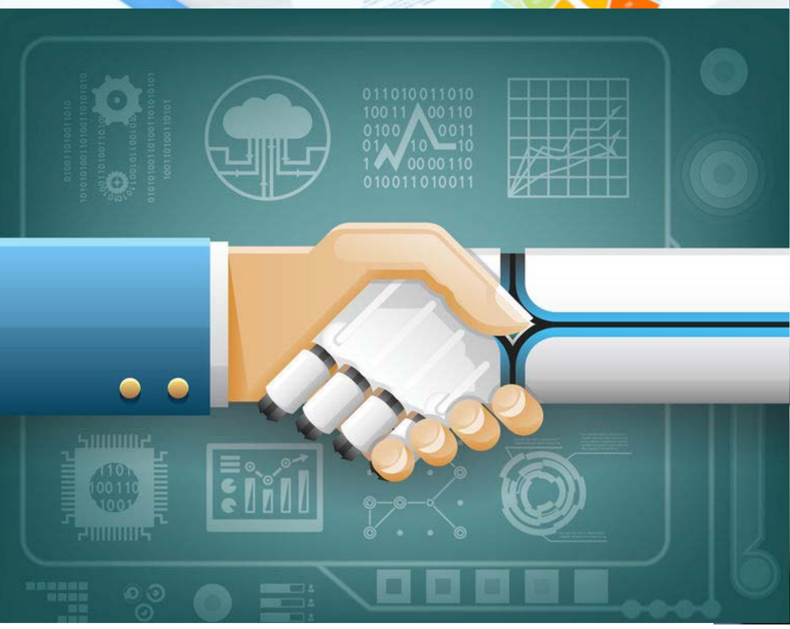
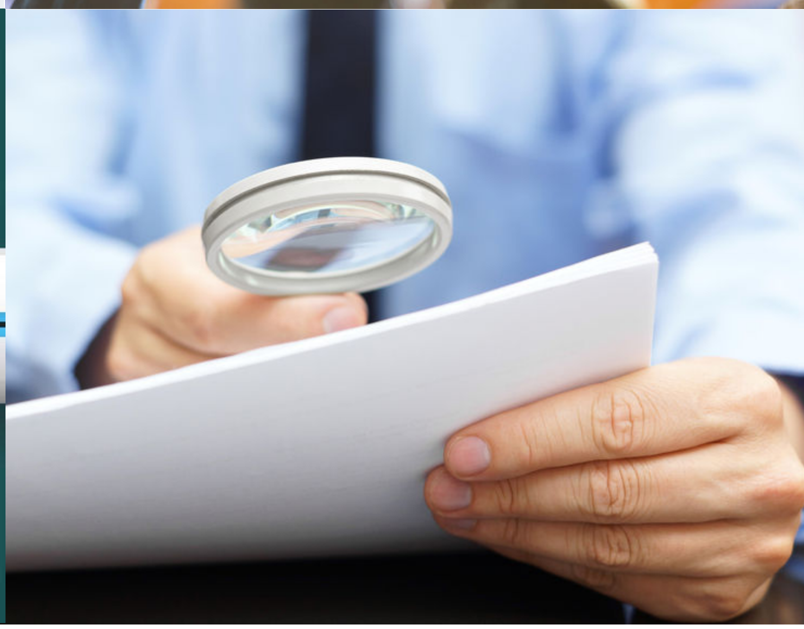
CORE COMPETENCIES FRAMEWORK ON FINANCIAL LITERACY FOR INVESTORS





The International Organization of Securities Commissions (IOSCO) was established in 1983, is the acknowledged international body that brings together world's securities regulators and is recognised as the global standard setter for the securities sector.

IOSCO develops, implements and promotes adherence to internationally recognized standards for securities regulation, and is dedicated to enhancing investor protection and promoting investor confidence.

IOSCO's membership regulates more than 95% of the world's securities markets and is one of the few international organizations that includes all the major emerging markets jurisdictions within its membership.

IOSCO believes the need for investor education and financial literacy has never been greater than today. In response to these challenges, the IOSCO Board establishment Committee 8 on Retail Investors in 2013. The Committee's primary mandate is to conduct IOSCO's policy work on retail investor education and financial literacy. Its secondary mandate is to advise the IOSCO Board on emerging retail investor protection matters and conduct investor protection policy work as directed by the IOSCO Board.

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The Organisation for Economic Co-operation and Development (OECD) is an international organisation that works to build better policies for better lives. Working with governments, policy makers and citizens, the OECD's mission is to shape policies that foster prosperity, equality, opportunity and well-being for people around the world.

OECD governments officially recognised the importance of financial literacy in 2002 with the launch of a unique and comprehensive project. In 2008, the project was further enhanced through the creation of the International Network on Financial Education – INFE. The OECD/ INFE has high-level membership from over 270 public institutions - including central banks, ministries of finance and ministries of education - in over 120 countries. Members meet twice a year to share country and member experiences, discuss strategic priorities, and develop policy responses.

See www.oecd.org/finance/financial-education

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1. EXECUTIVE SUMMARY

1.1 Objectives and Application of the Framework

Investor education is intended to help individuals who invest ("retail investors"), or are considering investing, in securities and other investment products achieve the level of financial literacy needed to make informed investment decisions. A Core Competencies Framework on Financial Literacy for Investors ("the Framework") could help make this process more effective by defining the knowledge, attitudes and behaviours that retail investors should ideally exhibit.

The Framework is aimed at providing jurisdictions with an important tool to support the development and implementation of investor education initiatives. The Framework could also provide guidance on areas that should be covered in investor education, help guide the content of investor education initiatives, and indicate areas to be assessed as part of an evaluation strategy.

The investing environment, which may vary in different jurisdictions, is becoming notably more complex. It is therefore important for investors in any market to be equipped with core competencies that could help them make informed investment decisions. For example, knowing how to diversify investments, reduce risk or choose investments that are suitable for one's needs and objectives is essential for investors when purchasing investment products.

The Framework could help stakeholders deliver investor education more effectively and could also be used for:

- Improving the clarity and visibility of retail investor financial literacy issues;
- Increasing awareness of the need for retail investor education;
- Designing a survey instrument to assess the level of financial literacy among retail investors;
- Providing a benchmark for identifying and measuring the potential gaps in the current provision of investor education;
- Providing guidance for the development of consistent educational and instructional content, resources and communication messages; and
- Developing guidelines for evaluating investor education initiatives.

This Framework complements the OECD/INFE Core Competencies Framework on Financial Literacy for Adults (Adult Framework)[1], delivered to G20 leaders in 2016. The Framework builds on the competencies identified in the Adult Framework that are relevant to investors. Some competencies are described in both frameworks to ensure consistency and make it possible to use either document as a standalone reference.

The Framework also builds on the IOSCO Strategic Framework for Investor Education and Financial Literacy[2] which identifies three initial areas of focus for investor education including Investment knowledge and understanding; Financial skills and competence; and Program design, delivery and measurement.

The Framework addresses the first two areas, focusing on improving investors' investment knowledge and skills.

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[1] OECD (2016), G20/OECD INFE Core competencies framework on financial literacy for adults, available at https://www.oecd.org/finance/Core-Competencies-Framework-Adults.pdf.

[2] FR09/14 Strategic Framework for Investor Education and Financial Literacy, Report of the Board of IOSCO, November 2014, available at https://www.iosco.org/library/pubdocs/pdf/IOSCOPD462.pdf .

1.2 Key components of the Framework

The Framework is outcome-based and covers seven **Content Areas** on which retail investors are encouraged to build their competencies:

1. ***Basic investing principles and concepts***: the broad underlying principles of investing.
2. ***Investment product attributes***: key features such as product structure and fees as well as the potential risks of various investment products.
3. ***Buying/selling process of investment products***: the competencies applicable during the process of selecting investment products, financial service providers and platforms for buying and selling investment products.
4. ***Owning investment holdings***: the competencies applicable to monitoring and managing investments.
5. ***Investor rights and responsibilities***: investor rights and responsibilities and investor protection measures such as complaint and redress procedures.
6. ***Behavioural biases related to investing***: the emotional or cognitive biases that may affect investors when making investment decisions.
7. ***Investment scams and frauds***: the common features of investment scams and the ability to avoid being a victim of scams and frauds.

Core competencies for each Content Area are organised into one of the following **Dimensions**:

- ***Awareness and knowledge***: information acquired by a retail investor such as the fees, features and risks of common investment products.
- ***Skills and behaviours***: actions, or the ability to act, in a manner that achieves positive outcomes, using the behaviours that would most likely lead to financial well-being e.g., evaluating the real return on investments before selecting an investment product.
- ***Attitudes, confidence and motivations***: the internal, psychological mechanisms that may hinder/support informed decision-making and financial well-being, e.g. retail investors' belief that the past performance of an investment is an indication of future returns.

In each of the Content Areas, the three Dimensions (i.e., awareness and knowledge; skills and behaviours; and attitudes, confidence and motivations) are listed in three columns. It is important to note that the order of the competencies listed does not indicate the difficulty of acquiring a competence or the likelihood that someone already has a competency, as both difficulty and likelihood may vary according to personal characteristics and national context.

In some cases, a particular competency may be applicable to more than one Content Area. As an example, risk diversification could be discussed under "Basic investing principles and concepts" or "Owning investment holdings". For the sake of brevity, competencies are not replicated in all possible Content Areas.

The Framework also includes illustrative examples for selected competencies at the end of the Framework. The examples are intended to be general and universally applicable, and stakeholders may wish to develop examples of relevance for their own jurisdictions.

2. CORE COMPETENCIES FRAMEWORK ON FINANCIAL LITERACY FOR INVESTORS

2.1. The Framework

	A. AWARENESS AND KNOWLEDGE, i.e. can	B. SKILLS AND BEHAVIOURS, i.e. will	C. ATTITUDES, CONFIDENCE AND MOTIVATIONS
1. Basic investing principles and concepts	• Explain the difference between saving and investing. • Explain the difference between investing and speculation. • Describe the relationship between risk and potential return. • Explain the impact of inflation on a long-term financial plan and long-term investments. • Explain the effect of compounding on wealth accumulation. • Explain the benefits of diversifying investments. • Explain the risks of borrowing money (or leveraging) to invest. • Explain the effects of cost-averaging when investing.	• Create a liquid savings reserve (emergency fund) before contemplating investing. • Choose investments that suit the individual's risk tolerance level and investment objectives. • Diversify investments. • Consider investments in which the features, fees and risks can be explained by the individual. • Set investment objectives for each investment. • Reassess the individual's risk tolerance level when factors that affect it have changed. • Invest regularly and with discipline for long-term financial goals.	• Recognise that the value of an investment may increase or decrease. • Recognise that making uninformed investment decisions can entail more risks. • View investing as part of the financial planning process rather than for speculative gain.
2. Investment product attributes	• Identify and compare the features and risks of different asset classes. • Identify the factors and how they can affect the value of an investment. • Describe the fees associated with an investment product.	• Research and compare potential investment products within the same asset class. • Use appropriate metrics to compare similar investments. • Evaluate the real rate of return on investment products.	• Confident to undertake research on potential investments before committing. • Motivated to research the range of investments incorporated in investment products in order to make both a financial and ethical decision on their suitability. • Recognise that the past performance of an investment is not an indication of future returns.

	A. AWARENESS AND KNOWLEDGE, i.e. can	B. SKILLS AND BEHAVIOURS, i.e. will	C. ATTITUDES, CONFIDENCE AND MOTIVATIONS
3. Buying/ selling process of investment products	• Describe the features of available channels for buying and selling investment products. • Identify the roles and responsibilities of the financial service provider/intermediary in the buying and selling of investment products. • Explain the risks of delegating the management of an investment account to a third party. • Identify the cyber security risks of using online platforms for investing.	• Use multiple impartial and independent resources, tools and information to assist in making investment decisions. • Ask the financial service provider/intermediary questions to confirm understanding or clarify inconsistencies about investment advice or recommendations. • Seek independent financial advice when necessary. • Compare the pros and cons of buying and selling investment products through different channels. • Check and keep transaction records to confirm they are accurate and genuine. • Use a licensed/regulated financial service provider/ intermediary to buy and sell investment products.	• Confident to make informed investment decisions. • Confident to question investment offers that appear too good to be true. • Confident to ask a financial service provider/intermediary about an investment product; for advice or recommendations; and how they are remunerated for the transaction. • Confident to assess the level of trust that can be invested in a particular financial service provider/ intermediary.
4. Owning investment holdings	• Explain the key information in an investment account statement or transaction confirmation document. • Identify the impact of the different options available when there is a corporate action. • Differentiate between an unrealised and realised gain/loss.	• Regularly review and keep investment account statements, transaction or other documents, and ask for a copy of these documents if not provided. • Regularly review the performance of investments to see if they meet current risk tolerance level and investment objectives. • Rebalance an existing investment portfolio if it no longer fits an individual's risk tolerance level and investment objectives. • Read all communications that are sent regarding existing investments and take appropriate action as necessary.	• Confident to manage investments and make adjustments. • Motivated to be kept informed about existing investments and take necessary actions.

	A. AWARENESS AND KNOWLEDGE, i.e. can	B. SKILLS AND BEHAVIOURS, i.e. will	C. ATTITUDES, CONFIDENCE AND MOTIVATIONS
5. Investors' rights and responsibilities	• Explain investors' rights and responsibilities, the scope of investor protection measures available, including complaint/redress procedures. • Identify the implications of providing inaccurate, misleading or insufficient information to the financial service provider/ intermediary. • Identify the implications of signing documents with a financial service provider/ intermediary.	• Read the sales documents for the investment product before buying one. • Check with financial regulator(s) whether an investment is regulated/registered and how it is regulated/registered. • Check with financial regulator(s) whether the financial service provider/ intermediary is licensed/regulated/ registered to provide such services. • File a complaint about an investment or service with the right parties when there is a dispute. • Clarify all details in a document before signing it and retain a copy.	• Confident to exercise an investor's rights. • Recognise that carrying out investors' rights and responsibilities will reduce the possibility of an investment going wrong. • Recognise that all information in a document (including the small print) may have substantial implications. • Recognise that it is in an individual's best interest to provide the financial service provider/intermediary with accurate and up-to-date relevant information. • Recognise that unregulated investments are higher risk as there is little investor protection. • Accept responsibility for the financial outcome of an investment decision an individual has made.
6. Behavioural biases related to investing	• Aware that investors may not always make rational decisions due to biases. • Provide examples of common emotional or cognitive biases that may affect investing decisions.	• Spot signs of emotional or cognitive biases when making investment decisions. • Avoid making impulsive investment decisions. • Make investment decisions based on factual information.	• Recognise that human characteristics such as emotion can have an impact on investing decisions in unanticipated ways. • Recognise that discipline in investing can minimise behavioural biases.
7. Investment scams and fraud	• Describe the main features of common investment scams and frauds. • Identify the sources available for information on reported investment scams and frauds.	• Recognise if a tactic used in investment scams or fraud is being applied. • Question investment offers that appear too good to be true. • Report to the financial regulator(s) or law enforcement agency(ies) when an investment scam or fraud is suspected.	• Motivated to learn about and how to avoid investment scams and fraud. • Confident to question whether an investment may be fraudulent. • Confident to acknowledge, if it has become apparent, that an investment scam or fraud has taken place. • Recognises that "low risk, high return" investments do not exist.

2.2 Examples/descriptions of selected competencies in the Framework

1. Basic investing principles and concepts

	Competency	Examples/descriptions
A. Awareness and Knowledge	Explain the difference between saving and investing.	• Saving involves putting money away for a future need in a low- to no-risk account, while investing generally involves money that you are trying to grow over the longer term.
	Explain the difference between investing and speculation.	• -
	Describe the relationship between risk and potential return.	• -
	Explain the impact of inflation on a long-term financial plan and long-term investments.	• If an investment does not grow at or above the rate of inflation, its real value will drop.
	Explain the effect of compounding on wealth accumulation.	• Earnings from investments are reinvested in order to generate more earnings over time, i.e., generating earnings from previous earnings.
	Explain the benefits of diversifying investments.	• Diversifying investments spreads risk, thus offsetting the potential risk of concentration.
	Explain the risks of borrowing money (or leveraging) to invest.	• Also margin trading.
	Explain the effects of cost-averaging when investing.	• Also referred to as dollar-cost-averaging.
B. Skills and behaviours	Create a liquid savings reserve (emergency fund) before contemplating investing.	• E.g., the principle of the Financial Planning Pyramid.
	Choose investments that suit the individual's risk tolerance level and investment objectives.	• Investments, including investment portfolios. • E.g. time horizon, liquidity of an investment vs liquidity needs of the investor.
	Diversify investments.	• -
	Consider investments in which the features, fees and risks can be explained by the individual.	• Example of features: liquidity, credit, market risks, etc.
	Set investment objectives for each investment.	• E.g., expected return, time horizon, taking into account the potential return with the associated risk, etc.
	Reassess the individual's risk tolerance level when factors that affect it have changed.	• E.g., age, marital status, loss of income, retirement, financial commitments, etc.
	Invest regularly and with discipline for long-term financial goals.	• -
C. Attitudes, Confidence and Motivations	Recognise that the value of an investment may increase or decrease.	• -
	Recognise that making uninformed investment decisions can entail more risks.	• -
	View investing as part of the financial planning process rather than for speculative gain.	• -

2. Investment product attributes

	Competency	Examples/descriptions
A. Awareness and Knowledge	Identify and compare the features and risks of different asset classes.	• Inter-asset class comparisons. • Aware that some investment products are complex, high-risk and/or illiquid, e.g., use of derivatives, terms that alter the nature or risk of the investment or pay-out profile, etc.
	Identify the factors and how they can affect the value of an investment.	• Factors that can affect the value of investments, e.g., interest rate, government policies, technological developments, etc. • Ways that value is affected, e.g., bond prices may drop due to interest rate hikes.
	Describe the fees associated with an investment product.	• The various types of fees applicable to the investment product, how they are charged and how they impact investment returns (especially returns in the long-term).
B. Skills and behaviours	Research and compare potential investment products within the same asset class.	• Intra-asset class comparisons. • Seeking information on important features of an investment product from the financial service provider/intermediary.
	Use appropriate metrics to compare similar investments.	• Metrics to measure a stock's value, e.g., price-to-earnings ratio, price-to-book ratio, dividend yield, etc. • Metrics to measure bond value, e.g., yield-to-maturity rate, etc. • Benchmarks/indices.
	Evaluate the real rate of return on investment products.	• Investment returns can be affected by factors such as inflation, taxes, fees, etc.
C. Attitudes, Confidence and Motivations	Confident to undertake research on potential investments before committing.	• -
	Motivated to research the range of investments incorporated in investment products in order to make both a financial and ethical decision on their suitability.	• Researching the underlying asset classes in investment products.
	Recognise that the past performance of an investment is not an indication of future returns.	• -

3. Buying/selling process of investment products

	Competency	Examples/descriptions
A. Awareness and Knowledge	Describe the features of available channels for buying and selling investment products.	• Channels could include online platforms, phone, in-person, etc. • Features such as account balance minimums, commissions, fees etc.
	Identify the roles and responsibilities of the financial service provider/intermediary in the buying and selling of investment products.	• Principal and agent problem: Realise that financial professionals get paid in different ways—via fees, commissions, etc. —and may make more money if they sell a specific product. These include sales commissions or other incentives on product sales, tactics used to encourage excessive trading or to generate commissions (e.g. churning). • The scope or limitations of the financial service provider/intermediary.
	Explain the risks of delegating the management of an investment account to a third party.	• E.g., churning, frequent trading incurring high commission/fees.
	Identify the cyber security risks of using online platforms for investing.	• E.g., suspicious URL, platform not regulated, data security.
B. Skills and behaviours	Use multiple impartial and independent resources, tools and information to assist in making investment decisions.	• E.g., on-line calculators, ratings agencies, comparison websites.
	Ask the financial service provider/intermediary questions to confirm understanding or clarify inconsistencies about investment advice or recommendations.	• -
	Seek independent financial advice when necessary.	• -
	Compare the pros and cons of buying and selling investment products through different channels.	• E.g., convenience, speed, additional services, account balance minimums, commissions, fees, costs, tax consequences, etc.
	Check and keep transaction records to confirm they are accurate and genuine.	• Transaction records: e.g., receipts, contracts, statements, etc. • Accuracy: e.g., checking that the transactions are authorised by the investor.
	Use a licensed/regulated financial service provider/intermediary to buy and sell investment products.	• -
C. Attitudes, Confidence and Motivations	Confident to make informed investment decisions.	• Confidence in analysing the usefulness of the information for making investment decisions. • E.g., the information may be out of date, information may be too generic, etc.
	Confident to question investment offers that appear too good to be true.	• Knowing that investments could be scams, or there may be a misunderstanding about the offer.
	Confident to ask a financial service provider/intermediary about an investment product; for advice or recommendations; and how they are remunerated for the transaction.	• -
	Confident to assess the level of trust that can be invested in a particular financial service provider/intermediary.	• E.g., an intermediary acting on behalf of a product provider, distributing in-house products, receiving retrocessions/rebates from product issuers or acting as an independent advisor all command different trust levels.

4. Owning investment holdings

	Competency	Examples/descriptions
A. Awareness and Knowledge	Explain the key information in an investment account statement or transaction confirmation document.	• Key information: e.g., investment account activities, summary of investments, performance (profit or loss), fees and charges, corporate actions, etc.
	Identify the impact of the different options available when there is a corporate action.	• Corporate actions could include choosing to receive cash or scrip dividend, voting in the shareholders meeting, acting on rights issues/offerings.
	Differentiate between an unrealised and realised gain/loss.	• -
B. Skills and behaviours	Regularly review and keep investment account statements, transaction or other documents, and ask for a copy of these documents if not provided.	• -
	Regularly review the performance of investments to see if they meet current risk tolerance level and investment objectives.	• -
	Rebalance an existing investment portfolio if it no longer fits an individual's risk tolerance level and investment objectives.	• -
	Read all communications that are sent regarding existing investments and take appropriate action as necessary.	• -
C. Attitudes, Confidence and Motivations	Confident to manage investments and make adjustments.	• -
	Motivated to be kept informed about existing investments and take necessary actions.	• -

5. Investors' rights and responsibilities

	Competency	Examples/descriptions
A. Awareness and Knowledge	Explain investors' rights and responsibilities, the scope of investor protection measures available, including complaint/redress procedures.	• Investors' rights: e.g. right to attend the Annual General Meeting, right to obtain full disclosure of information from the financial service provider/intermediary, right to complain/seek redress, etc. • Investor protections under unregulated vs regulated products: e.g., differences between protections under locally regulated products and overseas regulated products, the role of various agencies such as ombudsmen and regulators, the process and timelines, etc.
	Identify the implications of providing inaccurate, misleading or insufficient information to the financial service provider/intermediary.	• E.g., providing insufficient information for a suitability test could result in the wrong risk profile and being offered unsuitable products.
	Identify the implications of signing documents with a financial service provider/intermediary.	• E.g., financial obligation or liabilities, loss of rights or protection measures, etc.
B. Skills and behaviours	Read the sales documents for the investment product before buying one.	• Sales materials could include product key fact statements, prospectus, etc.
	Check with financial regulator(s) whether an investment is regulated/registered and how it is regulated/registered.	• -
	Check with financial regulator(s) whether the financial service provider/intermediary is licensed/regulated/registered to provide such services.	• -
	File a complaint about an investment or service with the right parties when there is a dispute.	• Parties could include the complaints officer of a financial service provider/intermediary, financial regulators, ombudsman, dispute resolution bodies, etc.
	Clarify all details in a document before signing it and retain a copy.	• E.g., waivers or disclaimers that do not properly reflect the actual circumstance or agreement.
C. Attitudes, Confidence and Motivations	Confident to exercise an investor's rights.	• -
	Recognise that carrying out investors' rights and responsibilities will reduce the possibility of an investment going wrong.	• -
	Recognise that all information in a document (including the small print) may have substantial implications.	• -
	Recognise that it is in an individual's best interest to provide the financial service provider/intermediary with accurate, up-to-date and relevant information.	• -
	Recognise that unregulated investments are higher risk as there is little investor protection.	• -
	Accept responsibility for the financial outcome of an investment decision an individual has made.	• -

6. Behavioural biases related to investing

	Competency	Examples/descriptions
A. Awareness and Knowledge	Aware that investors may not always make rational decisions due to biases.	• -
	Provide examples of common emotional or cognitive biases that may affect investing decisions.	• Common biases such as herding, anchoring, loss aversion, etc.
B. Skills and behaviours	Spot signs of emotional or cognitive biases when making investment decisions.	• -
	Avoid making impulsive investment decisions.	• -
	Make investment decisions based on factual information.	• -
C. Attitudes, Confidence and Motivations	Recognise that human characteristics such as emotion can have an impact on investing decisions in unanticipated ways.	• -
	Recognise that discipline in investing can minimise behavioural biases.	• -

7. Investment scams and fraud

	Competency	Examples/descriptions
A. Awareness and Knowledge	Describe the main features of common investment scams and frauds.	• Scam features could include promise of high/quick returns with low risk, exclusive opportunities, etc.
	Identify the sources available for information on reported investment scams and frauds.	• Sources may come from regulators, law enforcement agencies, IOSCO, etc.
B. Skills and behaviours	Recognise if a tactic used in investment scams or fraud is being applied.	• E.g., cold calls, high pressure sales tactics, guarantee high returns within a short period of time, build-up trust to weaken a person's guard against fraud, etc.
	Question investment offers that appear too good to be true.	• E.g., using benchmarking to identify an investment that offers above average returns, high returns are promised within a short period of time, risk free but high returns promised, etc.
	Report to the financial regulator(s) or law enforcement agency(ies) when an investment scam or fraud is suspected.	• -
C. Attitudes, Confidence and Motivations	Motivated to learn about and how to avoid investment scams and fraud.	• -
	Confident to question whether an investment may be fraudulent.	• -
	Confident to acknowledge, if it has become apparent, that an investment scam or fraud has taken place.	• -
	Recognise that "low risk, high return" investments do not exist.	• -

APPENDIX A – Development process of the Framework

Approach

A working group was formed within the IOSCO C8 to develop the Framework. Many of the members were also OECD/INFE members (see Appendix B for membership list). Hence, the working group acted as a conduit between IOSCO C8 and OECD/INFE during the development process.

A desktop research study of other competency frameworks for financial literacy was carried out to identify competencies relevant to investing. This was followed by a survey distributed to all IOSCO C8 members and OECD/INFE members. The survey included questions about what financial literacy competencies were covered in financial education initiatives and measured during impact evaluation for different jurisdictions. The survey also outlined some competencies, derived from the desktop research, that were considered important or of relevance to assess.

A draft of the Framework was forwarded to the Chairperson of the IOSCO Affiliate Members Consultative Committee for circulation to its members for comment. The final Framework was then circulated to all IOSCO C8 members and OECD/INFE members.

Reviewing existing financial competency frameworks for adults that have investing competencies

As determined from the questionnaire, six of the jurisdictions with financial competency frameworks follow the G20/OECD INFE Core Competencies Framework on Financial Literacy for Adults. The remaining jurisdictions produce their own financial competency frameworks with components that are relevant to their jurisdictions. Some of the frameworks show financial literacy competencies in terms of the desirable levels of knowledge, skills and behaviours that the general public should exhibit. Other jurisdictions' frameworks, such as those in the United States; Japan; and Hong Kong, China organise competencies in groups for different levels, such as schoolchildren and adults, to reflect their actual needs in applying the required competencies. For example, the skills needed to engage financial intermediaries are applied to adults only.

There are no existing frameworks that specifically address the financial literacy competency needs of investors. Most of the reviewed national strategies for financial education and financial competency frameworks cover some core competencies relevant to investing. For example, most of the strategies and frameworks mention investing as part of long-term financial planning and thus require knowledge of basic investing concepts, such as risks and rewards, and diversification.

In some frameworks such as the G20/OECD INFE Core Competencies Framework on Financial Literacy for Adults, Japan's Financial Literacy Map and Hong Kong Financial Competency Framework, there are content areas dedicated to the competencies related to investing. These frameworks cover a wider range of knowledge, skills and attitudes, from basic investing concepts and choosing investment products to investor protection.

Feedback from different jurisdictions for the core competency framework on financial literacy for investors survey

A survey of core competency frameworks on financial literacy for investors was circulated to all IOSCO C8 members and OECD/INFE members. A total of 39 members responded (Appendix C), 36 of which completed the questionnaire.

Many jurisdictions have definitions for terms such as "Professional Investor/Client", "Institutional/Wholesale Investor", "Sophisticated Investor" or the like, with parameters such as the amount of assets held by investors or their net worth, and the amount and types of transactions. As there are no definitions of retail investors, these are identified by elimination, i.e. those who do not fall into other defined groups of investors.

Only eight of the respondents do not use a financial competency framework. Those that do either have a document in which financial competencies have been defined or follow the G20/OECD INFE Core Competencies Framework on Financial Literacy for Adults.

“Basic investing principles and concepts” and “Investment product attributes” are by far the most common content areas covered in investor education, while “Unauthorised and illegal activities” such as scams and investment frauds are also popular. The Financial Sector Conduct Authority of South Africa produced a three-level investor guidebook, which covers the knowledge and skills relevant to investors with different capabilities.

In Germany, BaFin published an Investment Alphabet. It is a brochure for people with learning difficulties, explaining the most relevant terms of the “investment business”.

About 30% of the respondents also provide education initiatives on the “Buying/selling investment process”, “Monitoring investment holdings” and “Investors’ rights and responsibilities”. The *MoneySmart* website of the Australia Securities and Investments Commission provides content on how to check listed investment companies and guidance on keeping track of investments and managed funds. There are also instructions on how to make a complaint if something goes wrong with their financial products and investment.

Financial education on “Behavioural biases” related to investing is relatively light. Only 17 respondents offer initiatives that alert investors about possible behavioural biases when making an investment decision. In Brazil, the Comissão de Valores Mobiliários (CVM) released three educational publications that alert investors about the most common systematic errors that can be made due to heuristics employed or other factors studied in the behavioural sciences on consumption, investing and savings. In China, the China Securities Regulatory Commission conducted research projects on the structure and behaviours of investors. Based on the analysis of the data, the Shanghai Stock Exchange issued a “Code of Conduct for Individual Investors” with the intent of fostering mature, rational and eligible investors while also promoting the development of the stock market. In Singapore, the MoneySense-Singapore Polytechnic Institute for Financial Literacy provides talks and workshops on behavioural investing.

Most of the evaluations of financial education initiatives such as seminars and workshops measure the knowledge gains of participants through pre- and post-questionnaires. There are very few of these evaluations that make reference to a financial literacy competency framework.

Among those jurisdictions that have conducted studies on the financial literacy levels of their populations, some (e.g. Belgium, Hungary, Turkey, Mexico, Germany) have done so by participating in the OECD/INFE International Survey of Adult Financial Literacy Competencies, which measures basic investing concepts. Others have developed their own surveys. For example, the Swedish FSA tests the financial literacy levels of their population on a regular basis, and Portugal CMVM makes inquiries on the profile of Portuguese investors. AMF Quebec has its Financial Awareness Index (AMF Index), which measures its population’s financial literacy and includes measures on how investors manage investments, obtain information about fees and penalties, risk diversification, and dealing with financial advisors, among other topics.

Looking forward, the majority of jurisdictions (89%) have observed an increasing trend in “Investment frauds” such as boiler room scams. Another trend is the “Offering of complex products”, covering unit-linked and structured retail products. Information on “Binary options and contracts for differences and cryptocurrencies” is also increasingly being offered to retail investors in many jurisdictions (77%). “Cybercrime or cybersecurity” is another area of concern in some jurisdictions (60%), as well as the “Mis-selling of financial products by financial intermediaries” (62%).

Thirty-three competencies, covering awareness/knowledge, skills/behaviours and attitudes/ motivation were identified from the desktop research and included in the questionnaire to gather views in different jurisdictions. Most of the competencies were regarded as important by the respondents. There were, however, seven competencies that 10% or more of respondents felt were either unimportant or irrelevant:

1. Analyse the impact of tax(es) on the return of an investment;
2. Use appropriate metrics to compare similar investments within an asset class, e.g. yield-to-maturity, P/E, expenses ratio, etc.;
3. Reassess individual risk tolerance levels when factors that affect it have changed;
4. Compare the pros and cons of placing transaction orders through different channels (e.g. on-line, mobile, phone call, in person);
5. Differentiate between unrealised and realised gain/loss;
6. Identify the implications of providing inaccurate information to the financial service provider/intermediary, e.g. information for suitability test; and
7. Spot signs of emotional responses or cognitive biases to make rational investment decisions.

The following suggestions were collected from respondents of the questionnaires:

1. Include competencies about the risks of alternative forms of financing for investing and the responsibility of consumers to make informed and rational decisions;
2. The issues of behavioural biases and scams have been less frequently addressed until now;
3. Include competencies on being cautious when delegating the management of an investment portfolio to a third party;
4. Include competencies about investors' ability to compare investing in individual securities and investing in funds, and to compare the total fees for buying, owning and selling different investments;
5. Include competencies for investors to spot common persuasion tactics used by fraudsters;
6. Include competencies related to the use of futures contracts, options and derivative products for risk management versus speculation;
7. Include competencies related to how leverage can amplify risk;
8. Avoid illegal trading behaviours once investors increase their knowledge of rational and legal investments;
9. Include competencies for investors on their ability to take into account when an investment product is covered by some form of protection scheme and thus reduces the risk of losing the investment; and
10. Include competencies for investors on their ability to take a holistic approach to financial planning when making investment decisions.

Respondents also noted that new initiatives to address behavioural biases in investing and complex products such as ICOs and cryptocurrencies are planned.

APPENDIX B – List of members: IOSCO C8 working group

Hong Kong, China (leader)	Securities and Futures Commission – Investor and Financial Education Council (IFEC)*
Australia	Australian Securities and Investments Commission (ASIC)*
Brazil	Comissão de Valores Mobiliários (CVM)*
Germany	Bundesanstalt für Finanzdienstleistungsaufsicht (BaFin)*
Indonesia	Indonesia Financial Services Authority (IFSA)*
Italy	Commissione Nazionale per le Società e la Borsa (CONSOB)*
Portugal	Comissão do Mercado de Valores Mobiliários (CMVM)*
Russia	The Bank of Russia
Spain	Comisión Nacional del Mercado de Valores (CNMV)*
Turkey	Capital Markets Board (CMB)
United States of America	Commodity Futures Trading Commission (CFTC)
United States of America	Financial Industry Regulatory Authority (FINRA)
United States of America	Securities and Exchange Commission (SEC)

* OECD/INFE full members

APPENDIX C – List of IOSCO and OECD/INFE members participating in the survey

	Jurisdiction	Organisation(s)
1	Angola	Comissão do Mercado de Capitais – Angola
2	Argentina	Securities and Exchange Commission of Argentina (CNV)
3	Australia	Australian Securities and Investments Commission
4	Austria	Wiener Borse AG
5	Belgium	Financial Services and Markets Authority (FSMA)
6	Brazil	Banco Central do Brasil
7	Brazil	Comissão de Valores Mobiliários (CVM)
8	China	China Securities Regulatory Commission (CSRC)
9	Czech Republic	Ministry of Finance
10	France	Autorité des marchés financiers (AMF)
11	Germany	BaFin, Federal financial supervisory authority, Germany
12	Hong Kong, China	Investor and Financial Education Council (IFEC)
13	Hungary	Central Bank of Hungary
14	India	Securities and Exchange Board of India (SEBI), Securities and commodities market of India
15	Israel	Israel Securities Authority
16	Italy	CONSOB
17	Japan	Financial Services Agency, Bank of Japan
18	Jersey	Jersey Financial Services Commission
19	Malaysia	Securities Commission Malaysia
20	Mexico	BANSEFI
21	Mexico	Ministry of Finance, Mexico
22	New Zealand	Commission for Financial Capability, Financial Markets Authority
23	Ontario, Canada	Ontario Securities Commission (OSC)
24	Portugal	Comissão do Mercado de Valores Mobiliários (CMVM)
25	Quebec, Canada	AMF Quebec Canada (Autorité des marchés financiers)
26	Russia	Bank of Russia
27	Singapore	Monetary Authority of Singapore
28	Slovak Republic	Ministry of Finance of the Slovak Republic
29	South Africa	Financial Sector Conduct Authority (FSCA)
30	Spain	COMISIÓN NACIONAL DEL MERCADO DE VALORES
31	Sweden	Finansinspektionen (The Swedish FSA)
32	Tajikistan	National Bank of Tajikistan
33	Thailand	The Securities and Exchange Commission, Thailand
34	Turkey	Capital Markets Board of Turkey
35	United Kingdom	Financial Conduct Authority
36	United Kingdom	Money Advice Service
37	United States of America	FINRA
38	United States of America	U.S. Commodity Futures Trading Commission
39	United States of America	U.S. Securities and Exchange Commission

OICU-IOSCO

OECD