economics brings insights from psychology and other behavioural sciences into an economic framework to explain why consumers behave the way they do. Consumers may sometimes misjudge important facts or make choices that are predictably mistaken By using behavioural economics, we can understand how these decisions arise, why they persist, and what we can do to ameliorate them."

Stefan Hunt and Darragh Kelly, U.K. Financial Conduct Authority¹⁸

Governments and regulators have increasingly used behavioural economics (BE), finance (BF) and insights (BI) since the 2007-08 global financial crisis with a range of public sector authorities rapidly expanding their use of both disciplines in their policy work. The number of BI units, behavioural science teams and behavioural science professionals among governments and regulators across the world has also seen significant growth, adding to the success of BE and BF in the public sector.

This comes much later than the private sector's adoption of behavioural concepts, which have been employed by firms and professionals in advertising, product displays and other commercial activities for many decades. Corporations continue to accelerate their use of BE and BF in the way they design, test and implement technology in their business, combining massive amounts of data with BE and BF insights to generate a deeper understanding of human behaviour. Using data and analytics has enabled businesses to apply, test and redesign products using BI in ways that

were not possible in the pre-digital era. The growth of BI usage by corporations in the era of Big Data and Big Analytics bears emphasis with the latest evidence including the number of leading Fortune 500 companies that have created Chief Behavioural Officer positions in senior management.¹⁹

It is important to state that while the mandate of this report focuses on BI, its relationship to BE and BF and their intersection with behavioural science requires exploration. BE uses both economics and psychology to understand people's actual thinking and behaviour in a systematic and scientific manner. It attempts to identify the processes and influences that affect people's decisions. As noted above, behavioural sciences, however, are much broader and encompass neuroscience, anthropology and other scientific disciplines' research into people's thoughts and behaviour.

There are three major sections of this chapter's literature review. While we strongly recommend reading the entire chapter, these three sections are designed to either be read in full or as individual sections and sub-sections which focus on the foundations and key principles of BE and BF (section B) as the forerunners of BI or BF's specific applications (section C).

The three sections following the introduction to this literature survey chapter are:

A. Foundations, milestones and factors that drove the adoption of behavioural approaches – this section begins with an overview of the major developments and pioneer researchers of BE and BF. It then focuses in upon BE's and BF's move from academia and the private sector into the public sector, including a review of the heavy reliance that governments and regulators have on consumer market efficiency and rational choice for policy, the huge costs of inappropriate products being sold by financial firms and the rise of BE, BF and BI following the global financial crisis.

B. Key concepts, nudging and insights into online decision-making – this section explores the core principles of BE and BF, their intersection with behavioural science that led to BI and the merits and limits of nudging. It also examines how online devices affect the information and choices available to people, and how our use of this technology is changing our decisions, preferences and ways of thinking.

C. Financial market challenges and behavioural finance's applications – this section summarizes why financial decisions are difficult for many people and explores how biases in our preferences, beliefs and decision-making abilities affect our choices.

Why behavioural insights gained momentum in the public sector

Economic policy and regulation of consumer and other markets were dominated by models based upon market efficiency and rational behaviour for much of the post-World War II era. These models were rooted in people's "arch rationality," where authorities would rely on individuals' rational decision-making as a core part of efficient markets.²⁰ As a result, government and regulatory approaches were led by the principles of "self-stabilization, equilibrium and efficiency." Public sector authorities assumed that individuals and firms were rational, that markets were highly efficient and optimal for consumer outcomes, and that any imbalances were self-correcting and would not cause any large shocks or sustained problems.

However, financial markets (among others) have often failed to achieve the best outcomes for consumer costs and products in recent decades, especially in the past ten years.

Ongoing consumer market problems and periodic shocks have had very costly repercussions, particularly in the years following the global financial crisis. Traditional models' failure to predict the 2007-08 shocks²¹ and other consumer market failures²² led to reassessments of policy and regulation. The global financial crisis drove searches for better models and policies in financial markets, specifically around banking, securities and derivatives supervision, and monetary policy.

Behavioural approaches offered many of the answers sought by governments and regulators. These disciplines began to be incorporated into public policy as policy makers realized that BE research showed how many aspects of market failures and undesired outcomes were predictable and systematic, and had significant implications in the ways that markets work.²³

By combining the concepts and findings from psychology and economics, BE and BF provided frameworks for understanding people's decision-making and behaviour. BE and BF studies demonstrated that consumers were often not rational, especially when faced with complex decisions or decisions with long-term impacts but little effect in the near-term. They showed that people's biases and mistakes can be systematic, including making continually poor product choices that can result in consumer market failure. BE and BF offered a way to explain why as well as providing new and more effective ways to address them.²⁴

Behavioural approaches have now "captured the attention of policymakers and regulators across many sectors."²⁵ More and more governments and regulators are using BI to better understand markets and people's behaviour, as well as help improve policy initiatives and achieve better outcomes for consumers. Regulators and other authorities are using the insights provided by these disciplines to learn more about how:

- consumers make choices and how their decisions and behaviour affect retail market outcomes;
- financial professionals interact with retail customers, and the impact that their incentives, information and various other factors have on consumer behaviour; and
- regulations and policies have intended and unintended impacts on both of these groups.

This chapter's literature review summarizes research in both BE and BF, as well as in BI, that is applicable to the work of the OSC, including examining how these disciplines have successfully challenged the consumer market efficiency and rational choice models.

This review of behavioural research is intended to provide an extensive overview for a general audience of informed stakeholders and other interested readers. It is limited in its scope as an exhaustive examination of the complete array of academic and other research in these fields is well beyond the purpose of this report.

This chapter also does not examine the behaviour of financial intermediaries and their staff apart from the interaction of advisors with retail investors. In this regard, we would note the research on intermediary and professional staff behaviour undertaken by the Federal Reserve Bank of New York and the Netherlands' central bank, among others.²⁶ Pending research is also underway by the U.K.'s Financial Conduct Authority.²⁷

Section A: Foundations, milestones and the public sector adoption of behavioural economics and finance

I. Introduction to the foundations of behavioural economics and finance

What is behavioural economics?

Traditional (neo-classical) economic theory is based upon efficient markets and logical human behaviour as its core assumptions are efficiency and rationality. In contrast, BE combines psychology and economic research to generate insights into how and why consumers and other economic agents are frequently not rational and often make mistakes.²⁸ BE and BF explore the factors that affect and shape people's thinking and behaviour.

Alain Samson's 2014 summary framework for BE's core principles and insights²⁹ is a useful introduction to these disciplines, beginning with how BE and BF recognize that people's thinking lacks sufficient knowledge and feedback. Our choices often involve uncertainty, and our decisions are affected by the context in which they are made. We have attentional and cognitive limits on our processing capability.

Samson summarizes how most choices are not made with careful deliberation. Rather, people are:

- influenced by readily-available information, whether that information is novel or relevant, and whether it automatically generates good or bad feelings;
- making decisions in the moment, as many people prefer to continue with their current behaviour and often do not consider the future impact of their choices;
- poor predictors of future behaviour and are subject to people's distorted memories;
- affected by physiological conditions and emotional states;
- shaped by social norms and expectations (such as trust, reciprocity and fairness) and social emotions (such as shame or empathy), and are susceptible to social influences (such as peer pressure); and
- affected by social biases³⁰ and mental models,³¹ such as stereotypes.

BE's main principles and insights may appear simple, however their importance in policy-making and regulation results from the ways in which they have advanced how people's thinking and behaviour are understood. BE and BF have a wide number of applications for policy makers that go beyond behavioural observations. As the U.K.'s Financial Conduct Authority explains, BE offers systematic, evidence-driven frameworks for governments and regulators to understand where and how market failures occur and provides a lens to evaluate potential remedies.³²

Although it is not easy to precisely define BE – even the foremost theorists and other leading researchers do not agree upon an exact definition³³ – there are several core elements that, when combined, effectively capture BE's and BF's usefulness for assessing markets and behaviour, as well as for improving policy-making and regulation.

A general definition of BE starts with the way in which it applies psychological insights to economic problems.³⁴ This definition highlights BE's origins in psychology, particularly through repeated experiments and observations to derive principles of economic behaviour, which contrasts with traditional macroeconomics and efficient market theories, which are "top-down" in their assumptions about how people behave and market interactions occur.³⁵

Another helpful description is to define BE as the study of cognitive, emotional and social factors that affect people's observable economic behaviour.³⁶ Additionally, BE is also a "discipline at the intersection of psychology and economics"³⁷ with growing ties to neuroscience and other disciplines that fall within the scope of behavioural science.

Behavioural disciplines also hold a number of important advantages in their approach to empirical testing. Behavioural sciences make use of the experimental method, the gold standard of which is undertaking randomized controlled trials deployed in laboratory environments and/or through extensive field testing and (more recently) advanced data science to measure and describe people's behaviour. As a result, their BI frameworks can provide clear benefits for diagnosing policy and regulatory problems, designing appropriate responses and adapting policies and regulations from the evidence collected.

In spite of their precise definitional challenges,³⁸ BE, BF and other behavioural sciences offer many theoretical and practical advantages,³⁹ including a means to explain systematic influences on economic decision-making and to address regulators' abilities to influence behaviour by using "nudges" or rules to affect behaviour.

According to the Organisation for Economic Co-operation and Development (OECD), BI is "being used to enhance the effectiveness of government interventions."⁴⁰ The benefits of BI extend beyond nudges and other policy interventions as they provide important input into policy assessments and implementations.⁴¹ These insights offer significant advantages to governments and regulators by:

- playing an important role in assessing and defining certain problems (including market failure);
- being an influential complement to other traditional policy approaches; and
- being used to fine-tune and enhance current economic thinking.⁴²

An overview of behavioural economics' foundations and key milestones in its rise to prominence

Governments and regulators have increasingly adopted BE and BF insights into their work over the past decade. In 2008, Dan Ariely wrote that BE is an "emerging field."⁴³ In contrast, by 2015, Richard Thaler could write that BE "is no longer a fringe operation [as it] is going mainstream."⁴⁴

However, BE and BF's rise to prominence over the past decade in the public sector follows more than 40 years of research⁴⁵ showing how consumer choices and people's thinking regularly contradict rational choice and market efficiency models of post-World War II economics and policy.

The dominant post-World War II model of economists had two broadly assumptions, namely market efficiency and rational choice which were assumed and acted upon by policy makers and regulators.⁴⁶ Policy reflected a framework based upon the idea that people are generally rational and their thinking is generally sound, and that because they behave this way,

their decisions are also generally sound. Emotions such as affection, fear and hatred explained most of the occasions when people do not behave rationally.

These assumptions about people's rationality and market efficiency were held by most academics until the 1990s, and continued to prevail among policy makers and regulators into the early 21st century. Efficient consumer markets and rational choice proponents were led by the University of Chicago's Milton Friedman and Gary Becker, Nobel prizewinners who were highly influential in mainstream economics and other social science fields. Becker outlined a set of ideas in *The Economic Approach to Human Behaviour* that became the pillars of "rational choice" theory,⁴⁷ embracing the view that people have stable preferences and engage in behaviours that best serve their own interests by maximizing their own benefits. Accordingly, rational behaviour occurs in a wide array of policy areas, ranging from crime to marriage.

Friedman and Becker's impact was paralleled in academic studies regarding financial market efficiency. By 1970, the collective studies of Eugene Fama and other leading academics at the University of Chicago and the Massachusetts Institute of Technology provided strong support for financial market efficiency, including Fama positing the "efficient markets hypothesis."⁴⁸ Rational expectations models of markets and people's behaviour also became increasingly popular in the mid-1970s and onward, leading to new macro-economic models that displaced Keynesian economics.

The neo-classical model of rational agents and of rational expectations has four simplifying assumptions that merit a brief expansion to better understand how BE and BF challenged this traditional model of people's behaviour and thinking. This definition of rationality is fundamentally different from the popular and everyday notions of what is rational – it has four 'C's as summarized by BE expert Kelly Peters:⁴⁹

- **Completeness of information** – people look at and consider all outcomes and potential future events;
- **Fully logical Cognition** – people are almost robotic in assessing information as emotions, physiological conditions and social influences and norms do not affect our behaviour;
- **Computational Strengths** – people are capable of doing sophisticated mathematical and statistical analyses; and
- **Consistency of choice** – our choices are fully logical and transitive whereby if we prefer Choice A to Choice B, and Choice B to Choice C, by definition we must prefer option A to option C.

Other important aspects of the neo-classical rationality include completeness in knowing our preferences and that there is no end to our consumption (non-satiation).

For several decades, BE and BF have challenged these assumptions of consumer market efficiency and rational choice. BE and BF studies have shown that existing rational choice and rational expectations models had "excessive faith in the efficiency of markets and rational choices made by agents [economic actors] in their behaviour, and the ability of agents in financial markets in particular to make sound decisions."⁵⁰ BE and BF challenged the neo-classical approach by demonstrating that people systematically deviate from the rational model. As they showed, these deviations in our behaviour and thinking are large enough and predictable enough to show that BI is essential.

The pioneers: Tversky and Kahneman (1974, 1979)

While the modern roots of BI go back to Herbert Simon's pathbreaking work on the limits to our cognitive capabilities (bounded rationality),⁵¹ pioneering psychology articles by Amos Tversky and Daniel Kahneman in the 1970s were crucial in establishing the

intellectual and empirical foundations of clear limits on people’s rationality. These two academics played a founding role in developing the core principles of the cognitive behavioural approach and challenged the rational choice model of economics. Their pathbreaking “Judgement under Uncertainty” (1974) article explored how people’s use of shortcuts and simplifications have created some 20 biases in our decision-making. Tversky and Kahneman’s work demonstrated the ongoing use of mental “rules of thumb” (heuristics) in people’s judgement, the impact of which is evident in this research being cited over 7,000 times in academic papers, “an unbelievable rate for a psychology article.”⁵²

Tversky and Kahneman’s 1979 paper had an even greater impact, introducing prospect theory and identifying three elements to consider when assessing wealth opportunity outcomes.⁵³ The first is that people evaluate the potential outcomes of their choices from a mental reference point, which is used to weigh gains or losses. Our tastes are not fixed, but will vary with the reference point that each person uses when making choices. The second element is that people have diminishing sensitivity when evaluating change, especially when it comes to wealth. The third, and perhaps most important element, is the impact of loss aversion. People feel losses much more than they do gains, between 1.5 and 2.5 times more, and as a result there are asymmetries in people’s preferences and decision-making.

Loss aversion and people’s reliance upon mental reference points explain why losses appear much larger than gains in people’s decision-making, creating disproportionate responses in their preferences and choices. We favour smaller changes over larger ones (not including situations where the perceived gains are materially positive) and, accordingly, only make choices with a different potential result (relative to the *status quo*) when the perceived benefits exceed the perceived, over-weighted losses.

Taken together, Tversky and Kahneman’s 1974 and 1979 articles effectively demonstrated that there are systematic errors that occur in people’s thinking which result from human cognition, rather than being strictly a product of emotion as neoclassical economics assumed. Their findings also led to examining how people’s choices are influenced by the way in which they are perceived or framed. Among the many insights from their research is the notion that people’s willingness to take risks is influenced by how a choice is framed. Their decisions about risks are dependent upon the context in which a choice is presented – a person’s response to a choice changes based on whether it is framed as either a gain or a loss.

Loss Aversion



The breakout to the public mainstream: *Nudge*, *Predictably Irrational* and *Irrational Exuberance*

Despite Tversky and Kahneman's pioneering work, it took time for academia to respond to their pathbreaking research. Even with BE's early beginnings with Richard Thaler's "Toward a Positive Theory of Consumer Choice" (1980)⁵⁴ article and Robert Shiller's critique of asset pricing theory (1981),⁵⁵ BE and BF still had a very narrow impact with economists. As Thaler notes, by the late 1980s only he and three other academics saw themselves as behavioural economists.⁵⁶

During the 1990s and early 21st century, however, other researchers built significantly upon Tversky and Kahneman's work. This research demonstrated how systematic errors can occur in people's decisions as a result of their biases.⁵⁷ Through numerous experiments and other evidence-based research, these studies showed how people's ability to undertake rational plans is constrained by:

- limits upon their self-control (bounded willpower);
- limits upon their mental capacity to assess complex issues, undertake complex mathematics and solve multi-part problems (bounded rationality);⁵⁸ and
- limits upon their self-focused behaviour from their concerns for fairness, reciprocity, trust and other social values (bounded self-interest).

Behavioural insights into the cognitive biases, emotional factors and social influences that affect people's thinking are also consistent with the notion that heuristics are essential to most of people's daily or routine decisions. Mental shortcuts often help people prioritize and keep from over-analyzing their choices. As well, people's adherence to social norms rather than only market norms is often in their own interest. Most people live according to societal codes and expectations, which encourage favourable social actions such as cooperation.

BE and BF provide better frameworks for understanding how and why people's biases lead to decisions that are not in their best interests. These mistakes often occur when consumers are confronted with complex choices or when they are faced with decisions that do not have immediate impacts, but hold longer-term consequences that may be difficult to anticipate or predict. People often make mistakes when a choice causes significant emotions. Decades of research from these behavioural disciplines also shows the importance of people's social expectations, preferences and other norms that are at odds with market norms.

Given the strengths demonstrated by BE and BF research and their increasing intersection with other behavioural sciences, these disciplines grew to be much more accepted in academic circles by the late 1990s and the early 21st century.

In marked contrast, the public sector was much slower to acknowledge Tversky and Kahneman's findings and to use BI for government and regulatory purposes. Consumer market regulation and other policy from the 1980s to the early 21st century embraced the efficient markets, rational choice and rational expectations models. However, there was a shift in BE and BF's acceptance among the public sector during and after 2008.

The popular works of several authors were critical factors in leading the public sector's awareness of these disciplines. Richard Thaler and Cass Sunstein's book *Nudge* (2008)⁵⁹ led the rise in BE and BF's profile. *Nudge* highlighted the shortcomings of policies and regulations that are based

upon economic idealization rather than actual human behaviour, and provided experts and non-experts alike with a framework for better assessing markets and people's behaviour as well as a clear rationale for applying BE to government policy and regulation.

Thaler and Sunstein focused on how traditional economic approaches sought to address market weaknesses by maximizing the number (and variety) of choices based on efficient markets and rational choice models. They explained how these models fail to recognize that almost all people, almost all of the time, do not make choices in their best interest or that are better than choices made by others. Nudge also explored bounded rationality's principle of limited knowledge or information, and showed how people require experience, good information and prompt feedback in order to make good decisions.

While Thaler and Sunstein drew extensively upon psychology research that select others, such as Robert Cialdini, had helped popularize (see Cialdini's work on persuasion and marketing⁶⁰), they transformed the public recognition and understanding of BE in three crucial ways.⁶¹ As non-psychologists, they applied cognitive insights to challenges faced by economists, governments and regulators. They also built upon existing academic literature by combining it with concepts from BE. Additionally, they were extensively engaged in policy, beginning with the 2008 Obama campaign and later the White House and U.K. Cabinet Office.

Nudge had a decisive impact upon governments and regulators. The term "nudging" entered the public lexicon to describe initiatives designed to improve default choices, simplify communications and reduce consumer hassles at low cost. The extensive use of nudges for these and other purposes was the most visible impact of BE and BF in policy initiatives for various governments and regulators.⁶²

***Nudge* explored how bounded willpower, bounded rationality and present bias combined with money illusion resulted in inadequate retirement savings for many people. Thaler and Sunstein highlighted Thaler and Benartzi's (2004) "Save More Tomorrow" work, which identified multiple barriers to people having sufficient future savings or participating in retirement plans. These included that:**

- many participants desire and plan to save more, but never follow through;
- limits on willpower make it difficult for participants to follow through on their intentions;
- people dislike having their paycheques decrease (loss aversion) for hard-to-assess future benefits (present bias);
- losses are felt in nominal dollars, not percentages (money illusion); and
- inertia plays a significant role in inhibiting desired behaviour.

Dan Ariely's 2008 book, *Predictably Irrational*,⁶³ was also important in generating awareness of BE. Ariely effectively summarized a wide range of behavioural concepts through real life examples, clear descriptions of research experiments and other illustrations drawn from academic research as well as his own experience. He explored how people's irrational behaviour is neither random nor senseless, but rather systematic and predictable. *Predictably Irrational* highlighted how people's decisions are influenced by their immediate environment, their emotions and their prioritizing of the present over the future. Ariely's book also effectively illustrated how people's bounded rational choices reflected the limits upon their thinking processes.

Predictably Irrational also explored the impacts that social norms have in people's everyday lives. Social norms like fairness, honesty, reciprocity and trust differ from market norms as they reflect society's

acceptable behaviours and have a decisive influence on people's choices. The presence of these social norms can lead to choices that are not driven by price and other financial considerations. Examples of this include family interactions (parents do not expect to be paid for cooking or performing other household duties that benefit their children) and many aspects of volunteer work. (In an instructive U.S. example, lawyers had little interest in doing work for seniors at much lower rates, but were happy to do work for free as a public service.⁶⁴)

As a *New York Times* bestseller, *Predictably Irrational* significantly broadened public sector awareness of behaviours that frequently fail to conform to the models of efficient markets and rational choice. Ariely showed that people's cognitive biases and limitations, emotional states and social influences mean that their choices are often not rational in the traditional economic sense. He strongly favoured using BE, given its insights regarding how people think and act. "Economics would make a lot more sense if it were based upon how people actually behave, instead of how they should behave."⁶⁵

The asset market, macro dimensions and insights of BE and BF

The third member of the crucial popularizers of BE and BF is Robert Shiller. While much of Shiller's work is outside of the scope of this report, his financial market and macro-economic research on asset markets,⁶⁶ as well as his books and insights, have been influential in the rise of BE and BF among governments and regulators.

Beginning in the early 1980s, Shiller combined BE and BF with research into asset price formation (stock prices and real estate) to show that emotions, social influences and other irrational factors can be decisive influences. He explained how periodic bursts of irrational exuberance can create major systemic risks in financial and housing markets, which were missed by most policy makers in the years prior to 2000-02 and again in the years before 2007-08.

Shiller's work on the causes of market excesses and his predictions of major market risks helped to popularize BF and, from 2008 onward, influence policy. His book, *Irrational Exuberance* (2000),⁶⁷ along with his market forecasts and comments in the media, were significant during this time; he discussed the potential for large stock market declines ahead of both market drops in 2000-02 and 2007-08. He also predicted the bubble in U.S. real estate prices well in advance of its 2007-09 collapse.⁶⁸

Shiller's work provided measures to gauge asset bubbles and advanced macroeconomic policy models and regulatory initiatives, helping lay the groundwork for monetary and other macro policy changes after 2007-08. His BF work included a methodology derived from long-run stock market valuations since 1881 using current price-to-long-term earnings ratios. His model was incorporated into numerous leading market analyses of equity market valuations and investment outlooks in the wake of the 2000-02 stock market declines and is still in widespread use today. The Case-Shiller home price index for housing markets has also achieved a substantial following and has been used by a number of policy makers and regulators since 2007-08.

II. Market failures and systemic shocks spur the adoption of behavioural economics and finance

Serious flaws in traditional market efficiency and rational choice models become clear

The popularity of Thaler and Sunstein's *Nudge* and Ariely's *Predictably Irrational* – as well as the public recognition of Shiller's insights and frameworks – came about during a period of major consumer market failures and structural problems with existing financial market policy models. These problems stemmed from traditional consumer protection policies⁶⁹ that were designed with assumptions that the average person is rational and that more information leads to better choices, which in turn increases consumer benefits.

The traditional approach suffered from several flaws, beginning with the assumption that people are willing and sufficiently competent enough to effectively deal with the information provided to them. It also incorrectly assumed that consumers usually make informed and rational decisions and take advantage of their "information-based rights."⁷⁰ The events of 2007-08 combined with these leading authors' popularity to create a fertile environment to showcase the merits of BE and BF research as these disciplines clearly demonstrated fundamental issues with traditional policies and regulations.

The financial crisis revealed that relying upon de-regulation and extensive disclosure to achieve better consumer outcomes was a flawed approach. Among the most important government and regulatory mistakes were the failures to prevent costly housing market bubbles in the U.S. and various European and Asian countries, too-easy credit conditions, inadequate regulation of banks' and investment dealers' derivatives and new products, and a lack of oversight of high-cost retail products being inappropriately sold to consumers.

This crisis spurred a re-evaluation of a range of other traditional approaches to policy and regulation. Various studies showed that dense, legalistic and lengthy disclosure was ineffective,⁷¹ as many people struggle to understand such information given their literacy or language challenges. 'Innumeracy' is an even larger challenge, as many people cannot answer basic statistics questions. Lengthy disclosure and large amounts of fine print result in 'overload' and 'accumulation' problems for many people. Overload arises when disclosure is too extensive and too complex, while accumulation problems refer to the ongoing daily, weekly, monthly and yearly receipt of so many disclosures that people cannot keep up with nor understand.

Despite extensive efforts to assist people with understanding disclosure materials, behavioural research has revealed that reliance upon conflict of interest disclosure of advisors is often inadequate and can produce results that were the opposite of its intended effects.⁷² These studies have shown how many psychological factors limit the effectiveness of advisors' disclosure⁷³ for consumers and advisors, including consumers having biased probability judgements and limited understanding of the disclosure. People also demonstrated an aversion to disclosure that made them uncomfortable or that did not support the choices that they had already made. Subsequently, they would often feel increased pressure to follow an advisor's advice due to the panhandler effect (consumers did not want to be ungrateful after the advisor's interest was disclosed) and insinuation anxiety (people had a fear of showing distrust post-disclosure). For advisors, the effectiveness of disclosure was reduced if "moral licencing" occurred, whereby the advisor feels less responsibility to give unbiased advice after disclosure.⁷⁴

Other traditional policy models and regulatory approaches also were questioned following the financial crisis. Certain governments and regulators came to recognize that markets with a large number of firms were not necessarily more competitive. For example, despite the presence of numerous banks in Italy, its banking sector has had substantial inefficiency⁷⁵ as well as systemic risks.

Regulators began to understand that it is essential to distinguish between nominal competition, as shown by the number of firms, and effective competition as determined by price, quality and service.

There is also growing evidence to suggest that even when regulators enforced compliance upon advisors that were found to have broken rules, these advisors' behaviour did not change in the ways expected or intended, as an individual's compliance tends to worsen after he or she has been required to pay fines and taxes.⁷⁶

BE and BF studies have demonstrated that a number of traditional policy approaches were either inadequate or failed to solve the poor choices often being made by consumers. Even when traditional regulation successfully identified a problem, the research suggests that it frequently used ineffective measures (such as very detailed disclosure to correct these market flaws) to address them. Authorities had the "right problem, wrong solution."⁷⁷ Traditional policy and regulatory measures came to be seen frequently as ineffective, and often also as causing unintended consequences.⁷⁸

Conflict of Interest Disclosure



Inappropriate products: Huge costs of weak policy frameworks and ineffective regulation

By 2007-08, there were many factors precipitating the need for new regulatory frameworks and approaches to address structural market problems, especially in consumer markets. High-profile, poorly-understood products were creating losses for a significant numbers of individuals and, in the case of the U.S., were generating systemic risks that spread globally. There were major cases of products being mis-sold to consumers during the 1990s and early 21st century which benefitted the firms selling such products but were unsuitable for many purchasers. Most buyers only came to understand these products' opaque and excessive costs long after their purchase. (Sub-prime lending in the U.S., the U.K. Payment Protection Insurance and Hong Kong mini-bonds are all major examples of poorly-designed but successfully-marketed products that met the needs of firms rather than consumers.⁷⁹)

These high-profile cases underscored serious weaknesses in traditional government and regulatory approaches to consumer financial markets. The traditional models were especially problematic in how they failed to address serious issues and gaps in financial policy for consumers and in the regulation of banking and investment firms.

The 2007-08 global crisis leads to fundamental rethinking of financial market policy and regulation

The global financial crisis, and the “Great Recession” that followed in many countries, was pivotal in shifting the policy and regulatory approaches to financial markets. Although the 1987 and 2000-02 equity market declines had challenged the economic models of efficient markets and rational individuals, the nature and severity of the 2007-08 crisis showed the flaws in these models can be acute and costly.⁸⁰ Reliance on market forces and assumptions of rational behaviour did not prevent the 2007-08 global financial crisis and subsequent recessions in most countries, the worst since the 1930s.

By 2009, governments and regulators in North America, Europe and Asia had seen how key parts of their approaches to monetary policy, banking and financial markets had failed. Among the repercussions for policy makers and the public were:

- considerable government exposure generated by bailing out financial intermediaries in the US and Europe;
- large declines in housing market prices, which continued to be depressed in the U.S. and several European countries for years;
- unemployment rising to levels not seen by a number of countries, particularly in Europe, in several decades; and
- a prolonged stock market decline.

These and other consequences, created an urgent need for academics, governments and regulators to revisit their understanding of markets and behaviours.

The resulting crisis in the economics discipline itself⁸¹ led to a fundamental policy and regulatory overhaul.⁸² This spurred the use of zero interest rate policies, forward guidance and quantitative easing, as well as a search for new macro models.⁸³ Monetary policy also shifted toward an increased focus on financial stability, as well as systemic and firm risks.

In banking oversight, authorities became less reliant on pure market forces and self-regulation, instead introducing a range of changes that included increased and higher-quality capital buffers⁸⁴ and tougher stress tests for intermediaries. In regulated consumer markets, especially securities, new entities like the Consumer Financial Protection Bureau in the U.S. and the Financial Conduct Authority in the U.K. were created.

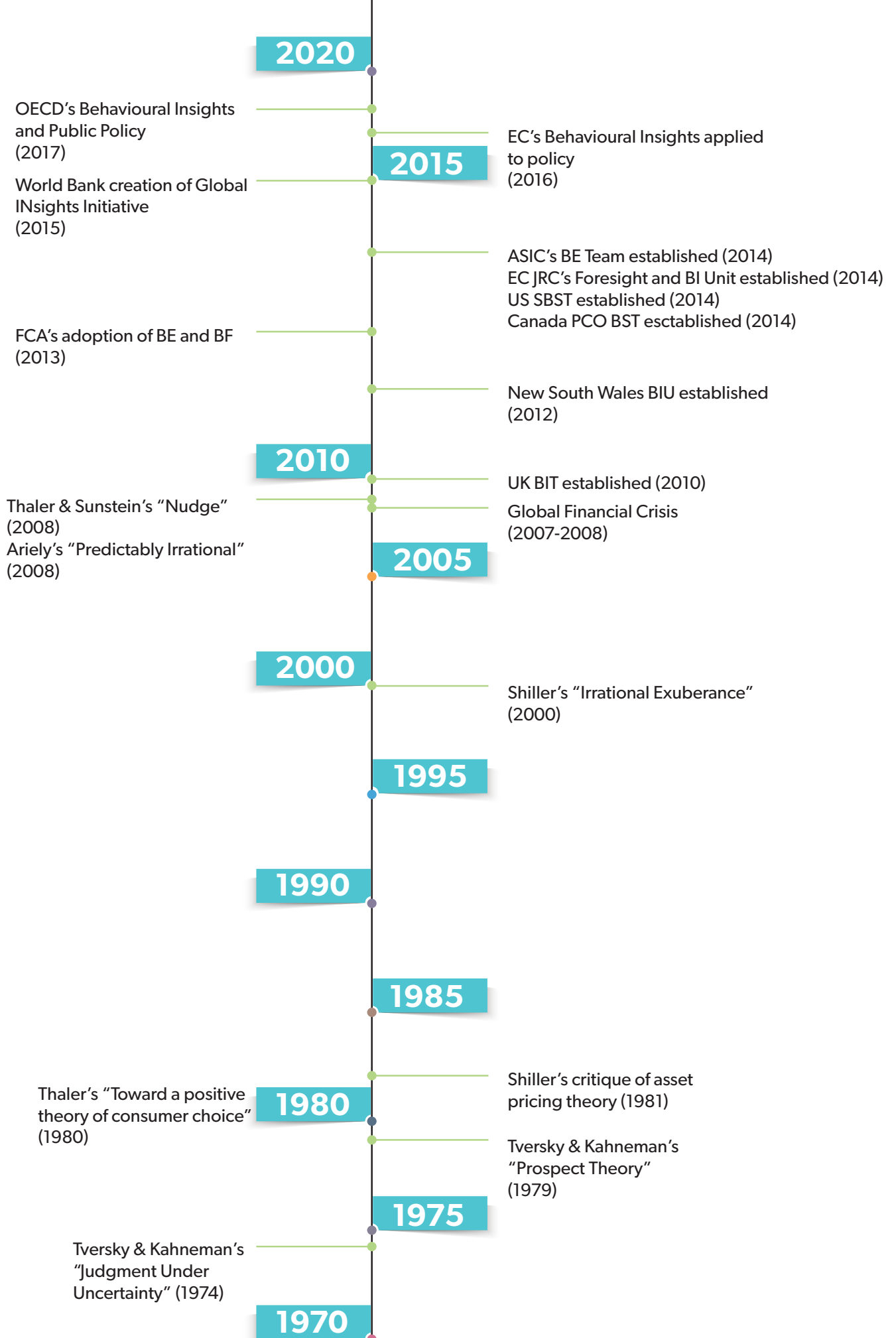
A new path: Behavioural economics and finance's rise to prominence

The disruption of traditional economic models and search for alternatives, especially in regulated markets, created fertile ground for BE and BF's use by governments and regulators.

It had been approximately three decades since the 1974 and 1979 articles by Tversky and Kahneman, but as Pete Lunn wrote in 2014, "from the position of a sometimes marginalized sub-discipline, BE has been swept into the mainstream with surprising speed" since 2009.⁸⁵ Some notable examples of the impact of BE and BF in the public sector include:

- Richard Thaler's and Cass Sunstein's roles in Barack Obama's 2008 presidential campaign;
- Sunstein being appointed Director, U.S. Office of Information and Regulatory Affairs, in 2009;
- the U.K.'s creation of the Cabinet Office Behavioural Insights Team (UK BIT) with Thaler as an advisor (2010), its renewed mandate (2012), and its expanded domestic and foreign role (2014)⁸⁶ when it was moved and restructured to be a stand-alone entity outside of government;
- the U.K. Institute for Government publishing a discussion paper, *Mindspace* (2010),⁸⁷ which relied extensively upon nudging principles and enjoyed a broad public sector audience;
- the U.K. Financial Conduct Authority's adoption of BE and BF in 2013 and its active pursuit of policy and regulation informed by these disciplines since then;
- the creation of the White House Social and Behavioural Sciences Team in 2014 and its significant impact on U.S. Federal government programs through 2016;
- the World Bank's creation of the Global INsights Initiative in 2015, with a mission of assisting governments in incorporating behavioural and social insights into project design and implementation, and evaluating the impact of these policy interventions;⁸⁸
- the European Commission's framework for behavioural consumer research, with its notable insights in banking fees, food labels and online gambling;⁸⁹
- Canada's establishment of a 3-person Behavioural Sciences Team as part of the Privy Council's Innovation Hub in 2014.⁹⁰ Ontario followed in 2015 in creating a BI unit; and
- OECD's major study of BI use globally and 150+ case studies was released on March 1st, 2017⁹¹

The extensive influence that BE has had on the economics discipline over the years following the financial crisis is also worth noting. Tversky and Kahneman's Prospect Theory article, which had very limited citations in the initial years after being published in 1979, became the second most cited paper in all of economics by 2010.⁹² The impact of their research overall was significant – "by 2016, every tenth paper published in economics would have a behavioural angle to it."⁹³



Section B: Behavioural disciplines' key concepts

III. Behavioural economics and finance's core concepts, insights, intersection with behavioural science and nudging

Understanding the merits of BE and BF and the reasons for their widespread adoption requires exploring some of their core principles and the ways in which they overlap with behavioural science as BI. It is important to examine the duality of people's systems of thinking, as these provide the foundation for BI's frameworks.

Essential BE Concepts and Principles

The dual-system theory was built upon Keith Stanovich and Richard West's study, "Individual Differences in Reasoning: Implications for the Rationality Debate," as well as the subsequent work of Tversky and Kahneman and numerous other cognitive psychology studies.⁹⁴ This theory posits that "the complexity of human thought and action can be understood by envisioning two systems operating simultaneously in the brain," and refers to two systems of thought:⁹⁵ automatic (fast and non-conscious thinking) and reflective (slow and conscious thinking).⁹⁶

The dual-system theory is a highly useful framework to explain how the brain works, and subsequently how humans think and feel. Many leading researchers have found the theory to be a helpful model for framing people's approach to decision-making, while still recognizing that there is debate around the ways in which these systems interact and how people make choices within this framework.⁹⁷

Under the dual-system theory, automatic thinking is people's default way of processing information and responding. This system results in thought processes that are rapid, intuitive and experience-based. These quick responses are necessary for human survival, as they generate low effort responses to choices and situational demands. This system works quickly to try and simplify challenges, and while it is often accurate, it is not necessarily rational. Automatic thinking makes use of heuristics and is responsible for the ongoing biases (systematic errors) in people's decision-making.⁹⁸ The automatic system also harnesses basic emotions, such as anger, fear, happiness and sadness.

Reflective thinking is the alternative way for people to process information and to respond to the world around them. This system is more thoughtful and sophisticated, as well as slower, analytical and deliberate. Reflective thinking makes use of more sophisticated strategies for solving problems, resulting in decisions that may be more accurate, appropriate and/or effective than those produced through automatic thinking. The reflective system is also emotional, but it includes more complex and often social emotions (such as empathy, guilt or shame).

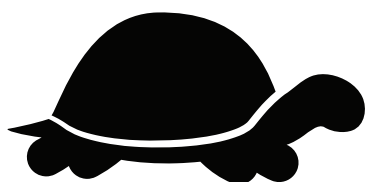
TABLE 1

Dual System of Thinking⁹⁹

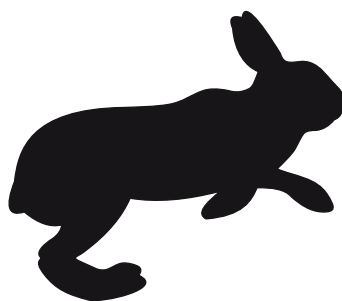
Automatic System	Reflective System
Applies what rapidly comes to mind (narrow frame)	Considers a broad set of relevant factors (wide frame)
Effortless	Effortful
Associative	Based on reasoning
Intuitive	Deliberative
Affected by Basic Emotions (e.g., fear, happiness, sadness)	Influenced by Complex Emotions (e.g., regret)

Our Brains Like Efficiency. Mental and Time Constraints Matter.

Dual System of Thinking



Reflective



Automatic

While cognitive psychologists generally agree dual-system theory is a highly useful framework, as noted above, there is some debate about how these systems interact.¹⁰⁰ (It is also important to reiterate that our automatic thinking is essential for many routine tasks and to avoid the cognitive depletion that increasingly occurs when reflective thinking is used extensively.)¹⁰¹

Kahneman and numerous cognitive psychologists describe the interaction as one in which the rapid and intuitive responses generated by the automatic system usually overwhelm the reflective system's more careful and objective thoughts. As a result, people's decisions are more likely to reflect their predictable biases than their rational choices, even when automatic thinking has produced a default choice that is inappropriate, inaccurate or that does not fit the circumstances in which it is made.

People's automatic use of heuristics is increased by a number of factors, as shown by numerous studies.¹⁰² Automatic thinking is most likely to be used for choices that involve emotional topics or by people who are feeling extreme emotions. Automatic thinking is also employed when people have strong preconceived attitudes or beliefs or when they receive information from a source believed to be credible and trustworthy. Similarly, this system predominates when people feel it would be challenging to evaluate the information provided (for example, in situations where they feel distracted or hurried, or where there is an overload of information).

In contrast, reflective thinking is likely to take prominence when a choice is seen to have an important outcome, greater relevance or involves accountability to others.¹⁰³

There are numerous challenges that arise from the shortcuts and heuristics that are applied when people make automatic decisions, particularly in the number of biases that influence their decision-making.¹⁰⁴ These cognitive biases include:

- **Anchoring.** This refers to people's initial exposure to a piece of information (such as a number) that becomes an unintended reference point which influences subsequent value judgements. For example, anchoring can occur when a prospective homebuyer judges the value of new homes based on the price of the first house he or she viewed.
- **Zero price effect.** This describes the emotional response that people have to a product priced for free, leading them to make choices that are not in their best interests. This effect is a notable source of irrational excitement as people perceive a product's intrinsic value to be higher when its price is reduced to zero, so much so that it overwhelms many people's capacity to conduct a traditional cost-benefit analysis. Examples range from taking a free item such as a fast food sample because you want it, but do not need it or should not own or consume it to accepting free timeshare accommodation or offers of portfolio appraisals without considering the strong investment sales pitch that all-too-often accompanies these zero-priced products.
- **Availability.** This describes the probability of an event occurring being perceived as higher because it is easy to think of examples of when this event had previously occurred (it is readily-available in a person's memory). An example of this would be a situation in which investors judge the quality of a stock based on information that was recently featured in the media, ignoring other relevant data and facts.
- **Affect.** These are good or bad feelings that are automatically generated when thinking about a given topic. When making a decision, people may take a quick mental short-cut by using such "affect as information," and judging what feels good as 'right and desirable', and what feels bad as 'wrong and to be avoided'.¹⁰⁵ These choices are based on past experiences and memories that are triggered before (and potentially to the exclusion of) reflective thinking. As with other biases, the role of affect in decision-making is more pronounced when people's time or resources are insufficient.

However, an affect bias does not always lead to poor outcomes, as various studies have demonstrated.¹⁰⁶ Emotions can help people with creating priorities and motivate problem-solving behaviours. Negative emotions can help us complete detail-oriented tasks, and often encourage greater systematic evaluation; positive emotions can encourage creative thinking. It is when there is too much emotion present that decision-making typically begins to suffer.

- **Overreliance on Salience.** This occurs when information stands out, is novel or seems relevant and therefore attracts more attention than what may be merited. Much like using "affect as information," people use the rule of thumb that "salience signals importance". This bias includes people's preference for brand names and their perception of quality based the brand's profile, its distinguishing aspects or its personal importance to the decision-maker. People tend to base their decisions on salient elements as opposed to considering all of the elements of their environment. Examples include focusing their attention on information displayed in vibrant colours, large formats or prominent locations on a computer or mobile device screen.
- **Status quo and inertia.** These biases refer to people's aversion to change. These biases often involve habits based on repetition and associative learning. People will frequently not change their habitual behaviours without a strong incentive. Examples of this include people's unwillingness to change banks or insurance policies, even when there is readily-available evidence of similar products offering better savings rates or lower costs.

Status quo and inertia biases are reinforced by two others: confirmation bias and belief bias. What people believe influences the information that they look for and how thoroughly they analyze it. Confirmation bias means that we automatically look for information that supports our prior beliefs¹⁰⁷ because we seek affirmation for our views. Belief bias means that we are more likely to dismiss or find fault in information that challenges our beliefs and accept information that affirms them. In some instances, belief bias leads people to thoroughly analyze information that is inconsistent with their beliefs, and similarly discourages evaluating information that matches their views.

“Temporal dimensions”¹⁰⁸ are also very important. These include the ways in which time factors into people’s decision-making, as well as the difficulty that we have when trying to predict our future behaviour, experiences or perceptions of value.

Psychology research has demonstrated that people’s decisions change depending on whether they consider them for the long-term (“high distance”) or the near-future (“low distance”).¹⁰⁹ The dimension of distance leads to significant differences in people’s evaluations and preferences. Low distance choices lead us to focus on concrete and specific details, as well as feasibility and cost, while high distance choices cause us to consider the abstract and general aspects, plus desirability and benefits.

People are poor predictors of their future behaviour and place greater weight on the present. This reflects the “present bias” previously noted, as people often discount the future compared to the present. In one notable U.K. experiment, people preferred receiving a lesser amount of money immediately rather than receiving a greater amount one month later.¹¹⁰

An important temporal dimension also stems from the ways in which forecasting and memory work. Both often have biases that reflect our mental shortcuts¹¹¹ such as the “planning fallacy” in which people underestimate how long a task will take by ignoring past experience. Similarly, memory is subject to the “peak-end rule” as people selectively evaluate the things that they remember as pleasurable or problematic. Our memories typically reflect either the most or least favourable elements rather than an average of the total experience.

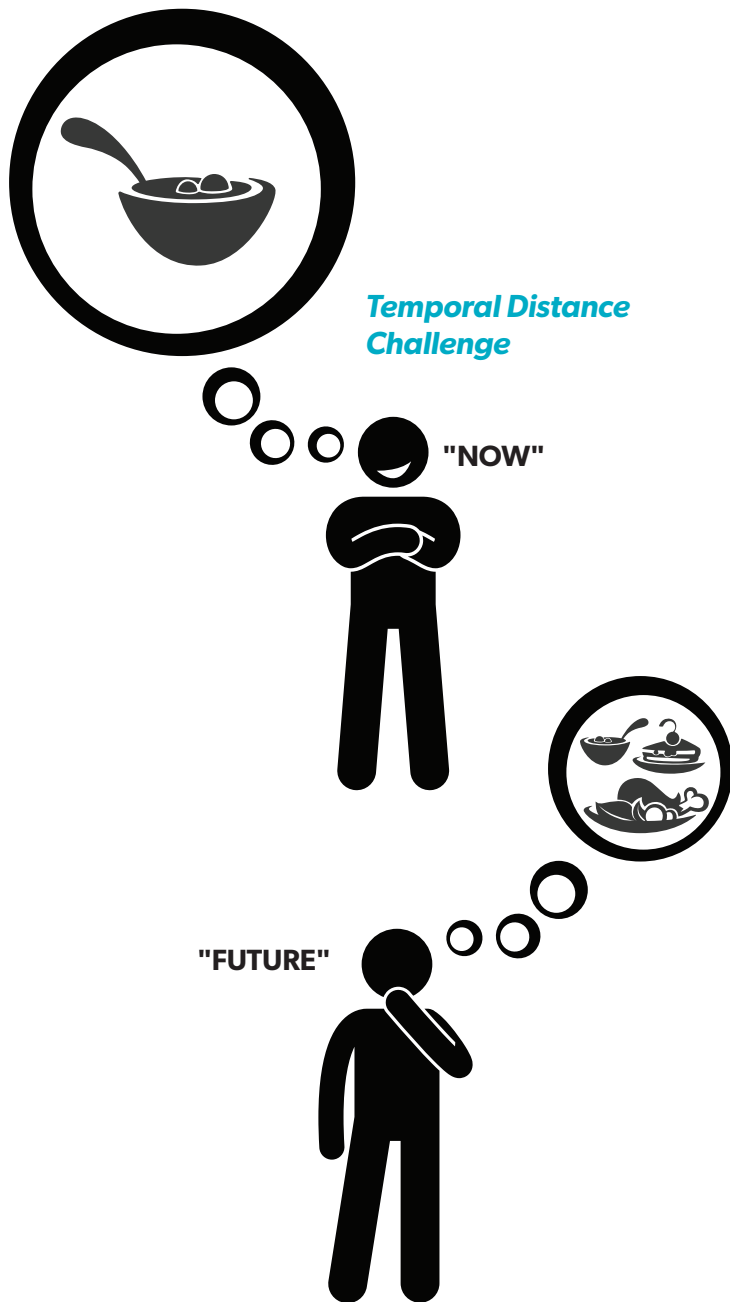


Anchoring Bias
(e.g., Home buyer's bias)

Affect Heuristic

The “fresh start” effect¹¹² is another notable temporal bias that sees people set new goals at milestone times or events such as Mondays, the start of a new year, or on birthdays and anniversaries. People are more likely to take actions toward medium and longer-term goals at these times, and the fresh start effect can be used to change people’s behaviour for savings, financial planning or other desirable actions.

Motivational factors affect the extent to which people engage in reflective thinking and rational analysis.¹¹³ For example, although the reasoning skills of two people may be on par with each other, one person may be more motivated than another to apply these skills during problem-solving. Research suggests that people vary in terms of their willingness and motivation to dip into their ‘logical toolbox’ and think rationally and reflectively.



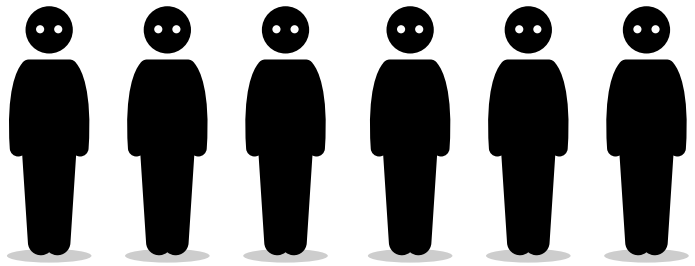
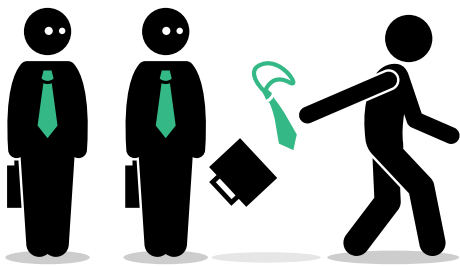
As well, physiological circumstances have major impacts upon people’s decision-making. This type of influence, known as the “hot-cold” or empathy gap, has been studied extensively by George Loewenstein, a founder of BE. During hot states, visceral factors (such as pain), emotions (anger, fear) and drives (thirst) foster poor decisions.¹¹⁴ People experiencing hot states make poorer decisions regarding prevention, protection and other behaviours that are in their long-term interests.¹¹⁵

The social dimensions of people’s decision-making are also important.¹¹⁶ Their decisions are shaped by and embedded in their social environment. Their choices are influenced by social norms, not just market considerations. Social norms are powerful informal guidelines that affect people’s decision-making, and the norms of trust, fairness and reciprocity are significant in shaping people’s behaviour. Research has shown that “humans are hard wired to develop and adhere to norms; imitation is one of the key ways humans learn strategies for interacting in the world.”¹¹⁷ The “propensity to develop norms is so strong that norms emerge for almost every behaviour.”¹¹⁸ The effects of social dimensions include the tendency to engage in “groupthink,” the susceptibility to peer pressure and the increased effect of others’ views, thoughts and actions through social media.

When people make decisions that are at odds with social norms, they will often rationalize their choice after the fact in an attempt to deal with any cognitive dissonance. This can create commitment issues for important, long-term objectives. Repercussions from this rationalization may include making the challenge more difficult of meeting health, pension or other ongoing goals.

For example, cognitive dissonance can lead an investor to buy a stock and then hold onto it despite encountering new information that would suggest it was a poor investment. To resolve the discomfort caused by this new information, the investor may distort or otherwise manipulate the information, or search for positive news and views to support her/his original decision. This may lead the investor to hold onto her/his bad stock, which may challenge them in meeting their investment goals.

Herding



As the World Bank's *Mind, Society and Behaviour* report explains, "when people think, they generally do not draw upon concepts that they have invented themselves. Instead, people use concepts, categories, identities, prototypes, stereotypes, causal narratives, and worldviews drawn from their communities. These are all examples of mental models. Mental models affect what individuals perceive and how they interpret what they perceive."¹¹⁹

While mental models are relevant for many policy issues outside of the scope of this report – such as those used for thinking about climate change and disease – it is important to note that not all models are useful. As the World Bank's report states, "understanding the role that mental models play in individual decision-making opens up the possibility of new levers for policy while at the same time highlighting potential problems in design and implementation".¹²⁰ For the purpose of this report, mental models are applicable in the ways that they affect financial decision-making. They appear in people's automatic thinking which provide existing frameworks that enable better financial choices.

Before turning to the expanding intersection of BE and BF through other behavioural sciences as BI, the behavioural concept of choice overload merits a brief exploration here. Choice overload occurs when people are faced with too many options for purchase, and refers to either an excessive number of choice attributes or alternatives. It has multiple effects.¹²¹ The greater the choice overload through either too many options or too much complexity, the more consumers use mental shortcuts such as choosing the default option or deferring their selection. Choice overload can also cause decision fatigue and/or lead to choice paralysis. Ways to counter choice overload include simplifying the choice attributes or reducing the number of available options.¹²² Elimination of redundant or too-similar options combined with using plain language, decreasing the amount of text and providing more readable summaries of complex rules can also be effective in reducing choice and information overload.

Overlaps and intersection with behavioural science

BE and BF's overlap and intersection with certain elements of behavioural science are also significant, particularly as they spurred the use of the broader range of behavioural disciplines as BI. BE and BF have benefited from economic psychology, cognitive psychology, decision science, neuroeconomics, marketing science and other behavioural science disciplines.¹²³ BE and BF can be seen as "situated within the larger landscape of social and behavioural sciences" with both disciplines benefiting from a better understanding of the human brain.¹²⁴

These overlaps and intersections with behavioural science are also reflected in the public's often-confused views about BE and BF research and practitioners. Psychology has often incorrectly been identified as behavioural economics. In his 2013 keynote address on BE and investor protection, Daniel Kahneman complained that Thaler and Sunstein's book **Nudge** was really about social psychology. However, because Thaler is a behavioural economist, a large chunk of social psychology has been called BE following the publication of *Nudge*. "It is a mistake actually; it should be called behavioural science because it is not economics at all."¹²⁵

Thaler has also pointed out that the work of U.K. BIT has been overstated as BE.¹²⁶ As he wrote, "the work has primarily come from psychology and other behavioural sciences ...the whole point of forming U.K. BIT is to utilize the findings of other social sciences to augment the usual advice being provided by economists." David Halpern, head of U.K. BIT, highlights that its work and his book are "about the application of psychology to the challenges we face in the world today."¹²⁷ This confusion about the broad range of disciplines that comprise BI is among the reasons why leading experts and practitioners refer to behavioural applications in business, the non-profit and public sectors as BI approaches.

Nudges

Even with the debate and, at times, confusion over the classification and precise definition of BE, the success of Nudge and its authors is reflected in how nudges have been used in a broad range of initiatives around the world. Since 2008, nudges have entered the public policy lexicon and been increasingly used by many countries and multilateral institutions, such as the World Bank and OECD, in a number of different areas of policy implementation and regulation.

The foundation for using BI and nudges in public policy stems from two papers published in 2003:¹²⁸ one by Thaler and Sunstein and the other by Colin Camerer and his co-authors. Thaler and Sunstein's paper advocated for "libertarian paternalism," while Camerer et al recommended "asymmetric paternalism." Both papers supported a policy-making approach "intended to benefit individuals not acting in their own self-interest, but which imposed minimal burdens on those already acting rationally."¹²⁹ This specific type of policy was popularized by *Nudge* and has seen widespread use since its publication.

There are clear merits¹³⁰ to distinguishing the frameworks provided by BI from nudges. It is important that behavioural approaches are recognized for their scientific methods of research and analysis, which use experiments to test hypotheses, while nudges refer to how behavioural disciplines' findings are applied to government policy and regulation.

Thaler and Sunstein state that a nudge is "any aspect of choice architecture that alters people's behaviour in a predictable way without forbidding any options or significantly changing their economic incentives ... to be a nudge, the intervention must be cheap and easy to avoid. Nudges are not mandated, prescribed or proscribed behaviour."¹³¹ Nudges are intended to improve people's choices given their challenges of insufficient attention, inadequate information, limited cognitive abilities and lack of complete self-control.

Using Lunn's framework,¹³² nudges are employed in areas where an authority has a governing, policy or regulatory responsibility over economic actors that are making problematic choices. A nudge has two defining features in setting its "choice architecture" to encourage better consumer decisions and improve the outcomes for individuals and governments. One is that the authority preserves personal freedom of choice by not preventing the selection of problematic options. The other is that BE results are used to change the decision context for people in a way that makes better outcomes more likely.

A useful example to illustrate nudging's benefits is the impact of the small change of people signing a self-reporting information document at the beginning in comparison to signing at the end. Signing upfront rather than at the last stage makes ethics salient and has surprisingly powerful effects on the honesty of the information provided and its quality.¹³³ Signing at the beginning makes morality salient at the outset "right before it is needed most, so that it can remain active during the most tempting moments".¹³⁴ It is a gentle nudge that is a very effective intervention -- it does not restrict people's freedom of choice, it significantly improves ethical and economic behaviour and its cost is minimal as most self-reports already require individuals to sign a pledge of honesty, but they do so in a much less beneficial location.¹³⁵ Among the advantageous ways to use this nudge is with disclosure documents for retail investors in their initial and update meetings with their investment advisor in person or onscreen with online advisors (as well as with health forms for insurers etc.)

Nudges offer numerous advantages for governments and regulators. These include addressing evidence of inferior consumer choices in regulated sectors such as energy, finance, health (among others) that result in higher costs and lower benefits for both consumers and governments. The low cost to implement nudges also makes them appealing, especially relative to traditional regulations, subsidies and taxes. Other advantages include the increasing number of opportunities to use nudges given the rapidly expanding range of choices for consumers, the surge in information sources available and the technological advances for policy and program delivery.

While nudges have proven to be effective for many different sectors and tasks, it is important to recognize their limits. Thaler and Sunstein¹³⁶ point out that nudging has its limits and cannot solve every market failure, noting that some bans and mandates are inevitable as no society can exist without rules and regulations.

Other researchers have cited the challenges that authorities face in determining their preferred outcomes for a nudge. Codagnone *et al*¹³⁷ wrote there is no universal criterion for determining preferred outcomes. The authors stress that policy makers, regulators and, at times, courts must make this assessment. They also point out how nudges are better suited to address simpler, more straightforward situations rather than complex ones. For example, their research for the European Union and other studies have shown that nudges are necessary, but far from sufficient enough to persuade consumers to buy eco-friendly cars or to change the impulses of online gamblers.

In response to nudge critics, Thaler updated his and Sunstein's framework in a 2015 article,¹³⁸ writing that nudges should be guided by three principles, namely that:

- nudges should be transparent and never misleading;
- nudges should be easy for participants to opt out of, "preferably with as little as one mouse click;" and
- their use should reflect a "good reason to believe that the behaviour being encouraged will improve the welfare of those being nudged."

It is important to recognize the strong merits of nudges as policy measures to address problems with choice architecture and selected heuristics and biases in people's automatic thinking. As important, BE and BF have extensive applications beyond nudging. Bhargava and Loewenstein summarized the advantages of nudging but also highlighted the benefits of using behavioural disciplines for much more than nudging in government policies and regulations.¹³⁹ They noted that nudging has clearly improved our decision-making architecture by such measures as better default options in forms and on screens, shorter and simpler disclosure and reduced hassle factors for consumer choices.

However, Bhargava and Loewenstein state the need for and potential of much broader applications of BE and set out three principles in this regard.¹⁴⁰ They begin with BE and BF also providing a platform to improve the decision-making environment for consumers and to simplify the products and incentives affecting these choices. These authors point to BI as a way to protect consumers from "behavioural exploitation" by firms taking advantage of people's biases through marketing tactics and complex products. They also contend that behavioural disciplines can improve the design and implementation of policies based on traditional economic approaches by enhancing the impact of conventional economic incentives.

In 2016, the European Commission's Joint Research Committee set out a framework for categorizing behavioural policy implementations.¹⁴¹ This serves as a useful introduction to a number of BI applications, including specific examples of nudges and more extensive BI interventions. Its framework has three categories for behavioural initiatives:

- **Behaviourally-tested initiatives.**

These are interventions being tested or scaled up after initial *ad hoc* experiments. Examples include testing different options for nudging by changing the way that information in tax payment letters is framed to encourage compliance.

- **Behaviourally-informed initiatives.** These are interventions designed after a review of available behavioural evidence but without any experiments. Examples include interventions to avoid firms' exploitation of consumer biases such as banning pre-checked boxes.

- **Behaviourally-aligned initiatives.**

These are interventions that do not rely on any behavioural evidence from either literature or *ad hoc* experiments. Examples include the use of penalty points for driving licences to use motorists' loss aversion to encourage compliance with driving rules.

IV. Behavioural insights into online decision-making and preferences

With the use of internet-connected devices continuing to climb, BI is able to help provide a better understanding of the ways in which digitization and the online world are changing people's decisions and preferences.

Research regarding people's use of technology goes back several decades, including studying the decisive factors and influences that determine how, when and which technology people decide to adopt. Research by Fred Davis in the 1980s focused on how perceived usefulness and perceived ease of use were important factors in determining people's acceptance of technology.¹⁴² Perceived usefulness refers to the degree to which a person views a particular product as enhancing her or his activities. Perceived ease of use refers to the degree to which a person believes that using the product would be effortless. Short-term usage is more likely to be predicted by the perception of a product's usefulness. Long-term use is determined more by the product's user-friendliness.

More recently, researchers have investigated whether people have associated technology with success, and whether there is a technology bias in their decision-making. In 2016, Bruce Clark and his colleagues found that the abstract notions of technology and their link to success have become so powerful that they create an underlying bias in judgement and decision-making.¹⁴³ In their words, "frequent exposure to examples of technological successes gradually 'bakes in' a cognitive association between technology and success." Their work demonstrated the "technology effect:" a tendency toward excessive optimism in decision-making where the effects of technology are clear. The results of their studies showed that people were more optimistic about technology-related stocks over those that were not, even though the information supplied in the laboratory-controlled study clearly showed that both types of stocks had the same performance.

Peter Kell, Deputy Chair of Australia's Securities and Investment Commission, has highlighted the emerging literature on consumers' behaviour in a digital environment, including how some biases appear to be magnified on screen.¹⁴⁴ Studies by Shlomo Benartzi in 2015¹⁴⁵ and Dilip Soman

and his colleagues in 2016¹⁴⁶ provide useful insights into online behaviour relative to people's decisions and preferences in the physical world. Their respective research examines the ways in which computer screens affect how people process information and make choices compared to an offline environment.

Online technology changes behaviour

Benartzi explores a broad range of research to demonstrate how "technology is shifting people's brains in many subtle ways." These shifts can often anticipate how people will react online and how they will respond to policy and regulatory interventions.¹⁴⁷

Soman and his colleagues reached a similar conclusion about the impact of technology, proposing that the process of people's decision-making online may be fundamentally different.¹⁴⁸ Noting extensive research by Barber and Odean and by Goldfarb *et al*, they emphasize that patterns of behaviour are significantly different online relative to the physical world.¹⁴⁹

As Herbert Simon concluded back in 1971, an information-rich environment consumes the attention of its recipients. As attention is relatively inelastic, "a wealth of information creates a poverty of attention."¹⁵⁰ Simon's research reflected the pre-internet world, when the amount of data and available information was a fraction of what it is today.

Benartzi shows that device screens amplify this scarcity of attention. "In an age of information, we are less able than ever before to process information since our attention is all used up."¹⁵¹ He emphasizes that at a certain point the amount of information actually makes it harder to deploy any attention that people have left. This is compounded by the ease of access to information that technology enables, as an increase in the volume of information can result in less information processing. A screen filled with excessive information will actually decrease a person's ability to process it.

There is also a growing amount of indirect evidence that suggests screens are changing the way people think by making them more impulsive and reactive, and shortening their attention span as they engage with multiple types of electronic communications (such as emails, texts, websites, social media). For example, a Chartbeat study¹⁵² showed that 55 per cent of all visitors to a website spend less than 15 seconds reading it. As Benartzi highlights, the average website visitor is not carefully assessing content, but rather reacting to his or her first impression, making a quick decision to engage or look away. This is a major challenge for text-heavy sites given the time needed to process information. In Benartzi's words, "we have traded away depth for speed."¹⁵³

Studies have highlighted the role of the digital technology used by people as different devices may have different effects. Information is processed at a different pace on mobile phones than it is on larger computers.¹⁵⁴ Other research has highlighted how smartphones are changing the way that many people think. Recent experiments¹⁵⁵ show that people who typically rely on automatic thinking – those who use fast and easy mental shortcuts – may allow their smartphones to do more of their thinking for them. Not only are these people more likely to use their smartphones for more information in their daily lives, but Barr and colleagues' study suggests that they may be offloading some of their thought processes to technology, which raises issues about how cognition occurs in the online era.

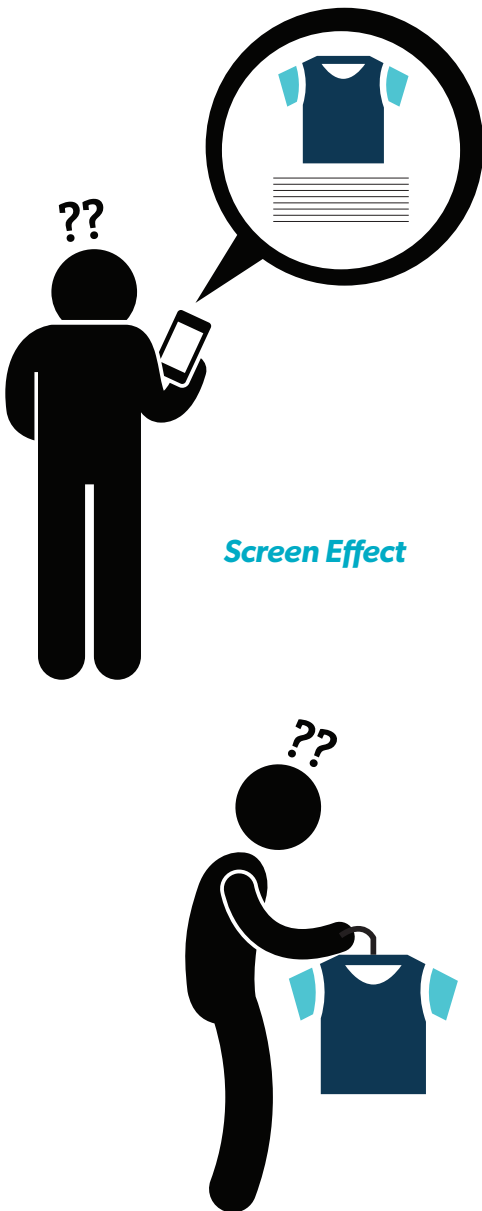
The online screen impact

The research of Benartzi and of Soman and his colleagues also highlights how screen display is a potentially decisive factor in people's decision-making. According to Benartzi, people's unconscious preferences for a visual system – where they look and how a screen looks – may significantly shape their preferences, making the display onscreen important.¹⁵⁶ Screen display can influence attention through simple design given by attracting our eyes' focus. Our patterns of eye fixations have a large influence on the choices of subjects. Scientists refer to this as "display-induced decision bias." It also means that design tweaks can have significant impacts.

Screen design can also affect people's decision-making¹⁵⁷ by manipulating how easy it is for people to see their options. Changes to the brightness of a screen or the amount of time an item is shown on screen will affect the choice a person makes.

Soman and his colleagues highlight the screen effect as one of three factors that distinguish online decision-making from the offline environment. The screen effect can be an important influence on the way that people process information, especially given that there is often a visual bias impact upon their decision-making. Many studies¹⁵⁸ have shown that several judgements and behaviours are rooted in automatic, non-deliberative processing with a large part of people's automatic processing being visual; their first impressions are usually the ones that are retained, unless there is strong motivation to change. Research also shows that people usually rate information (specifically websites) with greater visual appeal as being the most useable or trustworthy. The screen effect also reflects the advantages that information display has for showing information more effectively. Screens allow people to easily compare information side-by-side and evaluate an array of products by their variety, quality ratings and costs. They can evaluate items by specific characteristics or attributes, changing the way in which they assess their options and make choices. In an attribute-based mode,¹⁵⁹ options are evaluated based on how they compare to the alternatives. However, some research suggests that side-by-side comparisons may cause certain attributes of an item to become over-weighted during the process of making choices.

In addition to the screen effect, Soman and his colleagues also emphasize two other factors as being decisive in people's online behaviours. One is the connectivity effect,¹⁶⁰ which is the result of people having instant access to an unprecedented amount of product alternatives and information via the internet, allowing them to easily find and compare a vast range of products. This connectivity also gives people access to their peers' choices, offering them unprecedented access to the market preferences of others. Connectivity makes it easier for people to use that information to inform their choices. As previously noted, research by psychologists (as well as Ariely and other behavioural scientists) has shown people tend to model their behaviour based on the behaviour of their peers. Soman and his colleagues highlight how the connected world can reinforce the human tendency to conform to our peers' behaviour.



Screen Effect

The other decisive online factor for Soman and his colleagues is the choice engine effect.¹⁶¹ Technology provides “choice engines” to allow decision-making to be more manageable for people, given the challenge of dealing with the massive amounts of information and huge range of production options that are available online. One group of choice engines, called recommendation agents, creates personalized options for people, allowing them to focus on their interests. Examples of these recommendation agents include Amazon’s suggested products, Apple Music’s recommended playlists, and Facebook’s curated newsfeeds.

In sum, Benartzi identifies three key sources of onscreen impacts: information architecture; choice architecture and thinking architecture.¹⁶² Information architecture refers to the ways that the format of information changes how people process it. Choice architecture shows that the design and layout of alternatives on screens can affect decisions. Thinking architecture is about helping people think smarter – it is a checklist for their thoughts to avoid narrow framing, loss aversion and *status quo* bias when they are online.

For their part, Soman and his colleagues set out five key elements of online behaviour differences¹⁶³ as people onscreen have:

- an increased tendency and willingness to be honest;¹⁶⁴
- a greater ability to make direct comparisons, resulting in the reduced role of appraisal and the greater role of trade-off analyses among displayed attributes online;
- greater access to information about others’ choices, resulting in a greater likelihood of being influenced by others;
- access to an abundance of alternatives and an overload of information, resulting in a search for simpler decision strategies; and
- access to decision-making tools and choice engines, reducing the effects of cognitive burden.



Choice Engine Effect

Section C: Behavioural finance's merits and notable applications

BF's frameworks and insights are especially valuable in the financial sector. Many people face a number of substantial challenges in financial markets,¹⁶⁵ including:

- making financial decisions that have long-term impacts (such as saving for retirement) without the benefits of experience and feedback from previous decisions;
- needing significant knowledge and cognitive capacity to evaluate complex products (such as mutual funds, exchange-traded funds or preferred share securities);
- needing the ability to forecast future spending needs;
- assessing the value of "credence goods" as many investment products and services' ultimate worth may not be known for many years (even decades) after they are purchased;
- making decisions involving substantial sums of money; and
- possessing strong willpower (for example, to restrain spending using credit cards in order to stay within their capacity to pay off the cards' balances).

BF also offers governments and regulators a framework and approach to using data science to diagnose, test and learn about consumers' responses to policy initiatives. Securities, derivatives and banking markets in particular generate huge amounts of data which can be used for evidence-based analysis, empirical testing and evaluations of consumer responses to BE and BF approaches.

Why financial markets are so challenging for consumers

BF's application within financial markets has been well summarized by the U.K.'s FCA in its rationale for adopting a behavioural approach set out in its 2013 Occasional Paper #1.¹⁶⁶ This paper explores how the interaction of multiple different factors results in consumers being more prone to making errors in financial markets as compared to most other markets. It provides useful insight into how different biases, our dual system of thinking, social factors and temporal dimensions that affect people's decision-making cause major structural issues in consumer financial markets.

As outlined, most consumers have difficulty understanding financial products. Making financial decisions is often challenging, time-intensive and unsettling. Making good choices often involves an effort to be educated and knowledgeable, and many markets and products can be confusing for people without financial backgrounds.

However, people already face massive amounts of information and choices in financial markets that are exacerbated by the volume of information available online, as demonstrated by Benartzi, Soman and colleagues as well as other leading researchers. They are confronted with a vast array of information and 'expert' analyses about economic developments, market trends and product evaluations. The abundance of information and choice can often overwhelm and confuse many people.

The complexity of financial markets and products also makes it harder for people to evaluate their choices, even when taking additional time and effort, and despite (or because of) the required

product disclosure. For example, dense, legalistic and lengthy security prospectuses that need specific expertise hinder a consumer's ability to make a choice, and complex products with often opaque fee structures also complicate the process of working with an advisor.

As we have seen, these problems are compounded by many people's lack of interest or limited literacy and numeracy. Some people face challenges related to functional illiteracy, and struggle with reading basic documents or legal statements. Many have serious difficulties with complex math in finance and statistics, weaknesses which are not always reflected in policy design and implementation. For example, Canadian¹⁶⁷ and international¹⁶⁸ research consistently reveals large segments of the public that lack either the interest or capacity to understand basic aspects of securities, such as how bond prices change with interest rates or the impact of compound interest rates.

Many financial decisions include evaluating risk and uncertainty. As Kahneman, Thaler and others have demonstrated in their research, people are generally poor intuitive mathematicians and may make systematic errors in their choices. Evaluating risk and uncertainty inspires negative emotions, which makes it more likely that people will use mental shortcuts through automatic thinking rather than spend time deliberating.

Yet securities markets, as well as insurance products and many other financial instruments, inherently require people to make complex assessments about cost, return and risk. The difficulty of these tasks combined with the limits on our amount of resources and time involved bear re-emphasis. They can lead investors to make conservative investment choices given their lower perceived risk, despite having a financial need for higher returns and somewhat higher risks. In these cases, their initial decision to choose low-risk securities makes them (incorrectly) feel more secure.

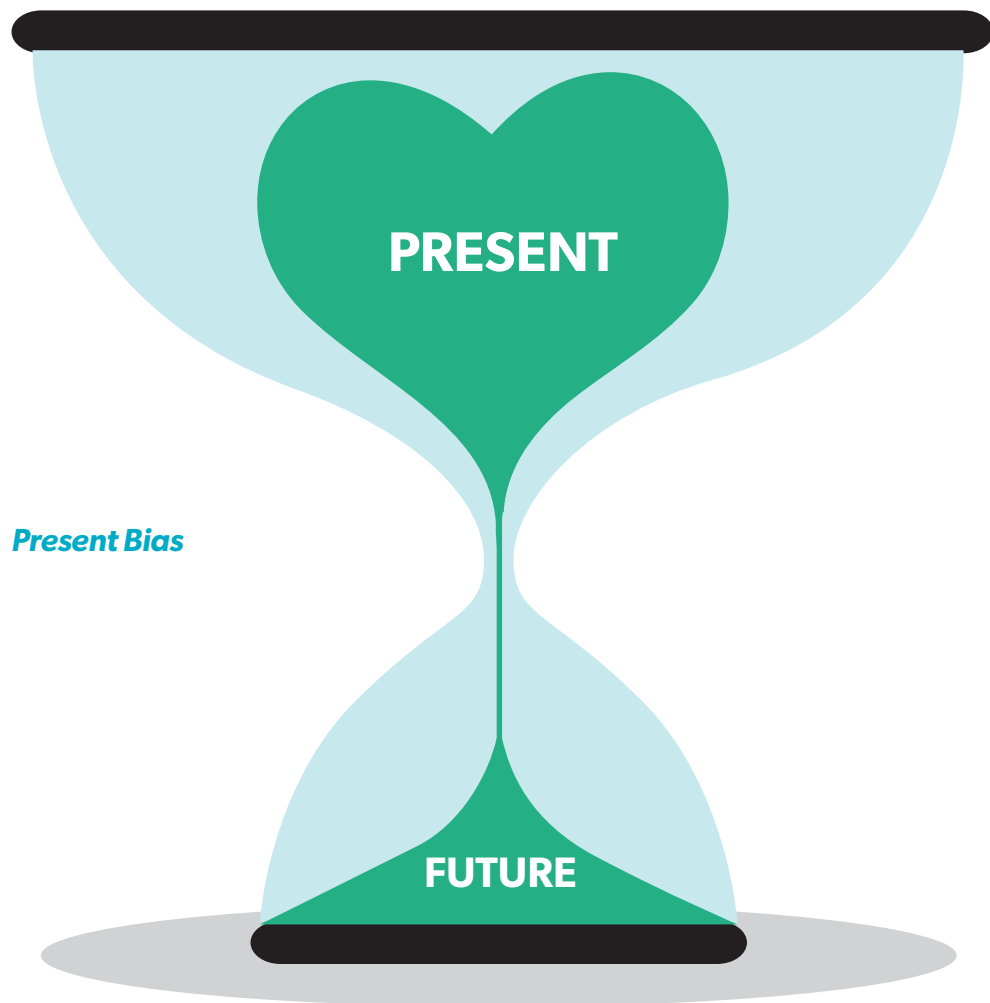
Making financial choices may require making trade-offs between the present and the future. As explored earlier, making decisions about saving and borrowing often challenges people's willpower, which can result in procrastination, impulsivity and/or other undesirable results. Many people borrow excessively on their credit cards, use too much home equity and have excessive mortgages without the discipline to make payments from future income. The powerful rewards that come from consuming income in the present (derived from the *status quo* bias and present bias) and the challenges that we have in appropriately valuing future relative to current consumption (high versus low-distance preferences) complicate many people's abilities to control their debt and save for the future. These problems are magnified online¹⁶⁹ as the volume of information and choice enables procrastination. The internet also encourages people to be impulsive with their money due the ease of making purchases, withdrawing from a bank account or selling securities and derivatives.

Decision-making can be emotional. A wide range of behavioural research has shown how negative emotions, such as stress, anxiety, regret and fear of loss can determine people's choices. Similarly, positive emotions like happiness and joy can have strong effects (such as leading them to spend excessively) that may prevent them from carefully assessing the actual costs and benefits of their decisions. In financial markets, anxiety and fear can lead people to purchase excessive life, product or travel insurance relative to their risks and costs. For many investors, periods of severe volatility and sharp stock market declines are particularly stressful and can prompt panic selling after a large loss. Conversely, when investors are highly optimistic, their excessive positive emotions can limit their careful assessment of stock purchases, which can lead to undue trading activity and portfolio turnover.

It is challenging for people to learn about financial products when their financial decisions are made infrequently, lack feedback or involve credence goods. Some of the most significant financial choices that people make, such as decisions about a mortgage or pension, are only seldom made, and their true benefits and costs are only evident over a long period of time. Other decisions are affected by macroeconomic conditions, which consumers do not have a chance to learn about. Thaler¹⁷⁰ describes how people need to learn from experience and require frequent practice and immediate feedback. We do well with frequent small purchases like coffee, groceries and lunch, but encounter problems with infrequent larger choices such as selecting the right pension plan or investment advisor. Benartzi's research¹⁷¹ shows that the internet is also creating problems for people through the excessive amounts of information and feedback available through screens. The abundance of information can result in investors making decisions based upon short-term portfolio losses rather than a long-term plan, and their time horizons can shrink based on how often they receive feedback.

Talking about money is also taboo in some cultures and among older individuals, which is a consequence of social norms and mental models. While surveys have revealed that some people rely on their friends and family to be a primary or secondary source of financial advice,¹⁷² others do not enjoy discussing their money, even with their spouses or partners.¹⁷³ Their reluctance reflects the impact of social norms and mental models, whereby people may feel that talking about their finances is off-limits as they prefer to manage their money without the advice of family or friends. In these cases, especially for middle aged and older people, one spouse defers all or most financial decisions to the other.

Viewing financial discussions as off-limits creates a number of problems, including keeping people from seeking financial advice, isolating them when they are experiencing financial difficulties and discouraging them from evaluating their financial decisions relative to those made by others. Similarly, when one spouse or partner defers financial matters to the other, he or she is left vulnerable and in-need of financial advice if the couple separates, or if mental cognition issues arise for the partner responsible for the finances, or if that partner dies.



Specific biases, other challenges and examples of behavioural issues for financial markets

The behavioural concepts and research described above are relevant to the systematic problems for people’s financial choices. Biases and systematic errors in people’s financial decision-making are also outlined further by the FCA in its 2013 Occasional Paper #1.¹⁷⁴

Preference biases are the first type of systematic error, beginning with present bias. As shown by Ariely and other researchers, people can excessively prefer immediate gratification, which causes them to overvalue the present. In addition to causing future regret, the present bias can also challenge self-control and willpower, leading to impulsivity or procrastination. Examples of behavioural financial errors from the present bias include consumers overpaying for financial products at the point of purchase by underestimating their future use, failing to search for the best products available, or stopping their search too soon. Other present bias-related mistakes include not cancelling products that they intend to cancel as well as not investing money for the long term. For many people, even if savings goals exist, they are for concrete and material things (like a new car or vacation) as opposed to long-term outcomes (like a child’s education or their own retirement).

Reference dependence and loss aversion – Tversky and Kahneman’s research showed that consumers may not assess problems objectively, but rather evaluate their gains and losses relative to an arbitrary reference point. Since people feel losses at roughly twice that of gains, consumers will over-weight losses and under-weight gains. As well, their choices can shift depending upon the reference point selected, which can have adverse impacts.¹⁷⁵ Loss aversion can make investors less willing to sell stocks that have declined in value, yet the pain of losing can also increase risk-taking with other stocks.

People’s dependence upon mental reference points can also affect asset markets. For example, the purchase price of a house or stock can become a person’s reference point for that house or stock’s future sale, even if market prices or demand have declined.

**Reference Dependence Effect
(e.g., Home seller's bias)**



An important aspect of the reference point and loss aversion impacts is the “endowment effect,”¹⁷⁶ as Thaler demonstrated. People value things more if they own them, and this effect increases their tendency to stick with what they have. This effect can create disparity between the price that a person is willing to sell an asset for and the price that he or she is willing to purchase it. With investing, this effect can distort and delay people’s willingness to sell securities when losses occur, even if the merits of holding these assets have changed. There are even ‘instant’ endowment effects which can occur soon after owning or imagining owning an item.

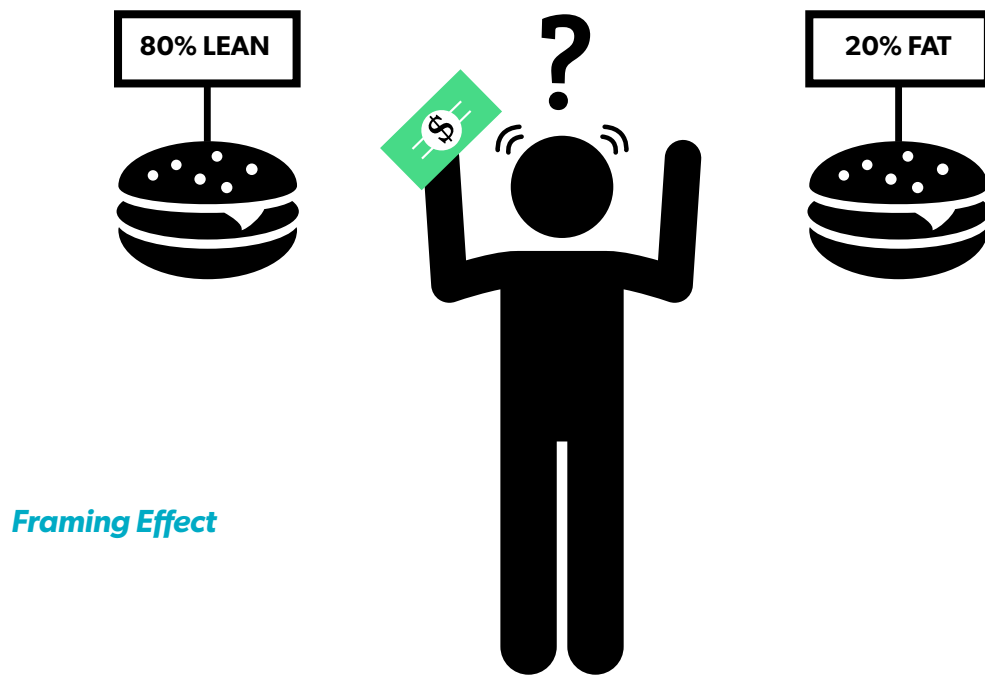
Negative emotions – people may also be influenced by stress, the unpleasant feelings associated with uncertainty and negative emotions such as fear or anger. Consumer errors from these negative emotions include failing to solve debt problems or avoiding the purchase of financial products. These types of errors often cause people to pay a premium to purchase products that deal with such problems.

Belief biases – people are often overconfident about good events occurring (staying healthy) and avoiding bad events (not being injured). Investors who are overconfident in their own ability (to pick lucrative stocks, for example) can experience other biases, such as believing that all events that happened can be explained in hindsight, which leads to excessive confidence about their ability to predict future events. People’s overconfidence biases also include the tendency to attribute their success to their own ability and blame failure on external factors such as bad luck (this is also known as the self-serving bias).¹⁷⁷ Investing overconfidence can lead people to purchase unnecessarily risky investments and overestimate the accuracy of information about a product as well as underestimate the uncertainty of excessive trading of securities.

Overextrapolation – people often over-extrapolate and make predictions based on only a few observations that do not fully consider the scope of a situation, such as only considering short or favourable timeframes when making an investing decision. Consumer errors from over-extrapolation include overvaluing a product’s benefits and underestimating its costs or risks, leading people to become willing to overpay. For retail investors, this bias can appear in “momentum” trading based on how a security’s price has moved recently rather than assessing its fundamental merits, risks and longer-term price performance.

Projection bias – people can make errors when they over- or underestimate their future wants and needs, leading them to do things like tie up funds or make unnecessary commitments in long-term contracts. People also make projection bias mistakes in situations where they make impulsive credit card purchases or fail to adequately save for their needs (such as healthcare in retirement).

Decision-making biases – people engaging in **mental accounting** and **narrow bracketing** can make major mistakes. As Thaler’s research shows¹⁷⁸, mental accounting describes how people treat money allocated for different purposes differently (such as “holiday savings”) rather than recognizing that all money is the same. For example, many consumers borrow and save at the same time, and therefore lose money due to the higher costs of borrowing compared to the lower return on their savings. Narrow bracketing refers to the way in which people consider their choices in isolation, rather than integrating them into other decisions. Errors from this bias include people making investment decisions asset by asset rather than considering the return and risk of their overall portfolio.



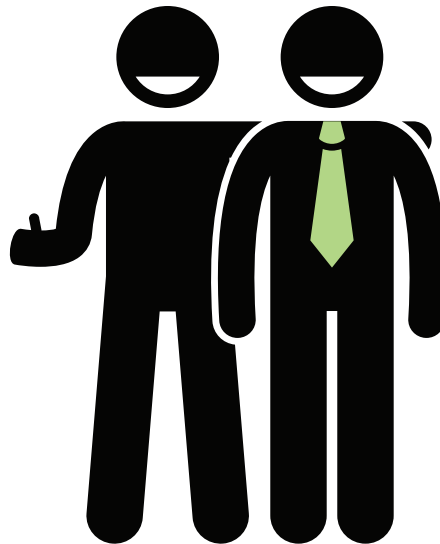
Framing Effect

Framing, salience and limited attention – people have limits in their attention and cognition, meaning that the way they frame information and prioritize information determines the factors that they use in their decision-making. People may make different choices depending on how it is framed and what elements draw each person’s attention. Particularly salient aspects of a situation will draw their attention the most, which can have a significant impact on their decision. People’s challenges with framing and salience include their perceptions of advisor fees or mutual fund fees that are expressed in percentages rather than dollar amounts (percentages are perceived as lower costs), or when people make purchases based solely on headline prices or advertised benefits rather than considering whether the product actually meets their needs or wants.

Decision-making rules of thumb – several decades of behavioural research have demonstrated that people simplify complex decision problems by adopting specific rules of thumb that are most often used through their automatic systems of thinking. As a result, when selecting from a wide range of options, we may choose the most familiar one and avoid what is uncertain, or we may simply pick the first option on a list. When estimating unknown quantities, people use some (relevant or irrelevant) figure as a basis for adjustment. Consumer risks from the automatic use of heuristics include people only searching for brand name products, or only looking at the largest product providers without seeking products with lower costs or more applications to a person’s needs. For example, on websites that aggregate financial, travel or other products, consumers often choose the first or cheapest option without considering all of the relevant details.

Persuasion – people may also allow themselves to be persuaded by ‘likeable’ salespeople who are therefore perceived as trustworthy. Persuasion and social influence create consumer risks in people following financial advice and succumbing to sales pressure based on how likeable an advisor seems, rather than his or her demonstrated knowledge. Other errors include people not taking into account the incentives of an advisor, and making decisions based on emotion instead of the merits of a product being offered.

Persuasion Effect



Peer effects – a broad array of research since the mid-1950s has shown how people’s behaviour is influenced by others around them. These effects are the “conformity impact” of decision-making.¹⁷⁹ Shiller’s studies on the housing and stock markets have demonstrated how this can cause herd behaviour in financial markets, and various other studies have shown that investors who are more attuned to other investors’ behaviour are more likely to invest in speculative bubbles.¹⁸⁰ This is a potential concern as other research has shown that bubbles may be accelerated by excessive online feedback that, in turn, harms investors’ decision-making abilities and creates a greater risk of irrational enthusiasm in markets.¹⁸¹

Peer Effect



BEHAVIOURAL INSIGHTS

CHAPTER 2

CHAPTER 2: GLOBAL ADOPTION OF BEHAVIOURAL INSIGHTS BY GOVERNMENT PRACTITIONERS

■ The application of behavioural insights to public policies starts with the recognition that the world is complicated and policy makers should recognise that sometimes they don't know and should find out. The use of behavioural insights to date is about supporting people to make better choices, such as, but not only, through nudges. Behavioural insights are also playing an important role in gathering intelligence and informing the problem definition by governments and regulators, before any interventions are considered.

OECD International Seminar (2015)¹⁸²

INTRODUCTION

The previous chapter of this report explored how behavioural disciplines can offer improved frameworks and insights for understanding people's behaviour and decision-making abilities. The literature review examined how decades of behavioural studies have demonstrated the value that behavioural research and principles holds for governments and regulators.

This chapter turns its focus to government practitioners, applied researchers and financial regulators that have used the insights provided by the various behavioural disciplines. They look at the ways in which behavioural insights (BI) – especially behavioural economics (BE) and finance (BF) – have been put into practice as:

- lenses to understand and assess market and consumer behaviour;
- frameworks to design policy and regulatory interventions; and
- templates for enhanced policy and regulatory implementation.

This chapter surveys relevant practitioners' adoption of BI. It is based upon their publications and OSC interviews with more than 20 government behavioural insights units, applied researchers and financial regulators. It looks at how BI is being used in various jurisdictions around the world to enhance policy and regulatory initiatives, and explores the importance of applying the 'Test, Learn, Adapt' model to their implementations.

There are three sections to this chapter:

- A. Organizational design typology and overview of behavioural insights capabilities and approaches** – this section looks at the many and varied BI approaches taken by governments, regulators and other agencies around the world. It begins with a look at the early adopters in Europe, Asia and in North America as well as multilateral institutions (such as the World Bank and the Organisation for Economic Co-operation and Development) and sub-central governments.
- B. Applying behavioural insights in practice** – this section examines how behavioural research has been adapted and used in strategy and tactics, beginning with the lessons and insights from the U.K. Behavioural Insights Team. It includes an in-depth overview of using BI to enhance tactics and implementation. It also explores the importance of impact analysis and testing actual behaviour through experimentation and trialling.
- C. Themes from behavioural insights units, applied researchers and academic practitioners** – this section summarizes the major lessons and insights from leading government behavioural units, applied researchers and most active regulators for the OSC.

Section A: Organizational design typology and overview of BI capabilities and approaches

I. Organizational design options for BI capabilities

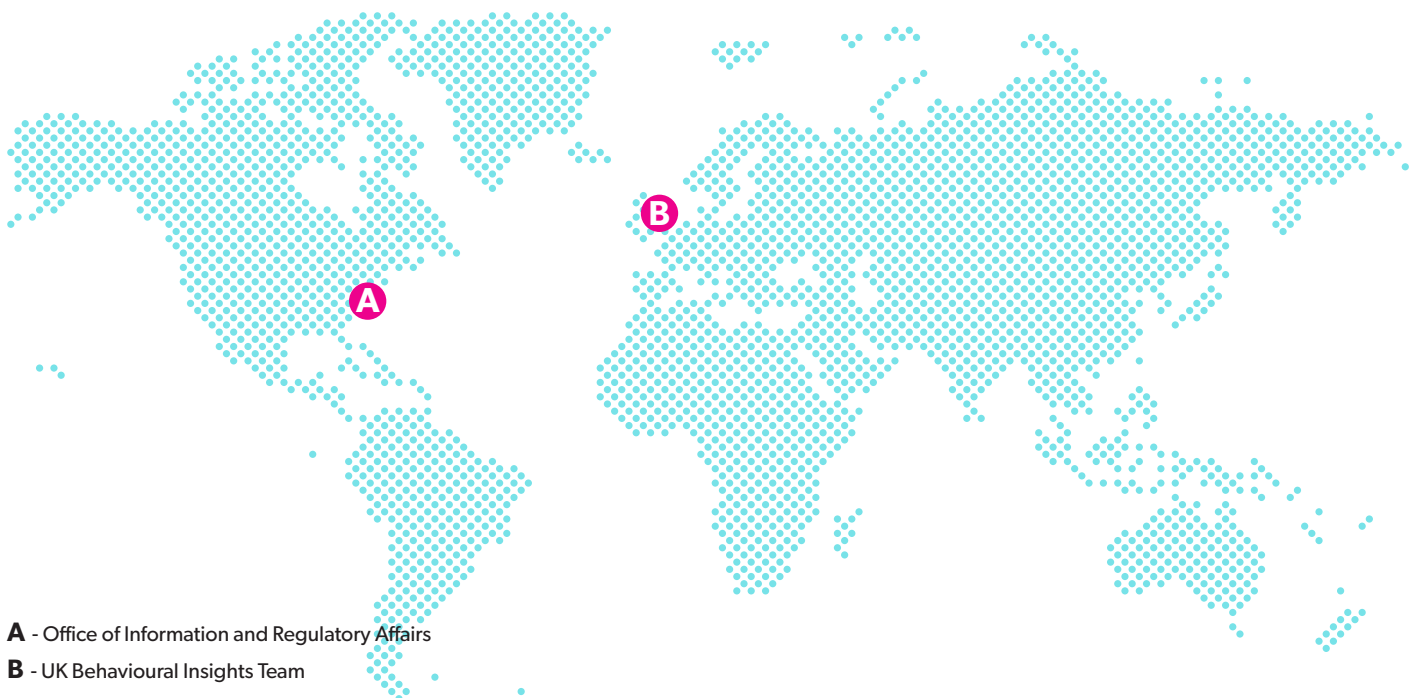
As chapter 1 noted, the Economic and Social Research Council in 2014 found that 136 countries had incorporated behavioural sciences in some aspects of public policy, with 51 of those nations having centrally-directed policy initiatives influenced by behavioural sciences. While this was initially led by the U.K., U.S., Singapore and Australia, the momentum has since grown to the point where a 2017 OECD report examines 159 case studies of behavioural initiatives across the globe from 23 countries and two multilateral institutions.¹⁸³

Organizational Design options for BI capabilities

Governments employ three different models to incorporate behavioural approaches¹⁸⁴, none of which are mutually exclusive. These models often co-exist and evolve over time, with differing degrees of diffusion of capabilities and central coordination.¹⁸⁵

- **Specialized units within the centre of government** – the foremost example of this model was the Cabinet Office Behavioural Insights Team (U.K. BIT) established by the U.K. government in 2010. The U.K. BIT's success during its formative years, together with the growth in BI usage across government, led to its transition into an autonomous entity outside of government in 2014. The U.K. BIT still provides support to U.K. government agencies and departments, some of which have gone on to create their own BI units or specialized capabilities.¹⁸⁶

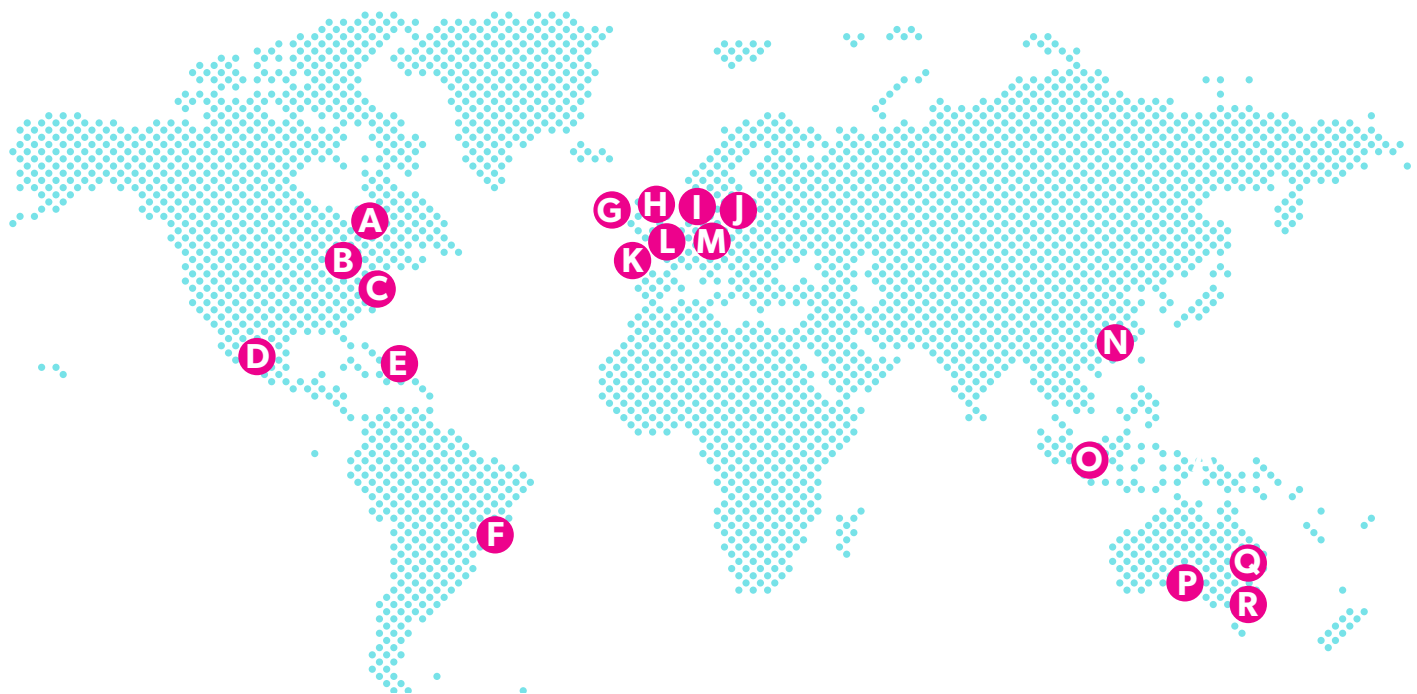
Map Depicting Early Adopters of BI in 2011



In the U.S., the BI initiative was first led by the White House Office of Information and Regulatory Affairs (OIRA). While not formally a BI unit or team, OIRA used a series of executive orders, memoranda and overarching policy instruments in its BI approach from 2009 onward. In 2014, the White House Social and Behavioural Sciences Team (SBST) was created to help provide policy guidance and advice to a broad range of federal departments and agencies through 2016.

- **Networks of teams across ministries and agencies** – this diffused model of BI units and teams across separate ministries or agencies can involve academic institutions, the private sector and not-for-profit organizations. For example, the Netherlands' BI team in the Ministry of Infrastructure and Environment was created in 2012 to collaborate with other ministries and institutes in a BI network¹⁸⁷.
- **Ad hoc approaches for specific projects and initiatives** – also referred to as the Project Model.¹⁸⁸ Examples include the U.S. Financial Industry Regulatory Authority (FINRA), which has been active with BI over the years through investor testing to enhance consumer information and disclosure. The FINRA Investor Education Foundation (IEF) has also funded research on BE topics. Neither FINRA nor its IEF has a formal BI unit or group of BI specialists, but both are behaviourally aware, have behaviourally-aligned policies and use external expertise to assist their BI efforts.

Map Depicting Select BI units and Networks in 2016



- A** - Canada's PCO Behavioural Sciences Team
- B** - Government of Ontario Behavioural Insights Unit
- C** - White House Social and Behavioural Sciences Team
U.S. Securities and Exchange Commission
World Bank Global INsights Initiative (GINI)
- D** - President's Office, Mexico
- E** - Finance Ministry, Jamaica
- F** - Mayor's Office, Rio de Janeiro
- G** - The Economic and Social Research Institute

- H** - UK Behavioural Insights Team
UK Financial Conduct Authority
- I** - Netherlands Ministry of Infrastructure and Environment
- J** - Danish Nudging Network
- K** - Organisation for Economic Co-operation and Development
France SGMAP
- L** - European Commission's Joint Research Council

- M** - Chancellor's Office, Germany
- N** - Hong Kong SFC, ISC
- O** - Monetary Authority of Singapore
- P** - Victorian Behavioural Insights Unit
- Q** - Australian Behavioural Economics Team
Australian Securities and Investments Commission
- R** - New South Wales Behavioural Insights Unit

Since 2008, BI's adoption around the world has grown remarkably. In 2011, only the U.K. Behavioural Insights Team and, in practice but without the formal BI designation, the US Office of Information and Regulatory Affairs existed. By 2016, the number of BI units worldwide had surged to the point where it is difficult to account for all of them without overcrowding the map.

The early BI adopters: U.S., U.K. and Australia

The **United States** was first to implement BI concepts, with U.S. BI roots in Richard Thaler's and Cass Sunstein's roles as advisors in Barack Obama's 2008 presidential campaign. The first milestone in BI use was Sunstein's appointment as the head of OIRA in 2009. OIRA sought to instill BI principles in policy and regulation,¹⁸⁹ and its efforts included simplifying disclosure (including distinguishing between summary and full disclosure) and making the presentation of information clearer and shorter. OIRA's other noteworthy BI efforts included setting beneficial default options on screen or in letters and forms to aid good decision-making and encourage the use of behavioural approaches to manage regulatory stock.¹⁹⁰

While OIRA faced significant challenges from partisan political divisions in Washington¹⁹¹, its work had important impacts through the use of BI in health care, financial reform, energy efficiency and consumer protection from 2009 to 2013.¹⁹²

The creation of the SBST in 2014, "a cross-agency group of applied behavioural scientists, program officials and policymakers,"¹⁹³ was the next milestone in BI use. In its first year, the SBST embedded 12 behaviourally-informed, evidence-based tests of federal programs.¹⁹⁴ A 2015 presidential

executive order directed federal agencies to apply BI to the design of policies and programs¹⁹⁵, charging the SBST with providing policy guidance and advice to assist in achieving this directive.¹⁹⁶ Through 2016, the SBST had an important role in terms of its profile, but its separate activity working with various government departments and agencies as part of the General Services Administration (GSA) was also significant. As of early 2017, the role of the SBST is not yet clear under the new administration, but its GSA work continues.

In 2010, the **United Kingdom** created the Behavioural Insights Team (U.K. BIT), building upon the U.K. government's previous receptiveness to BI.¹⁹⁷ The U.K. BIT was initially set up as a "tiny sister unit to a much bigger PM's Strategy Unit," with access to Prime Minister David Cameron and Deputy Prime Minister Nick Clegg through a special steering board chaired by the cabinet secretary.¹⁹⁸ The U.K. BIT's seven-person staff included experts in various behavioural disciplines and the testing of policy options. It also included members with a strong understanding of the political and administrative environment. The U.K. BIT functioned like an internal public sector consultancy,¹⁹⁹ working with government departments, agencies and private sector to collaboratively facilitate policy trials at the local level.

Tough conditions were set during the creation of the U.K. BIT.²⁰⁰ The U.K. government established three challenging objectives for the team to achieve within two years: transform at least two areas of policy; spread understanding of behavioural approaches across U.K. government; and achieve at least a tenfold return on the costs of the BIT. If these objectives were not achieved, the BIT would be shut down.

At its two-year review by the U.K. government in 2012, the U.K. BIT was able to demonstrate clear success with nudges. Modest interventions in four areas had achieved significantly higher collection rates of outstanding taxes, increased energy savings from more insulated homes and achieved higher rates of payment for outstanding court and traffic fines.²⁰¹

By 2014, the U.K. BIT was moved from a central government office into an autonomous entity with three-way ownership among the U.K. government, the Nesta innovation foundation and BIT's own employees. As of early 2017, the BIT continues to assist U.K. ministries and agencies, but has grown to be a global BI entity with five offices on three continents. The U.K. government has significantly increased the BI capacity across a number of ministries to further enhance its use of BI.

In **Australia**, the BI approach built upon reports from 2008 to 2010 from its Productivity Commission regarding the application of behavioural thinking to public policy, as well as a 2012 report from its former Department of Finance and Deregulation on the insights of behavioural economics and the potential to apply BI.²⁰² The New South Wales government was the first to create a BI unit in 2012, bringing in the U.K. BIT's Rory Gallagher to help establish this new unit. As of early 2017, Gallagher remains an advisor to this BI unit's 10 staff members.²⁰³

On the national level, the Australian government's approach grew to bring the decentralized applications of BI in various departments together under a centrally-steered model.²⁰⁴ The national government declared its intention to create a central unit in late 2015, and established the Behavioural Economics Team (BETA) in early 2016 as a joint initiative across the government and in partnership with a number of agencies.²⁰⁵ The Victoria government followed closely by establishing its own unit in the Department of the Premier and Cabinet in early 2016, but also sought to build BI capacity across state government in partnership with several agencies working on a portfolio of projects.²⁰⁶

European and Asian government BI approaches

The **European Commission** (EC) has been applying BI to its policy-making since 2009 and expanding its range of initiatives in building its BI capacity.²⁰⁷ Its first behavioural study looked at consumer decision-making in retail investment services, including how product choices are made and the impact of financial advice²⁰⁸ and BI use in policy assessment and implementation have been hallmarks since then.

In 2014, the EC created a Foresight and Behavioural Insights Unit within its Joint Research Centre (JRC) and a Policy Lab in 2015 creating significant additional BI capacity within the EC.²⁰⁹ In 2016 the JRC also released its major report, Behavioural Insights Applied to Policy, which focused on behavioural sciences and their benefits and challenges for policy-making. It detailed behavioural policy interventions in nine policy areas and examined the various behavioural policy-making approaches adopted across Europe.

The application of BI to policy-making has expanded considerably across many European countries.²¹⁰ While the U.K. BIT remains the largest and most active entity, four other countries have followed suit. These different BI units range from centralized structures in Germany to those where ministries have taken the lead, such as in the Netherlands and Denmark. As of early 2017, both Finland and Austria have also looked at introducing BI capabilities, albeit in different ways.

The **Netherlands** was the second European country to create a BI team within the government, taking a decentralized approach with different BI units and experts spread across different ministries. The Dutch Ministry of Infrastructure and Environment was the first to establish a small BI unit in 2012. Its council also created a Behavioural Analysis Framework to facilitate a systematic consideration of human behaviour in selecting policy instruments. In 2014, a Behavioural Insights Network was set up to share knowledge and to promote collaboration among 11 different ministries and regulatory bodies.

Germany was the third country in Europe to build BI capacity, establishing a behavioural team in the Policy Planning Unit within the Federal Chancellery in 2015. This unit is a small team with a range of expertise including behavioural and empirical social sciences, trialling, design, law and design thinking, and its role includes acting as a service unit for federal ministries. Among its objectives are improving policy impacts through user-led design of processes and projects as well as testing proposed solutions.

France started using BI in government reports in 2010, beginning with the former Centre for Strategic Analysis research on behavioural impacts for environment and public health. BI approaches were later developed by the Secretariat-General for Government Modernization (SGMAP), an inter-ministerial agency located in the Prime Minister's office. The SGMAP promotes nudges as a complementary approach to the traditional uses of law, taxes and information as a way to meet policy objectives. Given the constraints on human resources and internal expertise, SGMAP also relies on private partners.²¹¹

While **Denmark** does not have a specialized BI unit within its government, some Danish authorities have formed (or are in the process of forming) their own units. Denmark does have the unique "iNudgeYou" not-for-profit organization that grew from a blog in 2010 to an active research network dedicated to improving decisions in public service and other areas by using BI.²¹² Its efforts include collaboration with academics, local governments, private sector organizations and citizen groups.

With regard to Asia, many BI practitioners, applied researchers and other experts have pointed to Singapore's approach as less reliant on BI units, focusing instead on placing knowledgeable people in key places and increasing the general familiarity of all divisions with behavioural science.²¹³ While Singapore has not made much of its BI approach publicly available, a wide range of commentators have cited its work exploring advanced applications of data and digital technologies through BI for public services.²¹⁴

Supranational institutions' BI approaches

As discussed in the literature review, the World Bank's 2015 *Mind, Society and Behaviour* report was a milestone in its examination of BI policy applications, opportunities and challenges. The Global INsights Initiative (GINI)²¹⁵ was launched in later in 2015 to put this report's findings and recommendations into practice. GINI works with World Bank teams to design interventions using BI and to evaluate their impacts. It assists the World Bank's government clients in their own policies and projects using BI, and develops BI networks among academia, corporations and policy professionals. GINI is of the view that ongoing testing, evaluation and adaptation of interventions is essential and that traditional economic intervention can be complementary to BI use.

While the OECD has not created a formal BI unit to date, it has engaged in extensive work in the area, including its January 2015 symposium with leading practitioners, applied researchers and academics from several continents. This symposium produced a very useful summary of main findings to help guide BI's public sector use.²¹⁶ The OECD's 2017 in-depth study summarizes its review of BI approaches within and outside of its member countries and includes 159 case studies of BI policy applications across world.²¹⁷

Canadian government BI approaches

The 2017 OECD report on BI applications cites Canada's BI approach as one that combines a diffused model with *ad hoc* initiatives at both national and provincial levels.²¹⁸ Nationally, the three-person Behavioural Sciences Team (BST) is part of the Privy Council Office's Central Innovation Hub and is currently engaged in more than 15 projects.²¹⁹ The BST's links to design capability within the Central Innovation Hub enables qualitative design thinking to test the results of proposed designs as well as having access to an advisory committee of academics and practitioners that assist with design and implementation matters.

Ontario created its BI unit in 2015 to design interventions to assess programs and provide low-cost alternatives to improve consumer outcomes. Ontario's BI unit has no policy objectives of its own, but rather is entirely focused on advancing the goals of government ministries, crown agencies and other public sector entities. This partnership-driven unit is housed within the Treasury Board Secretariat's office, and consists of five people working together with representatives from other public sector organizations, including the Government of Canada on projects that have shared benefits for both Ontario and Canada.

BI approaches of other sub-sovereign governments

While the spread of BI units and other teams in state, regional and local governments is too extensive to summarize, one particularly notable approach comes from the U.S. District of Columbia. Its adoption of BI is led by The Lab @ DC, a scientific team in the Executive Office of the Mayor of the District of Columbia. While not exclusively a BI unit,²²⁰ The Lab @ DC engages

in extensive BI work, including the implementation of nudges and other BI trials and tests. Its 'hub and spoke' structure allows its team to work with a network of dispersed government researchers. The Lab@DC is able to apply BI across a wide range of policy areas, initiatives and issues through its structure and role.

II. Frameworks for setting up a BI unit

After looking at the range of government BI approaches around the world, it is appropriate to turn to the question of what makes a BI unit successful. For this purpose, the U.K. BIT, OECD and EC have each developed instructive frameworks to create a successful BI unit, based upon their respective experience and expertise.

David Halpern, Chief Executive Officer of the U.K. BIT since its 2010 inception has set out six criteria that are central components of BI units' success.²²¹ These measures, which are also recommended by the OECD²²², are summarized as 'APPLES,' an acronym for:

- **Administrative support** – ensuring that a BI unit has senior level 'buy-in' and strong support from inside government. This is an important signal to the rest of government and offers key leverage when needed.
- **Political support** – recognizing that BI units must fit with a government's narrative and instincts.
- **People** – assembling a team with the right mix of skills and expertise BI and other related disciplines. Successful BI units also need people with experience in government and large organizations.
- **Location** – maximizing a BI unit's position within a government structure to gain the support of politicians, managers and other decision-makers.
- **Experimentation** – embracing empirical methods and experimental approaches to demonstrate how a BI approach can work and quantify its impact.
- **Scholarship** – having BI unit members that know behavioural literature and the challenges the unit may face when putting BI into practice. BI units require members who can keep pace with emerging BI thinking and results.

Multiple factors led to the U.K. BIT's success during its formative years (2010 to 2014). Using the APPLES framework, it is instructive to look briefly at how the UK BIT's success was achieved as a small, start-up unit with a core mass of resources²²³ before it became a multinational social purpose organization.

The U.K. BIT had the administrative support of Gus O'Donnell, then-Head of the Home Civil Service, to ensure support from within the U.K. civil service, which was pivotal for securing the buy-in of a number of line ministries and agencies. Political support for the unit was led by then-Prime Minister David Cameron and then-Deputy Prime Minister Nicholas Clegg. Its location was also vital given its position in Cabinet Office, providing it access to Cameron, Clegg, the rest of Cabinet and the heads of ministries and agencies.

The people and scholarship factors of the U.K. BIT were evident in its staff members drawn from academia and government. Halpern's strong academic background in psychology and visible position as director of the U.K.'s Institute of Government when he was appointed CEO of the unit 2010 was also key. He built a team well-versed in behavioural literature that was capable of deploying robust methods to determine what worked.

The U.K. BIT's staff demonstrated their skills and knowledge with papers like Test, Learn, Adapt (2012) and EAST (2014). As the results of its work from 2010 to 2012 demonstrated (and documented in Test, Learn, Adapt), the U.K. BIT also had a strong commitment to experimentation through rigorous test and trials.

The EC's JRC examined both the U.K. BIT and the work of other European countries to create its framework for BI units success. Its 2016 Behavioural Insights Applied to Policy report described the six key features of an effective BI unit through the PRECIS acronym,²²⁴ which considers:

- **Political support** – the level of engagement from senior political representatives. Proximity to a political cabinet and a clear official mandate are important aspects of this criterion.
- **Resources** – the number of people comprising the unit's staff.
- **Expertise** – the dimensions of experience and seniority of the team across different disciplines. This includes trials, articles and reports developed by the unit, as well as the creation and support of an advisory panel or other means of input from academic experts.
- **Coverage** – the scope of the unit's work. Broader responsibilities mean a higher level of coverage.
- **Integration** – the unit's position within government and the extent to which it is integrated within the civil service.
- **Structure** – the model of BI approach, be it centralized or diffused over a number of ministries and agencies. This criterion uses a scale that assumes a centralized team working closely with line departments is the most effective method. In contrast, a centralized unit with weak links to policy ministries or distributed capabilities without common guidance is seen as less effective.

TABLE 1
PRECIS framework
for five leading
European
Countries

	UK	NL	DE	FR	DK
Political support	■	■	■	■	■
Resources	■	■	■	■	■
Expertise	■	■	■	■	■
Coverage	■	■	■	■	■
Integration	■	■	■	■	■
Structure	■	■	■	■	■

■ High ■ Good ■ Sufficient ■ Low

Section B: Applying behavioural insights in practice

III. Findings and frameworks from leading academic practitioners and applied researchers

Among the many benefits of BI are their advantages for improving business, policy and regulatory results. Leading academic practitioners and applied researchers merit exploration as they have translated BI from theory into practice. Their combination of extensive research with practitioner, advisory and applied experience offers useful perspectives on how to use BI in the public sector.

In particular, the insights of professor Dilip Soman regarding the “last mile”²²⁵ warrant exploration. As Soman states, “policy as well as governance schools distinguish between strategy (first mile) and tactics (last mile).” Yet most governments and regulators spend a disproportionate amount of time, resources and effort on strategy and much less on tactics.

Making policies and regulations is a matter of strategy, while delivering policies and regulations is a tactical matter. The last mile problem is one of understanding human psychology and using the insights it provides. It is not about technology, product or program design.

Soman explains that the last mile requires careful implementation of BI because of the large variation in people’s behaviour. In his view, organizations should focus on three sets of activities: translation, application and intervention.²²⁶

- Translation refers to the need to monitor academic research in behavioural sciences and translate findings into practical insights and guidelines. This is essential to create a framework for behaviour change and choice architecture.
- Application refers to the need to understand specific touch points (such as how direct interaction occurs with consumers in person or electronically) in the last mile, how to disclose information in a behaviourally-informed manner and how to help consumers make better choices.
- Intervention refers to changing the context for people’s decisions and measuring the impacts using controlled trials.

Soman’s framework contains four strategies available to the public sector in order to change consumer behaviour: legal changes, economic incentives, information and persuasion, and nudges and choice architecture.²²⁷

TABLE 2

The Last Mile Activities

Translation	Auditing	Intervention
Translating academic research into insights	Monitoring efficiency of processes	Designing nudging interventions
Coming up with prescriptive advice	Identifying bottlenecks and areas for improvement	Piloting interventions, running controlled trials and monitoring success
Considering areas of application	Using tools from psychology to identify opportunities	Iterating and identifying long term success factors

TABLE 3
Public Sector
Toolkit for
Behaviour

Legal - Bans,
compliance rules,
mandates

Useful when	<ul style="list-style-type: none"> • Behaviour has consequences that are a high risk to society, take advantage of others (intentional fraud) or violate society’s ethics or values (discrimination) • Third-party effects are present and the consequences of behaviour are not entirely absorbed by the individual or corporation • Standards are established to enhance standard of living or protect individuals • Enforcement is feasible and cost-effective
Avoid when	<ul style="list-style-type: none"> • Regulation is perceived as overly restrictive or intrusive • Individuals would likely respond with defiance or by undermining regulation
When choice architecture can help	<ul style="list-style-type: none"> • Enforcement is in place but may not be working effectively • Choice architecture may help increase compliance

Economic incentives –
Taxes, penalties,
grants, subsidies

Useful when	<ul style="list-style-type: none"> • Behaviour is motivated by costs and benefits, and hyperbolic discounting does not take effect (impact is felt up front; losses are painful) • Incentives are salient to the consumer • The market is in line with incentives and does not work against them
Avoid when	<ul style="list-style-type: none"> • Behaviour is motivated by fairness, altruism or social norms
When choice architecture can help	<ul style="list-style-type: none"> • Behaviour is affected by cognitive influences (such as loss aversion or the <i>status quo</i>) • Choice architecture can help highlight incentives or reduce barriers to accessing them

Information and persuasion –
Advertising,
disclosures,
promotion materials

Useful when	<ul style="list-style-type: none"> • Combined with other policy tools • Encourages learning and can improve decision-making skills over time
Avoid when	<ul style="list-style-type: none"> • Information is presented in a complex manner • Messages conflict with what is being presented in the media or by other influencers (such as peers)
When choice architecture can help	<ul style="list-style-type: none"> • When information is overly complex; can help improve information processing using nudge techniques such as salience and simplification

Nudges and choice architecture – Defaults, simplifications, opt-in vs. opt out

<p>Useful when</p>	<ul style="list-style-type: none"> • Freedom of choice is important and individual preferences vary • Economic incentives or penalties are not appropriate • Behaviour is affected by cognitive influences and individuals struggle with turning intentions into action • Aligned with current regulations or incentives
<p>Avoid when</p>	<ul style="list-style-type: none"> • Context can be changed by businesses or other institutions in the marketplace • Additional regulation may be needed to set boundaries for market behaviour. Or, incentives may need to be changed to improve alignment with policy goals • Intended outcome of nudge may go against individual intentions

Other academic practitioners have focused on specific BI applications and refined their use to better guide public sector interventions. Among these is Cass Sunstein’s update of his and Richard Thaler’s earlier Nudge work on applying nudges effectively and practically. Sunstein offers applications and tactical opportunities in the last mile in a recent work, "A Catalogue of Ten Important Nudges".²²⁸

1. Default rules – such as automatic enrolment in savings plans

- May be the most effective nudges
- If people are automatically enrolled in retirement plans, their savings can rise substantially

2. Simplification – such as making enrolment forms less complex

- Complexity is a serious problem because of the confusion it can create, the potential for increased expense and the barrier to participation it causes
- Benefits of significant programs (such as in finance) are often greatly reduced because of undue complexity

3. Social norms – such as emphasizing what most people do

- One of the most effective nudges is to inform people that most others are engaged in a particular behaviour

4. Ease and convenience – such as making low cost options more visible or accessible

- To encourage certain behaviour, reducing various barriers (including the time that it takes to enroll) is often helpful

5. Disclosure (if information is simple) – such as disclosing the full cost of credit cards

- Simplicity is crucial for consumers. Disclosure policies can be highly effective if, at minimum, the information is understandable and straightforward to access

6. Warnings – such as large fonts and bold letters in text and graphic pictures

- Warnings can help counteract the natural tendency of people toward unrealistic optimism
- They can also materially increase the probability that people will focus on the long term

7. Pre-commitment – such as committing to certain future actions

- Often people have specific goals (like saving money) but their actions fall short of meeting them
- Committing to a specific action at a specific future moment better motivates action and decreases procrastination

8. Reminders – such as emails or text messages to counter the adverse effects of inertia, procrastination, competing priorities and forgetfulness

- Reminders can have major impacts provided that they are timely
- Need to ensure that people can act immediately on the information

9. Implementation intentions – such as eliciting questions about future behaviour

- People are more likely to undertake a desired activity if they are engaged with the way that they are going to participate the activity

10. Past choices – such as informing people about the effects of previous behaviour

- As people often lack information about the costs of previous choices, providing this information can change behaviour, saving consumers money and improving the ways in which markets work

Lessons from the U.K. BIT’s success

Halpern’s book exploring both the work of the U.K. BIT through early 2015 and the broader applications of psychology to public policy provides a detailed review of putting BI into practice. The U.K. BIT initially used “MINDSPACE” for its internal education and engagement regarding BI use and its external efforts. (MINDSPACE: Influencing behaviour through public policy was published by the U.K. Cabinet Office and the Institute for Government in 2010.)²²⁹ MINDSPACE is the acronym used to summarize nine influences on human behaviour that policy makers should be aware of and employ where appropriate. It is designed to provide a simple framework and a memorable mnemonic to help policy makers consider what might influence people’s behaviour in a given context. The summary table below sets out the nine effects comprising MINDSPACE.²³⁰

TABLE 4
MINDSPACE

Messenger	People are heavily influenced by who communicates information
Incentives	People’s responses to incentives are shaped by predictable mental shortcuts, such as strongly avoiding losses
Norms	People are strongly influenced by what others do
Defaults	People ‘go with the flow’ of pre-set options
Salience	People’s attention is drawn to what is novel and seems relevant to them
Priming	People’s acts are often influenced by sub-conscious cues
Affect	People’s emotional associations can shape their actions
Commitments	People seek to be consistent with their public promises and reciprocate acts
Ego	People act in ways that make them feel better about themselves

The MINDSPACE framework was initially useful for guiding the U.K. BIT's early work and was effective in the unit's seminars and workshops to educate and build capability among the government. However, after the first year the U.K. BIT found that MINDSPACE held some challenges for non-academic practitioners given its nine components to consider on top of the significant time constraints and other important factors constraining practitioners focus and understanding.

The U.K. BIT then developed a simpler and more streamlined approach for its BI initiatives with the acronym **EAST**: easy, attractive, social, timely.²³¹ Team members used the EAST framework to guide their work in BI application, particularly in testing and adapting policy initiatives.

EAST proved to be very useful as a checklist to highlight people's mental shortcuts and recall these components when developing policy interventions. It helped accelerate the testing of some straightforward ideas and also provided politicians, policy makers and other civil servants with a simple, memorable framework to think about effective behavioural approaches. Based on its own work and other academic literature, the U.K. BIT published "EAST: Four simple ways to apply behavioural insights"²³² in 2014. EAST's four principles are:²³³

- **Make it easy** – Harness the power of defaults, simplify messages and reduce the 'hassle factor' of using a service
- **Make it attractive** – Attract attention and design rewards or sanctions for maximum effect
- **Make it social** – Show that most people perform the desired behaviour, use the power of networks and encourage people to make a commitment to others
- **Make it timely** – Prompt people when they are likely to be most receptive, consider the immediate costs (and benefits) and help people plan their response to events

Halpern expanded upon the components of EAST in a helpful table setting out aspects to consider and some examples of their use:²³⁴

TABLE 5
EAST
Framework

EAST	Things to think about	Examples
Easy	<ul style="list-style-type: none"> • Simplify • Friction: remove, or add to inhibit • Defaults: set the easy path as the healthiest, safest option 	<ul style="list-style-type: none"> • Pensions: millions more saving as a result of auto-enrolment • University entry: 25% more underprivileged students go when forms are pre-filled
Attract	<ul style="list-style-type: none"> • Personalise: use recipient's name; make information relevant • Salience: make key point stand out • Messenger: experts and named individuals work better than anonymous or distrusted sources • Lotteries: make incentives more attractive • Emotion: as important as reason 	<ul style="list-style-type: none"> • Tax: 10 times more doctors declared income with salient letter • Giving: 2 times more donations to emergency appeals with story of one child compared to statistics of mortality • Courts: 3 times more likely to pay fines with a personalized text

EAST	Things to think about	Examples
Social	<ul style="list-style-type: none"> • Norms: what are others actually doing • Networks: a friend or colleague recommends • Reciprocity and active commitments: promises • Reminders of others: eyes and faces (emotional cues to suggest how people should feel and react) 	<ul style="list-style-type: none"> • Tax: 16% more likely to pay if informed that most people “pay on time” • Giving: 7 times more likely to give when learning that a colleague already gave
Timely	<ul style="list-style-type: none"> • Habits: intervene before they become established • Key moments: when behaviour is disrupted • Priming and anchoring: the power of what just came before • Time inconsistency: discounting of the future 	<ul style="list-style-type: none"> • Tax: twice as much less likely to respond to nudge if late paying the previous year • Health: 3 times more workers choose healthy option a week ahead than on day of eating

Early wins

With many practitioners and publications stressing the importance of early and demonstrable success for a BI unit, other aspects of the U.K. BIT’s approach during its formative years are also instructive. Given its two-year window to demonstrate its value with concrete results, it was imperative that the U.K. BIT demonstrate clear success in rapid order. In Halpern’s words, the U.K. BIT needed several clear “wins” to illustrate the benefits of nudging.²³⁵

Its four early nudges warrant brief elaboration for their successes and returns given the slight alterations they implemented. The unit’s use of nudges took advantage of social norms, lessened hassle for people, personalized communication and enhanced the timing of communication in a number of ways:²³⁶

- For tax payments owing, communicating a simple message like “most people pay their tax on time” boosted repayment rates by “several percentage points”. This resulted in “tens of millions of pounds” in additional outstanding taxes being paid.
- To encourage people to insulate their lofts or attics, offering an attic clearing service achieved three times the take-up of the U.K. government-offered discount on insulation. This was an example that clearly demonstrated where removing hassle could be more effective changing consumer behaviour than bigger price discounts.
- For traffic fines owing, adding the image of owner’s car, captured by roadside camera, made the owner more likely to pay unpaid tax.
- For outstanding court fines, sending a text that bailiffs were “due to collect in ten days” led to a more than double rise in payment rates.

How EAST and nudging can work in practice

The U.K. BIT's success in nudging and other BI applications occurred in a broad range of areas. Briefly exploring one of these key principles and practices – simplification – visibly demonstrates its benefits. It is also informative given regulation's traditional heavy reliance upon disclosure to change behaviour.

As Halpern wrote,²³⁷ many agencies and governments stumble at the “make it easy” component of EAST, specifically with regard to communication. The most fundamental application of “make it easy” is to ensure that information, messages or requests are clear and simple to understand. Neither governments nor regulators should expect much impact if the information is so dense and complex that it is not clear what is being asked of the recipient. As a range of research studies have shown, an easy-to-read message is not only more likely to be understood, it is also more likely to be believed.²³⁸

The U.K. BIT tested the effects of simplifying official communications that “looked like they had been written by a committee of lawyers or technical administrators.”²³⁹ The results of this test demonstrated that:

- tax letters written in plain English with a clear, simple request at the beginning could generate a 200 to 300 per cent improvement relative to the originals; and
- click-through rates by businesses in response to government emails could be increased by 40 to 60 per cent by reducing the text in the email. Sign-ups on websites increased when website landing pages were simplified and reduced clutter.

The U.K. BIT's work taught its staff about the importance of being “almost obsessive” about reducing hassles.²⁴⁰ Even slight amounts of extra hassle can have a significant impact in behaviour. For example, having a single click can increase the completion of tax forms by 22 per cent, underscoring the opportunity for pre-filling forms. (In the U.K. BIT's view, “much of what tax authorities consider fraud and evasion are actually more a result of the hassle and other frictions of wading through complex tax forms”).²⁴¹

BI uses beyond nudging

It is important to reiterate Halpern's view that BI approaches should be used “as a tool or lens through which to view all interventions, including tax and incentive design.”²⁴² The U.K. BIT spent significant time designing regulations, and became very involved in the form and detail of communications, information and transparency across a broad range of U.K. government activity.

IV. Experimenting and testing BI applications

Using BI effectively requires “systematic experimentation and trialling. The combination, mixed with design flair, can be very effective” as Halpern states.²⁴³

Behavioural experiments offer numerous advantages.²⁴⁴ BI units and applied researchers can undertake experiments that test the direction and magnitude of nudge impacts and other, more extensive interventions. Experiments can also study the size of different phenomena; for example, how large is the effect of framing a bonus as a loss versus a gain? Experiments can test and reconcile conflicting predictions from BI compared to other behavioural theories. Trials can also document behavioural phenomena and help develop theories to explain them.

Soman has extensively explored the merits, nature and types of experimentation and trials, and his summary is helpful for understanding their role.²⁴⁵ As he explains, the word “experiment” conjures up images of people in lab coats at work with scientific equipment. Compared to the physical sciences, behavioural theories can make predictions that are often accompanied by somewhat more uncertainty. Fundamental difference arises from the significantly greater variability in human behaviour.

Yet behavioural experiments are similar to hard sciences in other ways. Among the most sophisticated of these are randomized controlled trials (RCTs). These trials are highly valuable as they test whether a causal relationship exists between one particular variable and an important outcome. Simple and decisive advantages of this type of experimentation include that, if done properly, RCTs isolate all of the other factors affecting people’s perceptions, thinking or behaviour from the condition, initiative or other intervention being tested.

As the U.K. BIT’s paper on RCTs explains, RCTs are the best way of determining whether a policy is working.²⁴⁶ RCTs have been used for over 60 years to compare the effectiveness of new medicines. They are also utilized extensively by companies testing website layouts to generate more sales. What makes RCTs different from other types of evaluation is the introduction of a randomly assigned control group. RCTs enable governments and regulators to compare the effectiveness of a new intervention against what would have happened if nothing had been changed. Introducing a control group eliminates a host of biases that normally complicate the evaluation process.

RCTs: A more detailed look

Two key aspects of RCTs are the “background variables” and the “randomization.”²⁴⁷

A **background variable** is any set of factors that are held constant and not manipulated. It is important to ensure that any such variables – such as location, gender, ethnicity or age – are kept constant for the trial.

Randomization is the act of allocating participants to different conditions in an unplanned and undirected approach. This is important in order to minimize selection and allocation biases, as a BI unit would want to isolate variables so that the sample selection does not distort results. The U.K. BIT identified nine separate steps required to set up any RCT²⁴⁸ in its 2012 paper that defined its “test, learn, adapt” methodology.

Test

1. Identify two or more policy interventions to compare (such as old and new policies).
2. Determine the outcome the policy is intended to influence and how it will be measured in the trial.
3. Decide on the randomisation unit: whether to randomise to intervention and control groups at the level of individuals, institutions (like schools) or geographical areas (like local authorities).
4. Determine how many units (people, institutions or areas) are required for robust results.
5. Assign each unit to one of the policy interventions, using a robust randomisation method.
6. Introduce the policy interventions to the assigned groups.

Learn

7. Measure the results and determine the impact of the policy interventions.

Adapt

8. Adapt your policy intervention to reflect your findings.
9. Return to Step 1 to continually improve your understanding of what works.

Typology of behavioural experiments


The spectrum of behavioural trials and tests ranges from fairly complex RCTs with many variables that are manipulated with large data sets to simple lab experiments where people make hypothetical choices. Soman's categorization of this range as three different sets of experiments,²⁴⁹ (see table below) as well Alain Samson's summary differentiating these types of experiments,²⁵⁰ are both helpful and informative.

Lab experiments can test either hypothetical choices or real choices with consequences. These experiments conduct research in a controlled environment with standardized procedures. Natural experiments are observational studies that do not assign subjects to treatment or control conditions.

Natural experiments can be done using archived or archivable data. The former refers to activities or choices where some kind of archive of data already exists which researcher needs to access. The latter refers to natural conditions where the researcher may need to ask people questions or observe behaviour to document the effect of intervention on choices and actions.

There are two types of field experiments, which differ in scale. In the first type, the researcher goes into a real-world setting and comes up with an intervention. In the latter, the researcher conducts RCTs on a large scale, usually with thousands of participants.

TABLE 6
Soman's Typology
of Experiments

 <p>Control</p> <p>Realism</p>	<ul style="list-style-type: none"> • Laboratory experiment – hypothetical choices
	<ul style="list-style-type: none"> • Laboratory experiment – real choices
	<ul style="list-style-type: none"> • Natural experiment – archived or archivable data
	<ul style="list-style-type: none"> • Natural experiment – generates data from existing conditions
	<ul style="list-style-type: none"> • Field experiments – real world situation with new intervention or variable, data generated on relatively smaller scale
	<ul style="list-style-type: none"> • Large scale randomized controlled trials (RCTs) – running condition tests simultaneously

Test, learn, adapt

“We need to recognize our dangerous tendency to overconfidence and our presumption that what we do know is ‘right’... we need to embrace doubt. We need to test, learn and adapt.”

David Halpern²⁵¹

The U.K. BIT viewed RCTs as essential to its success as it needed to show solid evidence of BI's impacts.²⁵² In order to achieve the benefits of BI on a large scale, it saw the need to demonstrate its applications both inside and outside of government. The U.K. BIT made an early choice to seek

out areas that are well-suited to low cost RCTs that could be done quickly. The results of those early trials showed that BI can be effective and that experiments can be quickly completed and at a low cost. With the recent rise of digital government, the merits of testing have been reinforced, and the U.K. BIT began to seek out digital interventions within the public sector to test multiple variations of projects, such as alternative forms of webpages.²⁵³

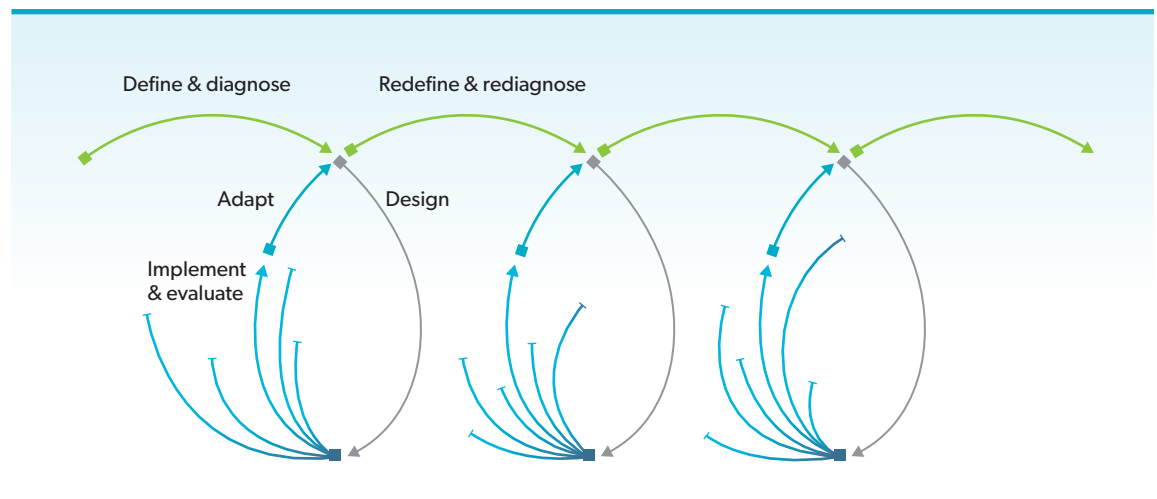
In the U.K. BIT's words, "the 'test, learn, adapt' approach has the potential to be used in almost all aspects of public policy."²⁵⁴ Testing an intervention means ensuring that robust measures are in place to evaluate the effectiveness of an intervention. Learning is about analyzing the outcome of the intervention so that working components can be identified and the magnitude of its effect can be determined. Adapting refers to the use of this learning to modify the intervention as required so that there is no continual refinement to the policy that is designed and implemented.

The World Bank puts a similar priority on experimentation. It has highlighted how an experimental approach that incorporates testing during the implementation phase can help identify more cost-effective interventions.²⁵⁵ As it states, "the process of delivering products matters as much as the product that is being delivered, and it can be difficult to predict what will matter in which context and for which population." Problem assessment by the World Bank, as well as its policy design and implementation, look very different under this new framework.

In the World Bank's more recent approach, understanding behaviour and identifying effective interventions involve more complex and iterative processes throughout the project cycle.²⁵⁶ This includes greater resources being devoted to defining and assessing problems, as well as to designing interventions. It also requires that several options be tested during the implementation period, with each reflecting different assumptions about decision-making and behaviour. One of the tests is adapted to reflect the trial results and then goes through a new round of "definition, diagnosis, design, implementation and testing."²⁵⁷ This process then is ongoing after the intervention is scaled up for broader application to a larger segment of the population.

FIGURE 7

Understanding behaviour and identifying effective interventions are complex and iterative processes



Source: WDR 2015 Report

Section C: Themes from behavioural insights units, applied researchers and academic practitioners

V. Major lessons and insights relevant to the OSC

This chapter has explored the nature of leading government BI units, their insights plus those of applied researchers and academic practitioners into using BI and the crucial importance of tests and trials. The Investor Office supplemented this research with in-depth interviews of 15 government BI units, academic practitioners and applied researchers to refine the themes of BI application. Seven such themes are summarized below.

Seven financial regulators were also interviewed as part of this study and their feedback helped to inform Chapter 3.

As Chapters 1 and 2 have shown, BI offers a lens for understanding market problems and consumer challenges. Financial decision-making and retirement saving issues were cited numerous times as major problems in this regard. There is also extensive BI use in policy implementation to design choice architecture for government and regulatory initiatives (like changing default choices, simplifying disclosure and other such nudges). However, there has been much less BI use in policy design to date. This is due to a number of issues, including being less able to measure success effectively and the ethical issues that can be raised.

The adoption and use of BI is about nudging and about more extensive behavioural-led initiatives.

Nudges have demonstrated the compelling advantages they hold for governments and regulators. They can be implemented at a low cost and hold the potential for quick wins. Nudging typically faces fewer political and legal barriers given the limited nature of changes they introduce. Behavioural disciplines can also identify when nudges are insufficient for broader initiatives where regulations, rules, subsidies or taxes may be needed to effect a desired change.

BI are essential to the testing and evaluation of these traditional policy tools, as well as adapting and re-designing such interventions to make them more effective. As important is the way in which BI can highlight and provide solutions to help prevent commercial exploitation of consumer biases and other cognitive errors in people's decision-making.

Incorporating BI is essential to achieving a policy culture of testing and learning.

Making assumptions about behaviour in the design and implementation of policy can lead to major errors. The need to use BI and to test, learn and adapt interventions was repeatedly stressed by practitioners and applied researchers alike. Many experts identified the need to begin with accurate description and diagnosis of a problem before designing interventions and testing, learning and adapting their implementation. They emphasized how governments and regulators must have humility and a commitment to testing in order to minimize errors. A culture of trialling, whether through lab experiments, field tests (including RCTs) or data science, is as important as the willingness to admit and learn from mistakes.

The successful use of BI involves multi-disciplinary and multi-functional approaches.

Staffing a BI unit requires behavioural sciences expertise (in areas like economics, cognitive psychology, social psychology), but also other specialists. Successful BI units need to be integrated with policy, legal and other expertise for practical applications. Effectively adopting BI involves using multiple methods to test policy initiatives, including design thinking, lab and natural experiments, field-based RCTs and other collection and sophisticated analysis through advanced data science. The experts interviewed also highlighted the effectiveness of combining BI with traditional economic approaches.

There is no single BI unit model that meets all governments' and regulators' needs.

Choosing a structure, staff, mandate and goals for a BI unit depends on the context, resources (including funding and data support), organizational and political culture and the authority's governing style. While the success of the U.K. BIT and White House SBST (through 2016) are widely recognized, these teams have (or had) large staffs and a national (or international, in the case of the U.K. BIT) scale for their work.

Denmark's approach, with its much smaller scale and extensive networking, was cited by many of the experts interviewed. Others stressed the importance of a hub and spoke system - a central unit or capacity combined with line department or ministry capabilities - to build capacity beyond a central unit in important operational and policy areas.

Academic and other expert collaboration is essential for BI units.

Numerous practitioners and applied researchers stressed the benefits of collaborating to leverage government and regulator resources in diagnosis, design and testing. They also recognized the opportunities to combine academic rigour with public sector knowledge of legal, policy and political constraints.

Staying current with behavioural literature and the rapidly-expanding public sector use of BI is a major challenge. Academics emphasized that they cannot keep up with the growing number of BI units or increasing behavioural capabilities within national and local governments. For their part, the practitioners interviewed made it clear that they could not stay current with the volume of new and potentially relevant research.

External and internal communications and engagement are important.

Most practitioners and applied researchers made mention of how important open engagement and ongoing communication of findings with staff and politicians can be. They also underscored the opportunities and benefits of using occasional papers, symposiums and public consultation to educate and engage external stakeholders (though there was a mix of views about communicating through academic publications).

BI is an essential part of governments and regulators' policy toolkits, but it is not a panacea.

The use of behavioural findings, applied BI research and behavioural frameworks is a major step forward in the public sector's understanding of people's actions, choices and thinking. However, it is just one part of the array of analytical and implementation strengths of an effective policy-making or regulatory organization. It is complementary to, and works best when combined with, traditional cost-benefit, scarcity and other economic analysis, as well as expertise in policy, legal, design, data and other areas.

BEHAVIOURAL INSIGHTS

CHAPTER 3

CHAPTER 3 - THE INCREASING USE OF BEHAVIOURAL APPROACHES IN FINANCIAL REGULATION

“Using insights from behavioural economics, together with more traditional analysis of competition and market failures, can help the FCA assess problems in financial markets better, choose more appropriate remedies and be a more effective regulator as a result.”

Martin Wheatley, former Financial Conduct Authority CEO²⁵⁸

Since the U.K. established the Financial Conduct Authority (FCA) in 2013, financial behavioural regulation has become an increasingly significant part of the regulatory landscape in major markets.²⁵⁹ The FCA's Occasional Paper #1 set out well the merits and applications of behavioural economics in financial markets.

Numerous financial regulators and supervisors around the world are now expanding their initiatives and analysis in both their jurisdictional reach and the scope of approaches. Conduct risk, which is a subset of behavioural risk, is appearing more often as a specific focus for policy makers and regulators. In addition to the U.K.'s FCA, notable behavioural initiatives and interventions have been announced in Australia, the U.S., the European Union, Hong Kong, Singapore and New Zealand. The use of behavioural approaches elsewhere by securities regulators and other agencies is increasingly accelerating.

This chapter continues the Investor Office's survey of relevant practitioners' adoption of BI, particularly at the integrated behavioural initiatives and major behavioural economics (BE), behavioural finance (BF) or BI units in major jurisdictions relevant to the OSC. It begins with the FCA and its use of BI, as well as the range of studies and initiatives developed by Australia's Securities and Investment Commission (ASIC) and New Zealand's Financial Markets Authority (FMA). The extensive BI work of the European Commission (EC) in financial policy-making is also examined, followed by a review of other substantial and relevant work produced by agencies in the U.S. and Asia that have engaged in BI-informed initiatives.

I. Taking the lead: the U.K.'s Financial Conduct Authority (FCA)

“While it is common sense that people make mistakes, behavioural economics takes us beyond intuition and helps us be precise in detecting, understanding, and remedying problems that arise from consumer mistakes.”

FCA Occasional Paper #1²⁶⁰

The FCA, the world's first behavioural financial regulator, has led the application and tactics of behavioural principles.²⁶¹ From the outset, the FCA has articulated the principles and insights of BE and BF,²⁶² including aspects such as:

- consumers make predictable mistakes when choosing financial products;
- firms respond to these mistakes;
- behavioural biases can lead firms to compete in ways that are not in consumers' interest; and
- focusing on how BE can, and should, be used in the regulation of financial conduct.

The FCA led the use of BE for policy and regulatory initiatives across a broad spectrum of financial services from 2013 onward.²⁶³ The FCA's strategy of combining behavioural science, data and technology “has turned economics into such an important feature of conduct regulation.”²⁶⁴ The FCA has embraced BE as an essential tool to assess markets and potential interventions to support better financial outcomes and improve ethics, crisis prevention and consumer protection.

In a series of speeches given throughout 2014 and 2015, Martin Wheatley, the FCA's first CEO, summarized the rationale and merits that BE held for the FCA. In late 2014, he stated that the FCA was “enhancing traditional economic analysis by integrating it with behavioural techniques. Considering the demand-side as well as the supply-side of competition – how real people interact with markets.”²⁶⁵ In his words, the FCA was “designing policy based on how people engage with financial products. For policy-makers and regulators, this is important for two reasons. First, because it has the potential to materially improve consumer outcomes. Second, because it can potentially increase competitive pressure on incumbents by reducing barriers to contestability like complexity, consumer inertia and so on.” (Contestability refers to both the ability of new suppliers to enter markets and to offer effective competition on price or products that causes existing suppliers to respond to consumers' benefit.)

In Wheatley's view, “sophisticated field-testing, trials and big data analysis is now dominating so much of the FCA's work across key areas ... In other words, instead of relying on intuition and guesswork, we combine trials, behavioural economics and competition analysis, to work out what's going on in each market – real markets, not just theoretical constructs.”²⁶⁶

The FCA has pursued a comprehensive strategy that uses in-depth publications and engagement with intermediaries and investors to support its other regulatory roles. The FCA has led the way in publishing its research and initiatives, especially through the 25 occasional papers that it published between 2013 and 2016. As set out in its Occasional Paper #1, Applying Behavioural Economics at the FCA, “the FCA is committed to encouraging debate among academics, practitioners and policymakers in all aspects of financial regulation. To facilitate this, it publishes a series of

occasional papers in financial regulation extending across economics and other disciplines ... Since their main purpose is to stimulate interest and debate, the FCA welcomes the opportunity to publish controversial and challenging material ... The FCA encourages contributions from external authors as well as from its own staff. In either case, the papers will express the views of the author(s) and not those of the FCA.”²⁶⁷

The FCA’s framework for using BE in financial markets

Occasional Paper #1 included an in-depth literature review that looked at people’s behavioural biases and the impacts those biases had in consumer financial markets. It set out an extensive number of BE applications for many FCA activities, including:

- “policy – i.e., creating our rules and guidance;
- analysing firms’ business models, behaviour and products when authorizing or supervising firms;
- building evidence for enforcement cases; and
- shaping FCA and firm communications with customers.”²⁶⁸

The FCA sees BE as essential to all steps of the regulatory process. Occasional Paper #1 detailed its key questions for applying behavioural analysis and its approach to address the risks, problems and interventions.²⁶⁹

Applying behavioural analysis: Questions addressed by Occasional Paper #1

TABLE 1

<p>Step 1: Identify and prioritize risks to consumers</p>	<ul style="list-style-type: none"> • How can we spot risks of consumer detriment caused by biases? • How can we prioritize these risks?
<p>Step 2: Understand root causes of problems</p>	<ul style="list-style-type: none"> • Could consumers be choosing reasonably? • If consumers are biased, what do they truly want and need? • How should we analyze firm-specific issues? • How should we analyze market-wide issues?
<p>Step 3: Design effective interventions</p>	<ul style="list-style-type: none"> • What interventions are available to protect consumers? • Should we intervene and, if so, how? • How can we assess the impact of interventions?

Identifying and prioritizing issues – given that biases are usually tough to directly observe, the FCA proposed a series of indicators to identify where consumer detriment from mistakes can be significant. Its BE approach also prioritized problems based upon their size, including the distributional effects when less sophisticated consumers pay more than more sophisticated consumers.

Understanding root causes of problems – it is important to develop possible explanations for the root causes of market problems and build evidence, including investigating whether consumers are making mistakes and, if so, which biases may be causing the problems. The process of building evidence includes examining how consumers make decisions under different circumstances, their awareness of important product information and their self-declared needs and objectives. The FCA described how BI can help assess firm-specific and market-wide problems, including using consumer research, lab or field experiments to analyze markets.

Designing effective interventions – BE offers new perspectives on potential interventions to address behavioural and other financial market problems. The FCA described four ways in which it can solve behavioural problems, ranked from least to most interventionist:

- **Provide information** – require firms to provide information in a specific way or prohibit specific marketing materials or practices.
- **Change the choice environment** – Adjust how choices are presented to consumers.
- **Control product distribution** – Require products to be promoted or sold only through particular channels or only to certain types of clients.
- **Control products** – Ban specific product features or whole products that appear designed to exploit, or require products to contain specific features.²⁷⁰

The FCA noted the potential to expand this four-way toolkit by using more nudges in regulation. These small prompts, if designed well, have low costs and can result in better consumer decisions without restricting people's choices. Occasional Paper #1 also points out that effective interventions require a determination of whether to intervene, and if so, where the limits to consumer responsibility should be. Effective interventions should consider the implications of less interventionist options like nudges compared to more interventionist ones, such as bans.

Testing eligible consumer take-up of redress

The FCA was at the forefront of tests and trials that assessed consumer problems and potential regulatory interventions in financial markets. This included undertaking the first-ever large-scale RCT by a U.K. regulator in 2013, and then an innovative lab experiment regarding online retail behaviour, which are described in depth in Occasional Paper #2 and Occasional Paper #3, respectively.

Occasional Paper #2, Encouraging consumers to claim redress: evidence from a field trial,²⁷¹ is both relevant and instructive for financial regulators. Pursuing the appropriate amount of redress and maximizing consumer take-up of applicable redress supported consumer protection, one of the FCA's three operational objectives. To that end, this paper looked at how the FCA could encourage more eligible consumers to claim their money back with simple changes to the letters they received.

Among the changes that the FCA tested were simplifying some of the text, making key information (such as the telephone number to make a claim) more prominent, and telling people how long it would take to claim.

From the FCA's perspective, the BI literature offered a variety of ways to attract consumer attention and compel them to seek redress that could be tested as hypotheses.²⁷² The envelope sent to

customers needed to be appropriately distinctive in order to be opened given the volume of regular mail that people still receive. The key messages in the redress letter needed to be as salient and immediate as possible, with the firm offering redress also needing to reduce excess text as much as possible. Firms also needed to remind consumers to respond.

The FCA developed changes (“treatments”) to seven features of the firm’s communication to consumers eligible for redress to test their hypotheses.²⁷³ One treatment changed the envelope, five changed language in the firm’s letter, and one established a reminder for consumers to respond. The RCT’s control group received the original envelope and letter from the firm with no reminder.

TABLE 2
FCA Changes
To Firm's
Communication
With Consumers

Envelope	<ul style="list-style-type: none"> • Adds a message to ‘act quickly’ to a plain envelope
FSA logo	<ul style="list-style-type: none"> • Uses the Financial Services Authority (FSA) logo in the letterhead [Note FSA was the FCA’s predecessor, and the regulator overseeing the firm that engaged in mis-selling]
Salient bullets	<ul style="list-style-type: none"> • Replaces the two bullet points at the top of the letter with more salient bullet points
Simplified	<ul style="list-style-type: none"> • Makes the body of the letter simpler and more concise by reducing text by 40%
Claims process	<ul style="list-style-type: none"> • Includes a sentence in bold explaining that the claims process would only take five minutes
CEO signature	<ul style="list-style-type: none"> • Uses the firm CEO’s signature to sign the letter, instead of generic ‘Customer Team’
Reminder	<ul style="list-style-type: none"> • Sends a second letter three to six weeks after the first letter

*The FSA preceded the FCA and oversaw overseeing the firm that engaged in mis-selling.

CHART 3: Specific changes in communications with eligible consumers

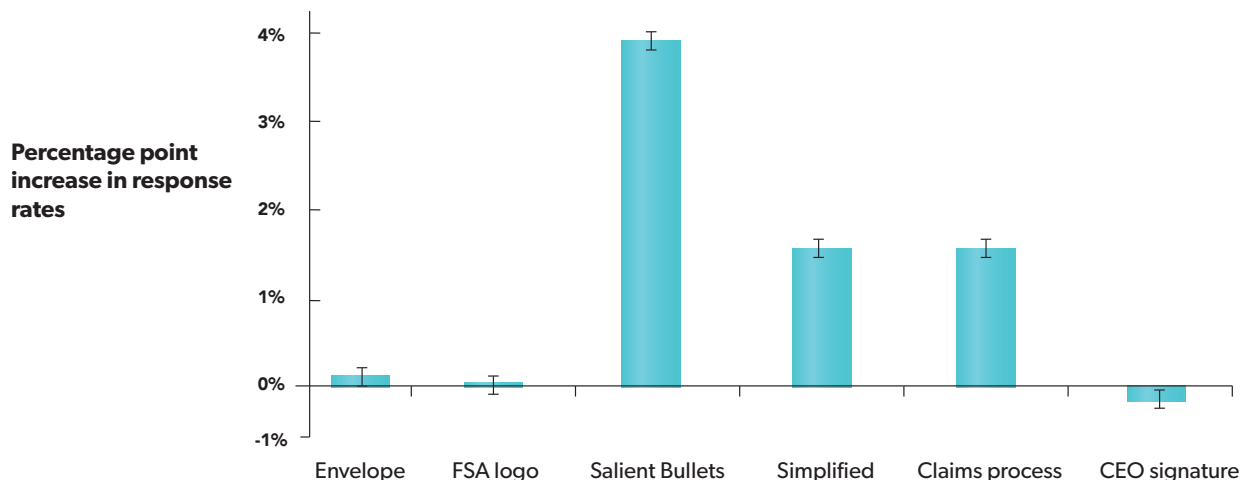


CHART 4: Effect of changes in communications (including combined changes)



The results of these treatments, both individually and together, were considerable, particularly given that the firm’s original letter (used as the control) was clear.²⁷⁴ The firm’s original letter received a 1.5 per cent response rate. In contrast, the ‘salient bullets’ treatment had the largest single effect, increasing responses by 3.8 percentage points, just over 2.5 times relative to the original letter. The ‘simplified and “claims process’ treatments had the next largest impact, almost doubling the response rate. The ‘CEO signature’ treatment’ had a noticeably and statistically significant negative impact, albeit a small one.

Measuring the interaction of these treatments showed that the best combination had a very significant impact. A combination of the ‘salient bullets’, simplifying the text, explaining the claims process and ‘reminder’ treatments boosted response rates to almost 12% from the control group’s 1.5%, equivalent to an additional 20,000 people claiming redress.

As the FCA noted, there were a number of surprises in the RCT’s results.²⁷⁵ Most important was that small improvements to what was an already clear letter had major impacts. From the FCA’s perspective, these effects were much larger than anticipated. Additionally, the overall distribution of impacts was different than the pre-RCT expectations, and the FCA had not anticipated any negative impacts at all. These findings underscore the importance of both the precise design of communications and the generation of solid evidence from real settings, which this RCT did effectively.

Online lab experiment

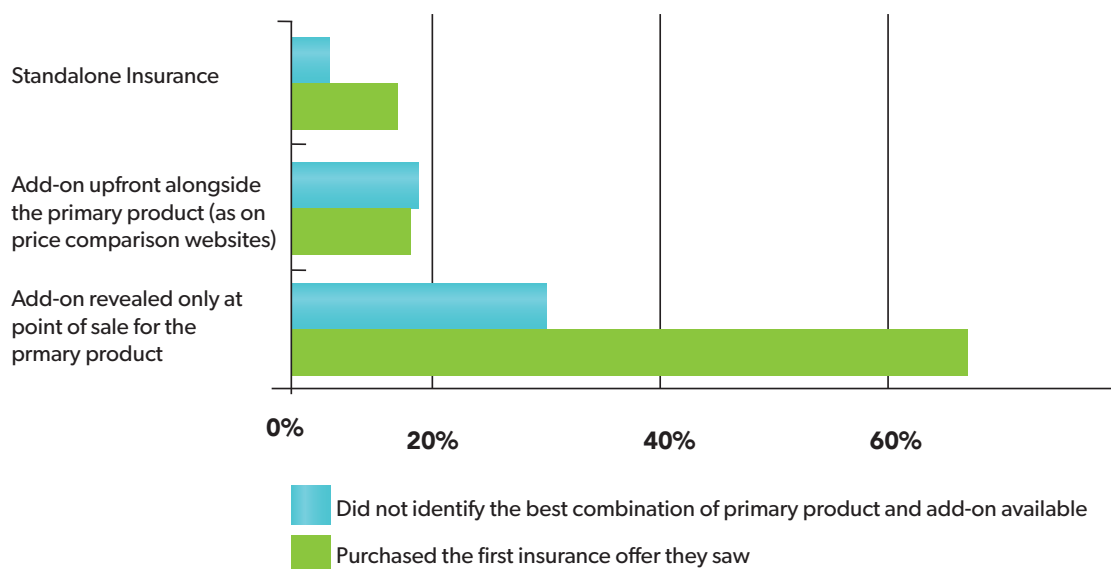
In contrast to field experiments that test behaviour in real-world situations, lab experiments test decision-making in stylized and more controlled environments that can capture key aspects of the choice being made. Occasional Paper #3, “How does selling insurance as an add-on affect consumer decisions? A practical application of behavioural experiments in financial regulation” described the FCA’s first online lab experiment and analyzed its results.²⁷⁶

This paper also set out the advantages of lab experiments,²⁷⁷ beginning with helping researchers identify causes and effects more precisely (by removing irrelevant environmental influences) and investigating general problems affecting people’s decision-making in a range of contexts (in this case, the markets for different insurance products). Other important benefits of lab experiments include the potential to observe the impacts on people’s behaviour (and not just changes in outcomes) and the ability to investigate general principles of consumer behaviour. This paper also reviewed how the experiment was designed to be a simplified online experience of shopping around and ‘purchasing’ a primary product and an optional insurance product. The shopping around task was done five times with five different primary products.

The online lab experiment showed that the transaction context for consumers had significant effects.²⁷⁸ The impact of being allocated to one of the three most common ways of selling insurance – “stand alone; transparently advertised alongside the primary product; or drip-fed during the purchase of the primary product” – had a large impact on consumers’ willingness to check other options and prices, as well as their ability to choose the best option. The Standalone transaction is seen as the benchmark, and the Alongside and Drip Fed transaction types get progressively worse outcomes for consumers. In this case, the firms’ Drip Fed approach is not designed to reduce information overload, but to reduce the willingness of consumers to shop around for the secondary product because they have already started along the purchase journey for the primary product.

One important finding was that when add-on insurance was revealed only at the point of sale of the primary product (the drip-fed approach) it significantly worsened outcomes given the lower transparency for consumers. The adverse impacts of this point of sale disclosure were higher prices paid, less shopping around and fewer customer decisions that met their actual product needs.

CHART 3: The effects of the common insurance sales formats on consumer behaviour



BI used in the FCA’s Economics for Effective regulation

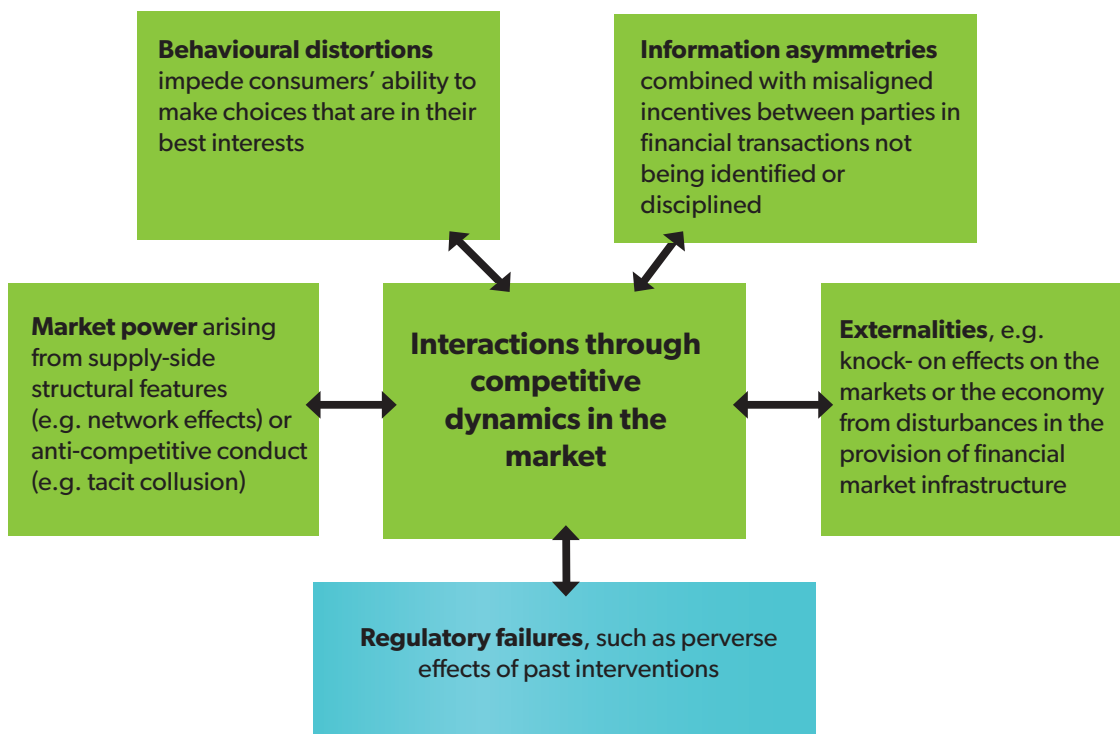
To meet its strategic objective to “make the relevant markets work well,”²⁷⁹ the FCA often requires in-depth assessments of market outcomes, including the causes of poor outcomes and what can be done to rectify them. The FCA is obligated to achieve higher standards than its predecessor, the Financial Services Authority, in assessing the effects of interventions to meet its competition

obligations and its given legal requirements to publish cost-benefit analyses when consulting on new policy options.

Occasional Paper #13, Economics for Effective Regulation saw the FCA set out a new and detailed framework for a market-based approach to regulation: Economics for Effective Regulation (EFER).²⁸⁰ EFER has three stages: problem diagnosis, intervention design and impact assessment. It draws extensively upon recent academic literature and regulatory best practices to build upon standard approaches to economic analysis by regulators. Among EFER's enhancements are incorporating a "more explicit and structured consideration of behavioural biases and competition problems" as well as "recognizing that severe cases of poor outcomes in markets frequently arise because of the interactions of multiple underlying problems" that need to be assessed and responded to through a combined approach.²⁸¹

In describing EFER's rationale, the FCA identified a combination of factors that can generate poor market outcomes that need to be analyzed and addressed together.²⁸² For example, consumers may not take advantage of better pricing or products from other providers for a number of reasons, including information asymmetries (such as when the current cost of use is not provided to people) and behavioural considerations (procrastination in choosing alternative products despite a clear benefit for doing so). There may also be structural factors (including network effects where people want to use the same firm as others) and regulatory failures that increase the hassle factor for consumers (older regulation may require time-consuming checks or paperwork to switch).

CHART 4: Interactions between market imperfections



The FCA's EFER methodology is careful in incorporating assessments of behavioural distortions given that these problems typically affect market results through their interactions with other issues.²⁸³ As the FCA states, the fact that behavioural biases are a reality in how people think is not in itself a reason for intervention. EFER's approach seeks to identify and respond to situations where biases create systematic barriers to market participants acting in their interests and not just the presence of biases themselves. Occasional Paper #13 noted that underlying biases cannot typically be remedied by regulation, but it may be possible for regulatory interventions to address the market imperfections that such biases create.

The EFER framework also delineates the two ways in which regulation can achieve improved outcomes: remedying the underlying market imperfections and directly mitigating them.²⁸⁴ With the former, properly-designed regulation can address market imperfections. However, when these imperfections are structural features of the ways in the market works, regulation alone might not fully remedy the problems. These fundamental aspects of markets can also reflect behavioural considerations, such as when a product's complexity is too much for most people to comprehend without assistance. For problems where consumers' cognitive and expertise limitations create risks, the role of regulation is to mitigate the harm through interventions such as price caps or banning retail purchases of the complex products without advice.

Other FCA occasional and discussion papers

While the considerable number of occasional papers in the FCA's series means that this report cannot consider the full scope of related work, three other papers are particularly indicative and informative regarding their identification and testing of BI-based problems and solutions. They serve as indicators of the FCA's approach:²⁸⁵

- **Occasional Paper #7**, "Stimulating interest: reminding savers to act when rates decrease"
- **Occasional Paper #10**, "The impact of annual summaries, text alerts and mobile apps on consumer banking behaviour"
- **Occasional Paper #19**, "Attention, search and switching: Evidence on mandated disclosure from the savings market"

The foreword in the FCA's 2015 Smarter Consumer Communications discussion paper also illustrates its BI approach: "We recognize, however, that information itself does not necessarily empower the consumer. Our work on behavioural economics has clearly shown it can overwhelm, confuse, distract or even deter people from making effective choices if presented in a way people struggle to engage with."²⁸⁶ These include the adverse effects upon consumers' choices, such as "behavioural biases, low levels of financial literacy and the complexity of some financial services and products" and that "firms tend to use financial and legal jargon which can make the materials they produce lengthy and impenetrable for the consumer."

This discussion paper states that the FCA expects firms to understand the importance of communicating effectively with consumers and that information about their products and services should reflect "at least as much behaviourally informed creativity as is applied to business

development, marketing and financial promotions.”²⁸⁷ It also states the FCA’s support for firms that are already “writing for the consumer first and then ensuring communications are compliant, rather than the other way round” as well as “moving away from a box-ticking approach to communication design.”

The FCA’s inclusion of specific examples of firms that, in its words, “demonstrate possible approaches to developing smarter communications”²⁸⁸ is also significant. The FCA does not expect other firms to replicate these approaches, but it hopes that “these inspire firms to think differently about how they communicate with consumers.”

The FCA’s behavioural unit and behavioural priorities in its mission

The Behavioural Economics and Data Science unit at the FCA is notable for its staff quality and size. As of early 2017, it had 10 permanent staff and 4 temporary research staff. The unit works on a broad range of internal projects in addition to its numerous external publications. Its ongoing importance to the FCA’s work is evident in the priorities set out in the FCA’s mission document from October 2016.²⁸⁹ Among the FCA’s priorities in transparency and disclosure is how BE is adapting its regulatory response.²⁹⁰ “We believe we can play a greater role in helping consumers by influencing how they make decisions. This can include changing the way firms present choices to consumers (known as ‘choice architecture’). It can also include ‘nudging’ (encouraging change in small stages) passive consumers by giving them easy options to switch provider or ‘default’ them into simpler, cheaper products instead of expensive and complex ones.”

II. Australia and New Zealand

Australia Securities and Investments Commission (ASIC)

While ASIC formally set up a BE team in 2014, it first began incorporating behavioural findings and behaviourally-informed approaches as much as 15 years earlier through extensive consumer research. Significant examples are described in its 2011 Financial literacy and behavioural change report,²⁹¹ which was originally compiled in 2008 and updated in 2010. This report described how behavioural economists see people as ‘normal’ and subject to a range of behavioural biases rather than as rational agents of traditional economic theory.²⁹² ASIC highlighted common barriers to good decision-making such as information and choice overload, complexity and uncertainty, time effects and pressures, over (and under) confidence, self-control and framing. Its paper referenced a range of research from 2002 to 2010, exploring the effects of these behavioural barriers on various aspects of people’s financial decision-making.

In a 2016 address, Deputy Chair Peter Kell provided a comprehensive overview of ASIC’s adoption, rationale and use of BE.²⁹³ As Kell explained, Australia’s regulatory regime for most retail financial markets had been based upon disclosure, including for risky and complex products. In his words, “anything goes, as long as you disclose.” Reliance on this disclosure left consumers bearing much of the responsibility of avoiding harm. However, this structure did not prevent persistent and systemically adverse market outcomes in such areas as financial planning and investments in debentures.

In Kell's words, ASIC was "wasting money and resources – including the resources of industry participants, who were producing large amounts of disclosure documents – while failing to fix market problems."²⁹⁴ As he stated, disclosure seemed to be the answer before a question had even been asked or a problem was identified by the regulator. While disclosure was clearly a key component of well-functioning markets, especially in financial services, too much weight was being put on formal disclosure requirements to fix any and every market problem.

The global financial crisis was pivotal in changing ASIC's approach. The crisis made it clear that different ways of thinking about problems and solutions in financial markets was required. Turning to BE helped explain why some of ASIC's traditional regulatory interventions were failing. Kell stated, "I don't want to suggest that BE has all the answers – it doesn't. However, BE helped us to understand the problem more effectively. BE helped to underline that we needed a more diverse regulatory toolkit. In fact, you could say that it is now included as one of the tools in the toolkit."²⁹⁵

ASIC has taken a staged approach to applying BE. It uses BE to better understand the nature of problems, which also helps it avoid action bias. "Our instinct – as regulators and policy makers – can be to race to a solution before assessing. An understanding of how people actually behave and make – and sometimes avoid – decisions or actions is essential to tailoring regulatory regimes."²⁹⁶

ASIC uses BE to identify product architecture or sales methods that might adversely influence people's biases and lead to poor consumer outcomes. For example, the way information is framed can make a significant difference to how a consumer interprets and responds to it, as can the device with which people review that information. In Kell's and ASIC's view, "timing matters. The messenger matters. Context matters."²⁹⁷

ASIC is also developing its own thinking about how BE can help it respond to problems with new tools like nudges. As part of this process, ASIC asks questions such as "when is a behavioural intervention, such as a nudge, the right response to a problem? When do we need to look to other tools in our regulatory toolkit? Important questions – a nudge is not a new panacea to all regulatory problems or consumer harms."²⁹⁸

A BE team was set up by ASIC in 2014. Originally staffed by four people, not all of whom were full-time in their BE role, the team now has a five-person staff with expertise in economics, psychology, decision science and legal matters. The BE unit, as well as ASIC itself, is committed to evidence-based research, which ranges from field RCTs through lab experiments, focus groups and other consumer research.

In addition to ASIC's use of BE as described by Kell, it is also important to note the support of the ASIC Chair, Greg Medcraft. Examples include his November 2016 speech *Driving better consumer outcomes in the era of big data and artificial intelligence*, where he stated that ASIC was "expanding [its behavioural insights] team," helping them with "tools for understanding and influencing human behaviour and complements [their] other regulatory tools, such as education and enforcement."²⁹⁹

Among ASIC's notable publications are two lab experiments and reports it commissioned from the Queensland Behavioural Economics Group. One of these was a pilot study to identify the behavioural biases that impact people's allocation of hybrid securities within their investment portfolios and their assessment of the perceived risk of hybrid securities relative to equities and bonds.³⁰⁰ This study found that the allocation to hybrid securities increased by nearly 14 per

cent for participants with control bias, which occurs when people believe that they can affect the outcome over events that they can neither control nor influence. The allocation of hybrid securities was greater by 10 per cent for participants with overconfidence bias, which occurs when people have an excessive belief in their cognitive capacity, intuition and judgement.

The other lab experiment involved research assessing the impacts of changing letters sent to directors of firms in involuntary liquidation.³⁰¹ The study shows that targeted nudges can enhance compliance by directors.³⁰² This included directors “who would like to comply but lack business management skills.” It also offered suggestions regarding how to nudge directors who were deliberately not complying into doing so. Basic nudges such as reversing the order of the information in the letter from ASIC to directors significantly improved directors’ recall of information. The study found that cognitive ease can increase compliance, and led its authors to recommend a randomized controlled trial (RCT) to better assess the potential to enhance the effectiveness of communications with directors of failed firms.

ASIC also commissioned qualitative consumer research that examined people’s experience when they purchased add-on insurance products as part of the process for buying a car through a dealer. This research demonstrated how decision fatigue, information overload and price-framing led consumers to purchase products of minimal or even negative value.³⁰³ ASIC also conducted a literature review of people’s biases that may affect their decision-making around financial advice. This review was used to educate other ASIC staff about these challenges for consumers. The agency has also undertaken exploratory qualitative testing of various forms of online disclosure in areas such as ‘key fact statements’ for investment products with industry partners.³⁰⁴

Looking ahead, ASIC sees the behavioural field increasingly drawing on social science experts beyond economics and psychology and into, for example, anthropology and data science. Kell stated that in order to be a modern behavioural regulator ASIC must work out what sort of research is needed and is feasible. One of the key lessons that resonated with ASIC came from the U.K. BIT’s David Halpern regarding humility: “We won’t always know in advance what interventions will work, and at times some policy actions may have perverse outcomes. Also, regulators seeking to apply behavioural sciences need to be willing to test, learn and adapt interventions (policies, programs) iteratively, over time.”³⁰⁵

New Zealand’s Financial Markets Authority (FMA)

New Zealand’s FMA views its role as a “conduct regulator” in working to achieve the FMA’s “main objective of promoting and facilitating the development of fair, efficient and transparent financial markets.”³⁰⁶ The FMA’s “Strategic Risk Outlook 2017” expanded upon its conduct regulation approach, including its intelligence and information gathering which “entails making greater use of consumer behavioural insights to inform our supervisory focus” and referring to its “Using Behavioural Insights to improve Financial Capability” white paper.³⁰⁷

The FMA’s 2016 BI white paper is instructive in its framing of people’s financial capability challenge for governments and regulators alike, which is based upon previous analysis by the U.K.’s FSA. The FSA’s analysis was developed further by World Bank research that identified four dimensions of financial capability:

- day-to-day money management;
- planning for future needs;
- choosing and using appropriate products; and
- being informed and getting help.

Most people can undertake day-to-day money management quite well, but are less capable in the other three areas. As the white paper explains, “evidence tells us that improving capability in planning, choosing and being informed, in particular, requires more innovative and behaviourally-based approaches. Social marketing, simplifying products, default mechanisms, and more proactive consumer protection regulation are approaches that have been shown to help deal with low levels of capability.”³⁰⁸

The white paper advocates using the U.K. BIT’s TEST approach to apply BI to influence desired behaviour.³⁰⁹ TEST is a straightforward practical framework of (T) targeting and defining the outcome, (E) exploring the context, building an intervention (S) solution and (T) testing, learning and adapting once developed. The FMA also highlighted the merits of RCTs as well as using the U.K. BIT’s EAST framework.

The FMA’s BI efforts have taken place or are underway in a wide range of areas, including a 2015 initiative to leverage the social media channels of high-profile personalities to increase the reach of financial capability messages.³¹⁰ The FMA is trialling the use of Google AdWords to promote investor information on foreign exchange trading whereby a message appears when a consumer searches for information about currencies.

The white paper outlines a number of future BI opportunities.³¹¹ For example, the FMA and the Commission for Financial Capability are exploring the potential to run RCTs with financial service providers as the first step in publishing local examples of what is and is not effective for better consumer outcomes. The FMA notes that the U.K.’s FCA has identified that governments and regulators can use consumer understanding to solve behavioural issues in several ways. As outlined earlier in the FCA overview, these include requiring firms to improve the ways that information is provided and enhancing the choice architecture offered to consumers. Regulators can also limit the distribution of products of concern to certain select types of customers. In the most problematic cases, they can “ban specific product features or whole products that appear designed to exploit, or require products to contain specific features.”³¹²

For the FMA, approaches that are less interventionist are preferable given that they avoid limiting consumer choices. The white paper also clearly states the FMA’s preference for innovation to help build people’s financial capability and provides a useful checklist for using the EAST framework in practice.

A checklist for understanding the context of financial decisions from the FMA³¹³

Easy

- Will the individual be making an active or an automatic choice?
- How many options are available? What is the default option if an individual decides to do nothing?
- What knowledge or expertise is needed to make a decision?
- Does the decision require exertion of willpower or self-control (such as saving or paying down debt)?
- Is there an application process and is it difficult to navigate?

Attractive

- Is the decision important to the individual or does it receive little attention?
- What are the incentives? Which ones are most prominent? Which ones are less prominent?
- What are the associated costs (financial, social, and psychological)?

Social

- Are peers a major source of information?
- Is the decision made in isolation or in a social environment?
- Is the decision influenced by what is presented in the media or by expert opinions?

Timing

- What moments or events motivate an individual to act on the decision?
- Is feedback available and is it received immediately?
- How is information or knowledge communicated to the individual (visually, verbally, in text)?
- Are the benefits of making a good decision delayed or experienced immediately?
- Is the decision usually made when the individual is in an emotional state?
- Does the information flow sequentially? What information is presented first? Presented last?

III. The European Commission (EC) and the European Securities and Markets Authority (ESMA)

The European Commission's adoption of BI

The EC's adoption of BI extends to many different policy areas.³¹⁴ The formal application of BI dates back to a 2008 investigation into Microsoft's practice of tying its web browser to its Windows operating system. The EC used behavioural evidence on the material impact of defaults on consumers' choices that resulted in the change to a choice screen being offered by Microsoft to users, prompting them to make an active decision and offset the default effect.³¹⁵

According to the EC's 2016 JRC summary of BI applications to policies within the European Union, 20 EC behavioural studies have been conducted since 2010.³¹⁶ The first, "Consumer Decision-making in Retail Investment Services: A Behavioural Economics Perspective", included two online RCTs and a lab RCT to understand consumer choice in retail investor products.³¹⁷ These experiments tested consumers' ability to make appropriate decisions about investment products in the absence of advice, the effects of advisors disclosing conflicts, and how direct interaction with advisors affects investors' choices. The findings showed the significant problems consumers face in making optimal investment decisions. The authors of the study concluded that simplifying and standardizing key investment parameters would likely improve consumers' decision-making considerably. These findings were among the key inputs into the recent design of Packaged Retail and Insurance-based Investment Products (PRIIP) consultation and proposed technical legislation.³¹⁸

Other important EC initiatives in BI applications include the 2012 Report on Consumer Policy, which set out that policy options would be supported by consumer behavioural studies.³¹⁹ The 2014 update to the report stated that “findings from consumer scoreboards, market studies and behavioural research have influenced EU policy in various areas of interest for consumers.”³²⁰ The EC’s JRC produced a report in 2013 regarding applying behavioural sciences to EU policy-making, followed by a research guide in 2015 for policy officers that are planning to outsource behavioural research studies.³²¹ In 2016, an extensive report on consumer vulnerability across key EU markets included behavioural experiments in three markets, including finance, where a high incidence of people at risk of negative outcomes from their choices in the market was found.³²² The EC website also summarizes how behavioural research is informing EU policy design.³²³

The EC’s Better Regulation approach

The EC, under the presidency of Jean-Claude Juncker, “has made a strong commitment to the principles of Better Regulation as a way to ensure that policy measures are based on the best available evidence and decisions are prepared in a transparent and anticipatory way.”³²⁴ Better Regulation applies to the whole policy cycle as it covers the process from policy design and implementation through to evaluation and revision.

The Better Regulation approach uses BI extensively.³²⁵ From the EC’s perspective, BI complements traditional policy approaches and offers a compelling means to deliver more precise and efficient solutions at all stages of the policy process. BI can enhance the analysis of policy problems to identify whether there are behavioural aspects involved and design policy options that reflect people’s decision-making processes and biases, and assist attempts to improve the evaluation of policy effects. The Better Regulation agenda also sets out the importance of regular policy impact studies and fitness checks for existing policies that may no longer be fit for their original purpose.

The EC’s BI capacity

The EC’s BI capabilities are both extensive and significant.³²⁶ In 2014, the EC created a Foresight and Behavioural Insights Unit within the JRC and in 2015 created the EU Policy Lab to support policies with evidence from BI, foresight and design thinking. The EU Policy Lab uses a multidisciplinary approach to identify the behavioural elements of a given policy or policy option to “communicate (and apply) available evidence, and embed behavioural solutions into the design of policy interventions.”³²⁷

The Foresight and Behavioural Insights Unit, combined with the JRC’s other resources, creates significant “expertise and capacity to support EC services with behavioural advice and/or conduct behavioural studies internally or externally (with the support of a framework contract for the provision of behavioural studies).”³²⁸ These studies may be undertaken from an exploratory perspective to use BI to research a particular issue or implementation considerations, such as testing specific interventions or refining policy measures. The use of BI is a major component for EU policy-makers to ensure “that realistic assumptions about people’s behaviour are taken into account when designing and testing policy options.”³²⁹

European Securities and Markets Authority

In the area of BI, the European Securities and Markets Authority (ESMA) relies on the EC, national authorities and academic research, for the development of its policy work.³³⁰ In making the distinction between internal BI capabilities and its approach, it is important to note that a number of ESMA's events, public statements and technical standards are behaviourally-informed. Examples include the ESMA Chair's 2013 comments on BE's impact in changing its model for regulation, which also noted some of the challenges in determining appropriate limits in its implications for financial regulatory supervision.³³¹ ESMA's Joint Consumer Protection Day in 2014 featured a session on how behavioural evidence can be used to improve policy making for consumers and the use of BF as a regulatory tool.³³²

ESMA's calls for more transparency and standards for investors also reflect its focus on consumer protection, which are behaviourally-aware, as are its regulatory standards for the presentation, content, review and provision of information documents for consumers. These standards also address the methodologies used for the risk, reward and cost information in the templates for information documents, risk indicators, performance scenarios and the presentation of costs.³³³

IV. The United States of America

Through early 2017, several U.S. regulators had notable BE and BF-informed initiatives. Regarding securities regulation, the Securities and Exchange Commission (SEC) has significant BE and BF capabilities. With respect to retirement accounts, the Department of Labor (DoL) used behavioural principles in designing its proposal to extend the fiduciary obligation to all providers, which was first proposed in 2015 and originally scheduled to take effect in April 2017.³³⁴ Following the change of administration in the U.S., implementation of this rule has been delayed pending a review of its effects on access to retirement information and financial advice, as well as an economic and legal analysis of the rule's "likely impact."³³⁵ The impact that these changes hold for U.S. financial authorities is still unfolding as of early 2017.

Separately, the Financial Industry Regulatory Authority (FINRA), which regulates brokerage firms doing business with the public in the United States and is overseen by the SEC, is important for its BE and BF awareness, alignment and research funding. For example, FINRA has used BI in developing regulations that focus on achieving more effective disclosure through simpler and more timely presentation of information to consumers.

The Securities and Exchange Commission (SEC)

Although the U.S. SEC does not yet have a formal BI component in its role or strategy, President Obama's 2015 executive order (see Chapter 2) led the SEC to begin building a BF unit to incorporate behavioural science into its policy-making. The SEC's Division of Economic and Risk Analysis created this unit in early 2016 to bring behavioural research into economic analysis for rule-making.

The SEC also created its Office of the Investor Advocate in 2014. As of early 2017, its staff included a principal economic advisor and senior economist, whose credentials included expertise in household finance, BE and evidence-based approaches to policy design using BI.³³⁶

Prior to creating its BF unit, the SEC's behavioural initiatives were focused upon several reports and certain specific policy initiatives. The SEC had the Library of Congress develop a report on behavioural patterns and pitfalls of U.S. investors in 2010 that included the foundations and research of many behavioural finance concepts.³³⁷ Two other papers prepared by its staff were published by the SEC in 2014 and 2015, the first being a white paper on computing tools to promote sound investment decisions and the second looking at the impacts of regulating hidden add-on costs for investors.³³⁸

In terms of policies and rules, the SEC's use of BI includes a 2011 staff recommendation that the SEC specify a uniform fiduciary standard that would apply to broker-dealers and investment advisors when they provide personalized securities advice to retail investors.³³⁹ Other examples include statements by commissioners and the Investor Advocate about improving the presentation of information and enhanced disclosure to be more accessible and address the problem of information overload.³⁴⁰ Other SEC behavioural efforts occurred in proxy voting, including a 2015 roundtable to look at opportunities to use technology and improve disclosure formats for retail investors.³⁴¹

Looking ahead, one project that SEC staff is considering is the potential to provide investors with financial calculators online.³⁴² The SEC BF unit is exploring how such tools can convey information about risk and uncertainty in investments (especially in retirement investments).

The Financial Industry Regulatory Authority (FINRA)

Understanding of behavioural principles at FINRA and potential applications go back at least a decade. For example, at a 2007 symposium the then-Chair and CEO of FINRA's predecessor organization (NASD) mentioned that "the more we understand about human psychology – and trust the research – the better we will be able to create tools, resources, and proactive programs that meet the needs of the public."³⁴² Remarks by senior executives in 2015 highlighted the BE concept of empowerment through simpler disclosure and "cooling off periods," where investors had to wait before executing on an investment idea.³⁴³

While FINRA has engaged behavioural economists in various ways, it does not have a formal BI unit.³⁴⁴ Instead, it takes a more *ad hoc* approach to testing disclosure for investors and the tools that it releases.³⁴⁵

For example, FINRA recently engaged in investor testing as an aid in developing a new disclosure document for consumers who are considering transferring their assets to another firm. The educational communication is one component of a new FINRA rule, which the SEC approved in November 2016, that establishes an obligation on firms to deliver the communication under the circumstances set forth in the rule.³⁴⁶

Separately, the FINRA Investor Education Foundation (IEF) has funded research that uses elements of BF to examine behavioural approaches to problem-solving and identify how different nudges can change behaviour related to financial consumption. FINRA and its IEF are both interested in exploring the extent to which BF can be used to improve investor education, affect the risks that investors face and improve disclosure, which is the foundation of U.S. securities regulation.³⁴⁷

While the IEF is a wholly-owned subsidiary of FINRA, it is governed separately and has funded its own behavioural research. The IEF consistently seeks ways to improve the financial capability of U.S. consumers, which involves researching investor needs and ways of encouraging more investors to participate in the market.³⁴⁸ Since 2010, the IEF has funded projects that include BE-driven field experiments to facilitate debt reduction³⁴⁹ and evaluate interventions to increase savings.³⁵⁰

The U.S. Department of Labor (DoL)

Although the DoL does not have an explicit or formal policy regarding BE and BF, behaviourally-informed principles have factored into significant portions of its work and organizational structure. The fiduciary rule for retirement accounts was clearly informed by the behavioural literature, as the DoL's regulatory impact analysis for the final rule demonstrated.³⁵¹ (As noted above implementation of this rule has been delayed in early 2017 pending further analysis and review).

The impact analysis stated that "investors often lack investment expertise and must rely on experts – but are unable to assess the quality of the expert's advice or guard against its conflicts of interest. Most have no idea how advisers are compensated for selling them products. Many are bewildered by complex choices that require substantial financial expertise and welcome advice that appears to be free, without knowing that the adviser is compensated through indirect third-party payments creating conflicts of interest or that hidden fees that go to the adviser over the life of the investment will reduce their returns."³⁵²

It also explicitly referred to "economic theory on the dangers posed by conflicts of interest and by the asymmetries of information and expertise that characterize interactions between ordinary retirement investors and conflicted advisers."³⁵³

The DoL's evidence-based approach to BI and its applications is also notable. It established the Clearinghouse for Labor Evaluation and Research (CLEAR), which was charged with making "research on labor topics more accessible to practitioners, policymakers, researchers, and the public more broadly ... CLEAR identifies and summarizes many types of research, including descriptive, implementation, and impact studies. In addition, CLEAR assesses the quality of research that looks at the effectiveness of particular policies and programs."³⁵⁴

CLEAR looks in-depth at a range of topics related to the DoL's responsibilities and work. It reviews applicable BF research regarding retirement, as well as BI relevant to the DoL's labour-related programs, assessing causal evidence while also highlighting gaps in literature and suggesting where further research is required.³⁵⁵

V. Asia

Singapore

Although the Monetary Authority of Singapore (MAS) has not yet published a formal policy on applying BI to financial market regulation or established a formal BI unit, it has been increasingly incorporating BI in various areas of its work.³⁵⁶ MAS is conducting consumer testing using surveys and focus groups to better understand investors' decision-making processes and their understanding of investment products. It hopes to apply its findings to its proposed implementation of ratings for the complexity and risk of investment products that are disclosed to investors.

MAS is also increasingly using data analytics in its policy design and the supervision of the financial industry, which is aligned with approaches taken by other government agencies in Singapore.

Most of MAS' current projects are related to consumer issues, and the staff involved has a solid background in addressing retail issues, though will tap external resources or expertise for support where appropriate.³⁵⁷ External experts were used in a recent study related to the implementation of complexity and risk disclosures of investment products. For this project, MAS engaged an external consultant to advise on the design of surveys and focus group discussions, among other aspects.

Hong Kong

The Investor Education Centre (IEC), a subsidiary of Hong Kong's Securities and Futures Commission (SFC), takes a distinct approach to investor education that is instructive from a behavioural perspective. All four of Hong Kong's financial regulators and the Education Bureau support the IEC, which is charged with engaging the public and providing consumers with greater education and skills for managing their personal finances.³⁵⁸

The IEC's behaviourally-informed approach is based upon eight components,³⁵⁹ with a high priority on using a social marketing model to deliver financial education to key segments of Hong Kong's population. Other components are to "advance and measure financial behaviour change [and] drive behaviour change through life events."³⁶⁰

While the IEC's social marketing campaign does not explicitly use BI, the approach reflects a number of foundational BI elements. Its education efforts are timely as they are built around 'life events' and focus on opportunities to educate people at various life stages.

"The Chin family" is central to IEC's financial education³⁶¹ This marketing avatar is easy to access and it depicts a family whose members represent the priority demographics of working adults, retirees, tertiary students and school-aged children. The IEC's communication and education strategy with Chin family is also attractive in its design goals of being fun, lively and practical in its real-life implications.³⁶² It is social, as the Chin family members reflect the cultural importance of family and familial obligations.

The IEC's decision to create the Chin family reflected the SFC's and IEC's past experience (limitations of the IEC name as IEC provides much wider education than investing) and consumer feedback. The IEC has previously communicated its financial education information as either the SFC or IEC. The public's reaction was that this "sounded very regulatory" and was perceived as "pushing the responsibility back on the public saying 'you need to be careful.'"³⁶³



Since introducing the Chin family, the IEC as an organization has held a fairly low profile in Hong Kong. To most of the public, this subsidiary of the SFC barely exists, other than as the website for the Chin Family.³⁶⁴ The IEC has been active in assessing the campaign's results in order to meet its strategic objective to measure behavioural change. It seeks external feedback through consumer research and advisory groups for each priority demographic and the population overall.³⁶⁵

BEHAVIOURAL INSIGHTS

CONCLUSION

■ CONCLUSION

It is clear that the use of behavioural insights in financial policy-making and regulation has merit. Even when formal BI units are not present, the behavioural awareness and understanding that these insights bring to financial regulation complements a regulator's toolkit. Whether the activities are market or registrant regulation, or investor education and outreach, applying a behavioural lens to our work increases the likelihood of achieving better outcomes. While not a panacea, understanding human behaviour enables the OSC to better comprehend, diagnose and address ongoing problems. To repeat what David Halpern, Director, U.K. Behavioural Insights Team said: "A lot of our policy models traditionally are based on a rather naïve understanding of what drives behaviour. But if you have a more intelligent, nuanced account of how people make decisions, you can design policy that is more effective, less costly, and makes life easier for most citizens."

Having conducted the research outlined in this paper, the OSC will continue to build its capacity and understanding in the use and application of behavioural insights, as well as identify opportunities to apply behavioural insights in OSC policy development and operational processes. Over the coming year, the OSC will also conduct pilot projects for testing using a behavioural insights lens, and will use the report to build awareness, understanding and capacity in the use of behavioural insights both within the OSC and amongst stakeholders, with a view to identifying further practical applications of behavioural insights that will lead to better investor and market participant outcomes.

END NOTES

¹Cited in Brigitte Madrian, “Applying Insights from Behavioural Economics to Policy Design”, Working Paper 20318, NBER (July 2014) p. 3

²Economic and Social Research Council study published in 2014, cited in Richard Thaler, *Misbehaving: the Making of Behavioural Economics*, 2015, p. 344

³World Bank 2015 Development Report, *Mind, Society and Behaviour*, p. 30

⁴Dan Ariely, *Predictably Irrational: The Hidden Forces That Shape Our Decisions*, (originally published in 2008, revised edition 2009)

⁵Alain Samson, “An Introduction to Behavioural Economics” in *The Behavioural Economics Guide 2014*; and Costa et al, “Applying behavioural insights to regulated markets”, Behavioural Insights Team (May 2016), pp. 5, 9

⁶World Bank 2015, *Mind, Society and Behaviour*, p. 6

⁷Ibid.

⁸Saurabh Bhargava and George Loewenstein, “Behavioural Economics and Public Policy 102: Beyond Nudging”, *American Economic Review*, 2015, 105(5) pp. 397-8

⁹Dilip Soman, *The Last Mile: Creating Social and Economic Value from Behavioural Insights*, (UoFT Rotman Press: 2015), pp. 10-12

¹⁰See Martin Wheatley, “Beesley lecture: Economics, technology, data – Redefining the future of conduct regulation”, published November 14th 2014, p 2. In Wheatley’s words, “it’s the specific combination of behavioural science, data and technology that has turned economics into such an important feature of conduct regulation.”

¹¹It is a difficult challenge to explore even just crucial parts of BE and BF without lengthy commentary and/or summaries given the number of leading behavioural concepts and the extensive literature of these disciplines. As Alain Samson writes in “Behavioural Science: Theory and Practice” (2015) in *The Behavioural Economics Guide 2015*, pp. 9-11, even the “theory and practice of nudging has become too vast to be discussed in detail” in his wide-ranging survey. He states that “readers of the behavioural science literature who wish to apply ideas from economics and psychology are faced with the challenge of engaging with material that is quite vast and complex.”

¹²See for example, the Federal Reserve Board of New York, “Special Issue: Behavioural Risk Management in the Financial Services Industry – The Role of Culture, Governance, and Financial Reporting” *Economic Policy Review* August 2016, Vol. 22, no. 1; and De Nederlandsche Bank, *Supervision of Behaviour and Culture: Foundations, practice & future developments*, 2015

¹³This World Bank report notes that “experts, policy makers, and [other] professionals, like everyone else, are themselves subject to the biases and mistakes that can arise from thinking automatically, thinking socially, and using mental models”. See World Bank 2015, *Mind, Society and Behaviour*, p. 18. Varun Gauri, head of the World Bank’s Global Insights Initiative (GINI) states that practitioners and professionals are subject to confirmation and sunk cost biases and “other cognitive illusions”. See his interview in *The Behavioural Economics Guide 2016*, p. 28

¹⁴Peter Kell, “ASIC and behavioural economics: Regulating for real people”, Speech, The Impacts of Behavioural Economics on Financial Markets Regulations Symposium, (Brisbane, October 18th, 2016) p. 4

¹⁵See, for example, Pete Lunn’s comments about the huge amount and broad range of behavioural economics research already and its ongoing major expansion in Lunn, *Regulatory Policy and Behavioural Economics* (OECD, 2014) and in Alain Samson’s in-depth overviews, “An Introduction to Behavioural Economics” in *The Behavioural Economics Guide 2014* and “Behavioural Science: Theory and Practice” in *The Behavioural Economics Guide 2015* and, most recently, in “Behavioural Economics in Perspective” in *The Behavioural Economics Guide 2016*. See Samson’s “Selected Behavioural Science Concepts” in the *Behavioural Economics Guide 2016* where his survey briefly explores over 90 concepts and their key research, yet requires 25 pages of text and 6 pages of references.

¹⁶In Daniel Kahneman’s view, “we need a common label for our shared activities. ‘Behavioural economics’ is not a good label, simply because psychologists are not economists and are not trained to think about markets. ‘Social psychology’ would cause similar difficulties to the economists A descriptively correct label is ‘applied behavioural science.’” Cited in E. Shafir, *The Behavioural Foundations of Public Policy*, Princeton, 2013, p. IX

¹⁷Cited in Hollingworth & Barker, “How to Apply Behavioural Science with Success: Learning from Application around the World”, *Behavioural Economics Guide 2016*, p. 30

¹⁸Stefan Hunt and Darragh Kelly, “Behavioural economics and financial market regulation: practical policy, rigorous methods”, *Agenda*, Oxera July 2015 p. 1

¹⁹Nancy Albinson, Andrew Blau and Yang Chu, “The future of risk: New game, new rules”, (Deloitte, 2016) <https://www2.deloitte.com/us/en/pages/risk/articles/future-of-risk-ten-trends.html> p. 6

²⁰Martin Wheatley, “Beesley lecture: Economics, technology and data – Redefining the future of conduct regulation” Speech at The Institute of Directors (November, 2014)

²¹Lynne Hamel and Nigel Gilbert, *Agent-Based Modelling in Economics* (2016: Wiley & Sons), p. 3. See also European Central Bank President Jean-Claude Trichet’s remarks in 2010 on the need for new approaches to explain crises and economic behaviour (Trichet, 2010) as well as the review conducted for the Bank of England that concluded in 2012, “The financial crisis exposed virtually all major macro models as being woefully ill-equipped to understand the implications of this type of event” (Stockton, 2012) cited in *ibid*.

²²Notably, Trichet’s reflections in 2010 included stating that “We need to entertain alternative motivations for economic choices. Behavioural economics draws on psychology to explain decisions made in crisis circumstances.” cited in *ibid*.

- ²³Erta et al, "Applying behavioural economics at the Financial Conduct Authority", Occasional Paper No. 1, Financial Conduct Authority (2013), p. 12
- ²⁴Costa et al, "Applying behavioural insights to regulated markets", Behavioural Insights Team (May 2016), pp. 3, 5
- ²⁵OXERA, "Behavioural Insights into Australian retail energy markets", AEMC (2016), p. 5
- ²⁶Federal Reserve Board of New York, "Special Issue: Behavioural Risk Management in the Financial Services Industry (2016)"; and De Nederlandsche Bank, Supervision of Behaviour and Culture: Foundations, practice & future developments, 2015 noted above
- ²⁷See Peter Andrews, "Culture in U.K. banking: regulatory priorities", Speech (London: October 18th, 2016)
- ²⁸Dan Ariely, *Predictably Irrational*, (2009), pp. 317-319
- ²⁹Alain Samson, "An Introduction to Behavioural Economics" in *The Behavioural Economics Guide 2014*, pp. 9-10
- ³⁰There is a broad range of literature on social biases, including group attribution error, in-group bias and moral luck. See, for example, Allison, S.T. & Messick, D.M. (1985) "The group attribution error" *Journal of Experimental Social Psychology*, 21(6), 563-579; Aronson, E. et al (2010). *Social Psychology*. 7th edition. Upper Saddle River: Prentice Hall; and Williams, B. (1981). *Moral Luck*. Cambridge: Cambridge University Press.
- ³¹See World Bank 2015, *Mind, Society and Behaviour*, Chapter 3.
- ³²Erta et al, "Applying behavioural economics at the Financial Conduct Authority", p. 12
- ³³See, for example, the different definitions posed by Richard Thaler (Thaler and Mullainathan, 2000) and Robert Shiller (2005), two of the most accomplished and leading experts in behavioural economics and finance cited in Pete Lunn, "Regulatory Policy and Behavioural Economics" (OECD, 2014), p. 19.
- ³⁴Ibid.
- ³⁵As Pete Lunn further explains, BE is the application of the inductive scientific method to the study of economic activity. It involves empirical studies of decision-making, *ibid*. BE and BF empirical studies can be grouped within three types of approaches: i) laboratory experiments; ii) random-controlled trials and field experiments; and, more recently, data science. See *Ibid*, pp. 13, 19
- ³⁶Alain Samson, "An Introduction to Behavioural Economics" in *The Behavioural Economics Guide 2014* and "Behavioural Science: Theory and Practice" in *The Behavioural Economics Guide 2015*.
- ³⁷Note See Lunn (OECD, 2014) p. 9 as well as Samson, "An Introduction to Behavioural Economics" (2014) p. 9 and "Behavioural Science: Theory and Practice" (2015), p. 1
- ³⁸Daniel Kahneman's and Richard Thaler's comments highlight some of the confusion of labelling of what is psychology and other non-economists' work as BE. Cited in Samson, "Behavioural Science: Theory and Practice" (2015), p. 2. Note also Tim Harford's (2014) comment that too many view BE as a catch-all phrase, applying it without practical or academic rigour. Cited in Samson, "An Introduction to Behavioural Economics" (2014), p. 11
- ³⁹Lunn, (2014) p. 19
- ⁴⁰OECD, (2015) "Behavioural insights and new approaches to policy design: The views from the field", Summary of an International Seminar, p. 6
- ⁴¹Joana Sousa Lourenco et al, "Behavioural Insights Applied to Policy: European Report 2016" (European Commission Joint Research Centre, 2016) p. 10
- ⁴²OECD, (2015) "Behavioural insights and new approaches to policy design: The views from the field", pp. 6, 9 and 13.
- ⁴³Ariely, *Predictably Irrational*, p. 317
- ⁴⁴Thaler, *Misbehaving*, p. 347 Indeed, by 2015, the LinkedIn network, The Behavioural Economics Group, had over 25,000 members. See Samson, "Behavioural Economics in Perspective" in *The Behavioural Economics Guide 2016*, p. 1.
- ⁴⁵In terms of BE's origins, some highlight Bernoulli (1738, reproduced in 1954) who first wrote that people are generally averse to risk, and that their risk aversion decreases with increasing wealth. See also Thaler, *Misbehaving* (2015), pp. 88-89, who notes the significant behavioural elements in the published works of Adam Smith, William Jevons, Arthur Pigou and Irving Fisher. Other experts cite Kenneth Boulding (1958) who predicted the integration of traditional economics with other social sciences like psychology and anthropology, calling this potential new area of research "behavioural economics". Others look to Herbert Simon's bounded rationality studies in the 1950s and his subsequent work that explored how people's decisions were not always optimal due to restrictions on human processing, limits to knowledge (and information) and computational capabilities (Simon, *Models of Bounded Rationality*, 1982), Samson, "Selected Behavioural Science Concepts" (2016), p.102
- ⁴⁶Kahneman, *Thinking Fast and Slow*, 2011, p. 8
- ⁴⁷Cited in Lunn, (2014), p. 17
- ⁴⁸Eugene F. Fama, "Two Pillars of Asset Pricing", Nobel Prize Lecture (December 8th, 2013) https://www.nobelprize.org/nobel_prizes/economic-sciences/laureates/2013/fama-lecture.pdf p. 365
- ⁴⁹Kelly Peters presentation, UofT Rotman, January 30th, 2017
- ⁵⁰Cited in Lunn, (2014), p. 17
- ⁵¹(Simon, *Models of Bounded Rationality*, 1982) cited in Samson, "Selected Behavioural Science Concepts" (2016), p.102
- ⁵²Amos Tversky and Daniel Kahneman, "Judgement under Uncertainty: Heuristics and Biases", *Science*, vol. 185, (1974) pp. 1124-1131. The source for this research being cited over 7,000 times in academic papers, "an unbelievable rate for a psychology article", is Klaus Fielder and Momme von Sydow, "Heuristics and biases: Beyond Tversky and Kahneman's (1974) judgment under

uncertainty" (University of Heidelberg, Germany), p.146

⁵³Daniel Kahneman and Amos Tversky, "Prospect Theory: An Analysis of Decision under Risk", *Econometrica* 47, (1979), pp. 507-521. Of the three elements introduced by this article, loss aversion is particularly notable in Noble Prize winner Daniel Kahneman's view, loss aversion is the most significant contribution of psychology to BE from *Thinking Fast and Slow*, 2011, p.300

⁵⁴Thaler, "Toward a Positive Theory of Consumer Choice" (1980)

⁵⁵Shiller, "Do Stock Prices Move Too Much to Be Justified by Subsequent Changes in Dividends" (1981) cited in Thaler, *Misbehaving*, pp. 230-232

⁵⁶Ibid

⁵⁷Martin Wheatley, "Making competition king – the rise of behavioural economics at the FCA", Speech to ASIC, (March 2014) and Thaler, *Misbehaving*, pp. 177-184

⁵⁸See Herbert Simon, *Models of bounded rationality* (1982)

⁵⁹Richard Thaler and Cass Sunstein, *Nudge: Improving Decisions about Health, Wealth and Happiness* (2008)

⁶⁰See for example, Robert Cialdini, *Influence: The Psychology of Persuasion* (2006)

⁶¹David Halpern, *Inside the Nudge Unit: How Small Changes Can Make a Big Difference* (Random House, 2015) p. 39

⁶²Ibid, pp. 8-9 and 38-58

⁶³Dan Ariely, *Predictably Irrational*, (2009)

⁶⁴Ibid, p. 79

⁶⁵Ibid, p. 317

⁶⁶For a thorough summary of his work as well as a comprehensive survey of other important BF research, see Robert J. Shiller, "Speculative Asset Prices", 2013 Nobel Prize Lecture revised February 2014, https://www.nobelprize.org/nobel_prizes/economic-sciences/laureates/2013/shiller-lecture.pdf pp 459-501. Thaler (*Misbehaving*) and a range of other leading academics and experts highlight Shiller's contributions and the foresight of his research.

⁶⁷Robert J. Shiller, *Irrational Exuberance* (2000)

⁶⁸While Shiller's framework for gauging financial market excesses and his prescience in forecasting both the 2000-02 and 2007-08 stock market declines and 2007-09 housing sector bubble merit highlighting, the timing and magnitude of such excesses make these very difficult to measure precisely in advance. For a different view of Shiller's forecasts and the defense of efficient markets, see Fama, "Two Pillars of Asset Pricing", pp. 376-77

⁶⁹Codagnone et al, "Nudging in the World of International Policymaking" in *The Behavioural Economics Guide* 2014, p. 11

⁷⁰Ibid.

⁷¹Omri Ben-Shahar and Carl E. Schynedier, *More Than You Wanted to Know: The Failure of Mandatory Disclosure*, (2014) chapter 1

⁷²Cain et al, "The Dirt on Coming Clean: Perverse Effects of Disclosing Conflicts of Interest" (2005) online; Sah et al, *The Burden of Disclosure: Increased Compliance with Distrusted Advice* (2012) online; and Loewenstein et al, "Disclosure: Psychology changes everything" (2014) online

⁷³Cited in Samson, "Behavioural Science: Theory and Practice" (2015), p. 15

⁷⁴Ibid.

⁷⁵Martin Wheatley, "Regulation – supporting vibrant markets", Speech at Future of Financial Services event (2015)

⁷⁶OECD (2015), p. 11.

⁷⁷Wheatley, "Making competition king", (March 2014)

⁷⁸Wheatley, "Economics, technology and data" (November 2014)

⁷⁹Wheatley, "Making competition king", (2014)

⁸⁰Richard Thaler, *Misbehaving*, (2015) and his remarks at the University of Toronto, May 18th 2016 – the Great Recession was the "final nail in the coffin". "The global financial crisis added urgency to the quest for more effective regulation", and was reflected in the marked shift in the OECD's recommended principles in 2012 for better regulation to address key traditional policy and regulatory failures in Lunn (2014), p. 17. See also Peter Kell, "ASIC and behavioural economics: Regulating for real people", p. 3, and Halpern, *Inside the Nudge Unit*, p. 45

⁸¹Hamill and Gilbert, *Agent-Base Modelling in Economics* (2016), p. 3

⁸²Halpern, *Inside the Nudge Unit*, p. 45

⁸³The failure of traditional macro-economic models to capture the risks and severity of the 2008-09 recession and their ongoing overestimations of economic growth during 2010-16YTD also spurred efforts to find new macro models based on real behaviour. For example, the Canadian Centre for Economic Analysis (CANCEA) has developed an agent-based modelling and systems approach to achieve more accurate forecasts of the economy and its major components based on the actual behaviour of people, corporations et al. See www.cancea.ca for a variety of CANCEA's studies.

⁸⁴By 2011, the Basle Committee on Banking Supervision (BCBS) required that all regulatory bank capital issuance in the near future include conversion to equity in the event of the issuing bank's prospective insolvency. As a BCBS member, Canada changed

its bank capital regulations in 2013 to increase the: thresholds and quality of capital buffers for Canadian banks; and investors' exposure to the future viability of banks. More recently, tougher banking oversight in Canada was reflected in the further increases in the scrutiny of banks' exposure to residential mortgages and the capital required for this lending has been raised in 2015-16.

⁸⁵Lunn (2014) p. 12

⁸⁶The U.K. BIT's international expansion reflected both its demonstrated success and the need to adjust its strategy to reflect the pending end to full funding by the U.K. government.

⁸⁷Paul Dolan et al, "MindSpace: Influencing Behaviour Through Public Policy", U.K. Institute for Government, 2010

⁸⁸The World Bank, Global Insights Initiative (2016) online

⁸⁹Samson, "Behavioural Economics in Perspective", (2016), p. 8. Samson also notes that in 2016, the EC's Joint Research Centre in 2016 published an account of European behavioural initiatives with recommendations for its future while a new round of EC-funded partnerships including a consortium led by the London School of Economics also began this year.

⁹⁰See the Innovation Hub's First Annual Report March 2016, available at <http://www.pco-bcp.gc.ca/index.asp?lang=eng&page=innovation&doc=rpt3/index-eng.htm>

⁹¹See OECD, "Behavioural insights and new approaches to policy design"; and OECD, "Behavioural Insights and Public Policy: Lessons from Around the World," OECD Publishing, 2017

⁹²Michael Lewis, *The Undoing Project: A Friendship that Changed Our Minds* (2016) p. 342

⁹³Ibid

⁹⁴See Keith Stanovich and Richard West, "Individual Differences in Reasoning: Implications for the Rationality Debate", *Behavioural and Brain Science* 23 (2000) cited in Kahneman, *Thinking Fast and Slow* (2011), pp. 48-49 and in Benartzi, *The Smarter Screen* p. 59 as well as other leading investigators' research also cited in Kahneman (2011), pp. 19-58

⁹⁵Michael J. Kaufman, "Behavioural Economics and Investor Protection" (2013) pp. 1324-5; and Samson, "An Introduction to Behavioural Economics" (2014) p. 4

⁹⁶<https://www.behaviouraleconomics.com/mini-encyclopedia-of-be/dual-system-theory/>

⁹⁷See Kruglanski, A. W., & Gigerenzer, G. (2011). "Intuitive and deliberative judgements are based on common principles". *Psychological Review*, 118, pp. 97-109. Note that these authors cite some compelling evidence in support of their critique, but a detailed review of their views and the responses of dual systems' proponents is beyond the scope of this Report.

⁹⁸Samson, "Selected Behavioural Science Concepts", (2016), p.16

⁹⁹Adapted from World Bank 2015, *Mind, Society and Behaviour*, p. 6 – note that we have used reflective rather than deliberative to describe System 2 and added emotions to the World Bank table content

¹⁰⁰Some researchers, Kahneman included, believe that the automatic (System 1) appraises situations in advance of the reflective (System 2), and is the more powerful system. Other researchers believe that the systems run in parallel, and that System 2 can suppress System 1 at times, thereby preventing biased thinking from winning out. Sources: Goel, V. and Dolan, R.J. (2003). Explaining modulation of reasoning by belief. *Cognition*, 87, B11-B22; Kahneman, D. (2011). *Thinking, fast and slow*; Shynkaruk, J.M. and Thompson, V.A. (2006); Confidence and accuracy in deductive reasoning. *Memory & Cognition*, 34(3), 619-632; Sloman, S. A. (1996). The empirical case for two systems of reasoning. *Psychological Bulletin*, 119, 3-22; Stuppel, E.J.N. and Ball L.J. (2008). Belief-logic conflict resolution in syllogistic reasoning: Inspection-time evidence for a parallel-process model. *Thinking & Reasoning*, 14(2), 168-181.

¹⁰¹From Samson, *BE Guide 2016*, p. 107 "Fast and frugal decision-making refers to the application of ecologically rational heuristics, such as the recognition heuristic, which are rooted in the psychological capacities that we have evolved as human animals (e.g. memory and perceptual systems). They are 'fast and frugal' because they are effective under conditions of bounded rationality—when knowledge, time, and computational power are limited (Goldstein & Gigerenzer, 2002)."

¹⁰²This point is from Michelle Hilscher who cites the following sources for these research findings: Blanchette, I. and Leese, J. (2011). The effect of negative emotion on deductive reasoning. Examining the contribution of physiological arousal. *Experimental Psychology*, 58(3), 235-246. Blanchette, I. and Richards, A. (2004). Reasoning about emotional and neutral materials: Is logic affected by emotion? *Psychological Science*, 15(11), 745-752. Copeland, D.E., Gunawan, K. and Bies-Hernandez, N.J. (2011). Source credibility and syllogistic reasoning. *Memory and Cognition*, 39, 117-127. Feather, N. (1964). Acceptance and rejection of arguments in relation to attitude strength, critical ability, and intolerance of inconsistency. *Journal of Abnormal and Social Psychology*, 69, 127-136. Markovits, H. and Nantel, G. (1989). The belief-bias effect in the production and evaluation of logical conclusions. *Memory & Cognition*, 17(1), 11-17. Oaksford, M., Morris, F., Grainger, B. & Williams, J.M.G. (1996). Mood, reasoning, and central executive processes. *Journal of Experimental Psychology: Learning, Memory, and Cognition*, 22(2), 476-492. Pennycook, G., Cheyne, J. A., Koehler, D. J., and Fugelsang, J. A. (2013). Belief bias during reasoning among religious believers and skeptics. *Psychonomic Bulletin & Review*, 20, 806-811.

¹⁰³Samson and Voyer "Two minds, three ways", (2012) and "Emergency purchasing situations", (2014) cited in Samson, "Selected Behavioural Science Concepts", (2016)

¹⁰⁴Samson, "An Introduction to Behavioural Economics" (2014) pp. 1-12, and "Selected Behavioural Science Concepts" in *The Behavioural Economics Guide 2015*, pp. 28-53.

¹⁰⁵Clore, G. L., Gasper, K., & Garvin, E. (2001). Affect as information. In J. P. Forgas, (Ed.). *Handbook of Affect and Social Cognition* (pp. 121-144). Mahwah, NJ.: Lawrence Erlbaum Associates.

¹⁰⁶See Blanchette, I. and Richards, A. (2010). The influence of affect on higher level cognition: A review of research on interpretation, judgement, decision-making and reasoning. *Cognition and Emotion*, 24(4), 561-595. Forgas, J.P. (1995). Mood and judgment:

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¹⁰⁷See Dawson, Gilovich, and Regan (2002) cited in *World Bank, Mind, Society and Behaviour*, p. 27

¹⁰⁸Samson, (2014), pp. 6-7

¹⁰⁹See Trope & Liberman (2003); Trope et al (2007); Fiedler 2007; and Liberman & Trope (2008) cited in *World Bank, Mind, Society and Behaviour*, p. 115

¹¹⁰Cited in Samson, (2014), p. 6

¹¹¹See Buehler, Griffin & Ross (1994) "Exploring the 'planning fallacy': Why people underestimate their task completion times, *Journal of Personality and Social Psychology*, 67(3), 366-81 cited in Samson, "Selected Behavioural Science Concepts" (2016), p. 113; and Kahneman & Tversky (1999) "Evaluation by moments: Past and future" in D. Kahneman & Tversky (eds), *Choices values and frames*, pp. 2-23 cited in *ibid*, p. 114

¹¹²Dai, H. et al, "The fresh start effect: Temporal landmarks motivate aspirational behaviour" *Management Science*, (2014), pp. 1-20

¹¹³Cosmides, L. and Tooby, J. (1996). A logical design for the mind? *PsychCRITIQUES*, 41(5), 448- 450. Evans, J.S.B.T. (2006). Dual system theories of cognition. Some issues. In *Proceedings of the 28th Annual Meeting of the Cognitive Science Society* (pp. 202-207).

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¹¹⁶Ariely, *Predictably Irrational* (2009), pp. 75-102 ; Samson (2014), pp. 7-9; and World Bank 2015, *Mind, Society and Behaviour*, p. 51

¹¹⁷Cited in *World Bank, Mind, Society and Behaviour*, p. 51

¹¹⁸Cited in *Ibid*

¹¹⁹*Ibid*, pp. 11 and 62-3

¹²⁰*Ibid*.

¹²¹Samson, "Selected Behavioural Science Concepts", in *BE Guide 2016*, pp. 102-103

¹²²See Johnson et al, "Beyond Nudges: Tools of a choice architecture", *Marketing Letters*, 23, 487-5014 cited in *Ibid*, p. 103

¹²³Lunn, (2014) p. 19

¹²⁴See Camerer et al, "Neuroeconomics: How neuroscience can inform economics" (2005) cited in Samson (2014), p. 10

¹²⁵Daniel Kahneman, "Speech – Behavioural Economics and Investor Protection: Keynote Address" (2013) pp. 1339-1340

¹²⁶Thaler, *Misbehaving*, p. 345

¹²⁷Halpern, *Inside the Nudge Unit*, p. 9

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¹²⁹*Ibid*.

¹³⁰Lunn (2014), p. 9

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- ¹⁸⁹Lunn, "Regulatory Policy and Behavioural Economics", pp. 25-26; and C. R. Sunstein, "Disclosure and Simplification as Regulatory Tools: Memorandum for the Heads of Executive Departments and Agencies (2010) and C.R. Sunstein, "Informing Consumers through Smart Disclosure: Memorandum for the Heads of Executive Departments and Agencies (2011)
- ¹⁹⁰Cass Sunstein's concept of retrospective analysis includes this assessment of existing regulations and rules – retrospective analysis "can both produce changes in those rules and lead to significant improvements in prospective analysis". See Cass Sunstein, "Cost-Benefit Analysis and the Knowledge Problem" October 2014, p. 4
- ¹⁹¹Halpern, *Inside the Nudge Unit*, p. 42. While leading BI practitioners saw OIRA as effective in promoting the use of disclosure and simplification in regulation, some non-BI advocates did have more mixed reviews of OIRA's impacts – see J.M. Broeder, "Powerful Shaper of U.S. Rules Quits, With Critics in Wake" The New York Times referenced in Lourenco et al, "Behavioural Insights Applied to Policy" p. 32
- ¹⁹²Richard Thaler, Foreword in Halpern, *Inside the Nudge Unit*, p. X; and Halpern, Ibid, p. 42
- ¹⁹³Social and Behavioural Sciences Team, "Annual Report", September 2016, p. VIII
- ¹⁹⁴Richard Thaler, *Misbehaving*, p. 344
- ¹⁹⁵Executive Order 13707 of September 15, 2015, Using Behavioural Science Insights to Better Serve the American People, Code of Federal Regulations title 3 (2015)
- ¹⁹⁶SBST, Annual Report, p. VIII
- ¹⁹⁷Halpern, *Inside the Nudge Unit*, pp. 31-49
- ¹⁹⁸Halpern, Ibid, pp. 53-54
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- ²⁰⁶David Donaldson, "Victoria gives behavioural insights a nudge, cross agency mandate", The Mandarin, available at <http://www.themandarin.com.au/62107-victoria-gives-behavioural-insights-unit-nudge/>
- ²⁰⁷This EC section draws extensively upon Lourenco et al, "Behavioural Insights Applied to Policy" p. 37
- ²⁰⁸Lunn, "Regulatory Policy and Behavioural Economics", p. 33
- ²⁰⁹Lourenco et al, "Behavioural Insights Applied to Policy" p. 37
- ²¹⁰This European country section generally and the material for the Netherlands, Germany, France and Denmark draws extensively upon ibid, pp. 34-36
- ²¹¹Ibid, p. 35
- ²¹²See iNudgeYou – the Danish Nudge Unit at <http://inudgeyou.com/en/about-us-2;> and Lunn, "Regulatory Policy and Behavioural Economics", p. 35
- ²¹³The information about Singapore's approach in this paragraph is based upon feedback from numerous interviews undertaken by the OSC's Investor Office and unsolicited commentary from a variety of private experts.

- ²¹⁴Many of the experts interviewed regarding BI's adoption and use globally cited Singapore as either a leader and/or unique in its approach. Source: over 20 interviews by the OSC.
- ²¹⁵<http://www.worldbank.org/en/programs/gini>
- ²¹⁶OECD, (2015) "Behavioural insights and new approaches to policy design: The views from the field", pp. 1-27 Available at <https://www.oecd.org/gov/behavioural-insights-summary-report-2015.pdf>
- ²¹⁷OECD (2017), "Behavioural Insights and Public Policy"
- ²¹⁸*Ibid*, p. 35
- ²¹⁹See the Innovation Hub's First Annual Report March 2016, available at <http://www.pcobcp.gc.ca/index.asp?lang=eng&page=innovation&doc=rpt3/index-eng.htm>
- ²²⁰Private interview with The Lab@DC's Director David Yokum.
- ²²¹Halpern, *Inside the Nudge Unit*, p. 58
- ²²²OECD, "Behavioural insights and new approaches to policy design: The views from the field", p. 12
- ²²³Thaler, Foreword in Halpern, *Inside the Nudge Unit*, p. XI
- ²²⁴Lourenco et al, "Behavioural Insights Applied to Policy", p. 33
- ²²⁵Dilip Soman, *The Last Mile: Creating Social and Economic Value from Behavioural Insights* (UofT Rotman Press, 2015) pp. 10-11
- ²²⁶*Ibid*, pp. 19-20
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- ²³³*Ibid*, pp. 3-5
- ²³⁴Halpern, *Inside the Nudge Unit*, p. 149
- ²³⁵*Ibid*, pp. 3-4
- ²³⁶*Ibid*.
- ²³⁷*Ibid*, pp. 70-1
- ²³⁸*Ibid*, p. 71
- ²³⁹*Ibid*, pp. 70-1
- ²⁴⁰*Ibid*, p. 74
- ²⁴¹*Ibid*, p. 75
- ²⁴²*Ibid*, p. 318
- ²⁴³*Ibid*, p. 338
- ²⁴⁴*Ibid*, p. 118
- ²⁴⁵Soman, *The Last Mile*, pp. 113-118
- ²⁴⁶Haynes, Service, Goldacre & Torgerson, "Test, Learn, Adapt: Developing Public Policy with Randomised Controlled Trials", Cabinet Office Behavioural Insights Team (June 2012) pp. 4-6.
- ²⁴⁷Soman, *The Last Mile*, pp. 123-4
- ²⁴⁸Haynes et al, "Test, Learn, Adapt", p. 5
- ²⁴⁹Soman, *The Last Mile* pp. 129-131
- ²⁵⁰Alain Samson, "Behavioural Science: Theory and Practice", *The Behavioural Economics Guide 2015*, edited by Alain Samson pp. 16-18
- ²⁵¹Halpern, *Inside the Nudge Unit*, p. 297
- ²⁵²*Ibid*, pp. 274-5
- ²⁵³*Ibid*, p. 275
- ²⁵⁴Haynes et al, "Test, Learn, Adapt", p. 7
- ²⁵⁵World Bank Group, World Development Report 2015: *Mind, Society and Behaviour*, (World Bank, 2015) p. 192

- ²⁵⁶Ibid, p. 193
- ²⁵⁷Ibid.
- ²⁵⁸Martin Wheatley, Foreword, p. 3 in Kristine Erta et al, "Applying Behavioural Economics at the Financial Conduct Authority", Occasional Paper #1 (FCA, 2013)
- ²⁵⁹Roger Miles, "Catching the Careless Nudists: The Behavioural Regulators' Agenda" in The Behavioral Economics Guide 2015, pp. 86-92
- ²⁶⁰Erta, Hunt, Iscenko and Brambley, "Applying Behavioural Economics at the Financial Conduct Authority", Occasional Paper #1 (FCA, 2013) p. 4
- ²⁶¹Miles, "Catching the Careless Nudists: The Behavioural Regulators' Agenda", pp. 86-92
- ²⁶²Erta, Hunt et al, "Applying Behavioural Economics at the Financial Conduct Authority", pp. 1-71
- ²⁶³Martin Wheatley, "The Human Face of Regulation", Speech at the London School of Economics (April 2013)
- ²⁶⁴See Martin Wheatley, "Making competition king – the rise of behavioural economics at the FCA", Speech to ASIC, (March 2014)
- ²⁶⁵Ibid.
- ²⁶⁶Ibid, p. 3
- ²⁶⁷Description of the Occasional paper series in Erta et al, "Applying behavioural economics at the Financial Conduct Authority", FCA Occasional Paper No. 1
- ²⁶⁸Ibid, p. 9
- ²⁶⁹Ibid, pp. 7-9
- ²⁷⁰Ibid, p. 8
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- ²⁷³Ibid, p. 5
- ²⁷⁴Ibid, pp. 5-6
- ²⁷⁵Ibid, p. 7
- ²⁷⁶Iscenko, Duke, Huck & Wallace, "How does selling insurance as an add-on affect consumer decisions? A practical application of behavioural experiments in financial regulation", FCA Occasional Paper No. 3, pp. 1-54
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- ²⁹⁶Ibid, p. 4
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- ³⁰²Ibid, pp. 2-4
- ³⁰³ASIC, "Buying Add-on Insurance in Car Yards: Why It Can Be Hard to Say No", Report 470 (February 2016) Available at <http://download.asic.gov.au/media/3549387/rep470-published-29-february-2016.pdf>
- ³⁰⁴Kell, "ASIC and behavioural economics: Regulating for real people", (Oct 2016) p. 5
- ³⁰⁵Ibid, p. 5
- ³⁰⁶See, for example, Financial Markets Authority, "Strategic Risk Outlook 2015", (New Zealand FMA, 2015) p. 2
- ³⁰⁷Financial Markets Authority, "Strategic Risk Outlook 2017", (New Zealand FMA, 2017), pp. 22 and 28. The white paper is Boyes, Pelenur, and McCauley, "Using behavioural insights to improve financial capability" (New Zealand Financial Markets Authority, April 2016) Available at: <http://www.financialliteracy.gov.au/media/559983/usingbehaviouralinsightstoimprovefinancialcapability-nz-2016.pdf>
- ³⁰⁸Boyes et al, "Using behavioural insights to improve financial capability", p. 10
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- ³¹⁰Ibid, pp. 14-17
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- ³¹⁶See Joint Research Centre, "Application in the Commission", European Commission, 2015 cited in Ibid, p. 37
- ³¹⁷Chater, Huck & Inderst, "Consumer Decision-Making in Retail Investment Services: A Behavioural economics perspective" Final Report (November 2010) Available at: http://ec.europa.eu/consumers/financial_services/reference_studies_documents/docs/consumer_decision-making_in_retail_investment_services_-_final_report_en.pdf
- ³¹⁸The study's "findings will be used to revise the PRIIPS (Packaged Retail Investment Products) legislation" in European Commission, "Report on Consumer Policy (July 2010 – December 2011)", Commission Staff Working Document, (EC, 2012) p. 26 Available at http://ec.europa.eu/consumers/archive/strategy/docs/report_consumer_policy_2012_en.pdf
- ³¹⁹European Commission, "Report on Consumer Policy (July 2010 – December 2011)", (EC, 2012) pp. 25-26
- ³²⁰European Commission, "Report on Consumer Policy: January 2012 – December 2013", (EC, 2014) p. 20
- ³²¹Van Bavel et al, "Applying Behavioural Sciences to EU Policy-making", JRC Scientific and Policy Reports (EC, 2012) available at http://ec.europa.eu/dgs/health_food-safety/information_sources/docs/30092013_jrc_scientific_policy_report_en.pdf and van Bavel et al, "Seven Points to Remember when Conducting Behavioural Studies in Support of EU Policy-making" JRC Scientific and Policy Reports (EC, 2015) available at <http://publications.jrc.ec.europa.eu/repository/bitstream/JRC96525/lfna27345enn.pdf>
- ³²²"Consumer vulnerability across key markets in the European Union" Final Report (EC, 2016) available at http://ec.europa.eu/consumers/consumer_evidence/market_studies/docs/vulnerable_consumers_approved_27_01_2016_en.pdf
- ³²³See http://ec.europa.eu/consumers/consumer_evidence/market_studies/docs/vulnerable_consumers_approved_27_01_2016_en.pdf
- ³²⁴Lourenco et al, "Behavioural Insights Applied to Policy", pp 37-38
- ³²⁵Ibid
- ³²⁶Ibid, p. 37
- ³²⁷Ibid.
- ³²⁸Ibid.
- ³²⁹Ibid.
- ³³⁰See ESMA Chair's remarks in June 29th, 2016 interview available at <https://www.esma.europa.eu/press-news/esma-news/politico-morning-exchange-interview-steven-maijoor>

- ³³¹Gemma Varriale, "Esma calls for increased focus on consumer protection" September 25th, 2013 available at <http://www.iflr.com/Article/3259018/Esma-calls-for-increased-focus-on-consumer-protection.html>
- ³³²This BE and BF session also included using PRIIPs as a case study regarding standardizing information and asking how to improve consumer engagement, information salience and working with/against biases. See ESMA's Joint Consumer Protection Day event on June 4, 2014 available at https://www.esma.europa.eu/sites/default/files/library/2015/11/joint_esas_consumer_protection_day_programme.pdf
- ³³³See [https://eiopa.europa.eu/Publications/Technical%20Standards/JC%202016%2021%20\(Final%20draft%20RTS%20PRIIPs%20KID%20report\).pdf](https://eiopa.europa.eu/Publications/Technical%20Standards/JC%202016%2021%20(Final%20draft%20RTS%20PRIIPs%20KID%20report).pdf)
- ³³⁴"This rulemaking would reduce harmful conflicts of interest by amending the regulatory definition of the term "fiduciary" set forth at 29 CFR 2510.3-21(c) to more broadly define as fiduciaries those persons who render investment advice to plans and IRAs for a fee within the meaning of section 3(21) of the Employee Retirement Income Security Act (ERISA) and section 4975(e)(3) of the Internal Revenue Code." See Department of Labor, "Conflict of Interest Rule-Investment Advice", RIN-AB32 (Spring, 2015) and Department of Labor, "Definition of the Term "Fiduciary"; Conflict of Interest Rule – Retirement Investment Advice", Available at <https://s3.amazonaws.com/public-inspection.federalregister.gov/2016-07924.pdf>
- ³³⁵Hazel Bradford, "DoL seeks regulatory delay of fiduciary rule", Pensions and Investments, February 10th, 2017
- ³³⁶See <https://www.sec.gov/biography/scholl-brian>
- ³³⁷Library of Congress, Behavioral Patterns and Pitfalls of U.S. Investors (August, 2010)
- ³³⁸Jeremy Ko, "White Paper on Computing Tools for Promoting Sound Investment Decisions, SEC, June 2014; and Jeremy Ko and Jared Williams, "The Effects of Regulating Hidden Add-on Costs", SEC, May 2015
- ³³⁹2011 SEC Staff "Study on Investment Advisors and Broker-Dealers", pp. 101-02
- ³⁴⁰See Commissioner Paredes' Remarks at the SEC speaks in 2013, Commissioner Stein's statement in April 2016, and The Investor Advocate speech in Nov. 2016
- ³⁴¹SEC to hold Roundtable on Proxy Voting January 2015. Note also that other background information in this paragraph and the next paragraph is based upon an interview with K. Jeremy Ko, Senior Economist, Division of Economic and Risk Analysis, SEC
- ³⁴²Mary L. Schapiro, Chairman and CEO, NASD "Remarks at the NASD Foundation-Tuck School of Business Symposium on Marketing Investor Education," May 7th, 2017. Available at <http://www.finra.org/newsroom/speeches/050707-remarks-nasd-foundation-tuck-school-business-symposium-marketing-investor>.
- ³⁴³Thomas M. Selman, Executive Vice President Regulatory Policy, "Remarks From the LIMRA/LOMA 2015 Regulatory Compliance Exchange," March 18th 2015. Available at <http://www.finra.org/newsroom/speeches/031815-remarks-limraloma-2015-regulatory-compliance-exchange>.
- ³⁴⁴Interview, Geraldine M. Walsh, President, FINRA Investor Education Foundation & Senior Vice President, FINRA
- ³⁴⁵Ibid
- ³⁴⁶The SEC approved the adoption of FINRA Rule 2273 (Educational Communication Related to Recruitment Practices and Account Transfers), which establishes an obligation to deliver an educational communication in connection with firm recruitment practices and account transfer. See "SEC Approves Rule Requiring Delivery of an Educational Communication to Customers of a Transferring Representative" Regulatory Notice 16-18 Available at http://www.finra.org/sites/default/files/notice_doc_file_ref/Regulatory-Notice-16-18.pdf
- ³⁴⁷See Interview, Geraldine M. Walsh, FINRA
- ³⁴⁸Ibid
- ³⁴⁹Innovations for Poverty Action. Project Evaluation: Borrow Less Tomorrow. Available at: <http://www.finrafoundation.org/web/groups/foundation/@foundation/documents/foundation/p126765.pdf>
- ³⁵⁰Innovations for Poverty Action. Project Evaluation: Commitment Savings. Available at: <http://www.finrafoundation.org/web/groups/foundation/@foundation/documents/foundation/p126766.pdf>
- ³⁵¹See Department of Labor, "REGULATING ADVICE MARKETS DEFINITION OF THE TERM "FIDUCIARY" CONFLICTS OF INTEREST - RETIREMENT INVESTMENT ADVICE REGULATORY IMPACT ANALYSIS FOR FINAL RULE AND EXEMPTIONS", APRIL 2016 Available at <https://www.dol.gov/sites/default/files/ebsa/laws-and-regulations/rules-and-regulations/completed-rulemaking/1210-AB32-2/conflict-of-interest-ria.pdf>
- ³⁵²Ibid, p. 3
- ³⁵³Ibid, p. 9
- ³⁵⁴See Department of Labor homepage for CLEAR at <http://clear.dol.gov/>
- ³⁵⁵See behavioural finance: retirement and behavioural insights topic areas at Ibid
- ³⁵⁶Source: Private interview for this information and other MAS activities in this paragraph and the next.
- ³⁵⁷Ibid
- ³⁵⁸See <https://www.thechinfamily.hk/web/iec/en/about-iec.html>
- ³⁵⁹See <https://www.thechinfamily.hk/web/iec/en/strategy.html>
- ³⁶⁰Ibid

³⁶¹See <http://www.thechinfamily.hk/web/tc/>

³⁶²Interview, Damien Yip, Head of Marketing and Programmes, Investor Education Centre

³⁶³Ibid

³⁶⁴Ibid

³⁶⁵See <https://www.thechinfamily.hk/web/iec/en/about-iec.html>

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1.1.2 MM Café Franchise Inc. et al.

**IN THE MATTER OF
THE SECURITIES ACT,
R.S.O. 1990, c. S.5 AS AMENDED**

AND

**IN THE MATTER OF
MM CAFÉ FRANCHISE INC.,
TECHOCAN INTERNATIONAL CO. LTD.,
1727350 ONTARIO LIMITED,
MARIANNE GODWIN,
DAVE GARNET CRAIG and
HAIYAN (HELEN) GAO JORDAN**

NOTICE OF WITHDRAWAL

WHEREAS:

1. on March 23, 2016, the Ontario Securities Commission (the "Commission") issued a Notice of Hearing pursuant to sections 127 and 127.1 of the *Securities Act*, R.S.O. 1990, c. S.5, as amended, to consider whether it is in the public interest to make orders, as specified in the Notice of Hearing, in respect of a number of Respondents including 1727350 Ontario Limited; and
2. the Notice of Hearing was issued in connection with the allegations as set out in the Statement of Allegations of Staff of the Commission ("Staff") dated March 23, 2016, and amended on April 24, 2016 and July 26, 2016 ("Staff's Allegations").

TAKE NOTICE that Staff hereby withdraw Staff's Allegations against 1727350 Ontario Limited.

March 24, 2017

Staff of the Ontario Securities Commission
20 Queen Street West, 22nd Floor
Toronto, ON M5H 3S8

1.1.3 Notice of Ministerial Approval of Amendments to NI 23-101 Trading Rules

**NOTICE OF MINISTERIAL APPROVAL OF
AMENDMENTS TO
NATIONAL INSTRUMENT 23-101 TRADING RULES**

On March 20, 2017, the Minister of Finance approved amendments (Amendments) to National Instrument 23-101 *Trading Rules* (the Rule). The Amendments are reproduced in Chapter 5 of this Bulletin and at www.osc.gov.on.ca.

The Amendments were published in the Bulletin on January 26, 2017 at (2017), 40 OSCB 963. No changes have been made to the rule since this publication.

The substance and purpose of the Amendments is to amend NI 23-101 to lower the active trading fee cap applicable to trading in certain securities. In setting out the maximum fee that can be applied to the execution of an order entered to execute against displayed volume, the Amendments distinguish between securities that are listed on both a Canadian and a U.S. exchange (Inter-listed Securities) and securities that are listed on a Canadian exchange, but not listed on a U.S. exchange (Non-Inter-listed Securities).

The Amendments amend section 6.6.1 of NI 23-101 to cap active trading fees for Non-Inter-listed Securities at \$0.0017 per security traded for an equity security or per unit traded for an exchange-traded fund, if the execution price of the security or unit traded is greater than or equal to \$1.00.

The Amendments will come into force on April 10, 2017.

1.2 Notices of Hearing

1.2.1 MM Café Franchise Inc. et al. – ss. 127, 127.1

**IN THE MATTER OF
THE SECURITIES ACT,
RSO 1990, c S.5**

AND

**IN THE MATTER OF
MM CAFÉ FRANCHISE INC.,
TECHOCAN INTERNATIONAL CO. LTD.,
1727350 ONTARIO LIMITED,
MARIANNE GODWIN,
DAVE GARNET CRAIG and
HAIYAN (HELEN) GAO JORDAN**

AND

**IN THE MATTER OF
A SETTLEMENT AGREEMENT BETWEEN
STAFF OF THE ONTARIO SECURITIES COMMISSION,
TECHOCAN INTERNATIONAL CO. LTD., AND
HAIYAN (HELEN) GAO JORDAN**

**NOTICE OF HEARING
(Sections 127 and 127.1 of the Securities Act)**

TAKE NOTICE that the Ontario Securities Commission (the "Commission") will hold a hearing pursuant to sections 127 and 127.1 of the *Securities Act*, RSO, c S.5, as amended (the "Act"), at the offices of the Commission at 20 Queen Street West, 17th Floor, in the City of Toronto, commencing on March 24, 2017 at 11:30 a.m. or as soon thereafter as the hearing can be held;

AND TAKE NOTICE that the purpose of the hearing is for the Commission to consider whether it is in the public interest to approve the Settlement Agreement dated March 22, 2017 between Staff of the Commission ("Staff") and Techocan International Co. Ltd. and Haiyan (Helen) Gao Jordan;

BY REASON OF the allegations set out in the Amended Amended Statement of Allegations of Staff, dated July 26, 2016;

AND TAKE FURTHER NOTICE that any party to the proceeding may be represented by a representative at the hearing;

AND TAKE FURTHER NOTICE that upon failure of any party to attend at the time and place aforesaid, the hearing may proceed in the absence of that party, and such party is not entitled to any further notice of the proceeding;

AND TAKE FURTHER NOTICE that the Notice of Hearing is also available in French on request, participation may be in either French or English and participants must notify the Secretary's Office in writing as soon as possible, and in any event, at least thirty (30) days before a hearing if

the participant is requesting a proceeding to be conducted wholly or partly in French; and

ET AVIS EST ÉGALEMENT DONNÉ PAR LA PRÉSENTE que l'avis d'audience est disponible en français sur demande, que la participation à l'audience peut se faire en français ou en anglais et que les participants doivent aviser le Bureau du secrétaire par écrit le plus tôt possible et, dans tous les cas, au moins trente (30) jours avant l'audience si le participant demande qu'une instance soit tenue entièrement ou partiellement en français.

DATED at Toronto, this 22nd day of March, 2017.

"Grace Knakowski"
Secretary to the Commission

1.5 Notices from the Office of the Secretary

1.5.1 MM Café Franchise Inc. et al.

FOR IMMEDIATE RELEASE
March 23, 2017

**IN THE MATTER OF
THE SECURITIES ACT,
RSO 1990, c S.5**

AND

**IN THE MATTER OF
MM CAFÉ FRANCHISE INC.,
TECHOCAN INTERNATIONAL CO. LTD.,
1727350 ONTARIO LIMITED,
MARIANNE GODWIN,
DAVE GARNET CRAIG and
HAIYAN (HELEN) GAO JORDAN**

AND

**IN THE MATTER OF
A SETTLEMENT AGREEMENT BETWEEN
STAFF OF THE ONTARIO SECURITIES COMMISSION,
TECHOCAN INTERNATIONAL CO. LTD., AND
HAIYAN (HELEN) GAO JORDAN**

TORONTO – The Office of the Secretary issued a Notice of Hearing for a hearing to consider whether it is in the public interest to approve a settlement agreement entered into by Staff of the Commission and Techocan International Co. Ltd. and Haiyan (Helen) Gao Jordan in the above named matter.

The hearing will be held on March 24, 2017 at 11:30 a.m. on the 17th floor of the Commission's offices located at 20 Queen Street West, Toronto.

A copy of the Notice of Hearing dated March 22, 2017 is available at www.osc.gov.on.ca.

OFFICE OF THE SECRETARY
GRACE KNAKOWSKI
SECRETARY TO THE COMMISSION

For media inquiries:

media_inquiries@osc.gov.on.ca

For investor inquiries:

OSC Contact Centre
416-593-8314
1-877-785-1555 (Toll Free)

1.5.2 MM Café Franchise Inc. et al.

FOR IMMEDIATE RELEASE
March 23, 2017

**IN THE MATTER OF
THE SECURITIES ACT,
RSO 1990, c S.5**

AND

**IN THE MATTER OF
MM CAFÉ FRANCHISE INC.,
TECHOCAN INTERNATIONAL CO. LTD.,
1727350 ONTARIO LTD.,
MARIANNE GODWIN,
DAVE GARNET CRAIG and
HAIYAN (HELEN) GAO JORDAN**

TORONTO – The Commission issued an Order in the above noted matter which provides that:

1. the Final Interlocutory Appearance is adjourned to April 13, 2017 at 1:00 p.m. or such other date as may be agreed to by the parties and set by the Office of the Secretary.

A copy of the Order dated March 23, 2017 is available at www.osc.gov.on.ca.

OFFICE OF THE SECRETARY
GRACE KNAKOWSKI
SECRETARY TO THE COMMISSION

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OSC Contact Centre
416-593-8314
1-877-785-1555 (Toll Free)

1.5.3 Steven J. Martel et al.

FOR IMMEDIATE RELEASE
March 24, 2017

IN THE MATTER OF
THE SECURITIES ACT,
RSO 1990, c S.5

AND

IN THE MATTER OF
STEVEN J. MARTEL,
MARTEL GROUP OF COMPANIES INC. and
8446997 CANADA INC.

TORONTO – The Commission issued an Order in the above named matter which provides that:

1. The hearing of the Extension Motion is hereby vacated;
2. The Privilege Motion is adjourned to June 15 at 10:00 a.m., continuing on June 16, 2017, or such other dates as may be agreed to by the parties and set by the Office of the Secretary, and the parties shall adhere to the following timeline for the exchange of materials:
 - a. Staff shall serve and file a responding motion record no later than March 22, 2017;
 - b. cross-examinations on affidavits, if any, will be conducted during the week of April 24, 2017;
 - c. Martel shall serve and file a memorandum of fact and law no later than May 10, 2017;
 - d. Staff shall serve and file a responding memorandum of fact and law no later than May 26, 2017; and
 - e. Martel shall serve and file a reply memorandum of fact and law, if any, no later than June 2, 2017.

A copy of the Order dated March 24, 2017 is available at www.osc.gov.on.ca.

OFFICE OF THE SECRETARY
GRACE KNAKOWSKI
SECRETARY TO THE COMMISSION

For media inquiries:

media_inquiries@osc.gov.on.ca

For investor inquiries:

OSC Contact Centre
416-593-8314
1-877-785-1555 (Toll Free)

1.5.4 MM Café Franchise Inc. et al.

FOR IMMEDIATE RELEASE
March 24, 2017

**IN THE MATTER OF
THE SECURITIES ACT,
R.S.O. 1990, c. S.5, AS AMENDED**

AND

**IN THE MATTER OF
MM CAFÉ FRANCHISE INC.,
TECHOCAN INTERNATIONAL CO. LTD.,
1727350 ONTARIO LIMITED,
MARIANNE GODWIN,
DAVE GARNET CRAIG and
HAIYAN (HELEN) GAO JORDAN**

AND

**IN THE MATTER OF
A SETTLEMENT AGREEMENT BETWEEN
STAFF OF THE ONTARIO SECURITIES COMMISSION
AND TECHOCAN INTERNATIONAL CO. LTD.,
AND HAIYAN (HELEN) GAO JORDAN**

TORONTO – Following a hearing held today, the Commission issued an Order in the above named matter approving the Settlement Agreement reached between Staff of the Commission and Techocan International Co. Ltd. and Haiyan (Helen) Gao Jordan.

A copy of the Order dated March 24, 2017 and Settlement Agreement dated March 24, 2017 are available at www.osc.gov.on.ca.

OFFICE OF THE SECRETARY
GRACE KNAKOWSKI
SECRETARY TO THE COMMISSION

For media inquiries:

media_inquiries@osc.gov.on.ca

For investor inquiries:

OSC Contact Centre
416-593-8314
1-877-785-1555 (Toll Free)

1.5.5 MM Café Franchise Inc. et al.

FOR IMMEDIATE RELEASE
March 24, 2017

**IN THE MATTER OF
THE SECURITIES ACT,
R.S.O. 1990, c. S.5 AS AMENDED**

AND

**IN THE MATTER OF
MM CAFÉ FRANCHISE INC.,
TECHOCAN INTERNATIONAL CO. LTD.,
1727350 ONTARIO LIMITED,
MARIANNE GODWIN,
DAVE GARNET CRAIG and
HAIYAN (HELEN) GAO JORDAN**

TORONTO – Staff of the Ontario Securities Commission filed a Notice of Withdrawal against the Respondent 1727350 Ontario Limited as of March 24, 2017 in the above noted matter.

A copy of the Notice of Withdrawal dated March 24, 2017 is available at www.osc.gov.on.ca.

OFFICE OF THE SECRETARY
GRACE KNAKOWSKI
SECRETARY TO THE COMMISSION

For media inquiries:

media_inquiries@osc.gov.on.ca

For investor inquiries:

OSC Contact Centre
416-593-8314
1-877-785-1555 (Toll Free)

1.5.6 Dennis L. Meharchand and Valt.X Holdings Inc.

**FOR IMMEDIATE RELEASE
March 28, 2017**

**IN THE MATTER OF
THE SECURITIES ACT,
RSO 1990, c S.5**

AND

**IN THE MATTER OF
DENNIS L. MEHARCHAND and
VALT.X HOLDINGS INC.**

TORONTO – The Commission issued an Order in the above noted matter which provides that:

1. by no later than April 26, 2017, Staff shall disclose to the Respondents all documents and things in the possession or control of Staff that are relevant to the hearing;
2. by no later than June 19, 2017, Staff shall provide preliminary witness lists and statements to the Respondents and shall indicate any intent to call an expert witness, including the name of the expert and the issue on which the expert will be giving evidence; and
3. the Second Appearance in this matter will be heard on June 26, 2017 at 10:00 a.m., or such other date as may be agreed to by the parties and set by the Office of the Secretary.

A copy of the Order dated March 27, 2017 is available at www.osc.gov.on.ca.

OFFICE OF THE SECRETARY
GRACE KNAKOWSKI
SECRETARY TO THE COMMISSION

For media inquiries:

media_inquiries@osc.gov.on.ca

For investor inquiries:

OSC Contact Centre
416-593-8314
1-877-785-1555 (Toll Free)

Chapter 2

Decisions, Orders and Rulings

2.1 Decisions

2.1.1 Excel Funds Management Inc. and Excel Billionaire Leaders Fund

Headnote

National Policy 11-203 Process for Exemptive Relief Applications in Multiple Jurisdictions – Approval of mutual fund merger – approval required because the merger does not meet the criteria for pre-approved reorganizations and transfers in National Instrument 81-102 – the fundamental investment objectives and fee structures of the terminating fund and the continuing fund are not substantially similar – unitholders of the terminating fund are provided with timely and adequate disclosure regarding the merger.

Applicable Legislative Provisions

National Instrument 81-102 Investment Funds,
ss. 5.5(1)(b), 19.1.

March 17, 2017

IN THE MATTER OF
THE SECURITIES LEGISLATION OF
ONTARIO
(the Jurisdiction)

AND

IN THE MATTER OF
THE PROCESS FOR EXEMPTIVE RELIEF
APPLICATIONS IN MULTIPLE JURISDICTIONS

AND

IN THE MATTER OF
EXCEL FUNDS MANAGEMENT INC.
(the Manager)

AND

EXCEL BILLIONAIRE LEADERS FUND
(the Terminating Fund and together with
the Manager, the Filers)

DECISION

Background

The principal regulator in the Jurisdiction has received an application from the Manager on behalf of the Terminating Fund for a decision under the securities legislation of the Jurisdiction for approval under paragraph 5.5(1)(b) of National Instrument 81-102 *Investment Funds (NI 81-102)* of the proposed merger (the **Merger**) of the Terminating

Fund into Excel Blue Chip Equity Fund (the **Continuing Fund**, together with the Terminating Fund, the **Funds**) (the **Approval Sought**).

Under the Process for Exemptive Relief Applications in Multiple Jurisdictions (for a passport application):

- (a) the Ontario Securities Commission is the principal regulator (**Principal Regulator**) for this application, and
- (b) the Filer has provided notice that subsection 4.7(1) of Multilateral Instrument 11-102 *Passport System (MI 11-102)* is intended to be relied upon in each of the provinces and territories of Canada, other than the province of Ontario (the **Other Jurisdictions**).

Interpretation

Defined terms contained in NI 81-102, National Instrument 14-101 *Definitions* and MI 11-102 have the same meaning in this decision unless they are defined in this decision.

Representations

This decision is based on the following facts represented by the Filers:

The Manager

1. The Manager is a corporation governed by the laws of the Province of Ontario with its head office in Mississauga, Ontario.
2. The Manager is registered as an investment fund manager in the Provinces of Newfoundland and Labrador, Ontario and Quebec.
3. The Manager is the manager and promoter of the Funds.

The Funds

4. Each of the Funds is an open-ended mutual fund trust established under the laws of the Province of Ontario under a master declaration of trust.
5. Units of the Funds are currently qualified for sale under a simplified prospectus, annual information form and fund facts documents, each dated September 30, 2016 (collectively, the **Offering Documents**).

6. Each of the Funds is a reporting issuer under the applicable securities legislation of the Jurisdiction and the Other Jurisdictions (the **Legislation**).
7. Each of the Funds is subject to NI 81-102.
8. Neither the Manager nor the Funds is in default under the Legislation.
9. Other than circumstances in which the securities regulatory authority of a province or territory of Canada has expressly exempted a Fund therefrom, each of the Funds follows the standard investment restrictions and practices established under the Legislation.
10. The net asset value (**NAV**) for each series of the Funds, as applicable, is calculated on a daily basis in accordance with the Funds' valuation policy and as described in the Offering Documents.
18. The Manager has determined that it believes that it would be most efficient to implement the Merger on a tax-deferred basis as a "qualifying exchange", within the meaning of section 132.2 of the *Income Tax Act* (Canada) (the **Tax Act**), as a tax-deferred transaction. Unitholders of the Terminating Fund will exchange on a tax-deferred rollover basis their units of the Terminating Fund for units of the Continuing Fund. The Terminating Fund will not realize any net capital gains as a result of the Merger.

The Merger

11. The Manager intends to reorganize the Funds by merging the Terminating Fund into the Continuing Fund.
12. Regulatory approval of the Merger is required because the Merger does not satisfy all of the criteria for pre-approved reorganizations and transfers as set out in section 5.6 of NI 81-102, namely because: (i) a reasonable person may not consider the fundamental investment objectives of the Terminating Fund and that of the Continuing Fund to be "substantially similar"; and (ii) a reasonable person may not consider the fee structure of the Terminating Fund and that of the Continuing Fund to be "substantially similar".
13. Except for the reasons noted in paragraph 12 above, the Merger will otherwise comply with all of the other criteria for pre-approved reorganizations and transfers set out in section 5.6 of NI 81-102.
14. The Manager is of the view that the Merger will not be a "material change" for the Continuing Fund.
15. No sales charges will be payable in connection with the acquisition by the Continuing Fund of the investment portfolio of the Terminating Fund.
16. Unitholders of the Terminating Fund will continue to have the right to redeem or transfer their units of the Terminating Fund at any time up to the close of business on the business day prior to the effective date of the Merger.
17. A press release and material change report in respect of the proposed Merger were filed on SEDAR on February 6, 2017. Units of the Terminating Fund ceased to be available for sale on that date.
19. A notice of meeting, management information circular (the **Circular**) and a proxy in connection with the Merger will be mailed to unitholders of the Terminating Fund on or about February 27, 2017 and will be subsequently filed on SEDAR.
20. The most recently-filed fund facts documents of the Continuing Fund will also be included in the meeting materials sent to unitholders of the Terminating Fund.
21. The Circular describes how unitholders in the Terminating Fund may obtain, at no cost, a copy of the Offering Documents of the Continuing Fund and its most recent interim and annual financial statements and management reports of fund performance.
22. The Circular provides unitholders of the Terminating Fund with information about the differences between the Terminating Fund and Continuing Fund, the management fees of the Continuing Fund and the tax consequences of the Merger. Accordingly, unitholders of the Terminating Fund will have an opportunity to consider this information prior to voting on the Merger.
23. Unitholders of the Terminating Fund will be asked to approve the Merger at a special meeting scheduled to be held on or about March 24, 2017. If the meeting is adjourned, the adjourned meeting will be held on or about March 27, 2017.
24. The Filer will pay all costs and reasonable expenses relating to the solicitation of proxies and holding the unitholder meeting in connection with the Merger as well as the costs of implementing the Merger, including any brokerage fees.
25. If the requisite approvals are obtained, it is anticipated that the Merger will be implemented on or about March 30, 2017. If unitholder approval is not obtained, the Terminating Fund will be terminated on or about May 1, 2017.
26. The investment portfolio and the other assets of the Terminating Fund to be acquired by the Continuing Fund in order to effect the Merger will be acceptable on or prior to the effective date of the Merger to the portfolio manager of the

- Continuing Fund and will be consistent with the investment objective of the Continuing Fund.
27. Following the Merger, the Continuing Fund will continue as a publicly offered open-end mutual fund and the Terminating Fund will be wound up as soon as reasonably practicable.
28. Following the Merger, units of the Continuing Fund received by unitholders in the Terminating Fund as a result of the Merger will have the same sales charge option and, for units purchased under the deferred sales charge option or the volume sales charge option, remaining deferred sales charge schedule as their units in the Terminating Fund.
29. The Merger is conditional on the approval of (i) the unitholders of the Terminating Fund; and (ii) the Principal Regulator. If the necessary approvals are obtained, the following steps will be carried out to effect the Merger:
- (a) Unitholders of the Terminating Fund will be asked at a Special Meeting of unitholders to approve the Merger and such other matters as are set forth in the applicable resolutions in respect of the Merger.
 - (b) Prior to effecting the Merger, the Terminating Fund will liquidate portfolio securities that do not meet the investment objective and investment strategies of the Continuing Fund.
 - (c) The Terminating Fund will determine the amount of income and net taxable gains (if any) it has realized during the taxation year including the date of the Merger. If applicable, the terminating Fund will distribute sufficient net income and net capital gains to Unitholders to ensure that the Terminating Fund will not be subject to tax under Part I of the Tax Act.
 - (d) The Continuing Fund will acquire the portfolio securities and other assets of the Terminating Fund in exchange for units of the Continuing Fund.
 - (e) The Continuing Fund will not assume any liabilities of the Terminating Fund and the Terminating Fund will retain sufficient cash to satisfy its estimated liabilities, if any, as of the date of the Merger.
 - (f) The units of the Continuing Fund received by the Terminating Fund will have an aggregate net asset value equal to the value of the portfolio securities and other assets that the Continuing Fund is acquiring from the Terminating Fund, and
- the units of the Continuing Fund will be issued at the applicable series net asset value per unit as of the close of business of the effective date of the Merger.
- (g) Immediately thereafter, units of the Continuing Fund will be distributed to unitholders of the Terminating Fund in exchange for their units in the Terminating Fund on a dollar for dollar and series-by-series basis, as applicable. The units of the Continuing Fund received by unitholders in the Terminating Fund will have the same sales charge option and, for unit purchases under the deferred sales charge option or the volume sales charge option, remaining deferred sales charge schedule as their units in the Terminating Fund.
 - (h) Following the Merger, and in any case within 60 days thereof, the Terminating Fund will be wound up.
30. As required by National Instrument 81-107 *Independent Review Committee for Investment Funds (NI 81-107)*, the Filer presented the terms of the Merger to the Funds' Independent Review Committee (**IRC**) for its review and recommendation. The IRC reviewed the potential conflict of interest matters related to the proposed Merger and has determined that the proposed Merger, if implemented, would achieve a fair and reasonable result for unitholders of the Funds.
31. The Terminating Fund and the Continuing Fund are mutual fund trusts under the Tax Act and, accordingly, units of both Funds are "qualified investments" under the Tax Act for registered retirement savings plans, registered retirement income funds, deferred profit sharing plans, registered education savings plans, registered disability savings plans and tax free savings accounts.
32. The Manager believes that the Merger will be beneficial to unitholders of the Funds for the following reasons:
- (a) unitholders of the Terminating Fund will gain investment exposure to a diversified portfolio of holdings of companies located around the world that derive a portion of their revenues through activities in emerging markets, with different economic cycles and drivers that provide the Fund with the potential to diversify risk in different macroeconomic conditions;
 - (b) unitholders of the Terminating Fund will not be subject to any increased management expense ratios as the management

expense ratios that are charged to Series A and Series F units of the Continuing Fund are less than the management expense ratios that are currently charged to Series A and Series F units of the Terminating Fund;

- (c) unitholders of the Terminating Fund and the Continuing Fund will enjoy increased economies of scale as part of a larger combined Continuing Fund; and
- (d) the Continuing Fund, because of its greater size, may benefit from its larger profile in the marketplace.

Decision

The Principal Regulator is satisfied that the decision meets the test set out in the Legislation for the Principal Regulator to make the decision.

The decision of the Principal Regulator under the Legislation is that the Approval Sought is granted.

“Darren McCall”
Manager
Investment Funds & Structured Products Branch
Ontario Securities Commission

2.1.2 Excel Funds Management Inc. and Excel Latin America Fund

Headnote

NP 11-203 Process for Exemptive Relief Applications in Multiple Jurisdictions – Existing and future mutual funds managed by the Filer granted relief from paragraphs 15.3(4)(c) and (f) of NI 81-102 Investment Funds to permit references to FundGrade A+ Awards, FundGrade Ratings, Lipper Awards and Lipper Leader Ratings in sales communications – Relief subject to conditions requiring specified disclosure and the requirement that the FundGrade A+ Awards and Lipper Awards being referenced not have been awarded more than 365 days before the date of the sales communication.

Applicable Legislative Provisions

National Instrument 81-102 Investment Funds,
ss. 15.3(4)(c) and (f), 19.1.

March 17, 2017

**IN THE MATTER OF
THE SECURITIES LEGISLATION OF
ONTARIO
(the Jurisdiction)**

AND

**IN THE MATTER OF
THE PROCESS FOR EXEMPTIVE RELIEF
APPLICATIONS IN MULTIPLE JURISDICTIONS**

AND

**IN THE MATTER OF
EXCEL FUNDS MANAGEMENT INC.
(the Manager)**

AND

**EXCEL LATIN AMERICA FUND
(the Terminating Fund and together
with the Manager, the Filers)**

DECISION

Background

The principal regulator in the Jurisdiction has received an application from the Manager on behalf of the Terminating Fund for a decision under the securities legislation of the Jurisdiction for approval under paragraph 5.5(1)(b) of National Instrument 81-102 *Investment Funds* (NI 81-102) of the proposed merger (the **Merger**) of the Terminating Fund into Excel Emerging Markets Fund (the **Continuing Fund**), together with the Terminating Fund, the **Funds**) (the **Approval Sought**).

Under the Process for Exemptive Relief Applications in Multiple Jurisdictions (for a passport application):

- (a) the Ontario Securities Commission is the principal regulator (**Principal Regulator**) for this application, and
- (b) the Filer has provided notice that subsection 4.7(1) of Multilateral Instrument 11-102 *Passport System (MI 11-102)* is intended to be relied upon in each of the provinces and territories of Canada, other than the province of Ontario (the **Other Jurisdictions**).

Interpretation

Defined terms contained in NI 81-102, National Instrument 14-101 *Definitions* and MI 11-102 have the same meaning in this decision unless they are defined in this decision.

Representations

This decision is based on the following facts represented by the Filers:

The Manager

- 1. The Manager is a corporation governed by the laws of the Province of Ontario with its head office in Mississauga, Ontario.
- 2. The Manager is registered as an investment fund manager in the Provinces of Newfoundland and Labrador, Ontario and Quebec.
- 3. The Manager is the manager and promoter of the Funds.

The Funds

- 4. Each of the Funds is an open-ended mutual fund trust established under the laws of the Province of Ontario under a master declaration of trust.
- 5. Units of the Funds are currently qualified for sale under a simplified prospectus, annual information form and fund facts documents, each dated September 30, 2016 (collectively, the **Offering Documents**).
- 6. Each of the Funds is a reporting issuer under the applicable securities legislation of the Jurisdiction and the Other Jurisdictions (the **Legislation**).
- 7. Each of the Funds is subject to NI 81-102.
- 8. Neither the Manager nor the Funds is in default under the Legislation.
- 9. Other than circumstances in which the securities regulatory authority of a province or territory of Canada has expressly exempted a Fund therefrom, each of the Funds follows the standard investment restrictions and practices established under the Legislation.

- 10. The net asset value (**NAV**) for each series of the Funds, as applicable, is calculated on a daily basis in accordance with the Funds' valuation policy and as described in the Offering Documents.

The Merger

- 11. The Manager intends to reorganize the Funds by merging the Terminating Fund into the Continuing Fund.
- 12. Regulatory approval of the Merger is required because the Merger does not satisfy all of the criteria for pre-approved reorganizations and transfers as set out in section 5.6 of NI 81-102, namely because: (i) a reasonable person may not consider the fundamental investment objectives of the Terminating Fund and that of the Continuing Fund to be "substantially similar"; and (ii) a reasonable person may not consider the fee structure of the Terminating Fund and that of the Continuing Fund to be "substantially similar".
- 13. Except for the reasons noted in paragraph 12 above, the Merger will otherwise comply with all of the other criteria for pre-approved reorganizations and transfers set out in section 5.6 of NI 81-102.
- 14. The Manager is of the view that the Merger will not be a "material change" for the Continuing Fund.
- 15. No sales charges will be payable in connection with the acquisition by the Continuing Fund of the investment portfolio of the Terminating Fund.
- 16. Unitholders of the Terminating Fund will continue to have the right to redeem or transfer their units of the Terminating Fund at any time up to the close of business on the business day prior to the effective date of the Merger.
- 17. A press release and material change report in respect of the proposed Merger were filed on SEDAR on February 6, 2017. Units of the Terminating Fund ceased to be available for sale on that date.
- 18. The Manager has determined that it believes that it would be most efficient to implement the Merger on a tax-deferred basis as a "qualifying exchange", within the meaning of section 132.2 of the *Income Tax Act* (Canada) (the **Tax Act**), as a tax-deferred transaction. Unitholders of the Terminating Fund will exchange on a tax-deferred rollover basis their units of the Terminating Fund for units of the Continuing Fund. The Terminating Fund will not realize any net capital gains as a result of the Merger.
- 19. A notice of meeting, management information circular (the **Circular**) and a proxy in connection with the Merger will be mailed to unitholders of the

- Terminating Fund on or about February 27, 2017 and will be subsequently filed on SEDAR.
20. The most recently-filed fund facts documents of the Continuing Fund will also be included in the meeting materials sent to unitholders of the Terminating Fund.
21. The Circular describes how unitholders in the Terminating Fund may obtain, at no cost, a copy of the Offering Documents of the Continuing Fund and its most recent interim and annual financial statements and management reports of fund performance.
22. The Circular provides unitholders of the Terminating Fund with information about the differences between the Terminating Fund and Continuing Fund, the management fees of the Continuing Fund and the tax consequences of the Merger. Accordingly, unitholders of the Terminating Fund will have an opportunity to consider this information prior to voting on the Merger.
23. Unitholders of the Terminating Fund will be asked to approve the Merger at a special meeting scheduled to be held on or about March 24, 2017. If the meeting is adjourned, the adjourned meeting will be held on or about March 27, 2017.
24. The Filer will pay all costs and reasonable expenses relating to the solicitation of proxies and holding the unitholder meeting in connection with the Merger as well as the costs of implementing the Merger, including any brokerage fees.
25. If the requisite approvals are obtained, it is anticipated that the Merger will be implemented on or about March 30, 2017. If unitholder approval is not obtained, the Terminating Fund will be terminated on or about May 1, 2017.
26. The investment portfolio and the other assets of the Terminating Fund to be acquired by the Continuing Fund in order to effect the Merger will be acceptable on or prior to the effective date of the Merger to the portfolio manager of the Continuing Fund and will be consistent with the investment objective of the Continuing Fund.
27. Following the Merger, the Continuing Fund will continue as a publicly offered open-end mutual fund and the Terminating Fund will be wound up as soon as reasonably practicable.
28. Following the Merger, units of the Continuing Fund received by unitholders in the Terminating Fund as a result of the Merger will have the same sales charge option and, for units purchased under the deferred sales charge option or the volume sales charge option, remaining deferred sales charge schedule as their units in the Terminating Fund.
29. The Merger is conditional on the approval of (i) the unitholders of the Terminating Fund; and (ii) the Principal Regulator. If the necessary approvals are obtained, the following steps will be carried out to effect the Merger:
- (a) Unitholders of the Terminating Fund will be asked at a Special Meeting of unitholders to approve the Merger and such other matters as are set forth in the applicable resolutions in respect of the Merger.
 - (b) Prior to effecting the Merger, the Terminating Fund will liquidate portfolio securities that do not meet the investment objective and investment strategies of the Continuing Fund.
 - (c) The Terminating Fund will determine the amount of income and net taxable gains (if any) it has realized during the taxation year including the date of the Merger. If applicable, the terminating Fund will distribute sufficient net income and net capital gains to Unitholders to ensure that the Terminating Fund will not be subject to tax under Part I of the Tax Act.
 - (d) The Continuing Fund will acquire the portfolio securities and other assets of the Terminating Fund in exchange for units of the Continuing Fund.
 - (e) The Continuing Fund will not assume any liabilities of the Terminating Fund and the Terminating Fund will retain sufficient cash to satisfy its estimated liabilities, if any, as of the date of the Merger.
 - (f) The units of the Continuing Fund received by the Terminating Fund will have an aggregate net asset value equal to the value of the portfolio securities and other assets that the Continuing Fund is acquiring from the Terminating Fund, and the units of the Continuing Fund will be issued at the applicable series net asset value per unit as of the close of business of the effective date of the Merger.
 - (g) Immediately thereafter, units of the Continuing Fund will be distributed to unitholders of the Terminating Fund in exchange for their units in the Terminating Fund on a dollar for dollar and series-by-series basis, as applicable. The units of the Continuing Fund received by unitholders in the Terminating Fund will have the same

sales charge option and, for unit purchases under the deferred sales charge option or the volume sales charge option, remaining deferred sales charge schedule as their units in the Terminating Fund.

- (h) Following the Merger, and in any case within 60 days thereof, the Terminating Fund will be wound up.

30. As required by National Instrument 81-107 *Independent Review Committee for Investment Funds (NI 81-107)*, the Filer presented the terms of the Merger to the Funds' Independent Review Committee (**IRC**) for its review and recommendation. The IRC reviewed the potential conflict of interest matters related to the proposed Merger and has determined that the proposed Merger, if implemented, would achieve a fair and reasonable result for unitholders of the Funds.

31. The Terminating Fund and the Continuing Fund are mutual fund trusts under the Tax Act and, accordingly, units of both Funds are "qualified investments" under the Tax Act for registered retirement savings plans, registered retirement income funds, deferred profit sharing plans, registered education savings plans, registered disability savings plans and tax free savings accounts.

32. The Manager believes that the Merger will be beneficial to unitholders of the Funds for the following reasons:

- (a) following the Merger, unitholders of the Terminating Fund will gain investment exposure to a diversified portfolio of holdings in emerging market countries throughout the world;
- (b) unitholders of the Terminating Fund will not be subject to any increased management fees as the management fees that are charged to the Series A, Series F Series D, Series N and Institutional Series units of the Continuing Fund are the same as, or less than, the management fees that are currently charged to the Series A, Series F, Series D, Series N and Institutional Series units of the Terminating Fund;
- (c) unitholders of the Terminating Fund and the Continuing Fund will enjoy increased economies of scale as part of a larger combined Continuing Fund; and
- (d) the Continuing Fund, because of its greater size, may benefit from its larger profile in the marketplace.

Decision

The Principal Regulator is satisfied that the decision meets the test set out in the Legislation for the Principal Regulator to make the decision.

The decision of the Principal Regulator under the Legislation is that the Approval Sought is granted.

"Darren McKall"
Manager
Investment Funds & Structured Products Branch
Ontario Securities Commission

2.1.3 Total Energy Services Inc.

Headnote

Multilateral Instrument 11-102 Passport System and National Policy 11-203 Process for Exemptive Relief Applications in Multiple Jurisdictions – Takeover Bids – Identical consideration – Offeror requires relief from the requirement in subsection 2.23(1) of National Instrument 62-104 Take-Over-Bids and Issuer Bids that all holders of the same class of securities must be offered identical consideration – Under the bid, Canadian resident shareholders will receive shares; Non-resident shareholders will receive substantially the same value as Canadian shareholders in the form of cash paid to the non-resident shareholders based on the proceeds from the sale of their shares.

Applicable Legislative Provisions

Multilateral Instrument 62-104 Take-Over Bids and Issuer Bids, s. 2.23(1).

Citation: Re Total Energy Services Inc., 2017 ABASC 47

March 21, 2017

**IN THE MATTER OF
THE SECURITIES LEGISLATION OF
ALBERTA AND ONTARIO
(the Jurisdictions)**

AND

**IN THE MATTER OF
THE PROCESS FOR EXEMPTIVE RELIEF
APPLICATIONS IN MULTIPLE JURISDICTIONS**

AND

**IN THE MATTER OF
TOTAL ENERGY SERVICES INC.
(the Filer)**

DECISION

Background

The securities regulatory authority or regulator in each of the Jurisdictions (**Decision Maker**) has received an application from the Filer for a decision under the securities legislation of the Jurisdictions (the **Legislation**) exempting the Filer from subsection 2.23(1) of National Instrument 62-104 *Take-Over Bids and Issuer Bids* (the **Identical Consideration Requirement**), which requires the Filer to offer identical consideration to all of the holders of the same class of securities that are subject to a take-over bid in connection with the Filer's offer to acquire all of the outstanding common shares (**Savanna Shares**) of Savanna Energy Services Corp. (**Savanna**) (the **Exemption Sought**).

Under the Process for Exemptive Relief Applications in Multiple Jurisdictions (for a dual application):

- (a) the Alberta Securities Commission is the principal regulator for this application;
- (b) the Filer has provided notice that subsection 4.7(1) of Multilateral Instrument 11-102 *Passport System (MI 11-102)* is intended to be relied upon in each of British Columbia, Saskatchewan, Manitoba, Québec, Nova Scotia, New Brunswick, Newfoundland and Labrador, Prince Edward Island, Yukon, Northwest Territories and Nunavut; and
- (c) this decision is the decision of the principal regulator and evidences the decision of the securities regulatory authority or regulator in Ontario.

Interpretation

Terms defined in National Instrument 14-101 *Definitions* or MI 11-102 have the same meaning if used in this decision, unless otherwise defined herein.

Representations

This decision is based on the following facts represented by the Filer:

1. The Filer is a corporation existing under the *Business Corporations Act* (Alberta) (the **ABCA**). The head office of the Filer is located in Calgary, Alberta.
2. The Filer is a reporting issuer in Alberta, British Columbia, Saskatchewan, Manitoba, Ontario, Québec, New Brunswick, Prince Edward Island and Newfoundland and Labrador. To its knowledge, the Filer is not in default of securities legislation in any jurisdiction of Canada.
3. The authorized capital of the Filer consists of an unlimited number of common shares (the **Filer Shares**) of which, as at February 16, 2017, there were 30,920,000 issued and outstanding.
4. The Filer Shares are listed on the Toronto Stock Exchange (the **TSX**).
5. On December 9, 2016, the Filer commenced an offer (the **Offer**) to purchase, on and subject to certain terms and conditions, all of the issued and outstanding common shares (the **Savanna Shares**) of Savanna Energy Services Corp. (**Savanna**), including any Savanna Shares that may become issued and outstanding (including upon the exercise, exchange or conversion of any convertible securities) before 11:59 p.m. (Pacific Time) on the expiry date of the Offer (currently March 24, 2017) and filed and mailed the Offer

- and related take-over bid circular (the **Offer and Circular**) to the registered securityholders of Savanna.
6. Savanna is a corporation existing under the ABCA. Savanna's head office is located in Calgary, Alberta.
 7. Savanna is a reporting issuer in the provinces of Alberta, British Columbia, Saskatchewan, Manitoba, Ontario, Québec, New Brunswick, Nova Scotia, Prince Edward Island and Newfoundland and Labrador. To the knowledge of the Filer, Savanna is not in default of securities legislation in any jurisdiction of Canada.
 8. To the knowledge of the Filer, the authorized capital of Savanna consists of an unlimited number of Savanna Shares, an unlimited number of first preferred shares, issuable in series and an unlimited number of second preferred shares, issuable in series. As at February 16, 2017, based upon public filings, there were 118,224,189 Savanna Shares issued and outstanding and no preferred shares outstanding.
 9. To the knowledge of the Filer, as at February 16, 2017, Savanna had outstanding 4,232,695 options to acquire Savanna Shares, 876,655 performance common share unit awards and 7,000,000 common share purchase warrants.
 10. The Savanna Shares are listed on the TSX.
 11. Under the terms of the Offer, as amended and varied by the notice of change and notice of variation filed and mailed by the Filer to the registered holders of Savanna on March 1, 2017, and subject to any further variation or the withdrawal of the Offer, the Filer will distribute 0.1300 of a Filer Share (**Share Consideration**) and \$0.20 cash (**Cash Consideration**) for each Savanna Share taken up under the Offer.
 12. The Offer is not being made to any person in any jurisdiction in which such offer or solicitation is unlawful. The Offer is not being made or directed to, nor will deposits of Savanna Shares be accepted from or on behalf of, holders of Savanna Shares in any jurisdiction in which the making of or acceptance thereof would not be in compliance with the laws of such jurisdiction. To date, no such jurisdictions have been identified.
 13. The Filer has filed a registration statement on Form F-80 (the **Registration**) with the SEC to register the Offer under the 1933 Act.
 14. The Registration does not register the Offer, or provide an exemption from the securities laws of any state or territory of the United States of America (**US**). As a result, the securities laws of a number of US states could prohibit the distribution of the Filer Shares to holders of the Savanna Shares in the US (**US Shareholders**) without registration under US state securities laws of the Filer Shares to be issued to US Shareholders resident in such states unless such holders are otherwise eligible to be issued Filer Shares in transactions exempt from registration under the securities laws of such states.
 15. Registration, under applicable US state securities laws or the securities laws of any other country, of the Filer Shares deliverable to certain holders of Savanna Shares in the US (who are not eligible to be issued Filer Shares in transactions exempt from registration under the securities laws of a number of US states) and elsewhere (the **Ineligible Shareholders**) under the Offer would be costly and burdensome to the Filer.
 16. The Filer will deliver Filer Shares in any jurisdiction in (a) each jurisdiction of Canada; and (b) each foreign jurisdiction in which it is satisfied, in its sole discretion, acting reasonably, that the Filer Shares may be lawfully delivered in reliance upon available exemptions from the registration or similar requirements of the securities laws of such jurisdiction, on a basis reasonably determined to be acceptable to it.
 17. The Filer proposes, with respect to each Ineligible Shareholder that would otherwise receive Filer Shares in exchange for Savanna Shares, to have such Filer Shares issued on behalf of the Ineligible Shareholder to a selling agent. The selling agent will, as agent for Ineligible Shareholders, as expeditiously as is commercially reasonable following the date on which the Filer takes up and pays for the Savanna Shares tendered by the Ineligible Shareholders, sell such Filer Shares on behalf of each such Ineligible Shareholder, through the facilities of the TSX and have the net proceeds of such sale, less any applicable brokerage commissions, other expenses and withholding taxes, delivered to each such Ineligible Shareholder (the **Vendor Placement**). Each Ineligible Shareholder for whom Filer Shares are sold by the selling agent will receive an amount equal to such holder's pro rata interest in the net proceeds of sales of all Filer Shares so sold by the selling agent. The Vendor Placement will be conducted in a manner intended to maximize the consideration to be received from the sale of Filer Shares on behalf of the Ineligible Shareholders and minimize any adverse impact of the sale on the market for the Filer Shares.
 18. The Offer and Circular discloses the Filer's intention with respect to the Vendor Placement and the procedure to be followed with respect to Ineligible Shareholders that deposit their Savanna Shares under the Offer.

19. The Offer to Ineligible Shareholders and the sale of Filer Shares for the benefit of Ineligible Shareholders under the Vendor Placement described in the preceding paragraphs will not constitute a violation of any US federal securities laws or any applicable laws in a state or territory of the US.
20. To the knowledge of the Filer, based on the jurisdiction of residence of registered shareholders of Savanna as disclosed in a registered list of shareholders delivered to the Filer by Savanna, as of February 16, 2017, there are 26,086 Savanna Shares (representing approximately 0.02% of the issued and outstanding Savanna Shares) held by registered shareholders of Savanna who are Ineligible Shareholders.
21. To the knowledge of the Filer, and based on the jurisdiction of residence of beneficial shareholders of Savanna as disclosed in a geographic analysis report delivered to the Filer by Savanna, the Filer's own inquiries and the inquiries of its information agent under the Offer and GMP Securities Inc., the Filer's dealer manager in connection with the Offer, as of February 16, 2017 there are estimated to be not more than 6,688,223 Savanna Shares (representing not more than approximately 5.66% of the issued and outstanding Savanna Shares) beneficially held by shareholders of Savanna who are Ineligible Shareholders.
22. Based on the foregoing, to the knowledge of the Filer, it is estimated that not more than 6,714,309 Savanna Shares (representing not more than approximately 5.68% of the issued and outstanding Savanna Shares) are held, in aggregate, by registered and beneficial shareholders of Savanna that are Ineligible Shareholders.
23. There is currently a "liquid market" (as such term is defined in Section 1.2 of Multilateral Instrument 61-101 *Protection of Minority Security Holders in Special Transactions*) for the Filer Shares and the Filer's financial advisor has advised that, in its view, there will continue to be a "liquid market" for the Filer Shares following completion of the Offer, any related second-step transaction and the sale of the Filer Shares on behalf of Ineligible Shareholders.
24. Based on the exchange ratio of the Offer and the number of Savanna Shares outstanding that, to the knowledge of the Filer, are held by Ineligible Shareholders and assuming the Filer acquires 100% of the Savanna Shares (on a non-diluted basis), the Filer Shares to be sold would represent not more than approximately 1.87% of the outstanding Filer Shares immediately following completion of the Offer.
25. If the Filer increases the consideration offered pursuant to the Offer to holders of Savanna

Shares resident in Canada, the increase in consideration will also be offered to Ineligible Shareholders at the same time and on the same basis.

26. Except to the extent that relief from the Identical Consideration Requirement is granted, the Offer will comply with the requirements under the Legislation.

Decision

Each of the Decision Makers is satisfied that the decision meets the test set out in the Legislation for the Decision Maker to make the decision.

The decision of the Decision Makers under the Legislation is that the Exemption Sought is granted provided that each Ineligible Shareholder who would otherwise receive a combination of Filer Shares and cash pursuant to the Offer instead receives the Cash Consideration together with, in lieu of the Share Consideration, the net cash proceeds from the sale of the Filer Shares in accordance with the procedures set out in paragraphs 17 and 18 above.

"Tom Graham, CA"
Director, Corporate Finance
Alberta Securities Commission

2.1.4 Mackenzie Financial Corporation and IPC Investment Corporation

Headnote

National Policy 11-203 – Process for Exemptive Relief Applications in Multiple Jurisdictions – Relief from the requirement in s. 3.2.01 of NI 81-101 to deliver a fund facts document to investors who purchase mutual fund securities of a high net worth series pursuant to switches from a regular retail series upon meeting certain eligibility requirements based on the amount of the investor's investments – High net worth series securities are identical to regular retail series securities except that the high net worth series have lower combined management and administration fees – Investment fund manager initiating switches on behalf of investors when their investments satisfy eligibility requirements of high net worth series – Switches between series of a fund triggering a distribution of securities attracting the requirement to deliver a fund facts - Relief granted from requirement to deliver a fund facts to investors for purchases of high net worth series securities made pursuant to such switches subject to compliance with certain notification and prospectus/fund facts disclosure requirements – National Instrument 81-101 Mutual Fund Prospectus Disclosure.

Applicable Legislative Provisions

National Instrument 81-101 Mutual Fund Prospectus Disclosure, ss. 3.2.01, 6.1.

March 14, 2017

IN THE MATTER OF
THE SECURITIES LEGISLATION OF
ONTARIO
(the Jurisdiction)

AND

IN THE MATTER OF
THE PROCESS FOR EXEMPTIVE RELIEF APPLICATIONS
IN MULTIPLE JURISDICTIONS

AND

IN THE MATTER OF
MACKENZIE FINANCIAL CORPORATION
(the Filer)

AND

IPC INVESTMENT CORPORATION
(the Representative Dealer)

DECISION

Background

The principal regulator in the Jurisdiction has received an application (the **Application**) from the Filer for a decision under the securities legislation of the Jurisdiction of the principal regulator (the **Legislation**) for an exemption from the requirement in the Legislation for a dealer to deliver or send the most recently filed fund facts document (**Fund Facts**) in the manner as required under the Legislation (the **Pre-sale Fund Facts Delivery Requirement**) in respect of the purchases of High Net Worth Series (as defined below) securities of the Funds (as defined below) that are made pursuant to Lower Fee Switches (as defined below) (the **Exemption Sought**).

Under the Process for Exemptive Relief Applications in Multiple Jurisdictions (for a passport application):

- (a) the Ontario Securities Commission is the principal regulator for this application; and
- (b) the Filer has provided notice that section 4.7(1) of Multilateral Instrument 11-102 *Passport System* (**MI 11-102**) is intended to be relied upon in British Columbia, Alberta, Saskatchewan, Manitoba, Québec, New Brunswick, Nova Scotia, Prince Edward Island, Newfoundland and Labrador, the Northwest Territories, Nunavut and Yukon (the **Other Jurisdictions**, together with the Jurisdiction, the **Jurisdictions**).

Interpretation

Terms defined in NI 81-102, National Instrument 14-101 *Definitions*, and MI 11-102 have the same meaning if used in this decision, unless otherwise defined.

Representations

This decision is based on the following facts represented by the Filer:

The Filer

1. The Filer is a corporation amalgamated under the laws of Ontario with its head office in Toronto, Ontario.
2. The Filer is registered as an investment fund manager, portfolio manager, exempt market dealer and commodity trading manager in Ontario. The Filer is also registered as a portfolio manager and exempt market dealer in the Other Jurisdictions and as an investment fund manager in Newfoundland and Labrador and Québec.
3. The Filer is the manager of the mutual funds (the **Existing Funds**), each of which is subject to the requirements of National Instrument 81-102 *Investment Funds (NI 81-102)*. The Filer may in the future become the manager of additional funds that are subject to the requirements of NI 81-102 (the **Future Funds**, and together with the Existing Funds, the **Funds** and, individually a **Fund**).
4. The head office of the Filer is located in Toronto, Ontario.
5. The head office of the Representative Dealer is located in Mississauga, Ontario.
6. The Filer is not in default of the securities legislation in any of the Jurisdictions.
7. The Representative Dealer is registered as a mutual fund dealer in the Jurisdictions and registered as an exempt market dealer in Alberta, British Columbia, New Brunswick, Newfoundland and Labrador, Ontario and Saskatchewan.

The Funds

8. Each Fund is, or will be, an open-end mutual fund trust created under the laws of the Province of Ontario or an open-end mutual fund that is a class of shares of a mutual fund corporation.
9. Each Fund is, or will be, a reporting issuer under the laws of the Jurisdictions. The securities of the Funds have, are, or will be, qualified for distribution pursuant to a simplified prospectus, Fund Facts and annual information form that have been, or will be, prepared and filed in accordance with National Instrument 81-101 *Mutual Fund Prospectus Disclosure (NI 81-101)*.
10. The units and shares of the Funds are referred to herein, collectively, as **Securities**. The majority of the Securities of the Funds are currently offered under simplified prospectus, Fund Facts and annual information form dated September 29, 2016. Certain Securities of the Funds, as more fully outlined in paragraph 12 below, are not offered under simplified prospectus.
11. The Funds currently offer up to 39 series of Securities – Series A, AR, B, C, D, DA, F, F5, F6, F8, FB, FB5, G, GP, I, O, O6, PW, PWB, PWF, PWF5, PWF8, PWT5, PWT8, PWX, PWX5, PWX8, S6, S8, SC, SP, T5, T6, T8, U, U5, W, B-Series, and Investor Series securities. The Filer may offer additional series in the future.
12. Certain Funds have series that were previously offered under simplified prospectus and are currently closed to new investors or were created for implementing mergers but were never offered to the public by way of simplified prospectus. These series include A, B, C, DZ, E, E5, E6, E8, J, J6, J8 and Advisor Series.
13. Certain Funds intend to offer Series PWB, PWFB, PWFB5, PWT5, PWT6, PWF5 and PWF6, which will be qualified for distribution by way of an amendment to the simplified prospectus to be filed on or around March 10, 2017 (the **Prospectus**).
14. Series PW, PWB, PWF, PWF5, PWF6, PWFB, PWFB5, PWF8, PWT5, PWT6, PWT8 and any future applicable high net worth series securities (the **High Net Worth Series**) of the Funds generally have or will have lower combined management and administration fees than Series A, B, C, DZ, E, E6, E8, F, F5, F6, F8, FB, FB5, G, I, J, J6, J8, SC, S6, S8, T5, T6, T8, U, U5, Advisor Series and Investor Series and any future applicable retail series securities (the

Retail Series) and are or will be only available to investors who have invested at least \$100,000 in one series of a Fund or \$250,000 across a group of eligible investments (**Eligibility Criteria**).

15. The Existing Funds are not in default of securities legislation in any of the Jurisdictions.

Automatic Switches

16. The Filer is starting a program effective April 13, 2017 (the **Implementation Date**) whereby investors holding Retail Series securities will automatically be switched into the corresponding High Net Worth Series securities if they meet the Eligibility Criteria and would benefit from lower fees, subject to certain exceptions outlined in paragraph 17 below. The Filer will automatically switch these Retail Series holders into the High Net Worth Series (the **Lower Fee Switches**) without the dealer or investor having to initiate the trade. If an investor holding High Net Worth Series securities ceases to meet the Eligibility Criteria, the Filer may switch the High Net Worth Series back into the applicable Retail Series securities without the dealer or investor initiating the trade (the **Higher Fee Switches**, and together with the Lower Fee Switches, the **Automatic Switches**).

17. The following Securities will be excluded from the Automatic Switches:

(a) Securities held in the Filer's Portfolio Architecture Service program (the **PAS Program**). The majority of securities in this program are held in High Net Worth Series or Series O. Series O securities have a minimum investment of \$500,000; the fees are negotiable and payable directly to the Filer outside of the Fund; and, the series is only available for purchase if the investor has entered into a Series O account agreement with the Filer. While investors in the PAS Program hold High Net Worth Series securities and/or Series O securities, some investors may also hold a portion of their assets in Retail Series. This would generally be due to the investor holding some securities that are subject to a redemption fee schedule that has not yet expired. Investors holding Retail Series securities in this program will be manually monitored by the Filer and, when they meet the Eligibility Criteria and their redemption fee schedule has expired, they will be manually moved to either Series O (if they have entered into a Series O account agreement) or High Net Worth Series. This manual switching will occur in the same frequency as the Automatic Switches.

(b) Deferred sales charge securities purchased between 1987 and 1994 where the Filer issued limited partnership units to the public in order to finance the sales commissions paid to the dealers. These partnerships were consolidated into one partnership called Mackenzie Master Limited Partnership (**MMLP**) which trades on the Toronto Stock Exchange under the symbol "MKZ.UN".

When these partnership units were issued, a subsidiary of the Filer entered into a contractual agreement with MMLP whereby the limited partners would receive payments from the Filer that consisted of: (i) any deferred sales commissions earned from clients upon the redemption of the mutual fund units where MMLP had financed the sales commission (the **MMLP Linked Mutual Fund Units**); and (ii) an annual distribution payment based on the total value of the outstanding MMLP Linked Mutual Fund Units. Pursuant to this contractual agreement, the Filer cannot take any action that would decrease the value of the units of MMLP. The Automatic Switches would reduce the value of the MMLP Linked Mutual Fund Units and would therefore violate the contractual agreement between the subsidiary of the Filer and MMLP.

(c) Series C of Mackenzie Canadian Money Market Fund, because this series offers chequing privileges and the Filer does not offer chequing privileges on the High Net Worth Series. The ability to write cheques directly from their investment is a program many investors benefit from and the Filer does not want to unilaterally take this benefit away from those investors by automatically switching them into a High Net Worth Series.

(d) Securities held in a Mackenzie Registered Disability Savings Plan (**RDSPs**). The Filer uses a third-party system to support the RDSPs due to the complexities of these plans. Currently the Filer has determined that there is insufficient demand to warrant the offering of RDSPs in a high net worth series security and therefore the Filer cannot automatically move these assets to a High Net Worth Series while they are part of the RDSP program.

18. The Lower Fee Switches will generally take place when the investor purchases additional securities or when positive market movement moves the investor into High Net Worth Series eligibility.

19. The Higher Fee Switches may occur because of redemptions that decrease the amount of total investments with the Filer for purposes of calculating the investor's eligibility for High Net Worth Series securities. However, in no circumstances will market value declines lead to Higher Fee Switches.

20. Once an account has qualified for the High Net Worth Series, the account will continue to enjoy the benefit of lower fees associated with the applicable High Net Worth Series, even if fund performance reduces the account value below the Eligibility Criteria.
21. Investors may access High Net Worth Series securities of a Fund by (a) initially investing in High Net Worth Series securities if they meet the Eligibility Criteria or (b) initially investing in Retail Series securities and then, upon meeting the Eligibility Criteria, having those Retail Series securities be switched into High Net Worth Series securities by way of a Lower Fee Switch.
22. Investors may access Retail Series securities of a Fund by (a) initially investing in Retail Series securities or (b) initially investing in High Net Worth Series securities and then, upon no longer meeting the Eligibility Criteria for the High Net Worth Series securities, having those High Net Worth Series securities be switched into Retail Series securities by way of a Higher Fee Switch.
23. For the majority of investors, the trailing commissions for the High Net Worth Series and Retail Series securities are or will be identical. For a small number of investors (for example investors that are invested in legacy series through certain acquisitions or investors that hold series that were created for the purposes of effecting a fund merger) the trailing commission for the High Net Worth Series will be higher than the trailing commission on the Retail Series. While the trail may increase in certain circumstances, the total cost to the investors will always be lower as a result of the Lower Fee Switch.
24. Further to each Lower Fee Switch, an investor's account would continue to hold Securities in the same Fund(s) as before the Automatic Switch, with the only material differences to the investor being that (i) the combined management and administration fees charged for the High Net Worth Series securities would be lower than those charged for Retail Series securities and (ii) as more fully described in paragraph 23 above, for a small number of investors the trailing commission would be higher for the High Net Worth Series securities than the Retail Series securities.
25. Further to each Higher Fee Switch, an investor's account would continue to hold Securities in the same Fund(s) as before the Automatic Switch, with the only material differences to the investor being that the combined management and administration fees charged for the Retail Series securities would be higher than those charged for High Net Worth Series securities.
26. Although the maximum sales charge that may be charged upon an initial investment in Retail Series securities is higher than the maximum sales charge that may be charged upon an initial investment in High Net Worth Series securities, there are no sales charges, switch fees or other fees payable by the investor upon an Automatic Switch.
27. Implementation of the Automatic Switches will have no adverse tax consequences on investors under current Canadian tax legislation.
28. Each Automatic Switch will entail (a) a redemption of the Retail Series security, immediately followed by a purchase of the corresponding High Net Worth Series security, or (b) a redemption of the High Net Worth Series security, immediately followed by a purchase of the corresponding Retail Series security. Each purchase of Securities done as part of an Automatic Switch will be a "distribution" under the *Securities Act* (Ontario), which triggers the Pre-Sale Fund Facts Delivery Requirement.
29. Pursuant to the Pre-Sale Fund Facts Delivery Requirement, a dealer is required to deliver the most recently filed Fund Facts of a series of a fund to an investor before the dealer accepts an instruction from the investor for the purchase of securities of that series of the fund.
30. While the Filer will initiate each trade done as part of an Automatic Switch, the Filer does not propose to deliver the Fund Facts to investors in connection with the purchase of Securities made pursuant to a Lower Fee Switch for the following reasons:
 - (a) at no time will an account that qualifies for High Net Worth Series securities pay combined management and administration fees at a rate higher than the rate of the combined management and administration fees of the Retail Series securities for which it initially subscribed; and
 - (b) since Retail Series securityholders would have received a simplified prospectus or Fund Facts disclosing the higher level of fees which applied to the Retail Series for which they initially subscribed, the investor would derive little benefit from receiving a further Fund Facts document for each Lower Fee Switch.

Decisions, Orders and Rulings

31. The dealer will be required to deliver the Retail Series Fund Facts to investors in connection with the purchase of Retail Series securities made pursuant to a Higher Fee Switch, as required by the Pre-Sale Fund Facts Delivery Requirement.
32. The Filer will deliver or will arrange for the delivery of trade confirmations to investors in connection with each trade done further to an Automatic Switch. Furthermore, details of the changes in series of securities held will be reflected in the account statements sent to investors for the quarter in which the change occurred.
33. The Filer will disclose (a) the eligibility requirements and the management and administration fees applicable to the Retail Series and the High Net Worth Series in the simplified prospectus of the Funds, and (b) a summary of the eligibility requirements, the management and administration fees or the management expense ratios, as applicable, and the fee discounts applicable to the High Net Worth Series in the Retail Series Fund Facts of the Funds.
34. The Filer will communicate extensively with dealers about the Lower Fee Switches so that dealers will be equipped to appropriately notify existing Retail Series investors of the changes applying to their Retail Series investments and appropriately advise new Retail Series investors about the Lower Fee Switches.
35. In the absence of the Exemption Sought, the Filer may not carry out the Automatic Switches without compliance with the Pre-Sale Fund Facts Delivery Requirement.

Decision

The principal regulator is satisfied that the decision meets the test set out in the Legislation for the principal regulator to make the decision.

The decision of the principal regulator under the Legislation is that the Exemption Sought is granted provided that:

1. For investors invested in Retail Series prior to the Implementation Date of the Automatic Switches, the Filer will liaise with dealers to devise a notification plan for such investors regarding the Automatic Switches that addresses the following:
 - (a) that their investment may be switched to a High Net Worth Series with lower fees upon meeting the applicable Eligibility Criteria;
 - (b) that other than a difference in fees, there may be no other material difference between the Retail Series and the High Net Worth Series;
 - (c) that if they cease to meet the Eligibility Criteria for High Net Worth Series, their investment may be switched into a series with higher management and administration fees which will not exceed Retail Series fees; and
 - (d) that they will not receive the Fund Facts when they purchase Securities further to a Lower Fee Switch, but that
 - (i) they may request the most recently filed Fund Facts for the relevant series by calling a specified toll-free number or by sending a request via email to a specified address;
 - (ii) the most recently filed Fund Facts will be sent or delivered to them at no cost;
 - (iii) the most recently filed Fund Facts may be found either on the SEDAR website or on the Filer's website; and
 - (iv) they will not have the right to withdraw from an agreement of purchase and sale (a **Withdrawal Right**) in respect of a purchase of series securities made pursuant to a Lower Fee Switch, but they will have the right of action for damages or rescission in the event any Fund Facts or document incorporated by reference into a simplified prospectus for the relevant series contains a misrepresentation, whether or not they request the Fund Facts.
2. the Filer will incorporate disclosure in the Prospectus for the Retail Series and the High Net Worth Series that sets out the following:
 - (i) the eligibility requirements for both the Retail Series and the High Net Worth Series;
 - (ii) the fees applicable to investments in both the Retail Series and the High Net Worth Series; and

- (iii) in the event investors cease to meet the Eligibility Criteria of a specified High Net Worth Series, that their investment may be switched into a series with higher management and administration fees which will not exceed the applicable Retail Series fees.
3. each Fund Facts for the Retail Series will
- (i) disclose a summary of the eligibility requirements and the fee discounts applicable to the High Net Worth Series;
 - (ii) disclose that, if investors cease to meet the eligibility requirements of a specified High Net Worth Series, their investment may be switched into the corresponding Retail Series, with higher management and administration fees; and
 - (iii) contain a cross-reference to the more detailed disclosure in the simplified prospectus;
4. the Retail Series Fund Facts containing the disclosure described in paragraph 3 above is delivered to investors at the time of first purchase of Retail Series securities in accordance with the Pre-sale Fund Facts Delivery Requirement.
5. For Retail Series investors, the Filer sends these investors an annual reminder notice advising that they will not receive the Fund Facts when they purchase High Net Worth Series securities further to a Lower Fee Switch, but that
- (a) they may request the most recently filed Fund Facts for the relevant series by calling a specified toll-free number or by sending a request via email to a specified address;
 - (b) the most recently filed Fund Facts will be sent or delivered to them at no cost;
 - (c) the most recently filed Fund Facts may be found either on the SEDAR website or on the Filer's website; and
 - (d) they will not have a Withdrawal Right in respect of a purchase of series securities made pursuant to a Lower Fee Switch, but they will have a right of action for damages or rescission in the event any Fund Facts or document incorporated by reference into a simplified prospectus for the relevant series contains a misrepresentation, whether or not they request the Fund Facts.
6. For High Net Worth Series investors who cease to meet the Eligibility Criteria and who will be switched into the applicable Retail Series, the Fund Facts for the applicable Retail Series will be required to be delivered in accordance with the Pre-Sale Fund Facts Delivery Requirement.

“Darren McKall”
Manager
Investment Funds and Structured Products Branch
Ontario Securities Commission

2.1.5 Enbridge Income Fund et al.

Headnote

National Policy 11-203 Process for Exemptive Relief Applications in Multiple Jurisdictions – Exemption from the requirements in subparagraph 4.2(a)(ix) of National Instrument 44-101 and subsections 12.1(3) and (4) of Form 44-101F1 Short Form Prospectus to provide separate guarantor disclosure in a prospectus and on an ongoing basis. Issuer expects to file prospectuses for offerings of medium term notes guaranteed by certain other entities in structure (a holding trust, a limited partnership holding a number of subsidiaries and an operating subsidiary). Issuer to provide certain alternative disclosure in respect of the credit supporters. Relief subject to numerous conditions.

Applicable Legislative Provisions

NI 44-101 Short Form Prospectus Distributions, s. 8.1(1).

Citation: Re Enbridge Income Fund, 2017 ABASC 41

March 13, 2017

IN THE MATTER OF
THE SECURITIES LEGISLATION OF
ALBERTA AND ONTARIO
(the Jurisdictions)

AND

IN THE MATTER OF
THE PROCESS FOR EXEMPTIVE RELIEF APPLICATIONS
IN MULTIPLE JURISDICTIONS

AND

IN THE MATTER OF
ENBRIDGE INCOME FUND (the Fund),
ENBRIDGE COMMERCIAL TRUST (ECT),
ENBRIDGE INCOME PARTNERS LP (EIPLP) AND
ENBRIDGE INCOME PARTNERS HOLDINGS INC. (EIPHI)

DECISION

Background

The securities regulatory authority or regulator in each of the Jurisdictions (the **Decision Maker**) has received an application from the Fund for a decision under the securities legislation of the Jurisdictions (the **Legislation**) for relief with respect to each Prospectus (as defined herein) from the requirements in:

- (a) Subparagraph 4.2(a)(ix) of National Instrument 44-101 *Short Form Prospectus Distributions* that the Fund must provide an undertaking to file the periodic and timely disclosure of ECT, EIPLP and EIPHI (the **Continuous Disclosure Relief**);
- (b) Subsection 12.1(3) of Form 44-101F1 *Short Form Prospectus* (**Form 44-101F1**) that the Fund provide certain disclosure for ECT, EIPLP and EIPHI; and
- (c) Subsection 12.1(4) of Form 44-101F1 that the earnings coverage ratios of each of ECT and EIPHI under section 6.1 of Form 44-101F1 must be provided as if such credit supporter was the issuer of the MTNs (as defined herein) (together with (b) above, the **Prospectus Relief**, and collectively with the Continuous Disclosure Relief, the **Exemptions Sought**).

Under the Process for Exemptive Relief Applications in Multiple Jurisdictions (for a dual application):

- (a) the Alberta Securities Commission is the principal regulator for this application;

- (b) the Fund has provided notice that subsection 4.7(1) of Multilateral Instrument 11-102 *Passport System (MI 11-102)* is intended to be relied upon in each of British Columbia, Saskatchewan, Manitoba, Québec, New Brunswick, Nova Scotia, Prince Edward Island and Newfoundland and Labrador; and
- (c) this decision is the decision of the principal regulator and evidences the decision of the securities regulatory authority or regulator in Ontario.

Interpretation

Terms defined in National Instrument 14-101 *Definitions*, MI 11-102, National Instrument 13-101 *System for Electronic Document Analysis and Retrieval*, or National Instrument 51-102 *Continuous Disclosure Obligations (NI 51-102)* have the same meaning if used in this decision, unless otherwise defined herein.

Representations

This decision is based on the following facts represented by the Fund:

The Fund Group Entities

1. The Fund is an unincorporated open-ended trust established under the laws of the Province of Alberta pursuant to a trust indenture dated May 22, 2003, and last amended and restated on September 1, 2015. The Fund is a limited purpose trust and pursuant to the Fund trust indenture, its activities are generally restricted to acquiring, holding and dealing with interests in operating investments that are involved in energy infrastructure and related businesses (the **Fund Permitted Activities**). The Fund Permitted Activities also include issuing securities and engaging in financial and other activities ancillary or incidental to its purpose. The Fund is a reporting issuer in each province of Canada and is not in default of securities legislation in any jurisdiction of Canada. The head office of the Fund is located in Calgary, Alberta.
2. ECT is an unincorporated trust established under the laws of the Province of Alberta pursuant to a trust indenture dated December 20, 2002, and last amended and restated on March 1, 2017, for the purpose of holding and administering the Fund assets. Pursuant to the ECT trust indenture, ECT's activities are restricted to the direct or indirect conduct of the business of, or activities pertaining to, energy infrastructure including the ownership, operation and lease of assets and property, investments, and other rights or interests in companies or other entities involved in the energy infrastructure business and engaging in all activities ancillary or incidental to the foregoing (the **ECT Permitted Activities**). In connection with the ECT Permitted Activities, ECT can acquire, own, hold, lease, transfer, dispose of, invest in, operate and otherwise deal with assets, securities and other interests or properties of whatever nature or kind issued by persons involved, directly or indirectly, in the business or activities pertaining or related to energy infrastructure and may borrow monies and otherwise incur indebtedness, guarantee the debts and liabilities of any person, hold cash and short-term investments, issue securities, repurchase or redeem securities. ECT is a flow-through entity that does not legally own any material assets other than 99.99% of the Class A (voting) units of EIPLP (**EIPLP Class A Units**) and 49% of the EIPGP Common Shares (as defined herein).
3. The Fund holds 100% of the common (voting) units of ECT. Enbridge Inc. (**Enbridge**) holds 100% of the preferred (non-voting) units of ECT. The authorized capital of ECT also includes Class B (non-voting) units, none of which have been issued.
4. Enbridge Income Partners GP Inc. (**EIPGP**) is a corporation incorporated under the laws of Canada. EIPGP is the general partner of EIPLP and carries on no business, other than in its capacity as the general partner of EIPLP. EIPGP does not legally own any material assets other than 0.01% of the EIPLP Class A Units. EIPGP does not have any liabilities. EIPGP has not provided any guarantees or credit support other than in connection with previously issued medium term notes of the Fund and the Bank Guarantee (as defined herein).
5. Enbridge holds 51% of the common (voting) shares of EIPGP (**EIPGP Common Shares**).
6. EIPLP is a limited partnership established under the laws of the Province of Alberta pursuant to a limited partnership agreement dated December 20, 2002, as amended and restated on September 1, 2015. EIPLP, through its ownership of operating subsidiaries or investments, is involved in the transportation, storage and generation of energy.
7. Enbridge holds, directly and indirectly through its wholly-owned subsidiary IPL System Inc. (**IPL**), 100% of each of the Class C (voting) units of EIPLP, the Class D (voting) units of EIPLP, the Class E (non-voting) unit of EIPLP and the special interest rights (non-voting) of EIPLP.

Decisions, Orders and Rulings

8. EIPHI is a corporation incorporated under the laws of the Province of Saskatchewan. EIPHI indirectly owns a 50% interest in the Alliance Pipeline, which transports natural gas from Canada to the United States, a 50% interest in NRGreen, which owns waste heat facilities along the Alliance Pipeline, and interests in wind and solar facilities located in Alberta, Saskatchewan and Ontario.
9. EIPLP owns 100% of the common (voting) shares of EIPHI.
10. The Fund, ECT, EIPLP and the subsidiaries and investees of EIPLP (including EIPHI) are referred to herein as the **Fund Group**.

The MTN Guarantee

11. As of the date hereof, a total of \$2.075 billion principal amount of medium term notes (**MTNs**) of the Fund are issued and outstanding. The Fund intends to offer from time to time under short form base shelf prospectuses (each, a **Prospectus**) additional MTNs which will be subject to the MTN Guarantee (as defined herein). Such MTNs will be issued under a trust indenture between the Fund and Computershare Trust Company of Canada dated November 29, 2004, as amended. The MTNs will be direct unsecured obligations of the Fund ranking equally and *pari passu*, except as to redemption, purchase fund, amortization fund and/or sinking fund provisions, with all other unsecured and unsubordinated indebtedness of the Fund. The MTNs will rank equally with the Fund's obligations under its existing unsecured revolving credit facility. The obligations under that credit facility are guaranteed by ECT, EIPLP, EIPGP and EIPHI (the **Bank Guarantee**).
12. The Fund's payment obligations under the MTNs will be unconditionally and irrevocably guaranteed (the **MTN Guarantee**) by each of ECT, EIPLP and EIPHI (each, a **Guarantor**) and are direct and unsecured obligations of each Guarantor, ranking *pari passu* with all other present and future unsecured and unsubordinated indebtedness of each such Guarantor. The MTN Guarantee constitutes "full and unconditional credit support" as defined in National Instrument 41-101 *General Prospectus Requirements*.
13. The MTNs will be assigned a credit rating as they are issued. To the knowledge of the Fund, the MTN Guarantee provided by ECT is not material to such credit rating.

The Guarantors

14. The Fund, ECT, EIPLP and EIPHI are holding entities and none has any material operations.
15. EIPLP owns all of the underlying operating entities of the Fund Group through its subsidiaries and investees.
16. ECT does not have any debt obligations other than subordinated promissory notes issued to the Fund. ECT has not provided any guarantees or credit support other than in connection with the MTN Guarantee and the Bank Guarantee.

Recent Developments

17. On September 1, 2015, Enbridge and IPL transferred certain Canadian liquids pipeline assets and renewable energy assets to EIPLP (the **2015 Transaction**).
18. Prior to the 2015 Transaction, the financial results of ECT, EIPLP, EIPGP and EIPHI were consolidated in the financial statements of the Fund. As such, the Fund relied on the exemption in Item 13.4 of Form 44-101F1 in prior prospectuses under which it issued MTNs.
19. On completion of the 2015 Transaction, the Fund ceased to control ECT, EIPLP, EIPGP and EIPHI and as a result, changed its method of accounting for its investments in ECT, EIPLP, EIPGP and EIPHI from consolidation accounting to the equity method of accounting. The changes to the method of accounting have been applied prospectively since September 1, 2015.
20. EIPLP is the entity in the Fund Group into which all of the Fund Group operating subsidiaries and investments are consolidated. On October 28, 2015, pursuant to section 6.1 of National Policy 41-201 *Income Trusts and Other Indirect Offerings*, the Fund provided an undertaking (the **October 2015 Undertaking**) to the securities regulatory authority in each province of Canada. The October 2015 Undertaking included an undertaking that for any reporting periods where:
 - (i) the generally accepted accounting principles (**GAAP**) used by the Fund prohibit the consolidation of financial information of the Fund and its operating entity or entities; and
 - (ii) EIPLP and its subsidiaries, including significant business interests, represent significant assets of the Fund;

the Fund will prepare, file and provide to its unitholders separate audited annual consolidated financial statements and unaudited interim consolidated financial statements of EIPLP prepared in the same GAAP as the financial statements of the Fund, and related management's discussion and analysis (**MD&A**) (including information about any of EIPLP's significant business interests) (the **EIPLP Financial Information**). The EIPLP Financial Information consolidates the financial results of EIPHI, together with the other subsidiaries of EIPLP and is publicly available under the Fund's SEDAR profile. In addition, the October 2015 Undertaking included an undertaking that, in the circumstances where paragraph (i) above applies and any significant assets of the Fund are not held within EIPLP, the Fund will also prepare and file separate audited annual financial statements and interim financial statements in the same GAAP as the financial statements of the Fund, and related MD&A, for each entity that owns a significant business interest which represents a significant asset of the Fund.

Guarantor Disclosure

21. Item 13 of Form 44-101F1 provides certain exemptions from subsections 12.1(3) and 12.1(4) of Form 44-101F1. As a result of the 2015 Transaction, the Fund no longer meets the criteria for the exemption provided in section 13.4 of Form 44-101F1, as the Fund ceased to consolidate the financial results of the Guarantors into its financial statements.
22. The Fund proposes to include the following alternative disclosure in each Prospectus, either directly or through incorporation by reference (collectively, the **Alternative Prospectus Disclosure**):
 - (a) the current annual information form of the Fund containing full, true and plain disclosure of the material assets, businesses and operations of each Guarantor and the Fund Group as a whole;
 - (b) the EIPLP Financial Information;
 - (c) for the periods covered by the EIPLP Financial Information, EIPLP's earnings coverage ratios calculated in accordance with item 6 of Form 44-101F1 as if EIPLP were the issuer of the MTNs; and
 - (d) for the periods covered by the EIPLP Financial Information, "summary financial information" for EIPLP, as defined in paragraph 13.1(1)(g) of Form 44-101F1, as if EIPLP were the issuer, presented substantially in the format set out in subparagraph 13.4(e)(ii) of Form 44-101F1.
23. The Fund proposes to provide and file on SEDAR an undertaking (the **Undertaking**) addressed to the regulator in Alberta and Ontario that, during each period commencing on the date on which the Fund issues any MTNs under a Prospectus and ending on the date on which all MTNs issued under such Prospectus are no longer issued and outstanding, (i) if the Fund consolidates any of the Guarantors, it will present "summary financial information" in respect of its consolidated subsidiaries in each Prospectus, presented substantially in the format set out in subparagraph 13.4(e)(ii) of Form 44-101F1, and (ii) the Fund will file periodic and timely disclosure in respect of each of the Guarantors that are not consolidated by the Fund similar to the disclosure required to be provided in respect of credit supporters under section 12.1 (the **Section 12.1 Disclosure**) of Form 44-101F1, provided that:
 - (a) the Fund will not be required to file the Section 12.1 Disclosure in respect of EIPLP if all of the following are true:
 - (i) the current annual information form of the Fund contains full, true and plain disclosure of the material assets, businesses and operations of EIPLP and the Fund Group as a whole;
 - (ii) the Fund continues to satisfy its obligations pursuant to the October 2015 Undertaking;
 - (iii) if EIPLP and its subsidiaries, including significant business interests, no longer represent significant assets of the Fund such that the Fund is no longer required by the October 2015 Undertaking to file the EIPLP Financial Information, the Fund nonetheless continues to file the EIPLP Financial Information in the manner contemplated in the October 2015 Undertaking;
 - (iv) the Fund presents for the periods covered by the EIPLP Financial Information, EIPLP's earnings coverage ratios calculated in accordance with item 6 of Form 44-101F1, as if EIPLP were the issuer of the MTNs;
 - (v) the Fund presents for the periods covered by the EIPLP Financial Information, "summary financial information" for EIPLP, as defined in paragraph 13.1(1)(g) of Form 44-101F1, as if EIPLP were the issuer, presented substantially in the format set out in subparagraph 13.4(e)(ii) of Form 44-101F1;
 - (vi) the Fund complies with Part 7 of NI 51-102 in respect of any material change for EIPLP that is not a material change for the Fund;
 - (b) the Fund will not be required to file the Section 12.1 Disclosure in respect of ECT if all of the following are true:

Decisions, Orders and Rulings

- (i) the current annual information form of the Fund contains full, true and plain disclosure of the material assets, businesses and operations of ECT and the Fund Group as a whole;
 - (ii) the Fund continues to satisfy its obligations pursuant to the October 2015 Undertaking;
 - (iii) if ECT has any material operations or assets other than its interests in EIPGP, EIPLP and EIPLP's subsidiaries, the Fund shall file all of the following with respect to ECT:
 - A. separate audited annual financial statements and interim financial statements and related MD&A in the manner contemplated in the October 2015 Undertaking (the **ECT Financial Information**);
 - B. for the periods covered by the ECT Financial Information, ECT's earnings coverage ratios calculated in accordance with item 6 of Form 44-101F1, as if ECT were the issuer of the MTNs;
 - C. material change reports in accordance with Part 7 of NI 51-102 in respect of any material change for ECT that is not a material change for the Fund; and
- (c) the Fund will not be required to file the Section 12.1 Disclosure in respect of EIPHI if all of the following are true:
- (i) the current annual information form of the Fund contains full, true and plain disclosure of the material assets, businesses and operations of EIPHI and the Fund Group as a whole;
 - (ii) the Fund continues to satisfy its obligations pursuant to the October 2015 Undertaking;
 - (iii) if EIPHI is not consolidated by either EIPLP or the Fund, the Fund shall file with respect to EIPHI all of the following:
 - A. separate audited annual financial statements and interim financial statements and related MD&A in the manner contemplated in the October 2015 Undertaking (the **EIPHI Financial Information**);
 - B. for the periods covered by the EIPHI Financial Information, EIPHI's earnings coverage ratios calculated in accordance with item 6 of Form 44-101F1, as if EIPHI were the issuer of the MTNs;
 - C. material change reports in accordance with Part 7 of NI 51-102 in respect of any material change for EIPHI that is not a material change for the Fund.

Decision

Each of the Decision Makers is satisfied that the decision meets the test set out in the Legislation to make the decision.

The decision of the Decision Makers is that the Exemptions Sought are granted provided that:

- (a) with respect to the Prospectus Relief, in relation to any Prospectus:
 - (i) the Prospectus contains the Alternative Prospectus Disclosure;
 - (ii) the Guarantors continue to satisfy the conditions set forth in paragraphs 13.4(a) and (b) of Form 44-101F1; and
 - (iii) the Fund continues to satisfy the condition set forth in paragraph 13.4(c) of Form 44-101F1; and
- (b) with respect to the Continuous Disclosure Relief, the Fund has filed on SEDAR the Undertaking.

"Cheryl McGillivray, CA"
Manager
Corporate Finance

2.1.6 Exxon Mobil Corporation

Headnote

National Policy 11-203 Process for Exemptive Relief Applications in Multiple Jurisdictions – exemption from the requirements of National Instrument 51-101 Standards of Disclosure for Oil and Gas Activities – less than 10% of issuer’s security holders in any class or series are resident of Canada – less than 10% of any class or series of issuer’s securities are beneficially owned by residents of Canada – relief conditional on issuer complying with oil and gas disclosure requirements of the SEC and the NYSE and filing such disclosure, and other conditions.

Applicable Legislative Provisions

National Instrument 51-101 Standards of Disclosure for Oil and Gas Activities, s. 8.1.

Citation: Re Exxon Mobil Corporation, 2017 ABASC 30

February 23, 2017

IN THE MATTER OF
THE SECURITIES LEGISLATION OF
ALBERTA AND ONTARIO
(the Jurisdictions)

AND

IN THE MATTER OF
THE PROCESS FOR EXEMPTIVE RELIEF
APPLICATIONS IN MULTIPLE JURISDICTIONS

AND

IN THE MATTER OF
EXXON MOBIL CORPORATION
(the Filer)

DECISION

Background

The securities regulatory authority or regulator in each of the Jurisdictions (the **Decision Maker**) has received an application from the Filer for a decision under the securities legislation of the Jurisdictions (the **Legislation**) that the Filer be exempted from the requirements of National Instrument 51-101 *Standards of Disclosure for Oil and Gas Activities* (**NI 51-101**) (the **Exemption Sought**).

Under the Process for Exemptive Relief Applications in Multiple Jurisdictions (for a dual application):

- (a) the Alberta Securities Commission is the principal regulator for this application;
- (b) the Filer has provided notice that subsection 4.7(1) of Multilateral Instrument 11-102 *Passport System* (**MI**

11-102) is intended to be relied upon in British Columbia; and

- (c) this decision is the decision of the principal regulator and evidences the decision of the securities regulatory authority or regulator in Ontario.

Interpretation

Terms defined in National Instrument 14-101 *Definitions*, MI 11-102 or National Instrument 13-101 *System for Electronic Document Analysis and Retrieval* have the same meaning if used in this decision, unless otherwise defined herein.

Representations

This decision is based on the following facts represented by the Filer:

1. The Filer is a corporation governed by the laws of the State of New Jersey, with its head office in Irving, Texas. The Alberta Securities Commission was selected as principal regulator because the head office of Imperial Oil Limited (**Imperial Oil**), a Canadian subsidiary of the Filer, is located in Calgary, Alberta.
2. Divisions and affiliated companies of the Filer operate or market products in the United States and most other countries of the world. Their principal business is energy, involving exploration for, and production of, crude oil and natural gas, manufacture of petroleum products and transportation and sale of crude oil, natural gas and petroleum products.
3. The Filer is a reporting issuer in the provinces of British Columbia, Alberta and Ontario (collectively, the **Reporting Jurisdictions**), and is not in default of securities legislation in any jurisdiction of Canada. The Filer became a reporting issuer in the Reporting Jurisdictions upon completion of a plan of arrangement under Section 195 of the *Business Corporations Act* (Yukon) pursuant to which the Filer acquired all of the issued and outstanding common shares of InterOil Corporation.
4. The Filer's authorized capital stock consists of 9,000,000,000 shares of common stock (**Common Shares**) and 200,000,000 shares of preferred stock, without par value (**Preferred Shares**). As of the date hereof, no Preferred Shares are outstanding.
5. The Filer has issued various notes over a number of years under its U.S. shelf registration statement (the **Notes**).
6. The Common Shares and the Notes are registered under the 1934 Act. The Common

- Shares are listed on the New York Stock Exchange (the **NYSE**) under the symbol "XOM".
7. The Filer is subject to and is in compliance with all requirements applicable to it imposed by the SEC, the 1933 Act, the 1934 Act, the United States *Sarbanes-Oxley Act of 2002* and the rules of the NYSE (collectively, the **US Rules**).
 8. The Filer prepares disclosure with respect to its oil and natural gas activities (the **Oil and Gas Disclosure**) in accordance with the US Rules.
 9. The Filer qualifies as an "SEC foreign issuer" under National Instrument 71-102 *Continuous Disclosure and Other Exemptions Relating to Foreign Issuers (NI 71-102)*, and as such relies on and complies with the exemptions from Canadian continuous disclosure requirements afforded to SEC foreign issuers under Part 4 of NI 71-102.
 10. The Filer has made a good faith investigation to confirm the residency of the holders of its outstanding securities. The investigation included obtaining geographical surveys of beneficial holders of Common Shares and Notes from Broadridge Financial Solutions Inc., a list of registered holders of Common Shares from Computershare Trust Company, N.A. and a breakdown of the residency of initial investors for each series of the Notes from J.P. Morgan Securities LLC. Based on this investigation, the Filer has concluded that residents of Canada:
 - (a) do not directly or indirectly beneficially own more than 10% of the aggregate number of the Common Shares,
 - (b) do not directly or indirectly beneficially own more than 10% of the aggregate principal amount of any class or series of the Filer Notes, and
 - (c) do not directly or indirectly comprise more than 10% of the aggregate number of registered and beneficial holders of the Common Shares or any class or series of the Notes.
 11. None of the Common Shares or the Notes are listed for trading on any "marketplace" in Canada (as such term is defined in National Instrument 21-101 *Marketplace Operation*), and the Filer has no current intention to list the Common Shares or the Notes on any marketplace in Canada.
- (a) residents of Canada do not directly or indirectly beneficially own more than 10% of the Common Shares or of any class or series of securities issued by the Filer;
 - (b) residents of Canada do not directly or indirectly beneficially own more than 10% of the aggregate principal amount of any class or series of Notes or more than 10% of the aggregate principal amount of any class or series of other notes or debt instruments issued by the Filer;
 - (c) residents of Canada do not directly or indirectly comprise more than 10% of the aggregate number of registered and beneficial holders of any class or series of securities of the Filer;
 - (d) residents of Canada do not directly or indirectly beneficially own more than 10% of the aggregate outstanding number of any class or series of securities issued by any subsidiary of the Filer (other than Imperial Oil);
 - (e) residents of Canada do not directly or indirectly beneficially own more than 10% of the aggregate principal amount of any notes or debt instruments issued by any subsidiary of the Filer (other than Imperial Oil);
 - (f) residents of Canada do not directly or indirectly comprise more than 10% of the aggregate number of registered and beneficial holders of any class or series of securities issued by any subsidiary of the Filer (other than Imperial Oil);
 - (g) the Filer continues to comply with the US Rules in connection with its oil and natural gas activities;
 - (h) the Filer issues in Canada, and files on SEDAR, a news release stating that it will provide the Oil and Gas Disclosure in accordance with the US Rules rather than in accordance with NI 51-101; and
 - (i) the Filer files the Oil and Gas Disclosure with the securities regulatory authority or regulator in each of the Reporting Jurisdictions as soon as practicable after the earlier of the date the Oil and Gas Disclosure is required to be filed under the US Rules and the date it is filed with the SEC.

Decision

Each of the Decision Makers is satisfied that the decision meets the test set out in the Legislation for the Decision Maker to make the decision.

The decision of the Decision Makers under the Legislation is that the Exemption Sought is granted for so long as:

"Tom Graham, CA"
 Director
 Corporate Finance

2.1.7 Cordiant Capital Inc. and Convergence Blended Finance, Inc.

Headnote

Under paragraph 4.1(1)(a) of National Instrument 31-103 Registration Requirements, Exemptions and Ongoing Registrant Obligations, a registered firm must not permit an individual to act as a dealing, advising or associate advising representative of the registered firm if the individual is registered as an officer, partner or director of another registered firm that is not an affiliate of the first-mentioned registered firm – the Filers are not affiliated entities and have valid reasons for the representative to be registered with both firms – Both firms will be managing different activities, which will mitigate the risk of conflicts of interest arising from the dual registration – the representative will have sufficient time to adequately serve both firms – Both firms have policies and procedures in place to address potential conflicts of interest and the dually registered representative is aware of those procedures – the firms are exempted from the prohibition.

Applicable Legislative Provisions

Multilateral Instrument 11-102 Passport System, s. 4.7.
National Instrument 31-103 Registration Requirements, Exemptions and Ongoing Registrant Obligations, ss. 4.1, 15.1.

March 23, 2017

**IN THE MATTER OF
THE SECURITIES LEGISLATION OF
QUÉBEC AND ONTARIO
(the Jurisdictions)**

AND

**IN THE MATTER OF
THE PROCESS FOR EXEMPTIVE RELIEF
APPLICATIONS IN MULTIPLE JURISDICTIONS**

AND

**IN THE MATTER OF
CORDIANT CAPITAL INC. (Cordiant) AND
CONVERGENCE BLENDED FINANCE, INC.
(Convergence) (the Filers)**

DECISION

Background

The securities regulatory authority or regulator in each of the Jurisdictions (Decision Maker) has received an application from the Filers for a decision under the securities legislation of the Jurisdictions (the Legislation) for relief from the requirement contained in 4.1(1)(a) of National Instrument 31-103 *Registration Requirements, Exemptions and Ongoing Registrant Obligations* (NI 31-103), pursuant to section 15.1 of NI 31-103, to permit David Creighton (the Representative) to act as a director of

Convergence while also acting as a dealing representative of Cordiant (the Exemption Sought).

Under the Process for Exemptive Relief Applications in Multiple Jurisdictions (for a dual application):

- (a) the Autorité des marchés financiers is the principal regulator for this application;
- (b) the Filers have provided notice that section 4.7(1) of Multilateral Instrument 11-102 – *Passport System* (MI 11-102) is intended to be relied upon in Alberta; and
- (c) the decision is the decision of the principal regulator and evidences the decision of the securities regulatory authority or regulator in Ontario.

Interpretation

Terms defined in National Instrument 14-101 *Definitions* and MI 11-102 have the same meaning if used in this decision, unless otherwise defined.

Representations

The decision is based on the following facts represented by the Filers:

Cordiant

1. Cordiant is a corporation existing under the *Canada Business Corporations Act*. Its head office is located in Montréal, Québec.
2. Cordiant is an exempt market dealer registered with the securities regulatory authorities in Alberta, Ontario and Québec and is registered as an Investment Fund Manager and Portfolio Manager with Ontario and Québec. Cordiant is also registered with the U.S. Securities and Exchange Commission and Commission de surveillance du Secteur financier (Luxembourg).
3. Cordiant was formed in 1999 as a manager of emerging market and private sector investments. Cordiant has been investing in the emerging markets for over a decade.
4. Cordiant's client base is made up of large institutional investors (who are accredited investors), mostly situated in Europe. Funds raised from these clients will be managed in one of Cordiant's emerging market private debt funds. Cordiant's investment activities focus primarily on emerging and frontier markets in Africa, Latin America, Asia, etc. All of Cordiant's investments are comprised of private commercial debt investments.
5. Cordiant is not in default of any requirement of securities legislation in any of the Jurisdictions.

Convergence

6. Convergence is organized as a not-for-profit corporation under the *Canada Not-for-profit Corporations Act*. Its head office is located in Toronto, Ontario.
7. Convergence is registered as a restricted dealer in Ontario and has applied for registration as a restricted dealer in Québec.
8. Convergence intends to operate an online network designed to address certain blended finance challenges through three distinct service offerings: (1) a New Product Design Facility, (2) Market Building Tools, and (3) an Investment Network. The New Product Design Facility and the Market Building Tools services will not advertise, promote or nor solicit any trades in specific offerings of securities, but are only general sector and product type information and educational tools, in keeping with the public service development mandate of Convergence. The Investment Network will be a type of portal for bringing together potential sophisticated investors, including governments and philanthropic foundations, with international development projects seeking blended finance funding.
9. Convergence does not hold or have access to any investor or issuer funds or securities as, unlike a conventional dealer, Convergence does not act on behalf of investors as clients in connection with a purchase or sale of securities and does not participate in the investment process.
10. Convergence is not in default of any requirement of securities legislation in any of the Jurisdictions.
11. Convergence and Cordiant are not affiliates.

The Representative

12. The Representative is currently a registered officer, director and dealing representative of Cordiant in Alberta, Ontario and Québec. In that capacity he serves in an advisory capacity to the Board with respect to attracting new institutional investors as well as consulting on infrastructure projects. He spends the majority of his time seeking opportunities to raise investment capital in Canada and Europe from institutional investors (insurance companies, pension funds, endowments, etc.). His primary responsibility is to raise capital for investment funds.
13. The Representative is also one of eight members of Cordiant's Internal Credit Committee. This committee will only be involved with the review of the credit worthiness and solvability of possible loan investments made to emerging markets.

14. It is proposed that the Representative be appointed as a director of Convergence in Ontario and Québec.
15. Given that (i) the pool of potential directors in Canada with significant experience in international development blended finance is very limited, (ii) members of Convergence's Board of Directors serve without remuneration, and (iii) the Representative will not, owing to the nature of Convergence's limited not-for-profit activities, be in any investment decision-making, day-to-day operations nor trading activities for Convergence, Cordiant is amenable to the appointment.
16. The Representative's role at Convergence will be as one of three members of the Board of Directors. In that role, the Representative will provide strategic guidance and advice to the Board of Directors and senior management in the area of emerging markets, which complements Convergence's not-for-profit blended finance goals.
17. The potential for conflicts of interest or client confusion due to the Representative acting as a dealing representative of Cordiant and as a director of Convergence are mitigated by the following:
 - a. Convergence and Cordiant engage in different activities;
 - b. Convergence will not engage in trading in securities, underwriting nor advising in respect of securities, except in narrow relation to indirect promotion through operating the Investment Network international development blended finance platform;
 - c. Convergence will have no client securities trading accounts, will not have any managed accounts, will not engage in holding client funds or securities, and will not make any recommendations with respect to buying, selling or holding any securities, and will not engage in any proprietary trading in securities;
 - d. Members of Convergence's Board of Directors serve without remuneration;
 - e. The Representative will not be involved in day-to-day operations of Convergence and will not be involved with either users or projects on Convergence's online platform;
 - f. Cordiant will not grant Investment Network access to the Representative; and

- g. Cordiant will include a disclaimer on any and all projects it posts to Convergence's online platform identifying the Representative as both an officer of Cordiant and a board member of Convergence.
18. It is possible that Cordiant, through one of its investment funds, could subscribe to Convergence's platform as a provider of capital, or alternatively, as a deal sponsor (again, through one of Cordiant's investment funds). Should such a situation arise, the Filers have a number of safeguards in place to mitigate any conflict of interest, namely:
- a. Convergence treats external subscribers identically and has no involvement whatsoever with any project posted on the Investment Network;
 - b. As a member of the Convergence board, the Representative will not have access to additional information other than what is posted on the Investment Network;
 - c. The Representative will recuse himself from all matters related to Cordiant that could arise at the board level; and
 - d. All prospective investments must be submitted to Cordiant's investment review and risk management process.
19. The Representative will have sufficient time and resources to meet his obligations to both Cordiant and Convergence. The Representative will devote approximately 35 hours per week at Cordiant and 6 hours per month at Convergence.
20. Both Filers have in place written policies and procedures to address any potential conflicts and they believe that they will be able to appropriately deal with any conflicts of interest that may arise as a result of the Representative acting as a dealing representative Cordiant and as a member of the board of directors of Convergence.
21. The Representative will be subject to supervision by and to the applicable compliance requirements of both Filers.
22. Both Filers are subject to the conflict of interest requirements set out in NI 31-103 and such requirements will be complied with at all times.
23. In the absence of the Exemption Sought, Convergence would be prohibited under paragraph 4.1(1)(a) of NI 31-103 from permitting the Representative to act as a dealing representative of Cordiant while also acting as a director of Convergence.

Decision

Each of the Decision Makers is satisfied that the decision meets the test set out in the Legislation for the Decision Maker to make the decision.

The decision of the Decision Makers under the Legislation is that the Exemption Sought is granted provided that (a) the circumstances described above remain in place, and (b) the Exemption Sought shall cease to be effective when:

- (i) the Representative is no longer registered in any of the Jurisdictions as a dealing representative of Cordiant; or
- (ii) the Representative is no longer a director of Convergence.

"Eric Stevenson"
Superintendent, Client Services and Distribution Oversight

2.1.8 Angellist, LLC and Angellist Advisors, LLC

Headnote

CSA Regulatory Sandbox initiative – Application for relief from certain registrant obligations contained in National Instrument 31-103 Registration Requirements, Exemptions and Ongoing Registrant Obligations (NI 31-103) and from the prospectus requirement in the Legislation – Filers proposing to operate novel online platform for accredited investors with experience in venture capital and angel investing and start-ups that primarily operate in the technology sector – relief granted subject to certain terms and conditions set out in the decision – decision is time-limited to allow the firm to operate in a test environment and will expire in two years – decision may be amended on written notice to the Filers – decision is based on the unique facts and circumstances of the Filers and is made on a time-limited, test case basis. Prior Ontario-only exemptive relief decision is repealed effective as of the date of this decision.

Applicable Legislative Provisions

Statutes Cited

Securities Act, R.S.O. 1990, c. S.5, as am., ss. 53, 74, 144.

Instrument Cited

National Instrument 31-103 Registration Requirements, Exemptions and Ongoing Registrant Obligations, ss. 12.10(2), 13.2(2)(c)(i), 13.3, 13.16, 14.2(2)(i), (j) and (k), 15.1 and Division 5.

March 27, 2017

**IN THE MATTER OF
THE SECURITIES LEGISLATION OF
ONTARIO
(the “Jurisdiction”)**

AND

**IN THE MATTER OF
THE PROCESS FOR EXEMPTIVE RELIEF APPLICATIONS
IN MULTIPLE JURISDICTIONS**

AND

**IN THE MATTER OF
ANGELLIST, LLC (“Angellist”) and
ANGELLIST ADVISORS, LLC
 (“ALA”, collectively with Angellist, the “Filers”)**

DECISION

Background

The Filers operate an online platform that offers a number of services to start-up businesses that operate primarily in the technology sector (**Start-ups**), including services to facilitate venture capital and angel investing in Start-ups that meet certain criteria. All investors on the platform must qualify as an accredited investor (as defined in Canadian securities legislation) (**Accredited Investors**) and must also have prior experience in venture capital and angel investing, such that they have an understanding of the risks of investing in Start-ups through the platform.

In conjunction with ALA’s application for registration in all of the provinces of Canada, ALA is seeking relief from certain requirements under the securities legislation of the Jurisdiction of the principal regulator (the **Legislation**). This decision (the Decision) has been considered in the context of the CSA Regulatory Sandbox (as defined below) initiative and is made on a time-limited, test case basis. This Decision is based on the unique facts and circumstances of the Filers.

ALA is currently registered in Ontario as a restricted dealer. The Filers previously applied for and received exemptive relief from the prospectus requirement in a decision of the Ontario Securities Commission (**OSC**) (the **Prior Commission Decision**) and from certain registrant obligations in a decision of the Director (the **Prior Director Decision**) dated October 24, 2016 (together, the **Prior Ontario decision**) on terms substantially similar to this Decision.

Relief from registrant obligations

1. The Filers have applied for exemptive relief pursuant to section 15.1 of National Instrument 31-103 *Registration Requirements, Exemptions and Ongoing Registrant Obligations* (**NI 31-103**) for ALA from the following:
 - (a) the requirement in subsection 12.10(2) [*Audited financial statements*] of NI 31-103 that the annual financial statements delivered to the regulator must be audited (the **audited financial statement requirement**);
 - (b) the requirement in subparagraph 13.2(2)(c)(i) [*Know-your-client*] of NI 31-103 that a registrant must take reasonable steps to ensure that it has sufficient information regarding the client's investment needs and objectives (the **know-your-client requirement**);
 - (c) the requirement in section 13.3 [*Suitability*] of NI 31-103 that a registrant must take reasonable steps to ensure that, before it makes a recommendation to or accepts an instruction from a client to buy or sell a security, the purchase or sale is suitable for the client (the **suitability requirement**);
 - (d) the requirement in section 13.16 of NI 31-103 [*dispute resolution service*] that a registered firm have a certain dispute resolution service provider (the **dispute resolution requirements**); and
 - (e) the requirement to deliver the disclosure and reporting requirements in paragraphs 14.2(2)(i), (j), and (k) [*Relationship Disclosure Information*] and Division 5 [*Reporting to clients*] of Part 14 of NI 31-103 (the **disclosure and reporting requirements**) (together with the preceding paragraphs, referred to as the **Registrant Obligations Relief Sought**),

provided that ALA ensures only Quality Investors (as defined below) access the Restricted Services (as defined below) and registration is limited to two years from the date of this Decision.

Prospectus Relief

2. ALA has applied for an exemption from the prospectus requirement in connection with distributions by an SPE (as defined below) to Quality Investors (as defined below) who acquire securities of SPEs through the platform (as described in this Decision) (the **Prospectus Relief Sought**).

Repeal and replacement of OSC decision

3. The Filers have applied, pursuant to s. 144 of the *Securities Act* (Ontario) (the **Act**), to repeal the Prior Ontario decision effective as of the date of this Decision (the **Ontario Relief Sought**).

The principal regulator in the Jurisdiction has received an application from the Filers for a decision under the securities legislation of the Jurisdiction (the **Legislation**) for the Registrant Obligations Relief Sought, the Prospectus Relief Sought and the Ontario Relief Sought.

Under the Process for Exemptive Relief Applications in Multiple Jurisdictions (for a passport application):

- (a) the OSC (**Principal Regulator**) is the principal regulator for this application; and
- (b) the Filers have provided notice that subsection 4.7(1) of Multilateral Instrument 11-102 *Passport System* (**MI 11-102**) is intended to be relied upon in each of the other provinces of Canada.

Interpretation

1. For the purposes of this Decision:
 - (a) **Approved Incubator Program** means an incubator, accelerator, Technology Transfer Office or similar organization that meets all of the following criteria:
 - a. has a program for Start-ups and the program has been delivered for at least two years;
 - b. receives funding from (A) a federal, state, provincial/territorial, or municipal government or a crown corporation or a government-owned corporation or authority, or (B) an accredited university or college;
 - c. has a competitive application process with clear criteria to select Start-ups for the program;

- d. reviews the founders and other key individuals involved in the Start-up to ensure they meet the criteria for admission into the program;
 - e. provides entrepreneurial advice and mentorship support over a reasonable period of time; and
 - f. in respect of which ALA has received the approval from staff of the securities regulatory authority in the local jurisdiction in which the incubator program is based that the organization qualifies as an “Approved Incubator Program”.
- (b) **Credible Investor** means an investor that meets one of the following criteria:
- a. a Venture Capital Fund that has at least \$10 million in assets under management; or
 - b. an individual investor who has led or participated in at least five investments in a Start-up, of which at least two of those Start-ups have completed a Successful Liquidity or Financing Event; or
 - c. is an Experienced Founder.
- (c) **CSA Regulatory Sandbox** means an initiative of the Canadian Securities Administrators (**CSA**) to review new and innovative technology-focused or digital business models. The objective of this initiative is to facilitate the ability of those businesses to use innovative products, services and applications, while ensuring appropriate investor protection.
- (d) **Eligible Canadian Start-up** means a Start-up that is operating from or doing business in Canada where either a. or b. applies:
- a. (i) the start-up is incorporated or organized under the laws of Canada or any jurisdiction of Canada, (ii) the head office of the start-up is located in Canada, and (iii) at least 25% of the directors and 25% of the Executive Officers or founders of the start-up (or at least one director and one Executive Officer or founder, if there are less than four directors and less than four Executive Officers or founders, respectively) reside in Canada; or
 - b. at least 25% of the consolidated payroll of the Start-up and its subsidiaries is for employees and consultants who reside in Canada.
- (e) **Executive Officer** means an individual who is:
- a. a chair, vice-chair, or president,
 - b. a vice-president in charge of a principal business unit, division or function including sales, finance, production, technology or engineering, or
 - c. performing a policy-making function in respect of the issuer.
- (f) **Experienced Founder** means a founder of a Start-up who has:
- a. management, product or engineering experience, typically with the title of “director” or equivalent, at a large technology company (500+ plus employees), or
 - b. co-founded, or served at the vice-president level or above of (in either case, with executive responsibilities), a Start-up that has achieved a Successful Liquidity or Financing Event.
- (g) **Quality Investor** means an Accredited Investor who has been determined by ALA’s procedures, as described in paragraphs 58 to 60, to have sufficient experience in venture capital and angel investing.
- (h) **Successful Liquidity or Financing Event** means:
- a. an initial public offering (**IPO**);
 - b. an acquisition of all or substantially all the securities or assets of the Start-up; or
 - c. the completion of a follow-on round or “up round” of venture capital or angel financing for the Start-up involving external investors to the Start-up at that time, at a valuation in excess of the Start-up’s

previous round of financing or that triggered the automatic conversion of previously issued debt or equity securities. (For example, a Series Seed round to a Series A round.)

- (i) **Technology Transfer Office** means an office at a university with an academic research program or at a research institute that is established to handle the intellectual property and licensing rights for faculty and student investors.
 - (j) **Venture Capital Fund** means:
 - a. In the United States (**U.S.**), shall mean a “venture capital fund” as defined in Rule 203(l)-1 under the Investment Advisers Act of 1940; and
 - b. In Canada, a venture capital fund that focusses primarily on venture capital or angel investing, and that is a non-individual permitted client.
2. Terms used in this Decision that are defined in the Act, National Instrument 14-101 *Definitions* (**NI 14-101**), National Instrument 31-103 *Registration Requirements, Exemptions and Ongoing Registrant Obligations* (**NI 31-103**) and MI 11-102 and not otherwise defined in the Decision, shall have the same meaning as in the Act, NI 14-101, or MI 11-102 as applicable, unless the context otherwise requires.

Representations

This Decision is based on the following facts represented by the Filers:

The Filers

- 3. ALA is registered as a restricted dealer in Ontario and has applied for registration as a restricted dealer in each other province of Canada.
- 4. ALA is a limited liability company formed under the laws of the state of Delaware. ALA is a subsidiary of AngelList, a limited liability company formed under the laws of the state of Delaware. A minority interest in ALA is held by AngelList EI, LLC (which is wholly-owned by employees of ALA or ALA’s affiliates). The head offices of the Filers are in San Francisco, California, United States of America.
- 5. ALA is an “exempt reporting adviser” in the U.S. ALA relies on an exemption from SEC investment adviser registration requirements under sections 203(l) [*venture capital fund adviser exemption*] of the *Investment Advisers Act of 1940* and related rules. As an exempt reporting adviser, ALA is subject to oversight by the SEC, including the requirement to pay fees to the SEC, to report annually certain information to the SEC and to have policies regarding the dissemination of material, non-public information and anti-fraud measures. ALA is also subject to review by the SEC.
- 6. The Filers are not registered as broker-dealers with the SEC under U.S. federal securities laws. The Filers rely on a no action letter issued to them by the SEC dated March 28, 2013 regarding the scope of their permitted activities in the U.S. without registering as broker-dealers in accordance with section 15(b) of the *Securities Exchange Act of 1934*. The Filers also rely on the no action letter issued to FundersClub Inc. and FundersClub Management LLC by the SEC dated March 26, 2013 with respect to their activities as an exempt reporting adviser. The Filers also rely on section 201(c) of the JOBS Act.
- 7. AngelList Ltd., an affiliate of the Filers, is authorized by the Financial Conduct Authority to carry on the following limited regulated activities in the United Kingdom: arranging (bringing about) deals in investments, dealing in investments as agent, and making arrangements with a view to transactions in investments. Through a passport process, AngelList Ltd. is permitted to carry out its permitted activities to countries in the European Economic Area.
- 8. The Filers wish to offer certain of the services (as described below) to issuers and investors in Canada. As these services will involve the facilitation of trades in securities of issuers to Quality Investors for the purposes of venture capital and angel investing, ALA is registered as a restricted dealer in Ontario and wishes to become registered as a restricted dealer in each other province of Canada.
- 9. The Filers are seeking the Prospectus Relief Sought and the Registrant Obligations Relief Sought to allow Quality Investors and issuers resident in other Canadian provinces to access the Restricted Services (as defined below).
- 10. The Filers are not in default of securities legislation in any jurisdiction of Canada, subject to the matter to which this Decision relates. The Filers are in compliance in all material respects with U.S. and U.K. securities laws.

11. The Filers do not currently prepare financial statements that are audited. During the two year period to which this Decision relates, the Filers will be working towards providing the Principal Regulator with annual financial statements audited in accordance with U.S. generally acceptable accounting principles and standards.

Services

Public Services

12. AngelList operates an online networking website (the **Platform**) that allows start-ups, accelerators, incubators, angel investors and other individuals in the start-up sector (together, the **Participants**) to connect with each other and to raise their profile in the start-up community. The Platform is primarily aimed at technology or technology-enabled Start-ups.
13. Any Participant can post a profile on the Platform that contains general information about itself, including, as applicable, its products or services, and its management team (a **Profile**). A Profile is publicly available to anyone accessing the Platform. A Start-up may also post confidential information and grant access only to certain Participants.
14. After setting up a Profile, a Participant may request a connection by visiting another Participant's profile (the **Connection Services**). AngelList will confirm the relationship between the Participants. A verified connection is required in order for a Participant to send other Participants a message or request an introduction to other Participant's connections.
15. Any Start-up can also post job openings on the Platform and seek applicants from Participants on the Platform for such job openings (the **Recruiting Services**) (together with the Connection Services, the **Public Services**).

Restricted Area and Restricted Services

16. The Platform includes a password protected area (the **restricted area**). Participants must apply to enter the restricted area, and ALA only permits Accredited Investors to enter the restricted area.
17. Once Participants have been approved for access to the restricted area, they may further apply to access certain services, which are referred to below as **Restricted Services**. ALA only permits Quality Investors to access the Restricted Services. Based on the Filers' experience in the United States, approximately 30% of U.S. accredited investors that apply to access the Restricted Services meet ALA's Quality Investor standard and are approved to use the Restricted Services.
18. The Restricted Services consist of the following:
 - a. ALA allows both Start-ups and Lead Investors (as defined below) the ability to raise money for a specific Start-up by forming a syndicate of investors through the Platform (the **Syndicate Services**).
 - b. ALA provides a transaction update email to Quality Investors. ALA has an algorithm that uses objective criteria to identify Start-ups seeking to raise capital from a syndicate of investors and provides a list of these Start-ups to Quality Investors who request this information.
 - c. ALA offers a program for Quality Investors who plan to invest over USD\$600,000 through the Platform (the **Professional Investor Program**). Under this program, ALA introduces these Quality Investors to Start-ups that do not wish to make it known publicly that they are raising capital through a syndicate.
19. In the U.S., accredited investors who are not Quality Investors may invest in diversified funds created by ALA (referred to as **Funds**) that invest in a wide variety of syndicates on the Platform. ALA is seeking registration only as a restricted dealer. ALA may, at a later date, wish to offer Canadian investors the opportunity to invest in the Funds. Prior to allowing Canadian investors the opportunity to invest in the Funds, ALA will apply for and obtain registration as required by the Principal Regulator and regulators in other Canadian jurisdictions.

Services to be Offered in Canada

20. AngelList proposes to make the Public Services available to participants.
21. ALA proposes to make the Syndicate Services available to:
 - a. Start-ups and Lead Investors (described below), and

b. Quality Investors,

subject to certain restrictions set out below.

22. ALA will make the Professional Investor Program available to Quality Investors who qualify as a “permitted client” as defined in section 1.1 of NI 31-103.

Syndicate Services

23. Syndicates can be formed by the founder or management of a Start-up itself or by an investor who is investing in a single Start-up, who wishes to make this investment opportunity available to other investors (**co-investors**) on the same terms and conditions, and who has been reviewed and approved by ALA as described in paragraphs 62 to 69 (a **Lead Investor**). Each syndicate only invests in securities of a single Start-up (a **syndicate**).

24. A Start-up or Lead Investor requests approval from ALA to establish the syndicate.

25. ALA reviews the request from the Start-up or Lead Investor and determines whether to allow the Start-up or Lead Investor to form a syndicate. In reviewing a request to form a syndicate, ALA reviews the Start-up for the following features:

- a. Whether the Start-up is a growth-oriented technology or technology-enabled company that has the potential to develop into a large stand-alone business;
- b. Whether the Start-up is focused on a product or service that will provide social, economic or environmental benefits or that is likely to meet a strong market demand; and
- c. Whether, in ALA’s opinion, the Start-up is likely to appeal to Quality Investors.

26. ALA will not permit reporting issuers or any public company in any other jurisdiction to form a syndicate on the Platform.

27. If ALA grants approval to form a syndicate, the Start-up or the Lead Investor, as applicable, completes and posts an investor note (the **investor note**) about the syndicate on the restricted area of the Platform. The investor note contains factual information about the proposed capital raise, the Start-up to be invested in, any co-investors, the risks associated with investing in the Start-up, past financing of the Start-up, and other key investment terms and conditions.

28. Interested Quality Investors may conduct due diligence on the Lead Investor and/or the Start-up. Quality Investors use their own judgement whether to invest in a syndicate.

29. Neither ALA nor the Lead Investor nor the Start-up:

- a. provide specific recommendations or advice to particular Quality Investors about the suitability of an investment in a Start-up through an SPE (as defined below); or
- b. recommend or solicit any particular purchase or sale by a Quality Investor of an SPE’s (as defined below) securities.

30. Interested Quality Investors may submit non-binding requests for additional information through the Platform to either the Start-up or Lead Investor about the Start-up that is being syndicated.

31. If there is sufficient interest to proceed with closing a syndicate investment, ALA establishes a special purpose entity (**SPE**) to accept the funds from committed investors and to acquire the Start-up’s securities. The SPE formed to invest in the Start-up is required under U.S. securities law to have 99 or fewer investors. For investments in Eligible Canadian Start-ups, for tax reasons Canadian investors may be aggregated into a parallel Canadian SPE. The parallel Canadian SPE will otherwise invest on identical terms and conditions to a standard SPE.

32. ALA has engaged an arms’ length consulting and fund administration firm (the **SPE Manager**) to provide administrative services in relation to the SPEs. On behalf of ALA, the SPE Manager handles the formation and organization of each SPE, certain closing procedures for the syndicate investments, securities filings, ongoing administration, and winding up the SPE where applicable.

33. The first time a Quality Investor invests with a syndicate, prior to closing of that syndicate, the Quality Investor is asked to confirm his or her interest in investing in Start-ups generally, and to acknowledge a series of risk warnings including

warnings as to risk of total loss of the investment, illiquidity of the securities and dilution risk, and the need for the Quality Investor to conduct his or her own due diligence on the Start-up. Detailed risk warning acknowledgements are not obtained from Quality Investors on subsequent investments; however, certain risks are acknowledged upon each Quality Investor's acceptance of the provisions of the Closing Documents (as defined below).

34. For each syndicate, prior to closing that syndicate, the Quality Investor is also asked to reconfirm its accredited investor status. If a Quality Investor indicates that its status has changed such that it is no longer an accredited investor, the investor is not permitted to invest with the syndicate and is not permitted to access the restricted area of the Platform. Quality Investors electronically agree to and sign the SPE's closing documents on the Platform and are provided with wire instructions for their investment amounts.
35. After a Quality Investor commits to making an investment with a syndicate, the Quality Investor receives the following documents: the SPE's operating or limited partnership agreement, the SPE's private placement memorandum, the subscription or purchase agreement for the purchase of securities of the SPE, an investor statement (which is a screen confirming how much the Quality Investor invested in the SPE and the corresponding investment by the SPE in the Start-up as of the specific date), a signature certificate (which is a screen showing the investor that documents have been digitally signed and a digital fingerprint provided for security reasons) and the investor note (collectively, the **Closing Documents**). The SPE Manager will retain the Closing Documents for eight years.
36. Either the Filers or SPE Manager will deliver electronically to the securities regulatory authority of each jurisdiction of Canada where a distribution occurs, any of the Closing Documents that constitute an offering memorandum (as defined under the Legislation). The Filers will inform the Start-up that the Start-up must deliver electronically to the securities regulatory authority of each jurisdiction of Canada where a distribution occurs a copy of any document that constitutes an offering memorandum (as defined under the Legislation) that has not already been delivered by the Filers or SPE Manager.
37. Prior to closing a syndicate, ALA uses a third party service (such as Blockscore or Jumio) to verify the identity of each Quality Investor. ALA also runs anti-money laundering and terrorist financing checks. The verification process and anti-money laundering and terrorist financing checks are performed on both individual and non-individual Quality Investors (entities). For non-individual Quality Investors, the Filers contact the investor by email to determine the identity of the individual principal(s) of the Quality Investor. AML and terrorist financing checks are performed through a politically exposed person (PEP) list and/or Office of Foreign Assets Control (OFAC) list search. Similar verification processes and checks will be performed for Canadian investors.
38. ALA conducts a review of each Start-up's constating documents and Closing Documents to ensure they are consistent with the information in the Profile and the investor note, the results of any background checks and any accompanying materials or information provided to it by an investor, the Lead Investor and/or the Start-up and determines if the Closing Documents are complete, consistent and not misleading. If it appears to ALA that the Closing Documents are incomplete, inconsistent or misleading, ALA will require the Closing Documents to be corrected, made complete, or clarified.
39. Neither the Filers nor the SPE holds, handles or controls any investor or Start-up funds. The funds are held by and deposited in a single trust account that has been established by a FDIC-member U.S. bank in the name of the bank for the benefit of investors investing through the Platform. The Filers do not intermingle their own monies in this account.
40. Once all expected funds have been received by the bank, the bank notifies ALA. ALA then issues advice to the bank to initiate funds transfer to the Start-up.
41. All Quality Investors in the syndicate are e-mailed to inform them that the SPE investment, and the investment by the SPE in the Start-up, is finalized and to provide them with a copy of the final Closing Documents.
42. The Filers will utilize the same bank and procedures for investments in Eligible Canadian Start-ups completed on the Platform. Although initially the Platform will only support transactions denominated in U.S. dollars, the Filers plan to support transactions in Canadian dollars and utilize Canadian banking services as required for transactions in Canadian dollars.
43. Quality Investors have access to an individual account on the Platform where they may view information about the transaction and access copies of the Closing Documents. The Closing Documents will be retained and made available to Quality Investors through the Platform for at least eight years.
44. For their role in a syndicate, ALA and the Lead Investor will only receive compensation equal to a portion of the increase in value, if any, of the investment as calculated at the termination of the investment in the SPE (the **Carried Interest**), and will not receive any transaction-based compensation. None of the Filers, the Lead Investor, nor any of

their officers or directors receive any other form of commission or transaction-based compensation related to the Restricted Services, including the Syndicate Services.

45. ALA requires that each investor in a syndicate pay a portion of the costs associated with the closing of the syndicate investment (such as legal fees) in proportion to the investor's investment.
46. Neither the syndicate nor the SPE borrows funds from investors or the public for any reason. The syndicate, the SPE and the Filers do not loan money or extend margin to investors that wish to invest in a Start-up as part of a syndicate.
47. The Filers do not facilitate any secondary trading of previously issued securities, whether originally issued to the members of a syndicate or otherwise.
48. From the date of the OSC decision to the date of this Decision, seven Start-ups have raised capital from a syndicate on the platform in reliance on the Prior Ontario Decision. The Filers are in compliance with all of the terms and conditions of the Prior Ontario Decision.

Professional Investor Program

49. ALA is involved with a number of syndicates in which the Start-up does not wish to disclose publicly that it is seeking funding (the **Private Syndicates**).
50. These Private Syndicates are only made available to Quality Investors who:
 - a. intend to invest over USD\$600,000 in syndicates through the Platform;
 - b. invest, on average, at least USD\$50,000 per month in syndicates;
 - c. sign a non-disclosure agreement with ALA; and
 - d. are able to make investment decisions in a timely manner.
51. ALA has automated functionality that matches between one to five Private Syndicates with the Quality Investor's selected objective criteria, based on filters that the Quality Investor selected when the Quality Investor signed up for the Professional Investor Program.
52. ALA provides the list of Private Syndicates to the Quality Investor.
53. The Quality Investor conducts its own due diligence on the Start-up of the Private Syndicate.
54. The Quality Investor will make its own decision as to which Private Syndicate to invest in. The same investment procedures that are used for a typical syndicate also apply to a Private Syndicate.
55. There are no fees for participating in the Professional Investor Program.

Participants

Investors

56. When opening an account with AngelList, each investor provides the Filers with the following information:
 - a. The category of accredited investor the investor meets, which for Canadian investors will correspond to the definition of accredited investor in Canadian securities legislation;
 - b. The amount the investor has budgeted for investing in Start-ups on the Platform;
 - c. The investor's net worth band (e.g., > \$1 million, > \$2 million, > \$5 million, with currency being denominated in U.S. dollars). For Canadian investors, bands will be denominated in Canadian dollars;
 - d. The proportion of the investor's net worth that the investor's budget for investing in Start-ups represents; and
 - e. The investor's experience in investing in Start-ups or working for or with private equity firms and venture capital firms and the investor's connection to other investors and Start-ups on the Platform.

The above-listed information is retained on the Platform by the Filers for 8 years.

57. In addition to providing the information in paragraph 56, each investor acknowledges the following risks associated with investing in Start-ups generally when signing up to access the Public Services and Restricted Services:
- a. Risk of loss of an investor's entire investment in a Start-up;
 - b. Illiquidity risk;
 - c. No due diligence of a Start-up is conducted by the Filers;
 - d. Dilution risk;
 - e. Risk of change in the Start-up's plans, markets and products; and
 - f. No recommendation or advice is provided by the Filers to the investor.

In addition:

- g. Prior to making an investment, the investor must acknowledge that it will receive limited or no initial or ongoing information about the investment; and
- h. The investor note will disclose any conflicts of interest that may exist.

The above-listed information is retained on the Platform or by ALA for 8 years.

58. ALA assesses each investor's experience and knowledge with respect to venture capital and angel investing based upon the following information:
- a. The investor's previous venture capital and angel investments and the size of those investments (as declared by the investor);
 - b. The investor's connections to other founders and investors, and ALA's assessment of those founders and investors; and
 - c. ALA's judgement about an investor's previous venture capital and angel investing experience with other top investors and the investor's reputation.
59. Using a computer algorithm, ALA rates each investor on a scale of one to ten based on the information provided by the investor (a **Quality Investor Score**). Only investors with a Quality Investor Score of at least 6.5 out of 10 are approved by ALA as Quality Investors. In order to access the Restricted Services an investor must first be approved as a Quality Investor.
60. ALA does not initially approve an investor if the investor has an initial Quality Investor Score of less than 6.5 out of 10 or if the investor has indicated that he or she plans to invest more than 9% of his or her net worth in Start-ups. ALA may conduct a further review of these investors who are not initially approved. If ALA's manual review of the investor discloses information which would materially increase the investor's Quality Investor Score (for example, the investor has significant venture capital or angel investing experience that was not reflected on its profile on the Platform), the investor may be approved as a Quality Investor and permitted to invest in syndicates through the Platform.
61. In Canada, Accredited Investors that are not Quality Investors will not be permitted to invest as part of a syndicate through the Platform and will not be permitted access to the Restricted Services.

Lead Investors

62. Only Accredited Investors can apply to be Lead Investors. ALA retains the right and full discretion to determine whether a person may act as a Lead Investor.
63. ALA reviews a potential Lead Investor for previous experience related to venture capital and angel investing by reviewing the Lead Investor's activity on relevant social media and other websites (such as Crunchbase and Google).
64. ALA also reviews references provided by each Lead Investor related to the Lead Investor's prior Start-up investments.

Decisions, Orders and Rulings

65. If ALA is not satisfied that a Lead Investor has sufficient knowledge and experience related to Start-up and/or venture capital investing, ALA will also consider whether there is a Credible Investor involved in the syndicate and who is investing on the same terms and conditions as the investors in the syndicate.
66. Where ALA approves a Lead Investor to form a syndicate, ALA requires each Lead Investor to sign an agreement with ALA. For so long as the Lead Investor has an interest in the Start-up that the Lead Investor has syndicated, this agreement requires, among other things, the Lead Investor:
- a. To assist ALA and the SPE Manager as necessary to allow ALA and the SPE Manager to comply with applicable regulatory requirements pertaining to the syndicate and the investment in the Start-up,
 - b. To provide ALA with information about the Start-up as required by ALA or the SPE Manager to service the syndicate, and
 - c. To provide ALA with written notice of certain events, including subsequent investment in the Start-up by the Lead Investor, sale or transfer of the Lead Investor's securities in the Start-up, and how the Lead Investor has voted.
67. Lead Investors are required to disclose all conflicts of interest to ALA and to potential Quality Investors. Conflicts of interest that must be disclosed include whether the Lead Investor invested in previous round of financing by the Start-up, is an employee or officer of the Start-up, or has family members working at the Start-up, any other circumstances judged by ALA to constitute conflicts or potential conflicts.
68. The Lead Investor invests either directly with the Start-up or alongside other investors in the syndicate on the same terms and conditions as the investors in the syndicate.
69. Prior to the closing of the syndicate, ALA conducts a background check on the Lead Investor (through a third party service provider), including criminal record, securities regulatory, AML, terrorist financing, and economic and political sanctions watch-lists.

Start-ups

70. ALA conducts background checks on the Start-up and each officer and director of the Start-up (through a third party service provider) before the close of a syndicate.
71. The background checks conducted by ALA include: criminal record, securities regulatory, AML, terrorist financing, and economic and political sanctions watch-lists.
72. ALA does not permit a syndicate to close, if any of the Start-up, its president or chief executive officer has pled guilty to or has been found guilty of an offence related to or has entered into a settlement agreement in a matter that involved fraud or securities violations or if the Start-up is bankrupt.

Additional Requirements

73. Canadian investors will only be permitted to invest in a Start-up that seeks to raise capital through a syndicate on the Platform in one of the following circumstances:
- a. **Permitted Clients.** Canadian investors who qualify as permitted clients (as defined in section 1.1 of NI 31-103) and who waive the requirement for ALA to conduct a suitability assessment, in accordance with subsection 13.3(4) of NI 31-103, may invest in any syndicate on the Platform and participate in the Professional Investor Program.
 - b. **The Start-up is participating in or within the past 24 months has successfully completed an Approved Incubator Program.** Canadian Quality Investors may invest in syndicates where the Start-up is an Eligible Canadian Start-up that is participating in or has successfully completed an Approved Incubator Program.
 - c. **Other Start-ups – Subject to limits on the number of Canadian Quality Investors.** Over the two-year period that this Decision relates to, up to a maximum of 1000 Canadian Quality Investors may invest with one or more syndicates that meet one of the following criteria:
 - i. The founder of the Start-up is an Experienced Founder.

- ii. Either the Lead Investor of the syndicate or at least one investor in the Start-up that the syndicate is investing in, other than the Lead Investor, is a Credible Investor, and the syndicate is investing in the Start-up on the same terms and conditions as the Credible Investor.
- iii. The Start-up has, within the previous three years, received funding from a federal, state, provincial or territorial government program that supports small business or Start-ups as part of its mandate, such as Business Development Bank of Canada, BDC Capital, the Investment Accelerator Fund, Ontario Centres of Excellence, the Federal Economic Development Agency for Southern Ontario and Investissement Québec.

The 1000 Canadian Quality Investors limit is measured from the period commencing on the date of the OSC decision and ending on the expiry of this Decision.

Decision

The Principal Regulator is satisfied that the Decision meets the tests set out in the Legislation for the Principal Regulator to make the Decision.

The decision of the Principal Regulator under the Legislation is that the Prior Commission Decision is repealed and the Prospectus Relief Sought is granted, provided that all of the following conditions are met:

1. The Filers have their head office or principal place of business in the U.S. or Canada.
2. The Filers are in compliance with the no action letter relating to broker-dealer registration issued to them by the SEC dated March 28, 2013 and the no action letter has not been modified or revoked.
3. ALA is an exempt reporting adviser in the U.S.
4. The Filers ensure that securities are only distributed to investors in Canada in accordance with the terms, conditions, restrictions and requirements applicable to the accredited investor exemption as set out in Canadian securities legislation, except the requirements in subsections 2.3(6) and (7) of NI 45-106 to obtain and retain a signed risk acknowledgement in the prescribed form.
5. For each distribution, either ALA, or the SPE Manager on behalf of ALA, will file a completed Form 45-106F1 *Report of Exempt Distribution (Form 45-106F1)* in accordance with Part 6 of NI 45-106 within 10 days of the date of the distribution and will reference the accredited investor exemption as set out in section 2.3 of NI 45-106 as the "Exemption relied on" in Schedule 1 of Form 45-106F1.
6. For each distribution by the SPE, if an offering memorandum (as defined under the Legislation) is provided by the SPE to investors resident in a jurisdiction of Canada, either ALA or the SPE Manager will deliver to the securities regulatory authority of each jurisdiction of Canada where the distribution occurs, a copy of the offering memorandum, or any amendment to a previously delivered offering memorandum, within 10 days of the date of the distribution.
7. For each distribution by the SPE made in reliance on this Decision, if an offering memorandum (as defined under the Legislation) is provided by the SPE to investors resident in a jurisdiction of Canada, ALA will ensure that the SPE provides to investors resident in a jurisdiction of Canada a contractual right of action against the SPE for rescission or damages that:
 - a. Is available to an investor who purchases a security offered by the offering memorandum during the period of distribution, if the offering memorandum contains a misrepresentation, without regard to whether the purchaser relied on the misrepresentation
 - b. Is enforceable by the investor delivering notice to the SPE
 - (i) In the case of an action for rescission, within 180 days after the date of the transaction that gave rise to the cause of action, or
 - (ii) In the case of an action for damages, before the earlier of
 - (A) 180 days after the investor first had knowledge of the facts giving rise to the cause of action, or
 - (B) three years after the date of the transaction that gave rise to the cause of action

- c. Is subject to the defence that the investor had knowledge of the misrepresentation
 - d. In the case of an action for damages, provides that the amount recoverable
 - (i) Must not exceed the price at which the security was offered, and
 - (ii) Does not include all or any part of the damages that the SPE proves does not represent the depreciation in value of the security resulting from the misrepresentation, and
 - e. Is in addition to, and does not detract from, any other right of the purchaser.
8. The first trade in securities distributed in reliance on this Decision will be deemed to be a distribution that is subject to section 2.5 of National Instrument 45-102 *Resale of Securities*.
 9. The Filers ensure that
 - a. The accredited investor status of each investor is verified when the investor first signs up to the Platform and verified again when the investor makes any investment through the Platform, and
 - b. Upon account opening, the investor acknowledges the risks as described above in paragraphs 56 and 57.
 10. The Filers limit access to the Restricted Services to Quality Investors.
 11. The Filers will immediately remove an investor from being able to access the Restricted Services if it knows or suspects that the investor is not an accredited investor (as defined in section 73.3(1) of the Act and NI 45-106).
 12. The Filers ensure that Canadian investors invest in syndicates through the Platform in accordance with paragraph 73.
 13. The Approved Incubator Programs are NEXT Canada (previously known as The Next 36), Creative Destruction Lab, York Entrepreneurship Development Institute's (YEDI) Incubator Track, Ontario Centres of Excellence's (OCE) Market Readiness Program and any other Approved Incubator Program from time to time.
 14. ALA notifies the Principal Regulator in writing at least 30 days prior to any material change in either Filers' business operations or business model, including any material addition to or material modification to the Restricted Services.
 15. The Filers notify the Principal Regulator promptly in writing of any regulatory action, criminal charges, or material civil actions initiated after the date of this Decision in respect of the Filers or any specified affiliate (as defined in Form 33-109F6 *Firm Registration*) of the Filers.
 16. This Decision shall expire two years after the date of the Decision.

"Grant Vingoe"
Vice Chair
Ontario Securities Commission

"Monica Kowal"
Vice Chair
Ontario Securities Commission

The further decision of the Principal Regulator is that the Prior Director Decision is repealed and the Registrant Obligations Relief Sought is hereby granted, provided that all of the following conditions are met:

1. The Filers comply with the terms and conditions of the Decision with respect to the Prospectus Relief Sought.
2. Unless otherwise exempted by a further decision of the Principal Regulator, ALA complies with all of the terms, conditions, restrictions and requirements applicable to a registered dealer, ALA complies with all of the terms, conditions, restrictions and requirements applicable to a registered individual under Canadian securities laws, including the Act and NI 31-103, and any other terms, conditions, restrictions or requirements imposed by a securities regulatory authority or regulator on ALA.
3. The Filers will deal fairly, honestly and in good faith with Participants.
4. The Filers, any representatives of the Filers, any Lead Investors, and any Start-ups do not provide recommendations or advice to any investor or prospective investor on the Platform.

Decisions, Orders and Rulings

5. The Filers ensure Lead Investors of a syndicate invest in the Start-up on the same terms and conditions as the syndicate.
6. The Filers ensure that any Start-up that raises capital in Canada through the Platform is not an investment fund and not a reporting issuer.
7. Neither ALA nor any Lead Investor will solicit investors, aside from the restricted services of the Platform itself.
8. Neither the Filers nor the SPE holds, handles or controls any investor or Start-up funds.
9. Neither Filers permit any secondary trading of previously issued securities to take place on the Platform.
10. The only compensation that ALA and the Lead Investor receive for their role in a syndicate is Carried Interest and such compensation is disclosed to investors. None of the Filers, the Lead Investor nor any of their officers or directors receive any other form of commission or transaction-based compensation related to the Restricted Services, including the Syndicate Services.
11. ALA will disclose any conflicts of interest as described in paragraph 67 to investors in the syndicate.
12. The Filers will immediately remove a Start-up from the Platform, and the posting of any syndicate in relation to such Start-up, if:
 - a. Either Filer makes a good faith determination that the business of the Start-up may not be conducted with integrity because of the past or current conduct of the Start-up or of the Start-up's directors, executive officers or promoters; and
 - b. Either Filer becomes aware that the Start-up is not complying with applicable securities legislation.
13. The Filers will immediately remove any Participant from the Platform or prohibit any person or company from accessing the restricted area of the Platform at the request of the Principal Regulator.
14. In addition to any other reporting required by law, including Form 45-106F1 *Report of Exempt Distribution*, the Filers provide the following information to the Principal Regulator on a quarterly basis:
 - a. The name of each Start-up that has raised capital in Canada through a syndicate on the Platform, the name of the associated SPE(s), whether the Start-up is an Eligible Canadian Start-up and the name of the Approved Incubator Program, and the total amount raised by the Start-up, and
 - b. The number of Canadian Accredited Investors that applied during the quarter to be approved as Quality Investors and the number who were approved by ALA as Quality Investors.
15. This Decision shall expire two years after the date of the Decision.
16. This Decision may be amended by the Principal Regulator from time to time upon prior written notice to the Filer.

"Debra Foubert"
Director
Ontario Securities Commission

2.2 Orders

2.2.1 Canadian National Railway Company and The Bank of Nova Scotia – s. 6.1 of NI 62-104 Take-Over Bids and Issuer Bids

Headnote

Section 6.1 of NI 62-104 – Issuer bid – relief from the requirements applicable to issuer bids in Part 2 of NI 62-104 – issuer proposes to purchase, pursuant to a repurchase program and at a discounted purchase price, up to a specified number of its common shares under its normal course issuer bid from a third party – the third party will abide by the requirements governing normal course issuer bids as though it was the issuer, subject to certain modifications, including that the third party will not make any purchases under the program pursuant to a pre-arranged trade – common shares delivered to the issuer for cancellation will be common shares from the third party's existing inventory – the third party will purchase common shares under the program on the same basis as if the Issuer had conducted the bid in reliance on the normal course issuer bid exemptions set out in securities legislation – no adverse economic impact on, or prejudice to, the Issuer or its security holders – acquisition of securities exempt from the requirements applicable to issuer bids in Part 2 of NI 62-104, subject to conditions, including that the number of common shares transferred by the third party from its existing inventory to the issuer for purchase under the program be equivalent to the number of common shares that the third party has purchased, or had purchased on its behalf, on Canadian markets.

Applicable Legislative Provisions

National Instrument 62-104 Take-Over Bids and Issuer Bids, Part 2 and s. 6.1.

IN THE MATTER OF
THE SECURITIES ACT,
R.S.O. 1990, c. S.5, AS AMENDED

AND

IN THE MATTER OF
CANADIAN NATIONAL RAILWAY COMPANY AND
THE BANK OF NOVA SCOTIA

ORDER
(Section 6.1 of National Instrument 62-104)

UPON the application (the "**Application**") of Canadian National Railway Company (the "**Issuer**") and The Bank of Nova Scotia ("**Scotia**", and together with the Issuer, the "**Filers**") to the Ontario Securities Commission (the "**Commission**") for an order pursuant to section 6.1 of National Instrument 62-104 *Take-Over Bids and Issuer Bids* ("**NI 62-104**") exempting the Issuer from the requirements applicable to issuer bids in Part 2 of NI 62-104 (the "**Issuer Bid Requirements**") in respect of the proposed purchases by the Issuer of up to 1,800,000 (the "**Program Maximum**") of its common shares (the "**Common Shares**") from Scotia pursuant to a share repurchase program (the "**Program**");

AND UPON considering the Application and the recommendation of staff of the Commission;

AND UPON the Issuer having represented to the Commission the matters set out in paragraphs 1, 2, 3, 4, 10 to 21, inclusive, 23 to 30, inclusive, 34, 36, 38, 39, 40, 42 and 43;

AND UPON Scotia and Scotia Capital Inc. ("**SCI**", and together with Scotia, the "**Scotia Entities**") having represented to the Commission the matters set out in paragraphs 5, 6, 7, 8, 9, 21 to 24, inclusive, 27, 29, 31 to 35, inclusive, 37, 41, 43 and 44 as they relate to the Scotia Entities:

1. The Issuer is a corporation governed by the *Canada Business Corporations Act*.
2. The registered and head office of the Issuer is located at 935 de La Gauchetière Street West, Montréal, Quebec, H3B 2M9.
3. The Issuer is a reporting issuer in each of the provinces and territories of Canada (the "**Jurisdictions**") and the Common Shares are listed for trading on the Toronto Stock Exchange (the "**TSX**") and the New York Stock Exchange (the "**NYSE**") under the symbols "CNR" and "CNI", respectively. The Issuer is not in default of any requirement of the securities legislation of the Jurisdictions.

4. The authorized share capital of the Issuer consists of an unlimited number of Common Shares, of which 759,871,789 were issued and outstanding as of March 14, 2017.
5. Scotia is a Schedule I bank governed by the *Bank Act* (Canada). The corporate headquarters of Scotia are located in the Province of Ontario.
6. SCI is registered as an investment dealer under the securities legislation of British Columbia, Alberta, Saskatchewan, Manitoba, Ontario, Québec, Nova Scotia, New Brunswick, Newfoundland and Labrador, Prince Edward Island, Yukon, the Northwest Territories and Nunavut. SCI is a member of the Investment Industry Regulatory Organization of Canada (“IIROC”) and the Canadian Investor Protection Fund, a participating organization or member of the TSX, TSX Venture Exchange and Canadian Securities Exchange, and an approved participant of the Bourse de Montréal. The head office of SCI is located in Toronto, Ontario.
7. Scotia does not own, directly or indirectly, more than 5% of the issued and outstanding Common Shares.
8. Scotia is the beneficial owner of at least 1,800,000 Common Shares, none of which were acquired by, or on behalf of, Scotia in anticipation or contemplation of resale to the Issuer (such Common Shares over which Scotia has beneficial ownership, the “**Inventory Shares**”). All of the Inventory Shares are held by Scotia in the Province of Ontario. No Common Shares were purchased by, or on behalf of, Scotia on or after January 23, 2017, being the date that was 30 days prior to the date of the Application, in anticipation or contemplation of a sale of Common Shares by Scotia to the Issuer.
9. Scotia is at arm’s length to the Issuer and is not an “insider” of the Issuer, or an “associate” of an “insider” of the Issuer, or an “associate” or “affiliate” of the Issuer, as such terms are defined in the *Securities Act* (Ontario) (the “**Act**”). Scotia is an “accredited investor” within the meaning of National Instrument 45-106 *Prospectus Exemptions*.
10. Pursuant to a Notice of Intention to Make a Normal Course Issuer Bid (the “**Notice**”) which was accepted by the TSX effective October 30, 2016, the Issuer is permitted to make a normal course issuer bid (the “**Normal Course Issuer Bid**”) to purchase for cancellation up to 33,000,000 Common Shares, representing approximately 5.1% of the Issuer’s public float of Common Shares as of the date specified in the Notice. The Notice specifies that purchases under the Normal Course Issuer Bid will be conducted through the facilities of the TSX and the NYSE or alternative trading systems, if eligible, or by such other means as may be permitted by the TSX in accordance with sections 628 to 629.3 of Part VI of the TSX Company Manual (the “**TSX Rules**”) or a securities regulatory authority, including under automatic trading plans and by private agreements or share repurchase programs under issuer bid exemption orders issued by securities regulatory authorities.
11. The Normal Course Issuer Bid is being conducted in reliance upon the exemption from the Issuer Bid Requirements set out in subsection 4.8(2) of NI 62-104 (the “**Designated Exchange Exemption**”).
12. The Normal Course Issuer Bid is also being conducted in the normal course on the NYSE and other permitted published markets (collectively with the NYSE, the “**Other Published Markets**”) in reliance upon the exemption from the Issuer Bid Requirements set out in subsection 4.8(3) of NI 62-104 (the “**Other Published Markets Exemption**”, and together with the Designated Exchange Exemption, the “**Exemptions**”).
13. Pursuant to the TSX Rules, the Issuer has appointed SCI as its designated broker in Canada, and Citigroup Global Markets Inc. as its designated broker in the United States, in each case, in respect of the Normal Course Issuer Bid (the “**Responsible Brokers**”).
14. The Issuer may, from time to time, appoint a non-independent purchasing agent (a “**Plan Trustee**”) to fulfill requirements for the delivery of Common Shares under the Issuer’s security-based compensation plans (the “**Plan Trustee Purchases**”). A Plan Trustee has not been appointed by the Issuer and no Plan Trustee Purchases will be required during the Program Term (as defined below).
15. Effective October 30, 2016, the Issuer implemented an automatic repurchase plan (the “**ARP**”) to permit the Issuer to make purchases under the Normal Course Issuer Bid at such times when the Issuer would not be permitted to trade in its securities, including regularly scheduled quarterly blackout periods and other internal blackout periods (each such time, a “**Blackout Period**”). The ARP was approved by the TSX and is in compliance with the TSX Rules and applicable securities law. The ARP will not be in effect during the Program Term (as defined below).
16. The maximum number of Common Shares that the Issuer is permitted to repurchase under the Normal Course Issuer Bid will be reduced by the number of Plan Trustee Purchases and purchases under the ARP, if any.

17. To the best of the Issuer's knowledge, the "public float" (calculated in accordance with the TSX Rules) for the Common Shares as at March 14, 2017 consisted of 640,752,554 Common Shares. The Common Shares are "highly-liquid securities" as that term is defined in section 1.1 of OSC Rule 48-501 *Trading during Distributions, Formal Bids and Share Exchange Transactions* ("**OSC Rule 48-501**") and section 1.1 of the Universal Market Integrity Rules ("**UMIR**").
18. On October 25, 2016, the Commission granted the Issuer and The Toronto-Dominion Bank ("**TD**") an order pursuant to section 6.1 of NI 62-104 exempting the Issuer from the Issuer Bid Requirements in connection with the proposed purchases by the Issuer of up to 2,723,662 Common Shares from TD pursuant to a share repurchase program (the "**TD Program**"). The Issuer purchased 2,723,662 Common Shares under the TD Program, which terminated on December 16, 2016.
19. On December 5, 2016, the Commission granted the Issuer and BMO Nesbitt Burns Inc. ("**BMO Nesbitt**") an order pursuant to section 6.1 of NI 62-104 exempting the Issuer from the Issuer Bid Requirements in connection with the proposed purchases by the Issuer of up to 4,840,000 Common Shares from BMO Nesbitt pursuant to a share repurchase program (the "**BMO Nesbitt Program**"). The Issuer purchased 4,840,000 Common Shares under the BMO Nesbitt Program, which terminated on March 9, 2017.
20. On February 23, 2017, the *Autorité des marchés financiers* granted the Issuer an order pursuant to section 6.1 of NI 62-104 exempting the Issuer from the Issuer Bid Requirements in connection with the proposed purchases by the Issuer of up to 1,246,000 Common Shares from National Bank of Canada ("**NBC**") pursuant to a share repurchase program (the "**NBC Program**"). As at March 14, the Issuer has purchased 253,994 Common Shares under the NBC Program. The NBC Program will terminate on the earlier of April 7, 2017 and the date on which the Issuer will have purchased 1,246,000 Common Shares from NBC under the NBC Program. The Issuer expects the NBC Program to be completed on or about on or about March 31, 2017.
21. The Filers wish to participate in the Program during, and as part of, the Normal Course Issuer Bid to enable the Issuer to purchase from Scotia, and for Scotia to sell to the Issuer, that number of Common Shares equal to the Program Maximum.
22. Pursuant to the terms of the Program Agreement (as defined below), SCI has been retained by Scotia to acquire Common Shares through the facilities of the TSX and on Other Published Markets in Canada (each, a "**Canadian Other Published Market**" and collectively with the TSX, the "**Canadian Markets**") under the Program. No Common Shares will be acquired under the Program on any Other Published Markets other than Canadian Other Published Markets.
23. The Program will be governed by, and conducted in accordance with, the terms and conditions of a Share Repurchase Program Agreement (the "**Program Agreement**") that will be entered into among the Filers and SCI prior to the commencement of the Program and a copy of which will be delivered by the Filers to the Commission promptly thereafter.
24. The Program will begin on the Trading Day (as defined below) following the completion or termination of the NBC Program, and will terminate on the earlier of May 5, 2017 and the date on which the Issuer will have purchased the Program Maximum under the Program (the "**Program Term**"). Neither the Issuer nor any of the Scotia Entities may unilaterally terminate the Program Agreement during the Program Term, except in the case of an event of default by a party thereunder or a change in law or proposed change in law that would have adverse consequences to the transactions under the Program or to the Issuer or either of the Scotia Entities.
25. At least two clear Trading Days (as defined below) prior to the commencement of the Program, the Issuer will issue a press release that has been pre-cleared by the TSX that describes the material features of the Program and discloses the Issuer's intention to participate in the Program during the Normal Course Issuer Bid (the "**Press Release**").
26. The Program Maximum will be less than the number of Common Shares remaining that the Issuer is entitled to acquire under the Normal Course Issuer Bid, calculated as at the date of the Program Agreement.
27. The Program Term will include a Blackout Period. During a Blackout Period, the Program will:
 - (a) be an "automatic securities purchase plan" as defined in National Instrument 55-104 *Insider Reporting Requirements and Exemptions* (as applied, *mutatis mutandis*, to purchases made by an issuer), and SCI will conduct the Program in its sole discretion, in accordance with the irrevocable instructions established by the Issuer, and conveyed by the Issuer to SCI, at a time when the Issuer was not in a Blackout Period (the "**Irrevocable Instructions**"); and

- (b) comply with applicable securities regulatory requirements and guidance, including, *inter alia*, clause 175(2) of Regulation 1015 of the Act, OSC Staff Notice 55-701 *Automatic Securities Disposition Plans and Automatic Securities Purchase Plans* and similar rules and regulations regarding automatic acquisitions of securities under Canadian securities laws.
28. The TSX has been: (a) advised of the Issuer's intention to enter into the Program and has confirmed that it has no objection to the Issuer conducting the Program as part of the Normal Course Issuer Bid; and (b) provided with a copy of the Program Agreement.
29. At such times during the Program Term when the Issuer is not in a Blackout Period, SCI will purchase Common Shares on the applicable Trading Day (as defined below) in accordance with instructions received by SCI from the Issuer prior to the opening of trading on such Trading Day, which instructions will be the same instructions that the Issuer would give to SCI, as its designated Responsible Broker in Canada, if the Issuer was conducting the Normal Course Issuer Bid in reliance on the Exemptions.
30. The Issuer will not give purchase instructions in respect of the Program to SCI at any time that the Issuer is aware of Undisclosed Information (as defined below).
31. All Common Shares acquired for the purposes of the Program by SCI on a day during the Program Term on which Canadian Markets are open for trading (each, a "**Trading Day**") must be acquired on Canadian Markets in accordance with the TSX Rules and any by-laws, rules, regulations or policies of any Canadian Markets upon which purchases are carried out (collectively, the "**NCIB Rules**") that would be applicable to the Issuer in connection with the Normal Course Issuer Bid, provided that:
- (a) the aggregate number of Common Shares to be acquired on Canadian Markets by SCI on each Trading Day shall not exceed the maximum daily limit that is imposed upon the Normal Course Issuer Bid pursuant to the TSX Rules, determined with reference to an average daily trading volume that is based on the trading volume of the Common Shares on all Canadian Markets rather than being limited to the trading volume on the TSX only (the "**Modified Maximum Daily Limit**"), it being understood that the aggregate number of Common Shares to be acquired on the TSX by SCI on each Trading Day will not exceed the maximum daily limit that is imposed on the Normal Course Issuer Bid pursuant to the TSX Rules; and
- (b) notwithstanding the block purchase exception provided for in the TSX Rules, no purchases will be made by SCI on any Canadian Markets pursuant to a pre-arranged trade.
32. The aggregate number of Common Shares to be acquired by SCI in connection with the Program:
- (a) shall not exceed the Program Maximum; and
- (b) on Canadian Other Published Markets shall not exceed that number of Common Shares remaining eligible for purchase by the Issuer pursuant to the Other Published Markets Exemption, calculated as at the date of the Program Agreement.
33. On every Trading Day, SCI will purchase the Number of Common Shares. The "**Number of Common Shares**" will be no greater than the least of:
- (a) the maximum number of Common Shares that can be purchased: (i) using the Canadian dollar amount provided in the instructions received by SCI from the Issuer prior to the opening of trading on such day at such times when the Issuer is not in a Blackout Period; or (ii) pursuant to the Irrevocable Instructions at such times when the Issuer is in a Blackout Period;
- (b) the Program Maximum less the aggregate number of Common Shares previously purchased by SCI under the Program;
- (c) on a Trading Day where trading ceases on the TSX or some other event that would impair SCI's ability to acquire Common Shares on Canadian Markets occurs (a "**Market Disruption Event**"), the number of Common Shares acquired by SCI on such Trading Day up until the time of the Market Disruption Event; and
- (d) the Modified Maximum Daily Limit.

The "**Discounted Price**" per Common Share will be equal to: (a) the volume weighted average price of the Common Shares on the Canadian Markets on the Trading Day on which purchases were made less an agreed upon discount; or

- (b) upon the occurrence of a Market Disruption Event, the volume weighted average price of the Common Shares on the Canadian Markets at the time of the Market Disruption Event less an agreed upon discount.
34. Scotia will deliver to the Issuer that number of Inventory Shares equal to the number of Common Shares purchased by SCI on a Trading Day under the Program on the second Trading Day thereafter, and the Issuer will pay Scotia a purchase price equal to the Discounted Price for each such Inventory Share. Each Inventory Share purchased by the Issuer under the Program will be cancelled upon delivery to the Issuer.
35. Scotia will not sell any Inventory Shares to the Issuer unless SCI has purchased the equivalent number of Common Shares on Canadian Markets under the Program. The number of Common Shares that are purchased by SCI on Canadian Markets under the Program on a Trading Day will be equal to the Number of Common Shares for such Trading Day. SCI will provide the Issuer with a daily written report of SCI's purchases, which report will indicate, *inter alia*, the aggregate number of Common Shares acquired under the Program, the Canadian Market on which such Common Shares were acquired, and the Modified Maximum Daily Limit.
36. During the Program Term, the Issuer will: (a) not purchase, directly or indirectly, any Common Shares (other than Inventory Shares purchased under the Program); (b) prohibit the Responsible Brokers from acquiring any Common Shares on its behalf; (c) prohibit the Plan Trustee from undertaking any Plan Trustee Purchases; and (d) prohibit the designated broker under the ARP from acquiring any Common Shares on its behalf.
37. All purchases of Common Shares under the Program will be made by SCI and neither of the Scotia Entities will engage in any hedging activity in connection with the conduct of the Program.
38. The Issuer will report its purchases of Common Shares under the Program to the TSX in accordance with the TSX Rules. In addition, immediately following the completion of the Program, the Issuer will: (a) report the total number of Common Shares acquired under the Program to the TSX and the Commission; and (b) file a notice on the System for Electronic Document Analysis and Retrieval ("**SEDAR**") disclosing the number of Common Shares acquired under the Program and the aggregate dollar amount paid for such Common Shares.
39. The Issuer is of the view that: (a) it will be able to purchase Common Shares from Scotia at a lower price than the price at which it would be able to purchase an equivalent quantity of Common Shares under the Normal Course Issuer Bid in reliance on the Exemptions; and (b) the purchase of Common Shares pursuant to the Program is in the best interests of the Issuer and constitutes a desirable use of the Issuer's funds.
40. The entering into of the Program Agreement, the purchase of Common Shares by SCI in connection with the Program, and the sale of Inventory Shares by Scotia to the Issuer will not adversely affect the Issuer or the rights of any of the Issuer's security holders and it will not materially affect control of the Issuer.
41. The sale of Inventory Shares to the Issuer by Scotia will not be a "distribution" (as defined in the Act).
42. The Issuer will be able to acquire the Inventory Shares from Scotia without the Issuer being subject to the dealer registration requirements of the Act.
43. At the time that the Issuer and the Scotia Entities enter into the Program Agreement, neither the Issuer, nor any member of the Global Equity Derivatives group of Scotia, nor any personnel of either of the Scotia Entities that negotiated the Program Agreement or made, participated in the making of, or provided advice in connection with, the decision to enter into the Program Agreement and sell the Common Shares, will be aware of any "material change" or "material fact" (each as defined in the Act) with respect to the Issuer or the Common Shares that has not been generally disclosed (the "**Undisclosed Information**").
44. Each of the Scotia Entities:
- (a) has policies and procedures in place to ensure that the Program will be conducted in accordance with, among other things, the Program Agreement and this Order, and to preclude those persons responsible for administering the Program from acquiring any Undisclosed Information during the conduct of the Program; and
 - (b) will, prior to entering into the Program Agreement: (i) ensure that its systems are capable of adhering to, and performing in accordance with, the requirements of the Program and this Order; and (ii) provide all necessary training and take all necessary actions to ensure that the persons administering and executing the purchases under the Program are aware of, and understand the terms of this Order.

AND UPON the Commission being satisfied that to do so would not be prejudicial to the public interest;

IT IS ORDERED pursuant to section 6.1 of NI 62-104 that the Issuer be exempt from the Issuer Bid Requirements in respect of the purchase of Inventory Shares from Scotia pursuant to the Program, provided that:

- (a) at least two clear trading days prior to the commencement of the Program, the Issuer issues the Press Release;
- (b) all purchases of Common Shares under the Program are made on Canadian Markets by SCI, and are:
 - (i) made in accordance with the NCIB Rules applicable to the Normal Course Issuer Bid, as modified by paragraph 31 of this Order;
 - (ii) taken into account by the Issuer when calculating the maximum annual aggregate limits that are imposed upon the Normal Course Issuer Bid in accordance with the TSX Rules, with those Common Shares purchased on Canadian Other Published Markets being taken into account by the Issuer when calculating the maximum aggregate limits that are imposed upon the Issuer in accordance with the Other Published Markets Exemption;
 - (iii) marked with such designation as would be required by the applicable marketplace and UMIR for trades made by an agent of the Issuer; and
 - (iv) monitored by the Scotia Entities on a continual basis for the purposes of ensuring compliance with the terms of this Order, NCIB Rules, and applicable securities law;
- (c) during the Program Term: (i) the Issuer does not purchase, directly or indirectly, any Common Shares (other than Inventory Shares purchased under the Program); (ii) no Common Shares are purchased on behalf of the Issuer by the Responsible Brokers; (iii) no Plan Trustee Purchases are undertaken by the Plan Trustee; and (iv) no Common Shares are acquired on behalf of the Issuer by the designated broker under the ARP;
- (d) the number of Inventory Shares transferred by Scotia to the Issuer for purchase under the Program in respect of a particular Trading Day is equal to the number of Common Shares purchased by SCI on Canadian Markets under the Program in respect of the Trading Day;
- (e) no hedging activity is engaged in by the Scotia Entities in connection with the conduct of the Program;
- (f) at the time that the Program Agreement is entered into by the Filers and SCI:
 - (i) the Common Shares are “highly-liquid securities”, as that term is defined in section 1.1 of OSC Rule 48-501 and section 1.1 of UMIR; and
 - (ii) none of the Issuer, any member of the Global Equity Derivatives group of Scotia, or any personnel of either of the Scotia Entities that negotiated the Program Agreement or made, participated in the making of, or provided advice in connection with, the decision to enter into the Program Agreement and sell the Common Shares, was aware of any Undisclosed Information;
- (g) no purchase instructions in respect of the Program are given by the Issuer to SCI at any time that the Issuer is aware of Undisclosed Information;
- (h) the Scotia Entities maintain records of all purchases of Common Shares that are made by SCI pursuant to the Program, which will be available to the Commission and IIROC upon request; and
- (i) in addition to reporting its purchases of Common Shares under the Program to the TSX in accordance with the TSX Rules, immediately following the completion of the Program, the Issuer will: (i) report the total number of Common Shares acquired under the Program to the TSX and the Commission; and (ii) file a notice on SEDAR disclosing the number of Common Shares acquired under the Program and the aggregate dollar amount paid for such Common Shares.

DATED at Toronto, Ontario this 21st day of March, 2017.

“Naizam Kanji”
Director, Office of Mergers & Acquisitions
Ontario Securities Commission

2.2.2 The Bank of Nova Scotia and BMO Nesbitt Burns – s. 6.1 of NI 62-104 Take-Over Bids and Issuer Bids

Headnote

Section 6.1 of NI 62-104 – Issuer bid – relief from the requirements applicable to issuer bids in Part 2 of NI 62-104 – issuer proposes to purchase, pursuant to a repurchase program and at a discounted purchase price, up to a specified number of its common shares under its normal course issuer bid from a third party – the third party will abide by the requirements governing normal course issuer bids as though it was the issuer, subject to certain modifications, including that the third party will not make any purchases under the program pursuant to a pre-arranged trade – common shares delivered to the issuer for cancellation will be common shares from the third party's existing inventory – due to the discounted purchase price, the common shares cannot be acquired through the TSX trading system – but for the fact that the common shares cannot be acquired through the TSX trading system, the Issuer could otherwise acquire such shares in accordance with TSX rules and in reliance upon the issuer bid exemption available under section 4.8 of NI 62-104 – the third party will purchase common shares under the program on the same basis as if the issuer had conducted the bid in reliance on the normal course issuer bid exemptions set out in securities legislation – no adverse economic impact on, or prejudice to the issuer or its security holders – acquisition of securities exempt from the requirements applicable to issuer bids in Part 2 of NI 62-104, subject to conditions, including that the number of common shares transferred by the third party from its existing inventory to the issuer for purchase under the program be equivalent to the number of common shares that the third party has purchased, or had purchased on its behalf, on Canadian markets.

Statutes Cited

National Instrument 62-104 Take-Over Bids and Issuer Bids, Part 2 and s. 6.1.

**IN THE MATTER OF
THE SECURITIES ACT,
R.S.O. 1990, c.S.5, AS AMENDED**

AND

**IN THE MATTER OF
THE BANK OF NOVA SCOTIA AND
BMO NESBITT BURNS INC.**

ORDER

(Section 6.1 of National Instrument 62-104)

UPON the application (the “**Application**”) of The Bank of Nova Scotia (the “**Issuer**”) and BMO Nesbitt Burns Inc. (“**BMO Nesbitt**”, and together with the Issuer, the “**Filers**”) to the Ontario Securities Commission (the “**Commission**”) for an order pursuant to section 6.1 of National Instrument 62-104 *Take-Over Bids and Issuer Bids* (“**NI 62-104**”) exempting the Issuer from the requirements applicable to issuer bids in Part 2 of NI 62-104 (the “**Issuer Bid Requirements**”) in respect of the proposed purchases by the Issuer of up to 5,500,000 (the “**Program Maximum**”) of its common shares (the “**Common Shares**”) from BMO Nesbitt pursuant to a share repurchase program (the “**Program**”);

AND UPON considering the Application and the recommendation of staff of the Commission;

AND UPON the Issuer having represented to the Commission the matters set out in paragraphs 1 to 4, inclusive, 9 to 27, inclusive, 31, 33, 35 to 37, inclusive, 39, and 40;

AND UPON BMO Nesbitt and Bank of Montreal (“**BMO**”, and together with BMO Nesbitt, the “**BMO Entities**”) having represented to the Commission the matters set out in paragraphs 5 to 8, inclusive, 18 to 20, inclusive, 22, 26, 28 to 32, inclusive, 34, 38, 40, and 41 as they relate to the BMO Entities;

1. The Issuer is a Schedule I bank under, and is governed by, the *Bank Act* (Canada).
2. The Issuer's registered and head office is located at 1709 Hollis Street, Halifax, Nova Scotia, B3J 1W1 and its executive offices are at 44 King Street West, Toronto, Ontario, M5H 1H1.
3. The Issuer is a reporting issuer in each of the provinces and territories of Canada (the “**Jurisdictions**”) and the Common Shares are listed for trading on the Toronto Stock Exchange (the “**TSX**”) and the New York Stock Exchange under the symbol “BNS”. The Issuer is not in default of any requirement of the securities legislation in the jurisdictions in which it is a reporting issuer.

4. The authorized share capital of the Issuer consists of an unlimited number of Common Shares and an unlimited number of preferred shares, issuable in series. As of February 28, 2017: (a) 1,209,265,058 Common Shares; (b) 9,200,000 non-cumulative preferred shares series 17; (c) 7,497,663 non-cumulative preferred shares series 18; (d) 6,302,337 non-cumulative preferred shares series 19; (e) 8,039,268 non-cumulative preferred shares series 20; (f) 5,960,732 non-cumulative preferred shares series 21; (g) 9,376,337 non-cumulative preferred shares series 22; (h) 2,623,056 non-cumulative preferred shares series 23; (i) 6,142,738 non-cumulative preferred shares series 30; (j) 4,457,262 non-cumulative preferred shares series 31; (k) 11,161,422 non-cumulative preferred shares series 32; (l) 5,184,345 non-cumulative preferred shares series 33; (m) 14,000,000 non-cumulative preferred shares series 34; (n) 20,000,000 non-cumulative preferred shares series 36; and (o) 20,000,000 non-cumulative preferred shares series 38, were issued and outstanding. To the best of the Issuer's knowledge, as of February 28, 2017, the "public float" for the Common Shares represented approximately 99.948% of all the issued and outstanding Common Shares for the purposes of the TSX Rules (as defined below).
5. BMO Nesbitt is registered as an investment dealer under the securities legislation of the Jurisdictions. It is also registered as: (a) a futures commission merchant under the *Commodity Futures Act* (Ontario); (b) a derivatives dealer under the *Derivatives Act* (Québec); and (c) a dealer (futures commission merchant) under *The Commodity Futures Act* (Manitoba). BMO Nesbitt is a member of the Investment Industry Regulatory Organization of Canada ("IIROC") and the Canadian Investor Protection Fund, a participating organization or member of the TSX, TSX Venture Exchange and Canadian Securities Exchange, and an approved participant of the Bourse de Montréal. The head office of BMO Nesbitt is located in Toronto, Ontario.
6. BMO Nesbitt does not own, directly or indirectly, more than 5% of the issued and outstanding Common Shares.
7. BMO Nesbitt is the beneficial owner of at least 5,500,000 Common Shares, none of which were acquired by, or on behalf of, BMO Nesbitt in anticipation or contemplation of resale to the Issuer (such Common Shares over which BMO Nesbitt has beneficial ownership, the "Inventory Shares"). All of the Inventory Shares are held by BMO Nesbitt in the Province of Ontario. No Common Shares were purchased by, or on behalf of, BMO Nesbitt on or after February 6, 2017, being the date that was 30 days prior to the date of the Application, in anticipation or contemplation of a sale of Common Shares by BMO Nesbitt to the Issuer.
8. BMO Nesbitt is at arm's length to the Issuer and is not an "insider" of the Issuer, an "associate" of an "insider" of the Issuer, or an "associate" or "affiliate" of the Issuer, as such terms are defined in the *Securities Act* (Ontario) (the "Act"). BMO Nesbitt is an "accredited investor" within the meaning of National Instrument 45-106 *Prospectus Exemptions*.
9. The Issuer announced on May 31, 2016 the renewal of its normal course issuer bid (the "NCIB") to purchase for cancellation, during the 12-month period beginning on June 2, 2016 and ending on June 1, 2017, up to 12,000,000 Common Shares, representing approximately 1% of the issued and outstanding Common Shares as of the date specified in the Notice of Intention to Make a Normal Course Issuer Bid (the "Notice"), which was accepted by the TSX. An amendment to the Notice to provide for the ability of the Issuer to purchase Common Shares under the NCIB pursuant to private agreements under issuer bid exemption orders issued by securities regulatory authorities was accepted by the TSX on January 4, 2017. A further amendment to the Notice to provide for the ability of the Issuer to purchase Common Shares under the NCIB pursuant to share repurchase programs under issuer bid exemption orders issued by securities regulatory authorities (such as the Program) was accepted by the TSX on March 17, 2017. The Notice, as amended, specifies that purchases made under the NCIB are to be conducted through the facilities of the TSX as well as other designated exchanges and published markets in Canada, or by such other means as may be permitted by the TSX in accordance with sections 628 to 629.3 of Part VI of the TSX Company Manual (the "TSX Rules") or a securities regulatory authority.
10. The NCIB is being conducted in reliance upon the exemption from the Issuer Bid Requirements set out in subsection 4.8(2) of NI 62-104 (the "Designated Exchange Exemption").
11. The NCIB is also being conducted in the normal course on published markets other than the TSX (such other published markets, collectively, the "Other Published Markets") in reliance upon the exemption from the Issuer Bid Requirements set out in subsection 4.8(3) of NI 62-104 (the "Other Published Markets Exemption", and together with the Designated Exchange Exemption, the "Exemptions").
12. Pursuant to the TSX Rules, the Issuer has appointed Scotia Capital Inc. as its designated broker in respect of the NCIB (the "Responsible Broker").
13. Effective May 31, 2016, the Issuer implemented an automatic share purchase plan ("ASPP") to permit the Issuer to make purchases under the NCIB at such times when the Issuer would not be permitted to trade in its securities, including internal blackout periods (each such time, a "Blackout Period"). The ASPP was approved by the TSX and is in compliance with the TSX Rules and applicable securities laws. The ASPP will not be in effect during the Program

Term (as defined below). The maximum number of Common Shares that the Issuer is permitted to repurchase under the NCIB will be reduced by the number of purchases under the ASPP, if any.

14. The Issuer does not and will not have any arrangements pursuant to which it is, or will be, required to acquire and deliver Common Shares during the Program Term.
15. To the best of the Issuer's knowledge, the "public float" (calculated in accordance with the TSX Rules) for the Common Shares as at February 28, 2017 consisted of 1,208,734,050 Common Shares. The Common Shares are "highly-liquid securities" as that term is defined in section 1.1 of OSC Rule 48-501 *Trading during Distributions, Formal Bids and Share Exchange Transactions* ("**OSC Rule 48-501**") and section 1.1 of the Universal Market Integrity Rules ("**UMIR**").
16. The Commission granted the Issuer an order on January 6, 2017 pursuant to section 6.1 of NI 62-104 exempting the Issuer from the Issuer Bid Requirements in connection with the proposed purchases by the Issuer of up to 3,000,000 Common Shares from The Toronto-Dominion Bank (the "**Prior Order**"). The Issuer completed the purchase of 3,000,000 Common Shares under the Prior Order on March 6, 2017.
17. As at March 8, 2017, the Issuer has purchased a total of 4,500,000 Common Shares pursuant to the NCIB, including 3,000,000 Common Shares under the Prior Order.
18. The Filers wish to participate in the Program during, and as part of, the NCIB to enable the Issuer to purchase from BMO Nesbitt, and for BMO Nesbitt to sell to the Issuer, that number of Common Shares equal to the Program Maximum.
19. Pursuant to the terms of the Program Agreement (as defined below), BMO Nesbitt has been retained by BMO to acquire Common Shares through the facilities of the TSX and on Other Published Markets in Canada (each, a "**Canadian Other Published Market**" and collectively with the TSX, the "**Canadian Markets**") under the Program. No Common Shares will be acquired under the Program on any Other Published Markets other than Canadian Other Published Markets.
20. The Program will be governed by, and conducted in accordance with, the terms and conditions of a Share Repurchase Program Agreement (the "**Program Agreement**") that will be entered into among the Filers and BMO prior to the commencement of the Program and a copy of which will be delivered by the Filers to the Commission promptly thereafter.
21. The TSX has: (a) been advised of the Issuer's intention to enter into the Program; (b) been provided with a copy of the Program Agreement and a draft of the Press Release (as defined below); and (c) confirmed that it has no objection to the Issuer conducting the Program as part of the NCIB.
22. The Program will begin at least two clear Trading Days (as defined below) after the issuance of the Press Release (as defined below) and will terminate on the earlier of April 10, 2017 and the date on which the Issuer will have purchased the Program Maximum under the Program (the "**Program Term**"). Neither the Issuer nor any of the BMO Entities may unilaterally terminate the Program Agreement during the Program Term, except in the case of an event of default by a party thereunder, or a change in law or announced change in law that would have adverse consequences to the transactions contemplated thereunder or to the Issuer or the BMO Entities.
23. The Issuer will issue a press release that has been pre-cleared by the TSX that describes the material features of the Program and discloses the Issuer's intention to participate in the Program during the NCIB (the "**Press Release**").
24. The Program Maximum will be less than the number of Common Shares remaining that the Issuer is entitled to acquire under the NCIB, calculated as at the date of the Program Agreement.
25. The Program Term will not include a Blackout Period. In the event that a Blackout Period should arise during the Program Term, purchasing under the Program would immediately cease and would not be recommenced until following the expiration of the Blackout Period.
26. During the Program Term, BMO Nesbitt will purchase Common Shares on the applicable Trading Day in accordance with instructions received by BMO Nesbitt from the Issuer prior to the opening of trading on such day, which instructions will be the same instructions that the Issuer would have given to the Responsible Broker, as its designated broker in respect of the NCIB, if the Issuer was conducting the NCIB in reliance on the Exemptions.
27. The Issuer will not give purchase instructions in respect of the Program to BMO Nesbitt at any time that the Issuer is aware of Undisclosed Information (as defined below).

28. All Common Shares acquired for the purposes of the Program by BMO Nesbitt on a day during the Program Term on which Canadian Markets are open for trading (each, a “**Trading Day**”) must be acquired on Canadian Markets in accordance with the TSX Rules and any by-laws, rules, regulations or policies of any Canadian Markets upon which purchases are carried out (collectively, the “**NCIB Rules**”) that would be applicable to the Issuer in connection with the NCIB, provided that:
- (a) the aggregate number of Common Shares to be acquired on Canadian Markets by BMO Nesbitt on each Trading Day shall not exceed the maximum daily limit that is imposed upon the NCIB pursuant to the TSX Rules, determined with reference to an average daily trading volume that is based on the trading volume of the Common Shares on all Canadian Markets rather than being limited to the trading volume on the TSX only (the “**Modified Maximum Daily Limit**”), it being understood that the aggregate number of Common Shares to be acquired on the TSX by BMO Nesbitt on each Trading Day will not exceed the maximum daily limit that is imposed on the NCIB pursuant to the TSX Rules; and
 - (b) notwithstanding the block purchase exception provided for in the TSX Rules, no purchases will be made by BMO Nesbitt on any Canadian Markets pursuant to a pre-arranged trade.
29. The aggregate number of Common Shares acquired by BMO Nesbitt in connection with the Program:
- (a) shall not exceed the Program Maximum; and
 - (b) on Canadian Other Published Markets, shall not exceed that number of Common Shares remaining eligible for purchase by the Issuer pursuant to the Other Published Markets Exemption, calculated as at the date of the Program Agreement.
30. On every Trading Day, BMO Nesbitt will purchase the Number of Common Shares. The “**Number of Common Shares**” will be no greater than the least of:
- (a) the maximum number of Common Shares set out in the instructions received by BMO Nesbitt from the Issuer prior to the opening of trading on such day;
 - (b) the Program Maximum less the aggregate number of Common Shares previously purchased by BMO Nesbitt under the Program;
 - (c) on a Trading Day where trading ceases on the TSX or some other event that would impair BMO Nesbitt’s ability to acquire Common Shares on Canadian Markets occurs (a “**Market Disruption Event**”), the number of Common Shares acquired by BMO Nesbitt on such Trading Day up until the time of the Market Disruption Event; and
 - (d) the Modified Maximum Daily Limit.
- The “**Discounted Price**” per Common Share will be equal to (i) the volume weighted average price of the Common Shares on the Canadian Markets on the Trading Day on which purchases were made less an agreed upon discount, or (ii) upon the occurrence of a Market Disruption Event, the volume weighted average price of the Common Shares on the Canadian Markets at the time of the Market Disruption Event less an agreed upon discount.
31. BMO Nesbitt will deliver to the Issuer that number of Inventory Shares equal to the number of Common Shares purchased by BMO Nesbitt on a Trading Day under the Program on the first Trading Day thereafter, and the Issuer will pay BMO Nesbitt a purchase price equal to the Discounted Price for each such Inventory Share. Each Inventory Share purchased by the Issuer under the Program will be cancelled upon delivery to the Issuer.
32. BMO Nesbitt will not sell any Inventory Shares to the Issuer unless BMO Nesbitt has purchased the equivalent number of Common Shares on Canadian Markets under the Program. The number of Common Shares that are purchased by BMO Nesbitt on Canadian Markets under the Program on a Trading Day will be equal to the Number of Common Shares for such Trading Day. BMO Nesbitt will provide the Issuer with a daily written report of BMO Nesbitt’s purchases, which report will indicate, *inter alia*, the aggregate number of Common Shares acquired under the Program, the Canadian Market on which such Common Shares were acquired, and the Modified Maximum Daily Limit.
33. During the Program Term, the Issuer will: (a) not purchase, directly or indirectly, any Common Shares (other than Inventory Shares purchased under the Program); (b) prohibit the Responsible Broker from acquiring any Common Shares on its behalf; and (c) prohibit the designated broker under the ASPP from acquiring any Common Shares on its behalf.

34. All purchases of Common Shares under the Program will be made by BMO Nesbitt and neither of the BMO Entities will engage in any hedging activity in connection with the conduct of the Program.
35. The Issuer will report its purchases of Common Shares under the Program to the TSX in accordance with the TSX Rules. In addition, immediately following the completion of the Program, the Issuer will: (a) report the total number of Common Shares acquired under the Program to the TSX and the Commission; and (b) file a notice on the System for Electronic Document Analysis and Retrieval ("**SEDAR**") disclosing the number of Common Shares acquired under the Program and the aggregate dollar amount paid for such Common Shares.
36. The Issuer is of the view that: (a) it will be able to purchase Common Shares from BMO Nesbitt at a lower price than the price at which it would be able to purchase an equivalent quantity of Common Shares under the NCIB in reliance on the Exemptions; and (b) the purchase of Common Shares pursuant to the Program is in the best interests of the Issuer and constitutes a desirable use of the Issuer's funds.
37. The entering into of the Program Agreement, the purchase of Common Shares by BMO Nesbitt in connection with the Program, and the sale of Inventory Shares by BMO Nesbitt to the Issuer will not adversely affect the Issuer or the rights of any of the Issuer's security holders and it will not materially affect control of the Issuer.
38. The sale of Inventory Shares to the Issuer by BMO Nesbitt will not be a "distribution" (as defined in the Act).
39. The Issuer will be able to acquire the Inventory Shares from BMO Nesbitt without the Issuer being subject to the dealer registration requirements of the Act.
40. At the time that the Issuer and the BMO Entities enter into the Program Agreement, neither the Issuer, nor any member of the Trading Products Group of BMO Nesbitt, nor any personnel of either of the BMO Entities that negotiated the Program Agreement or made, participated in the making of, or provided advice in connection with, the decision to enter into the Program Agreement and sell the Common Shares, will be aware of any "material change" or "material fact" (each as defined in the Act) with respect to the Issuer or the Common Shares that has not been generally disclosed (the "**Undisclosed Information**").
41. Each of the BMO Entities:
 - (a) has policies and procedures in place to ensure that the Program will be conducted in accordance with, among other things, the Program Agreement and this Order, and to preclude those persons responsible for administering the Program from acquiring any Undisclosed Information during the conduct of the Program; and
 - (b) will, prior to entering into the Program Agreement, (i) ensure that its systems are capable of adhering to, and performing in accordance with, the requirements of the Program and this Order, and (ii) provide all necessary training and take all necessary actions to ensure that the persons administering and executing the purchases under the Program are aware of, and understand the terms of, this Order.

AND UPON the Commission being satisfied that to do so would not be prejudicial to the public interest;

IT IS ORDERED pursuant to section 6.1 of NI 62-104 that the Issuer be exempt from the Issuer Bid Requirements in respect of the purchase of Inventory Shares from BMO Nesbitt pursuant to the Program, provided that:

- (a) at least two clear Trading Days prior to the commencement of the Program, the Issuer issues the Press Release;
- (b) all purchases of Common Shares under the Program are made on Canadian Markets by BMO Nesbitt, and are:
 - (i) made in accordance with the NCIB Rules applicable to the NCIB, as modified by paragraph 28 of this Order;
 - (ii) taken into account by the Issuer when calculating the maximum annual aggregate limits that are imposed upon the NCIB in accordance with the TSX Rules, with those Common Shares purchased on Canadian Other Published Markets being taken into account by the Issuer when calculating the maximum aggregate limits that are imposed upon the Issuer in accordance with the Other Published Markets Exemption;

- (iii) marked with such designation as would be required by the applicable marketplace and UMIR for trades made by an agent of the Issuer; and
- (iv) monitored by the BMO Entities on a continual basis for the purposes of ensuring compliance with the terms of this Order, NCIB Rules, and applicable securities law;
- (c) during the Program Term, (i) the Issuer does not purchase, directly or indirectly, any Common Shares (other than Inventory Shares purchased under the Program), (ii) no Common Shares are purchased on behalf of the Issuer by the Responsible Broker, and (iii) no Common Shares are acquired on behalf of the Issuer by the designated broker under the ASPP;
- (d) the number of Inventory Shares transferred by BMO Nesbitt to the Issuer for purchase under the Program in respect of a particular Trading Day is equal to the number of Common Shares purchased by BMO Nesbitt on Canadian Markets under the Program in respect of the Trading Day;
- (e) no hedging activity is engaged in by the BMO Entities in connection with the conduct of the Program;
- (f) at the time that the Program Agreement is entered into by the Filers and BMO:
 - (i) the Common Shares are “highly liquid securities”, as that term is defined in section 1.1 of OSC Rule 48-501 and section 1.1 of UMIR; and
 - (ii) none of the Issuer, any member of the Trading Products Group of BMO Nesbitt, or any personnel of either of the BMO Entities that negotiated the Program Agreement or made, participated in the making of, or provided advice in connection with, the decision to enter into the Program Agreement and sell the Common Shares, was aware of any Undisclosed Information;
- (g) no purchase instructions in respect of the Program are given by the Issuer to BMO Nesbitt at any time that the Issuer is aware of Undisclosed Information;
- (h) no purchases of Common Shares under the Program will occur during a Blackout Period;
- (i) the BMO Entities maintain records of all purchases of Common Shares that are made by BMO Nesbitt pursuant to the Program, which will be available to the Commission and IIROC upon request; and
- (j) in addition to reporting its purchases of Common Shares under the Program to the TSX in accordance with the TSX Rules, immediately following the completion of the Program, the Issuer will: (i) report the total number of Common Shares acquired under the Program to the TSX and the Commission; and (ii) file a notice on SEDAR disclosing the number of Common Shares acquired under the Program and the aggregate dollar amount paid for such Common Shares.

DATED at Toronto, Ontario, this 21st day of March, 2017.

“Naizam Kanji”
Director, Office of Mergers & Acquisitions
Ontario Securities Commission

2.2.3 MM Café Franchise Inc. et al. – s. 127

IN THE MATTER OF
THE SECURITIES ACT,
RSO 1990, c S.5

AND

IN THE MATTER OF
MM CAFÉ FRANCHISE INC.,
TECHOCAN INTERNATIONAL CO. LTD.,
1727350 ONTARIO LTD.,
MARIANNE GODWIN,
DAVE GARNET CRAIG and
HAIYAN (HELEN) GAO JORDAN

ORDER
(Section 127 of the Securities Act)

WHEREAS

1. on March 23, 2016, the Ontario Securities Commission (the "Commission") issued a Notice of Hearing pursuant to sections 127 and 127.1 of the *Securities Act*, RSO 1990, c S.5 (the "Act") in relation to a Statement of Allegations filed by Staff of the Commission ("Staff") on March 23, 2016, to consider whether it is in the public interest to make certain orders against MM Café Franchise Inc., DCL Healthcare Properties Inc., Culturalite Media Inc., Café Enterprise Toronto Inc., Techocan International Co. Ltd., 1727350 Ontario Ltd., Marianne Godwin, Dave Garnet Craig, Frank DeLuca, Elaine Concepcion and Haiyan (Helen) Gao Jordan;
2. the Notice of Hearing set April 21, 2016 as the hearing date in this matter, on which date the First Appearance was held and the Commission adjourned the proceeding to a Second Appearance to be held on September 6, 2016;
3. on April 29, 2016, Staff filed an Amended Statement of Allegations;
4. on June 9, 2016, the Commission ordered the adjournment of the Second Appearance from September 6, 2016 to September 13, 2016;
5. on July 26, 2016, Staff filed an Amended Amended Statement of Allegations withdrawing certain allegations against Haiyan (Helen) Gao Jordan and a Notice of Withdrawal wholly withdrawing the allegations against DCL Healthcare Properties Inc., Culturalite Media Inc., Café Enterprise Toronto Inc., Frank DeLuca and Elaine Concepcion;
6. on September 13, 2016, the Commission adjourned the proceeding to a Third Appearance to be held on November 14, 2016;
7. on November 14, 2016, the Commission adjourned the Third Appearance to continue on December 15, 2016, and ordered, among other things, that the hearing on the merits shall commence on April 19, 2017, and continue on April 20, 21, 27 and 28, May 1, 3, 4, 5, 8, 9, 10, 23, 24, 26, 30 and 31 and June 1 and 2, 2017;
8. on December 15, 2016, the Commission continued the Third Appearance and ordered, among other things, that the Final Interlocutory Appearance shall be held on March 27, 2017;
9. in March 2017, the parties requested that the Final Interlocutory Appearance be adjourned to April 13, 2017; and
10. the Commission is of the opinion that it is in the public interest to make this order;

IT IS ORDERED that:

1. the Final Interlocutory Appearance is adjourned to April 13, 2017 at 1:00 p.m. or such other date as may be agreed to by the parties and set by the Office of the Secretary.

DATED at Toronto this 23rd day of March, 2017.

"Janet Leiper"

2.2.4 Authorization Order – s. 3.5(3)

DATED at Toronto, this 24th day of March, 2017.

**IN THE MATTER OF
THE SECURITIES ACT,
R.S.O. 1990, CHAPTER S.5, AS AMENDED
(the “Act”)**

“AnneMarie Ryan”
Commissioner

“Philip Anisman”
Commissioner

AND

**IN THE MATTER OF
AN AUTHORIZATION PURSUANT TO
SUBSECTION 3.5(3) OF THE ACT**

**AUTHORIZATION ORDER
(Subsection 3.5(3))**

WHEREAS a quorum of the Ontario Securities Commission (the “Commission”) may, pursuant to subsection 3.5(3) of the Act, in writing authorize any member of the Commission to exercise any of the powers and perform any of the duties of the Commission, including the power to conduct contested hearings on the merits.

AND WHEREAS, by an authorization order made on February 1, 2017, pursuant to subsection 3.5(3) of the Act (“Authorization”), the Commission authorized each of MAUREEN JENSEN, MONICA KOWAL, D. GRANT VINGOE, PHILIP ANISMAN, JANET LEIPER, and TIMOTHY MOSELEY acting alone, to exercise, subject to subsection 3.5(4) of the Act, the powers of the Commission to grant adjournments and set dates for hearings, to hear and determine procedural matters, and to make and give any orders, directions, appointments, applications and consents under sections 5, 11, 12, 17, 19, 20, 122, 126, 127, 128, 129, 140, 144, 146, and 152 of the Act that the Commission is authorized to make and give, including the power to conduct contested hearings on the merits.

IT IS ORDERED that the Authorization is hereby revoked;

THE COMMISSION HEREBY AUTHORIZES, pursuant to subsection 3.5(3) of the Act, each of MAUREEN JENSEN, MONICA KOWAL, D. GRANT VINGOE, PHILIP ANISMAN, ROBERT P. HUTCHISON, JANET LEIPER, TIMOTHY MOSELEY and MARK J. SANDLER acting alone, to exercise, subject to subsection 3.5(4) of the Act, the powers of the Commission to grant adjournments and set dates for hearings, to hear and determine procedural matters, and to make and give any orders, directions, appointments, applications and consents under sections 5, 11, 12, 17, 19, 20, 122, 126, 127, 128, 129, 140, 144, 146, and 152 of the Act that the Commission is authorized to make and give, including the power to conduct contested hearings on the merits; and

THE COMMISSION FURTHER ORDERS that this Authorization Order shall have full force and effect until revoked or such further amendment may be made.

2.2.5 Steven J. Martel et al.

IN THE MATTER OF
THE SECURITIES ACT,
R.S.O. 1990, c S.5

AND

IN THE MATTER OF
STEVEN J. MARTEL,
MARTEL GROUP OF COMPANIES INC. and
8446997 CANADA INC.

ORDER

WHEREAS:

1. On March 29, 2016, the Ontario Securities Commission (the "**Commission**") issued a Notice of Hearing in respect of a Statement of Allegations filed by Staff of the Commission ("**Staff**") on March 29, 2016, in which Staff sought an order against Steven J. Martel ("**Martel**"), Martel Group of Companies Inc. and 8446997 Canada Inc. (collectively, the "**Respondents**") pursuant to subsection 127(1) and section 127.1 of the *Securities Act*, RSO 1990, c S.5 (the "**Act**");
2. On January 11, 2017, Staff and counsel for Martel attended a pre-hearing conference and made submissions and the Commission made an order, among other things, scheduling a motion brought by Martel seeking a stay of proceedings for April 27, 2017 and a timeline for the exchange of materials (the "**January 2017 Order**");
3. On February 6, 2017, Martel served and filed an Amended Notice of Motion and Motion Record, seeking a stay of proceedings and other relief, including constitutional relief (the "**Privilege Motion**");
4. On February 22, 2017, Staff served and filed a Notice of Motion seeking an adjournment of the Privilege Motion and an extension to the timeline for the exchange of materials (the "**Extension Motion**");
5. On March 2, 2017, counsel for Martel and counsel for Staff attended at a hearing and made submissions and the Commission ordered that the Extension Motion be adjourned to March 16, 2017 at 10:00 a.m. and that the obligations of the parties to serve and file the materials and conduct cross-examinations in advance of the hearing of the Privilege Motion, pursuant to the schedule set out in the January 2017 Order, be adjourned to such other dates to be determined by the Commission after hearing the Extension Motion; and
6. On March 16, 2017, counsel for Staff attended at a hearing and made submissions, including that

Staff and counsel for Martel consented to the following order;

IT IS ORDERED that:

1. The hearing of the Extension Motion is hereby vacated;
2. The Privilege Motion is adjourned to June 15 at 10:00 a.m., continuing on June 16, 2017, or such other dates as may be agreed to by the parties and set by the Office of the Secretary, and the parties shall adhere to the following timeline for the exchange of materials:
 - a. Staff shall serve and file a responding motion record no later than March 22, 2017;
 - b. cross-examinations on affidavits, if any, will be conducted during the week of April 24, 2017;
 - c. Martel shall serve and file a memorandum of fact and law no later than May 10, 2017;
 - d. Staff shall serve and file a responding memorandum of fact and law no later than May 26, 2017; and
 - e. Martel shall serve and file a reply memorandum of fact and law, if any, no later than June 2, 2017.

DATED at Toronto, this 24th day of March, 2017.

"D. Grant Vingoe"

2.2.6 Augustine Ventures Inc.

Headnote

National Policy 11-206 Process for Cease to be a Reporting Issuer Applications – The issuer ceases to be a reporting issuer under securities legislation.

Applicable Legislative Provisions

Securities Act, R.S.O. 1990, c .S.5, as am., s. 1(10)(a)(ii).

March 24, 2017

**IN THE MATTER OF
THE SECURITIES LEGISLATION OF
ONTARIO
(the Jurisdictions)**

AND

**IN THE MATTER OF
THE PROCESS FOR CEASE TO BE
A REPORTING ISSUER APPLICATIONS**

AND

**IN THE MATTER OF
AUGUSTINE VENTURES INC.
(the Filer)**

ORDER

Background

The principal regulator in the Jurisdiction has received an application from the Filer for an order under the securities legislation of the Jurisdiction of the principal regulator (the **Legislation**) that the Filer has ceased to be a reporting issuer in all jurisdictions in Canada in which it is a reporting issuer (the **Order Sought**).

Under the Process for Cease to be a Reporting Issuer Applications (for a passport application):

- (a) the Ontario Securities Commission is the principal regulatory for this application, and
- (b) the Filer has provided notice that subsection 4C.5(1) of Multilateral Instrument 11-102 *Passport System (MI 11-102)* is intended to be relied upon in Alberta and Nova Scotia.

Interpretation

Terms defined in National Instrument 14-101 *Definitions* and MI 11-102 have the same meaning if used in this order, unless otherwise defined.

Representations

This order is based on the following facts represented by the Filer:

1. the Filer is not an OTC reporting issuer under Multilateral Instrument 51-105 *Issuers Quoted in the U.S. Over-the-Counter Markets*;
2. the outstanding securities of the Filer, including debt securities, are beneficially owned, directly or indirectly, by fewer than 15 securityholders in each of the jurisdictions of Canada and fewer than 51 securityholders in total worldwide;
3. no securities of the Filer, including debt securities, are traded in Canada or another country on a marketplace as defined in National Instrument 21-101 *Marketplace Operation* or any other facility for bringing together buyers and sellers of securities where trading data is publicly reported;
4. the Filer is applying for an order that the Filer has ceased to be a reporting issuer in all of the jurisdictions of Canada in which it is a reporting issuer; and
5. the Filer is not in default of security legislation in any jurisdiction.

Order

The principal regulator is satisfied that the order meets the test set out in the Legislation for the principal regulator to make the order.

The decision of the principal regulator under the Legislation is that the Order Sought is granted.

“Jo-Anne Matear”
Manager, Corporate Finance
Ontario Securities Commission

**2.2.7 Dennis L. Meharchand and Valt.X Holdings Inc.
– s. 127(1)**

**IN THE MATTER OF
THE SECURITIES ACT,
RSO 1990, c S.5**

AND

**IN THE MATTER OF
DENNIS L. MEHARCHAND and
VALT.X HOLDINGS INC.**

**ORDER
(Subsection 127(1) of the Securities Act)**

WHEREAS on March 27, 2017, the Ontario Securities Commission held a hearing at the offices of the Commission, located at 20 Queen Street West, 17th Floor, Toronto, Ontario, and heard submissions from Staff and counsel representing Dennis L. Meharchand and Valt.X Holdings Inc. (the “Respondents”);

IT IS ORDERED THAT:

1. by no later than April 26, 2017, Staff shall disclose to the Respondents all documents and things in the possession or control of Staff that are relevant to the hearing;
2. by no later than June 19, 2017, Staff shall provide preliminary witness lists and statements to the Respondents and shall indicate any intent to call an expert witness, including the name of the expert and the issue on which the expert will be giving evidence; and
3. the Second Appearance in this matter will be heard on June 26, 2017 at 10:00 a.m., or such other date as may be agreed to by the parties and set by the Office of the Secretary.

DATED at Toronto this 27th day of March, 2017.

“Janet Leiper”

2.3 Orders with Related Settlement Agreements

2.3.1 MM Café Franchise Inc. et al. – ss. 127, 127.1

IN THE MATTER OF
THE SECURITIES ACT,
R.S.O. 1990, c. S.5, AS AMENDED

AND

IN THE MATTER OF
MM CAFÉ FRANCHISE INC.,
TECHOCAN INTERNATIONAL CO. LTD.,
1727350 ONTARIO LIMITED,
MARIANNE GODWIN,
DAVE GARNET CRAIG and
HAIYAN (HELEN) GAO JORDAN

AND

IN THE MATTER OF
A SETTLEMENT AGREEMENT BETWEEN
STAFF OF THE ONTARIO SECURITIES COMMISSION AND
TECHOCAN INTERNATIONAL CO. LTD., AND
HAIYAN (HELEN) GAO JORDAN

ORDER
(Sections 127 and 127.1 of the Securities Act)

WHEREAS:

1. on March 23, 2016, the Ontario Securities Commission (the “Commission”) issued a Notice of Hearing pursuant to subsections 127(1) and 127.1 of the *Securities Act*, R.S.O. 1990, c. S.5, as amended (the “Act”) to consider whether it is in the public interest to make orders, as specified therein, against and in respect of MM Café Franchise Inc., Techocan International Co. Ltd., 1727350 Ontario Limited, Marianne Godwin, Dave Garnet Craig, and Haiyan (Helen) Gao Jordan. The Notice of Hearing was issued in connection with the allegations as set out in the Statement of Allegations of Staff of the Commission (“Staff”) dated March 23, 2016, and amended April 24, 2016 and July 26, 2016 (the “Amended Amended Statement of Allegations”);
2. Techocan International Co. Ltd. and Haiyan (Helen) Gao Jordan (the “Settling Respondents”) entered into a Settlement Agreement with Staff dated March 24, 2017 (the “Settlement Agreement”) in which the Settling Respondents agreed to a proposed settlement of the proceeding commenced by the Notice of Hearing dated March 23, 2016, subject to the approval of the Commission;
3. on March 22, 2017, the Commission issued a Notice of Hearing pursuant to section 127 of the Act to announce that it proposed to hold a hearing to consider whether it is in the public interest to approve a settlement agreement entered into between Staff and the Settling Respondents;
4. the Commission reviewed the Settlement Agreement, the Notice of Hearing and the Amended Amended Statement of Allegations, and heard submissions from counsel for the Settling Respondents and counsel for Staff; and
5. the Commission is of the opinion that it is in the public interest to make this order.

IT IS ORDERED THAT:

1. the Settlement Agreement be approved;
2. trading in any securities or derivatives by the Settling Respondents shall cease for a period of five years commencing on the date of this Order, pursuant to paragraph 2 of subsection 127(1) of the Act except:
 - a. Jordan may trade securities or derivatives in accounts managed by an independent, arms-length portfolio manager who is registered in accordance with Ontario securities law, to whom Jordan has given a copy of this Order, in an account with respect to which Jordan has no direction or control over the selection of specific

securities, and provided Jordan only has annual discussions with the registered portfolio manager for the sole purpose of her providing information regarding general investment objectives, suitability and risk tolerance or as required under Ontario securities law, and

- b. Jordan may trade, as beneficial owner, in securities of a private company, provided that she does not engage in the business of trading in securities;
3. the acquisition of any securities or derivatives by the Settling Respondents is prohibited for a period of five years commencing on the date of this Order, pursuant to paragraph 2.1 of subsection 127(1) of the Act except:
 - a. Jordan may acquire securities or derivatives in accounts managed by an independent, arms-length portfolio manager who is registered in accordance with Ontario securities law, to whom Jordan has given a copy of this Order, in an account with respect to which Jordan has no direction or control over the selection of specific securities, and provided Jordan only has annual discussions with the registered portfolio manager for the sole purpose of her providing information regarding general investment objectives, suitability and risk tolerance or as required under Ontario securities law, and
 - b. Jordan may acquire, as beneficial owner, securities of a private company, provided that she does not engage in the business of trading in securities;
 4. any exemptions contained in Ontario securities law do not apply to the Settling Respondents for a period of five years commencing on the date of this Order, pursuant to paragraph 3 of subsection 127(1) of the Act;
 5. Jordan is prohibited from becoming or acting as a director or officer of an issuer that is not a private company for a period of five years commencing on the date of this Order, pursuant to paragraph 8 of subsection 127(1) of the Act;
 6. Jordan is prohibited from becoming or acting as a director or officer of any registrant for a period of five years commencing on the date of this Order, pursuant to paragraph 8.2 of subsection 127(1) of the Act;
 7. Jordan is prohibited from becoming or acting as a director or officer of any investment fund manager for a period of five years commencing on the date of this Order, pursuant to paragraph 8.4 of subsection 127(1) of the Act;
 8. Jordan is prohibited from becoming or acting as a registrant, as an investment fund manager or as a promoter for a period of five years commencing on the date of this Order, pursuant to paragraph 8.5 of subsection 127(1) of the Act;
 9. the Settling Respondents pay an administrative penalty on a joint and several basis in the amount of \$40,000, which shall be designated for allocation or for use by the Commission in accordance with subsections 3.4(2)(b)(i) or (ii) of the Act, pursuant to paragraph 9 of subsection 127(1) of the Act;
 10. the Settling Respondents disgorge on a joint and several basis to the Commission the amount of \$110,000, which shall be designated for allocation or for use by the Commission in accordance with subsections 3.4(2)(b)(i) or (ii) of the Act, pursuant to paragraph 10 of subsection 127(1) of the Act; and
 11. the Settling Respondents shall pay costs on a joint and several basis in the amount of \$15,000, pursuant to section 127.1 of the Act.

DATED at Toronto, this 24th day of March, 2017.

“Timothy Moseley”

“Philip Anisman”

“Frances Kordyback”

**IN THE MATTER OF
THE SECURITIES ACT,
R.S.O. 1990, c. S.5, AS AMENDED**

AND

**IN THE MATTER OF
MM CAFÉ FRANCHISE INC.,
TECHOCAN INTERNATIONAL CO. LTD.,
1727350 ONTARIO LIMITED,
MARIANNE GODWIN,
DAVE GARNET CRAIG and
HAIYAN (HELEN) GAO JORDAN**

AND

**IN THE MATTER OF
A SETTLEMENT AGREEMENT BETWEEN
STAFF OF THE ONTARIO SECURITIES COMMISSION AND
TECHOCAN INTERNATIONAL CO. LTD., AND
HAIYAN (HELEN) GAO JORDAN**

SETTLEMENT AGREEMENT

PART I – INTRODUCTION

1. The Ontario Securities Commission (the “Commission”) will issue a Notice of Hearing to announce that it will hold a hearing to consider whether, pursuant to sections 127 and 127.1 of the *Securities Act* (the “Act”), it is in the public interest for the Commission to make certain orders in respect of Techocan International Co. Ltd. (“Techocan”) and Haiyan (Helen) Gao Jordan (“Jordan”) (collectively, the “Settling Respondents”).

PART II – JOINT SETTLEMENT RECOMMENDATION

2. Staff of the Commission (“Staff”) agree to recommend settlement of the proceeding commenced against the Settling Respondents by Notice of Hearing dated March 23, 2016 (the “Proceeding”) according to the terms and conditions set out in Part VI of this Settlement Agreement (this “Settlement Agreement”). The Settling Respondents agree to the making of an order in the form attached as Schedule “A” to this Settlement Agreement, based on the facts set out below.
3. For the purposes of the Proceeding, and any other regulatory proceeding commenced by a securities regulatory authority, the Settling Respondents agree with the facts as set out in Part III and the conclusion in Part IV of this Settlement Agreement.

PART III – AGREED FACTS

A. OVERVIEW

4. Between July 2011 and December 2014 (the “Material Time”), in Ontario, the Settling Respondents were in the business of assisting potential immigrants to immigrate to Canada further to a program in Ontario referred to as the Ontario Provincial Nominee Program (“OPNP”), which required that applicants make a minimum \$1 million investment or own at least 33.3% of the equity of a qualifying business. This led the Settling Respondents, who were not registered, to engage in the business of trading in securities of MM Café Franchise Inc. (“MMCF”) in circumstances where registration under the Act was required. The Settling Respondents also inappropriately relied upon prospectus exemptions.

B. THE SETTLING RESPONDENTS

5. Techocan was incorporated in Ontario on August 31, 1998.
6. Jordan is an Ontario resident and is the President and directing mind of Techocan. Jordan was registered with the Commission as a dealing representative for a scholarship plan dealer from March 7, 2011 to September 16, 2011.

C. ILLEGAL UNREGISTERED TRADING AND DISTRIBUTIONS

7. In 2011, MMCF was incorporated by the Respondents Marianne Godwin and Dave Garnet Craig, both Ontario residents, as a Canadian corporation with its office in Ontario, for the purpose of franchising coffee shops that used the Marilyn Monroe name.
8. Commencing in or about July 2011, Jordan, in the context of promoting the OPNP, directly, and indirectly through the use of agents, solicited investors in Ontario and the People's Republic of China ("PRC") to invest in MMCF in the belief that such investment would be a qualifying investment under the OPNP. The shares offered by MMCF are securities as defined in subsection 1(1) of the Act.
9. Jordan met with and forwarded to potential investors promotional materials about MMCF that were provided to Jordan by MMCF, made representations about MMCF based on information provided by MMCF, and offered investors the opportunity to purchase MMCF shares.
10. Information about investing in MMCF was also posted on the webpage of Jordan's company, Techocan.
11. Jordan made representations to investors that the purchase of shares of MMCF could be used to apply for permanent resident status in Canada under the OPNP. During the Material Time, applications were submitted on behalf of a number of MMCF investors to the OPNP. Ultimately, all of the MMCF investors' applications were rejected under the OPNP criteria.
12. Jordan provided investors with subscription agreements for MMCF shares that had been provided to Jordan by MMCF and then submitted the executed subscription agreements to MMCF on behalf of the investors.
13. To facilitate the investment in MMCF shares, Jordan accepted funds from investors for the purchase of MMCF shares in her personal bank account and in the bank account of Techocan that she then transferred to MMCF. Jordan also accepted cheques from investors on behalf of MMCF that she also provided to MMCF.
14. With the participation of the Settling Respondents, approximately CDN\$3.84 million and US\$1.35 million was raised from at least eighteen investors who purchased MMCF shares during the Material Time.
15. Jordan and Techocan received approximately \$110,000 in commissions from MMCF in connection with the investments made in shares of MMCF.
16. During the Material Time, the Settling Respondents were not registered in any capacity with the Commission.
17. The trades in MMCF's securities were "distributions" as defined in subsection 1(1) of the Act as the securities had not been previously issued.
18. No prospectus or preliminary prospectus was filed with the Commission and no receipt for them has ever been issued by the Director with respect to the trades in MMCF's securities.
19. No exemption from the requirements of section 53 of the Act was available with respect to the trades in MMCF's securities.
20. There is no evidence that, in connection with the admitted breaches of Ontario securities law, the Settling Respondents engaged in any dishonest conduct or knowingly contravened the Act.
21. The Settling Respondents fully cooperated with Staff during the course of its investigation.
22. The Settling Respondents have not previously been found to have contravened the Act or engaged in conduct contrary to the public interest.

**PART IV – CONTRAVENTIONS OF ONTARIO SECURITIES LAW AND
CONDUCT CONTRARY TO THE PUBLIC INTEREST**

23. By engaging in the conduct described above, the Settling Respondents admit and acknowledge that they have breached Ontario securities law and engaged in conduct contrary to the public interest. In particular:
 - a. The Settling Respondents engaged in the business of, or held themselves out as engaging in the business of trading in the MMCF securities, without being registered in accordance with Ontario securities law as a dealer, contrary to subsection 25(1) of the Act, and where there were no exemptions available; and

- b. The trades in the MMCF securities constituted distributions of securities in circumstances where no preliminary prospectus and prospectus were filed and receipts had not been issued for them by the Director, and where there were no exemptions available under Ontario securities law, contrary to subsection 53(1) of the Act.

PART V – SETTLING RESPONDENTS' POSITION

- 24. The Settling Respondents request that the settlement hearing panel consider the following mitigating circumstances:
 - a. Jordan advises that of the \$110,000 in commissions paid by MMCF to the Settling Respondents of which approximately \$54,250 was paid to agents and was not for the benefit of the Settling Respondents;
 - b. Jordan advises that subsequent to being informed by Staff as part of its investigation that registration would be required to engage in the trading associated with MMCF, Jordan took and passed the exempt market product course required for registration to sell exempt market products, although in the circumstances she has not pursued registration;
 - c. Jordan advises that the only reason the Settling Respondents had any connection to MMCF and the sale of shares of MMCF was a consequence of the work they performed in connection with the OPNP; and
 - d. Jordan advises that she is not an officer or director of a reporting issuer, registrant, or investment fund manager.

PART VI – TERMS OF SETTLEMENT

- 25. The Settling Respondents agree to the terms of settlement listed below and to the Order attached as Schedule "A" to this Settlement Agreement, to be made by the Commission pursuant to subsection 127(1) and section 127.1 of the Act, the terms of which include that:
 - a. the Settlement Agreement be approved;
 - b. trading in any securities or derivatives by the Settling Respondents shall cease for a period of five years commencing on the date of the Commission's order approving this Settlement Agreement, pursuant to paragraph 2 of subsection 127(1) of the Act, except:
 - i. Jordan may trade securities or derivatives in accounts managed by an independent, arms-length portfolio manager who is registered in accordance with Ontario securities law, to whom Jordan has given a copy of the order approving this Settlement Agreement, in an account with respect to which Jordan has no direction or control over the selection of specific securities, and provided Jordan only has annual discussions with the registered portfolio manager for the sole purpose of her providing information regarding general investment objectives, suitability and risk tolerance or as required under Ontario securities law, and
 - ii. Jordan may trade, as beneficial owner, in securities of a private company, provided that she does not engage in the business of trading in securities;
 - c. the acquisition of any securities or derivatives by the Settling Respondents is prohibited for a period of five years commencing on the date of the Commission's order approving this Settlement Agreement, pursuant to paragraph 2.1 of subsection 127(1) of the Act, except:
 - i. Jordan may acquire securities or derivatives in accounts managed by an independent, arms-length portfolio manager who is registered in accordance with Ontario securities law, to whom Jordan must have given a copy of the order approving this Settlement Agreement, in an account with respect to which Jordan has no direction or control over the selection of specific securities, and provided Jordan only has annual discussions with the registered portfolio manager for the sole purpose of her providing information regarding general investment objectives, suitability and risk tolerance or as required under Ontario securities law, and
 - ii. Jordan may acquire, as beneficial owner, securities of a private company, provided that she does not engage in the business of trading in securities;

- d. any exemptions contained in Ontario securities law do not apply to the Settling Respondents for a period of five years commencing on the date of the Commission's order approving this Settlement Agreement, pursuant to paragraph 3 of subsection 127(1) of the Act;
 - e. Jordan is prohibited from becoming or acting as a director or officer of an issuer that is not a private company for a period of five years commencing on the date of the Commission's order approving this Settlement Agreement, pursuant to paragraph 8 of subsection 127(1) of the Act
 - f. Jordan is prohibited from becoming or acting as a director or officer of any registrant for a period of five years commencing on the date of the Commission's order approving this Settlement Agreement, pursuant to paragraph 8.2 of subsection 127(1) of the Act;
 - g. Jordan is prohibited from becoming or acting as a director or officer of any investment fund manager for a period of five years commencing on the date of the Commission's order approving this Settlement Agreement, pursuant to paragraph 8.4 of subsection 127(1) of the Act;
 - h. Jordan is prohibited from becoming or acting as a registrant, as an investment fund manager or as a promoter for a period of five years commencing on the date of the Commission's order approving this Settlement Agreement, pursuant to paragraph 8.5 of subsection 127(1) of the Act;
 - i. the Settling Respondents pay an administrative penalty on a joint and several basis in the amount of \$40,000, which shall be designated for allocation or for use by the Commission in accordance with subsections 3.4(2)(b)(i) or (ii) of the Act, pursuant to paragraph 9 of subsection 127(1) of the Act;
 - j. the Settling Respondents disgorge on a joint and several basis to the Commission the amount of \$110,000, which shall be designated for allocation or for use by the Commission in accordance with subsections 3.4(2)(b)(i) or (ii) of the Act, pursuant to paragraph 10 of subsection 127(1) of the Act; and
 - k. the Settling Respondents shall pay costs on a joint and several basis in the amount of \$15,000, pursuant to section 127.1 of the Act.
26. Jordan will cooperate with Staff in its investigation including testifying as a witness for Staff in any proceedings commenced or continued by Staff or the Commission relating to the matters set out herein and meeting with Staff in advance of that proceeding to prepare for that testimony.
27. The Settling Respondents undertake to consent to a regulatory Order made by any provincial or territorial securities regulatory authority in Canada containing any or all of the prohibitions set out in sub-paragraphs 22(b) to (h) above. These prohibitions may be modified to reflect the provisions of the relevant provincial or territorial securities law.
28. The Settling Respondents agree to attend in person at the hearing before the Commission to consider this Settlement Agreement.
29. The Settling Respondents agree to make the payments specified in subparagraphs 22(i), 22(j), and 22(k) by certified cheque prior to the issuance of any Commission order approving this Settlement Agreement.
30. Upon the issuance of the Commission order approving this Settlement Agreement, Staff will seek an order of the Commission revoking the Certificate of Direction issued by the Commission on April 18, 2016 with respect to Jordan's home.
31. The Settling Respondents acknowledge that this Settlement Agreement and proposed Order may form the basis for parallel orders in other jurisdictions in Canada. The securities laws of some other Canadian jurisdictions may allow orders made in this matter to take effect in those other jurisdictions automatically, without further notice to the Settling Respondents. The Settling Respondents undertake to contact the securities regulator of any other jurisdiction in which they may intend to engage in any securities- or derivatives-related activities, prior to undertaking such activities.

PART VII – STAFF COMMITMENT

32. If the Commission approves this Settlement Agreement, Staff will not commence or continue any proceeding against the Settling Respondents or 1727350 Ontario Limited under Ontario securities law in relation to the facts set out in Part III of this Settlement Agreement, subject to the provisions of the paragraph below.
33. If the Commission approves this Settlement Agreement and the Settling Respondents fail to comply with any of the terms of this Settlement Agreement, Staff may bring proceedings under Ontario securities law against the Settling

Respondents. These proceedings may be based on, but need not be limited to, the facts set out in Part III of this Settlement Agreement as well as the breach of this Settlement Agreement.

PART VIII – PROCEDURE FOR APPROVAL OF SETTLEMENT

34. The parties will seek approval of this Settlement Agreement at a public hearing before the Commission scheduled for March 24, 2017, or on another date agreed to by Staff and the Settling Respondents, according to the procedures set out in this Settlement Agreement and the Commission's *Rules of Procedure*.
35. This Settlement Agreement will form all of the agreed facts that will be submitted at the settlement hearing on the Settling Respondents' conduct, unless the parties agree that additional facts should be submitted at the settlement hearing.
36. If the Commission approves this Settlement Agreement, the Settling Respondents irrevocably waive all right to a full hearing, judicial review or appeal of this matter under the Act.
37. If the Commission approves this Settlement Agreement, neither Staff nor the Settling Respondents will make any public statement that is inconsistent with this Settlement Agreement or with any additional agreed facts submitted at the settlement hearing.
38. Whether or not the Commission approves this Settlement Agreement, the Settling Respondents will not use, in any proceeding, this Settlement Agreement or the negotiation or process of approval of this Settlement Agreement as the basis for any attack on the Commission's jurisdiction, alleged bias, alleged unfairness, or any other remedies or challenges that may otherwise be available.

PART IX – DISCLOSURE OF SETTLEMENT AGREEMENT

39. If the Commission does not approve this Settlement Agreement or does not make an order in the form attached as Schedule "A" to this Settlement Agreement:
 - a. This Settlement Agreement and all discussions and negotiations between Staff and the Settling Respondents before the settlement hearing takes place will be without prejudice to Staff and the Settling Respondents; and
 - b. Staff and the Settling Respondents will each be entitled to all available proceedings, remedies and challenges, including proceeding to a hearing on the merits of the allegations contained in the Statement of Allegations of Staff in this matter. Any such proceedings, remedies and challenges will not be affected by this Settlement Agreement, or by any discussions or negotiations relating to this Settlement Agreement.
40. Both Staff and the Settling Respondents will keep the terms of this Settlement Agreement confidential until the Commission approves this Settlement Agreement, subject to the parties' need to make submissions during the public hearing.

PART X – EXECUTION OF SETTLEMENT AGREEMENT

41. This Settlement Agreement may be signed in one or more counterparts which, together, constitute a binding agreement.
42. A facsimile copy or other electronic copy of any signature will be as effective as an original signature.

Dated at Toronto this 24th day of March, 2017.

"Haiyan Jordan"

Techocan International Co. Ltd.
Per: Haiyan Jordan

"J. Naster"

J. Naster
Witness

I am authorized to bind the corporation.

Decisions, Orders and Rulings

Dated at Toronto this 24th day of March, 2017.

"Haiyan Jordan"
Haiyan (Helen) Gao Jordan

"J. Naster"
J. Naster
Witness

Dated at Toronto this 24th day of March, 2017.

"Johanna Superina"
for Jeff Kehoe
Director, Enforcement Branch

SCHEDULE "A"

**IN THE MATTER OF
THE SECURITIES ACT,
R.S.O. 1990, c. S.5, AS AMENDED**

AND

**IN THE MATTER OF
MM CAFÉ FRANCHISE INC.,
TECHOCAN INTERNATIONAL CO. LTD.,
1727350 ONTARIO LIMITED,
MARIANNE GODWIN,
DAVE GARNET CRAIG and
HAIYAN (HELEN) GAO JORDAN**

AND

**IN THE MATTER OF
A SETTLEMENT AGREEMENT BETWEEN
STAFF OF THE ONTARIO SECURITIES COMMISSION AND
TECHOCAN INTERNATIONAL CO. LTD., AND
HAIYAN (HELEN) GAO JORDAN**

ORDER

(Sections 127 and 127.1 of the Securities Act)

WHEREAS:

1. on March 23, 2016, the Ontario Securities Commission (the "Commission") issued a Notice of Hearing pursuant to subsections 127(1) and 127.1 of the *Securities Act*, R.S.O. 1990, c. S.5, as amended (the "Act") to consider whether it is in the public interest to make orders, as specified therein, against and in respect of MM Café Franchise Inc., Techocan International Co. Ltd., 1727350 Ontario Limited, Marianne Godwin, Dave Garnet Craig, and Haiyan (Helen) Gao Jordan. The Notice of Hearing was issued in connection with the allegations as set out in the Statement of Allegations of Staff of the Commission ("Staff") dated March 23, 2016, and amended April 24, 2016 and July 26, 2016 (the "Amended Amended Statement of Allegations");
2. Techocan International Co. Ltd. and Haiyan (Helen) Gao Jordan (the "Settling Respondents") entered into a Settlement Agreement with Staff dated [date] (the "Settlement Agreement") in which the Settling Respondents agreed to a proposed settlement of the proceeding commenced by the Notice of Hearing dated March 23, 2016, subject to the approval of the Commission;
3. on [date], the Commission issued a Notice of Hearing pursuant to section 127 of the Act to announce that it proposed to hold a hearing to consider whether it is in the public interest to approve a settlement agreement entered into between Staff and the Settling Respondents;
4. the Commission reviewed the Settlement Agreement, the Notice of Hearing and the Amended Amended Statement of Allegations, and heard submissions from counsel for the Settling Respondents and counsel for Staff; and
5. the Commission is of the opinion that it is in the public interest to make this order.

IT IS ORDERED THAT:

1. the Settlement Agreement be approved;
2. trading in any securities or derivatives by the Settling Respondents shall cease for a period of five years commencing on the date of this Order, pursuant to paragraph 2 of subsection 127(1) of the Act except:
 - a. Jordan may trade securities or derivatives in accounts managed by an independent, arms-length portfolio manager who is registered in accordance with Ontario securities law, to whom Jordan has given a copy of this Order, in an account with respect to which Jordan has no direction or control over the selection of specific securities, and provided Jordan only has annual discussions with the registered portfolio manager for the sole

purpose of her providing information regarding general investment objectives, suitability and risk tolerance or as required under Ontario securities law, and

- b. Jordan may trade, as beneficial owner, in securities of a private company, provided that she does not engage in the business of trading in securities;
3. the acquisition of any securities or derivatives by the Settling Respondents is prohibited for a period of five years commencing on the date of this Order, pursuant to paragraph 2.1 of subsection 127(1) of the Act except:
 - a. Jordan may acquire securities or derivatives in accounts managed by an independent, arms-length portfolio manager who is registered in accordance with Ontario securities law, to whom Jordan has given a copy of this Order, in an account with respect to which Jordan has no direction or control over the selection of specific securities, and provided Jordan only has annual discussions with the registered portfolio manager for the sole purpose of her providing information regarding general investment objectives, suitability and risk tolerance or as required under Ontario securities law, and
 - b. Jordan may acquire, as beneficial owner, securities of a private company, provided that she does not engage in the business of trading in securities;
 4. any exemptions contained in Ontario securities law do not apply to the Settling Respondents for a period of five years commencing on the date of this Order, pursuant to paragraph 3 of subsection 127(1) of the Act;
 5. Jordan is prohibited from becoming or acting as a director or officer of an issuer that is not a private company for a period of five years commencing from the date of this Order, pursuant to paragraph 8 of subsection 127(1) of the Act;
 6. Jordan is prohibited from becoming or acting as a director or officer of any registrant for a period of five years commencing on the date of this Order, pursuant to paragraph 8.2 of subsection 127(1) of the Act;
 7. Jordan is prohibited from becoming or acting as a director or officer of any investment fund manager for a period of five years commencing on the date of this Order, pursuant to paragraph 8.4 of subsection 127(1) of the Act;
 8. Jordan is prohibited from becoming or acting as a registrant, as an investment fund manager or as a promoter for a period of five years commencing on the date of this Order, pursuant to paragraph 8.5 of subsection 127(1) of the Act;
 9. the Settling Respondents pay an administrative penalty on a joint and several basis in the amount of \$40,000, which shall be designated for allocation or for use by the Commission in accordance with subsections 3.4(2)(b)(i) or (ii) of the Act, pursuant to paragraph 9 of subsection 127(1) of the Act;
 10. the Settling Respondents disgorge on a joint and several basis to the Commission the amount of \$110,000, which shall be designated for allocation or for use by the Commission in accordance with subsections 3.4(2)(b)(i) or (ii) of the Act, pursuant to paragraph 10 of subsection 127(1) of the Act; and
 11. the Settling Respondents shall pay costs on a joint and several basis in the amount of \$15,000, pursuant to section 127.1 of the Act.

DATED at Toronto, this 24th day of March, 2017.

Chapter 4

Cease Trading Orders

4.1.1 Temporary, Permanent & Rescinding Issuer Cease Trading Orders

Company Name	Date of Temporary Order	Date of Hearing	Date of Permanent Order	Date of Lapse/Revoke

THERE IS NOTHING TO REPORT THIS WEEK.

Failure to File Cease Trade Orders

Company Name	Date of Order	Date of Revocation

THERE IS NOTHING TO REPORT THIS WEEK.

4.2.1 Temporary, Permanent & Rescinding Management Cease Trading Orders

Company Name	Date of Order or Temporary Order	Date of Hearing	Date of Permanent Order	Date of Lapse/ Expire	Date of Issuer Temporary Order

THERE IS NOTHING TO REPORT THIS WEEK.

4.2.2 Outstanding Management & Insider Cease Trading Orders

Company Name	Date of Order or Temporary Order	Date of Hearing	Date of Permanent Order	Date of Lapse/ Expire	Date of Issuer Temporary Order
Performance Sports Group Ltd.	19 October 2016	31 October 2016	31 October 2016		

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Chapter 5

Rules and Policies

5.1.1 Amendments to NI 23-101 Trading Rules

AMENDMENTS TO NATIONAL INSTRUMENT 23-101 TRADING RULES

1. *National Instrument 23-101 Trading Rules is amended by this Instrument.*

2. *Section 6.6.1 is replaced with the following:*

6.6.1 Trading Fees

(1) In this section

“exchange-traded fund” means a mutual fund

- (a) the units of which are listed securities or quoted securities, and
- (b) that is in continuous distribution in accordance with applicable securities legislation; and

“inter-listed security” means an exchange-traded security that is also listed on an exchange that is registered as a “national securities exchange” in the United States of America under section 6 of the 1934 Act.

(2) A marketplace that is subject to section 7.1 of NI 21-101 must not charge a fee for executing an order that was entered to execute against a displayed order on the marketplace that,

(a) in the case of an order involving an inter-listed security,

- (i) is greater than \$0.0030 per security traded for an equity security, or per unit traded for an exchange-traded fund, if the execution price of each security or unit traded is greater than or equal to \$1.00, and
- (ii) is greater than \$0.0004 per security traded for an equity security, or per unit traded for an exchange-traded fund, if the execution price of each security or unit traded is less than \$1.00; or

(b) in the case of an order involving a security that is not an inter-listed security,

- (i) is greater than \$0.0017 per security traded for an equity security, or per unit traded for an exchange-traded fund, if the execution price of each security or unit traded is greater than or equal to \$1.00, and
- (ii) is greater than \$0.0004 per security traded for an equity security, or per unit traded for an exchange-traded fund, if the execution price of each security or unit traded is less than \$1.00.

(3) A recognized exchange must maintain a list of inter-listed securities that are listed on the exchange as of the last day of each calendar quarter.

(4) A recognized exchange must publicly disclose on its website the list referred to in subsection (3)

- (a) within 7 days after the last day of each calendar quarter, and
- (b) for a period of at least 12 months commencing on the date it is publicly disclosed on the website..

3. The following section is added after section 6.6.1:

6.6.2 Ceasing to be inter-listed security – fee transition period — If a security ceases to be an inter-listed security, paragraph 6.6.1(2)(b) does not apply if

- (a) less than 35 days has passed since the first date, following the cessation, the list referred to in subsection 6.6.1(4) was publicly disclosed, and
- (b) the fee charged is in compliance with paragraph 6.6.1(2)(a) as if the security were still an inter-listed security..

4. Transition – publication of inter-listed securities

On or before April 17, 2017, a recognized exchange must publicly disclose on its website a list of the inter-listed securities that were listed on the exchange as of April 10, 2017.

5. Transition – fee adjustment for orders involving non-inter-listed securities

Despite paragraph 6.6.1(2)(b), as enacted by section 2 of this Instrument, a marketplace to which that paragraph applies may, until May 15, 2017, charge a fee that exceeds the amount referred to in that paragraph provided the fee charged is not greater than

- (a) \$0.0030 per security traded for an equity security, or per unit traded for an exchange-traded fund, if the execution price of each security or unit traded is greater than or equal to \$1.00, and
- (b) \$0.0004 per security traded for an equity security, or per unit traded for an exchange-traded fund, if the execution price is less than \$1.00.

6. Effective Date

- (1) This Instrument comes into force on April 10, 2017.
- (2) In Saskatchewan, despite subsection (1), if these regulations are filed with the Registrar of Regulations after April 10, 2017, these regulations come into force on the day on which they are filed with the Registrar of Regulations.

SCHEDULE

1. ***The changes to Companion Policy 23-101 to National Instrument 23-101 Trading Rules are set out in this Schedule.***

2. ***Part 6 is changed by adding the following section:***

6.4.1 Trading Fees – Section 6.6.1 provides caps on the fee that a marketplace subject to section 7.1 of NI 21-101 can charge for execution against a displayed order on the marketplace. Paragraph 6.6.1(2)(a) establishes a higher trading fee cap for exchange-traded securities that are inter-listed (i.e., listed on both a recognized exchange and a national securities exchange in the United States of America) and priced at or above \$1.00. Subsections 6.6.1(3) and (4) provide a process to ensure transparency of a security’s status as an inter-listed security, and require a recognized exchange to publish a quarterly list of all of its inter-listed securities no later than seven days after the end of each quarter. In compiling the list, an exchange may rely on representations made by its listed issuers as to their status. Section 6.6.2 addresses the situation where a security’s status as an inter-listed security changes, specifically, when a security is delisted from all U.S. national securities exchanges on which it was listed and is now only listed on a recognized exchange in Canada and is no longer an inter-listed security. Section 6.6.2 requires marketplaces to make any reductions to their fees that are necessary to comply with paragraph 6.6.1(2)(b) no later than 35 days following the publication of the first list indicating that the security is no longer an inter-listed security.

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Chapter 7

Insider Reporting

This chapter is available in the print version of the OSC Bulletin, as well as as in Carswell's internet service SecuritiesSource (see www.carswell.com).

This chapter contains a weekly summary of insider transactions of Ontario reporting issuers in the System for Electronic Disclosure by Insiders (SEDI). The weekly summary contains insider transactions reported during the seven days ending Sunday at 11:59 pm.

To obtain Insider Reporting information, please visit the SEDI website (www.sedi.ca).

Chapter 11

IPOs, New Issues and Secondary Financings

INVESTMENT FUNDS

Issuer Name:

Templeton Asian Growth Fund
Templeton Asian Growth Corporate Class
Templeton Emerging Markets Fund
Templeton Emerging Markets Corporate Class
Templeton Frontier Markets Fund
Templeton Frontier Markets Corporate Class
Franklin Bissett All Canadian Focus Fund
Franklin Bissett All Canadian Focus Corporate Class
Franklin Bissett U.S. Focus Fund
Franklin Bissett U.S. Focus Corporate Class
Principal Regulator - Ontario

Type and Date:

Amendment #5 to Simplified Prospectus and Amendment #7 to the AIF dated March 27, 2017
Received on March 27, 2017

Offering Price and Description:

-

Underwriter(s) or Distributor(s):

Franklin Templeton Investments Corp.
Bissett Investment Management, a division of Franklin Templeton Investments Corp.

Promoter(s):

Franklin Templeton Investments Corp.
Project #2469490

Issuer Name:

Guardian Balanced Fund
Guardian Balanced Income Fund
Guardian Canadian Bond Fund
Guardian Canadian Equity Fund
Guardian Canadian Equity Select Fund
Guardian Canadian Focused Equity Fund
Guardian Canadian Growth Equity Fund
Guardian Canadian Short-Term Investment Fund
Guardian Canadian Small/Mid Cap Equity Fund
Guardian Emerging Markets Equity Fund
Guardian Equity Income Fund
Guardian Fundamental Global Equity Fund
Guardian Global Dividend Growth Fund
Guardian Global Equity Fund
Guardian Growth & Income Fund
Guardian High Yield Bond Fund
Guardian International Equity Fund
Guardian International Equity Select Fund
Guardian Managed Income & Growth Portfolio
Guardian Managed Income Portfolio
Guardian Private Wealth Bond Fund
Guardian Private Wealth Equity Fund
Guardian Short Duration Bond Fund
Guardian U.S. Equity Fund
Guardian U.S. Equity Select Fund
Principal Regulator - Ontario

Type and Date:

Combined Preliminary and Pro Forma Simplified Prospectus dated March 21, 2017
NP 11-202 Preliminary Receipt dated March 22, 2017

Offering Price and Description:

Series I Units

Underwriter(s) or Distributor(s):

Worldsource Financial Management Inc.
Guardian Capital LP
Worldsource Financial Management Inc.
Worldsource Securities Inc.

Promoter(s):

Guardian Capital L.P.

Project #2598071

Issuer Name:

imaxx Money Market Fund
Principal Regulator - Ontario

Type and Date:

Amendment #1 to Final Simplified Prospectus dated March 24, 2017

Received on March 24, 2017

Offering Price and Description:

-

Underwriter(s) or Distributor(s):

-

Promoter(s):

Foresters Financial Investment Management Company of
Canada Inc.

Project #2465651

Issuer Name:

Manulife Balanced Portfolio
Manulife Conservative Portfolio
Manulife Growth Portfolio
Manulife Moderate Portfolio
Principal Regulator - Ontario

Type and Date:

Preliminary Simplified Prospectus dated March 23, 2017
NP 11-202 Preliminary Receipt dated March 23, 2017

Offering Price and Description:

OFFERING ADVISOR SERIES, SERIES F, SERIES FT6,
SERIES H, SERIES HE, SERIES HH, SERIES J,
SERIES JT6, SERIES K6 AND SERIES T6 SECURITIES

Underwriter(s) or Distributor(s):

Manulife Asset Management Investments Inc.

Promoter(s):

Manulife Asset Management Limited

Project #2598988

Issuer Name:

Meritage Canadian Equity Portfolio
Meritage Global Equity Portfolio
Meritage American Equity Portfolio
Meritage International Equity Portfolio
Meritage Conservative Portfolio
Meritage Moderate Portfolio
Meritage Balanced Portfolio
Meritage Aggressive Growth Portfolio
Meritage Conservative Income Portfolio
Meritage Moderate Income Portfolio
Meritage Growth Income Portfolio
Meritage Aggressive Growth Income Portfolio
Meritage Global Conservative Portfolio
Meritage Global Moderate Portfolio
Meritage Global Aggressive Growth Portfolio
Meritage Canadian Equity Class Portfolio
Meritage Global Equity Class Portfolio
Meritage Aggressive Growth Class Portfolio
Meritage Global Aggressive Growth Class Portfolio
Principal Regulator - Quebec

Type and Date:

Amendment #1 to Final Simplified Prospectus dated March 20, 2017

Received on March 20, 2017

Offering Price and Description:

-

Underwriter(s) or Distributor(s):

-

Promoter(s):

National Bank Investments Inc.

Project #2499741

Issuer Name:

National Bank Balanced Diversified Fund
National Bank Conservative Diversified Fund
National Bank Global Diversified Equity Fund
National Bank Growth Diversified Fund
National Bank Moderate Diversified Fund
National Bank Secure Diversified Fund
NBI Balanced Portfolio
NBI Bond Fund (formerly, National Bank Bond Fund)
NBI Canadian All Cap Equity Fund (formerly, National Bank Canadian All Cap Equity Fund)
NBI Canadian Bond Private Portfolio
NBI Canadian Diversified Bond Private Portfolio
NBI Canadian Equity Fund (formerly, National Bank Canadian Equity Fund)
NBI Canadian Equity Growth Fund (formerly, National Bank Canadian Equity Growth Fund)
NBI Canadian Equity Private Portfolio
NBI Canadian High Conviction Equity Private Portfolio
NBI Canadian Index Fund (formerly, National Bank Canadian Index Fund)
NBI Canadian Preferred Equity Private Portfolio
NBI Canadian Short Term Income Private Portfolio
NBI Canadian Small Cap Equity Private Portfolio
NBI Conservative Portfolio
NBI Corporate Bond Fund (formerly, National Bank Corporate Bond Fund)
NBI Corporate Bond Private Portfolio
NBI Dividend Fund (formerly, National Bank Dividend Fund)
NBI Emerging Markets Equity Private Portfolio
NBI Equity Income Private Portfolio
NBI Equity Portfolio
NBI Floating Rate Income Fund (formerly, National Bank Floating Rate Income Fund)
NBI Global Bond Fund (formerly, National Bank Global Bond Fund)
NBI Global Equity Fund (formerly, National Bank Global Equity Fund)
NBI Global Real Assets Income Fund
NBI Global Tactical Bond Fund (formerly, National Bank Global Tactical Bond Fund)
NBI Growth Portfolio
NBI High Yield Bond Fund (formerly, National Bank High Yield Bond Fund)
NBI High Yield Bond Private Portfolio
NBI Income Fund (formerly, National Bank Income Fund)
NBI International Currency Neutral Index Fund (formerly, National Bank International Currency Neutral Index Fund)
NBI International Equity Private Portfolio
NBI International High Conviction Equity Private Portfolio
NBI International Index Fund (formerly, National Bank International Index Fund)
NBI Jarislowsky Fraser Select Balanced Fund (formerly Jarislowsky Fraser Select Balanced Fund)
NBI Jarislowsky Fraser Select Canadian Equity Fund (formerly Jarislowsky Fraser Select Canadian Equity Fund)
NBI Jarislowsky Fraser Select Income Fund (formerly Jarislowsky Fraser Select Income Fund)
NBI Mnoey Market Fund (formerly, National Bank Money Market Fund)
NBI Moderate Portfolio
NBI Multiple Asset Class Private Portfolio

NBI Municipal Bond Plus Private Portfolio
NBI Non-Traditional Capital Appreciation Private Portfolio
NBI Non-Traditional Fixed Income Private Portfolio
NBI North American Dividend Private Portfolio
NBI Preferred Equity Fund (formerly, National Bank Preferred Equity Fund)
NBI Preferred Equity Income Fund (formerly, National Bank Preferred Equity Income Fund)
NBI Quebec Growth Fund (formerly, National Bank Quebec Growth Fund)
NBI Real Assets Private Portfolio
NBI Resource Fund (formerly, National Bank Resource Fund)
NBI Secure Portfolio
NBI Short Term Canadian Income Fund (formerly, National Bank Short Term Canadian Income Fund)
NBI Small Cap Fund (formerly, National Bank Small Cap Fund)
NBI SmartBeta Canadian Equity Fund
NBI SmartBeta Global Equity Fund
NBI SmartData International Equity Fund (formerly, National Bank Consensus International Equity Fund)
NBI SmartData U.S. Equity Fund (formerly, National Bank Consensus American Equity Fund)
NBI Strategic U.S. Income and Growth Fund (formerly, National Bank Strategic U.S. Income and Growth Fund)
NBI Tactical Mortgage & Income Fund (formerly National Bank Mortgage Fund)
NBI U.S. Bond Private Portfolio
NBI U.S. Currency Neutral Index Fund (formerly, National Bank U.S. Currency Neutral Index Fund)
NBI U.S. Dividend Fund (formerly, National Bank U.S. Dividend Fund)
NBI U.S. Equity Fund (formerly, National Bank U.S. Equity Fund)
NBI U.S. Equity Private Portfolio
NBI U.S. High Conviction Equity Private Portfolio
NBI U.S. Index Fund (formerly, National Bank U.S. Index Fund)
NBI Unconstrained Fixed Income Fund
NBI Westwood Emerging Markets Fund (formerly, Westwood Emerging Markets Fund)
Principal Regulator - Quebec

Type and Date:

Combined Preliminary and Pro Forma Simplified Prospectus dated March 20, 2017

Received on March 22, 2017

Offering Price and Description:

Investor, Investor -2, R, R-2 Series, Advisor-2, F-2, F5-2, T5-2, O, U.S. \$-Advisor, U.S.\$-F, U.S. \$-FT, U.S.\$ - O, and U.S.\$-T Series Securities

Underwriter(s) or Distributor(s):

National Bank Investments Inc.

Promoter(s):

National Bank Investments Inc.

Project #2598204

Issuer Name:

NEI Ethical Select Income Portfolio
NEI Ethical Select Conservative Portfolio
NEI Ethical Select Balanced Portfolio
NEI Ethical Select Growth Portfolio
NEI Select Conservative Portfolio
NEI Select Balanced Portfolio
NEI Select Growth Portfolio
NEI Select Global Maximum Growth Portfolio
Principal Regulator - Ontario

Type and Date:

Amendment #6 to Final Simplified Prospectus dated March 20, 2017

Received on March 22, 2017

Offering Price and Description:

-

Underwriter(s) or Distributor(s):

Credential Asset Management Inc.

Promoter(s):

Project #2477315

Issuer Name:

Norrep Short Duration 2017 Flow-Through Limited Partnership
Principal Regulator - Alberta

Type and Date:

Preliminary Long Form Prospectus dated March 20, 2017
NP 11-202 Preliminary Receipt dated March 21, 2017

Offering Price and Description:

Maximum Offering: \$25,000,000 - 2,500,000 Limited Partnership Units

Minimum Offering: \$5,000,000 - 500,000 Limited Partnership Units

Purchase Price: \$10.00 per Unit

Minimum Purchase: 500 Units (\$5,000)

Underwriter(s) or Distributor(s):

BMO Nesbitt Burns Inc.
CIBC World Markets Inc.
National Bank Financial Inc.
RBC Dominion Securities Inc.
Scotia Capital Inc.
TD Securities Inc.
GMP Securities L.P.
Raymond James Ltd.
Canaccord Genuity Corp.
Desjardins Securities Inc.
Industrial Alliance Securities Inc.
Laurentian Bank Securities Inc.
Manulife Securities Incorporated

Promoter(s):

Norrep Investment Management Group Inc.

Project #2597515

Issuer Name:

Desjardins 1-5 year Laddered Canadian Corporate Bond Index ETF
Desjardins 1-5 year Laddered Canadian Government Bond Index ETF
Desjardins Canada Multifactor-Controlled Volatility ETF
Desjardins Canadian Preferred Share Index ETF
Desjardins Canadian Short Term Bond Index ETF
Desjardins Canadian Universe Bond Index ETF
Desjardins Developed ex-USA ex-Canada Multifactor-Controlled Volatility ETF
Desjardins Emerging Markets Multifactor-Controlled Volatility ETF
Desjardins USA Multifactor-Controlled Volatility ETF
Principal Regulator - Quebec

Type and Date:

Final Long Form Prospectus dated March 22, 2017
NP 11-202 Receipt dated March 24, 2017

Offering Price and Description:

Units

Underwriter(s) or Distributor(s):

-

Promoter(s):

DESJARDINS GLOBAL ASSET MANAGEMENT INC.
Project #2582961

Issuer Name:

Equium Global Tactical Allocation Fund
Principal Regulator - Ontario

Type and Date:

Final Simplified Prospectus dated March 23, 2017
NP 11-202 Receipt dated March 24, 2017

Offering Price and Description:

Series A and F units @ net asset value

Underwriter(s) or Distributor(s):

Promoter(s):

Equium Capital Management Inc.
Project #2583445

Issuer Name:

Manulife Multifactor Canadian Large Cap Index ETF
Manulife Multifactor Developed International Index ETF
Manulife Multifactor U.S. Large Cap Index ETF
Manulife Multifactor U.S. Mid Cap Index ETF
Principal Regulator - Ontario

Type and Date:

Final Long Form Prospectus dated March 23, 2017
NP 11-202 Receipt dated March 24, 2017

Offering Price and Description:

Hedged Units and Unhedged Units @ Net Asset Value

Underwriter(s) or Distributor(s):

-

Promoter(s):

Manulife Asset Management Limited
Project #2578920

Issuer Name:

Ridgewood Canadian Bond Fund
Ridgewood Tactical Yield Fund
Principal Regulator - Ontario

Type and Date:

Final Simplified Prospectus dated March 17, 2017
NP 11-202 Receipt dated March 21, 2017

Offering Price and Description:

units @ net asset value

Underwriter(s) or Distributor(s):

Ridgewood Capital Asset Management Inc.

Promoter(s):

Ridgewood Capital Asset Management Inc.

Project #2584589

Issuer Name:

Sun Life Milestone 2020 Fund
Principal Regulator - Ontario

Type and Date:

Amendment #1 to Final Simplified Prospectus dated March
17, 2017

Received on March 17, 2017

Offering Price and Description:

-

Underwriter(s) or Distributor(s):

-

Promoter(s):

Sun Life Global Investments (Canada) Inc.

Project #2499012

NON-INVESTMENT FUNDS

Issuer Name:

Builders Capital Mortgage Corp.
Principal Regulator - Alberta

Type and Date:

Amended and Restated Preliminary Long Form Prospectus dated March 21, 2017

Received on March 21, 2017

Offering Price and Description:

\$15,000,000.00 (1,500,000 Class A Non-Voting Shares) Maximum

Price: \$10.00 per Class A Non-Voting Share

Underwriter(s) or Distributor(s):

PI Financial Corp.

Promoter(s):

Builders Capital Management Corp.

Project #2568613

Issuer Name:

CT Real Estate Investment Trust
Principal Regulator - Ontario

Type and Date:

Preliminary Shelf Prospectus dated March 24, 2017
NP 11-202 Preliminary Receipt dated March 27, 2017

Offering Price and Description:

\$2,000,000,000.00

Units

Preferred Units

Debt Securities

Subscription Receipts

Warrants

Underwriter(s) or Distributor(s):

-

Promoter(s):

Canadian Tire Corporation, Limited

Project #2600084

Issuer Name:

Enbridge Income Fund
Principal Regulator - Alberta

Type and Date:

Preliminary Shelf Prospectus dated March 21, 2017
NP 11-202 Preliminary Receipt dated March 22, 2017

Offering Price and Description:

\$2,000,000,000.00 - Medium Term Notes

Underwriter(s) or Distributor(s):

-

Promoter(s):

-

Project #2598171

Issuer Name:

Enerplus Corporation
Principal Regulator - Alberta

Type and Date:

Preliminary Shelf Prospectus dated March 21, 2017
NP 11-202 Preliminary Receipt dated March 21, 2017

Offering Price and Description:

\$2,000,000,000.00 - Common Shares, Preferred Shares, Warrants, Subscription Receipts, Units

Underwriter(s) or Distributor(s):

-

Promoter(s):

-

Project #2597917

Issuer Name:

European Commercial Real Estate Limited
Principal Regulator - Ontario

Type and Date:

Preliminary Short Form Prospectus dated March 24, 2017
NP 11-202 Preliminary Receipt dated March 24, 2017

Offering Price and Description:

\$30,000,000.00 - 6,000,000 Class B Common Shares
Price: \$5.00 per Class B Share

Underwriter(s) or Distributor(s):

CIBC World Markets Inc.

BMO Nesbitt Burns Inc.

National Bank Financial Inc.

Scotia Capital Inc.

TD Securities Inc.

Canaccord Genuity Corp.

GMP Securities L.P.

Raymond James Ltd.

Desjardins Securities Inc.

Industrial Alliance Securities Inc.

Promoter(s):

-

Project #2599688

Issuer Name:

Golden Dawn Minerals Inc.
Principal Regulator - British Columbia

Type and Date:

Preliminary Short Form Prospectus dated March 22, 2017
NP 11-202 Preliminary Receipt dated March 22, 2017

Offering Price and Description:

\$10,000,000.00 - 18,055,555 Units & 8,750,000 FT units
Price: \$0.36 per Unit & \$0.40 per FT Unit

Underwriter(s) or Distributor(s):

Secutor Capital Management Corporation

Promoter(s):

-

Project #2592894

Issuer Name:

HUSKY ENERGY INC.
Principal Regulator - Alberta

Type and Date:

Preliminary Shelf Prospectus dated March 22, 2017
NP 11-202 Preliminary Receipt dated March 22, 2017

Offering Price and Description:

\$3,000,000,000.00 - Common Shares, Preferred Shares,
Debt Securities, Subscription Receipts, Warrants, Units

Underwriter(s) or Distributor(s):

-

Promoter(s):

-

Project #2598692

Issuer Name:

NioCorp Developments Ltd.
Principal Regulator - Ontario

Type and Date:

Amended and Restated Preliminary Shelf Prospectus
dated March 20, 2017

NP 11-202 Preliminary Receipt dated March 22, 2017

Offering Price and Description:

\$400,000,000.00 - Common Shares, Warrants, Units

Underwriter(s) or Distributor(s):

-

Promoter(s):

-

Project #2568538

Issuer Name:

Painted Pony Petroleum Ltd.
Principal Regulator - Alberta

Type and Date:

Preliminary Short Form Prospectus dated March 21, 2017
NP 11-202 Preliminary Receipt dated March 21, 2017

Offering Price and Description:

\$100,901,360.00 - 18,018,100 Common Shares

Price: \$5.60 per Common Share

Underwriter(s) or Distributor(s):

Cormark Securities Inc.
TD Securities Inc.
GMP Securities L.P.
Scotia Capital Inc.
Canaccord Genuity Corp.
RBC Dominion Securities Inc.
Raymond James Ltd.
AltaCorp Capital Inc.
CIBC World Markets Inc.

Promoter(s):

-

Project #2596176

Issuer Name:

PetroShale Inc.
Principal Regulator - Alberta

Type and Date:

Preliminary Short Form Prospectus dated March 21, 2017
NP 11-202 Preliminary Receipt dated March 21, 2017

Offering Price and Description:

Maximum of up to \$100,035,000.00 (111,150,000 Common
Shares)

Minimum of \$70,000,000.00 (77,777,778 Common Shares)

Price: \$0.90 per Offered Share

Underwriter(s) or Distributor(s):

Haywood Securities Inc.

Promoter(s):

-

Project #2598005

Issuer Name:

TriStar Gold Inc.
Principal Regulator - British Columbia

Type and Date:

Preliminary Short Form Prospectus dated March 22, 2017
NP 11-202 Preliminary Receipt dated March 22, 2017

Offering Price and Description:

Maximum Offering: \$7,000,000.00 or [*] Units

Minimum Offering: \$4,000,000.00 or [*] Units

Price: \$[*] per Unit

Underwriter(s) or Distributor(s):

Echelon Wealth Partners Inc.
Paradigm Capital Inc.

Promoter(s):

-

Project #2598639

Issuer Name:

Union Gas Limited
Principal Regulator - Ontario

Type and Date:

Preliminary Shelf Prospectus dated March 20, 2017
NP 11-202 Preliminary Receipt dated March 21, 2017

Offering Price and Description:

\$1,500,000,000.00 - Medium Term Note Debentures
(Unsecured)

Underwriter(s) or Distributor(s):

CIBC World Markets Inc.
BMO Nesbitt Burns Inc.
Desjardins Securities Inc.
HSBC Securities (Canada) Inc.
Merrill Lynch Canada Inc.
National Bank Financial Inc.
RBC Dominion Securities Inc.
Scotia Capital Inc.
TD Securities Inc.

Promoter(s):

-

Project #2597743

Issuer Name:

Firm Capital Mortgage Investment Corporation
Principal Regulator - Ontario

Type and Date:

Final Short Form Prospectus dated March 21, 2017
NP 11-202 Receipt dated March 21, 2017

Offering Price and Description:

1,420,000 Common Shares
\$14.10 per Offered Share

Underwriter(s) or Distributor(s):

TD Securities Inc.
CIBC World Markets Inc.
Scotia Capital Inc.
National Bank Financial Inc.
RBC Dominion Securities Inc.
Canaccord Genuity Corp.
GMP Securities L.P.
Desjardins Securities Inc.
Echelon Wealth Partners Inc.
Industrial Alliance Securities Inc.

Promoter(s):

-

Project #2593729

Issuer Name:

Slate Retail REIT
Principal Regulator - Ontario

Type and Date:

Final Shelf Prospectus dated March 17, 2017
NP 11-202 Receipt dated March 21, 2017

Offering Price and Description:

Units
Debt Securities
Subscription Receipts

Underwriter(s) or Distributor(s):

-

Promoter(s):

-

Project #2586765

Chapter 12

Registrations

12.1.1 Registrants

Type	Company	Category of Registration	Effective Date
Voluntary Surrender	Invescap Sarl	Exempt Market Dealer	March 23, 2017
Voluntary Surrender	Stuart Investment Management Limited	Investment Dealer	March 23, 2017
Name Change	From: Mirelis Advisors S.A. To: Hyposwiss Advisors SA	Portfolio Manager	March 20, 2017
Change in Registration Category	University of Toronto Asset Management Corporation	From: Portfolio Manager and Investment Fund Manager To: Portfolio Manager	March 27, 2017

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Chapter 13

SROs, Marketplaces, Clearing Agencies and Trade Repositories

13.1 SROs

13.1.1 IIROC – Non-Material Amendments to Schedule 12 of Form 1 and its Notes and Instructions Relating to Margin on Futures Concentrations and Deposits – Notice of Commission Approval

INVESTMENT INDUSTRY REGULATORY ORGANIZATION OF CANADA (IIROC)

NON-MATERIAL AMENDMENTS TO SCHEDULE 12 OF FORM 1 AND ITS NOTES AND INSTRUCTIONS RELATING TO MARGIN ON FUTURES CONCENTRATIONS AND DEPOSITS

NOTICE OF COMMISSION APPROVAL

The Ontario Securities Commission has approved IIROC's proposed non-material amendments to Schedule 12 of Form 1 and its Notes and Instructions relating to margin on futures concentrations and deposits. The amendments enhance Dealer Member clarity and certainty in the Schedule and the required margin calculations.

The amendments were republished for public comment on June 23, 2016. An original proposal was published for public comment on January 20, 2012. In response to Canadian Securities Administrators ("CSA") comments received, IIROC concluded that it would be prudent to divide the original proposal into two separate proposals. No comment letters were received for the republished proposed amendments. No changes to the proposed amendments, as set out in Notice 16-0142, were made.

The amendments will be effective on April 28, 2017. A copy of the IIROC Notice including the amendments can be found at <http://www.osc.gov.on.ca>.

In addition, the Alberta Securities Commission, the Autorité des marchés financiers, the British Columbia Securities Commission, the Financial and Consumer Affairs Authority of Saskatchewan, the Financial and Consumer Services Commission of New Brunswick, the Manitoba Securities Commission, the Nova Scotia Securities Commission, the Office of the Superintendent of Securities, Service Newfoundland and Labrador, and the Prince Edward Island Office of the Superintendent of Securities Office have approved or not objected to the amendments.

13.1.2 IIROC – Amendments to Dealer Member Rule 1200 and to Form 1 Relating to the Client Free Credit Cash Usage Limit and Client Free Credit Segregation Requirements – Notice of Commission Approval

INVESTMENT INDUSTRY REGULATORY ORGANIZATION OF CANADA (IIROC)

AMENDMENTS TO DEALER MEMBER RULE 1200 AND TO FORM 1 RELATING TO THE CLIENT FREE CREDIT CASH USAGE LIMIT AND CLIENT FREE CREDIT SEGREGATION REQUIREMENTS

NOTICE OF COMMISSION APPROVAL

The Ontario Securities Commission has approved IIROC's proposed amendments to Dealer Member Rule 1200 and to Form 1 relating to the client free credit cash usage limit and client free credit segregation requirements. The amendments strengthen the prudential framework for IIROC Dealer Members for ensuring the safeguarding of, and timely access to, client assets.

The amendments were republished for public comment on April 28, 2016. An original proposal was published for public comment on December 18, 2014. In response to public and Canadian Securities Administrators ("CSA") comments received, IIROC made material revisions to the original proposal. No comment letters were received for the republished proposed amendments. IIROC has made non-substantive changes to the proposed amendments, as set out in Notice 16-0090, to ensure consistency.

The amendments will be effective on March 30, 2017. A copy of the IIROC Notice including the amendments can be found at <http://www.osc.gov.on.ca>.

In addition, the Alberta Securities Commission, the Autorité des marchés financiers, the British Columbia Securities Commission, the Financial and Consumer Affairs Authority of Saskatchewan, the Financial and Consumer Services Commission of New Brunswick, the Manitoba Securities Commission, the Nova Scotia Securities Commission, the Office of the Superintendent of Securities, Service Newfoundland and Labrador, and the Prince Edward Island Office of the Superintendent of Securities Office have approved or not objected to the amendments.

Chapter 25

Other Information

25.1 Approvals

25.1.1 Veritas Asset Management Inc. – s. 213(3)(b) of the LTCA

Headnote

Clause 213(3)(b) of the Loan and Trust Corporations Act – application by manager, with no prior track record acting as trustee, for approval to act as trustee of pooled funds and future pooled funds to be established and managed by the applicant and offered pursuant to a prospectus exemption.

Statutes Cited:

Loan and Trust Corporations Act, R.S.O. 1990, c. L.25, as am., s. 213(3)(b).

February 28, 2017

Fogler, Rubinoff LLP
Barristers & Solicitors
77 King Street West
Suite 3000
Toronto-Dominion Centre
Toronto, Ontario M5K 1G8

Attention: Eric Roblin

Dear Sirs/Mesdames:

Re: Veritas Asset Management Inc. (the “Applicant”)

Application under clause 213(3)(b) of the *Loan and Trust Corporations Act* (Ontario) for approval to act as trustee

Application #2016/0738

Further to your application dated December 16, 2016 (the “**Application**”) filed on behalf of the Applicant, and based on the facts set out in the Application and the representation by the Applicant that the assets of VAM Signature Fund (the “**Original Fund**”) and any other future mutual fund trusts that the Applicant may establish and manage from time to time, the securities of which will be offered pursuant to prospectus exemptions, will be held in the custody of a trust company incorporated and licensed or registered under the laws of Canada or a jurisdiction, or a bank listed in Schedule I, II or III of the *Bank Act* (Canada), or a qualified affiliate of such bank or trust company, the Ontario Securities Commission (the “**Commission**”) makes the following order:

Pursuant to the authority conferred on the Commission in clause 213(3)(b) of the *Loan and Trust Corporations Act* (Ontario), the Commission approves the proposal that the Applicant act as trustee of the Original Fund and any other future mutual fund trusts which may be established and managed by the Applicant from time to time, the securities of which will be offered pursuant to prospectus exemptions.

Yours truly,

“Anne Marie Ryan”
Commissioner
Ontario Securities Commission

“Philip Anisman”
Commissioner
Ontario Securities Commission

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