Bridging the Divide

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) 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

Message from the Executive Director

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

Supporting the IFID Centre

Corporations
- AIC Limited
- AIM Trimark
- AXA Distributors
- BMO Financial Group
- CANNEX Financial Exchanges
- CI Investments
- CIBC Wood Gundy
- Genworth Financial
- Ibbotson Associates
- ING Annuities
- Investors Group Financial Services
- John Hancock
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Non-Profits & Government
- Banco Central del Uruguay
- Fidelity Research Institute
- Fields Institute
- Florida State Board of Administration (FSPA)
- Industry Canada
- Investors Education Fund
- MITACS
- National Association of Security Dealers (NASD)
- Retirement Income Industry Association (RIIA)
- Society of Actuaries (SOA)

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 Bietano, John O’Brien, Arthur Fliegelman, Harry Marmer and Malcolm 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 Kohayashi (Tokyo).
1. MITACS Project
MITACS (Mathematics of Information Technology and Complex Systems) is a federally funded NCE (National Centre 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 “Finsur- ance” led by Prof. T. Salisburry (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, and 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. The project supported the project team, the project team, the project team 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 secure for 2010/2011 and 2011/2012.

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.

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 related research.

4. Direct Support to York University
For three years (2007-2009), the IFID Centre has provided a research grant to Profs. D. Promislov 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 the 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 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.

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.

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-in to a fixed rate mortgage as opposed to a floating rate mortgage. 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 our first corporate sponsors asked a number of our affiliated academic researchers in mid-2000 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 Roger Ibbotson (also the Jahnson) 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 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 retire- ment 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 QRiskM Group which focuses on commercializing research in this area.

4. Annuity Database
Over the last decade we have carefully col- lected over half a million individual annuity quotes with the help of CANXEX 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 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 port- folio management and asset allocation has been the consideration of the extended bal- ance sheet and the inclusion of human capi- tal 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 our- selves into this research. The output from this project resulted in a series of papers published in the Journal of Risk and Insur- ance, 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 was based on numerous presentations and seminars attended by thousands of financial advisors, planners and brokers in North America.
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 or 416.348.9710 ext. 5060.

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.
Ten years of achievement, growth and awareness add up, yielding a strategic plan for the decade ahead. We will continue to organize our IFID conferences, devoted to quantitative wealth management, personal finance and insurance. We will keep nurturing all-important scholarly activities in these fields through grants, scholarships and research support from our endowment fund. And we will solicit new funding from corporate sponsors and government bodies, to explore new areas of research related to our central mandate: Generating the knowledge that individuals need to make informed economic decisions.