

October 23rd, 2020

Dear Sir/Madam,

Re: SRO Consultation

Thank you for the opportunity to comment on the SRO Consultation Paper. Our research team has done extensive scientific research on both the Investment Dealers Association of Canada (IDA) and its successor the Investment Industry Regulatory Organizations of Canada (IIROC). Twelve years of research on the IDA and IIROC's enforcement of complaints provided valuable insights for our comments on the SROs consultation. Our comments will be limited to the IIROC's enforcement and investors' protection mandates.

Who are the Victims?

The following results are victims' demographics data collected and coded from IIROC's tribunal cases. In brief, a significant proportion of victims were elderly, women, with poor investment knowledge, and limited net worth. As can be seen in Figure 1 and 2 below, the majority of victims were females and close to 50% of the victims who suffered from financial exploitations were retired.

Sheet 9

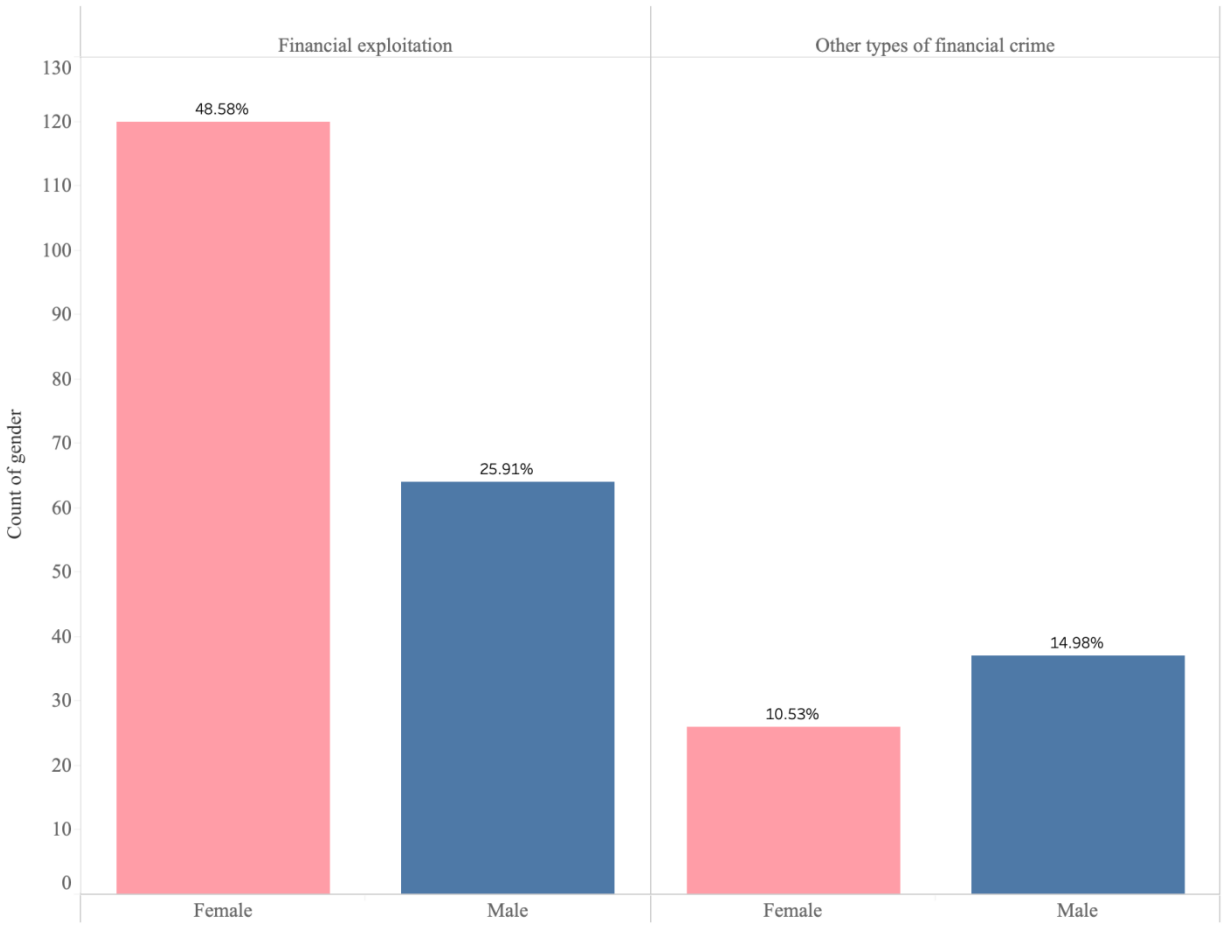
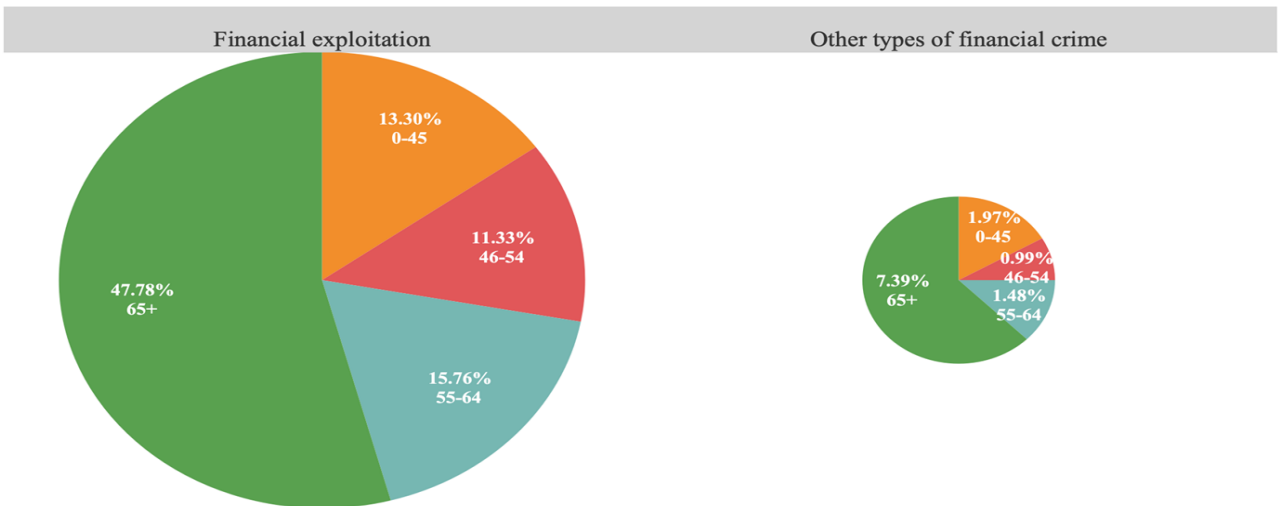


Figure 1: Investors by Gender

N = 203



N = 203

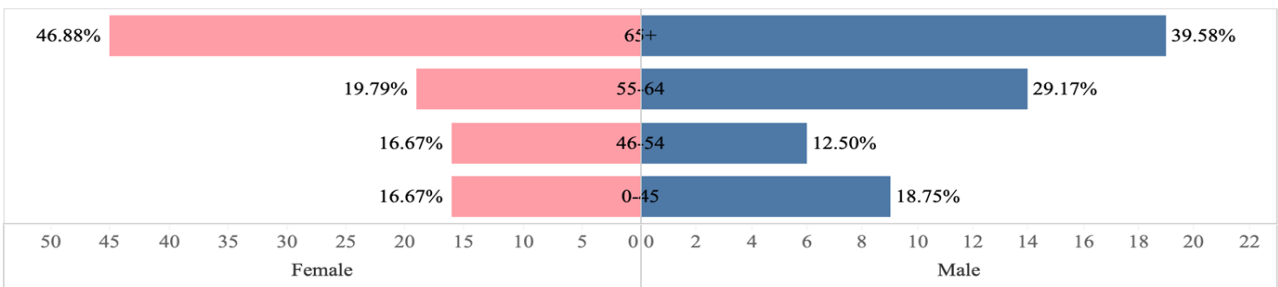
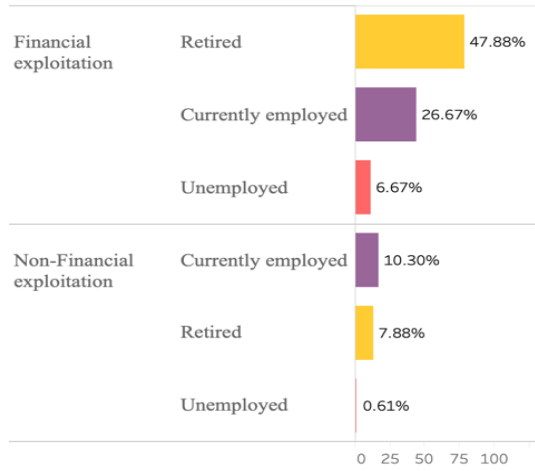
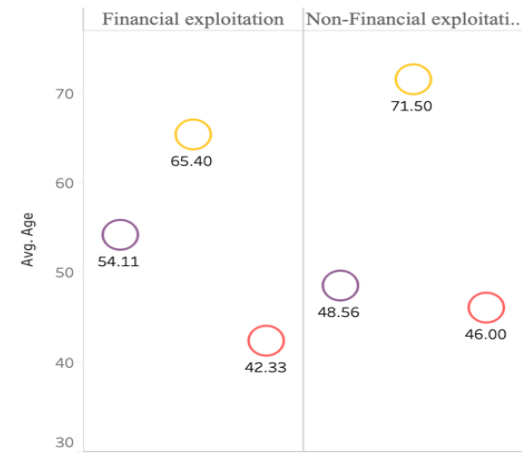


Figure 2: Proportion of Age Groups by Types of Exploitation and Gender

Proportion of Employment Status, by Types of Financial Crime (N = 165)



Average Age of Victims, by Types of Financial Crime & Employment Status (N = 165)



Occupation
 Currently employed
 Retired
 Unemployed

Victim's Average Net Worth, by Employment Status (N = 75)

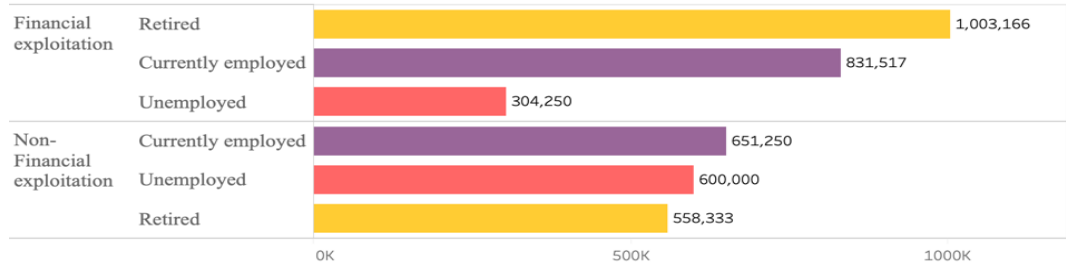


Figure 3: An overview of the Victims' Demographic

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N = 161

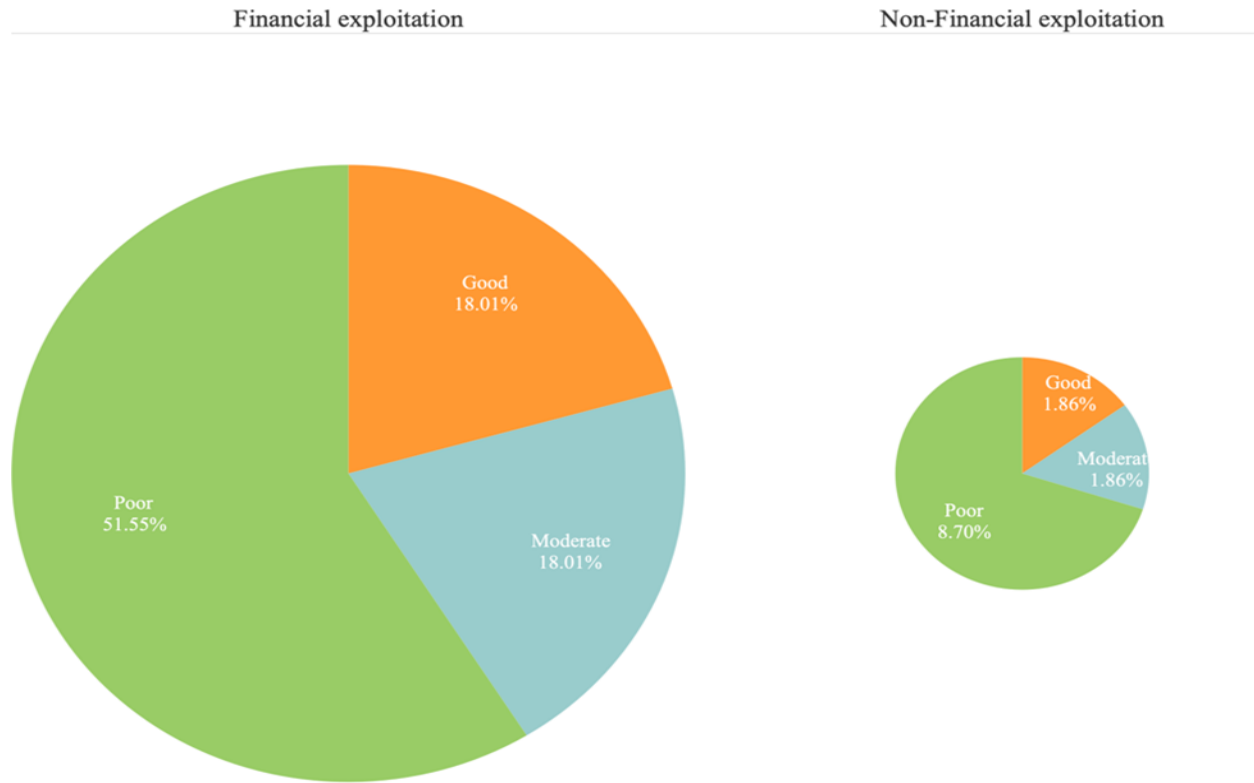


Figure 4: Victims Investment Knowledge

Fraud Victimization Prediction

We have predicted with 86% accuracy that the individuals who are more likely to become victims of investment scams are classified as females, have poor financial knowledge, know their advisors from the past, and are retired. Investors who are characterized as having limited financial literacy but a long-time relationship with their advisors have reduced probabilities of being victimized. However, male investors with low or moderate-level investment knowledge were more likely to be preyed upon by their investment advisors. While not statistically significant, older adults, in general, are at greater risk of being victimized.

A confusion matrix was used to further evaluate the classification model. In a confusion matrix, the number of correct and incorrect predictions is summed up based on the predicted and observed classes. Figure 5 presents a heat map of the prediction. Figure 5 shows that the model has an 83.66% (i.e., True Negative + True Positive) accurate prediction and a 16.34% (False Positive + False Negative) incorrect prediction of people who are likely to be victims of investment fraud. A more in-depth examination of the confusion matrix illustrates that the model predicted that 40.17% (True Negative) of the people who were predicted to be victimized were victimized. At the same time, the model predicted that 43.49% (True Positive) of people would

not be victimized, and they were not. Only 9.42% (False Positive) of the time did the model predict that investors would be victimized when they were not victimized. Only 6.93% (False Negative) of the time did the model predict that investors would not be victimized when they were victimized. Hence, the model is highly accurate in predicting investors who are likely to be victimized by their registered representatives.

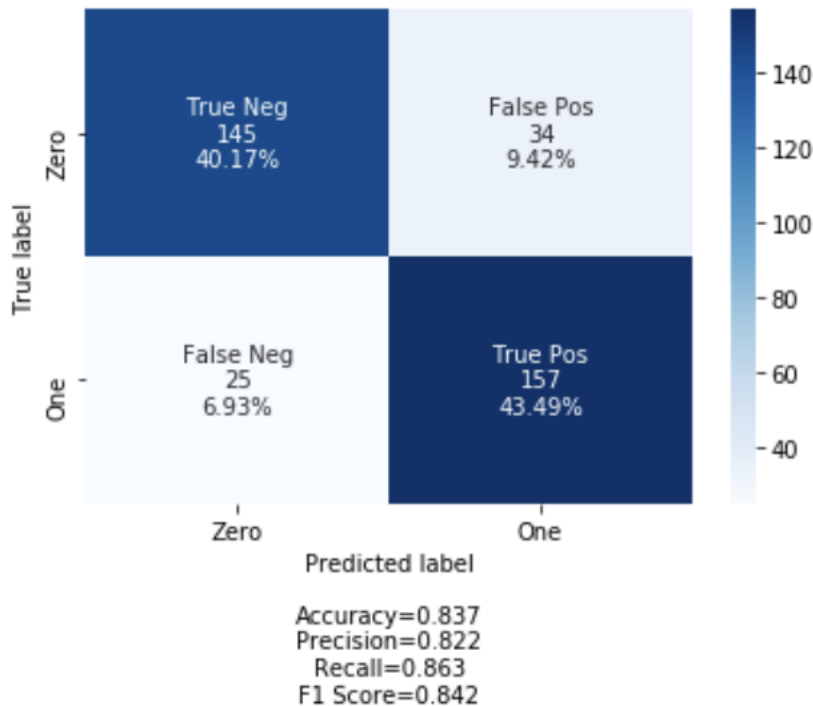


Figure 5: Confusion Matrix

The Receiver Operating Characteristic (ROC) curve is extensively employed to demonstrate the performance of a predictive model. The ROC is a plot of the true positive rate against the false positive rate (Yang & Berdine 2017). As seen in figure 6, the Area Under the Curve (AUC) score is 0.85. An AUC score of 1 indicates a perfect classifier, while a score of 0.5 represents a weak classifier. The predictive model has a higher discriminative capacity when the ROC curve stays as far away from the dotted line as possible (Yang & Berdine 2017). An ROC score of 85% indicates that the model has a very good probability of predicting fraud victimization. Together, the machine-learning predictive model illustrates that investors with certain demographic traits, namely retirees, females, individuals with low levels of financial literacy, and those who know their register representatives from the past are more likely to be victimized than the general population.

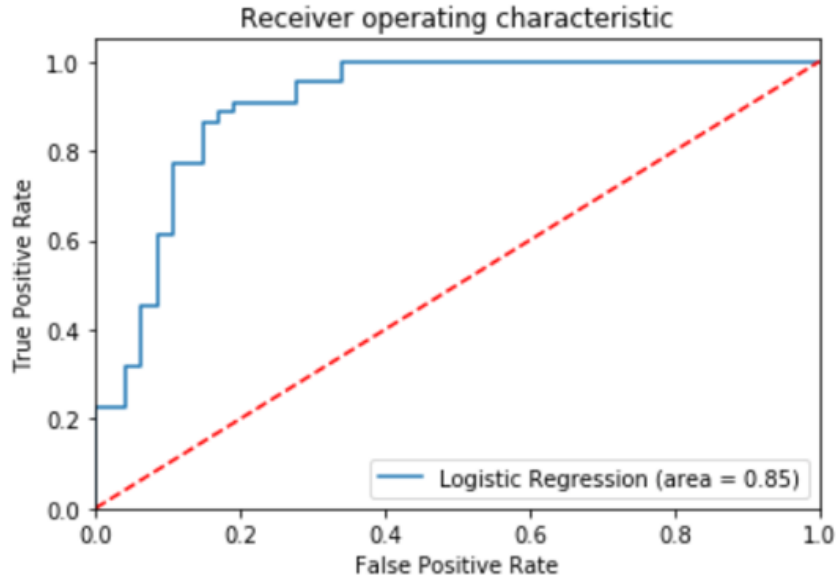


Figure 6: The ROC Curve

SRO Enforcement

Offences

We conduct a side-by-side comparison of the IDA and the IIROC's enforcement performance. The results are presented in the Tables 1 and 2 and Figure 7 below. Improper sales practice offenses continue to be a concern for regulators. As can be seen in Figure 7, improper sales practices offenses under the IDA's regime comprise 46.8% of all offenses, compared to IIROC's 46%. These are not surprising figures. Considering that sales and suitability-type offenses are the most rewarding when trades are successful, it is highly likely that the commission base trades will encourage rogue trading in these accounts. Note also that the IDA dealt with more quasi-criminal offenses (14.8%) than did the IIROC (7.9%). It could be that the IIROC has forwarded more cases with criminal elements to the RCMP and to the provincial securities commissions for criminal prosecutions, or alternatively, these cases were few and far between. An important caveat to these findings is that they are based only on the cases heard by an IIROC's hearing panel and the corresponding relevant files issued by the SRO.

Offences committed under IIROC

Offences committed under the IDA

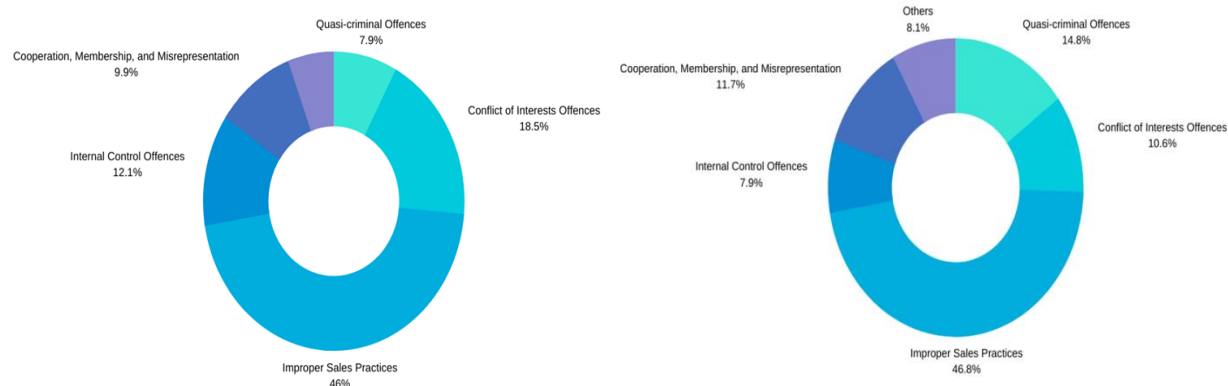


Figure 7: Side-by-Side Comparison of Offences under the IDA and IIROC’s regimes

Tables 1 and 2 below show offense type by rule violations. The much more serious unsuitable recommendations and discretionary and unauthorized trading offenses remain problematic areas for regulators. Our main concerns with these findings are that securities traders under both regimes have repeatedly been found to involved in unauthorized purchased of securities and to have manipulated the accounts of their clients and internal controls to either maximize their commissions by exceeding their risk limits or to make the accounts less risky or maybe both (e.g. see Reurink, 2016, p. 20). Although such “rogue trading” is not a new phenomenon, their rate of occurrence raises questions on SROs’ ability to deal with more serious infractions and whether this is symptomatic of a larger industry-wide problem. Unsuitable investments because of its dubious particularities can be measured in shades of grey and difficult to prosecute due to a lack of evidence (Lokanan, 2015a). The evidentiary burden can explain why such cases are resolved through regulatory proceedings with no further actions being taken. The reference to 'no further action (being taken) due to lack of evidence' raises in sharp detail the old question of 'light-touch regulation' failing due to scarcity of competent manpower, and motivation to see a case through with the attendant risks of aborted costs and damaged reputations for failure to 'convict' (Lokanan, 2015a). So is there a 'risk tariff' of a successful prosecution, and where does discretion reside to prosecute 'high risk' cases, a classic moral issue (a case of 'Quis custodiet ipsos custodes?')

Table 1: Summary of Offenses Committed by Individual Offenders in Cases Heard by IIROC

| Offense Type | N | (%) |
|-----------------------------------|----|------|
| <i>A. Quasi-Criminal Offenses</i> | | |
| A1 Fraud | 22 | 1.6% |
| A2 Forgery | 43 | 3.2% |
| A3 False endorsement | 3 | 0.2% |

| | | | |
|--------------|---------------------------|------------|-------------|
| A4 | Misappropriation of funds | 28 | 2.1% |
| A5 | Securities Act breach | 9 | 0.7% |
| Total | | 105 | 7.9% |

B. Conflict-of-Interest Offenses

| | | | |
|--------------|--|------------|--------------|
| B1 | Unauthorized or improper use of information | 6 | 0.4% |
| B2 | Unauthorized or improper disclosure and/or use of client information | 3 | 0.2% |
| B3 | Undisclosed or unauthorized accounts | 1 | 0.1% |
| B4 | Undisclosed personal business | 60 | 4.5% |
| B5 | Undisclosed personal business with client | 146 | 10.9% |
| B6 | Attempt to settle client claim for compensation | 19 | 1.4% |
| B7 | Failure to ensure client's orders are given priority | 12 | 0.9% |
| Total | | 247 | 18.5% |

C. Improper Sales Practices

| | | | |
|--------------|---|------------|--------------|
| C1 | Unsuitable recommendations | 148 | 11.1% |
| C2 | Failure to know your client | 80 | 6.0% |
| C3 | Failure to update NAAF | 33 | 2.5% |
| C4 | Order not within bounds of good business practice | 75 | 5.6% |
| C5 | Churning | 8 | 0.6% |
| C6 | Discretionary trading | 76 | 5.7% |
| C7 | Unauthorized trading | 53 | 4.0% |
| C8 | Unauthorized distribution of sales literature | 19 | 1.4% |
| C9 | Unauthorized third-party instructions | 35 | 2.6% |
| C10 | Outside business activities | 43 | 3.2% |
| C11 | Misleading client with false information | 44 | 3.3% |
| Total | | 614 | 46.0% |

D. Internal Control Offenses

| | | | |
|--------------|---|------------|--------------|
| D1 | Capital deficiencies | 5 | 0.4% |
| D2 | Failure to establish and/or maintain adequate internal controls | 21 | 1.6% |
| D3 | Failure to supervise | 111 | 8.3% |
| D4 | Failure to obtain a minimum required margin | 2 | 0.1% |
| D5 | Record-keeping violations | 22 | 1.6% |
| Total | | 161 | 12.1% |

E. Cooperation, Membership, and Misrepresentation

| | | | |
|----|----------------------|----|------|
| E1 | Failure to cooperate | 64 | 4.8% |
|----|----------------------|----|------|

| | | | |
|----------------------|---|-------------|---------------|
| E2 | Misrepresenting credentials to association upon registration/transfer | 10 | 0.7% |
| E3 | Allowing an unregistered person to trade | 1 | 0.1% |
| E4 | Conducting business while suspended | 1 | 0.1% |
| E5 | Misrepresentation | 56 | 4.2% |
| Total | | 132 | 9.9% |
| Other | | 76 | 5.7% |
| Overall Total | | 1335 | 100.0% |

Table 2: Summary of Offenses Committed by Individual Offenders in Cases Heard by IDA

| Offense Type | | N | (%) |
|---|--|------------|--------------|
| <i>A. Quasi-criminal Offenses</i> | | | |
| A1 | Fraud | 36 | 2.1% |
| A2 | Forgery | 53 | 3.1% |
| A3 | False endorsement | 5 | 0.3% |
| A4 | Misappropriation of funds | 90 | 5.3% |
| A5 | Securities Act breach | 67 | 4.0% |
| Total | | 251 | 14.8% |
| <i>B. Conflict-of-Interest Offenses</i> | | | |
| B1 | Unauthorized or improper use of information | 6 | 0.4% |
| B2 | Unauthorized or improper disclosure and/or use of client information | 6 | 0.4% |
| B3 | Undisclosed or unauthorized accounts | 24 | 1.4% |
| B4 | Undisclosed personal business | 7 | 0.4% |
| B5 | Undisclosed personal business with client | 84 | 5.0% |
| B6 | Attempts to settle client claim for compensation | 47 | 2.8% |
| B7 | Failure to ensure client's orders are given priority | 6 | 0.4% |
| Total | | 180 | 10.6% |
| <i>C. Improper Sales Practices</i> | | | |
| C1 | Unsuitable recommendations | 222 | 13.1% |
| C2 | Failure to know your client | 79 | 4.7% |
| C3 | Failure to update NAAF | 22 | 1.3% |
| C4 | Order not within bounds of good business practice | 71 | 4.2% |
| C5 | Churning | 8 | 0.5% |
| C6 | Discretionary trading | 232 | 13.7% |
| C7 | Unauthorized trading | 55 | 3.2% |
| C8 | Unauthorized distribution of sales literature | 17 | 1.0% |
| C9 | Unauthorized third-party instructions | 54 | 3.2% |
| C10 | Outside business activities | 33 | 1.9% |
| C11 | Misleading client with false information | 0 | 0.0% |
| Total | | 793 | 46.8% |

| <i>D. Internal Control Offenses</i> | | |
|--|---|--------------------|
| D1 | Capital deficiencies | 4 0.2% |
| D2 | Failure to establish and/or maintain adequate internal controls | 10 0.6% |
| D3 | Failure to supervise | 51 3.0% |
| D4 | Failure to obtain a minimum required margin | 18 1.1% |
| D5 | Record-keeping violations | 51 3.0% |
| Total | | 134 7.9% |
| <i>E. Cooperation, Membership, and Misrepresentation</i> | | |
| E1 | Failure to cooperate | 39 2.3% |
| E2 | Misrepresentation credentials to association upon registration/transfer | 7 0.4% |
| E3 | Allowing an unregistered person to trade | 19 1.1% |
| E4 | Conducting business while suspended | 3 0.2% |
| E5 | Misrepresentation | 130 7.7% |
| Total | | 198 11.7% |
| Other | | 138 8.1% |
| Overall Total | | 1694 100.0% |

Fines

As can be seen in Figure 8, the average fines per decision fluctuated more under the IIROC than under the IDA regime. One possible reason for this is that the IIROC handled more cases and imposed harsher fines than the IDA. A closer look at Figure 9 indicates that the average cost per investigation has decreased under the IDA regime. Except for the costs incurred in 2012, where a staggering number of 64 cases were presented to the IIROC hearing panels, the average cost decreased steadily until it began to rise again in 2017. The high costs incurred per case in 2012 can be attributed to the excessive resources spent by the IIROC to hear roughly twice the number of cases of the previous years. These findings have implications for self-regulation in Canada's capital markets. If one is to measure the effectiveness of self-regulation in Canada's securities industry by using the proportion of fines imposed on market participants as a yardstick of effective regulation, then it is evident that the IIROC has been more active than the IDA (Lokanan, 2015a, p. 477).

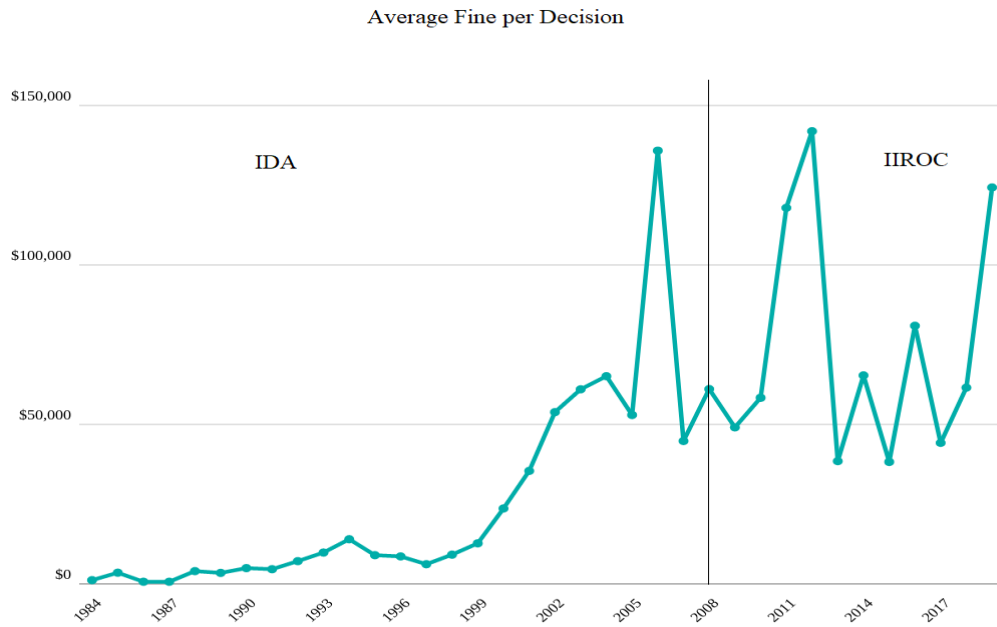


Figure 8: Yearly Average Fines

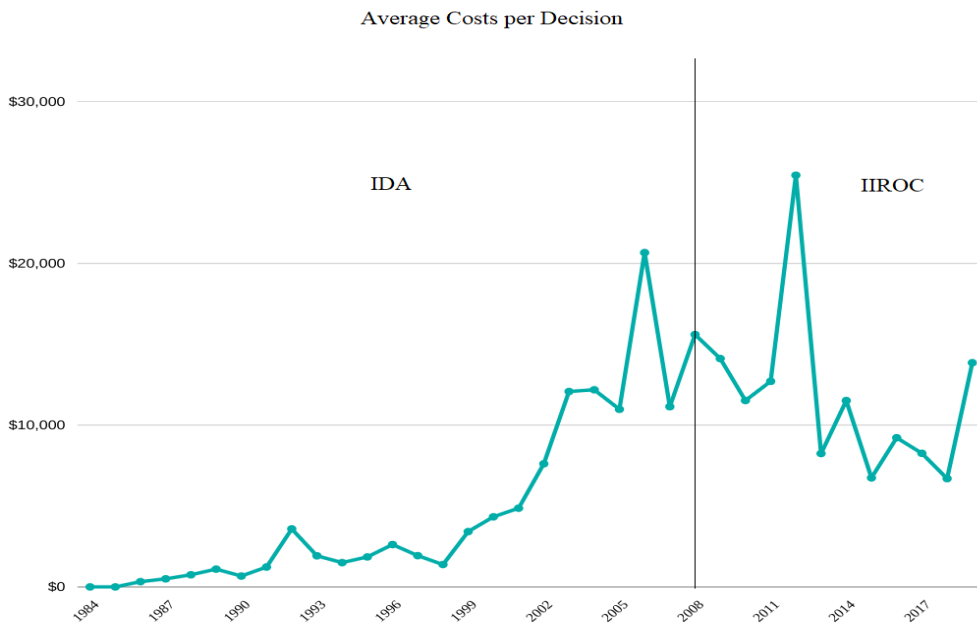


Figure 9: Yearly Average Costs

Aggravating and Mitigating Factors Considered by IIROC

Figures 10 and 11 present the mitigating and aggravating factors considered in penalty impositions. No prior records and credit for cooperation were the top two mitigating factors, while harm to the client and deliberate misconduct were the top two aggravating factors considered by the IIROC’s hearing panels. Of serious concerns, however, is that experience representative who was involved in activities that led to economic loss to the client and the member firms were frequently overlooked as aggravating factors.

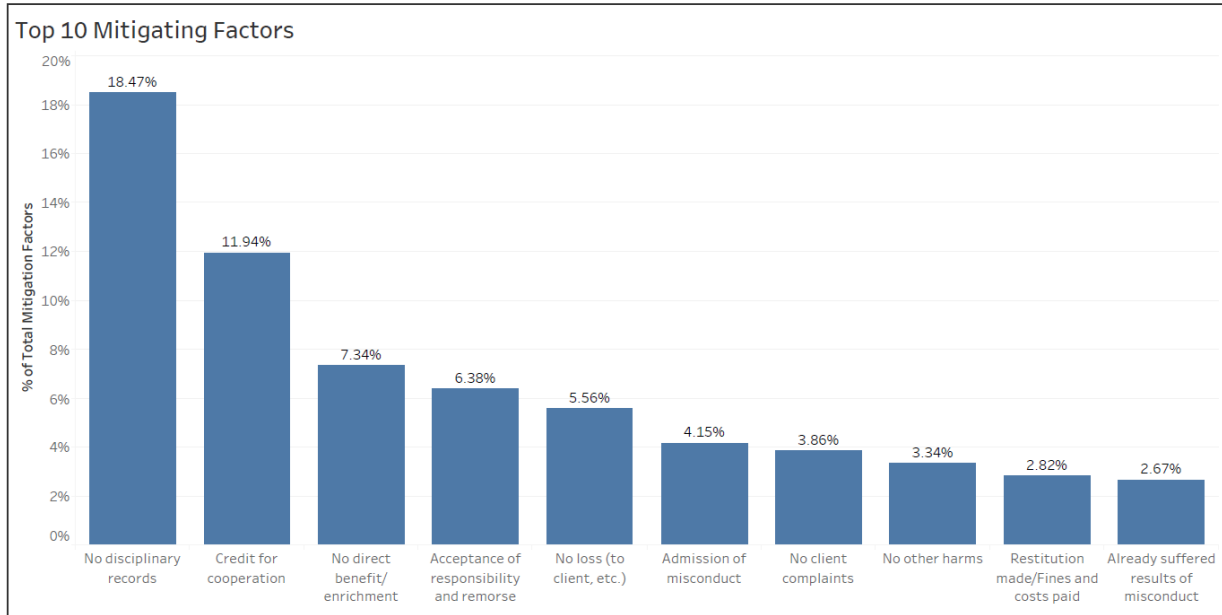


Figure 10: Ten Most Frequently Mitigating Factors Considered in Penalty Imposition

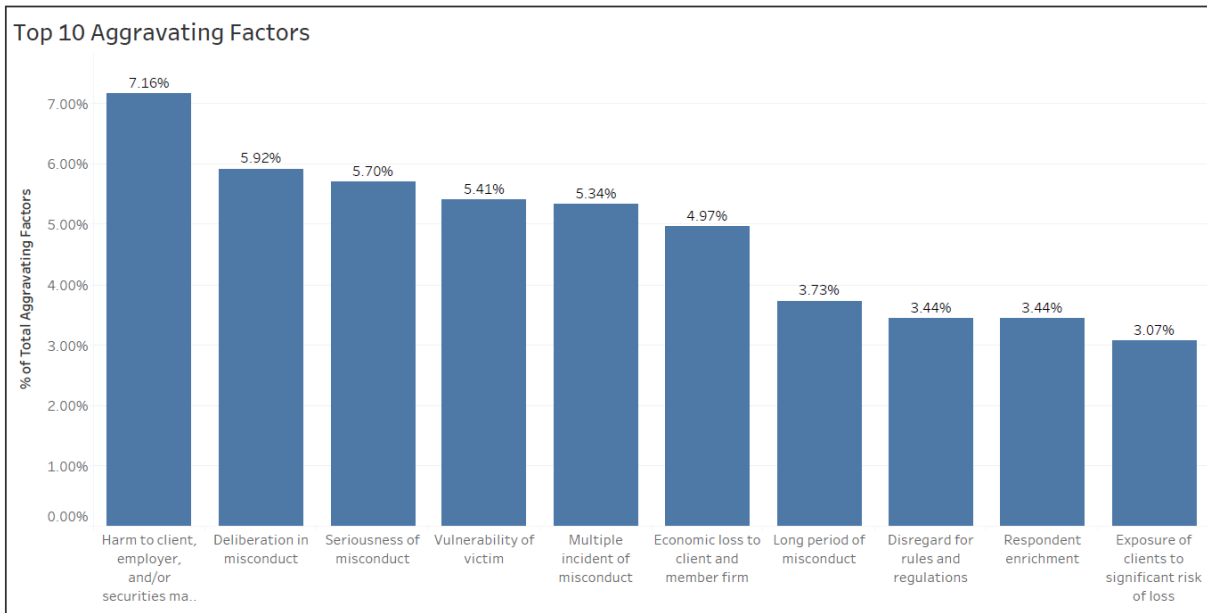


Figure 11: Ten Most Frequently Aggravating Factors Considered in Penalty Imposition

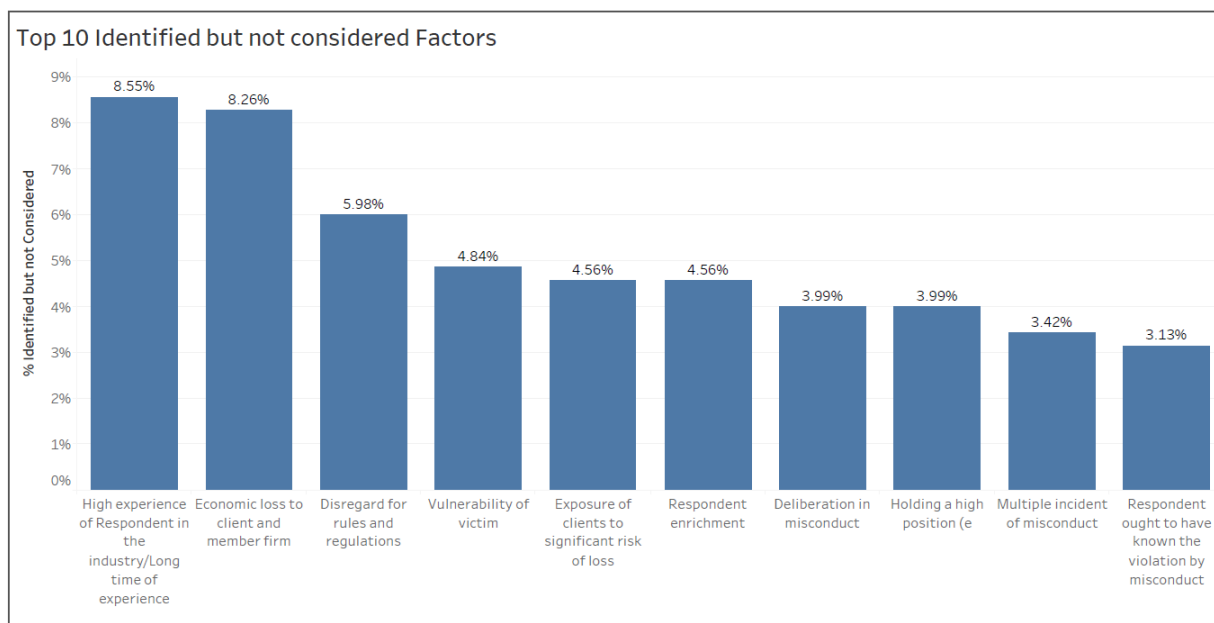


Figure 10: Top Ten Aggravating Factors Identified but Not Considered

A Way Forward

The findings presented here support the claims made by both proponents of self-regulation and by critics that the self-regulatory system in Canada needs immediate attention. It seems somewhat obvious that on paper a self-regulatory system would track more complaints than a more coercive state-led enforcement system might (at least based on raw data), but that tells us very little that is worth noting - particularly given the Canadian context in which there are all sorts of reasons to expect lax criminal and state regulatory enforcement in the financial industry in the first place. The role of self-regulation in Canadian finance seems to be largely symbolic in the larger context of securities regulation in Canada. Successful self-regulation in Canadian finance is important because government regulation is so completely ineffective (Lokanan, 2015a). Canada is unique in having its "patchwork" system of provincial regulators. It is also notable for lax criminal enforcement for crime in the sector (p. 458). The findings presented here raise in sharp detail the old question of 'light-touch regulation' failing due to scarcity of competent manpower, and motivation to see a case through with the attendant risks of aborted costs and damaged reputations for failure to 'convict'. There is a clear need to better understand the efficacy of SROs vis-à-vis enforcement and to that end, I have made a compelling case that [regulatory capture](#) might be particularly problematic for SROs operating in the security sector (Lokanan, 2017).

We are proposing a framework that is more responsive to victims and one that will hold individuals accountable to the law and ethical standards. In a market that is characterized by regulatory flux, regulation that is responsive is a feasible alternative to entice compliance from market participants. In brief, a responsive regulatory approach will entice compliance through a combination of persuasion and punishment techniques. I have outlined a responsive approach to securities regulation in the following article: [Securities regulation](#).

We advocate for an SRO that is accountable, one that protects investors from unscrupulous registered representatives, and one that has the will to prosecute cases that harm the public interest. Canada needs an SRO system that puts investors and the public interests first. To help achieve these goals, I would like to highlight some of the key recommendations made to the Capital Market Modernization Taskforce below.

Recommendations for Effective Self-regulation in the Securities Industry

Focus on Dealer Members

It is apropos for brokerage firms to design an internal regulatory system that inculcates a culture that values trust, transparency, and professionalism, while the challenge for regulators is to make sure that these values and practices are applied. It is more likely than not, that regulators will succeed when they use strategies that are responsive to the culture of the firms. In regulating securities trading, regulatory agencies must take into account the professional and organizational culture of the firms and their compliance policies (Lokanan, 2015b). We are hoping that this recommendation will be considered in the IIROC/MFDA unification.

While it is true that the individual financial advisors of the firms are the ones often involved in allegations, their motives could always be tied back to the dealer firms. The policies or the environment the dealer creates for its employees such as setting unrealistic sales targets or high commission on certain investment options either forces or motivates them to sell unsuitable and high-risk financial products to their clients. The most tragic part of this situation is that when the sold investment option fails, the agent's financial status does not allow them to take full responsibility for the losses incurred by the client, thus only a small percentage of fraud amounts are levied as fines by IIROC. Furthermore, there is a greater chance of delays or defaults on assessed fines as the fine collection rate from the individual offenders (25%) is far less than firms that are at 100%, according to the IIROC's 2018-19 annual report. Therefore, if the individual fines are tied to the dealer firms, there are better chances for SROs to recover losses. Besides, doing so will certainly impel the dealer firms to revisit their policies and train their agents to ensure they always comply with the rules of the SRO.

Focus on Early Fraud Detection Mechanism in Securities Markets

The trust and confidence of investors in capital markets can be strengthened when fraud or other non-compliances are detected early in their initial stages and avoid huge losses to investors.

There has been rising popularity of using regulatory technology in the securities markets to detect non-compliance trading activities. It is possible to achieve active surveillance and detect suspicious activities to avoid any manipulations that could cause flash crashes with the help of the latest Big data solutions. Moreover, the impact of improved data analytics could benefit the securities agencies and dealer firms in devising policies that ensure competitive capital markets in Canada and to mitigate problems that could arise in the future.

Focus on Penalty Escalation

The purpose of penalties must be to have both a specific and general deterrent effect. For this to happen, penalties imposed must be proportionate to the offenses. A system of pyramidal enforcement should be put in place with various degrees and levels of escalation. Offenders will be allowed to address their behaviour through the SRO and if failed then the matters should be escalated to the provincial securities commission, especially for the more serious improper sales practices and quasi-criminal offenses. There is evidence to suggest that improper sales practices and quasi-criminal offenses affect the dollar value of fines imposed, while others do not. There should be closer scrutiny of these offenses and the fines imposed for non-compliance. It might also be helpful to address alternative explanations for regulatory outcomes that deviate from the public interest. There is a clear need to better understand the efficacy of SROs vis-à-vis enforcement.

Focus on Proportionate Penalties

For penalties to be proportionate, regulators should assign equal weight to aggravating and mitigating factors in penalty imposition. The IIROC should revise its disciplinary hearing processes and sanction guidelines in the interests of standards of enforcement that ensure consistency and transparency when applying mitigating and aggravating factors. With this tailored approach, an argument can be made that the trick to successful self-regulation is to incorporate impartiality into the hearing process to minimize potential bias and increase the potential for proportionate penalties to be imposed for regulatory infractions. In analyzing the IDA's enforcement performance, we noticed that penalties were more proportionate when a public member was added to the hearing panel. This is not to say that there was no proportionality in penalty imposition before a public member was added to chair disciplinary hearings; rather, the findings tend to lean in the direction of proportional sanctions as reflected in the harsher penalties imposed. Consistency in applying both mitigating and aggravating factors in penalty hearings will bring IIROC or the proposed IIROC/MFDA unified SRO a step closer to regaining public trust.

Focus on Investors' Protection

Using data from the IIROC tribunal cases, we built a machine learning model that predicted with 86% accuracy the demographic characteristics that are correlated with fraud victimization in Canada. Our model found that seniors (>65), retirees, females with limited investment knowledge, and those with a prior relationship with their advisors as being at greater risk of being victimized from investment fraud. These features can be used by both member firms and regulators to mitigate victimization risks. The proposed unification between the MFDA and

IIROC to create a new SROs can achieve this outcome by empowering the CSA statutory regulators to address these feature variables more closely and restore public confidence in the markets.

Financial institutions as well as financial professionals are experiencing challenges to improve their understanding of their clients' financial goals. The primary reason seems to be the problems with keeping their clients' information up-to-date. More sustained measures must be put in place to ensure registered representatives are updating their clients' KYC on an annual basis. Base on our featured engineering model, the IIROC can enhance their risk reduction by closely monitoring the accounts of clients who fits the demographic traits identified above. The purpose of such scrutiny will be to prevent investors with vulnerable demographic characteristics from being engaged in aggressive investment activities, and consequently, reduce the likelihood of being victims of investment fraud.

Focus on SRO's Legal Framework

A more detailed review of the IIROC's legal, mandate, governance, limitations, and accountability frameworks as the oversight institution for certain aspects of securities market operations based on self-regulation, and how these conditions may affect decisions on the imposition of penalties (with and without 'capture' by members) should be carried out. The objective of SROs in the securities industry is to guard against conduct contrary to the interests of members, their clients, and the public. The empirical evidence suggests that the IIROC is not pursuing this three-part objective or if it does, it is not having any discernible impact.

Need for Standardized Format of Decision and Reasons across Hearing Panels

The hearing panels need to follow a standardized format of reporting the 'Decision and Reasons' in each case. Every case provides a unique data set regarding the victim's profile, the offender's profile, and the factors that influenced the panel's decision. A standardized format, with pre-identified key variables, will ensure that the opportunity to record all aspects of invaluable information is not lost, and the dataset of all the cases as a whole can be analyzed to assist future decision-making. Moreover, it will bring transparency, efficiency, and clarity in the rulings of the regulatory bodies.

Removing Quasi-criminal offences from the jurisdiction of the SROs

The SROs can take actions against offenders for regulatory violations and can only impose monetary penalties and industry sanctions. When offenses with criminal elements are addressed by the SROs, the offenders can evade punishment from the criminal justice system and elude jail time and a criminal record. The internal resolution of such cases provides an opportunity for the offenders to get away with relatively benign penalties. Moreover, complications arising from the overlap of authority between the RCMP and the SROs can be avoided if there is no ambiguity regarding jurisdiction.

References

- Lokanan, M.E. (2015a). Self-Regulation in the Canadian Securities Industry: Funnel In, Funnel Out, or Funnel Away? *International Journal of Law, Crime and Justice*, 43(4), 456-480.
- Lokanan, M.E. (2015b). Securities Regulation: Opportunities Exist for IIROC to Regulate Responsively. *Administration and Society*, doi: 10.1177/0095399715584637
- Reurink, A. (2016). Financial Fraud; A literature Review. Max Planck Institute for the Study of Societies. Retrieved from: https://www.mpifg.de/pu/mpifg_dp/dp16-5.pdf
- Lokanan, M.E. (2017). Regulatory Capture of Regulators: The case of the Investment Dealers Association of Canada. *International Journal of Public Administration*. DOI: 10.1080/01900692.2017.1385623
- Yang, S., & Berdine, G. (2017). The Receiver Operating Characteristic (ROC) Curve. *The Southwest Respiratory and Critical Care Chronicles* 5(19), 34-36.

Yours Truly,

Mark Lokanan Ph.D

Associate Professor, Accounting

Faculty of Management | **Royal Roads University**

T 250.391.2600 ext. 4386#

2005 Sooke Road, Victoria, BC Canada V9B 5Y2 | royalroads.ca

Mark.Lokanan@royalroads.ca

Susan Liu, MSc

Data Analyst

Faculty of Management | **Royal Roads University**

Royal Roads University

T 250-686-4009

Humin.5liu@royalroads.ca

Kush Sharma

Research Assistant (RA) to Prof. Mark Lokanan

Faculty of Management | **Royal Roads University**

T +1 778.678.9248

2005 Sooke Road, Victoria, BC Canada V9B 5Y2 | royalroads.ca

Kush.Sharma@royalroads.ca

Navya Masannagari, MSc

Finance Intern

British Columbia Investment Management Corporation

T 250-884-1004

Navyareddy.1masannagari@royalroads.ca