

Principles-based vs. Rules-based Regulation of Derivatives  
Markets in Developing and Developed Markets: A Comparison  
of the Regimes in Thailand and Québec

by

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LL.B, China University of Political Science and Law, 2006

LL.M, China University of Political Science and Law, 2009

A Thesis Submitted in Partial Fulfillment  
of the Requirements for the Degree of

MASTER OF LAWS

in the Faculty of Law

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University of Victoria

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## **Supervisory Committee**

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## **Abstract**

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This thesis compares and contrasts rules-based and principles-based approaches to the regulation of derivative securities and examines these approaches in the context of derivative securities regulation in Thailand and Québec. It highlights the importance of derivatives regulation by briefly noting the role of derivatives in the 2007-2008 financial crisis. Context is provided by briefly noting the complexity and riskiness of derivatives, and the function of intermediaries in derivatives markets. With this context in mind, literature on rules-based regulation and principles-based regulation is examined. The two approaches are described and the advantages and disadvantages of each approach are highlighted. The thesis posits that the approach in Thailand is predominantly rules-based while the approach in Québec is predominantly principles-based. The thesis then argues that Québec may have been better positioned than Thailand to adopt a principles-based approach, given its longer experience with trading in public securities markets, its greater degree of specialization in derivatives markets, and the significantly higher volume of derivatives trading in Québec. These factors may have promoted a greater degree of regulatory expertise and self-regulatory organization experience. It is then argued that even though Thailand, and countries at a similar stage of derivatives market development,

may not be in as good a position as Québec to adopt a principles-based regulatory approach, once the derivatives market has been established, a shift to principles-based regulation is, nonetheless, likely to better serve the regulatory goals of risk management and innovation.

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## Acknowledgements

In researching and writing this thesis, I have been blessed by the help of many people. Without their generous and patient support, I could not have completed such a long journey of academic research.

I cannot thank my supervisor Dr. Mark Gillen enough for his great help and wonderful supervision. The first time we met, he suggested I should start early and write often. These tips worked well for me and will contribute to the future success of my future career. Dr. Gillen encouraged me and said that writing is a learning process. He reviewed my draft thoroughly and rigorously with amazing patience. His insight and expertise made my thesis possible.

I owe a great deal of gratitude to Dr. Hao Zhang. I came to his class without any knowledge of finance and investment. His patient and clear explanations gave me much confidence in my studies. His supervision helped me learn the right way to research and write.

I also acknowledge Brenda Proctor and Kerry Sloan for their responsible editing work. They are always encouraging, and their help is always cherished.

## **Dedication**

To my parents.

# CHAPTER 1: INTRODUCTION

We still remember the days of 2008. Global credit markets froze, stock market values went into free-fall, Wall Street investment banks collapsed, major financial institutions were bailed out on an unprecedented scale, and financial regulatory systems internationally were cast in doubt.<sup>1</sup> This financial crisis continues to echo in the world economy.

The causes of the financial crisis are complicated. Derivatives are blamed for bringing down some of Wall Street's biggest names, such as Lehman Brothers Holdings Inc.<sup>2</sup> and American Home Mortgage.<sup>3</sup> The securitization process, it has been argued, creates an adverse selection bias and an opaque default swap market, leading to moral hazards.<sup>4</sup> In addition, the complexity of and innovation in derivatives can lead to the circumvention of regulations. For example, Martin Wolf claims that, in part, the complexity and innovation was motivated by a desire to circumvent regulation. He states that "...an enormous part of what banks did in the early part of this decade – the off-

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<sup>1</sup> "A Year of Financial Turmoil" *The New York Times* (11 September 2009), online: New York Times <[http://www.nytimes.com/interactive/2009/09/11/business/economy/20090911\\_FINANCIALCRISIS\\_TIME\\_LINE.html?ref=businessspecial4](http://www.nytimes.com/interactive/2009/09/11/business/economy/20090911_FINANCIALCRISIS_TIME_LINE.html?ref=businessspecial4)> .

<sup>2</sup> Jenner & Block LLP, *Report of the Examiner in the Chapter 11 Proceedings of Lehman Brothers Holdings Inc.* (11 March 2010), online: <<http://lehmanreport.jenner.com>> .

<sup>3</sup> "AHMIQ Is in Bankruptcy OTC Markets" OTC Markets (30 September 2009), online: OTC Markets <<http://www.otcm Markets.com/pink/quote/quote.jsp?symbol=AHMIQ>>. Both of these companies invested heavily in credit default swaps. A credit default swap is a swap contract in which the protection buyer makes a series of payments to the protection seller and, in exchange, receives a payoff if a credit instrument (typically a bond or loan) goes into default. This kind of swap functions to reduce risk and ensure that the mortgage is secure. When housing bubbles collapsed and a great number of debtors failed to pay off their mortgages, investing banks could not afford the liabilities resulting from the credit default swaps.

<sup>4</sup> Brian J.M. Quinn, "The Failure of Private Ordering and the Financial Crisis of 2008" (2010) 5 N.Y.U.J. L. & Bus. 549 at 553.

balance-sheet vehicles, the derivatives and the ‘shadow banking system’ itself – was to find a way round regulation.”<sup>5</sup>

Reduced regulation may have exacerbated risk in derivatives markets. In particular, changes made in 2000 by the *Commodity Futures Modernization Act*, may have, in part, laid the ground for the catastrophe.<sup>6</sup>

A flurry of ambitious reforms is being undertaken based on lessons from the financial crisis. Strict and rigid regulation cannot be the sole consequence of the crisis. In March 2009, Lord Adair Turner released the *Turner Review* in the United Kingdom, subtitled *A Regulatory Response to the Global Banking Crisis*.<sup>7</sup> In Canada, steps are being taken to develop more “principles-based securities regulation”<sup>8</sup> under the leadership of a proposed new national securities regulator.<sup>9</sup> In the United States, so-

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<sup>5</sup> Martin Wolf, “Reform of Regulation and Incentives”, online:<<http://www.delong.typepad.com/.../martin-wolf-on-the-reform-of-incentives-as-part-of-financial-regulation.html> >.

<sup>6</sup> Lynn A. Stout, “How Deregulating Derivatives Led to Disaster, and Why Re-Regulating Them Can Prevent Another” (2009) 1:7 *Lombard Street J.* 7 at 7. (UCLA School of Law, Law-Econ Research Paper No. 09-13), online: SSRN<<http://ssrn.com/abstract=1432654>>. See the *Commodity Futures Modernization Act*, 7 U.S.C. § 1 (2000).

<sup>7</sup> U.K., Financial Services Authority, *The Turner Review: A Regulatory Response to the Global Banking Crisis*, DP09/2 (London: 2009), online: FSA <[http://www.fsa.gov.uk/pubs/other/turner\\_review.pdf](http://www.fsa.gov.uk/pubs/other/turner_review.pdf)> [FSA, *Turner Review*].

<sup>8</sup> In the context of statutory drafting, principles-based regulation prefers generality to details. That means legislation contains more directives. Enforcement of principles-based regulation may rely on outcome-oriented regulation, ongoing guidance from the regulator, the ability to incorporate industry experience, and so on. See Cristie Ford, “Principles-Based Securities Regulation” (2009) Expert Panel on Securities Regulation, online: Expert Panel (in *Expert Panel on Securities Regulation* (Ottawa: Department of Finance, 2009) .<<http://www.expertpanel.ca/documents/researchstudies/Principles%20Based%20Securities%20Regulation%20-%20Ford.English.pdf>> [Ford, “Expert Panel”].

<sup>9</sup> Canada, Expert Panel on Securities Regulation, *Final Report and Recommendations*, (Ottawa: 2008) at 17, online: Expert Panel <<http://www.expertpanel.ca/eng/reports/final-report/advancing.html#principles>>.

called “institution-based securities regulation”<sup>10</sup> is being advocated, which is a significant departure from existing “rules-based securities regulation”.<sup>11</sup>

Differences in approaches to regulation can be of great significance. First, regulation is arguably needed to create a stable derivatives market. Derivatives, on the one hand, can involve risks such as price risk, default risk and systemic risk; on the other hand, they can be efficient financial risk management tools.<sup>12</sup> Reliance on self-regulation in derivative markets may have been part of the cause of the financial crisis.<sup>13</sup> Therefore, some regulation, other than self-regulation, may be necessary. The regulation of derivatives should, however, avoid constraining innovation in derivatives since innovation may provide new and more efficient ways of hedging against various forms of risk. Innovation that provides new and more efficient ways of hedging may, in some instances, require relatively complex derivatives. Consequently, a balanced and flexible form of regulation is needed to respond to the fast moving derivatives market.

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<sup>10</sup> In this strategy, the regulators—to date the Securities and Exchanges Commission and the Financial Industry Regulatory Authority—require firms to establish certain roles, such as a Chief Compliance Officer, and policies, such as compliance policies and procedures, an annual self-assessment, access for the Chief Compliance Officer to the firm’s senior level executives, and internal codes of ethics. However, the functioning of these institutions within each firm is generally left to the firms themselves, with regulators providing interpretations, guidance, and personal statements. See John H. Walsh, “Institution-Based Financial Regulation: A Third Paradigm” (2008) 49 Harv. Int’l L.J. 48 at 49 [Walsh, “Third Paradigm”].

<sup>11</sup> In the context of statutory drafting, rules-based securities regulation looks to rules first and uses them, instead of principles. In this context, “rules-based regulation” means legislation that contains more rules that create a high level of certainty. Enforcement of rules-based regulation may rely on process-oriented regulation.

<sup>12</sup> See *infra* Chapter 2.

<sup>13</sup> In October 2008, Alan Greenspan, the former Chairman of the U.S. Federal Reserve Board, appeared before a committee of the House of Representatives and pronounced himself “in a state of shocked disbelief” that sophisticated market participants had permitted themselves to engage in an orgy of reckless lending and ill-advised risk-taking and, in the process, had failed to protect themselves from their own fecklessness. “Greenspan Concedes Error on Regulation” *The New York Times* (24 October 2008), online: New York Times <<http://www.nytimes.com/2008/10/24/business/economy/24panel.html>>.

Second, paradigms of regulation in derivatives markets involve critical questions about who makes the decisions to address problems in derivatives markets. In principles-based regulation, legislators are inclined to let the industry decide how to operate regulation under the direction of regulators. Giving the decision-making power to industry allows for flexible responses and the incorporation of industry experience into regulatory expectations. In rules-based regulation, both regulators and industry pay more attention to administrative process and enforcement rather than to how to reflect good industry practice in achieving regulatory goals.

Finally, regulation also influences the governance of regulated entities and financial institutions in the long run. The power of regulators, the rights of market participants, and the protection of the public are basic issues affected by these fundamentally different regulatory paradigms.

It is not the intention of this paper to find the roots of the recent financial crisis or to assess the lessons from deregulation. Instead, this paper will explore principles-based and rules-based approaches to the regulation of derivatives. The question explored in this thesis is, “Which regulatory approach is more suitable given the ever-expanding and changing nature of derivatives markets?” This question is explored by comparing and contrasting approaches to the regulation of derivatives in Québec and Thailand. The Québec *Derivatives Act*,<sup>14</sup> passed in 2008, takes, it will be argued, a more principles-based approach, while the Thai *Derivatives Act*<sup>15</sup> takes, by contrast, a more rules-based

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<sup>14</sup> *Derivatives Act*, R.S.Q. 2009, c. I-14.01 [Québec *Derivatives Act*, or the “Québec Act”].

<sup>15</sup> *Derivatives Act*, B.E. 2546 [Thai *Derivatives Act*, or the “Thai Act”]. Add the date after the title

approach. This, it should be noted, is based on a textual analysis and not on the implementation of the statutes.

Chapter 2 provides important background to this thesis and a brief description of derivatives and the derivatives market. The rules-versus-principles conversation is especially relevant in derivatives because of the problem of rapid pace of innovation in derivatives and the complexity of derivatives. Many challenges are presented by derivatives. The chapter notes the wide range of derivatives and how creative and potentially complex they can be. It shows the potential speculative quality of derivatives and how risky they can be, while also demonstrating how they can be used to reduce risk. It also shows how default risk can give rise to systemic risk that can lead to a broad failure of financial institutions. The avoidance of this default risk and the related systemic risk is key in the regulation of derivatives.

Chapter 3 reviews literature on rules-based and principles-based regulatory paradigms in the context of securities regulation. It analyses advantages and disadvantages of each of these regulatory paradigms. It uses securities regulation in the United Kingdom and the United States to illustrate and compare rules-based and principles-based regulatory systems both historically and practically. It also illustrates how difficult it can be to categorize securities regulation as either rules-based or principles-based. It compares text drafting and outcome-oriented vs. process-oriented regulation as main characteristics of the two regulatory paradigms. The comparison also shows how the two systems identify risk, control the accumulation of default risk and reduce systemic risk.

Chapter 4 examines derivatives regulation in Québec and Thailand to illustrate and compare these two regulatory paradigms in practice. It focuses on the different approaches with respect to the regulation of clearing houses, customer protection and risk management. It argues that Thailand takes a primarily rules-based approach while Québec takes a primarily principles-based approach. It considers, for each jurisdiction, selected individual provisions, regulatory approaches and general regulatory structures.

Chapter 5 compares Thailand and Québec historically in terms of the number of years of experience they have had in publicly-traded securities, their degree of specialization in derivatives markets, and the volume of trading in their derivatives markets. It argues that Québec's longer experience with publicly-traded securities, its degree of specialization in derivatives markets and its significantly higher volume of derivatives trading may have allowed the development of regulatory expertise and may have allowed self-regulatory organizations to develop sufficient experience to take on a greater regulatory role. Consequently, Québec may have been in a better position than Thailand to adopt a principles-based approach to derivatives regulation. A rules-based approach may have helped Thailand establish a derivatives market. In Thailand—and in other countries that have established derivatives markets with a rules-based approach to regulation—once the market is established, a shift to a principles-based approach would likely be more conducive to achieving regulatory goals of risk management and innovation.

## **CHAPTER 2: BACKGROUND ON DERIVATIVES**

### **I. INTRODUCTION**

The rules-versus-principles conversation is especially relevant in derivatives. Derivatives are developed by persons with esoteric knowledge and rare skills and this can result in the development of derivatives that are difficult for most investors to understand and also difficult for regulators to understand. The speed of innovation in derivatives can also make it difficult to respond to new developments in derivative markets in a timely fashion.

This chapter provides a brief introduction to derivatives. It starts with a definition of derivative securities and provides a simple example. It notes the wide range of derivatives and how creative and potentially complex they can be. It shows the potential speculative quality of derivatives and how risky they can be, while also demonstrating how they can be used to reduce risk. This chapter sets up a discussion for the rest of the paper. It focuses on the ways in which the regulation of derivatives can reduce systemic risks. This is critical because failure to do so can lead to the broad failure of financial institutions.

## II. DEFINITION OF DERIVATIVES

Kolb provides the following definition of a “derivative”:

A financial derivative is a financial instrument that is based upon another more elementary financial instrument, and the value of the financial derivative depends on the more basic instrument.<sup>16</sup>

That is to say, derivatives always derive their value from the underlying asset. Take a futures contract for example. A futures contract is an agreement between two parties to buy or sell an asset at a certain time in the future for a certain price. Suppose that an orange farmer and a juice company in Florida enter into a futures contract in January. The juice company agrees to exchange \$15,000 for 10,000 pounds of oranges on the last day of September. However, if there is an unexpected storm in May, a large number of orange trees will die. Supply may then be less than demand. If the market price of oranges rises to \$4 per pound in the month prior to the maturity date of the futures contract, the value of the futures contract to the juice company increases, since it allows the juice company to acquire 10,000 pounds of oranges worth \$40,000 for just \$15,000. Consequently, an increase in the market price per pound will produce an increase in the value of the futures contract for the juice company. Similarly, if the price of the commodity decreases, the value of the futures contract to the juice company will also decrease. A futures contract, therefore, “derives” its value from the market price of the commodity, since a change in the price of the commodity leads to a change in the value of the futures contract. ..

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<sup>16</sup> Robert W. Kolb, *Financial Derivatives*, 2d ed. (Cambridge, Mass.: Blackwell, 1996) at 1 [Kolb, *Financial Derivatives*].

The creation of derivatives is motivated by commercial need and financial need. For one thing, derivatives are effective in acquiring or selling a commodity by “locking” in a predetermined price. For example, futures were originally developed to meet the needs of farmers and merchants.<sup>17</sup> Such commercial need is evident in the example of the futures contract between the orange farmer and the juice company. Derivatives often meet the financial needs of many types of corporations. For example, assume a German corporation is in need of U.S. dollars to build a new factory in the U.S., while an American company is in need of marks to buy a new set of machines in Germany. However, both companies may have difficulty acquiring loans from foreign banks. When this occurs, they can exchange currencies and finance each other, which reduces their costs and saves time. Investors in securities markets also need various financial instruments to control risks. The need to control risks leads to an incentive to develop new derivatives that help control risks; therefore, new types of derivatives are constantly being created.

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<sup>17</sup> John Hull, *Introduction to Futures and Options Markets*, (Englewood Cliffs, NJ: Prentice Hall, 1991) at 2 [Hull, *Introduction*]. The German company and U.S. company example is taken from this book.

### III. DIFFERENT TYPES OF DERIVATIVES

Derivatives can be categorized in different ways. Categorization-method analysis reveals why derivatives are created and how they are traded.

#### A. Futures, Options and Swaps

There are a wide variety of derivatives which differ in their relationships between the basic instrument and the derivative; however, this paper will only focus on futures, options and swaps as examples of derivatives.

Futures were briefly discussed above. An option gives the holder the right to buy or sell the underlying asset by a certain date for a certain price. There are two basic types of options: a “call option” gives the owner the right to buy, while a “put option” gives the holder the right to sell.<sup>18</sup> The underlying asset could be a bond<sup>19</sup> or a share.<sup>20</sup> For example, the buyer may pay \$1,000 on October 1 for an option to buy 100 common shares of a company before October 31 at \$10 per share. The buyer can either choose to exercise the option before it expires or choose not to exercise the option.

A swap is an agreement between two or more parties to exchange sets of cash flows or assets over a period in the future.<sup>21</sup> There are many varieties of swaps. For instance, there are currency swaps,<sup>22</sup> interest rate swaps<sup>23</sup> and commodity swaps<sup>24</sup> that

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<sup>18</sup> John Hull, *Options, Futures, and Other Derivatives*, 3rd ed. (Upper Saddle River, NJ: Prentice Hall, 1997) at 5 [Hull, “Options”].

<sup>19</sup> Bonds are debentures secured by taking a security interest in the assets of the borrowers. Borrowers sell debentures to raise funds. Bonds are certificates of indebtedness.

<sup>20</sup> Shares represent the capital invested in a business.

<sup>21</sup> Examples of swaps are given below in Part IV on complexity in derivatives.

<sup>22</sup> In a currency swap, the two parties exchange currencies to obtain access to a foreign currency that better meets their business needs. See Kolb, *Financial Derivatives*, *supra* note 16 at 131.

differ in terms of the underlying cash flow or asset. Futures, options, and swaps can also be combined with each other or with other derivatives, such as “swaptions”.<sup>25</sup>

## **B. Exchange-Traded Derivatives and Over-The-Counter Derivatives**

Exchange-traded derivatives and over-the-counter derivatives are named after the different markets in which the derivatives are traded. An over-the-counter market “is a market without a centralized exchange or trading floor”.<sup>26</sup> Over-the-counter (“OTC”) derivatives are mainly direct contracts between investment banks and their corporate clients that are entered into without using the facilities of an exchange. OTC derivatives offer “considerable benefits by allowing financial risks to be more precisely tailored to risk preferences and tolerance.”<sup>27</sup> Liquidity<sup>28</sup> can be low due to “the search costs in finding trading partners willing to take the other side of a desired transaction.”<sup>29</sup>

Exchange-traded derivatives are derivatives traded on exchanges, such as futures<sup>30</sup> and options.<sup>31</sup> Futures are highly standardized contracts, and bear a number of

<sup>23</sup> The essential features of an interest rate swap are the transformation of a fixed-rate obligation for one party and a complementary transformation of a floating-rate obligation to a fixed-rate obligation for the other party. See *ibid.*

<sup>24</sup> A commodity swap exchanges cash flows and is dependent on the price of an underlying commodity. It is usually used to hedge against changes in the price of a commodity.

<sup>25</sup> Options on swaps provide one party with the right, but not the obligation, to enter into a swap at a future time. Some markets include trading options on caps and floors, which, as one might guess, are called “captions” and “floortions”. See Robert W. Kolb, *Practical Readings in Financial Derivatives* (Malden, Mass.: Blackwell Business, 1998) at 53.

<sup>26</sup> *Ibid.* at 5.

<sup>27</sup> Garry Schinasi, *Modern Banking and OTC Derivatives Markets: The Transformation of Global Finance and its Implications for Systemic Risk*, (Washington, DC: International Monetary Fund, 2000) at 1 [Schinasi, *Modern Banking*].

<sup>28</sup> Liquidity is the ability of an investor to convert an asset into cash. High liquidity means buying and selling with minimum price disturbance and ease.

<sup>29</sup> Kolb, *Financial Derivatives*, *supra* note 16 at 15.

<sup>30</sup> See Part A “Futures, Options and Swaps” above.

specified contract terms that cannot be altered.<sup>32</sup> Such standardization promotes liquidity.<sup>33</sup> In turn, it reduces flexibility.<sup>34</sup> Options are traded on a variety of option exchanges. Retail investors<sup>35</sup> mainly trade on exchanges, while institutional investors dominate both over-the-counter markets and exchanges.

#### IV. USE OF DERIVATIVES

Derivatives are used to take risk (or “speculate”) and to manage risk (or “hedge”). For instance, futures contracts are used for hedging and speculating. Hedgers,<sup>36</sup> such as farmers and mining firms, use futures contracts to shift price risk to speculators. Speculators<sup>37</sup> exchange price risk for potential profits. Hedging and speculating using

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<sup>31</sup> *Ibid.*

<sup>32</sup> Futures contracts will have standard features and will vary only with regard to price. All organized futures exchanges restrict trading to contracts which specify precisely the commodity, the number of units and a limited number of alternative delivery times, each of which constitutes a separate contract. Thus, the Chicago Board of Trade is a marketplace where futures contracts for 60,000 pounds of soybean oil for delivery in March or May can be entered into. See Nancy L. Jacob & R. Richardson Pettit, *Investments* (Homewood, Ill.: Richard D. Irwin, 1984) at 738 [Jacob & Pettit, *Investments*].

<sup>33</sup> Because of standardization, traders will know immediately the exact characteristics of the goods being traded, without negotiation or lengthy discussion. See Kolb, *Financial Derivatives*, *supra* note 16 at 23. Also, the flow of futures contracts occurs each day, while the flow of forward contracts occurs, by contrast, at maturity. Throughout the life of the futures contract, there will be as many possible transfers as there are trading days until maturity. See Jacob & Pettit, *ibid.* at 738-739.

<sup>34</sup> Unlike OTC markets, futures contracts cannot be tailored to the specific needs of the two parties. There is a limited range of commodities traded on exchanges.

<sup>35</sup> A retail investor is an individual who purchases securities on his own account, not for another company or organization, as opposed to an institutional investor. A retail investor is also referred to as an “individual investor” or a “small investor”.

<sup>36</sup> Hedgers are traders who seek to transfer price risk by taking a futures position opposite to an existing position on the underlying commodity or financial instrument. See Kolb, *Financial Derivatives*, *supra* note 16 at 526.

<sup>37</sup> Speculators are traders who accept price risk by going long or short to bet on the future direction of prices. *Ibid.* at 525.

derivatives are complementary responses to uncertainty in the value of underlying assets or cash flows.<sup>38</sup>

## **A. Hedging**

Many companies face price risk when their business requires them to hold an inventory, such as for gasoline. Hedging with futures can be very practical for many companies operating in natural resource industries.

Assume Petro Canada holds 10,000,000 gallons of gasoline in inventory. Assume also that the market value of the inventory is \$3.00 per gallon (and therefore the market value of the inventory is \$30,000,000). Gasoline futures are based on amounts of 1,000 gallons. A drop in price of 5 cents per gallon will result in a loss of \$500,000 on an inventory of 10,000,000 gallons.

Petro-Canada can hedge against this risk for the following month by entering into a futures contract in which it agrees to sell gasoline. To cover the entire 10,000,000 gallons of inventory, it would need to enter into 10,000 contracts; in each contract, Petro-Canada would agree to sell 1,000 gallons of gasoline at \$3.00 per gallon within one month. A company speculating that the price of gasoline will go up may be willing to enter into a futures contract of this sort. If the price of gasoline drops by 5 cents per gallon, then Petro-Canada will have lost 5 cents per gallon on its inventory if it sells the gasoline at the then current market price of \$2.95 per gallon. However, Petro-Canada would make 5 cents per gallon on the futures contract since the contract allows it to sell the gasoline to the other party at \$3.00 per gallon.

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<sup>38</sup> Jordan Corrado, *Fundamentals of Investments*, 2nd ed. (Toronto: McGraw-Hill Ryerson, 2009) at 525 [Jordan, *Fundamentals*].

Normally, instead of the gasoline being delivered, the position is simply closed out. In other words, the other futures contract party pays the difference between the futures contract price per gallon and the market price per gallon on the delivery date times 1,000 gallons times the number of contracts. In the above example, this would mean the other party to the contract would pay Petro-Canada 5 cents per gallon  $\times$  1,000 gallons  $\times$  10,000 contracts, which equals \$500,000. The \$500,000 gain on the futures contract would match the \$500,000 loss on the market value of the inventory.

Suppose instead the per-gallon market price of gasoline went up as the speculator had anticipated. Suppose it went up to \$3.07 per gallon. Petro-Canada would have contracted to supply 10,000,000 gallons of gasoline to the speculator at \$3.00 per gallon and therefore would have lost \$700,000 (a loss of 7 cents per gallon on 10,000,000 gallons). If Petro-Canada simply closed out the position (instead of actually delivering the gasoline), then it would pay the speculator \$700,000 but would still have the gasoline which, at the then market price of \$3.07 per gallon, would have a market value of \$30,700,000. Thus, what Petro-Canada lost on the futures contract would be matched by the gain in the market value of its inventory of gasoline.

## **B. Speculating**

While derivatives can be used to hedge, they are also used to speculate. Consider an example of how a speculator could use options. Suppose that in October, a speculator wants to go long in Stock Y, that is to say, the speculator will gain if the stock price increases. Assume that the stock price is currently \$57 and that a December call option

with a \$60 strike price<sup>39</sup> currently sells for \$3. If the speculator only has \$5,700 to invest, there are two choices open to him or her. The first alternative involves the straight purchase of 100 shares. The second involves the purchase of a call option on 100 shares of Stock Y. Suppose that the speculator's hunch is correct and the price of Stock Y rises to \$70 by December. The first alternative of buying the stock yields a profit of  $100 \times (\$70 - \$57) = \$1,300$ . However, the second alternative is far more profitable. A call option on a share of Stock Y with a strike price of \$60 gives a profit of \$10, since the option enables something worth \$70 to be bought for \$60. The total gain on all the options that have been purchased is  $1,900 \times \$10 = \$19,000$ . Subtracting the original cost of the options, the net profit is  $\$19,000 - \$5,700 = \$13,300$ . However, the net profit of buying a stock is merely \$1,300. Therefore, the options strategy is over 10 times more profitable than the strategy of buying the stock.<sup>40</sup>

Nevertheless, options also give rise to a greater potential loss. Suppose the stock price falls to \$50 by December. In the first two examples, the first stock transaction yields a loss of  $100 \times (\$57 - \$50) = \$700$ . Since the call options expire without being exercised, the options strategy would lead to a loss of \$5,700, the original amount paid for the options. Options also provide a large degree of leverage<sup>41</sup> to investors. Consequently, speculating on options magnifies the financial consequences of a given investment.<sup>42</sup> Table 1 illustrates such speculation and consequences.

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<sup>39</sup> "Strike price" or "exercise price" is the price at which a certain derivative contract should be exercised, when the contract requires delivery of the underlying instrument. The trade will be at the strike price of the underlying instrument, regardless of market price at that time.

<sup>40</sup> Hull, *Introduction*, *supra* note 17 at 11.

<sup>41</sup> Leverage is the use of debt to supplement investments.

<sup>42</sup> Hull, *Introduction*, *supra* note 17 at 11.

Table 1. Speculation in Derivatives

Alternatives	Current Price	Strike Price of Options	Stock Prices in December	Net Profit
				Net Loss
Stock Y	\$57	Null	\$70	\$1,300
			\$50	\$700
Options on Stock Y	\$3	\$60	Null	\$13,300
				\$5,700

## V. COMPLEXITY IN DERIVATIVES

Complexity in financial markets relates to obfuscation and financial engineering. Complexity may be “for complexity’s sake”<sup>43</sup> and “a desire to obfuscate,”<sup>44</sup> as the pricing of retail financial products is sometimes overly complex, misleading non-expert consumers into investing in these products.<sup>45</sup> Yet, financial engineering is so advanced that sometimes the complexity of derivatives may even be beyond the understanding of the investment banks that create them, as when complex derivatives brought down some of Wall Street’s biggest names.<sup>46</sup> Even without deliberate obfuscation, the inherent complexity of derivatives is a common problem for all consumers. Structured products, derived from foreign currency, commodities, or residential mortgages, can promote

<sup>43</sup> Peter Green & Jeremy Jennings-Mares, Letter to the Editor, *Financial Times* (4 July 2008) at F14 [Green & Jennings-Mares, “Letter”].

<sup>44</sup> *Ibid.*

<sup>45</sup> Cf. Bruce I. Carlin, “Strategic Price Complexity in Retail Financial Markets” (2009)91 J. Fin. Econ. 278 at 278. Carlin proposes dichotomizing financial markets as “expert” and “non-expert”, noting that only non-expert consumers are problematic and need special protection.

<sup>46</sup>The most famous case is the bankruptcy of Lehman Brothers. “Lehman Bros files for bankruptcy” *BBC News* (16 September 2008), online: BBC News <<http://news.bbc.co.uk/1/hi/business/7615931.stm>>. Another case was the liquidation of Mervyn. See “Mervyns says files for Chapter 11 bankruptcy” *Reuters* (29 July 2008), online: Reuters <<http://www.reuters.com/article/pressReleasesMolt/idUSWNAB327320080729>> .

efficiency by offering investors the opportunity to gain higher returns and to more precisely hedge risk from new asset types and markets.<sup>47</sup> “Demand by investors for securities that meet their investment criteria and their appetite for ever higher yields”<sup>48</sup> drives firms to “constantly introduce new financial products because [profit] margins on products decline quickly”<sup>49</sup> due to competition. Complexity can thus add efficiency and depth to financial markets and investments.<sup>50</sup> The development of derivatives responding to commercial and financial needs can lead to some very complicated derivatives. Consider swaps, for example. Unlike futures and options on exchanges, they are traded in over-the-counter markets. They are private.<sup>51</sup> Swaps contracts are tailored to the specific needs of both parties involved. They have long horizons for flexibility and complex structures to address various types of risk exposure.<sup>52</sup>

Swaps are created to respond to financial concerns. For example, some firms are naturally exposed to interest rate risk due to the nature of their business operations. Others may be in need of foreign currency, but getting loans from foreign banks can be costly and difficult.<sup>53</sup>

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<sup>47</sup> Jennifer E. Bethel & Allen Ferrell, “Policy Issues Raised by Structured Products” in Yasuki Fuchita & Robert E. Litan, eds., *Brookings-Nomura Papers on Financial Services* (Washington DC: Brookings Institution Press, 2007).

<sup>48</sup> Green & Jennings-Mares, “Letter”, *supra* note 43 at 14.

<sup>49</sup> *Ibid.*

<sup>50</sup> Steven L. Schwarcz, “Regulating Complexity in Financial Markets” (2009) 87 Wash. U.L.R. 211 at 217 [Schwarcz, “Complexity”].

<sup>51</sup> In fact, the swaps market is limited to corporate investors. Retail investors seldom do swap transactions.

<sup>52</sup> Kolb, *Financial Derivatives*, *supra* note 16 at 123-126.

<sup>53</sup> *Ibid.* at 131.

## A. Plain Vanilla Swaps

Although the features of swaps may be quite complicated, the general nature of a swap transaction is very simple. Consider, to begin with, a simple, or “plain vanilla” swap. In a plain vanilla interest rate swap, first of all, a firm with a floating-rate loan may want to get a fixed rate while a firm with a fixed-rate loan may prefer a floating-rate loan. Party A may hold an initial position on a floating-rate debt instrument, while Party B is subject to a fixed-rate obligation. Party A is exposed to changes in interest rates. In order to escape from that risk, Party A may want to swap the floating-rate obligation with Party B’s fixed-rate obligation. Both parties can benefit from a swap transaction. If they reach an agreement on the same principal for the same period of time with the same currency, then that agreement is basically an interest-rate swap.

There are two streams of payment between the parties: principal and interest. However, principal amounts are generally not exchanged in interest-rate swaps. Cash flows on loans consist of interest payments and the payment of principal (usually at the end of the term of the loan). Interest-rate swaps are often used to exchange interest payment cash flows.

To be specific, assume that, initially, Party A has an original obligation of LIBOR<sup>54</sup> + 40 basis points (“bp”), while Party B has an original fixed-rate obligation of 12.2%. The swap covers a five-year period that involves annual payments on a \$5 million principal amount. In the swap contract, Party A agrees to pay a different but

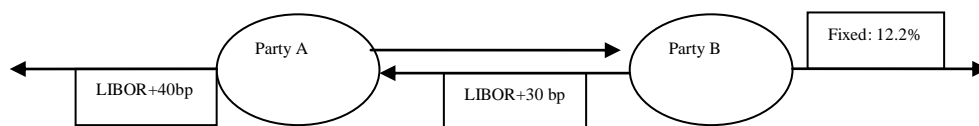
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<sup>54</sup> LIBOR stands for “London Interbank Offered Rate”. This is a base rate at which large international banks lend funds to each other. Floating rates in swaps markets are most often set to equal LIBOR plus some additional amount. *Ibid.* at 127.

fixed rate of 12% to Party B or \$600,000 per year. In return, Party B agrees to pay a floating rate of LIBOR + 30 basis points to Party A, but the actual amount of the payments depends on movement in LIBOR.

The structure of this interest rate swap is set out in Figure 1. Suppose LIBOR is 11.5% at the time of the first payment. This means that Party A will be obligated to pay \$600,000 to Party B. Party B will owe \$590,000 to Party A. The difference of \$10,000 is the net gain of Party B. It also generally represents the cash flow that takes place.

Figure 1. Interest Rate Swap



## **B. Complexity in Swaps**

The complexity in swaps lies in the complicated structures of many swap contracts. First of all, variations on the vanilla swap structure are limited only by the imagination of financial engineers and the desire of market participants.<sup>55</sup>

A number of features can be used to modify plain vanilla swaps. There are, for example, several underlying variables. If the principal decreases in a predetermined way, then it is an “amortizing swap”; if the principal increases in a predetermined way, it is a “step-up swap”; if one party has the right to extend the life of the swap beyond the specified period, it is an “extendable swap”; if one party has the right to terminate the swap early, it is a “puttable swap”. It is difficult to determine whether a limit to swaps types exists. Moreover, a wide diversity of swaps can be combined together. For instance, a plain vanilla interest-rate swap can be combined with a plain vanilla currency swap.<sup>56</sup> A swaption can be an option on any type of swap.

Finally, as the swaps transactions are facilitated by financial institutions, these various forms of swaps transfer and introduce risks among financial institutions. Financial institutions hold portfolios of derivatives to offset risks. Portfolios can be very complicated and may include investments in stocks, bonds, options, futures and swaps. These investments may be inter-related to track or match risks. These examples of potential swaps and portfolio complexity are just the tip of the iceberg in terms of derivatives complexity.

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<sup>55</sup> Hull, *Options*, *supra* note 18 at 149.

<sup>56</sup> As discussed above, this swap will include a contract to swap a fixed-rate currency for a floating-interest rate in another currency. Kolb, *Financial Derivatives*, *supra* note 16 at 131.

## VI. RISKS IN DERIVATIVES

Despite enhancement in efficiency, complexity may also cause risks in markets and investments. Complications in the underlying assets and “the means of originating those assets”<sup>57</sup> “increase the likelihood that failures will occur and diminish the ability of investors and other market participants to anticipate and avoid these failures.”<sup>58</sup>

Difficulties in valuing complex swaps exacerbate these failures.<sup>59</sup>

Not all risks are negative to investors. Risks, however, should never be neglected. Price risk, default risk and system risk represent different stages of risk associated with derivatives.

### A. Price Risk

Price risk has been described by Ludger Hentschel and Clifford W. Smith Jr. as “the potential for losses on derivatives from changes in the prices of underlying assets such as Treasury bonds, foreign currencies, and commodity prices.”<sup>60</sup> That is to say, derivatives respond very rapidly to changes in the price of the underlying asset. Moreover, derivatives such as futures and options offer investors a large degree of leveraging for borrowing. A small movement in an underlying asset’s price could mean a large return or a great loss. As we can see in Table 1, if the price of Stock Y is \$50 in December, the speculator will choose not to exercise that option. Consequently, the total

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<sup>57</sup> Schwarcz, “Complexity”, *supra* note 50 at 220.

<sup>58</sup> Schwarcz, “Keynote Address: Understanding the Subprime Financial Crisis” (2009) 60 S.C.L. Rev. 549 at 563.[ Schwarcz, “Keynote Address”]

<sup>59</sup> Schwarcz, “Complexity”, *supra* note 50.

<sup>60</sup> Ludger Hentschel & Clifford W. Smith, Jr., “Risk and Regulation in Derivatives Markets” in Robert J. Schwartz & Clifford W. Smith, Jr., eds., *Derivatives Handbook: Risk Management and Control* (Toronto: John Wiley & Sons, 1997) at 4 [Hentschel & Smith, “Risk Regulation”].

loss is 100%. The bankruptcy of Orange County, California in 1994 is a well-known example of the potential for large loss due to price risk.<sup>61</sup>

Leveraging in derivatives trading magnifies price risk. For example, Lehman Brothers borrowed significant amounts to fund its investments in the years before its bankruptcy in 2008. A significant portion was invested in derivatives based on housing.<sup>62</sup> This vulnerable position brought huge profit during the boom. Just a 3-4% decline in the value of its assets would, however, have entirely eliminated its book value or equity.<sup>63</sup> Moreover, investment banks such as Lehman Brothers were not subject to the same regulations that were applied to depository banks to restrict their risk-taking.<sup>64</sup> Such a huge potential loss due to a fluctuation in price creates significant default risks.

It may appear that losses on swaps will be offset by “gains in operating values”.<sup>65</sup> However, swap intermediaries face greater risks because of the difficulties they encounter in hedging their swap positions.<sup>66</sup> Swaps can also provide insurance and security, similar to the way a “fire insurance policy” provides security, even when a building does not “burn down.”<sup>67</sup>

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<sup>61</sup> An investment fund melt-down in 1994 led to the criminal prosecution of Orange County treasurer Robert Citron. The county lost at least \$1.5 billion through high-risk investments in derivatives. On December 6, 1994, Orange County declared Chapter 9 bankruptcy, from which it emerged in June 1995. The Orange County bankruptcy was the largest municipal bankruptcies in U.S. history. Jim Sleeper, “How Orange County Got Its Name” (29 November 2004), online: Orange Country <[http://ocgov.com/vgnfiles/ocgov/ClerkRecorder/Docs/Archives/How\\_Orange\\_County\\_Got\\_Its\\_Name.pdf](http://ocgov.com/vgnfiles/ocgov/ClerkRecorder/Docs/Archives/How_Orange_County_Got_Its_Name.pdf)>.

<sup>62</sup> U.S. Security Exchange Committee, *Lehman Brothers Holdings Inc. 10-K* (Washington D.C.: 2007), online: SEC. <<http://www.secinfo.com/d11MXs.t5Bb.htm#1stPage> Lehman 2007 Annual Report>.

<sup>63</sup> “Bankruptcy of Lehman Brothers”, online: Bestweb <[http://bestwebhealth.com/Bankruptcy\\_of\\_Lehman\\_Brothers.htm#cite\\_note-0](http://bestwebhealth.com/Bankruptcy_of_Lehman_Brothers.htm#cite_note-0)>.

<sup>64</sup> *Ibid.*

<sup>65</sup> Schinasi, *Modern Banking*, *supra* note 27 at 7.

<sup>66</sup> Janet Lewis, “Oil Prize Jitters? Try Energy Swaps” (1990) 12 Institutional Investor 204 at 206-208.

<sup>67</sup> *Ibid.*

## **B. Default Risk**

Default risk in derivatives trading, otherwise known as “credit risk” or “counterparty risk”, is the risk to each contracting party that the counterparty cannot pay out on a derivatives contract or live up to other contractual obligations. Both parties should consider this risk when evaluating a contract.

Default risk differs from settlement risk and Herstatt risk. “Settlement risk” refers to default risk that occurs on the date of settlement. Settlement risk obligations may be met eventually, just not on the date of settlement. “Herstatt risk” derives from the name of a German bank that defaulted on currency-exchange contracts with foreign counterparties after receiving payments of deutsche marks during the day but before making agreed upon U.S. dollar payments at the close of the day. The default risk from non-simultaneous exchange was due to the difference in business hours between New York and Germany. Herstatt risk therefore refers to a specific type of settlement risk arising due to differences in business hours.<sup>68</sup>

The example in Figure 1 also illustrates the default risk of a swap. If LIBOR increases 400 bp due to a certain financial event in the European market, which rarely happens but is still possible, Party B will owe money to Party A on the swap contract. Assume the net asset value of Party B falls dramatically at the same time. The solvency of Party B may be so impaired that it is not able to make required contract payments. Then Party B has to default on the interest payments.

If Party B has abundant capital, a small change in LIBOR would not lead to a default by Party B. If Party B has a strong credit rating (e.g. “AAA”), then any interest-

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<sup>68</sup>Hentschel & Smith, “Risk Regulation”, *supra* note 60 at 7.

rate swap it enters into is likely to pose little risk to counterparties. A very unusual increase in LIBOR could, however, cause Party B to default.

It is exactly this confidence that allows the accumulation of default risk. An investing bank may invest too much in one derivative. If too much is invested in one derivative without a corresponding investment in an offsetting derivative, then a potentially significant loss can occur during an underlying derivative asset price change. Moreover, if the rating firms give a rating that underestimates the credit risk of a counterparty, the default risk will be worse than anticipated. If many investing banks are too optimistic and too confident about one derivative, and if several credit-rating firms underestimate the default risk, several investing banks could suffer losses on that derivative. If this causes insolvency in one or more of the investing banks, there will be defaults. Losses due to these defaults could cause losses at other investing banks that may then also become insolvent. In other words, default in one type of derivatives contract could spread to other contracts and markets. The potential for this spread of default risk is known as “systemic risk” or “system risk”.<sup>69</sup> When Lehman Brothers collapsed, there was a domino effect by which the default spread to other derivatives and markets.

### **C. System Risk**

System risk represents the risk of an entire market collapsing due to widespread defaults in any set of financial contracts. This risk affects all derivatives in the market. The aggregation of the underlying risks faced by individual firms can lead to mass default

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<sup>69</sup> *Ibid.* at 7.

in the market and results in system-wide risk. Macroeconomic shocks, such as a domestic recession or movements in the global market, can also bring about system risk. For example, the burst of the real estate bubble in 2006 in the United States created significant defaults on insurance firm credit swaps in 2007. One bankruptcy had a cascading effect on other banks which were owed money by the first bank in trouble, causing systematic failure.

There is also unsystematic risk. Not every default in one derivative will spread everywhere and ultimately trigger system risk. Normally, default within derivatives contracts is negatively correlated. That is, at any point in time, only the side of a derivative contract that is “in the money” can lose from default.<sup>70</sup> Similarly, if an underlying price falls substantially, positions that were effectively long in the underlying security will lose while short positions will gain. Moreover, some risks in one derivative may not be related to other derivatives. For example, a farmer’s default on a wheat future may not be related to a bank’s default on a foreign currency. In addition, holding a portfolio can reduce the uncorrelated risks of derivatives. Unsystematic risk can be reduced by diversification.

Nevertheless, there is still a significant potential for system risk. If there are widespread defaults and financial firm failures due to system risks, these risks can cause a great deal of damage to derivatives markets, the financial industry, the domestic economy and potentially to the global economy. The International Monetary Fund estimated that large U.S. and European banks lost more than \$1 trillion on toxic assets and from bad loans from January 2007 to September 2009. These losses are expected to

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<sup>70</sup> *Ibid.*

top \$2.8 trillion by the end of 2010. U.S. bank losses were forecast to hit \$1 trillion and European bank losses were forecast to reach \$1.6 trillion.<sup>71</sup> There is also a direct relationship between declines in wealth and declines in consumption and business investments. For instance, since peaking in the second quarter of 2007, household wealth is down \$14 trillion in the U.S.<sup>72</sup> This shock was not confined to the U.S. It spread to the global economy. A number of European banks failed. There were declines in stock indexes and large reductions in the market value of equities<sup>73</sup> and commodities.<sup>74</sup>

Risks associated with the assets or indexes on which derivatives are based allow speculators to profit on the trading of derivatives. Derivatives also allow for the management of risk. Although risk cannot be eliminated, careful attention should be paid to the risks associated with derivatives, such as price risk, default risk, and especially system risk.

## VII. FINANCIAL FACILITATORS

“Facilitators” perform an important role in the market for many derivatives. The financial stability of facilitators is important in avoiding systemic risk and this is addressed in the regulation of derivatives discussed in chapter 4. Consequently, it is important to note the role of facilitators here. “Facilitators” facilitate these transactions

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<sup>71</sup> “Bloomberg—U.S. European bank write downs and losses—November 5, 2009” *Reuters*, online: Reuters <<http://www.reuters.com/article/marketsNews/idCNL554155620091105?rpc=44>>.

<sup>72</sup> “Americans’ wealth drops \$1.3 trillion”, CNN (11 June 2009), online: CNN <[http://money.cnn.com/2009/06/11/news/economy/Americans\\_wealth\\_drops/](http://money.cnn.com/2009/06/11/news/economy/Americans_wealth_drops/)>.

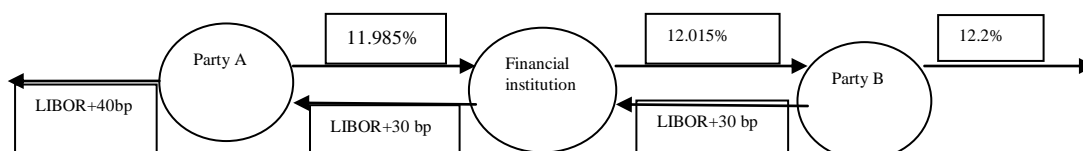
<sup>73</sup> Floyd Norris, “United panic”, *The New York Times* (24 October 2008), online: New York Times <<http://norris.blogs.nytimes.com/2008/10/24/united-panic.>>.

<sup>74</sup> Ambrose Evans-Pritchard, “Dollar tumbles as huge credit crunch looms”, *The Telegraph* (25 July 2007), online: Telegraph <<http://www.telegraph.co.uk/money/main.jhtml?xml=/money/2007/07/25/cnusecon125.xml>>.

by bringing counterparties together and serving as intermediaries for these types of transactions. Usually, therefore, two nonfinancial companies do not get in touch with each other directly to arrange a swap in the way indicated in Figure 1. Each of them often has a specific pattern of cash flows to swap, yet it can be very difficult to find a potential counterparty to take the opposite side of the transaction. Also, because a swap agreement is tailored to meet the needs of the two parties, the swap cannot be altered or terminated early without the agreement of both parties. Finally, as illustrated above, there is no guarantor of performance. In other words, swaps have possible default risk. Assessing the financial credibility of a counterparty is difficult and expensive.

As noted above, financial intermediaries have developed in the market to facilitate swap transactions. A financial institution may enter into two offsetting swap transactions with Party A and Party B as originally shown in Figure 1 and also shown in Figure 4 below. In these transactions, Party A and Party B deal with a financial intermediary such as a bank or other financial institution. Party B borrows at 11.985% instead of 12%. The financial institution is certain to make a profit of 0.03% (3 basis points) per year on the principal of \$5 million, which is \$15,000 per year. Party A ends up borrowing at LIBOR plus 40 basis points. Consequently, this financial institution has two separate contracts – one with Party A and one with Party B. The financial institution also bears two default risks – one associated with its contract with Party A and the other associated with its contract with Party B. The three basis point difference is the compensation.

Figure 2. Financial Intermediaries



As to futures and options, there are also two limitations. Firstly, for brokerage firms<sup>75</sup> that do large numbers of transactions daily, it would be extremely inefficient if every transaction had to end with a physical delivery of derivatives and payments for each transfer from the seller to the buyer. Secondly, high degrees of leveraging to borrow suggests great potential loss in futures and options trading. Settlement is very critical in derivatives contracts.

As noted above, it is important to have financially secure facilitators to avoid systemic risk. For example, a clearing house can overcome some limitations to the trading process. In the United States, a centralized clearing house, operated by the National Securities Clearing Corporation, handles trades made on the New York Stock Exchange and on the over-the-counter market. Some regional exchanges also maintain clearing houses. The members of clearing houses, such as brokerage firms and banks, notify them of their transactions. At the end of the day, a clearing house verifies both sides of trades for consistency, and then nets out all the transactions. Each member receives a list of the net amount of securities and the net amount of monies to be delivered or received.

For a certain transaction, Firm A must deliver 500 shares of Stock Y to Firm B and will receive \$2,000 from Firm B. Firm B must deliver 500 futures contracts to Firm A. Firm A does many different derivatives transactions with Firm B during the day. All these transactions are recorded by the clearing house. At the end of each day, the clearing house notifies Firms A and B of their net obligations. A clearing house, therefore, greatly simplifies the process and reduces the cost of transfer operations by

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<sup>75</sup> A brokerage firm trades in securities on behalf of other persons and brings buyers of securities into contact with sellers of securities.

allowing brokerage firms to settle through the clearing house instead of settling directly with various other firms.

## **VIII. SUMMARY**

Derivatives derive their value from other underlying assets. They can be used to speculate or to hedge against risk. They can be complex and can create significant risks such as price risk, default risk, and systemic risk. While these risks may be particularly difficult for retail investors to appreciate, the potential complexity of derivatives can even make it difficult for institutional investors to fully appreciate risk exposure.

Recent collapses in financial markets have created renewed interest in regulating derivatives markets. The approach to regulating derivatives is critical. An appropriate approach may retain the benefit these markets provide in terms of hedging and allow the timely creation of new derivatives products in response to the need for new devices to hedge risk. At the same time, it can also protect retail and institutional investors and, in particular, help avoid system risk. Should the regulatory approach be a rules-based approach or should it be a principles-based approach? This thesis will now address this question.



## CHAPTER 3: PRINCIPLES-BASED REGULATION AND RULES-BASED REGULATION

As noted in Chapter 2, derivatives, on the one hand, can involve risks such as price risk, default risk and system risk; on the other hand, they can be tools for efficient risk management. Innovation and complexity in derivatives may provide new and more efficient ways to hedge against various forms of risk. The derivatives industry also controls risk and polices the market through self-regulation. Futures exchanges and other self-regulatory associations implement many rules or by-laws to regulate derivatives market participants and transactions. Reliance on industry self-regulation may leave unresolved problems. Some regulation, other than self-regulation, may be necessary.<sup>76</sup> This chapter introduces principles-based and rules-based approaches to securities regulation. It then compares these approaches to regulation and provides a brief review of literature discussing their advantages and disadvantages.

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<sup>76</sup> This thesis assumes that the derivatives market is not efficient enough. Self-regulation needs to be supplemented by adequate regulation from the government. However, the relationship between market efficiency and government regulation is beyond the scope of this thesis. Whether government interference is justified is also too complex a question to explore in this relatively short thesis. For a helpful works on the relationship between market efficiency and regulation, see Adam C. Pritchard, "Self-Regulation and Securities Markets" (2003) 26 *Regulation* 32 at 36, and Mark Gillen, *Securities Regulation in Canada*, 3d ed. (Toronto: Carswell, 2007) at 53-76.

## I. DESCRIPTION OF PRINCIPLES-BASED REGULATION AND RULES-BASED REGULATION

### A. Principles-based Securities Regulation

At first glance, it may seem difficult to distinguish principles-based regulation from rules-based regulation, given the amalgam of rules and principles in the regulatory structure of the U.K. and the U.S. However, what distinguishes the two systems is “not so much what their rules look like, but how they are applied.”<sup>77</sup> Statutory drafting is only one element of the distinction between rules and principles. One could have a rules-based statute that is implemented in a principles-based way. A principles-based regime could come about from the way a rules-based statute is implemented. Therefore, principles-based statutory drafting is not actually “critical” to successful “principles-based” securities regulation.

The approach in implementation is more essential than drafting in statutes. At the level of regulatory implementation, principles-based regulation could be “an approach that looks to principles first, and uses principles rather than detailed rules wherever feasible.”<sup>78</sup> At the regulatory design level, a principles-based approach “moves away from reliance on detailed, prescriptive rules and [relies] more on high-level, broadly stated rules or principles to set the standards by which regulated firms must conduct

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<sup>77</sup> Julia Black, *Forms and Paradoxes of Principles-based Regulation*, Legal Studies Working Paper Series, Doc. No. 13 (2008) [Black, “Paradoxes”]. Black argues that “It is this difference in implementation and application which marks out the substantive difference between the US and the UK regimes which politicians are increasingly commenting on.”

<sup>78</sup> Ford, “Expert Panel”, *supra* note 8 at 9.

business.”<sup>79</sup> Principles-based regulation also means “different expectations of firms and how they engage with the regulatory issues they face.”<sup>80</sup> Principles-based regulation is a distinct regulatory approach from contrast to rules-based regulation. It is more than legislative drafting. It can be achieved through enforcement or implementation alone<sup>81</sup> and can perform in different patterns. Julia Black notes four forms of principles-based regulation: formal, substantive, full and polycentric:<sup>82</sup>

PBR can be formal, in the sense that there are principles in the rule books (including legislation, codes of practice and so on) but it may not be substantive. In contrast, a regime may have some of the operational characteristics of a PBR regime, but not have principles in the rule books. Where it is both, it is described as full PBR. Polycentric PBR is full PBR with the additional element that it is characterized by the enrolment of others, beyond regulators and firms, in the elaboration of the meaning and application of principles.

There can be three elements to principles-based securities regulation. First, principles-based regulation can, although it need not necessarily, have the formal element of principles-based statutory drafting. Preference for general standards and practical goals rather than detailed rules and processes in drafting often shows the move to principles-based regulation. The second is an outcome-oriented approach in implementation. Enforcement should focus on outcomes rather than processes. This approach should also be accompanied by knowledgeable staff and diverse channels for industry communication. An outcome-oriented approach is substantive and essential to

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<sup>79</sup> Julia Black, “Making a Success of Principles-based Regulation” (2007) 1:3 L. & Financial Markets Rev. 191 at 197 [Black, “Making a Success”].

<sup>80</sup> U.K., Financial Services Authority, “Principles-based Regulation: Focusing on the Outcomes That Matter” (London: 2007) at 2, online: FSA <<http://www.fsa.gov.uk/pubs/other/principles.pdf>> [FSA, “Focusing”].

<sup>81</sup> Ford, “Expert Panel”, *supra* note 8 at 10.

<sup>82</sup> Black, “Paradoxes”, *supra* note 77 at 5.

all the patterns in principles-based regulation. The third is a trustworthy industry, the precondition of polycentric and full principles-based regulation. This means most market participators are able to decide how to comply with requirements, share common understandings of regulatory requirements and give feedback to the regulators of enforcement.

## **1. Principles-based Text Drafting**

The choice of legal form has been a choice between “standards” and “rules” for a long time.<sup>83</sup> As a contrast to “rules”, this paper will use the term “principles” instead of “standards”, partly because that is the commonly used term in the context of principles-based regulation and partly because standards are increasingly used to “designate performance or conduct measures.”<sup>84</sup>

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<sup>83</sup> Duncan Kennedy, “Form and Substance in Private Law Adjudication” (1976), 89 Harv. L. Rev. 1685 at 1687. Kennedy notes that the choice of legal form is between rules and standards.

<sup>84</sup> Lawrence A. Cunningham, “A Prescription to Retire the Rhetoric of ‘Principles-Based Systems’ in Corporate Law, Securities Regulation and Accounting” (2007) 60 Vand. L. Rev. 1411 at 1419 [Cunningham, “Retire the Rhetoric”].

a. Characteristics of Principles

Voluminous literature highlights distinctions between rules and principles. One commonly accepted debate is whether the law is given content *ex ante* or *ex post*.<sup>85</sup>

Principles require legal decision makers to apply a background principle or set of principles to a particularized set of facts in order to reach a legal conclusion.<sup>86</sup>

It is a principle that one should drive at “a prudent rate of speed”. To determine whether a driver has violated the law, an adjudicator must investigate the range of relevant driving conditions and apply the background principle of reasonableness to the situation.<sup>87</sup> This scenario would require contextual analysis after the driving occurs;<sup>88</sup> an adjudicator would need to determine the particular prudent and reasonable speed and evaluate the driver’s manner of driving. Consequently, there are two steps for using principles. The first is to apply a background principle or set of principles to a

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<sup>85</sup> See Larry Alexander & Emily Sherwin, *The Rule of Rules: Morality, Rules and the Dilemmas of Law*, (Durham, NC: Duke University Press, 2001) at 29-30; Larry Alexander & Emily Sherwin, “The Deceptive Nature of Rules” (1994) 142 U. Pa. L. Rev. 1191 at 1203; James W. Colliton, “Standards, Rules and the Decline of the Court in the Law of Taxation” (1995) 99 Dick. L. Rev. 265 at 278; Alan Chen, “Shadow Law: Reasonable Unreasonableness, Habeas Theory, and the Nature of Legal Rules” (1999) 2 Buff. Crim. L. Rev. 535 at 540; Louis Kaplow, “Rules versus Standards: An Economic Analysis” (1992) 42 Duke L.J. 557 at 566; H.L.A. Hart, *The Concept of Law* (Oxford : Clarendon Press, 1961) at 127-129; Mark W. Nelson, “Behavioral Evidence on the Effects of Principles- and Rules-Based Standards” (2003) 17 Accounting Horizons 91 [Nelson, “Behavioral Evidence”]; Eric A. Posner, “Standards, Rules, and Social Norms” (1997) 21 Harv. J.L. & Pub. Pol’y 10 at 13; Duncan Kennedy “Form and Substance in Private Law Adjudication” (1976) 89 Harv. L. Rev. 1685 at 1701; Russell B. Korobkin, “Behavioral Analysis and Legal Form: Rules vs. Principles Revisited” (2000) 79 Or. L. Rev. 23 at 31 [Korobkin, “Behavioral Analysis”]; however, see Cunningham, “Retire the Rhetoric”, *supra* note 83. Cunningham argues that the categories are inevitably unstable and that rules, principles and standards reside on a continuum in which these components interact, so that their substantive meaning is mutually informative.

<sup>86</sup> Frederick Schauer “The Tyranny of Choice and the Rulification of Standards” (2005) 14 J. Contemp. Legal Issues 803 at 861 [Schauer, “Tyranny”].

<sup>87</sup> *Ibid.* at 860-862.

<sup>88</sup> *Ibid.*

particularized set of facts. The second is to reach a legal conclusion and to investigate the range of relevant driving conditions.<sup>89</sup>

In securities regulation, for example, NASD<sup>90</sup> Rule 2110, “a member, in the conduct of his business, shall observe high standards,” is a principle. The regulator should first investigate the context and then apply this “commercial honour” principle to specific conditions.

Principles have a number of characteristics. For example, generality makes overarching requirements flexible to a rapidly changing industry. Principles are largely behavioural standards, such as “integrity,”<sup>91</sup> “skill care and diligence”<sup>92</sup> and “reasonable care,”<sup>93</sup> which provide reasons behind rule-making or guidance.<sup>94</sup> An element of fault may be necessary in determining a principle breach.<sup>95</sup>

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<sup>89</sup> *Ibid.*

<sup>90</sup> NASD is short for National Association of Securities Dealers. NASD was the self-regulatory organization of the securities industry responsible for the operation and regulation of the Nasdaq stock market and over-the-counter markets. It also administered exams for investment professionals. In 2007, the NASD merged with the New York Stock Exchange’s regulation committee to form the Financial Industry Regulatory Authority, or FINRA.

<sup>91</sup> U.K., Financial Services Authority, *The Full Handbook* (London: 2010), online FSA: <<http://fsahandbook.info/FSA/html/handbook/PRIN/2/1>> [FSA, *Handbook*].

<sup>92</sup> *Ibid.*

<sup>93</sup> *Ibid.*

<sup>94</sup> Black, “Making a Success”, *supra* note 79 at 192.

<sup>95</sup> FSA, *Handbook*, *supra* note 91. The FSA Handbook notes that “In determining whether a Principle has been breached it is necessary to look to the standard of conduct required by the Principle in question. Under each of the Principles the onus will be on the FSA to show that a firm has been at fault in some way.”

## b. Principles-based System

Principles-based statutory drafting may feature “streamlined processes with its proposals for firm-only registration and continuous market access.”<sup>96</sup> While uncertainty is a frequent criticism of principles-based drafting, it can provide a greater clarity about the goals regulators seek to achieve in terms of regulatory outcomes. Principles matter both as to a choice of legal form and as to substance of legislation. High-level principles not only guide business conduct but also articulate regulatory outcomes.<sup>97</sup> For instance, the FSA set out 11 core principles or high-level standards at the beginning of its handbook. These principles address “integrity,” “skill,” “care and diligence, management and control,” “financial prudence,” “market conduct,” “customers’ interests,” “communications with clients,” “conflicts of interest,” and so on.<sup>98</sup> They are closely related to the FSA’s four regulatory objectives: maintaining financial confidence, promoting public understanding, providing protection for consumers, and reducing financial crime.<sup>99</sup>

Although principles are abstract, they can be as practical as rules because general principles can respond more flexibly to new issues. To some extent, “they are themselves rules.”<sup>100</sup> These requirements in general principles help the industry to better achieve the substantial outcomes desired by the FSA. These principles can also be applied to specific cases without supporting rules or other materials. In 2005, the Financial Services

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<sup>96</sup> Ford, “Expert Panel”, *supra* note 8 at 51.

<sup>97</sup> *Ibid.* at 18.

<sup>98</sup> FSA, *Handbook*, *supra* note 91.

<sup>99</sup> FSA, “Focusing”, *supra* note 80 at 4.

<sup>100</sup> *Ibid.*

Authority fined Citigroup Global Markets Limited (CGML) £13.9 million. The fine was imposed because CGML failed to conduct its business with due skill, care and diligence and failed to control its business effectively.<sup>101</sup>

However, principles-based text drafting is “not about replacing rules with principles or leaving businesses to their own devices, without regulatory guidance or oversight.”<sup>102</sup> There are some areas that lend themselves to rules-based treatment, such as administrative justice and procedural fairness.<sup>103</sup> Other areas, for example, “adequate consumer protection or sufficient consistency and comparability between regulated entities also entail prescriptive rules.”<sup>104</sup> It is not necessary to discard rules if rules work better. When the FSA simplified and shortened the Handbook, it focused on areas “where the benefits of removing detailed rules seem to be greatest”<sup>105</sup> and “introduced changes with the least additional disruption and cost.”<sup>106</sup> The FSA reassessed rules and tried to reduce the administrative costs imposed on firms by their regulations.

What principles-based text drafting aims for is a new regulatory architecture. High principles in statutes provide the backbone of regulatory architecture at the top level and govern the standards, guidance and other formal materials that follow. Informal materials give timely responses and valuable directions to the changing market.

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<sup>101</sup> U.K., Financial Services Authority, Press Release, “FSA fines Citigroup £13.9 million (€20.9mn) for Eurobond trades” (28 June 2005), online: FSA <<http://www.fsa.gov.uk/pages/Library/Communication/PR/2005/072.shtml>>.

<sup>102</sup> Ford, “Expert Panel”, *supra* note 8 at 17.

<sup>103</sup> *Ibid.* at 45.

<sup>104</sup> FSA, “Focusing”, *supra* note 80 at 10.

<sup>105</sup> *Ibid.* at 8.

<sup>106</sup> *Ibid.*

It is rulemaking function rather than statutory drafting that fill the interpretive power.<sup>107</sup> As noted earlier, high-level principles can set overarching requirements for all financial firms, while standards or conduct codes made by regulators further interpret right behaviours in specific business areas. They are “expressed in terms of outcomes and behaviours rather than processes or procedures.”<sup>108</sup> For example, the *Code of Conduct for Dealers and Advisors* proposed by the British Columbia Securities Commission (“BCSC”)<sup>109</sup> replaces “existing complex and confusing rules with a clear set of outcomes-based rules and guidance.”<sup>110</sup> The principles set out in the *Code of Conduct* for dealers include: integrity and fairness, confidentiality, proficiency, suitability, avoidance of conflicts of interest, and creation of compliance systems and client complaint resolution systems.<sup>111</sup> Principles-based legal sources are drafted in a way that “moves substantial authority over detailed requirements from legislator to regulator, to be addressed through [their] rule-making power.”<sup>112</sup>

The centre of decision-making is shifted from regulators to regulatees, by requiring regulatees to create their own compliance plans and make decisions about how to achieve goals. At the lower level of this new regulatory regime, materials, like industry solutions and guidance, not only provide real cases and detailed guidance to the senior

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<sup>107</sup> Cristie Ford, “New Governance in the Teeth of Human Frailty: Lessons from Financial Regulation” (2010) 2010:2 Wis. L. Rev. 411 at 17 [Ford, “Lessons”].

<sup>108</sup> FSA, “Focusing”, *supra* note 80 at 8.

<sup>109</sup> Christina Wolf, “Strong and Efficient Investor Protection, Dealers and Advisers under the BC Model—A Regulatory Impact Analysis” (2003), Economic Deregulation Project for British Columbia Securities Commission, online: <[www.bsc.bc.ca/uploadedFiles/Regulatory\\_Impact\\_Analysis.pdf](http://www.bsc.bc.ca/uploadedFiles/Regulatory_Impact_Analysis.pdf)>.

<sup>110</sup> British Columbia Securities Commission, *Securities Regulation That Works: The BC Model* (2003), online: BCSC <<http://www.bsc.bc.ca/registration.asp?id=2016>>.

<sup>111</sup> *Ibid.*

<sup>112</sup> Ford, “Lessons”, *supra* note 107 at 17.

management of firms but also involve ongoing participation by regulatees in pursuing good practices. These industry solutions and guidance may promote an efficient and orderly market better than formal rules.<sup>113</sup> For example, in 2004, “a group of four trade associations published industry guidance on their understanding of FSA’s rules relating to dealing ahead of investment research.”<sup>114</sup> The FSA worked with the group to agree publicly that guidance was consistent with the intended effect of their rules.<sup>115</sup> Industry guidance also unbundled the costs of other services charged as part of trade execution in institutional fund management and in delivering contract certainty.

At the bottom of this new regulatory architecture is important informal guidance, such as “FSA speeches, case studies, consultation papers and feedback statements.”<sup>116</sup> Firms need to develop systems to collect these resources.

## 2. Outcome-oriented Approach

The essential component of principles-based regulation is found at the level of implementation, which is outcome-oriented. An outcome-oriented approach, as opposed to a process-oriented one, means that the regulator devolves decision making over detailed process. It focuses on the results of enforcement and provides context-sensitive,

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<sup>113</sup> U.K., Financial Services Authority, *Better Regulation Action Plan: What We Have Done and What We Are Doing* (London: 2005) at 8, online: FSA <[www.fsa.gov.uk/pubs/other/better\\_regulation.pdf](http://www.fsa.gov.uk/pubs/other/better_regulation.pdf)> [FSA, *Better Regulation*]. This might, however, now be questioned in light of the 2008 financial crisis. Some opponents questioned whether such an approach would allow regulators to over-reach, especially in the enforcement context. See, e.g., Freshfields Bruckhaus Deringer, LLP “FSA Principles-based Regulation: What Should Firms Be Doing Differently?”, online: Freshfields <[www.freshfields.com/publications/pdfs/2007/17593.pdf](http://www.freshfields.com/publications/pdfs/2007/17593.pdf)> [Freshfields, “Differently”].

<sup>114</sup> *Ibid.*

<sup>115</sup> *Ibid.* The FSA indicates that “In 2004 we called on participants in the London insurance market to work together to develop within two years a market-driven solution to achieving greater contract certainty, ensuring clarity about the insured risk at the time the contract starts.”

<sup>116</sup> Freshfields, “Differently”, *supra* note 113..

flexible, dialogue-based ways and techniques to translate those principles into specific business conduct expectations.<sup>117</sup>

This interactive translation needs open communication with businesses through diverse channels of industry involvement. The FSA has “communicated to the industry via Press releases and Statements, Speeches, Newsletters, Enforcement notices and Dear CEO letters.”<sup>118</sup> These communication channels are used to implement rule-making powers. In this way, the regulators can swiftly respond to creative practices in derivatives markets and identify the hidden risks in complicated financial products.

An example can show how the outcome-oriented approach functions in practice. The FSA issued a “Dear CEO” letter to firms listed in U.K. to illustrate requirements on liquidity risk management on January 13, 2010, as the new liquidity system came into effect on December 1, 2009.<sup>119</sup> In this letter, the FSA illustrated the steps they would take to inspect the compliance of firms. Because the FSA needed reports from CEOs by February 12, 2010, the FSA author suggested that CEOs should write to explain whether the new systems and controls requirements had been successfully embedded within their firms, outline any remaining actions needing to be taken, and ensure an appropriate plan for accurate electronic reporting of liquidity data. After examining the reports from CEOs, the FSA would select a cross-section sample of firms and examine their compliance arrangements after revision of these reports and visit some firms to check on

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<sup>117</sup> Ford, “Lessons”, *supra* note 107, at 17.

<sup>118</sup> FSA, “Focusing”, *supra* note 80, at 12.

<sup>119</sup> U.K., Financial Services Authority, “FSA Requirements on Your Firm’s Liquidity Risk Management” (13 January 2010), online: BCSC <<http://www.fsa.gov.uk/pubs/ceo/13jan2010.pdf>>.

their response and adoption of good practices. If necessary, the FSA would take enforcement actions against firms if inappropriate actions were found. Finally, the FSA proposed that it would need documents for future liquidity data. Through this letter, the FSA set out how it would “monitor compliance with the new liquidity regime”<sup>120</sup> and how CEOs should confirm, by February 12, 2010, that their firms comply “with the new system and control requirements.”<sup>121</sup>

Principles-based regulation may be outcome-oriented, but it also may be management-based regulation.<sup>122</sup> Management-based regulation focuses on compliance processes, Outcome-oriented regulation measures performance against the achievement of regulatory goals.<sup>123</sup> It focuses on the final stage. Management-based regulation “focuses on the planning stage; i.e., the regulatees’ internal compliance processes including monitoring, risk assessment, training, etc.”<sup>124</sup> For example, on July 13, 2010, FSA chairman Lord Adair Turner called for a fundamental debate about the credit should be available in the mortgage market, and the capital and liquidity banks should be required to hold, without holding back the economic growth. Effective securities regulation should contribute to the goals of balancing and managing consumer choice and consumer protection. Future rule-making should be based on the balancing of these considerations.

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<sup>120</sup> *Ibid.*

<sup>121</sup> *Ibid.*

<sup>122</sup> Cary Coglianese & David Coglianese, “Management-Based Regulation: Prescribing Private Management to Achieve Public Goals” (2003) 37 *Law & Soc’y Rev.* 691 at 695-705 [Coglianese & Coglianese, “Management-Based Regulation”].

<sup>123</sup> Cristie Ford, “Principles-Based Securities Regulation in Wake of the Global Financial Crisis” (2010) 55:2 *McGill L.J.* 257 at 17.

<sup>124</sup> Ford, “Expert Panel”, *supra* note 8 at 10.

## **B. Rules-based Regulation**

### **1. Rules-based Statute Drafting**

#### **a. Characteristics of Rules**

Rules are “approaches to law that try to make most or nearly all legal judgments under the governing legal provision in advance of actual cases.”<sup>125</sup> Rules situate actors in the same condition and state a determinate legal result that follows from one or more triggering facts.<sup>126</sup> Most of the substantive choices are made at the time of drafting. Rules look like formulas in that decisions are available when applying triggering facts to them. The directives, the interpreters, enforcers, and subjects of the directives could then make “mechanical” decisions. Consequently, rules promote equal treatment and reduce arbitrariness and decision-maker bias.<sup>127</sup> In turn, rules make the exercise of discretion simple and clarify accountability.<sup>128</sup>

For instance, a simple and specific rule is “a 60-mile-per-hour speed limit”. This rule provides certainty in advance and gives specific guidance. Drivers and the police are very clear about whether particular conduct violates a rule. Rules are prescriptive and can provide individuals with information about consequences. They can promote predictability and precision to the extent that they provide the content of the law before

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<sup>125</sup> Cass R. Sunstein, “Problems with Rules” (1995) 83 Cal. L. Rev. 953 at 961 [Sunstein, “Problems”].

<sup>126</sup> Kathleen M. Sullivan, “The Justices of Rules and Standards” (1992) 106 Harv. L. Rev. 22 at 58 [Sullivan, “Justices”].

<sup>127</sup> Sunstein, “Problems”, *supra* note 126 at 966.

<sup>128</sup> *Ibid.* at 966-969.

individuals act. Thus, they can result in a determinate legal conclusion that follows the triggering facts.<sup>129</sup>

Rules are common in securities legislation. For example, section 93.3(1) of the Ontario *Securities Act*<sup>130</sup> provides that,

During the period beginning with the expiry of a formal bid and ending at the end of the 20th business day after that, whether or not any of the securities are taken up under the bid, an offeror shall not acquire or offer to acquire beneficial ownership of the securities of the class that was subject to the bid except by way of a transaction that is generally available to holders of that class of the securities on identical terms.

With these “restrictions on acquisitions after [a] formal bid”, the offeror is constrained from acquiring securities subject to the bid, other than by way of a transaction that is generally available to holders of the class of securities on identical terms, from the expiry of a formal bid to the end of the 20th business day after such an expiry. The terms “20th business day” and “holders of that class of the securities on identical term” are “bright line rules”.<sup>131</sup>

Rules can also be complex and abstract. They can be complex, creating a formula for deciding who may drive a vehicle, based, for example, on age, good performance, a written examination and a driving test. In addition, each of these three variables is marked by a specified numerical weight.<sup>132</sup> An abstract rule might be that “no one may

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<sup>129</sup> Sullivan, “Justices”, *supra* note 127 at 58.

<sup>130</sup> The *Securities Act*, R.S.O. 1990, c. S-5, as amended [“OSA”].

<sup>131</sup> Black, “Making a Success”, *supra* note 79 at 192.

<sup>132</sup> Sunstein, “Problems”, *supra* note 126 at 966.

drive over sixty miles per hour or that all cars must be equipped with catalytic converters.”<sup>133</sup>

### b. Rules-based Statutory Drafting

Rules-based drafting means legislation that contains more directives with specific details. There are more concrete factors and definite details required for compliance than general principles guiding conduct. A good example of this can be found by comparing prospectus requirements in the existing British Columbia *Securities Act* (“existing *BCSA*”) <sup>134</sup> with those in 2004 British Columbia *Securities Act* (the “2004 Act”) that was enacted but never declared in force.<sup>135</sup> Compared to the 2004 Act, the existing *BCSA* provides many additional details, such as specific provisions concerning “amendments to preliminary and final prospectuses, certificates of issuers and underwriters, receipts, waiting periods, and distribution.”<sup>136</sup> The 2004 Act omits these details and “any detail it does require is contained in its proposed securities Rules.”<sup>137</sup> Thus, rules-based regulation provides a check-list to the industry. The degree of certainty depends on the degree of specificity of the provision. This is different from the outcome-oriented approach, which depends more on the interactive community to define the content of requirements.<sup>138</sup>

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<sup>133</sup> *Ibid.* at 962.

<sup>134</sup> R.S.B.C. 1996, c. 418, as amended.

<sup>135</sup> S.B.C. 2004, c. 43.

<sup>136</sup> Ford, “Expert Panel”, *supra* note 8 at 50.

<sup>137</sup> *Ibid.* at 50. The author notes that her idea of the “interpretive community” should be attributed to Julia Black, Stanley Fish, Sol Picciotto and other scholars.

<sup>138</sup> *Ibid.* at 45.

Rules-based statutory drafting creates a regulatory regime in which legislators limit subsequent interpretation and decision-making power.<sup>139</sup> The interpretation of rules-based drafting is based on the statutes themselves, while interpretation of principles-based drafting depends on a common understanding between industry and regulators.<sup>140</sup>

There are two different types of decision-making that, to different extents, are guided by rules. “Entrenchment” rules have more binding force. They are often “followed even when they do not serve the purposes which motivated their creation.”<sup>141</sup> “Conversational” rules, on the other hand, are “not followed in particular cases if they are deemed to have suboptimal or erroneous results.”<sup>142</sup> Regulators use conversational rules in principles-based enforcement to confront novel or changing characteristics in the securities market over time.<sup>143</sup> Changes in the securities market due to, for example, “technological innovation and political change”<sup>144</sup> may require more urgent and substantial responses. They may “require enforcement concerning the securities offerings at the dawn of the internet and globalization.”<sup>145</sup> Securities law distinguishes itself from other statutes by these more conversational rules, which “treat normative

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<sup>139</sup> *Ibid.* at 42. The author argues that “as between the more rules-based and principles-based systems, however, the difference lies in how much detail is provided in the statute, and how much is left to be filled in through the Authority’s or Commission’s rulemaking.”

<sup>140</sup> *Ibid.* at 12.

<sup>141</sup> Frederick Schauer, *Playing By the Rules: A Philosophical Examination of Rule Based Decision-Making in Law and Life* (Oxford: Clarendon, 1992) at 254 [Schauer, *By the Rules*].

<sup>142</sup> *Ibid.* at 255.

<sup>143</sup> William R. McLucas, J. Lynn Taylor & Susan A. Mathews, “A Practitioner’s Guide to the SEC’s Investigative and Enforcement Process” (1997) 70 Temp. L. Rev. 53 at 74.

<sup>144</sup> See Cunningham, “Retire the Rhetoric”, *supra* note 84 at 1411,

<sup>145</sup> *Ibid.*

generalizations as only temporary and transparent approximations of the better results a decision maker should try to reach.”<sup>146</sup>

Although rules may promote equal treatment, reduce arbitrariness and decision-maker bias as described above, these claims might be overstated. Sometimes bright line rules might push discretion underground, and make accountability and transparency harder to achieve.<sup>147</sup>

## 1. Process-oriented Approach

Regulatory systems may be either outcome-oriented or process-oriented. Principles-based regulation tends to primarily take an outcome-oriented approach, while rules-based regulation tends to primarily take a process-oriented approach. Both outcome-oriented and process-oriented regulatory systems set several regulatory goals, but use different ways to fulfill them. A process-oriented approach promotes compliance through detailed procedures, while an “outcome-oriented approach measures performance against regulatory goals.”<sup>148</sup> Take the *Ontario Securities Act*<sup>149</sup> for example. The regulation on the commencement of a takeover bid is typically process-oriented. Section 94.1(1) provides that,

An offeror shall commence a formal take-over bid,

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<sup>146</sup> Schauer, *By the Rules*, *supra* note 142 at 254.

<sup>147</sup> Key articles include James J. Park, “The Competing Paradigms of Securities Regulation” (2007) 57 *Duke L. J.* 625 [Park, “Competing”]; Ford, “Regulation in Crisis”, *supra* note 124; Durham, NC: Duke University Press, 2001, *supra* note 89; Nelson, “Behavioral Evidence”, *supra* note 89.

<sup>148</sup> Ford, “Lessons”, *supra* note 107 at 17.

<sup>149</sup> *OSA*, *supra* note 131.

- (a) by publishing an advertisement containing a brief summary of the bid in at least one major daily newspaper of general and regular paid circulation in Ontario; or
- (b) by sending the bid to the security holders described in section 94.2007, c. 7, Sched. 38, s. 8.

In publishing an advertisement to commence a bid, three steps would fulfill this requirement. The first step is to complete “an advertisement containing a brief summary of the bid.” Then the offeror shall choose “at least one major daily newspaper of general and regular paid circulation in Ontario”. Finally, the offeror must advertise the bids in the newspaper. Compliance with these specific requirements is easy for the regulator to assess. The requirement is clear for the offeror to follow. A process-oriented approach does not operate in this “comply or explain” manner.<sup>150</sup> The process is determined by legislation and cannot be tailored to the specific situation of the offeror. Therefore, the cost of commencing a formal take-over bid is the same to all offerors.

Benefits of a process-based approach include the equal treatment of business participants and the control of administrative discretion. Because of the rigid procedures, no one is privileged or given special treatment. Unlike an outcome-oriented approach, a process-oriented approach assumes regulators are not in the best position to provide the content of the regulation,<sup>151</sup> perhaps because the industry and the regulators cannot be trusted to do so. Instead, a process-oriented approach relies on elected legislators to create regulation.

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<sup>150</sup> William W. Bratton, “Enron, Sarbanes-Oxley and Accounting: Rules Versus Principles Versus Rents” (2003) 48 Vill. L. Rev. 1023 at 1028.

<sup>151</sup> Ford, “Regulation in Crisis”, *supra* note 124 at 19..

### C. Distinctions Not Always Easy to Draw

Because principles-based securities regulation and rules-based securities regulation have different features, distinctions are difficult to draw.<sup>152</sup> For one thing, the labels “principles-based” or “rules-based” are frequently referred to and illustrated as different systems for reform and prescription.<sup>153</sup> They are sometimes misused. For another, securities regulation often combines principles-based and rules-based regulations together.<sup>154</sup>

In terms of drafting style, statutes are often hybrids of rules-based and principles-based provisions. Although the U.K. Financial Services Authority is often said to have led the way towards a more principles-based style of regulation, its regulatory structure is an amalgam of rules and principles.<sup>155</sup> Assessing whether individual provisions are principles-based or rules-based only looks at two ends of a continuum. Subtle trade-offs and overlaps between rules and principles are evident. No system can be entirely rules-based or principles-based. Rules and principles are mutually informative rather than isolated.<sup>156</sup>

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<sup>152</sup> There is also “institution-based” regulation and “standard-based” regulation. See Walsh, “Third Paradigm”, *supra* note 10 at 383-387. For standard-based regulation in accounting, see Nelson, “Behavioral Evidence”, *supra* note 84. Nelson argues that the whole body of principles is a standard when applied to a given accounting issue.

<sup>153</sup> Cunningham, “Retire the Rhetoric”, *supra* note 84 at 1423-1426.

<sup>154</sup> *Ibid.* at 1423-1426.

<sup>155</sup> Ford, “Expert Panel”, *supra* note 8 at 3.

<sup>156</sup> See Cunningham, “Retire the Rhetoric”, *supra* note 84 at 1414-1415.

Enforcement activity may also invoke a mixture of rules and principles. The following table,<sup>157</sup> extracted from the SEC and Canadian Securities Administrations(CSA) reports from 2003 to 2005, summarizes the percentage of SEC and CSA enforcement actions bearing dominantly rule-like or principle-like qualities and those of a more completely mixed nature.<sup>158</sup>

Table 2. SEC and CSA Enforcement Action Distributions

SEC and CSA Enforcement Action Distributions			
	Case Type	SEC	CSA
RULE-LIKE	The Securities Firms	32.0%	32.0%
	Offerings/Distributions	12.5	27.0
PRINCIPLE-LIKE	Insider Trading	7.5	9.0
	Manipulation/Fraud	6.0	12.0
MIXED	Disclosure	28.5	10.0
	Other	10.0	10.0

## II. ADVANTAGES AND DISADVANTAGES OF PRINCIPLES-BASED REGULATION AND RULES-BASED REGULATION

The features of the two regulatory paradigms are distinctly different as noted above, yet the advantages and disadvantages of a regulatory regime vary according to the perspectives of different stakeholders. A certain quality, such as flexibility, may be an advantage to the industry, but the complexity in operating a flexible system might also be

<sup>157</sup>BCSC, *Comparative Inquiry*, *supra* note 144 at 290.

<sup>158</sup> *Ibid.*

an extra burden to its regulators. Even within the industry, the cost of participating in compliance decision making can be quite significant for small businesses.<sup>159</sup> The different interests of various stakeholders should be considered.

## **A. Principles-based Regulation**

### **1. Advantages**

#### **a. Flexible Compliance**

Although controversial,<sup>160</sup> principles-based regulation may make the industry more inclined to innovate in compliance practice. Principles-based regulation may “allow registrants to tailor processes to their business needs rather than following rigid, ill-suited regulatory requirements.”<sup>161</sup> As noted earlier, in the structure of principles-based regulation, the industry can participate in the operation of the whole system and make decisions together with regulators. Regulators may provide non-legally-binding guidance on compliance based on consultation with the industry about recognized good practices. Industry solutions and guidance promote an efficient and orderly market better than formal rules do.<sup>162</sup>

Such a flexible approach reduces the cost and enhances the benefits of compliance under principles-based regulation. For example, four firms that are members of the

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<sup>159</sup> Ford, “Expert Panel”, *supra* note 8 at 16.

<sup>160</sup> Gary Hagland, “A Critical Evaluation of the Compliance Administrative Control System Within Albert E Sharp and its Motivational Impact Upon Those It is Supposed to Control,” (1994) 3 J. Finan. Rac. & Compl. 28 at 33; Neil Gunningham & Darren Sinclair, *Leaders & laggards: Next-Generation Environmental Regulation* (Sheffield: Greenleaf Publishing, 2002) at 13-40.

<sup>161</sup> Ford, “Expert Panel”, *supra* note 8 at 22.

<sup>162</sup> FSA, *Better Regulation*, *supra* note 113.

Investment Dealers Association of Canada (IDA) have shown a preference for principles-based regulation in a report prepared for the BCSC.<sup>163</sup> In the report's analysis of the impact of principles-based regulation, the firms found that the prescriptive IDA rules, like mandated reviews, gave them a heavy load of regulatory burdens but barely provided any meaningful customer protection. By contrast, the *Code of Conduct for Dealers and Advisors*, a fundamentally principles-based regulation in B.C., provided firms with flexibility in compliance. Firms complied in the most efficient and effective ways for their businesses and thereby reduced compliance costs.<sup>164</sup>

Further, a principles-based approach usually focuses on compliance processes to improve protection and service to investors, rather than on the rigid application of rules and procedures. This also benefits the industry. For instance, the overall goal of the FSA's principles-based regulation was "to create incentives for firms to design compliance processes and governance strategies that would achieve overall firm objectives while also achieving the FSA's regulatory objectives."<sup>165</sup> The FSA is looking at "studies to improve its ability to track cost, benefit and proportionality."<sup>166</sup> For example, the British report entitled *Estimation of the FSA Administrative Burden* serves "the purpose of applying the UK Standard Cost Model to rules within the FSA's

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<sup>163</sup> British Columbia Securities Commission, *Strong and Efficient Investor Protection: Dealers and Advisers under the BC Model – A Regulatory Impact Analysis*, by Christina Wolf (British Columbia: Deregulation Project, 2003) at 4857, online: BCSC <[http://www.llbc.leg.bc.ca/public/PubDocs/bcdocs/365940/regulatory\\_impact\\_analysis.pdf](http://www.llbc.leg.bc.ca/public/PubDocs/bcdocs/365940/regulatory_impact_analysis.pdf)> [BCSC, *Strong Protection*].

<sup>164</sup> Ford, "Expert Panel", *supra* note 8 at 39.

<sup>165</sup> Kern Alexander, "Principles v. Rules in Financial Regulation: Re-assessing the Balance in the Credit Crisis" (2008) 10 Eur. Bus. Org. L. Rev. 169 at 171 [Alexander, "Principles v. Rules"].

<sup>166</sup> *Ibid.* at 171.

Handbook”<sup>167</sup> and provides details about where the FSA should focus its efforts to reduce costs.<sup>168</sup>

The move to flexible compliance opens a new relationship between regulators and industry. The regulatory system moves to more management-based regulation, and firms can integrate their internal control systems to support regulatory compliance.<sup>169</sup>

## b. Responsive Enforcement

Principles-based regulation has more potential to be responsive because rule-making power is in the hands of the frontline regulators. It is more likely to be better-suited to addressing regulatory challenges in the market. Responsive regulation, however, can be complicated. As Robert Baldwin and Julia Black have noted,

Really Responsive Regulation seeks to add to current theories of enforcement by stressing the case for regulators to be responsive not only to the attitude of the regulated firm but also to the operating and cognitive frameworks of firms; the institutional environment and performance of the regulatory regime; the different logics of regulatory tools and strategies; and to changes in each of these elements.<sup>170</sup>

The elements of “really responsive regulation” are complex. Whether a principles-based regulation is responsive or not depends largely on enforcement. There is,

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<sup>167</sup> U.K., Financial Services Authority, *Estimation of the FSA Administrative Burdens* <[http://www.fsa.gov.uk/pubs/other/Admin\\_Burdens\\_Report\\_20060621.pdf](http://www.fsa.gov.uk/pubs/other/Admin_Burdens_Report_20060621.pdf)>.

<sup>168</sup> Alexander, “Principles v. Rules”, *supra* note 166 at 171.

<sup>169</sup> Cristie Ford, “New Governance, Compliance and Principles-Based Securities Regulation” (2008) 45 Am. Bus. L.J. 1 at 50 [Ford, “New Governance”].

<sup>170</sup> U.K., London Stock Exchange. *Really Responsive Regulation*, (LSE Legal Studies Working Paper Series, Doc. No. 15) by Robert Baldwin & Julia Black (2007) at 1 [Baldwin & Black, *Responsive Regulation*]. The quotation is also part of Ford, “Expert Panel” generally, *supra* note 8, which elaborates on the same set of ideas.

however, reason to believe a principles-based system may perform responsively with a learning regulatory institution and interactive regulatory mechanisms.

Principles-based regulation provides an approach to regulatory tools and strategies for responsive regulation. Regulators may communicate to the industry via press releases and statements, speeches, newsletters, enforcement notices and “Dear CEO” letters. Informal communication is, ideally, both timely and continuous. Industry participants will collect the guidance or informal materials themselves.

Regulatory institutions also emphasize the accuracy of input from the market. Through the learning process, regulatory institutions come to better understand the changing environment of regulation. Investigations and visits with industry participants are made to provide “accurate risk assessment of financial institutions and timely, effective intervention and feedback.”<sup>171</sup> Principles-based regulation takes an ongoing and flexible approach that better assesses the performance of the regulatory regime and the changing environment of regulation. Yet principles-based regulation does not mean doing away with quantitative measures, such as closures of registrants and violations of regulatory provisions.

A qualitative assessment of output is helpful for responsive changes to regulation in the long run. It measures “longer term outcomes: evaluating the impact of the regulatory system against the broad objectives of the agency.”<sup>172</sup> For example, the British Columbia Securities Commission sets four goals to measure its success: promoting a culture of compliance; acting decisively against misconduct; educating

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<sup>171</sup> *Ibid.*

<sup>172</sup> Baldwin & Black, *Responsive Regulation*, *supra* note 171 at 15.

investors; and advancing smart rule-making and guidance.<sup>173</sup> Each goal is supported by policy strategies and performance measures. For example, in Securities Commission Service Plan by the BCSC, there are three strategies to support the promotion of a culture of compliance in their market:<sup>174</sup> (i) Assess the level of compliance with firm and salesperson suitability obligations; (ii) Identify and respond to emerging retail investment trends; (iii) Define the nature and severity of continuous disclosure failure; (iv) Apply our portfolio of compliance processes to the most important problems.<sup>175</sup> This assessment of output provides “the opportunity to properly assess performance over time and whether new regulatory approaches are having the desired effect.”<sup>176</sup>

## 2. Disadvantages

### a. Uncertain and Inconsistent Enforcement

Industry participants may feel principles-based regulation is uncertain and hard to comply with. The uncertainty of principles poses a potential challenge in principles-based regulation, as they are “open to abuse by other, less well-intentioned firms”.<sup>177</sup> The Regulatory Law Committee of the City of London Law Society has expressed apprehension about the “unacceptable vagueness for firms as to how to satisfy the

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<sup>173</sup> British Columbia Securities Commission, *The Securities Commission Service Plan, 2006 – 2009* (2009), at 22, online: <[http://www.bcsc.bc.ca/uploadedFiles/ServicePlan\\_2006-2009.pdf](http://www.bcsc.bc.ca/uploadedFiles/ServicePlan_2006-2009.pdf)>.

<sup>174</sup> *Ibid.* at 21.

<sup>175</sup> *Ibid.*

<sup>176</sup> Ford, “Expert Panel”, *supra* note 8 at 13.

<sup>177</sup> Robert Baldwin, *Rules and Government* (Oxford: Clarendon Press, 1997) at 133.

FSA.”<sup>178</sup> “Compliance-based, educative approaches based on principles and guidance are open to abuse by other, less well-intentioned firms”.

The regulators may also feel confused about the implementation of general rules resulting in inconsistent enforcement. Some worry that once the detailed rules are gone, regulators may find it difficult to judge firms, leading to the possibility of inconsistencies and the development of unpublished regulatory standards.<sup>179</sup> It has also been argued that this uncertainty will also work against the regulator, “making it difficult for the regulator to punish on the basis of principles that can be interpreted in so many different ways.”<sup>180</sup> A conservative approach to enforcement does not effectively rectify the misconduct. An overly aggressive approach to enforcement may reduce the degree to which industry participants trust the regulator. This in turn reduces the degree of interactive regulation development.<sup>181</sup> An overly aggressive approach to enforcement may also cause industry participants to believe the regulator is enforcing the regulation without the benefit of hindsight.<sup>182</sup>

Such uncertainty is an extra burden for small and medium-sized enterprises. Flexibility in principles-based regulation appeals to big firms, which can afford the cost of tailored compliance. For small and medium-sized enterprises, however, principles-

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<sup>178</sup> “Law Society Critical of Principle-Based Approach”, Mortgage Introducer (22 April 2006), online: Mortgage Introducer <<http://www.mortgageintroducer.com/mortgages/10180/135/News-in-depth/Law-Society>>. This article quotes a letter from Margaret Chamberlain, Chairman of the City of London Law Society Regulatory Committee, to John Tiner, Chief Executive of the Financial Services Administration.

<sup>179</sup> Emily Perryman, “FSA ‘Should Not Monitor Compliance Process’” (10 August 2006) IFA, online: <[http://www.ifaonline.co.uk/public/showPage.html?page=ifa2006\\_articleimport&tempPageName=340752](http://www.ifaonline.co.uk/public/showPage.html?page=ifa2006_articleimport&tempPageName=340752)>.

<sup>180</sup> Walsh, “Third Paradigm”, *supra* note 10 at 386.

<sup>181</sup> Herbert Smith, “Principles-based Regulation in Principle and in Practice” (2007) at 15, online: <<http://www.herbertsmith.com/NR/rdonlyres/1EA2E1A0-B64C-4F20-87197-DA072C0AE28/3731/5924PBRBrochureD3.pdf>> [Smith, “Principles-based Regulation”].

<sup>182</sup> Ian Ayres & John Braithwaite, *Responsive Regulation* (Oxford: Oxford University Press, 1992) at 103-110.

based regulation may be a heavy burden. They not only have to deal with the uncertainty noted earlier, but they may feel obliged to design a compliance system comparable to those of large firms. If they fail in both of these tasks and in communication with regulators, the regulatory system will not be responsive to their specific circumstances or interests.<sup>183</sup>

#### b. Cost and Regulator Capacity Implications

While replacing clear rules with general principles can provide benefits to industry and regulators, there are potential cost implications. Further, since the principles-based regulator monitors “what” is being delivered, as opposed to “how” the firm is complying with specific rules, enforcement of principles-based regulation requires highly capable regulators.

A flexible outcome-oriented approach to enforcement does not mean it requires fewer resources.<sup>184</sup> Intensive interaction with firms is necessary. Industry participants want clear guidance about how to avoid legal risk. Transparent administration is needed to justify contextual judgments.<sup>185</sup> Principles-based regulation is therefore likely to require more resources than rules-based regulation.<sup>186</sup> Regulatory institutions need more staff to handle the complexity of interactive enforcement. Unfortunately, regulators under an existing rules-based approach tend not to be sufficiently staffed for the enforcement of a principles-based regime. This may have been a problem for the FSA,

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<sup>183</sup> Ford, “Regulation in Crisis”, *supra* note 124 at 52.

<sup>184</sup> Black, “Making a Success,” *supra* note 79 at 9.

<sup>185</sup> Ford, “Expert Panel”, *supra* note 8 at 28.

<sup>186</sup> *Ibid.*

given the claim that its enforcement is weak.<sup>187</sup> For example, the FSA has only successfully taken legal actions against two insider cases prior to 2007. Both of these cases involved defendants who did not contest the charges. The *Northern Rock* case in the U.K. also suggested the FSA had insufficient staff given its very limited direct contact with the bank.<sup>188</sup>

The cost of principles-based regulation may also be affected by a need to engage knowledgeable and experienced staff who can work well within a complex regulatory approach that is more responsive to the circumstances of particular industry participants.<sup>189</sup> Working interactively with industry participants also requires regulators who have substantial knowledge, experience and abilities. The cost and burden to the regulatory institution can therefore be significant.

## **B. Rules**

### **1. Advantages**

#### **a. Consistency**

Rules-based regulation has, as noted above, a greater tendency to decide cases before they arise. It therefore tends to be more predictable and consistent because it reduces the extent to which irrelevant and illegitimate factors enter into decision-

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<sup>187</sup> Tony Levene & Phillip Inman, “How can this still happen?” *The Guardian* (18 January 2003), online: Guardian Unlimited < <http://www.guardian.co.uk/money/2003/jan/18/consumernews.isas>>. (Inman and Levene state that “a regulatory loophole is enabling an offshore firm to advertise high-risk currency options in the UK - apparently with official approval.”)

<sup>188</sup> U.K., Financial Services Authority, Internal Audit Division, “The Supervision of Northern Rock: Lessons Learned Review” (2008) online: FSA <[http://www.fsa.gov.uk/pubs/other/nr\\_report.pdf](http://www.fsa.gov.uk/pubs/other/nr_report.pdf)> [FSA, “Northern Rock”]. (Northern Rock is a British bank. During the financial crisis in 2007, it suffered a huge loss in the money market and approached the Bank of England for a loan facility. However, it suffered a bank run after having gotten the funding from the Bank of England. It later became publicly owned in 2008 as there were no commercial buyers.)

<sup>189</sup> Nelson, “Behavioral Evidence”, *supra* note 85 at 8.

making.<sup>190</sup> It is also more predictable and consistent since the details in legislation are less changeable than the guidance or by-laws used in principles-based regulation.

Rules-based regulation is likely to be preferable to principles-based regulation that lacks “regulatory oversight to ensure that terms are interpreted in a reasonable and accountable manner.”<sup>191</sup> Regulators may use high-level principles to extend the scope of regulatory scrutiny. For example, the FSA extends its scrutiny into areas such as product design. The FSA pushes the boundaries of its statutory jurisdiction, which raises questions as to whether using general principles is an appropriate way to develop regulatory policy.<sup>192</sup>

Consistency is also promoted by the relatively easy implementation of rules compared to principles. Regulators can often follow rules without having to consider contextual factors. The rules and procedures are one-size-fits-all. The general principles will not be referred to unless there is no rule. Consequently, it is much easier to draw a conclusion, and consistency can be expected. Conversely, in principles-based regulation, decision makers may frequently refer to high-level standards. If there is sufficient guidance, as well as previous cases and other informal materials, rules may be tailored to particular cases. If there is no material supporting the principle, the case should be judged by desired outcomes derived from the application of case principles. As a result, consistency is relatively hard to maintain in principles-based regulation.

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<sup>190</sup> Sunstein, “Problems”, *supra* note 126 at 969.

<sup>191</sup> Ford, “Regulation in Crisis”, *supra* note 124 at 37.

<sup>192</sup> Smith, “Principles-based Regulation”, *supra* note 182 at 15.

b. Transparency

Rules also constrain decision makers to settled procedures which provide transparency. As general counsel of the U.S. Treasury Department, Peter J. Wallison, general counsel of the U.S. Treasury Department, questioned whether Principles-Based Regulation can work in the U.S. He argues the rules-based regulatory system takes a great deal of discretion away from government officials. In his articles “Fad or Reform Can Principles-Based Regulation Work in the United States?” , he notes,

Americans simply feel more comfortable when they can exercise the discretionary judgments that affect their lives and livelihoods. When they must function under regulation, they want to understand the precise scope of that regime.<sup>193</sup>

Moreover, he asserts, a rules-based system helps increase market competition by improving transparency and reducing barriers to market entry.<sup>194</sup>

The process-based approach contributes a great deal to transparency in rules-based regulation. Detailed processes provide clear steps with specific deadlines for compliance, so industry participants and regulators can predict and plan. Such transparency is determined by statutes or by-laws that remain the same for every registrant. In other words, if there is no clear and forceful regulatory process in the interpretive community to implement a principle, then the transparency provided by rules is more valuable than the flexibility and contextuality provided by principles.<sup>195</sup>

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<sup>193</sup>Peter J. Wallison, “Fad or Reform: Can Principles-Based Regulation Work in the United States?” in American Enterprise Institute for Public Policy Research, ed., *Financial Services Outlook* (2007) at 6, online: AEI < <http://www.aei.org/outlook/29285>>.

<sup>194</sup> *Ibid.* at 4.

<sup>195</sup> Ford, “Expert Panel”, *supra* note 8 at 28.

## 2. Disadvantages

### a. Technical Compliance

Prophylactic rules may be helpful in keeping essential systems functioning. However, it has been noted that, “rules have clear edges, allowing people to evade them by engaging in conduct that is technically exempted but that creates the same or analogous harms.”<sup>196</sup> For example, Goldman Sachs,<sup>197</sup> the giant investment bank, was blamed for the 2010 European sovereign debt crisis.<sup>198</sup> Between the years 1998-2009, it has systematically helped the Greek government mask its true national debt using derivatives,<sup>199</sup> in particular, through the use of a special Credit Default Swap (“CDS”) index<sup>200</sup>. While these financial arrangements were legal in the context of financial arrangements in 2001, these swaps concealed the true extent of the Greek government’s borrowing. Goldman Sachs’ actions also handicapped the Greek government’s recovery from the debt crisis. Investors lost confidence in the government’s balance sheets. They

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<sup>196</sup> Sunstein, “Problems”, *supra* note 126 at 44.

<sup>197</sup> The Goldman Sachs Group, Inc. is a global investment bank and securities firm which engages in investment banking, securities trading, investment management, and other financial services, primarily with institutional clients. Goldman Sachs was founded in 1869 and is headquartered at 200 West Street in the Lower Manhattan area of New York City. The firm has offices in major international financial centres and provides mergers and acquisitions advice, underwriting services, asset management, and prime brokerage to its clients, which include corporations, governments and individuals. The firm also engages in proprietary trading and private equity deals and is a primary dealer in the United States Treasury Security market. See Goldman Sachs online at < <http://www2.goldmansachs.com>>..

<sup>199</sup>“Goldman Sachs Group Inc.” New York Times (19 January 2011), online: New York Times <[http://topics.nytimes.com/top/news/business/companies/goldman\\_sachs\\_group\\_inc/index.html](http://topics.nytimes.com/top/news/business/companies/goldman_sachs_group_inc/index.html) >; “What’s behind Goldman Sachs fraud case?” Xinhuanet (22 April 2010), online: Xinhuanet <[http://news.xinhuanet.com/english2010/world/2010-04/22/c\\_13263441.htm](http://news.xinhuanet.com/english2010/world/2010-04/22/c_13263441.htm)>.

<sup>199</sup> *Ibid.*

<sup>200</sup>“European banks’ sovereign debt exposure” Financial Times (12 November 2010), online: Financial Times <<http://www.ft.com/indepth/euro-in-crisis>>;“Fed chief: We’re looking into firms betting on Greek default” *USA Today* (25 February 2010), online: USA Today <[http://www.usatoday.com/money/economy/2010-02-25-bernanke-fed-greece\\_N.htm](http://www.usatoday.com/money/economy/2010-02-25-bernanke-fed-greece_N.htm) >.

were afraid that they would be lured into the deeper economic crisis of investment banks like Goldman Sachs.

A senior Goldman Sachs executive, Gerald Corrigan, recently told British lawmakers that Goldman Sachs had done nothing illegal; according to him, it had followed the letter of law. However, Goldman Sachs arguably violated the spirit of the law.<sup>201</sup> Sachs's compliance with technical rules did not provide adequate regulation. Dan Lalor has suggested that "the standards of transparency could have and probably should have been heightened."<sup>202</sup> A principles-based standard of transparency might have been more effective in this situation than technical rules. A transaction that produces a misleadingly "rather small but nevertheless not insignificant reduction in Greece's debt to GDP ratios at that time" would be hard to justify as being consistent with the principle of transparency.

#### b. Outrun by the Market

In markets where the pace of change is fast, detailed rules are likely to be out of date before they are drafted.<sup>203</sup> Derivatives markets are growing every year and are changing at a fast pace. For example, the total national amount of all the outstanding positions on over-the-counter markets at the end of June 2004 stood at \$220 trillion.<sup>204</sup>

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<sup>201</sup> "Goldman Opens Up to Mollify Its Critics" Wall Street Journal (11 January 2011), online: Wall Street Journal <<http://online.wsj.com/article/SB10001424052748703779704576074360288635474.html>>; "A Greek Tragedy or There's a Sucker Born Every Minute" Wordpress (24 February 2010), online: Wordpress <<http://afunnythinghappenedonthewaytotheoffice.wordpress.com/2010/02/24/a-greek-tragedy-or-theres-a-sucker-born-every-minute/>>.

<sup>202</sup> Dan Lalor, "Greece trades should have been less opaque: Goldman" *Reuters* (10 August 1908), online: Reuters <<http://www.reuters.com/article/idUSTRE61L49F20100222>>.

<sup>203</sup> Sunstein, "Problems", *supra* note 126 at 952.

<sup>204</sup> "Triennial Central Bank Survey of Foreign Exchange and Derivatives Market Activity in 2007 – Final results" Bank of International Services (19 December 2007) online: BIS <<http://www.bis.org/forum/research.htm>>.

By the end of 2007, this figure had risen to \$596 trillion.<sup>205</sup> The market requires a form of regulation that can respond to new market events and develop good practices. In other words, a regulatory regime that is open and based on general principles is needed for derivatives markets. When the market changes dramatically, the rules requirements may no longer be appropriate for responding to developments in derivatives markets. Officers in regulatory authorities may simply ignore the rule, which yields a good deal of inaccuracy in particular cases.<sup>206</sup> The result may be more than the ignorance of the rules. Discretion may be exercised through “mild form[s] of civil disobedience, and this is hard to police or even to see.”<sup>207</sup>

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<sup>205</sup> *Ibid.*

<sup>206</sup> Sunstein, “Problems”, *supra* note 126 at 994.

<sup>207</sup> *Ibid.* at 994-995.



## CHAPTER 4: DERIVATIVES REGULATION IN QUÉBEC AND THAILAND

### I. INTRODUCTION

The preceding chapter discussed and compared principles-based and rules-based securities regulation. This chapter examines and contrasts the regulatory approaches to derivatives regulation in Thailand and Québec. It argues that Thailand takes a primarily rules-based approach while Québec takes a primarily principles-based approach. It considers, for each jurisdiction, selected individual provisions, regulatory approaches and general regulatory structures. It focuses on aspects such as provisions on insider trading, clearing houses, investor protection, and mandatory disclosure. Part II examines the Thai *Derivatives Act*.<sup>208</sup> Part III examines the Québec *Derivatives Act*.<sup>209</sup>

The assessment in this chapter focuses on the principles-based vs. rules-based quality of the text of the statute rather than the implementation of the statute. Although there is a difference between statute and implementation, the analysis here focuses on a textual analysis.

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<sup>208</sup> Thai *Derivatives Act*, *supra* note 15.

<sup>209</sup> Québec *Derivatives Act*, *supra* note 14.

## II. THAILAND

This part first introduces the Thai *Derivatives Act* briefly and then it examines several provisions of the Thai *Derivatives Act* to show that it is drafted primarily as a rules-based statute. It also contrasts the primarily rules-based provisions with other provisions that are arguably principles-based. A few of these are also discussed below. Finally, it generally shows the regulatory structure for derivatives markets in Thailand.

### A. Introduction to the Thai Derivatives Act

The Thai *Derivatives Act*, with amendments in 2008, was promulgated on July 3, 2003 and came into force 180 days later. There are nine chapters and 155 sections, covering areas such as derivatives business, exchanges, clearing houses, regulatory associations, unfair practices, and supervision and control. Section 3 of the Act defines the three characteristics of derivative.<sup>210</sup> Generally speaking, a derivative is a contract in which one party is obliged or entitled to demand that the other party deliver goods or make a payment as specified. As to derivative service providers, if the services are to

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<sup>210</sup> The Thai *Derivatives Act*, s. 3 provides that

In this Act: “derivatives” means a contract having one or any combination of the following characteristics:

- (1) a contract in which one party is obliged to deliver goods as specified in the contract to the other party at a given time in the future, and the other party, in turn, is obliged to make payment for such goods at a price specified therein;
- (2) a contract in which one party is obliged to make payment to the other party, or vice versa, in the amount which is equivalent to the difference between the price or value of goods or variable [Is this singular in the original? If yes, OK. If not, check throughout, as this word appears often.]specified in the contract and the price or value of such goods or variable prevailing at a given time or period of time in the future as specified in the contract;
- (3) a contract in which one party is entitled to demand the other party to deliver goods, or make payment for goods, or make payment in the amount which is equivalent to the difference between the price or value of goods or variable specified in the contract and the price or value of such goods or variable prevailing at a given time or period of time in the future as specified in the contract, or to demand the other party to enter into a contract under subsection (1) or (2).

institutional investors, registration with the Thai Securities Exchange Commission is required. If the services are to the public, approval of the SEC prior to commencing operations should be obtained.<sup>211</sup>

## **B. Rules-based Text Drafting**

Rules-based text drafting is very typical in the Thai *Derivatives Act*, especially in the sections between the discussion of derivatives business in Chapter 2 and the concerns in Chapter 6 regarding unfair practices in connection with derivatives trading. For instance, the requirements for licensed derivatives operators, as well as for dealers and advisers, are provided in sections 21 to 30 in Chapter 2. Section 23 provides that

In cases where the derivatives business operator is an individual, such individual shall not have any of the following prohibited characteristics:

- (1) being a person under receivership or a bankrupt;
- (2) being an incompetent or quasi-incompetent person;
- (3) having disreputable background or managing any business in a manner indicating a lack of professional accountability or due care as specified in the notification of the Capital Market Supervisory Board. In making consideration, the SEC Office shall take into account the degree of seriousness of such prohibited characteristics;
- (4) being a government official or an official in any state agency in charge of the supervision of derivatives businesses or financial institutions;
- (5) being a person not having educational qualification, working experience, or other qualifications as specified in the notification of the Capital Market Supervisory Board.

This section prohibits some individuals from operating derivatives businesses.

Conditions (1), (2) and (5) require adequate competency, reputation and experience.

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<sup>211</sup> *Ibid.* s. 16.

Conditions (3) and (4) deal with financial accountability and conflicts of interest with regulators. This section makes rules as to which individuals can be derivatives business operators in advance of an actual application for registration. All of these prohibitions are triggering facts. The Act provides this check-list instead of leaving it to decision-making by frontline regulators.

In case the applicant is a legal entity, the requirements for application in this category and detailed descriptions about adequate accountability for directors and shareholders are drafted in a similar way in sections 24 to 26 in the Act.<sup>212</sup> These

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<sup>212</sup> The Thai *Derivatives Act*, s. 24 provides that

In cases where the derivatives business operator is a legal entity, the appointment or authorization of any person to be or act as a director, manager, or holder of any position as specified in the notification of the Capital Market Supervisory Board shall be made only with an approval of the SEC Office, provided that such person does not have any of the prohibited characteristics as prescribed [check – should this be “proscribed”?]in Section 23.

In cases where it is subsequently found that the person acting as a director, manager, or holding a position under the first paragraph has any of the prohibited characteristics as prescribed [proscribed?]in Section 23, the SEC Office shall have the power to instruct the derivatives business operator to suspend such person from acting in that position and rectify such non-compliance or the SEC Office may revoke its approval on such person.

The provisions of the first and second paragraphs shall apply, *mutatis mutandis*, [italicized in original?]to any person with whom the derivatives business operator enters into an agreement authorizing such person as well as those who work for such person to have full or partial power of management in its derivatives business.

Section 25 provides that

Unless an approval of the SEC Office has been obtained, no person can hold shares or be a beneficial owner of shares of any derivatives business operator exceeding ten percent of all shares with voting rights.

The approval under the first paragraph shall be granted only if such person, or in cases where such person is a legal entity, the directors, managers or partners of such person, have no prohibited characteristics as prescribed [proscribed?]in Section 23(3) or any other prohibited characteristics as specified in the notification of the Capital Market Supervisory Board.

In cases where it is subsequently found that the person approved by the SEC Office has any of the prohibited characteristics under the second paragraph, the SEC Office shall have the power to revoke its approval on such person, the prohibited characteristics are those subsequently specified by the notification of the Capital Market Supervisory Board, the case in which, [in which case?]such approved person shall comply with the notification within the period specified by the SEC Office. After the lapse of such period, if such person fails to comply therewith, the SEC Office shall have the power to revoke its approval.

For the purpose of this Section, a beneficial owner of shares shall mean any person with direct or indirect power to:

- (1) direct or control the exercise of voting rights in a derivatives business operator;

prescriptive rules mainly describe the categories of registration, the conditions to be met by applicants, the duration of registration, and so on.

Another example of rules-based derivatives regulation is section 99, which deals with insider trading in derivatives. It provides that,

No director, subcommittee member, representative, agent, employee, staff, advisor, or any person working for a derivatives exchange, derivatives clearing house, derivatives regulatory association, securities exchange, securities trading centre, securities clearing house or any agency entrusted by law to supervise derivatives transaction, goods or variable, who have [has?]in possession material non-public information by virtue of his position, shall undertake any of the following acts:

- (1) engage in derivatives transaction, or offer to trade in derivatives, or purchase or sell or offer to purchase or sell goods, in connection with such material information, for his own benefit or for the benefits of others; or
- (2) disclose such material information to another person whereby he knows or should have known that such person may take advantage of such information by engaging in derivatives transaction, or purchasing or selling goods.

The material information under the first paragraph means information which is material to changes in the price of derivatives contract or goods, or the figure of variable, or affects the decision of investors to trade in derivatives or purchase or sell goods.

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- (2) direct or control the acquisition, disposal or creation of encumbrance over shares issued by a derivatives business operator; or
  - (3) direct or control any other matters as specified in the notification of the Capital Market Supervisory Board, irrespective of whether such power arises from any agreement, understanding, relationship or else, [else?]and whether such power arises from the acquisition or holding of shares by such person or by any other persons.

Section 26 provides that

In cases where any person, without an approval of the SEC Office under Section 25, holds shares of a derivatives business operator exceeding ten percent of all shares with voting rights, the derivatives business operator shall neither pay dividend as well as [nor?]any other benefits with respect to the portion of shares exceeding ten percent to such person nor allow such person to exercise the voting rights with respect to the portion of shares exceeding ten percent in any shareholders' meeting.

This provision shows how to identify insider trading in detail. The first paragraph precisely illustrates as many participants as possible, such as “director, subcommittee member, representative, agent”<sup>213</sup> and so on. Then the following words list specific acts which are considered illegal uses of material information, such as the purchase, selling, offer, trade or disclosure of material information. It tries to include any possible act that might be involved in insider trading. Finally, it notes any information, which is material to changes in price or other variables and the effect on investment decisions, is a material information.

### **C. Process-oriented Approach**

Rules-based drafting often contemplates a process-oriented approach to enforcement. The main procedures in regulation are often specified in the Thai Act, rather than in directives, enforcement or guidance. For example, section 22 provides that

The derivatives business operator shall not engage in any other business unless approved by the SEC Office.

Upon receipt of the application for approval under the first paragraph, the SEC Office shall consider the application and notify the derivatives business operator of the outcome of its consideration within sixty days from the date of receipt of such application together with all valid and complete supplementary documents as required by the notification of the SEC Office.

After the lapse of time as specified in the second paragraph, if the SEC Office does not notify the derivatives business operator of the outcome of its consideration or does not give any order otherwise, it shall be deemed that the SEC Office has granted its approval on such application.

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<sup>213</sup> *Ibid.* s. 99.

The first paragraph requires registration for the operator before doing business in derivatives. The following two paragraphs focus on the decision-making process. They limit the process to 60 days and grant a default approval. The process has two simple steps: consider the application upon receipt and then notify the applicant of the outcome within 60 days. Otherwise, the application will be granted automatically. This application process could be more flexible and practical, and based on guidance or directives by the SEC; however, the process-oriented approach here seems to give legislators more confidence in speeding up the application and in preventing abuse of regulatory power. This section prescribes a definite process to ensure proper and efficient registration.

Sections 77 to 89 in Chapter 4 also show the main features of rules-based regulation and a process-oriented approach. Chapter 4 of the Thai Act contains an extensive list of requirements for customer asset protection and the operation of a clearing house. A “clearing house”, in the Act, means “any center or network where for clearing and settlement of obligations under derivatives are provided as an ordinary course of business.”<sup>214</sup> A clearing house must be licensed or registered under the Act.

The heading for Chapter 4 of the Thai *Derivatives Act* is “Derivatives Clearing House” and it has two divisions. One division is concerned with supervision of the clearing house. The other is about regulation of the clearing house. Section 82 stipulates how to protect customer assets. It says,

In cases where the derivatives clearing house receives any asset from its members or has in its possession such asset as collateral for derivatives

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<sup>214</sup> *Ibid.* s. 3.

transactions, as a result of derivatives transactions of its members or its members' customers, [text missing here?]asset placed with the derivatives clearing house by any member for purposes of maintaining the integrity of the trading and settlement system of the derivatives market, the derivatives clearing house shall segregate such asset from its own [check if "from its own" is correct]and shall prepare and keep accounts of the asset received or had in possession for each respective member separately from its own account.

In preparing and keeping the accounts of asset under the first paragraph, if asset of customers of the member are [is?]included, the derivatives clearing house shall also prepare and keep accounts of such customer asset separately from the accounts of members' asset.

Type of asset to be held as collateral for derivatives transaction, safekeeping of asset, preparation and keeping of the accounts of asset under the first and second paragraph shall be in accordance with the rules as specified in the notification of the Capital Market Supervisory Board.

The items and amounts of asset as shown in the accounts under the first and second paragraph are presumed to be correct, unless proven otherwise.

This section specifies the procedures for a clearing house to offer a fair and secure clearing and settlement service. The first paragraph of Section 82 requires the segregation of the members' (or members' clients') assets from the clearing house's own assets and stipulates that the clearing house keep an account of each asset. The requirement arises when the clearing house receives or possesses such assets due to a derivatives transaction. If the asset is an asset of a customer of the member, the second paragraph requires that an account for that asset be kept separately from the account for assets of another member. The other elements of a fair and secure settlement service, such as the types, items and amounts of the assets, are described in the third and fourth paragraphs. It is a one-size-fits-all-approach. There is no involvement of the clearing house in deciding how to comply with the Act. All clearing services have to follow these

specific requirements. Any deviation from such segregation of assets and accounts could lead to a sanction under the Act.

## **D. A Principle as a Counterexample**

Some provisions of the Thai *Derivatives Act* are, however, drafted as principles. Principles are used as a method of giving discretion to the regulator and of giving market participants a basis for devising a way of meeting the principle that is adapted to their own circumstances. Consider, for example, the regulation of a derivatives exchange. Section 57 requires a derivatives exchange to have rules for the admission of members, rules applicable to members, and arrangements for monitoring and enforcement of compliance.<sup>215</sup> The rules of the derivatives exchange are subject to the approval of the Capital Market Supervisory Board.<sup>216</sup> The Capital Market Supervisory Board's approval is based on general principles. For example, section 64 provides that

When a derivatives exchange has proposed rules for the Capital Market Supervisory Board's approval, the Capital Market Supervisory Board shall approve rule of the derivatives exchange unless such rules:

- (1) are not consistent with the requirements specified in Section 57 or are not adequate to ensure the fulfillment of the requirements specified in Section 57; or
- (2) are not fair and equitable to members, investors or stakeholders of the derivatives exchange.

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<sup>215</sup> *Ibid.* s. 57. This section provides that a derivatives exchange should meet eight specific requirements for proper operation, such as possession of sufficient financial resources, creation of systems for settlement, of measures to promote and maintain the standard of integrity, and of contingency plans to accommodate any emergency, efficient arrangements for the handling of complaints and disputes, and so on.

<sup>216</sup> *Ibid.* s. 63.

Section 57 provides that

A derivatives exchange shall have:

- (1) sufficient financial resources for the proper performance of its operation and for the assumption of any risks associated with the operation of the derivatives exchange;
- (2) system for settlement of the clearing house's derivatives obligations that is operated by the derivatives exchange or other persons;
- (3) measures to promote and maintain the standard of integrity, reliability as well as fairness in relation to derivatives trading;
- (4) efficient system to record and disseminate information regarding price quotation and derivatives trading;
- (5) contingency plan to accommodate any emergency which may affect derivatives trading or settlement of derivatives obligations;
- (6) efficient arrangement for the handling of complaints or disputes in connection with the derivatives trading on the derivatives exchange or in respect of the use of services provided by the derivatives exchange;
- (7) rules for the admission of members which shall take into consideration the fit and proper status of the applicants; and
- (8) rules applicable to members and arrangement for the monitoring and enforcement of compliance by members with its rules and code of ethics in undertaking derivatives business.

While rules created under this section are subject to oversight by the Capital Market Supervisory Board, they allow for industry participation in regulatory rule-making. The proposed rules are creative responses to specific circumstances based on good business practices.

## E. The Centralized Regulatory Structure

The Thai derivatives regulatory structure is centralized. The Securities and Exchange Commission was created in 1992 by the *Securities and Exchanges Act*.<sup>217</sup> Section 9 of the Thai *Derivatives Act* authorizes the Securities and Exchange Commission to formulate policies and to supervise derivatives businesses. The relationship between the regulator and the derivatives business participants is administrative, rather than co-operative. The provisions above indicate that the SEC, through its Capital Market Supervisory Board, has various powers, and its duties include involving itself in the details of business operations, such as those of a clearing house. For instance, the Thai *Derivatives Act* specifies that the “system for settlement”<sup>218</sup> shall include “a clear procedure to deal with any default”,<sup>219</sup> and a clearing house shall have a “contingency plan to accommodate any emergency which may affect settlement of derivatives obligations.”<sup>220</sup>

On the whole, Thai derivatives regulation is rules-based. The rest of the provisions are mostly prescriptive and detailed rules. Although there are several principles, they generally provide discretionary power to the regulator and generally do not provide scope for direct industry participation in the regulatory process or for firm-

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<sup>217</sup> *Ibid.* ss. 14-15. These sections provide the SEC Board with the authority to issue orders, rules, regulations, notifications and directions under the SEA. [You should cite the Securities and Exchanges Act here.]

<sup>218</sup> Thai *Derivatives Act*, *supra* note 15, ss. 78. [this edit assumes you have cited the Securities and Exchanges act in the previous footnote]

<sup>219</sup> *Ibid.*

<sup>220</sup> *Ibid.*

specific regulatory responses. The process-oriented approach is indicated not only in the rules but also in the regulatory structure.

The next part introduces derivatives regulation in Québec as a contrasting approach to derivatives regulation in Thailand.

### III. QUÉBEC

This part begins with a brief introduction to the Québec *Derivatives Act*. It then notes several provisions of the Québec *Derivatives Act* to show it is drafted primarily as a principles-based statute. It contrasts these principles-based provisions with provisions about administrative proceedings that are arguably rules-based. Finally, it briefly describes Québec's regulatory structure.

#### A. Introduction to the Québec *Derivatives Act*

The Québec *Derivatives Act*, except for a few provisions,<sup>221</sup> came into force on February 1, 2009.<sup>222</sup> It has 11 titles containing 240 articles which cover areas such as regulated entities, dealers and advisers, qualified persons, administration, financial provisions and prohibitions.

The Act covers common types of derivative securities, such as options, swaps and futures.<sup>223</sup> As many new types of derivatives are created on a regular basis, the definition of derivatives attempts to include newly created derivatives in two ways. The first way is

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<sup>221</sup> *Derivatives Act* (Thailand), B.E. 2546, ss. 55, 58, 59, 82-85, 175. [This should refer to the Québec Act. Are these the right section numbers?]

<sup>222</sup> “Derivatives Act (2008, c. 24) — Coming into force” AMF (19 December 2009), online: AMF <[http://www.lautorite.qc.ca/userfiles/File/projets-speciaux/produits-derives/D-19-2009\\_ang.pdf](http://www.lautorite.qc.ca/userfiles/File/projets-speciaux/produits-derives/D-19-2009_ang.pdf)>.[check that this is the correct date – cite to the section in the statute about coming into force]

<sup>223</sup> Québec *Derivatives Act*, *supra* note 14, art. 3.

the derivative feature. If it is “derived from, referenced to or based on an underlying interest”, the contract or instrument is regulated by the Act. The second way is through individual identification, which means any product that is designated by regulation or considered equivalent to a derivative on the basis of criteria is determined by regulation. The Act also provides exemptions for some accredited entities from certain provisions and excludes some derivatives.<sup>224</sup> Some provisions respecting the *Autorit édes marches financiers* (“AMF”), however, do not apply where only accredited counterparties are involved in over-the-counter derivatives activities or in any other case specified by regulation.<sup>225</sup>

## **B. Principles-based Text Drafting**

The Act sets out its purposes at the very beginning in article 2. It provides that,

The purposes of this Act are, more specifically,

- (1) to govern derivatives offering and trading and related activities;
- (2) to provide for oversight of the activities of derivatives market professionals so as to ensure that their conduct is honest, fair and responsible;
- (3) to provide for the monitoring of regulated entities and, more specifically, of their activities, their exercise of delegated powers, the adequacy of their resources, the accessibility of their services, and the transactions carried out via the facilities or systems they operate;

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<sup>224</sup> *Ibid.* arts. 6-7.

<sup>225</sup> *Ibid.* art. 7 This article notes that “the provisions of Titles III and IV, sections 94 to 114, Division III of Chapter I and Divisions I and II of Chapter II of Title V of this Act and Chapter III.1 of Title I of the Act respecting the *Autorit édes marches financiers* (R.S.Q., chapter A-33.2) do not apply in the case of over-the-counter derivatives activities or transactions involving accredited counterparties only or in any other case specified by regulation”.

(4) to regulate market participants and regulated entities so as to ensure compliance with the principles set out in this Act and with the obligations deriving from those principles;

(5) to facilitate the control of systemic risk in derivatives trading, particularly in clearing house operations; and

(6) to provide for the implementation and administration of programs to deal with client complaints and protect clients in derivatives-related matters.

This article shows that the Act has “more confidence in a system that focuses on the outcomes rather than on compliance with technical rules.”<sup>226</sup> These purposes require a framework for derivatives regulation. They indicate that the Act is directed by these outcomes, such as the control of systemic risk, the oversight of the activities of the derivatives industry, the protection of clients, and so on. The articles that follow provide mechanisms and measures to fulfill the desired purposes. Each purpose provides the desired outcome in a certain area. For example, the fifth purpose, “to facilitate the control of systemic risk in derivatives trading, particularly in clearing house operations”, is supported by general obligations for regulated entities and special obligations for the clearing house. A “clearing house” “means a person who maintains a system for netting derivatives trades on a multilateral basis and who acts as central counterpart to that end.”<sup>227</sup> General obligations for regulated entities cover six areas: documents, internal by-laws, rules and procedures, governance, controls, activities, and decisions and disclosure.<sup>228</sup> These areas provide a self-regulatory structure and direction for the clearing house.

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<sup>226</sup> British Columbia Securities Commission, News Release, “The B.C. Model: BCSC Response to OSC Comment Letter” (22 August 2004), online: BCSC <[www.bcsc.bc.ca/news/NR03\\_29.asp](http://www.bcsc.bc.ca/news/NR03_29.asp)>.

<sup>227</sup> *Derivatives Act* (Thailand), B.E. 2546, s. 3. [Shouldn't this be cited to the Québec Act?]

<sup>228</sup> Québec *Derivatives Act*, *supra* note 14, arts. 19-38.

For example, article 26 is a provision about governance stated as general obligations:

The governance practices of a recognized regulated entity must be clear and transparent. They must serve the interests of its members or of market participants while also serving the public interest. In addition, they must include an accurate and informative system for reporting information to directors and officers.

The article's first paragraph provides the core principle of governance. It provides that the governance of a regulated entity should be clear and transparent. As noted earlier in Chapter 2, the clearing house may hold a large amount of important information about the market and institutions operating in it through the service it provides. This informational advantage could be abused to the disadvantage of market participants, especially if the clearing house has a monopoly.<sup>229</sup> A clearing house might provide service to several markets, yet it usually operates as a monopoly.<sup>230</sup> In addition, a default by one party in a transaction facilitated by a clearing house can impact other market participants and raise the potential for system risk.

The second paragraph emphasizes the governance factor: the informative system. Corporate governance is important for investor confidence. The directors and officers perform essential control functions. An accurate and informative system ensures that performance is based on the true conditions of the clearing house and therefore supports sound governance.<sup>231</sup>

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<sup>229</sup> Phillippo Russo, "Evolving Role of Central Counterparty Clearing Houses" (May-August 2002) 14:2 *Economia, società e istituzioni* at 239, online <<http://www.luiss.it/ricerca/instituti/ise/review/2002/02/Russo.pdf>>

<sup>230</sup> *Autorité des marchés financiers, Regulation of Derivatives Markets in Québec* (Québec: 2006), at 43, online: AMF <<http://www.lautorite.qc.ca/userfiles/File/industrie/encadrement-produits-derives/Regulation-Derivatives-Markets.pdf>> [AMF, *Regulation in Québec*].

<sup>231</sup> *Ibid.* at 42.

The clearing house has only two special obligations. Article 46 of the Québec Act lists key elements of sound internal management practices:

A clearing house must apply sound internal management practices in order to ensure its proper operation. To that end, it must put in place

- (1) an appropriate risk management process for derivatives clearing that integrates prudent risk limits;
- (2) sound information systems and risk measurement procedures;
- (3) comprehensive internal controls and audit procedures;
- (4) continuous monitoring, and frequent monitoring reporting to its senior management; and
- (5) appropriate oversight by its directors.

Although this looks like a checklist, it is still principles-based and more certain and clear than general principles. It requires the clearing house set up five basic risk control mechanisms to maintain sound internal management. There are no timelines for monitoring and reporting, no details regarding risk measurement procedures and no specific procedures for oversight by the directors. It provides only a compulsory and complete framework of internal risk management and demands that the outcome of risk management should be sound, appropriate and comprehensive. The AMF monitors the conduct of the clearing house for compliance with these general regulatory requirements. It regulates by setting the standards the clearing house must achieve according to the Act and by reinforcing the standards through other regulatory tools, such as guidance, enforcement, and education.

A clearing house faces many risks; therefore, risk management is critical. Article 26 of the Québec Act aims for sound management. If risks are identified and analyzed by

the clearing house, this process could help the regulator to fulfill the core purpose in article 2, namely, to “facilitate the control of systemic risk in derivatives trading.”<sup>232</sup> The *Qu  bec Derivatives Act* uses these general requirements to “achieve the fundamental objectives, while giving sufficient leeway to regulated entities.”<sup>233</sup> The clearing house example also highlights the significance of collaboration between the AFM and industry participants.

### **C. Outcome-oriented Approach**

An interesting example of the outcome-oriented approach is the regulation of derivatives operators, for example dealers and advisers. As noted earlier, the Thai *Derivatives Act* contains primarily prescribed rules. The *Qu  bec Derivatives Act* is drafted in a very different way. Article 58 provides,

The categories of registration, the conditions to be met by applicants, the duration of registration and the rules governing the business of dealers, advisers and representatives are determined by regulation.

Instead of drafting detailed rules for competence and clear processes for registration, the legislator generally seems confident in authorizing the regulators generally to make rules. A process decided on by the frontline regulator in consultation with the industry can then provide a more reasonable and flexible response to particular situations. This article allows the regulator to specify requirements and directives that are more focused on desired outcomes. It also indicates that principles-based drafting does

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<sup>232</sup> *Qu  bec Derivatives Act*, *supra* note 14, art. 2

<sup>233</sup> AMF, *Regulation in Qu  bec*, *supra* note 228 at 69.

not mean getting rid of all the details in regulation. It outlines the basic elements in considering applications, such as categories of registration, the conditions to be met by applicants, the duration of registration and the relevant rules. However, it leaves the prescriptions or details to the rule-making process and enforcement by regulators.

Article 47 in the Québec Derivatives Act is also outcome-oriented. It requires A clearing house must use the necessary means to offer fair and secure clearing and settlement services. This article is clearly principles-based. It shows the outcome-oriented approach noted earlier. It focuses on the desired result of fair and secure services. The principle is intended to encourage effective activities, whereas the Thai *Derivatives Act* tries to ensure compliance by specifically permitting certain activities while expressly prohibiting other activities. This article directs the clearing house to offer fair and secure services without specifying the necessary means. It leaves the planning process to the clearing house. The rules of the clearing house determine the settlement procedures and other necessary elements that are aimed at achieving fairness and security. Unlike the Thai *Derivatives Act*, the Québec Act lacks technical words such as “contingency plan”<sup>234</sup> and “segregation of account”.<sup>235</sup> The regulator assesses compliance by examining clearing and settlement services in light of the principles of fairness and security, not by using a detailed checklist specified by the legislation.

Another good example of outcome-oriented approach is article 54 of the Québec Act, which contrasts section 22 in the Thai *Derivatives Act* as noted earlier. It provides, no person may carry on business as a dealer or adviser unless registered as such with the

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<sup>234</sup> Thai *Derivatives Act*, *supra* note 15, s. 78.

<sup>235</sup> *Ibid.* s. 99.

Authority. This article requires registration with the Authority. It does not provide a process for consideration, or a time-frame limitation for applications, as the Thai Act does. Nor does it provide for a default grant of registration after the expiry of a prescribed period. Article 58 makes it clear that the process and the details are left to the regulators.<sup>236</sup> However, the Québec Act does provide essential elements and basic standards in considering applications. For example, article 59 provides,

After verifying that an applicant meets the conditions set by regulation, the Authority grants registration if it considers that

- (1) the applicant or, in the case of a legal person, its officers and directors, exhibit the requisite competence and integrity to ensure the protection of clients; and
- (2) the applicant is solvent and, in the case of a legal person, has the financial footing needed to ensure the viability of its business.

The Authority may impose any restriction or condition on the registration of an applicant, including limiting its duration.

This article may, at first, appear to be rules-based. However, it does provide principles and grants a significant degree of authority to the regulator to apply the principles. Article 59(1) provides that if an applicant is a legal entity, a crucial principle for the protection of clients is that the entity's officers and directors exhibit the requisite competency and integrity to ensure that protection. The assessment of the requisite competency and integrity is left to the regulator, who is directed to focus on the goal of client protection. Also, in article 59(2), the applicant not only has to be solvent but must also have the financial footing needed to ensure the viability of the business. The

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<sup>236</sup> The Thai *Derivatives Act*, s. 58 provides that “The categories of registration, the conditions to be met by applicants, the duration of registration and the rules governing the business of dealers, advisers and representatives are determined by regulation.”

regulator is left to assess the adequacy of this financial footing with a view to the outcome of business viability.

#### **D. A Prescriptive Rule as a Counterexample**

Even though Québec derivatives regulation is primarily principles based, it has many rules concerning administrative proceedings and sets out specific offences. For example, Article 79 provides the following:

Dealers and advisers must, on any date that the Authority may specify, submit a report to the Authority as at that date concerning their complaint examination policy. The report must include the number of complaints filed and a description of the nature of the complaints.

This article provides for the disclosure of complaints. The date of the report is to be specified by the Authority. The report should disclose the policy at the specified date. The two essential elements of the report are the number and the nature of complaints filed, which provide a quantitative and qualitative description of the complaint examination policy.

#### **E. The Co-operative Regulatory Structure**

The current derivatives regulatory system is not only based on principles but also on the collaboration between the *Autorité des marchés financiers* and self-regulatory organizations. The AMF was established under *An Act respecting the Autorité des marchés financiers*<sup>237</sup> on February 1, 2004. It is a single regulator for insurance,

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<sup>237</sup> *An Act respecting the Autorité des marchés financiers*, R.S.Q.2004, c. A-33.2.

securities, derivatives, deposit institutions, and the distribution of financial products. It also administers legislation and oversees enforcement in those areas.<sup>238</sup>

The AMF is financially self-sufficient and functionally independent. It is funded by the fees and dues paid by the persons and firms governed by the legislation it administers. The AMF is headed by a President and a Chief Executive Officer. Both are appointed by the Québec government. An internal Auditor as well as an Advisory Board supports the daily operation of the AMF. The Advisory Board is composed of a maximum of seven members.<sup>239</sup> Although these members are appointed by the provincial Minister of Finance, they are, unlike those in Thailand, not *ex officio* from the government. They are chosen “for their knowledge of the financial sector as well as their expertise in the area of administrative management.”<sup>240</sup> Advisory Board members’ appointments can only be renewed once, and each term has a maximum length of three years.<sup>241</sup>

Self-regulatory organizations also oversee the derivatives market in certain areas. The Québec Act supports self-regulation. A self-regulatory organization is “a legal person, a partnership or any other entity whose objectives are related to the mission of the Authority.”<sup>242</sup> It must be recognized by the AMF. A self-regulatory organization, such as a securities exchange or clearing house, is responsible for supervising activities. The principles-based approach of the Act permits self-regulatory organizations to use their

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<sup>238</sup> *Autorité des marchés financiers*, “About Us”, online: < <http://www.lautorite.qc.ca/autorite/a-propos.en.html#>>.

<sup>239</sup> *Supra* note 235, art. 97.

<sup>240</sup> *Ibid.*, art. 49.

<sup>241</sup> *Ibid.*, art. 50.

<sup>242</sup> *Ibid.* art. 59.

by-laws and internal risk management structures to regulate their members, serve the public and achieve the regulatory goals of the legislation.

Article 26 is an example of the extent to which regulation by the AMF relies on self-regulatory organizations. The legislative principles encourage self-regulatory organizations to achieve the desired outcomes in various ways that allow for rapid adaption to changing market conditions. The self-regulatory organizations are frontline regulators. For example, a clearing house is responsible for maintaining a fair and secure clearing and settlement service through its self-regulation and, by doing so, contributes to the prevention of system risk.

The Québec *Derivatives Act* is primarily principles-based. The rest of the provisions are much like those that are shown above. The Québec Act puts the general purposes or desired outcomes at the beginning, while the Thai *Derivatives Act* does not. The principles in the Québec *Derivatives Act* encourage an outcome-oriented approach to compliance and regulation. While the Québec *Derivatives Act* does prohibit certain acts and contains some prescriptive rules and detailed procedures, it is nonetheless primarily a principles-based piece of legislation that establishes a framework based on self-regulation and regulator and market participant collaboration.

#### **IV. SUMMARY**

The Thai *Derivatives Act* is primarily rules-based, while the Québec *Derivatives Act* is principles-based. The Thai Act focuses on the compliance process. It regulates through permitting and prohibiting the activities using prescriptive rules. The Québec Act focuses on desired outcomes. It encourages self-regulation tailored to individual

firms under the supervision of the AMF and the requirements of the Act. The next chapter comments on whether these different approaches are appropriate given the nature of the particular jurisdiction, its markets, state of development, legal infrastructure and political context.



## **CHAPTER 5: CRITICAL THINKING ON DERIVATIVES REGULATION**

Derivatives are increasingly popular in risk management as the international financial market expands. Regulators seek a legislative framework tailored to the derivatives market for better investor protection and risk control. Principles-based regulation and rules-based regulation are contrasting regulatory approaches. The provisions in the Thai *Derivatives Act* and the Québec *Derivatives Act* are examples of these contrasting regulatory approaches.

This chapter comments on these two approaches by examining three factors: types of legislation, regulatory orientation and allocation of regulatory responsibilities. It notes the differences in history, capitalization and regulation of the derivatives markets in Thailand and Québec. Finally, it examines the connection between principles-based regulation and Thai derivatives regulation. It recommends taking a principles-based approach even in a country that may not have the infrastructure, regulatory expertise or regulatory experience in the area of derivatives for a fully effective principles-based approach.

### **I. COMMENTS ON THE TWO ACTS**

#### **A. Types of Legislation**

As noted earlier, the Thai *Derivatives Act* uses prescriptive rules to prohibit wrongful conduct, whereas the Québec *Derivatives Act* uses core principles to encourage compliance. The prescriptive definition and prohibition in section 99 of the Thai

*Derivatives Act* provides market participants some certainty about insider trading. It may, however, limit the regulator's ability to identify wrongful conduct that is by nature insider trading because it represents a rule "that is at times reactive, generally complicated and, unfortunately, all too often after the fact and too late."<sup>243</sup> According to Williams, "The creation of the next new form of wrongful conduct will be encouraged rather than deterred" by a rule "that is at times reactive, generally complicated and, unfortunately, all too often after the fact and too late"<sup>244</sup>

In contrast, the *Québec Act* sets up a basic outline in article 26 to encourage internal governance. This approach was studied for years by the AMF. It noted that

The purpose of a regulatory system is to provide a framework for an activity that is not only permitted but also encouraged. Thus, a regulatory system is not necessarily intended to prohibit an activity, but rather to ensure effective operation. Legislation can achieve this objective through rules that specifically stipulate permitted and prohibited actions, or through core principles that focus on desirable conduct.<sup>245</sup>

Article 26 provides a framework for sound internal management in open-ended concepts. It also encourages initiative in compliance. The clearing house can operate with broader obligations to the public and the members in mind, rather than with detailed rules. However, the vagueness of article 27 in the *Québec Derivatives Act* creates a potential gap in credibility and confusion for regulatory staff in terms of providing clear guidance for the derivatives industry.<sup>246</sup>

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<sup>243</sup> AMF, *Regulation in Québec*, *supra* note 228 at 14.

<sup>244</sup> Jeffrey Williams, *Manipulation on Trial* (Cambridge : Cambridge University Press, 1995) at xviii.

<sup>245</sup> AMF, *Regulation in Québec*, *supra* note 228 at 20.

<sup>246</sup> Black, "Making a Success," *supra* note 79 at 198.

## **B. Regulatory Orientation**

Section 82 in the Thai *Derivatives Act* indicates a process-oriented approach while article 47 in the Québec *Derivatives Act* is outcome-oriented. A process-oriented regulatory approach measures performance with detailed procedural requirements, whereas an outcome-oriented regulatory approach verifies compliance against general goals.<sup>247</sup> Section 82 in the Thai *Derivatives Act* requires the separation of customer assets from the clearing house. A requirement on the settlement process may not insure the realization of a secure clearing system. It can also permit “cosmetic” compliance by market participants.<sup>248</sup> In the outcome-oriented approach, the goals of regulation are established by legislation. The means of offering clearing and settlement services is decided on by market participants according to the case context and the objectives of law. Then, the regulator assesses whether the compliance is fair and secure. The outcome-oriented approach focuses on the process of business decision-making and how that process promotes regulatory goals.

## **C. Allocation of Regulatory Responsibilities**

Allocation of regulatory responsibility functions on two levels. First is the allocation between the legislator and the regulator. The second allocation is between regulators and self-regulatory organizations (“SROs”). Allocating regulatory responsibilities to take advantage of specialized skills may be critical to effective regulation, particularly in the potentially complex world of derivatives. Although regulatory systems typically involve both a degree of collaboration and a degree of

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<sup>247</sup> Coglianesse & Coglianesse, “Management-Based Regulation”, *supra* note 122 at 695-705.

<sup>248</sup> Ford, “Expert Panel”, *supra* note 8 at 10.

centralization, Thailand has a more centralized regulatory system, while Québec takes a more collaborative approach.

As noted earlier, article 58 of the Québec *Derivatives Act* authorizes the frontline regulators to determine the categories of registration, the conditions to be met by applicants, and the duration of registration. In the Thai *Derivatives Act*, by contrast, legislators set a 60-day period for assessing a registration application and set out five conditions for individual applicants. These issues could be dealt with in a more flexible way if they were determined in the process of an application rather than being set out in advance. In a case-by-case scenario, the legislator would not set out the categories of registration and the conditions of applicants, since there could be new types of participants and transactions coming up in the expanding derivatives market.

At the SRO level, the two jurisdictions take different approaches. Consider, for example, the governance of the business of dealers, advisers and representatives. According to article 58 of the Québec Act, the rules governing the business of dealers, advisers and representatives are promulgated by the AMF. Although the AMF has a leading role in overseeing the dealers, advisers and representatives, several self-regulatory organizations are responsible for regulation as well. Besides the intermediaries, like the derivatives clearing houses and exchanges in Québec, the Investment Industry Regulatory Organization of Canada (“IIROC”) is an SRO that provides expertise in this area.<sup>249</sup> IIROC is given the authority and responsibility to regulate its members and monitor the bond and money markets and has subsidiaries in every Canadian province. The AMF collaborates with the intermediaries and IIROC.

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<sup>249</sup> In 2008, the Investment Dealers Association of Canada and Market Regulation Services Inc. were consolidated to form the Investment Industry Regulatory Organization of Canada.

In Thailand, the situation is a little different. In addition to the intermediaries, there is no such special self-regulatory organization that ensures the good behaviour of dealers, advisers and representatives, such as the IIROC in Canada. Intermediaries, like the Securities Exchange of Thailand (“SET”) and the Thailand Futures Exchange (“TFEX”), have the status of self-regulatory organizations. Other entities such as the Thai Bond Market Association (“TBMA”) and the Thai Investors Association (“TIA”) govern the dealers, advisers and representatives indirectly,<sup>250</sup> but the SEC in Thailand has to assume more responsibility than the AMF in Québec.

## **II. DERIVATIVES INDUSTRY MAKES THE CHOICE OF REGULATORY APPROACHES**

The reasons for regulatory approach choices might be complex; however, they are influenced by the history, degree of specialization and capitalization of the derivatives markets in Québec and Thailand.

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<sup>250</sup> According to the official website of the SEC in Thailand, the Securities Exchange of Thailand and its wholly-owned subsidiary, the Thailand Futures Exchange, have the status of self-regulatory organizations (SROs). In addition to these intermediaries, other entities, including the Federation of Accounting Professions, Thai Bond Market Association and the Thailand Securities Depository, also perform some self-regulatory functions.

## **A. Securities and Derivatives Trading Industry in Quebec**

### **1. A History of Nearly 180 Years**

The Montréal Stock Exchange (“MX”), or *Montréal bourse*, is the first and oldest exchange in Canada. It began in 1832 as an informal stock exchange at the Exchange Coffee House in Montréal. After the First World War, when speculative and junior stocks in the “Montréal Curb Market” (the former Canadian Stock Exchange) reached maturity, they were transferred to the Montréal Stock Exchange. From 1970 to 1999, modern infrastructures for derivatives markets were established, such as Trans Canada Options Inc. (the former Canadian Derivatives Clearing Corporation), the Canada-United States exchange-trading link, the Montréal Exchange Registered Representative Order Routing System and the electronic platform ETA (Exchange Trading Access). In 2008, Québec adopted a new *Derivatives Act* based on core principles and collaboration between the AMF and self-regulatory organizations. Québec thus has had securities markets for nearly one-hundred and eighty seven years and, in addition to roughly forty years of experience in derivatives markets, has, as further noted below, developed a specialization in derivatives markets.

### **2. Advanced SROs in Québec**

As securities trading expands, nation-wide self-regulatory organizations emerge. In 1998, the Mutual Fund Dealers Association (“MFDA”) was created to oversee mutual fund dealers in certain provinces across Canada.<sup>251</sup> The Investment Dealers Association

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<sup>251</sup> Mutual Fund Dealers Association of Canada, “About the MFDA”, online: MFDA <<http://www.mfda.ca/>>.

of Canada (“IDA”) carries out “member regulation” by regulating the business conduct and financial adequacy of Canada’s 212 investment dealers and their 30,480 registered employees across the country.<sup>252</sup> Market Regulation Services Inc. (“RS”) conducts real time monitoring and surveillance of trading on four alternative trading systems (who are also IDA members) and three exchanges (TSX, TSXV and CNQ, including CNQ’s Pure Trading facility) to promote investor confidence and market integrity.<sup>253</sup> In 2006, IDA and RS were consolidated into an independent stand-alone entity, the Investment Industry Regulatory Organization of Canada.<sup>254</sup>

### **3. Expertise in Derivatives**

With the development of national SROs and nationalization of the capital market, the exchanges went through an industry-led realignment. Originally, Canada had three other stock exchanges: the Toronto, Alberta and Vancouver Stock Exchanges. Each regulated its own marketplace and a select number of investment dealers. The realignment resulted in the Montreal Exchange Bourse becoming Canada’s sole derivatives exchange, the Toronto Stock Exchange (“TSX”) becoming Canada’s senior equity exchange, and the Toronto Venture Exchange (“TSXV”) becoming Canada’s venture exchange. As the sole financial derivatives exchange in Canada, the MX exerts its leadership in the areas of financial derivatives markets, information technology solutions and clearing services. With the MX specializing in derivatives markets, Québec

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<sup>252</sup> Susan Wolburgh Jenah, “Self-Regulation: Strengthening, Modernizing and Demonstrating Value” (lecture delivered at Mount Stephen Club, 22 November 2007), at 5, online: IIROC <[docs.iiroc.ca/DisplayDocument.aspx?DocumentID...Language=en](http://docs.iiroc.ca/DisplayDocument.aspx?DocumentID...Language=en)>. [City where lecture was given? Add before date.]

<sup>253</sup> *Ibid.* at 6.

<sup>254</sup> Investment Industry Regulatory Organization of Canada, “About IIROC”, online: IIROC <<http://www.iiroc.ca/English/Pages/home.aspx>>.

has become a jurisdiction which is more likely to develop regulatory expertise in derivatives markets.

#### **4. Volume of Derivatives Trading**

In the Québec derivatives market, various kinds of new products are created every year, such as equity options, currency options, index derivatives, interest rate derivatives, energy derivatives and so on. The market is ever-expanding. There is a significant volume of trading of a wide range of derivatives products on the Exchange. For example, the volume of Canadian Bankers Acceptance Futures (“BAX”) traded in 2006 was 16,702,302. On February 27, 2007 the total number of derivatives contracts was 690,202. In 2008 the volume of equity option contracts traded was 14,633,648. On May 20, 2010 there were open interests numbering 2,062,590.<sup>255</sup>

### **B. Securities and Derivatives Trading in Thailand**

#### **1. A History of Only 18 Years**

In Thailand, there were fleeting attempts to start a stock exchange in the 1960s and again in 1975. The Stock Exchange of Thailand was launched in July 1962 and later became the “Bangkok Stock Exchange Co., Ltd.” (“BSE”) in 1963. The exchange was so inactive, however, that it was closed in the early 1970s. The stock exchange did not really gain momentum until changes were made in the stock exchange listing rules, and a new *Public Limited Companies Act*<sup>256</sup> and *Securities Exchange Act*<sup>257</sup> were enacted in

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<sup>255</sup> Montréal Stock Exchange, “Market Records”, online: MX <[http://www.m-x.ca/nego\\_records\\_en.php](http://www.m-x.ca/nego_records_en.php)>.

<sup>256</sup> *Public Limited Companies Act*, 1992, B.E.2535 [Thailand].

1992. The Securities Exchange of Thailand was established and began trading in April 1975 with only 14 listed securities. It was formally renamed the Stock Exchange of Thailand on January 1, 1991. Subsequently, it became somewhat easier to get a listing on the exchange, and the exchange began to develop. Thus, the development of securities markets is a much more recent phenomenon in Thailand than in Québec. Québec has had a public securities market for nearly 180 years while Thailand has had only about 18 years of experience with a reasonably well-traded public securities market.

The Thailand Futures Exchange is a derivatives exchange that was established in May 2004, and is governed by the Thai *Derivatives Act*. It is a subsidiary of the Stock Exchange of Thailand and is under the supervision of the Securities and Exchange Commission. Its services include order entry facilities, a matching system and a market dissemination system through a reliable electronic trading platform. Products traded on the exchange include SET50 index futures, stock options, stock futures and gold futures, and there is no specific focus on derivatives markets as there is in Québec.

## **2. Weak SROs in Thailand**

The SET and the TFEX (wholly owned by the SET) perform the responsibilities of an SRO. In addition, various other entities, such as the Federation of Accounting Profession (“FAP”), and the Thailand Bond Market Association (“TBMA”) and the Thailand Securities Depository (“TSD”) perform some self-regulatory functions. However, before the set-up of the TFEX, there was no specialized self-regulation in derivatives markets.

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<sup>257</sup> *Securities Exchange Act*, 1992, B.E.2535 [Thailand].

### 3. Government Influence in Financial Markets

Thailand's financial market was promoted and regulated mainly by the Thai government. The modern Thai market dates back to the early 1960s. In 1961, Thailand implemented its first five-year National Economic and Social Development Plan to set goals for promoting economic growth and stability, as well as improving the Kingdom's standard of living. Following this, the Second National Economic and Social Development Plan (1967-1971) proposed an orderly securities market to mobilize additional capital for national economic development.<sup>258</sup> The industry could not survive without government support. Lacking government funding, even the SET was closed in 1970.<sup>259</sup> Later, in the 1990s, with government support, the SET grew into a thriving and active stock market.<sup>260</sup> Today, listing on the SET requires a minimum registered capital of 300 million b (\$10,098,000 Cdn). Beginning with only 14 listed companies in 1991, the SET now has 474 listed companies with a total market value of 3.4 trillion baht (\$0.11trillion Cdn) in February 2009.<sup>261</sup>

The Thai derivatives market has had a basic trading infrastructure since its establishment. The Thai Futures Exchange offers a cost-efficient and comprehensive range of services. It provides entry facilities, a matching system, a market dissemination system and reliable electronic trading platforms.<sup>262</sup> Most of the trading these

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<sup>258</sup> "Stock Exchange of Thailand (SET)", online: Thaiinvest <<http://www.thaiinvest.com/thai-stock-investment/stock-exchange-thailand-set/>>.

<sup>259</sup> *Ibid.*

<sup>260</sup> Thai Embassy, "Thailand Financial Market", online: <<http://bic.thaiembassy.sg/node/42>>.

<sup>261</sup> *Ibid.*

<sup>262</sup> Thailand Futures Exchange, "At A Glance", online: TFEX <<http://www.tfex.co.th/en/about/about.html>>.

infrastructures were created with the direct support and involvement of the government.<sup>263</sup>

#### **4. Volume of Derivatives Trading**

In 2008, TFEX total volume was 2,148,620 contracts (compared to 16,702,302 contracts for bankers' acceptances alone in Québec in 2006), worth about 937,782.18 million baht, an increase of 73.71% in volume over that of the same period in 2007. TFEX total trading value grew by 32.77% over 2007. The highest volume was on October 29 at 21,279 contracts and the lowest volume was on April 10, a mere 1,807 contracts.

Although there are fewer products on the Thai Futures Exchange than are traded on the Montréal Exchange, the volume of derivatives trading is increasing. Take the year 2008, for example. The TFEX total volume was 2,148,620 contracts, worth about 937,782.18 million baht in 2008. The figure might be very small compared to that of Québec; however, it represents a huge increase of 73.71% in volume over that of the same period in 2007.<sup>264</sup> SET50 index futures accounted for 97.70% of total trading volume. The products in Thailand are not as varied as those in Québec.

#### **C. Summary**

The differences in experience and expertise in derivatives markets may have led to different regulatory approaches in Thailand and Québec. Québec, as noted earlier, has nearly one-hundred and eighty years of public securities trading compared to Thailand's

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<sup>263</sup> *Ibid.*

<sup>264</sup> Thailand, 2008 *Annual Report* at 10.

less than 50 years; indeed, since trading in Thailand was very limited until after 1992, there have really only been less than 20 years of active public securities trading in Thailand. There has, therefore, been more opportunity in Québec for the development of expertise in the regulation of securities markets. Québec has also become focused on derivatives markets, given the specialization of the Montréal Exchange on derivatives trading. In Thailand the development of a specialized derivatives exchange market in 2004 was more recent than in Québec (that its beginning in the 1970s), and the variety of derivative products and the volume of trading is significantly less than that of the Montréal Exchange. Québec's greater variety of products, degree of specializations and higher trading volume puts Québec in a stronger position for the development of regulatory expertise in derivatives markets. Further, Québec has more well-developed and longer-standing SROs than Thailand does. All these factors put Québec in a better position for the adoption of a principles-based approach to regulation.

Principles-based and rules-based approaches to regulating derivatives markets can both contribute to the development of derivatives markets. Thailand and Québec may have had different regulatory goals when they adopted their approaches. A principles-based approach in Québec may promote market creativity and a more flexible response to changing conditions. A rules-based approach may have helped Thailand establish an efficient infrastructure for market participants and a basic regulatory framework in a reasonably short time.

To some extent, the history of the MX in Québec is a natural process of evolution in the derivatives market. As the market expands and new products become available, risk management becomes more and more important. The regulators need to regulate in

flexible and responsive ways. At the same time, market participants are becoming experienced and educated, and SROs are developing the capacity to assume some regulatory responsibility. Market participants may prefer a regulatory approach that can be tailored to their own situations. The regulatory goal is to provide better, more internationally competitive services to the industry. Québec regulators may have gained much more experience and expertise in financial services, member regulation, and risk management, given Québec's long securities trading history. When the regulators and the market in Québec developed to a more advanced stage, it became more feasible to introduce effective principles-based regulation. Québec adopted a new *Derivatives Act* that is totally different from the rules-based approach in effect prior to 2008.

Thailand, on the other hand, does not have as much experience in securities trading and derivatives trading as Québec. When Thailand promulgated its rules-based approach in 2003, it may have served the purpose of setting up infrastructures and rules of trading at a relatively early stage in market derivatives development. The experience of SROs and market participants may also have still been developing. Once market infrastructure has been established, and as SROs and regulators become more experienced, a move to a more principles-based approach to regulation may be more feasible. A rules-based approach may, however, have been an effective and efficient way of encouraging the development of the necessary infrastructure to get a derivatives market started.

### **III. TAKING A PRINCIPLES-BASED APPROACH IN THAILAND**

#### **A. New Regulatory Goals in Thailand**

It has only been about six years since the establishment of the TFEX. Although a rules-based regulatory approach may have been suitable for the Thai derivatives market when the Thai *Derivatives Act* was enacted in 2003, regulatory goals have changed. The SEC's 2010 - 2012 strategic plan focuses on four major goals: to maintain orderly markets, ensure investor protection, foster business innovation and promote competition.<sup>265</sup> TFEX is committed to a customer-oriented and knowledge-based environment and is dedicated to new product development.<sup>266</sup> With the infrastructure established and the derivatives market continuing to expand, the focus of Thai derivatives market regulation can now shift to risk management and innovation.

#### **B. Possible Approach: Principles-based Regulation**

The change in regulatory goals in Thailand together with an established and expanding derivatives market suggests a principles-based approach to regulation may now be suitable. It could provide a more effective means of promoting both risk management and innovation. The nature of the derivatives market makes it better-served by principles-based regulation and regulatory capacity would develop over time. Thailand should go ahead with a principles-based approach even though there may well be difficulties in implementation initially.

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<sup>265</sup> Thailand, Securities Exchange Committee, "Introduction to the SEC", online: SEC <[http://www.sec.or.th/sec/Content\\_0000000103.jsp?categoryID=CAT0000427&lang=en](http://www.sec.or.th/sec/Content_0000000103.jsp?categoryID=CAT0000427&lang=en)>.

<sup>266</sup> *Ibid.*

## **1. Connection to Thai Regulatory Goals**

As noted in previous chapters, an outcome-oriented approach has advantages over a process-oriented approach in terms of risk management. It can promote innovation in the industry. The principles-based approach can also facilitate communication between regulators and the industry, encouraging both learning from and education of the industry.

A principles-based approach has received attention in derivatives regulation in large part because of the speed of financial innovation in this area.<sup>267</sup> The cyber-revolution in trading systems gives investors access to various financial products without physical boundaries. This has spurred a global competition in trading. Rigid laws and regulations often fall behind the global marketplace and hamper innovations in derivatives markets. When problems unfold, regulators find themselves playing catch-up.<sup>268</sup>

The new regulatory goals in Thailand, such as fostering innovation, promoting competition, and promoting a knowledge-based environment, are naturally connected to the advantages of a principles-based approach.

## **2. Connection to the Results of Regulation**

As noted earlier, the practice in the UK has shown the effectiveness of a principles-based approach. Huge increases in investment came to London after the FAS adopted a more principles-based approach to regulation. The history of Quebec also

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<sup>267</sup> Ford, “Expert Panel”, *supra* note 8 at 6.

<sup>268</sup> Walter Lukken, “It’s a Matter of Principles”, University of Houston’s Global Energy Management Institute (25 January 2007), online: CFTC <<http://www.cftc.gov/PressRoom/SpeechesTestimony/2007/index.htm>> [Lukken, “Principles”].

suggests that in the adoption of a principles-based approach, an expanding derivatives market the adoption of a principles-based approach may be appropriate.

Even though securities regulation might still be rules-based, a principles-based approach to regulating derivatives markets may be suitable. The development of the derivatives regulation in the U.S. indicates a trend of switching to principles-based regulation of derivatives markets when the market is in need of innovation and investment. The U.S. futures industry has established a “regulatory regime utilizing risk-based principles.”<sup>269</sup> Clearing houses and exchanges are “thriving under a principles-based approach”<sup>270</sup> with the passage of the *Commodity Futures Modernization Act*,<sup>271</sup> as they must meet a separate set of statutory “core principles”<sup>272</sup> and must continually adhere to these high-level principles in business operations. To comply with each principle, the agency may set out acceptable practices as “safe harbours”. They can either follow already approved practices or adopt “their own measures for complying with the overarching principle.”<sup>273</sup> Under the *Commodity Exchange Act*<sup>274</sup>, industry and self-regulatory organizations (SROs) can “formulate their own acceptable practices and submit them to the U.S. Commodity Futures Trading Commission (“CFTC”) for approval.”<sup>275</sup>

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<sup>269</sup> *Ibid.*

<sup>270</sup> *Ibid.*

<sup>271</sup> *Commodity Futures Modernization Act*, 7 U.S.C. § 1 (2000), *supra* note 6.

<sup>272</sup> *Ibid.*

<sup>273</sup> Lukken, “Principles”, *supra* note 270.

<sup>274</sup> *Commodity Exchange Act*, c. 545, 49 Stat. 1491 (June 15, 1936) [United States].

<sup>275</sup> *Ibid.*

Principles-based derivatives regulation could be a practical way to achieve the new regulatory goals in Thailand given their advantages over rules-based regulation in risk management and the promotion of innovation.

### **3. Connection to Thai Regulatory Practice**

There may be obstacles to adopting a new approach in Thailand. For instance, the SROs may not be advanced enough to assume more regulatory responsibility, and the SEC is not as experienced as the U.S.SEC and the AMF in Québec. A principles-based approach may, nonetheless, fit well with Thai regulatory practice.

For example, the Thai government encourages self-regulation although some organizations are still very small. With government backing, more than 10 self-regulatory organizations have set up since the establishment of the SET, such as the Thai Bond Market Association, the Association of Securities Companies, the Securities Analysts Association and the Thai Investors Association. The Thai SEC encourages self-regulation and collaboration. Principles-based regulation will definitely promote this practice. As is shown in Québec, the benefits of collaboration are well appreciated by the AMF. This approach supports regulator encourages rules-making power and encourages the practice of self-regulation.

It is possible that the Thai government would consider a principles-based regulatory approach for the Thai Derivatives Market. The Thai government has shown a willingness to adopt Western market practices as long as the Western experience also works in Thailand. Consider, for example, the history of the SET. In 1969, the World Bank recommended Dr. Sidney M. Robbins from Columbia University to the Thai government. Robbins had previously served as Chief Economist at the SEC in the U.S.

He examined ways in which the Thai capital market could be developed. The Bank of Thailand also formed a Working Group on Capital Market Development to establish the stock market during the same year. In 1970, Robbins produced a comprehensive report entitled “A Capital Market in Thailand”.<sup>276</sup> This report became the master plan for the future development of the Thai capital market. The *Securities Exchange Act*<sup>277</sup>, enacted in 1992, was also modeled on U.S. federal securities laws.

Thailand is a good example of a developing country where a newly established derivatives market is expanding quickly. Taking a principles-based approach does not mean getting rid of the rules. Core principles could be combined with current rules. However, a principles-based approach has more promise for achieving the new goals of risk management and innovation. It would better serve the derivatives industry in the long run.

#### **IV. SUMMARY**

While rules-based derivatives regulation in Thailand may be a product of particular circumstances in Thailand, in the long-run it may not be conducive to a competitive derivatives market. Other jurisdictions, such as the U.S., the U.K. and Québec, are turning to a principles-based approach. Other countries are likely to follow suit. Since a principles-based approach is better-suited to responding to the rapid pace of change in derivatives markets, jurisdictions with a principles-based approach are likely to have more competitive derivatives markets. If Thailand continues with its rules-based

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<sup>276</sup> Thailand, Stock Exchange of Thailand, “History of the Stock Exchange of Thailand”, online: SET <[http://www.set.or.th/en/about/overview/history\\_p1.html](http://www.set.or.th/en/about/overview/history_p1.html)>.

<sup>277</sup> *Supra* note 258.

approach, its derivatives markets may not remain competitive and, in the long-run, Thailand may have to switch to a principles-based approach. While Thailand may lack capacity at both the regulatory and self-regulatory organizational levels, adopting a principles-based approach is more likely to develop this expertise than a rules-based approach. This may be true for other countries as well, whether they are developed or developing countries. If they are going to have competitive derivatives markets, they may need a principles-based approach to regulation. Taking such an approach at an early stage is more likely to create the necessary regulatory expertise of both regulatory and self-regulatory organizations.

## Conclusion and Proposal

One of the goals of this thesis has been to examine and compare rules-based and principles-based approaches to the regulation of derivatives. It has introduced the derivatives market and highlighted the potential complexity of derivatives and the pace of change in derivatives markets. Derivatives are popular risk management tools and important components in hedging and speculation portfolios. Both over-the-counter and exchange derivatives markets have been expanding rapidly. Investors are seeking higher liquidity and risk avoidance through new and increasingly complex derivatives. Financial facilitators are looking for good practices to provide secure and efficient operations and services. A regulatory framework for derivatives markets should be responsive to these features.

Principles-based and rules-based approaches to regulation have been compared. Regulatory practices in the U.K. and the U.S. provide a general picture of the two approaches. A principles-based and outcome-oriented approach has the advantage of flexibility suitable to ever-changing derivatives markets but has the potential disadvantage of uncertainty. A rules-based and process-oriented approach to regulation has the advantage of transparency and consistency but has the potential disadvantage that it might not be responsive to changing derivatives market conditions and might encourage mere technical compliance.

The thesis has also considered the suitability of principles-based or rule-based approaches in regulating derivatives markets through the lens of the Thai *Derivatives Act* and the Québec *Derivatives Act* and has argued that the Thai *Derivatives Act* takes a primarily rules-based approach while the Québec *Derivatives Act* takes a primarily

principles-based approach. The Thai approach is to regulate with prescriptive provisions and to take a process-oriented approach to the day-to-day supervision of derivatives markets in a centralized regulatory system. The Québec principles-based approach takes an outcome-oriented and collaborative regulatory approach to managing risk in derivatives markets. These different approaches may, in part, be the product of differences in regulatory history, expertise, and market capitalization.

The thesis has commented on the two regulatory systems and has compared the two derivative markets. It argues that Québec's longer history of securities markets and derivatives markets, together with its degree of derivatives market specialization and trading volume, is conducive to creating the regulatory expertise and self-regulatory organization experience to support a principles-based approach to derivatives market regulation. Québec adopted a principles-based approach for more flexibility and competition in the developed market. Thailand has set up the infrastructure for derivatives markets using a rules-based approach. While a rules-based approach may have served the goal of establishing the derivatives market, a principles-based approach has advantages in serving the goals of risk management and innovation in derivatives. This preference for a principles-based approach is likely to apply to both developing and developed countries that have established derivatives markets.

The thesis concludes that once the basic infrastructure for a derivatives market has been established and the regulatory goals of risk management and product innovation have become more important, even in developing countries like Thailand, to take a principles-based approach.

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