The Quebec City Conference 2014

PPF

Main Conclusions

2014

Public Policy Forum
on Venture Capital and Innovation

Quebec City, October 21 and 22, 2014

Message From The Quebec City Conference President

The Quebec City Conference (QCC) was created 11 years ago on the belief that, in a world where capital and markets know no borders, joining forces, resources and expertise was the right strategy to maximize value for each participant. We believe that this mission is more essential today than ever.

The QCC is a not-for-profit corporation whose mission is to contribute to the identification and resolution of capital market inefficiencies that lead to underinvestment in activities or sectors that generate societal benefit. In more specific terms, its mission consists of the following:

1. **To create customized by-invitation-only forums**, each one addressing a specific need in the market place. The main ones are the Public Policy Forum on Venture Capital and Innovation created in 2007, and the Institutional Investors Roundtable (IIR) created in 2010 and which has evolved into a community of over 40 sovereign wealth funds and large pension plans interested to improve their capacity around long-term investment activity. Other initiatives, although still in an experimental stage, are currently being considered.
2. **To provide these forums** with financial and logistical support and targeted research, thus playing the role of a foundation.

There has never been a greater need than in this time of economic turmoil for a thriving ecosystem supporting high potential technology entrepreneurship – public policies ensuring an appropriate legislative, fiscal and regulatory environment; public/private programs to support venture capital in its various forms; creative private initiatives to finance investments in innovation; collaboration with philanthropic investors to support “impact investment”, etc. - to create and sustain next generation technologies – the next Google, Microsoft or Genentech.

Governments around the world understand that startup companies, when supported by venture capital, can transform innovations of R&D into broadly-based economic gain and societal benefit through a unique combination of financing and professional management.

Unfortunately, venture capital is struggling in all major economies. This explains why most governments in the industrialized world actively support the venture capital industry and high potential technology entrepreneurship.

But it is extremely difficult for government – or any single group of stakeholders – to assume leadership in such initiatives because of the required coordination among the various groups whose contribution is essential to cohesive action, including: VCs, corporate investors, pharmaceutical companies, institutional investors, universities and research centers, “business angels”, academics and experts and crown corporations such as economic development banks.

Compounding this difficulty is that this ecosystem is constantly reinventing itself. New models of entrepreneurial finance are emerging and evolving rapidly: business angels, accelerators, various forms

of crowd funding, etc. It is therefore increasingly complex to keep track of all such initiatives and to link efficiently with their stakeholders, which adds to uncertainty.

There is a need for a platform where persons responsible for public policies around technology entrepreneurship can efficiently share information, views and experience on specific "cutting edge" issues, not only with their peers from all advanced economies but also with the leaders of the main groups of interested stakeholders of the startup ecosystem, for the objective of enabling public policies and innovative public and/or private initiatives fostering high potential technology entrepreneurship.

The Public Policy Forum on Venture Capital and Innovation (PPF) was created in 2007 to fulfil these objectives. Again, we believe that this mission is today more essential than ever.

We would like to thank all of the panelists, members of the advisory committee, volunteers and participants who have invested time and energy to ensure another successful PPF

A special "thank you" to the governments that offered their financial and logistical support to the Public Policy Forum. We express our gratitude to the Government of France that, through BpiFrance, joined the governments of Canada, Quebec, Ontario and British Columbia as partners in this project. They came together based on the conviction that joining forces, resources and expertise is the right strategy to maximize value for each participant. We believe that this generous and visionary precedent will also benefit other jurisdictions faced with the challenge of creating wealth through innovation.

Finally, a warm thank you goes out to the President of the PPF, Mr. Gilles Duruflé, its Chair, Mr. Yigal Erlich, and the Forum's Special Advisors, Dr. Josh Lerner, Dr. Thomas Hellmann and Dr. Ajay Agrawal.

Sincerely,

Christian Racicot

Christian Racicot
Co-Founder and President
The Quebec City Conference

About the PPF

Now in its eighth year, the Public Policy Forum on Venture Capital and Innovation ("PPF") has evolved into the premier gathering of public policy designers and industry leaders (GPs, LPs academics and other experts) from all major economies, responsible for encouraging high-potential entrepreneurship and venture capital.

It is a by invitation only international platform that gives participants an opportunity to exchange views, experiences and concerns regarding public policies in support of a buoyant venture capital ecosystem for financing emerging technology companies. Its proximity with the Institutional Investors Roundtable would allow its participants to engage with leading institutional investors from around the world having a renewed interest in the financing of innovation.

The PPF is operated by the QCC. The Chairman of the Forum is Yigal Erlich, founder of the Yozma Group (Israel) and father of the Israeli venture capital industry. Dr. Josh Lerner, Jacob H. Shiff Professor of Investment Banking at Harvard Business School and a world leading authority on venture capital and private equity is PPF's Special Advisor. The President of the Forum is Canadian expert Dr. Gilles Duruflé.

About the Quebec City Conference

QCC is a private, by-invitation-only, not-for-profit annual meeting designed for leaders of the international private capital community and public policy makers, industry experts and academics supportive of long-term investment activity producing societal benefit, in a format intended for high-level exchange and reflection.

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Message from the President and Chair of the Public Policy Forum on Venture Capital and Innovation ("PPF")

The importance of University based accelerators should not be overlooked

As chairman, I opened this year's PPF by stressing that the ideas shared during the conference needed to be heard well beyond the meeting room walls and be both impactful and influential. It is imperative that the voices of those participating in the PPF reach out a larger audience.

So, what are the messages that we need to convey at the end of the 2014 PPF?

Based on the research, presentations and discussions of the 2014 PPF that gathered more than 100 policy designers, investors and industry experts, we would like to recommend that the following become the basis of a position paper.

- Universities play an important role in the ecosystem as sources of ideas for businesses, some rooted in deep science. They have the ore that everyone wants to mine.
- Well designed university based accelerators (UBAs) help an increasingly large number of successful entrepreneurs to emerge from our universities and access funding from business angels and venture capital funds.
- They tend to address needs not easily served by the market: (i) they provide university-based entrepreneurs (students, researchers, and faculty) with support at earlier stage than would the commercial accelerators, (ii) they leverage university resources and equipment and support entrepreneurship in deep science domains not normally served by commercial accelerators and (iii) they benefit from non-dilutive funding (philanthropy, university, governments and corporations). Moreover, the best UBAs complement commercial accelerators as successful companies transition from UBAs to the likes of Y-Combinator and Techstars.
- There is no one-size-fits-all model when it comes to fostering university-based entrepreneurship. Deep science and capital intensive domains require models other than those currently used for the development of software and web-based startups, many of which are still being developed.
- Universities compete for talent and students, but support for the development of entrepreneurship is now part of the equation. The first ones to figure out how to deal with this issue will enjoy a competitive edge on the others.

To sum up, the importance of UBAs should not be overlooked. They address needs that are not easily served by the market. They make a strong contribution to the building of the entrepreneurial ecosystem and they will give most innovative universities an edge on their competitors.

We consider this theme vitally important and hope that policy designers, university administrators and industry leaders will consider translating it into action.

Three other important takeaways from our discussions should also be underlined.

- The recent renewal of early stage financing models (business angels, accelerators, crowdfunding, seed funds) is having a strong positive impact on regional ecosystems. Scale-up may well be the next big challenge for public policy as many ecosystems outside of the US face difficulties growing successful independent tech companies.
- Some large institutional investors are developing innovative approaches to the financing of innovation. Even if they are still a minority, they may well be at the cusp of new developments that are worth watching. We believe that ways can be found leading to greater institutional investor involvement in the financing of innovation.
- Far from Silicon Valley and Boston, Asian countries such as Taiwan have developed their own tech ecosystems using different models that have proven to be very successful.

If you agree with these messages, we'd like to ask each of you to make them known. Our team is working through a variety of channels to make our voice heard.

We hope that you will enjoy reading this report.

Please note that all the documentation related to the 2014 PPF and all previous PPFs is available at the following address: http://quebeccityconference.com/en/archives.php

Sincerely,

Yigal Erlich
Chairman
Public Policy Forum on Venture Capital and Innovation
Founder, Chairman and Managing Partner
The Yozma Group

Gilles Duruflé
Executive Vice President
The Quebec City Conference
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Public Policy Forum on Venture Capital and Innovation

Main Conclusions

1. Introduction

The 2014 PPF was organized around three main themes:

- Fostering entrepreneurship within universities: university-based accelerators (UBAs)
- Institutional investors' views on the financing of innovation
- International perspectives: the Taiwanese model linking research institutions, large corporations and financing instruments to create new startups

The keynote speaker Professor Josh Lerner, Jacob H. Schiff Professor of Investment Banking, Harvard Business School, opened the conference.

In the afternoon, actively moderated breakout sessions on subjects derived from these themes allowed for more direct interaction among the participants.

2. Keynote presentation: "The best of times or the worst of times? The evolving world of venture capital"

In his discussion of the state of the industry, Professor Josh Lerner first reviewed recent positive developments (a surge in IPOs, returns and fund raising). He then went on to address some of the challenges for public policies designed to support the venture capital ecosystem, namely the industry's geographical and return concentration. He also discussed the potential impact of two recent developments: the entry of alternative models and sources of early-stage funding (business angels, accelerators, crowdfunding) and the growing tendency among LPs' to invest directly, thus bypassing GPs.

Historically speaking, both a disproportionate share of venture capital and positive returns have been concentrated in leading US clusters (Silicon Valley, Boston, New York, and Southern California). Funds based in these areas largely outperform other players not only when they invest in their own region, but in others as well. On the other hand, returns in peripheral areas of the US as well as in most other countries remain disappointing.

Moreover, not only are positive returns geographically concentrated, they are also sharply skewed towards a small proportion of best performing funds that will probably continue to perform at a high level throughout their life. It is highly likely that first quartile managers will remain in the same performance bracket in their next fund. The same applies to bottom quartile managers. Research suggests that this is mainly due to the managers' specialization and skill levels.[1] This makes the building of a performing venture capital industry in peripheral localities all the more difficult.

However, there are signs that this situation may be changing as the industry bifurcates and technology radically changes the tech start-up environment. Statistics show that globalization is accelerating and the VC industry is growing in peripheral ecosystems such as Canada, China, Oceania and Western Europe.

The industry's bifurcation between large brand names and small seed and early stage funds has been going on for several years. Yet, there are questions as to the VC industry's ability to scale up. Research tends to show that beyond a certain size, returns begin to decline. At the other end of the spectrum, supported by changes in technology (cloud computing, software as a service, lean start-up models) that have drastically reduced the cost of starting a new business, the rise of alternative models for seed funding (business angels, accelerators, crowdfunding and small seed funds) has changed the game and is opening up new possibilities for peripheral regions.

The rise of accelerators and their impact on regional ecosystems represent one of these significant changes. Recent research "provides evidence of a large and statistically significant impact of the founding of accelerators on the number of early stage venture deals and early stage investors in the

[1] Paul A. Gompers, Anna Kovner, Josh Lerner, David S. Scharfstein, "Performance Persistence in Entrepreneurship", Harvard Business School, Working Paper 09-028, 2008.

accelerator's metropolitan area".[2] This impact is not confined to companies that graduated from the accelerators. "Across these metropolitan areas, on average, seed and early stage financing deals of start-ups that graduated from the accelerator represent only 30.4% of the increase in the annual number of seed and early stage financing deals post-treatment. Thus, the effect of accelerators on entrepreneurial finance activity in the region is not a treatment effect for accelerated companies alone, but rather represents a more general effect on the general equilibrium of financing activity in the region, consistent with the notion that an accelerator program may serve as a catalyst to draw attention to the region more generally".[3]

TechStars in Boulder, CO, and The Brandery in Cincinnati, OH, are particularly striking illustrations of these econometric results. "In the period preceding the founding of TechStars, Boulder saw an average of 4.8 seed and early stage software and IT VC deals per year. Post-arrival of TechStars, from 2007-2013, the average number of deals in the Boulder MSA rose to 10.7 deals per year, a 5.9 deal increase. However, during this period, only 2.3 deals per year, on average, involved companies that had graduated from TechStars Boulder. Similarly, consider Cincinnati, OH, home of The Brandery, and accelerator founded in 2010. Pre-arrival of The Brandery, Cincinnati experienced, on average, 0.55 early stage VC deals per year – about one deal every two years. After The Brandery was established, in the period 2010-2013, Cincinnati averaged 4 deals per year—an increase of 3.45 deals per year. However, only 1.45 deals per year on average in this period involved a Brandery graduate startup".[4]

The authors note that given the rise of business angels as an alternative source of seed and early stage funding, it is highly likely that accelerators may also have a positive impact on angel investing and to an even greater extent than on VCs. "We note that as the average seed and early stage investment size has fallen in these industries over last 15 years, primarily due to reduction in the cost of experimentation (Ewens, Nanda and Rhodes-Kropf (2013), angels have begun to emerge as a viable substitute for VC seed and A round investment. While we do not observe angel funding, it is likely that the effects we see for VC investment are also present at the angel level, and may be many times the VC effects".[5]

The first panel (see below) came to the same conclusion regarding university-based accelerators (UBAs). It detailed the logic by which UBAs are helping a larger number of successful entrepreneurs to emerge from universities and attracting more funding activity from business angels and VCs.

The dissatisfaction of institutional investors and sovereign wealth funds with the dominant LP/GP model is well documented: excessive fees, misalignment of interests, lack of transparency, etc. Research supports the claim that over the past decade, this model failed to properly align interests regarding compensation inasmuch as average GPs compensation relied far more on fees than carried interest.[6]

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[2] Daniel C. Fehder and Yael V. Hochberg, "Accelerators and the Regional Supply of Venture Capital Investment", MIT and NBER, September 19, 2014, p. 24.

[3] Ibid., p. 25-26.

[4] Ibid., p. 25.

[5] Ibid., p.24.

[6] Andrew Metrick and Ayako Yasuda, "The Economics of Private Equity Funds ", 2009.

In response to this situation, LPs are increasingly turning to co-investment and direct investment in venture capital and private equity. However, research results do not seem to be very encouraging so far, especially for venture capital: "We find that co-investments underperform fund investments, with the performance gap widening in the latter half of our sample (i.e., in the 2000s)".[7] In fact, solo investments by institutional investors outperform those of private equity funds, but only "in settings where information problems are less intense, such as local and later-stage transactions" and not in venture capital.[8]

At a time when large institutional investors continue withdrawing from venture capital funds, as illustrated by CALPERS' latest move, these findings may not augur well for the return of institutional investors to this asset class unless LPs discover new approaches. The second panel discussed this issue (see below).

Professor Lerner concluded with a few predictions: (i) venture activity is unlikely to disappear, (ii) globalization is likely to accelerate, (iii) the established order will be disrupted and (iv) increasing emphasis on value added will create opportunity for corporations and others.

[7] Lily Fang, Victoria Ivashina and Josh Lerner, "The disintermediation of Financial Markets: Direct Investing in Private Equity", January 13, 2014, p.4.

[8] Ibid., p. 5 and 26.

3. FIRST PANEL – UNIVERSITY-BASED ACCELERATORS (UBAS): ADRESSING JUDGMENT-RELATED MARKET FAILURES

This session was composed of two parts: first, a deep dive into the University of Toronto's Creative Destruction Lab by reflections by Professor Ajay Agrawal on the economics of university-based accelerators (UBAs); then, a panel highlighting the commonalities and specificities of four other UBA models, i.e., the Martin Trust Center for MIT Entrepreneurship, the NYU Entrepreneurial Institute, Ryerson Futures (Ryerson University) and Velocity (University of Waterloo).

Why do UBAs exist?

Ajay Agrawal, University of Toronto Professor and co-founder of the Creative Destruction Lab, opened the session by asking the following question: "Why do we have university-based accelerators?" After all, a university's mission is the creation and dissemination of knowledge. "Downtown's" job is to build businesses. Why would a university engage in building businesses?

His answer: there is a type of market failure that impedes the migration of university inventions from academia to the economy.

The inability of inventors and entrepreneurs to develop the judgment needed to build their businesses is at the root of this problem. While their inventions are based on outstanding research and the best among them have the skills and dedication to become entrepreneurs, they lack the judgment to set the priorities and milestones that will allow them to build their businesses. They run out of energy and capital. They fail because of bad choices.

Many teach judgment (professors, consultants, etc.) without necessarily having it. Those who do are the entrepreneurs who have succeeded in building thriving businesses. However, there is no efficient market for buyers and sellers of judgment to link those who have it with those who need it.

In Silicon Valley, this market is very effective because many individuals who have judgment have also held liquidity events, have the capacity to invest and have become angel investors. Once they put capital in a business, incentives are aligned to transfer their judgment.

Creative Destruction Lab

Creative Destruction Lab (CDL) was designed to address this type of market failure. It recruited seven of the most compelling entrepreneurs in Toronto (the G7 Fellows), individuals who have taken university prototypes to major liquidity events. The CDL's job is to transfer judgment to selected university-based entrepreneurs. It is particularly well suited for early-stage, science-based technology companies, especially those with links to research conducted in the university setting. One of its cornerstones is its focus on business and technical milestones. The G7 Fellows carefully identify milestones that increase the chances of success. The main objective of meetings taking place roughly every eight weeks over a nine-month period is to set new targets. Tenacious commitment to achieving them is of paramount importance for each venture admitted to the Lab. Individuals who are not fully committed to achieving their goals are periodically weeded out during the program, with less than half of those admitted in September still standing in June.

New tech ventures face three types of challenges: (i) technical risk (will it work at scale?), (ii) market risk (will customers buy the product?) and (iii) entrepreneurial risk (can this person deliver?). The Lab mainly addresses the third factor. Normally, half way through the program, either ventures have been dropped or a G7 mentor concludes that he has seen enough to become an investor. Incentives are then fully aligned for the transfer of judgment, sending out a strong positive signal to other investors in the tech community that (i) a young entrepreneur has been identified by a seasoned one, (ii) who has followed the former for several months (seen the movie, not only the picture) and (iii) has become an anchor investor in his/her new venture.

The Bionym and OTI Lumionics stories,[9] two companies that went through CDL, illustrate the Lab's role as a instrument for transferring judgment from seasoned to potential inventors/entrepreneurs. In both cases, university PhDs had developed disruptive technologies and were trying to license them without knowing what direction to take and how to interpret signals from the market and potential technology acquirers. Private, early-on meetings with G7 Fellows were pivotal and led the new entrepreneurs to change their business model and make choices that were subsequently funded by G7 Fellows and other investors, thus putting their companies on a fast track. These meetings were not merely one-time events, but critical moments in the development of an ongoing support relationship.

The Lab relies on the G7 Fellows' commitment which involves an all-day meeting every five to six weeks in addition to half-hour, bi-weekly sessions with entrepreneurs. These initial sessions develop into an ongoing relationship with some of the entrepreneurs. This process has yielded outstanding results, but none of it would have been possible without the Lab's initial screening and preparation of start-ups for meetings as well as the establishment of the right process for sharing of experience and judgment.

Comparing with other models

Other UBA models were presented and discussed, namely the Martin Trust Center for MIT Entrepreneurship, the NYU Entrepreneurial Institute, Ryerson Futures and Velocity (University of Waterloo). Although they may differ in many ways, they all aim at addressing failure for lack of judgment through training and mentorship and aiding university-based entrepreneurs to become investment ready for experienced and specialized investors, mentors, business angels and VC funds. The accelerator team's roles are to set up the process, attract and select entrepreneurs, identify mentors and facilitate the linking of entrepreneurs with mentors and funding sources.

An important question remains: what distinguishes UBAs from commercial accelerators? The former tend to address needs not easily served by the market: (i) they provide university-based entrepreneurs (students, researchers, and faculty) with support at an earlier stage than would the commercial accelerators, (ii) they leverage university resources and equipment and support entrepreneurship in deep science domains not normally served by commercial accelerators and (iii) they benefit from non-dilutive funding (philanthropy, university, governments and corporations). Moreover, the best UBAs complement commercial accelerators as successful companies transition to the likes of Y-Combinator and Techstars.

[9] See detailed the presentation of these cases in the Creative Destruction Lab presentation beginning on page 30 of the PPF Participant's Guide at the following address: http://quebeccityconference.com/en/archives.php.

During the discussion period, the participants pointed out that the various models differ among themselves along the following dimensions.

Space

The starting point for both Ryerson's Digital Media Zone and the University of Waterloo's Velocity was dedicated space for students, graduates and researchers wishing to build their companies. Various acceleration and funding programs have subsequently been developed around these spaces to support the best entrepreneurs.

The Martin Trust Center for MIT Entrepreneurship, the NYU Entrepreneurial Institute and the Creative Destruction Lab (CDL) are not structured as incubators. However, they provide minimal meeting and office space to companies that are part of their acceleration or training programs.

For instance, the NYU Entrepreneurial Institute operates a new center called the Leslie eLab. It is a 5,900-square-foot facility in the center of NYU's Washington Square campus where aspiring entrepreneurs from across all of NYU's schools and colleges — be they students, faculty, or researchers — can meet to connect, collaborate and tap into a vast array resources to help transform their ideas and inventions into startup companies. It is equipped with co-working spaces, meeting rooms, an event space and a prototyping lab and is designed to encourage the collaboration, creation, and networking so essential in the development of successful startups. It does not, however, provide NYU teams with dedicated full-time workspace.

NYU also has three incubator/accelerator locations designed to provide early stage startups with full-time co-working space and critical support - two in Brooklyn and one in downtown Manhattan. The incubators provide first-time and serial entrepreneurs with affordable space and legal services, as well as access to an extensive network of talent and strategic connections. A team based in NYU's Polytechnic School of Engineering operates these three incubators.

Access

These various models all began by offering services strictly to their university's students, researchers and faculty. However, Velocity, Ryerson Futures and CDL quickly realized the advantages to be gained by opening up to entrepreneurs, engineers and scientists from other schools. Today, all kinds of entrepreneurs and startups move freely through these various centers and eventually into private sector accelerators such as Y-Combinator or Techstars.

The Martin Trust Center for MIT Entrepreneurship currently offers its services to both MIT students and postdocs.

The NYU Entrepreneurial Institute's programs primarily serve the needs of current NYU students, faculty, and researchers. While it does not offer programs to non-NYU entrepreneurs, it does hold events that are open to alumni and the broader community. However, NYU's incubators are open to outside entrepreneurs.

The acceleration process

The acceleration process varies from one center to another. At MIT and NYU, it is structured primarily around formal training programs. At CDL, Ryerson Future and Velocity, the faculty plays a lesser role. However to a certain extent, the acceleration process relies everywhere on the same principles:

personalized mentorship, a structured set of milestones, interaction among teams and continuous selection that eliminates teams that fail to meet their milestones.

Costs and sources of funding

The selection process is both rigorous and continuous in all of these centers.

The services offered by the MIT Accelerator, the NYU Entrepreneurial Institute, Velocity and CDL come free of charge and with no strings attached. Ryerson's Digital Media Zone provides four months of free co-working space and services to selected start-ups (after which they pay a membership fee to stay on).

All models strive to link their companies with non-dilutive sources of money (grants from governments and philanthropy). Some of them (i.e., MIT, Velocity, NYU) award grants through competitions.

Ryerson Futures is a for-profit organization that manages a fund. It provides seed financing and takes an equity stake in exchange for its services.

The NYU Innovation Venture Fund is a commercial seed fund associated with the NYU Entrepreneurial Institute.

At MIT, CDL and Velocity, seed funding is expected to come from outside sources, especially mentors, business angels and venture capital funds.

The accelerator team's roles

The accelerator team sets up the process, recruits and selects entrepreneurs, attracts mentors and facilitates the linking of entrepreneurs with mentors and sources of funding.

The market failures that they address are those related to judgment and, to a certain extent, market frictions for seed and start-up funding. Professor Agrawal discussed how addressing those two failures is related: if the relationship between mentors and start-ups develops adequately, renowned mentors will become first investors and attract others.

MIT and NYU's reputations and the density of mentors, business angels and VC funds in Boston and New York greatly facilitate the task of attracting entrepreneurs, mentors and funders. Selecting entrepreneurs and training them through a structured process involving mentors is at the heart of an entrepreneurship center's activities.

In Canada, market frictions related to judgment and seed funding are major factors. Accelerators there need to adopt a more proactive approach to building their reputation and attracting outside sources of financing.

Velocity is a particularly interesting case in point. A first generation of success stories, notably companies subsequently taken on by Y-Combinator or Techstars or funded by prominent VC funds, has enhanced its reputation among VC teams based in Boston, New York and Silicon Valley. However, most of these outside funds don't go to Waterloo; companies have to go to them. Consequently, Velocity has deployed systematic efforts to connect with these funds, understand their investment strategies, select companies that will fit in with their strategies, link firms with funds and help entrepreneurs prepare their pitches.

Leveraging university resources and equipment

The ability to leverage university resources and equipment provides UBAs with a clear-cut competitive advantage. However, liability and lab accessibility issues involving outsiders remain.

Some centers (e.g., Velocity, NYU), have developed hybrid models, setting up entrepreneurship labs for the basics and low fidelity prototyping, while establishing relationships within their respective university to provide adequately insured access to specialized wet-labs. Forging these relationships takes years, but they represent a real added value for startups by providing access to university facilities and research teams that can put companies in contact with entrepreneurs interested in commercializing research results.

MIT provides access to a hardware pool as well as corporate partners willing to give access to highly specialized and expensive software either free of charge or at a reasonable price. A cross-campus wet-lab is also being developed at MIT.

Funding

MIT's center receives its funding from philanthropy.

The university, philanthropic and corporate donations and government grants for specific programs finance NYU's Institute.

Velocity is funded by the university (40%), the Government of Canada (20%), the Government of Ontario (20%) and private donors (20%).

The CDL's support originally came from philanthropic sources prior to the university's financial involvement.

Ryerson University launched the Digital Media Zone prior to government involvement. Ryerson Futures is a for-profit organization that receives its money from private corporations and the ecosystem.

Validation?

Since university organizations are not usually adept at demonstrating whether an individual is a capable entrepreneur or has succeeded in building a solid business, how can a UBA go about validating whether it is doing an adequate job?

Proof ultimately lies in whether its companies have succeeded in accessing top commercial incubators such as Y-Combinator and Techstars and/or attract funding by recognized VC funds.

NYU has proposed a comprehensive set of metrics to assess UBAs:

- How many start-ups has a center supported?
- How many teams have transitioned to first-tier commercial accelerators?
- How many were funded by VCs?
- How many jobs were created?
- How many students and faculty came to the university because the commercialization program's reputation?

4. SECOND PANEL – INSTITUTIONAL INVESTORS' VIEWS ON THE FINANCING OF INNOVATION

Large institutional investors have increasingly turned their back on venture capital as an asset class. This does not necessarily mean that they lack interest in technology or financing innovation. In fact, some leading institutional investors have actually developed new approaches to the financing of innovation. During this panel, three of them shared their views with the PPF.

David Goerz, AIMCO

Canadian pension funds have been very innovative over the last twenty years, investing early in alternative assets such as private equity, infrastructure, timberland and commodities. This model has been successful, but the benefits derived from past innovation are eroding as growing allocations to these asset classes have undermined the illiquidity premium. In this context, the 2-and-20 fund model appears to be particularly costly and can hardly deliver a satisfactory net illiquidity premium to investors. Moreover, an excessive part of the carried interest rewards the beta (overall market fluctuations) rather than the alpha generated by active investing.

In this environment, asset owners are well positioned to play a distinctly unique role: (i) their long term horizon and internal capacities allow them to invest directly at reduced cost and tap into certain market inefficiencies from which others cannot benefit and (ii) their scale enables them to attract, retain and nurture top talent and build these internal skills and capacities.

Still, this substantial advantage in long term investing is difficult and hence underutilized. Direct private investing is ripe for those that are nimble, flexible, disciplined, creative, long-term oriented, well-resourced and well-connected enough to identify new opportunities and invest "between the cracks" of traditional investments.

AIMCO aims at being one of these. Innovative companies like stakeholders such as AIMCO that have a long-term horizon and more evergreen type of model, can make follow-on investments and step up when needed.

Achieving extraordinary results calls for extraordinary means and one of the ways for AIMCO to achieve its objectives is through collaboration and partnership models with other large institutional investors and sovereign wealth funds such as the Innovation Alliance with ADIA and New Zealand Superannuation Fund. The alliance not only broadens the group's capacity, but adds diversity in that the partners develop independent models for analyzing and due diligence and challenge each other.

In conclusion, innovative long-term capital is very important for the economy. One of the main challenges for asset owners remains deal sourcing, getting opportunities to come to them directly rather than going to Wall Street. As for venture capital, there has to be a new model where investors would pay for active returns and not the beta.

Michelle Cucullu, University of California

One of the key priorities of the new president of the University of California, Janet Napolitano, is to promote entrepreneurship and innovation throughout a system consisting of ten campuses, five medical centers and three national laboratories. Among other things, the in-coming president asked the following questions: how can the University of California foster local innovation at the campus level? How can it improve the tech transfer process? And, directly addressing Michelle Cucullu's office, can bringing in more capital for emerging companies be beneficial?

After reviewing several models, the decision was made to create a separately managed fund that will serve the UC system and its labs. The university is currently recruiting the management team and structuring the fund.

Nicole Musicco, Teacher's Private Capital

Nicole Musicco's initial remarks echoed those of David Goerz. After a long and exceptional run of returns, sustained notably by private equity and alternative assets, Teacher's new CEO and CIO faced the challenge of finding new sources of positive returns in a context of reduced illiquidity premium.

The new CEO's message was to make innovation and collaboration the pillars of the next ten-year plan with the recommendation to think out of the box when seeking answers to the following questions: what does innovation mean? How can we be more innovative?

The teams then focused on: how do we source differently? How do we measure what we are doing differently so that we can make new innovative opportunities attractive in-house? How can we incentivize our in-house teams to spend time looking for these opportunities? How do we step out of our silos and start thinking more about innovation including innovation across the asset classes?

This has given a new life to venture capital at Teacher's. It has gone from being a relatively passive portfolio of funds and has adopted a more proactive approach to relations with a small group of solid managers, thus gaining access to interesting entrepreneurs. Building on a model developed in private equity, the team now selects managers with whom they want to spend more time. They want to learn from and grow with them, be long-term investors with them and "sweat" these relationships and these assets to find interesting opportunities.

The push for innovation from the top forced Teacher's to look for not only innovation in venture capital, but pockets of innovation across asset classes and the risk reward spectrum, notably in areas such as natural resources and Cleantech. This new search for innovation also leads to more early stage digging in sectors such as technology and health care.

As David Goerz mentioned, this puts a new emphasis on direct investing and sourcing generally and raises the question of measurement of success to incentivize the teams to spend more time on innovation and hunt for bleeding edge technologies.

These initial remarks were followed by a series of questions and answers.

How can Teacher's establish the type of relationship it wishes with its external managers? This is a challenge because Teacher's is demanding. It wants to partner with smart people and learn from them and insists on transparency and alignment of interests. Therefore, it has to make a solid case on the value-add it brings to the table so that there is a balance between both sides.

What kind of VC managers is Teacher's looking for? Later stage, almost growth equity funds that have demonstrated that they can find the next best thing and have real winners in their books (the first 5th percentile) or "farm teams" that have hit home runs and are looking for larger commitments for their next big ideas.

What kind of VC co-investment is AIMCO looking for? AIMCO is not investing in funds or seeking out co-investments as this often leads to adverse selection. It is building relationships in order to be able to step in when outstanding companies in D, E, F rounds need large amounts of long-term money or funds require more capital.

Is investment in venture capital worth the trouble? It has to make sense from a risk/return perspective. However, it remains important for the entire portfolio and provides a window on the future and eventual investment themes that one cannot get anywhere else.

5. THIRD PANEL – INTERNATIONAL PERSPECTIVES: THE TAIWANESE MODEL LINKING RESEARCH INSTITUTIONS, LARGE CORPORATIONS AND FINANCING INSTRUMENTS TO CREATE NEW STARTUPS

Taiwan has been particularly successful in linking research institutions, large corporations and financing instruments to create new startups, notably in semiconductors, microelectronics and hardware. Since 1979, the Industrial Technology Investment Corporation (ITIC) has played a critical role in building this ecosystem. Herb Lin, CEO of ITIC, presented the factors responsible for the Taiwanese model's success. He was then interviewed by Franceska Banga, CEO of the New Zealand Venture Investment Fund (NZVIF). NZVIF recently partnered with Taiwan's National Development Fund to launch a US $160 million cross-border venture capital fund that works closely with ITIC.

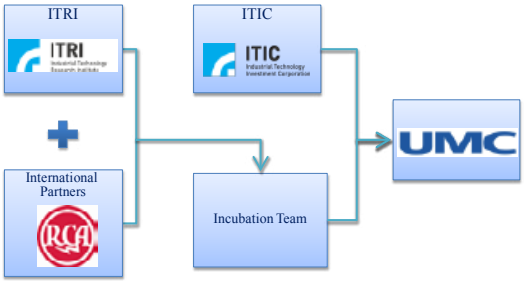
ITIC is a wholly owned subsidiary of the Industrial Technology Research Institute (ITRI) which has more than 6,000 researchers and concentrates solely on technologies that industry can apply within a two- to three-year framework. It does not produce research papers, but focuses only on patents of which it owns nearly 20,000.

Forty years ago, Taiwan had virtually no tech industry. Today, it ranks high on innovation and competitiveness indices, is a market leader in many critical computer and mobile phone components and sits at the center of the Apple manufacturing ecosystem. In his presentation, Mr. Lin explained how this happened and the role played by government institutions such as ITRI and ITIC in Taiwan's success.

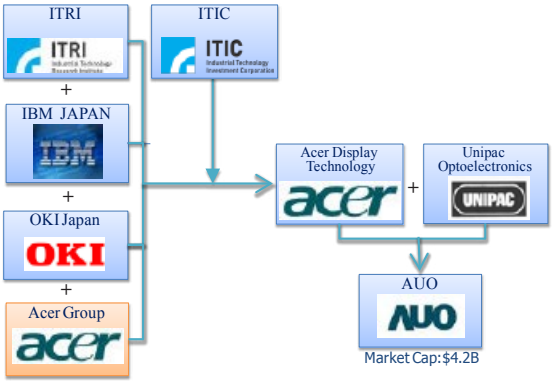
It all started in the late 70s when ITRI decided to focus on the semi-conductor industry, lured many Taiwanese engineers back from the US and partnered with RCA in order to have access to its technology. That decision led to the creation of UMC, the country's first semi-conductor foundry. RCA was attracted by Taiwan's low manufacturing costs. ITIC incubated the project, wrote its business plan, provided the initial financing and made the link with sources of follow-on financing. UMC now has a $5.4 billion market cap.

The next step in the model's development consisted in the involvement of not only external, but local industrial partners, as was the case when the first Taiwanese LCD company was built in conjunction with OKI Japan, IBM Japan and ACER (Taiwan).

Building the first semi-conductor company



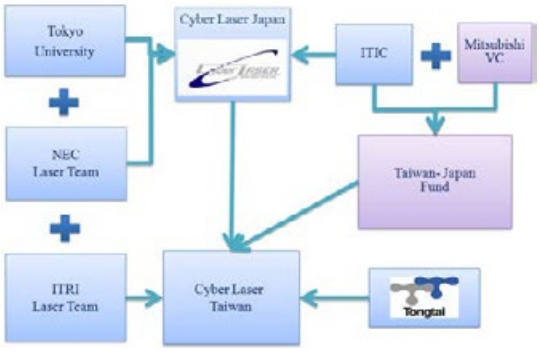
Then, built the first LCD Company



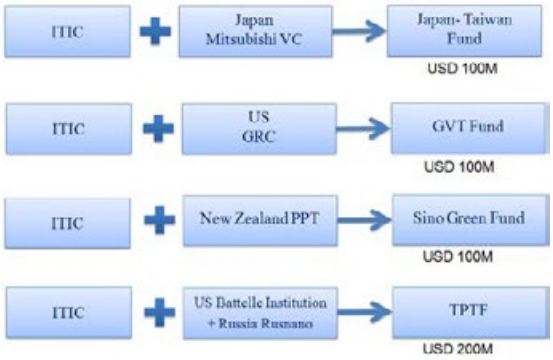
ITIC subsequently developed a financial partnership with Japan's Mitsubishi Bank. This took a long time because of the differences in business laws and customs. However, once trust was established, ITIC gained faster and easier access to Japanese companies that owned technologies that Taiwan needed to develop its manufacturing capabilities. This was the case for laser technology owned by Cyber Laser. Mitsubishi Bank was the largest debt provider and an equity investor in the company and facilitated the development of the ITIC/Cyber Laser partnership.

ITIC is creating similar financial vehicles with partners in the US, New Zealand and Russia (Rusnano) with the objective of developing technological ventures, notably with Russia.

Example 2.0:Cyber Laser



Model 2.0 Expansion



These various partnership models were used to build several upstream and downstream semiconductor companies that grew into major players such as TSMC (market cap of $106 billion), Mask Corp and MEMC. This was then replicated in automation (MIRLE), optical/display (Epistar) and today in biotech and solar energy as illustrated in the two following graphs.

What role did the government play in bringing about this success? The Taiwanese Government did not attempt to pick winners, but it did play a very important role in identifying sectors and building an environment and infrastructure in which they would thrive. For instance, ten years ago, the government decided that the next wave would be biotechnology. It played a lead role in building the required infrastructure, including labs accessible to researchers and start-up companies, facilities for preclinical trials (animal labs), facilities and processes for clinical trials and harmonization of the FDA process with China to gain access to the Chinese market. It continues to play a major role in attracting experience and talent back to Taiwan by creating positions, building facilities, and providing funding).

What is the process for identifying future sectors of opportunity? The process that ITRI/ITIC developed over decades consists of first selecting the general direction based on market trends and then laying the foundations, that is, the technology and above all the human resource base. Since the decision was made to select biotechnology and life sciences ten years ago, ITRI has trained 20,000 specialists, sent many of them to study and work in research centers and pharma companies abroad and made a concerted effort to lure them back to Taiwan. ITIC's job is to write business plans and it has acquired a considerable amount of experience doing that.

What are the challenges involved in building cross-border partnerships? They are huge, but the benefits are equally immense. For instance, Japan's business law and approach to discussing corporate strategies differ considerably from those of Taiwan, China and especially western countries. But just because the barrier to entry is so high, once in, one's position becomes very secure. It takes a lot of time to build trust, but once it's done, business is straightforward.

ITIC built its first partnership with the Mitsubishi Bank. The Mizuho and Mitsui Sumitomo banks are now LPs in the Japan-Taiwan cross-border funds set up by ITIC. Experience demonstrates that finding the right technologies for the right projects can now be accomplished very quickly and deals can be done within six months through this type of partnership.

The process started with Japan. ITIC now wants to replicate it with Russia.

From a Taiwanese perspective, what are the lessons to be learned about accessing China's market? China and Taiwan share a common language and culture and despite political frictions, very strong business integration has existed between the two economies over the past thirty years. Over two million Taiwanese business people live in China. China works with ITRI and Taiwanese companies to transfer their technologies to the mainland. This gives Taiwan access to China's huge resources and market. The two countries are developing common industrial standards, notably for cell phones.

The shortest route for western companies to the Chinese market, especially in the tech sector, is probably through Taiwan because while the latter understands the rules and language of the West, its economy is tightly integrated with China's, a country that has its own laws and customs that foreigners find difficult to break through.

6. Breakout sessions

6.1. Breakout session 1 – Public policies for venture capital: early versus later stage funding gaps

For many years, public policies were based on the assumption that early stage financing for entrepreneurs constituted the biggest gap and, as a result, were specifically designed to address this issue. An increasing number of voices are now saying that public policies should focus primarily on "scale-up rather than start-up".[10]

The questions raised at the beginning of the session were the following: have policies overdone it at the early stage? Is there a late stage gap? If so, how serious is it? What should public policies do about it?

Three lead participants from Canada, Europe and Mexico initially answered these questions. Their responses were further enriched by additional comments made during the discussion period and converged on the following points.

There is a high level of early stage activity everywhere. Entrepreneurship has become "sexy". New models of early stage entrepreneurial finance are being developed and this is very positive.

However, just about everywhere outside the US, there is a shortage of later-stage capital and support. Funds are too small and are looking for far too early exits at low valuations. Companies are underfunded. Managers focus on fund raising rather than growing the company and are unable to reach large valuation exits. All of this induces a vicious circle for the venture capital industry and the ecosystem which results in disappointing returns, fund raising difficulties, small funds, etc. Moreover, in peripheral markets, when companies are acquired too early, they are often sold to foreign acquirers and that translates into a potential loss for the local economy.

When compared to the US, the environment for later stage companies in peripheral countries also suffers from the following: a lack of access to public markets (a lack of both liquidity on local stock exchanges and specialized analysts and crossover funds), high regulatory costs for going public, an underdeveloped venture debt market and the withdrawal of banks from the scene due to recent regulatory developments, especially in Europe.

What can be done to address these issues and accelerate the development of a more mature ecosystem in which companies can scale up and grow independently over a longer period of time? The following summarizes the answers and questions that arose during the discussion.

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[10] "The Global Scale Up Declaration", Daniel Isenberg, Fadi Ghandour, Gregoire Sentilhes, Sherry Coutu, Calestous Juma and Linda Rottenberg, September 4, 2014. This document and other references were reproduced in the Participant's Guide p. 78-104. The Guide can be found at http://quebeccityconference.com/en/archives.php

- Can public money help to catalyze private sector money in order to fund larger and more experienced funds? This is an ongoing debate and results are mixed in Europe and Canada (VCAP program).
- In a country such as Canada where private sector money is scarce and governments play a key role in funding the ecosystem, can governments afford not to choose winners and focus resources on them given the importance of homegrown companies for the economy's competitiveness? If the answer is yes, then how do governments go about doing it?
- A fund's time horizon is often an incentive to sell companies early, especially if the fund is small. Should other approaches not be considered such as evergreen funds or lifting restrictions on cross-fund investments?
- A lot of innovative models are being developed in the US, notably at the venture debt level. Attracting these US investors to invest in Canadian companies may be part of the solution until similar models are developed in Canada. This could also apply to Europe and Mexico.

6.2. Breakout session 2 – How do university innovation initiatives fit into the broader early-stage financing environment?

The participants (investors, academics, managers of university-based accelerators) generally agreed that results flowing from the commercialization of research by universities are largely disappointing and not enough was emerging from academia to warrant investment. Many universities are still slow in approaching external sources of early-stage financing for entrepreneurs to connect with.

Universities have three roles to play in supporting the commercialization of research.

1. IP transfer. Many participants stressed that IP disclosures are not enough: people, not IP, create businesses. Universities need to change their culture and adopt a mindset that emphasizes support for people wanting to create businesses. Focusing too much on IP can create roadblocks and kill a business culture.
2. Programs supporting entrepreneurs and giving the founders the opportunity to self select. This includes training, readiness programs, accelerators that provide entrepreneurs and talent with a place where they can either rapidly make it to market or fail.
3. Encouraging the path to commercialization. The commercialization of research needs to be recognized and celebrated within the university community to the same extent as the pursuit of pure research; both need to be perceived as equally valuable. This cultural shift within universities requires leadership at every level.

While professors need to be leading the way on the path to commercialization, most are reluctant to forfeit their tenured positions to do so. Therefore, it is important to empower and support Ph.D.s and post-docs.

University-based accelerators can play an important role in bringing about culture change. Two Ph.D.s who went through the Creative Destruction Lab and became successful entrepreneurs explained how they had been trained to be scientists and academics and how the Lab led them to pivot and create their companies rather than licensing their technologies and becoming professors.

Specific suggestions were made to support culture change in universities such as (i) creating mechanisms to reach out to the best researchers and help them understand the commercialization path and (ii) establishing innovation fellowships at the graduate and postdoctoral levels with the objective of translating science into technology and harnessing knowledge to create businesses.

Universities are driven by metrics and rankings that attract students and funding. These metrics need to change and incorporate entrepreneurship and research commercialization. However, the situation is already evolving and these factors, based on the reputation of companies emerging from university programs, are already having an impact in attracting top faculty and students. MIT, the once undisputed leader in technology, is now catching up with Stanford. In Canada, Ryerson University has recently enhanced its reputation with its Digital Media Zone and caught up with the leaders. Those who can smoothly navigate this culture change will enjoy a competitive edge over other institutions.

There are different models for supporting entrepreneurship within universities. One size fits all does not apply.

- Accelerators for IT entrepreneurs (software, web 2.0, digital media) employ specific processes, are mostly community driven, are focused on mentoring and talent management and are more effective when operating outside the university setting.
- In deep science and areas with much higher capital requirements such as hard technologies and life sciences, the model is closer to virtual incubation. It offers a capital efficient environment in which to experiment (i.e, progress to the next step or fail rapidly) because its low cost rental costs and capital expenditures (shared labs) and outsourced services. Examples include Lab Central (Massachusetts), QB3 (California) and Neomed (Montreal). Although IP has tended to be shrouded in secrecy, these models have also borrowed from the IT model and developed a marked community orientation featuring collaborative research and business practices, namely how to deal with support services, talent recruitment, financing, etc.

How do these initiatives relate to the financing chain?

Success is the product of a fund raising culture capable of mobilizing a range of financing sources, i.e., grants, various acceleration programs, mentors, business angel groups and venture capital funds. The experience of successful places such as Waterloo indicates that it takes a whole community to build companies. Above all, a university needs to contribute to building this community and offer programs that prepare students to look for future funding and introduce them to potential investors. It is vital that investors be included in the process from the very outset to ensure that they will have the opportunity to encounter companies early on (the movie, not just the picture) and become involved in their growth and provide mentorship such that very little due diligence will be required when the moment to invest has arrived.

In conclusion,

- Universities are important in the ecosystem as sources of ideas for businesses, some rooted in deep science; they are the mineral deposit that everyone is interested in mining;
- It remains to be seen what metrics or incentives would best lead universities to include entrepreneurship and research commercialization in their objectives and efficiently link up with the rest of the ecosystem;
- These concerns are relatively new and while all universities compete for talent and students, those that will be the first to deal with and figure how to address these issues will have an edge over the others;
- Most universities have now given up the fight to focus only on pure research and this represents a dramatic change.

6.3. Breakout session 3 – Public policies to attract private sector investment

The suggested questions for this breakout session were: "Which LP funding models are working? What will it take to get the interest of institutional investors into VC? Can VCs turn instead to alternative LPs, such as corporates?"

The moderator proposed a rephrasing of these questions by asking: "Are there any public policy led funding models that succeed in getting institutional investors back into VC?" He opened the discussion citing the case of the Canadian Venture Capital Action Plan (VCAP), which had been extensively presented and discussed during the 2013 PPF.[11] VCAP is specifically structured to use government

[11] See 2013 PPF Main Conclusions p. 27-28 http://quebeccityconference.com/en/archives.php?page=ppf2013

capital to fund incentives, limit downside risk and enhance upside returns, in order to attract private sector capital back to the asset class.

One year later, it appears that the incentives have proven to be only moderately effective. The program's target was to close four privately managed funds of funds totaling $1,200 million under management, one-third from government and two-thirds from the private sector. As of November 2014, three funds made a first closing with only $673 million under management. Why has such an apparently compelling proposition been only partially successful so far?

Several explanations were suggested.

- Most large institutional investors have exited venture capital because returns have been disappointing and the asset class was deemed too small and too complex. They no longer have an allocation for venture capital or a team to invest in this field.
- We have witnessed a split among Canadian pension funds. Investing in VC has become inconsequential for a few of the very large pension funds. The remaining players are too small to consider investing in this asset class.
- Corporate investors have a reason other than returns to invest in venture capital, namely access to deal flow and innovation. VCAP allowed them to have access to underlying GPs and investee companies. So far their response has been somewhat positive, but still limited for the following reasons: (i) investing directly in funds, rather than funds of funds, provides better access to the underlying deal flow and (ii) there are not many large Canadian tech sector corporations and contrary to large pension funds, most Canadian corporate investors find it difficult to make investments larger than ten or twenty million dollars.

Corporate investors and fund managers with corporate LPs confirmed the following points.

- The main reason why corporate investors invest in venture capital is to have a window on innovation. They want to learn about the field.
- On average their commitments are significantly smaller than those of financial investors.
- Corporate LPs take up more fund manager time and are more complex to manage because they require more sector and deal flow information. However, in return they can add value to portfolio companies, providing access to their own technical resources and sharing their experience. For instance, one of the funds provides intern programs for people from its LPs' organizations. This gives better access to information both ways.
- Corporate investors should not have any special rights regarding portfolio company exits that could adversely affect the portfolio's returns.

- Competing corporations cannot invest in the same fund. Fund managers must be careful to avoid overlaps.

Interesting comments came from Mexico and France regarding one of the original questions, "Can VCs turn instead to alternative LPs, such as corporates, for funds?" Both countries have government sources (funds of funds) for VC funds, but, as in Canada, accessing private sources of capital remains challenging.

Mexico has very few large tech companies. Wealth is concentrated in more traditional sectors that have no interest in tech start-ups. In order to deal with this situation, Angel Ventures Mexico has launched a business angels seed fund supported by the government (funds of funds, development bank) and financed by a network of business angels, many of whom are from tech sectors. So far, individual commitments have been small as there have been few large tech successes in Mexico. Nevertheless, this network represents a collective power that the manager is able to leverage to source deals and add value to portfolio companies.

In France, Bpifrance and the European Investment Fund are large government VC funds of funds looking to attract private sector LPs. Private sources of capital include the following.

- Institutional investors. However, this source is drying up because (i) France has no large pension funds since its system is based on unfunded contributory pensions schemes and (ii) banks and insurance companies are increasingly withdrawing because of regulation (Basel III for banks and Solvency II for insurance companies).
- Business angels. Their contribution is increasing not only as co-investors in companies, but as LPs. Several business angels seed funds have been launched recently with help from government funding (Bpifrance).
- Corporations. Their importance is also growing. However, the need to align interests with financial investors limits their involvement and the size of their investments.

As a side note, the following recommendations were made during the discussion.

- In many countries, governments are working in the right direction through funds of funds. They need to be patient and persistent (avoid stop-and-go policies) as it takes several cycles to build an ecosystem.
- Small pension plans lack the expertise and size to invest in alternative assets. Aggregating funds should be considered in countries like Canada that have many small pension funds.

PROGRAM

WEDNESDAY, OCTOBER 22nd

PUBLIC POLICY FORUM ON VENTURE CAPITAL AND INNOVATION

Time	Event	Venue
7:15 am	**BREAKFAST AND REGISTRATION**	*Salon Jacques-Cartier, Fairmont Le Château Frontenac*
8:30 am	**WELCOME REMARKS**	*Frontenac Room, Fairmont Le Château Frontenac*

Mr. Yigal Erlich
Founder, Chairman and Managing Partner
The Yozma Group (Israel)
Chair
Public Policy Forum on Venture Capital

INTRODUCTION

Dr. Gilles Duruflé
President
Public Policy Forum on Venture Capital

8:50 am **KEYNOTE PRESENTATION**

Dr. Josh Lerner
Jacob H. Schiff Professor of Investment Banking
Harvard Business School

9:50 am	**NETWORKING BREAK**	*Petit Frontenac Room*

Time	Event	Venue
10:15 am	**FIRST PANEL: "Fostering Entrepreneurship within Universities"**	*Frontenac Room*

Part One: "University science and failures in the market for entrepreneurial judgment: economics of university accelerators – A case study"

Presentation and moderator

Dr. Ajay Agrawal
Peter Munk Professor of Entrepreneurship
Rotman School of Management
University of Toronto (Canada)

Panelists

Mr. Michael Helander
Co-founder and President
OTI Lumionics Inc. (Canada)

Mr. Karl Martin
Co-founder and CEO
Bionym Inc. (Canada)

Mr. Jesse Rodgers
Director
Creative Disruption Lab (Canada)

Time	Event	Venue
	Part two: "Contrasting models"	
	Moderator	
	 **Dr. Ajay Agrawal** Peter Munk Professor of Entrepreneurship Rotman School of Management University of Toronto (Canada)	
	Panelists	
	 **Ms. Christina Chase** Entrepreneur in Residence The Martin Trust Center for MIT Entrepreneurship (USA)	
	 **Mr. Michael Kirkup** Director Velocity University of Waterloo (Canada)	
	 **Mr. Alan Lysne** Managing Director Ryerson Futures Inc. (Canada)	
	 **Ms. Lindsey Marshall Gray** Director NYU Entrepreneurial Institute (USA)	
12:00 pm	**NETWORKING LUNCH**	*Salon Jacques-Cartier*

Time	Event	Venue
1:30 pm	**BREAKOUT SESSIONS**	

GROUP 1: "How do changes in the early stage environment affect the evolution of venture capital models? How can public policies find a balance in the support they provide to early vs. later stage financing?"

Moderator

Dr. Thomas Hellmann
Professor of Entrepreneurship and Innovation
Saïd Business School
Oxford University (UK)

GROUP 2: "How do university innovation initiatives fit into the broader early stage financing environment?"

Moderator

Dr. Ajay Agrawal
Peter Munk Professor of Entrepreneurship
Rotman School of Management
University of Toronto (Canada)

GROUP 3: "Which LP funding models are working? What will it take to get the interest of institutional investors into VC? Can VCs instead get funded from alternative LPS, such as corporates?"

Moderator

Mr. Neal Hill
Vice President, Fund of Funds
Business Development Bank of Canada (Canada)

2:45 pm	**NETWORKING BREAK**	*Salon Rose*

Time	Event	Venue
3:15 pm	**SECOND PANEL: "Institutional investors' views on the financing of innovation"**	

Moderator

Ms. Luba Nikulina
Global Head of Manager Research
Towers Watson (London, UK)

Panelists

Ms. Michele Cucullu
Director, Private Equity
University of California (USA)

Mr. David Goerz
Executive Vice President, Investment Strategy and
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Alberta Investment Management Corporation (Canada)

Ms. Nicole Musicco
Vice President, Funds & Co-Investments
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Time	Event	Venue
4:15 pm	**THIRD PANEL: "The Taiwanese model to link research institutions, large corporations, financing instruments to create new startups"** **Panelist**  **Mr. Herb Lin** President Industrial Technology Investment Corporation – ITIC (Taiwan) **Interviewer**  **Ms. Franceska Banga** CEO New Zealand Venture Investment Fund (NZ)	
5:00 pm	**CONCLUSION**  **Dr. Thomas Hellmann** Professor of Entrepreneurship and Innovation Saïd Business School Oxford University (UK)	
5:15 – 7:00 pm	**CLOSING SESSION** **Networking Cocktail**	*Salon Rose*

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