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Canada

Informed Financial Decisions

IFID Centre 2010 Annual Report



# Bridging the Divide

## Message from the Executive Director

It has been almost ten years since the Deputy Director of the Fields Institute, at the time Dr. Bradd Hart, asked me to consider launching a dedicated centre that would bring together local talent in applied mathematics and statistics, to help focus commercial activities and attention on “problems” in quantitative personal finance and insurance.

Although the logistics were challenging at first with many plans and little budget, The IFID Centre – which is an abbreviation for Individual Finance and Insurance Decisions Centre – was eventually incorporated as a not-for-profit entity on November 9, 2000. After much effort and help from our founding board members Tom Salisbury and Ted Cadsby, we identified sponsors and researchers who shared our passion and our mission.

Our mandate from the very beginning was to bridge the gap between scholarly/academic research and its real-world application to individual investors and consumers. Our main objective was to generate useful knowledge in an accessible manner so that individuals can make better and more informed financial decisions. In some sense, the IFID Centre viewed and modeled itself as an impartial, unbiased and rigorous “laboratory” for testing financial wisdom.

Indeed, I am glad to report that the range of activities conducted during the last ten years have greatly exceeded my expectations. During the last decade our Board of Directors, Scientific Committees and I have jointly co-organized 8 full-day seminars and 3 workshops. During this time over 50 scholars, academics and practitioners have shared their insights at our annual conferences. Researchers affiliated with the IFID Centre wrote and published over 50 white papers (all available at [www.ifid.ca](http://www.ifid.ca)) and we supported over 20 doctoral candidates, post-doctoral researchers and faculty members in their respective research work.

This was all possible because of the contributions and support from our gracious sponsors over the last ten years, which we are now taking the opportunity to acknowledge and thank. And so, without being too boastful, in this report you will find a description of what we like to consider our “greatest hits” during our first decade.

Moshe A. Milevsky, Ph.D.  
Toronto, Fall 2010

## Corporate Profile

The IFID Centre is a non-profit corporation dedicated to generating advanced research at the intersection of wealth management, personal finance and insurance.

Located within the prestigious Fields Institute on the campus of the University of Toronto, the IFID Centre represents a growing network of affiliated researchers and associates that have helped numerous companies in the financial services sector, as well as government agencies, and individuals around the world.

The IFID Centre is formally affiliated with The Schulich School of Business, Canada’s largest graduate business school with successful programs in corporate finance, investments, financial services management and financial engineering. Each year hundreds of undergraduate and MBA students study personal finance at the Schulich Business School and York University’s Atkinson Faculty of Liberal and Professional Studies.

*Our main objective is to generate useful knowledge in an accessible manner so that individuals can make better and more informed financial decisions.*

## Message from the Office Manager

*I am privileged to have served as the office and operations manager at the IFID Centre – as well as the liaison with the Fields Institute – for the last five years. As the main contact for all our daily activities, as well as the permanent link with our rotating Board of Directors, I have been fortunate to meet some of the most dedicated, intelligent and inspiring researchers and scholars in their fields. In our mission to innovate and educate, we are grateful to have the ongoing support and generosity of the sponsors listed below.*

Alexa Brand  
Toronto, Fall 2010

ADDING  
VALUE

### Supporting the IFID Centre

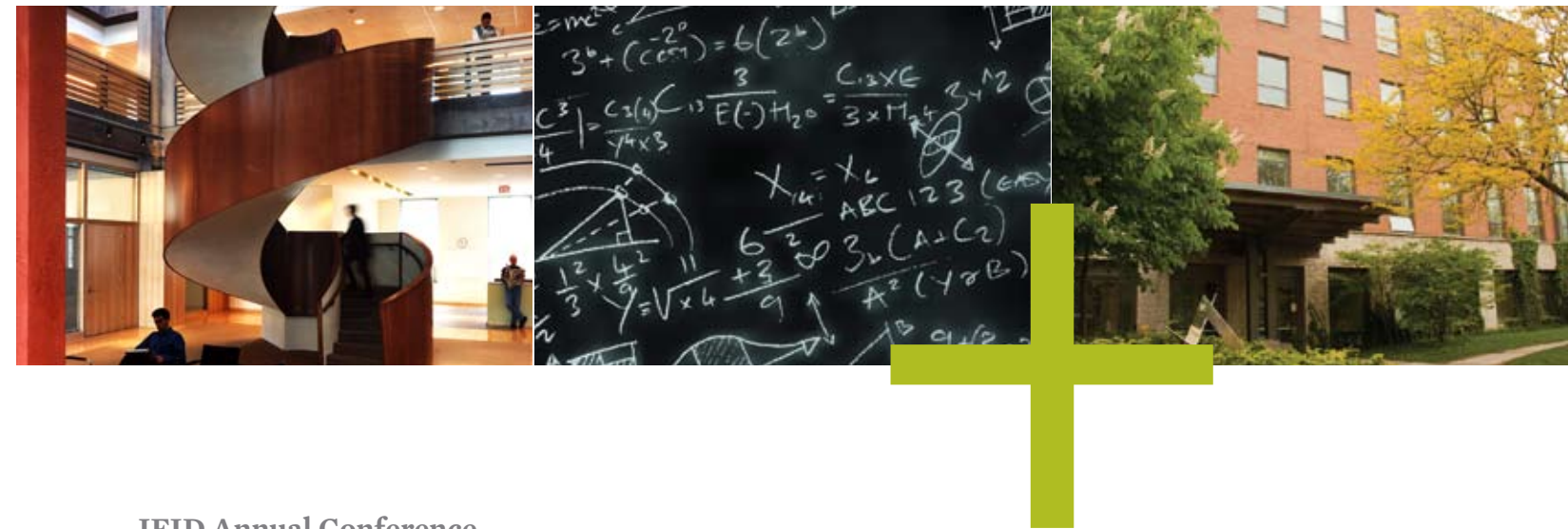
#### Corporations

AIC Limited	Mass Mutual
AIM Trimark	Merrill Lynch
AXA Distributors	MetLife
BMO Financial Group	Morgan Stanley Smith Barney
CANNEX Financial Exchanges	Nationwide Financial
CI Investments	Pacific Life
CIBC Wood Gundy	Prudential Insurance
Genworth Financial	Standard Life
Ibbotson Associates	SunAmerica
ING Annuities	Sun Life Financial
Investors Group Financial Services	Transamerica Capital
John Hancock	UBS Financial Services
Manulife Financial	Van Kampen Investments

#### Non-Profits & Government

Banco Central del Uruguay	MITACS
Fidelity Research Institute	National Association of Security Dealers (NASD)
Fields Institute	Retirement Income Industry Association (RIIA)
Florida State Board of Administration (FSBA)	Society of Actuaries (SOA)
Industry Canada	
Investor Education Fund	

# MEETING of the MINDS



### IFID Annual Conference

Every year the IFID Centre organizes a conference which takes place at our host institution; currently the Fields Institute for Research in Mathematics Sciences. Each conference has a unique annual theme but is generally devoted to the topic of “personal wealth management.”

Our inaugural annual conference took place at the Fields Institute in the Fall of 2001, with a roster of high-level keynote speakers including Professor Richard Roll (UCLA), Professor Zvi Bodie (Boston U.) as well as Professor Laurence Kotlikoff (Boston U.) Indeed, we launched with a big bang.

Since then our annual conference has included keynote presentations and seminars from world renowned scholars like Professor Terrance Odean (UC, Berkeley), Professor Jim Poterba (MIT), Professor Chester Spatt (CMU), Professor William Reichenstein (Baylor U.), Professor Phelim Boyle (U. of Waterloo), Professor Jeffrey Brown (UIUC), Professor Ragnar Norberg (LSE), Professor Stanley Pliska (U. of Illinois), Professor Roger Ibbotson (Yale), Professor Eitan Sheshinski (Princeton U.), Professor Virginia Young (U. of Michigan) and Professor Steven Haberman (City U.) amongst many others.

In addition – to balance the scholarly and theory oriented presentations – the annual conference features presentations from well-regarded practitioners in the financial services industry. During our first ten years of events, conference participants heard from: Dr. Peng Chen, Dr. Sid Browne, Dr. Paul Kaplan, Dr. Robert Reitano, John O’Brien, Arthur Fliegelman, Harry Marmer and Malcom Hamilton.

These events and conferences are open to graduate students, researchers, practitioners and the public at large for a small nominal fee. Alas, the bulk of the expenses and costs associated with our annual conference are absorbed directly by the IFID Centre and implicitly supported by the sponsors and contributors listed on Page #2. Some of them have sponsored specific events linked to their interests and lines of business.

We are especially excited about our 10th anniversary conference taking place in the end of October 2010, under the general theme of Lifecycle Finance, Insurance and Economics (LIFE) at which the speakers include Menahem Yaari (Hebrew U.), Scott Richard (Wharton), and Takao Kobayashi (Tokyo).



# How we function

## Support and Awards

In addition to the annual conferences, workshops, seminars and their associated costs, the IFID Centre supports a variety of additional activities. Here are some of the highlights.

### 1. MITACS Project

MITACS (Mathematics of Information Technology and Complex Systems) is a federally funded NCE (National Center of Excellence), which provides matching funds to stimulate university/private sector research partnerships. In 2008/2009 and 2009/2010, the IFID Centre and MITACS jointly funded the research project “Finsurance” led by Prof. T. Salisbury (York), with co-investigators Profs. H. Huang (York) and S. Jaimungal (Toronto). This funding was used to support mathematics and statistics graduate students (8 at York, 3 at Toronto), postdoctoral fellows (2 at York), and organize conferences (3) – all focused on finance, insurance, or both. IFID personnel were available to advise students about research projects. The goal of the project is to foster research at the interface between finance and insurance, and to train new researchers working at that interface. But more than supporting individuals, the project attempts to build a network of researchers in this area, and focus attention on the need for improved mathematical modelling when dealing with combinations of financial and actuarial risks. As a result, the project was able to scale up for 2010/2011 and 2011/2012: The IFID centre has now been joined by 8 other private-sector partners who fund the project alongside MITACS, and the research network has expanded to include 10 faculty, at York University, the University of Toronto, the University of Montreal, and the University of Waterloo.

### 2. Ph.D. Awards

To encourage and promote research on personal financial decision making, the IFID Centre holds an annual student paper competition. The competition is open to all doctoral students who conduct research that

is relevant to all aspects of personal finance. These areas include, but are not limited to, portfolio choice, investments, wealth management, retirement planning, pensions and actuarial science, life insurance and annuities.

The award is an amount of US\$5,000. The submitted papers are reviewed by our Scientific Committee. The author of the winning paper is invited to accept the award and present the paper at an annual IFID Centre conference in Toronto, Canada.

The competition started in 2009. Many high-quality papers were submitted. In the end, two winners shared the award. Their names and the titles of their papers are: Luis Goncalves-Pinto (University of Southern California): *How Does Illiquidity Affect Delegated Portfolio Choice?*, and Kim Peijnenberg (Tilburg University): *Optimal Annuitization with Background Risk and Equity Exposure During Retirement* (co-authored by T. Nijman and B. J. M. Werker).

For 2010, the competition has again been a success. This year, the award goes to Svetlana Pashchenko (University of Virginia): *Accounting for Non-Annuitization*.

The IFID Centre is committed to supporting research that will help to provide a better understanding of how individuals make their financial decisions. We look forward to holding this competition again in years to come.

### 3. Ad Hoc Research support

We provide ad-hoc grants and scholarships to graduate students, doctoral candidates and post-doctoral fellows who are conducting research in areas deemed relevant and connected to our mandate of helping individual consumers make better economic decisions in their personal life. Upon award, these grant payments are transferred to

the University institution at which the supported candidate is resident. The funds are managed and dispersed by a supervising faculty member who is affiliated with the IFID Centre. All we ask for is acknowledgement in any published output and public presentations of the relating research.

### 4. Direct Support to York University

For three years (2007–2009), the IFID Centre has provided a research grant to Profs. D. Promislow and T. Salisbury, of York University, to stimulate York research at the interface between finance and insurance. These funds have enabled York to support 1 PhD student and 3 postdoctoral fellows, supported a research visit by a distinguished Chinese mathematician (Prof. Shige Peng), and to hold a finance conference at York. This grant led directly to the formation of the “Finsurance” project team, that went on to secure funding from MITACS (see above). IFID subsequently tapered off the grant to York, and now supports this project team through a partnership with MITACS.

### 5. Visiting Scholar Program

The IFID Centre has a visiting scholar program in which prominent and internationally renowned researchers in the fields of finance, insurance or economics are invited to spend a few days up to a month at the offices of the IFID Centre. This is usually organized around the time of our annual conference and involves academics who are publishing and conducting research work in fields related to ongoing projects at the IFID Centre. The IFID Centre covers their travel and accommodation expenses in addition to a modest honorarium.

## SMART SOLUTIONS

*IFID has worked with the financial media to publish our results to the widest possible audience. Regular print, broadcast and online coverage has enabled us to communicate to huge numbers of consumers, educating them about how to make better financial decisions. We are dedicated to using all means at our disposal to get the word out.*

## Our Most Popular Projects

### 1. Mortgage Financing

One of our first corporate sponsors asked us to examine the way in which Canadians finance the purchase of their home, and specifically whether it was better for them to lock-into a fixed rate mortgage as opposed to a floating-rate loan. The resulting white paper (with contributions from Professor Bernie Wolf) that we released and made available in March of 2001 used statistical Monte Carlo techniques to establish that floating rate mortgages, despite the risks they posed, resulted in substantial personal savings over long periods of time. Indeed, this “fact” and the supporting research report have been downloaded, quoted and cited hundreds of times by the media, and have become a staple of mortgage broker wisdom in Canada.

### 2. Tax-Efficient Investing

One of the largest fund companies in Canada – and early sponsor of the IFID Centre – asked a number of our affiliated academic researchers in mid-2003 to examine the performance of mutual funds in Canada on an after-tax basis, to determine whether this had any impact on their relative ranking. Motivated by this request, after carefully reviewing the performance and historical track record of all Canadian equity funds we released and published together with Professor Amin Mawani (in the Canadian Tax Journal) a white paper that reported how “taxes scramble rankings.” Mutual funds that appear to have strong records on a pre-tax basis, in fact lagged on an after-

tax basis and vice versa. This research was widely reported on by the Canadian financial media, and was the impetus for various submissions and proposals to the Ontario Securities Commission (OSC) and eventually motivated Canadian mutual fund evaluators (like Morningstar) to adopt and report tax-adjusted rankings.

### 3. Retirement Income Guarantees

As baby-boomers approach their retirement years with very little pensionized™ income, a number of insurance companies in North America have created new products with embedded guarantees and associated promises. The IFID Centre has become a leader in all aspects of research related to these so-called Guaranteed Lifetime Withdrawal Benefits (GLWBs). In fact, we – together with Professor Tom Salisbury – first identified the under-pricing of the living benefit guarantees in a series of research and practitioner articles in 2006/2007, prior to the financial crises, and we have been at the forefront of cutting-edge research on optimal “product allocation” strategies ever since. This research also served as the impetus for launching our sister company The QWeMA Group which focuses on commercializing research in this area.

### 4. Annuity Database

Over the last decade we have carefully collected over half a million individual annuity quotes with the help of CANNEX Financial Exchange (one of our sponsors.) These quotes have been cleaned, tabulated, displayed and are continuously updated on our website

(www.ifid.ca). It is fast becoming the definitive reference for historical annuity quotes in Canada for anyone seeking this information for calculation of retirement benefits. The time-series we have created has been accessed many thousands of times over the last ten years and we continue to receive requests for additional analytics around the annuity index and associated calculations.

### 5. Human Capital Allocation

One of the emerging trends in applied portfolio management and asset allocation has been the consideration of the extended balance sheet and the inclusion of human capital in dynamic asset allocation decisions. We have embraced this way of thinking about personal finance – partially inspired by work done jointly with Professor Roger Ibbotson at Yale University – and have thrown ourselves into this research. The output from this project resulted in a series of papers published in the *Journal of Risk and Insurance*, the *Journal of Banking and Finance*, the *Financial Analysts Journal* – all jointly with Professor Huaxiong Huang (York U.) and a number of graduate students. Most recently this research project led to a published book entitled: “Are You a Stock or a Bond?” (FT/Press 2008) and a feature article in the Wall Street Journal in the Summer of 2010. This material has served as the basis for numerous presentations and seminars attended by thousands of financial advisors, planners and brokers in North America.

# Analytically Speaking

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## Seminars and Lectures

To fulfill our dual mandate of both conducting and disseminating research on personal finance to a wide audience, the executive director and other members of the IFID Centre periodically give contracted seminars to audiences of financial planners, investment advisors, insurance agents and individual investors across North America. These seminars are requested directly by sponsors and negotiated on a case-by-case basis or undertaken as a bulk arrangement. For more information about seminars, topics, keynote presentations and other related activities available from the IFID Centre, contact our office manager, Alexa Brand, at [abrand@ifid.ca](mailto:abrand@ifid.ca) or 416.348.9710 ext. 5060.

## Financial Governance and Highlights



# Strength *in* NUMBERS

The day-to-day operations of the IFID Centre are handled by the full-time operations manager, who is available during regular business hours at our office located at the Fields Institute, in downtown Toronto.

The executive director of the IFID Centre (currently Moshe A. Milevsky) is the primary signing officer of the corporation. He determines budgets and sets research priorities together with the Board of Directors. The composition and membership of the Board of Directors is rotated every 3-5 years. Currently the board consists of Professor Narat Charupat (McMaster U.) and Professor David Promislow (York U.)

The board meets once per year, usually after our annual conference, which also acts as the ad hoc scientific committee for vetting research papers, thesis awards, seminar and speaker presentations. The final decision and ultimate responsibility for all financial matters rests with the executive director.

In terms of finances, as of fiscal year-end 2010, the IFID Centre has a surplus endowment – technically a cumulative surplus – of approximately \$1,000,000 (CAD) which is intended to support staff, researchers and our various activities. The surplus endowment is managed very conservatively since our intent is to gradually spend down these funds over time. Our plan is to

finance future activities with new grants and contributions so that there is a link between ongoing sponsors and their projects.

In general terms, during our first decade (2000 to 2010) The IFID Centre spent over \$300,000 (CAD) to support and maintain our conferences together with their associated expenses and honorariums. In addition, over \$200,000 has been distributed as direct grants to researchers and \$75,000 has been given-out as scholarships, research assistantships, doctoral fellowships, thesis awards and payments to research associates. Our staff and overhead expenses cost us approximately \$100,000 per year.

Note that the IFID Centre is not a registered charity nor does it plan to seek such status in the future. Rather, we are formally organized as a non-for-profit corporation in which our members consist of our board of directors. Periodic contributions from our sponsors and clients provide the necessary funding for our activities on a case-by-case basis.

Finally, we are extremely grateful to the Fields Institute for giving us access to their innumerable resources, conference and seminar venues, as well as the dedicated support-staff and services, without which it would have been impossible to conduct our activities during the last ten years.

