London Business School

Coller Institute of Private Equity

Private Equity

Findings

INSIGHTS from the WORLD'S BEST PRIVATE EQUITY RESEARCH

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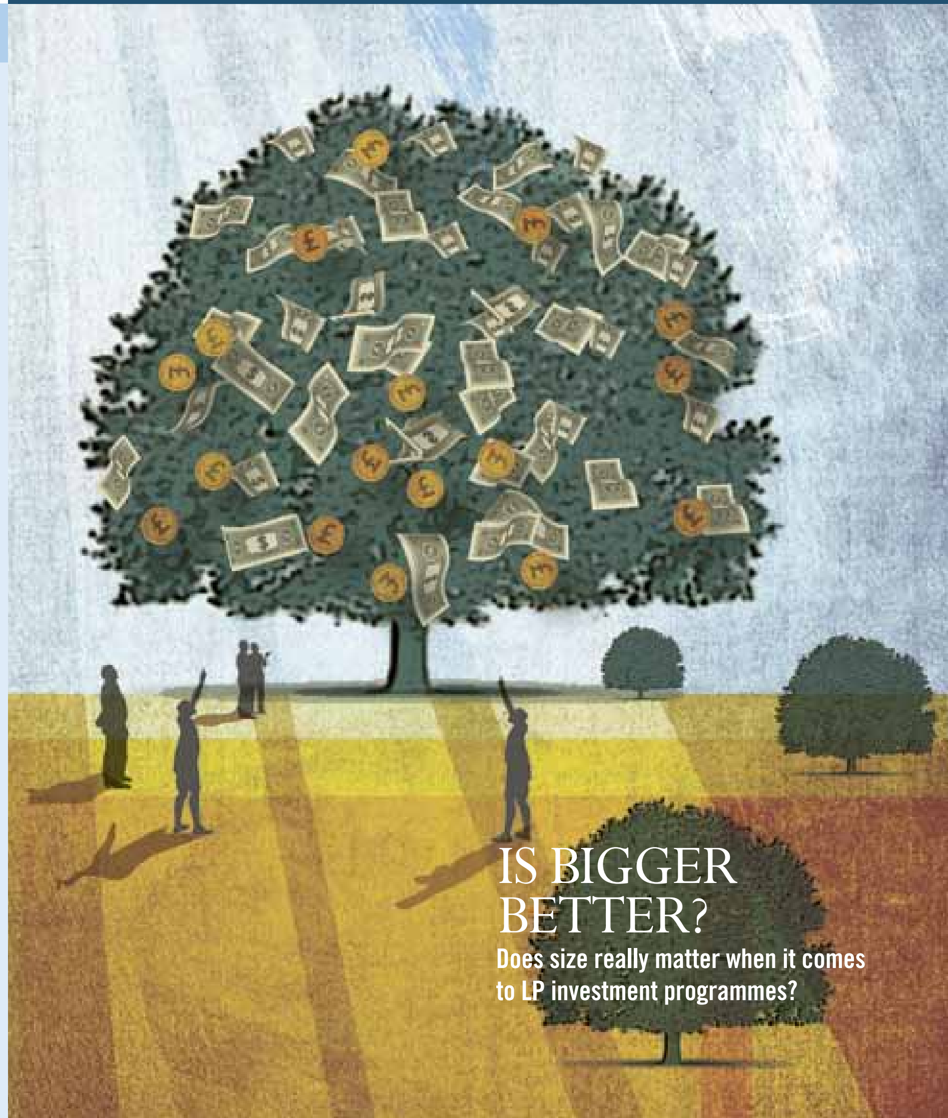

IS BIGGER BETTER?

Does size really matter when it comes to LP investment programmes?

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and thanks to

Hans Holmen
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FOREWORD

Professor Eli Talmor

Professor
Francesca Cornelli

Issue 7 of *Findings* starts with an interview with **Professor Lynda Gratton**, professor of management practice at London Business School and keynote speaker at the Coller Institute's 2012 Symposium. In this article, Professor Gratton comments on the five key forces that will affect the way we work in the future. She comments on the various challenges and opportunities associated with these dynamics and the implications for how tomorrow's leaders will work. Professor Gratton advises several large companies on leadership issues and her comments should be very pertinent for PE firms that are looking to prepare their portfolio companies for future challenges. Also, please visit our website at http://www.collerinstitute.com/News for a video interview with Professor Gratton.

One of the important forces shaping the world is the impact of emerging markets. Issue 7's *Case Study* takes us to China, where we examine private equity firm **Cowin Capital** against the backdrop of the country's remarkable growth story. The case, to be first taught in a forthcoming Coller Institute event in Hong Kong, explores how Cowin has transformed itself and is thriving in a rapidly evolving market.

This issue's *Head to Head* examines a paper by the Institute's academic director, Professor Francesca Cornelli. The research looks at the **role of management teams immediately before a buyout** and explores whether the opportunity to buy shares in the future creates an inherent conflict of interest for managers in the period leading up to the deal. The research has important implications on the balancing of incentives in the lead-up to an MBO or a privatisation.

Turning our focus to the LP, we discuss one of the largest classes of institutional investors in private equity: **pension plans**. *Findings* delves into two pieces of research on these investors, questioning whether large plans benefit from economies of scale in relation to performance. The papers show that the size advantage is brought to bear in allocations to alternative assets, in particular, private equity.

Our *Roundtable* interviews three leading academics and three practitioners to explore whether the persistent claims that private equity firms add value to portfolio companies through **operational improvements** are true. The article is based on three pieces of academic research with potentially controversial findings, as the papers struggle to find substantive operating improvements.

Issue 7's final article examines the paper that was runner-up in the *2011 Coller PhD Prize*. The research explores how **educational ties** can influence syndication decisions of venture capital firms and their impact on value creation.

We hope this edition of *Findings* stimulates a healthy exchange of views. If you have any thoughts on our articles, we would like to hear them, either via www.collerinstitute.com/Research/Findings or by email at collerpe@london.edu. The most interesting comments will win a copy of *International Private Equity*, an authoritative textbook on private equity, co-authored by Professor Eli Talmor and Florin Vasvari.

Professor Eli Talmor
Chair, Coller Institute

Professor Francesca Cornelli
Academic director, Coller Institute

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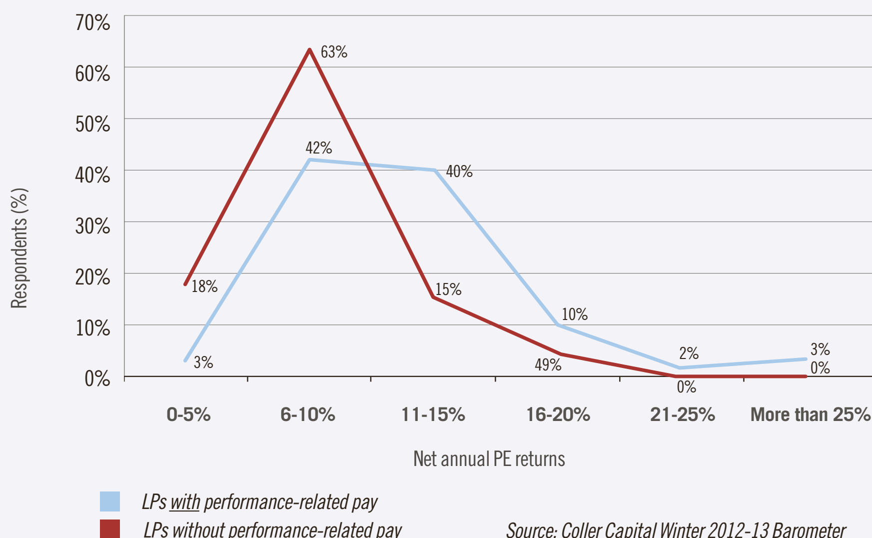
BY THE NUMBERS

A round-up of private equity trends and statistics

LP PERFORMANCE DEPENDS ON INCENTIVES

LPs' five-year PE portfolio performance correlated with their remuneration

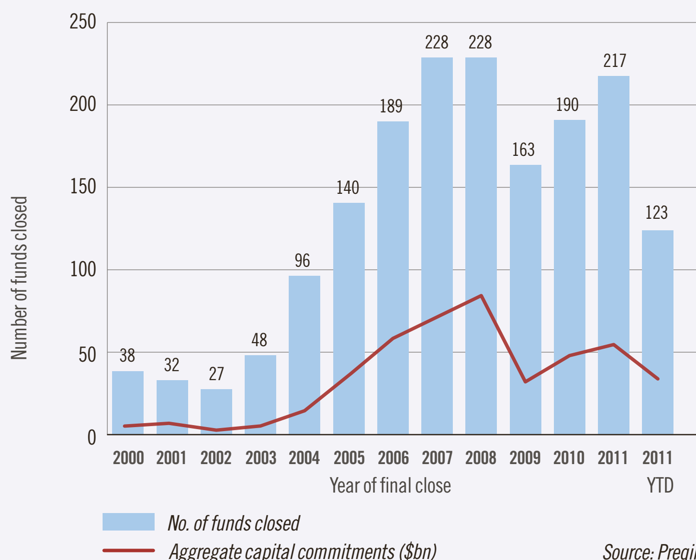


Source: Coller Capital Winter 2012-13 Barometer

- The issue of whether investment professionals at LPs should be remunerated with performance-related pay has long been controversial. Therefore, the results of the latest *Coller Capital Barometer*, which looked into the performance of LPs against whether they offered performance-related pay, make interesting reading.
- The overall finding is that LPs with performance-related pay outperform other LPs. Fifty-five per cent of LPs that offer remuneration according to performance made net annual returns on private equity investments of more than 11% over the past five years. This compares with just 19% that do not have performance-related pay.
- Performance-related pay is more widespread in North America, where 63% of LPs offer it, against 53% in Europe and 48% in Asia.

ASIAN FUNDRAISING COOLS

Annual Asia-focused fundraising 2000-2012 (as of 25 October 2012)

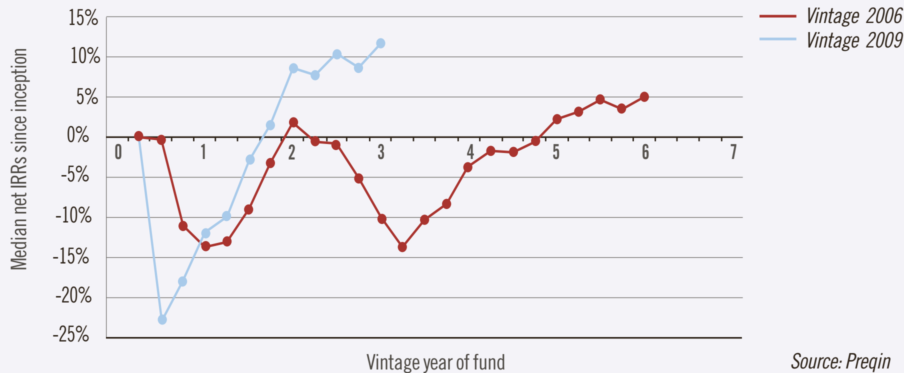


Source: Preqin

- Asia has long been an attractive destination for LP capital, as the steady rise in the number of funds closed and aggregate commitments between 2003 and 2008 demonstrates, according to Preqin figures. Yet, while Asia funds recovered quickly from the effects of the financial crisis – 2011 in particular was a good year for fundraising – there are signs that LPs are being more discerning about their choice of GP in the region.
- By 25 October, 123 funds targeting Asia had reached a final close in 2012, with aggregate commitments of $32.2bn. With just two months to go, it looks unlikely that the number or value will surpass the 217 funds that raised $53.4bn in 2011.
- The figures include RMB funds, which have seen reduced appetite from China's high-net-worth individuals in 2012, as many are still awaiting distributions from previous funds before committing to new funds.
- There have also been fewer exits than expected from many US$ funds in Asia as IPO markets there have slowed over the course of 2012. Many LPs are now looking for more evidence of realised returns from GPs before investing fresh capital.

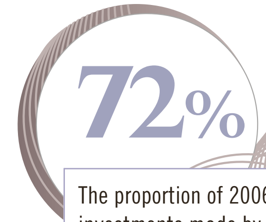
PRIVATE EQUITY RETURNS SHOW RECOVERY?

All private equity – annual median net IRRs – vintage years 2006 and 2009



Source: Preqin

- The effects of the financial crisis on private equity returns are all too evident in Preqin's median net IRR data. While private equity's returns profile normally follows a J-curve pattern as capital is deployed in the early stages of a fund's life and then value is added as the investments mature, the 2006 vintage instead follows more of a W-curve.
- Investments made in 2006 were affected by the drop in portfolio valuations in 2008, bringing IRR numbers into negative territory for a second time. These portfolios have since recovered in value, although at 5%, the IRR looks low by more normal standards.
- The 2009 vintage, by contrast, shows the classic J-curve. However, the Preqin data suggests that these investments moved into positive territory in less than two years, a full year earlier than most other vintage years. While it is still too early to assess the performance of these investments, this shows there is reason to be cautiously optimistic about their prospects.



The proportion of 2006 investments made by buyout houses globally that are still unrealised (as of 9 August 2012, according to Preqin). Of these, 55% are in the US, 32% in Europe and 13% in Asia. This shows the high level of capital that has yet to be distributed to LPs from the boom years. In addition, the lengthy hold periods of the deals look set to dampen returns as measured by IRR (see chart left for further explanation).

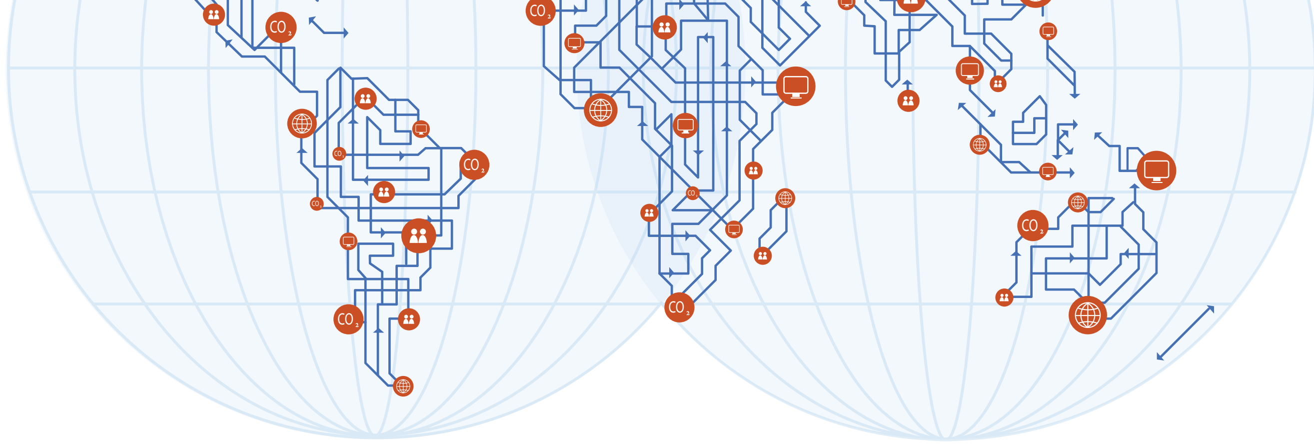
INSURERS STILL RATE PRIVATE EQUITY

The asset classes expected by insurance CIOs to have the highest and lowest returns over the next 12 months.

- Private equity remains one of the most attractive asset classes for insurance companies globally, according to GSAM Insurance Asset Management's *Insurance CIO Survey* for 2012. It is expected to generate the second highest level of returns by respondents to the survey, just behind US equities and well ahead of hedge funds and real estate.
- The survey also found that, overall, 27% of insurance CIOs were planning to increase their allocations to private equity. The asset class looks set for a particular boost from Asian insurance companies, as nearly half of respondents there planned to increase private equity exposure.
- This is particularly interesting given the forthcoming implementation of the Solvency II regime, which introduces risk-based solvency requirements for insurers and reinsurers. It had sparked fears of a widescale withdrawal from private equity by this type of investor.
- However, the new regime allows larger insurance companies to develop their own risk ratios, so that while some insurers will sell off private equity assets, others will be increasing their allocations to private equity to offset the increase in their liabilities caused by the continued low interest rate environment.

	% Highest total return	*% Lowest total return*
US equities	18	0
Private equity	**15**	**1**
Mezzanine debt	9	1
High yield debt	9	0
US investment grade corporates	7	2
Emerging market equities	7	1
Emerging market debt	6	1
Hedge funds	5	2
Real estate	3	2
Local government debt	2	14
Commodities	2	5
Cash/short-term instruments	1	34
European equities	1	15

Source: Goldman Sachs



TOMORROW'S COMPANY

So much is changing around the world that portfolio companies are having to adapt fast. So what are the key forces for change? What are the challenges and opportunities? How will we work over the coming decade and beyond? And what will tomorrow's leader look like? We asked management practice expert Lynda Gratton. **Interview by Vicky Meek.**

Organisations are having to become increasingly adept at managing change as a number of forces transform the way processes are managed, work completed and communications handled. Lynda Gratton, professor of management practice at London Business School, author of a series of books on change, including *The Shift – The Future of Work*, and founder of the Hot Spots Movement, has identified the five most important forces that will affect the way we work: technology, globalisation, demography, society and a need to reduce carbon emissions. In a keynote address at the 2012 Private Equity Findings Symposium, she set out how these would impact portfolio companies in the future, offering her view of what tomorrow's company would look like. We caught up with her to discuss her ideas.

Can you give me a brief outline of how these five forces are impacting organisations?

"They are already having a profound impact, but we will really see change accelerate over the next 10 years. There are so many effects, but let's look at globalisation and technology as a start. By 2025, there will be more than five billion people using the internet through mobile devices, so they will all be interconnected by technology across the world. That will create new talent clusters.

"Any job that can be done by technology will be. The internet cloud will deliver low-cost computing services and an increasing amount of work will be performed by robots. Globally, billions of cognitive assistants will collect information, monitor people's behaviour and take actions from their preferences. This will bring knowledge to people in remote places in a way never experienced before.

"Anything that can be outsourced will be. That will result in a hollowing out of the middle part of the economy in more developed nations. The remaining parts will be those jobs that can't be shifted to low-cost centres – services such as hairdressing and caring, or the highly skilled jobs such as physicians or lawyers.

"If we next look at demographic trends, we're all living and working longer and so traditional work practices are being eroded. Add to that the challenges of issues such as growing inequality in society, increasing poverty and environmental degradation, and companies have to start focusing much more on sustainability issues.

"All these changes present both challenges and opportunities for companies and individuals."

What about the effect on emerging markets?

"On an individual and company level, these changes are relatively good news. The financial markets have gone global, enabling companies to access new sources of capital, transforming the opportunities available. Many firms are grasping these opportunities – Indian technology firms, for example, use some of the most innovative management practices around. Take, for example, the way Infosys connects over 58,000 employees to talk about the strategy of the company, or the way TCS builds trust in virtual teams.

"Until 20 years ago, people in emerging markets didn't have access to the global labour market. Now they do. If someone is motivated and intelligent enough, they now have the chance to participate in the global economy like never before."

What will tomorrow's workplace look like?

"Over the next five to 10 years, we'll see a significant shift away from the model of going into an office every day and performance being based

Lynda Gratton
London Business School

Lynda Gratton is professor of management practice at London Business School, director of the school's Centre for Women in Business and a senior fellow of the Advanced Institute of Management Research. Her research interests include organisational change, corporate culture and the future of work.

on being present at a desk. Companies are realising that it's very expensive to house people in offices; they tend to be less productive in this setting and they prefer to work flexibly as they are becoming increasingly individualistic and prepared to forge lifestyles based on their own needs rather than societal expectations.

"Businesses will also need to reduce their carbon footprint and a key way of doing this is cutting down on employees commuting. When Unilever CEO Paul Polman set a goal of halving the corporation's CO_2 footprint – it was agile working that he looked to as part of the solution. We are seeing the development of local hubs by some of the most forward-thinking companies where creative spaces are set up closer to people's homes and shared between organisations. There will still be offices, but there will no longer be just one way of doing work – there will be a broad mix of homeworking, shared spaces and offices. More people will work as freelancers or 'neo-nomads'."

How can businesses adapt to the challenges of managing such dispersed workforces, particularly if they are working globally?
"You have to start with bringing in the right people. There has historically been a strong focus on leadership creating value, but increasingly technology is enabling value to be created by a much broader base of people. You need to employ the sort of people who are skilled and purposeful so they don't need micromanaging.

"But future-proofing businesses is not just about the people. It's also about whether a business is making effective use of collaborative technology. Companies with a global footprint will have pockets of people with specialist skills across the world. They have to find ways of working collaboratively to ensure the innovation potential of diversity is realised."

Private equity's mantra is management, management, management. So is the overall workforce the more important consideration?
"The companies that have consistently grown and remained successful over time usually have great employees. But you do need to look carefully at who is leading them to ensure their efforts are not in vain. It's the extremes that make the real difference – either the really great or the downright awful."

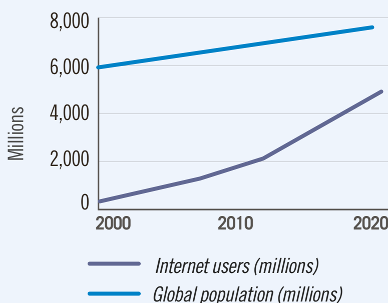
So what characteristics should private equity firms look for in a portfolio company leader?
"They need to ensure that a CEO is a person they can trust – and that they can trust to behave authentically. These days, there is no place for a leader to hide, so they need integrity of behaviour. When hiring, you want to be sure that what you see in the recruitment process is what you get in the many different settings in which a CEO will find himself or herself leading a business today. Transparency has become incredibly important. People don't listen to PR announcements; they read blogs and listen to social media.

"CEOs also need to have done interesting things so you can see they have been able to deal with many different situations. Most value will be created through alliances in the future, so their network is key – and I don't mean the old boys' network. Who do they know that is different from them? Do they, for example, know academics or people in NGOs? If they have a wide circle of contacts, they will have a much greater capacity to listen to and understand diverse views.

"This is vital because as the forces for change accelerate, decisions and actions will throw up all kinds of unintended consequences that can only be dealt with if you are able to take on board new and different ideas and to work in a multi-stakeholder context."

GETTING ONLINE

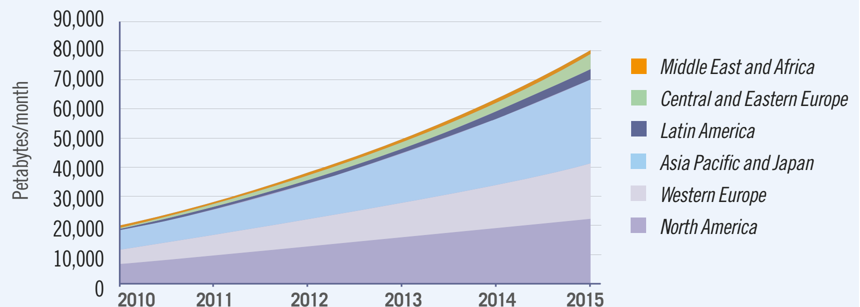
Growth in internet users accelerates



Source: Internet World Stats

GLOBAL INTERNET TRAFFIC

Emerging economies show rapid rise in internet usage



Source: Cisco Visual Networking Index

PERVERSE INCENTIVES?

The role of management teams immediately before a transaction has been widely studied, but new research from London Business School is the first to ask whether the opportunity to buy shares creates an inherent conflict of interest in LBOs and privatisations in the years before the deal.

By Grant Murgatroyd.

Francesca Cornelli

Francesca Cornelli is professor of finance at London Business School (LBS). She is head of the finance department and academic director of the Coller Institute of Private Equity. She has also held positions or taught at the Wharton School, Fuqua School of Business at Duke University, the London School of Economics, the Indian School of Business in Hyderabad and the New Economic School in Moscow.

"CAN BOARDS PUT IN PLACE STRUCTURES AND CONTRACTS THAT INCENTIVISE MANAGEMENT TO INCREASE THE PRICE THE COMPANY GETS SOLD FOR?"

"Could there be conflicts of interest for managers in companies where there is a possibility of the business being privatised or the subject of a management buyout? This is the subject explored in a recent study, *Ex Ante Effects of Ex Post Managerial Ownership*, by Professor Francesca Cornelli of London Business School and David Li of Tsinghua University.

Previous academic research has focused on productivity before and after a buyout or privatisation, and generally finds an improvement that can be attributed to the change of ownership. What has not been considered is whether the company is functioning normally in the months immediately preceding the transaction because of an assumption by management about its future ownership.

A good example came with the accession of Eastern European countries to the European Union. This was a transformational event for these economies, which had been dominated by state-owned enterprises during the years of communism. Across the region, privatisation programmes were enacted with the aim of reforming whole industries, but many of these were delayed or postponed. Incumbent management had often been expected to play a significant role in the enterprise going forward and had a reasonable assumption they would be in a position to acquire a significant stake in the business.

"This situation raises questions about whether managers have a perverse incentive to not pursue good investment opportunities or delay restructuring in order to be able to buy shares cheaply, and acquire a larger stake in the company," says Cornelli. "While the research was initiated in response to delayed privatisations, we believe that the same arguments are applicable for companies in corporate ownership that may be subject to a buyout."

Clearly, private equity firms would counter any accusations that they buy assets embedded in corporate ownership too cheaply. They would add that intense competition among buyers and the prevalence of auctions mean there are few opportunities to buy assets at below market value.

"This paper is theoretical, but it raises important questions for boards and owners and I hope it will provide a basis for discussion about the best ways to prevent value leakage when assets are sold," says Cornelli. "For example, should managers have more of a fiduciary duty to communicate to the company board that they are considering a buyout? How early should such conversations take place? Can boards put in place incentivisation structures and contracts that incentivise management to increase the price the company gets sold for, rather than decrease it?"

It is important to point out that the research finds that the negative effect before the privatisation/leveraged buyout does not take place because managers are able to buy shares below their true market value. On the contrary, when managers buy the shares, they buy them at the fair price and therefore do not make any extra profits on that transaction.

Despite this, the paper says, they have incentives to distort actions before the event. In situations where managers can buy shares they have less of an incentive to undertake new investments that increase the company value, if that implies they will have to pay more for it. Before the buyout the company may still be run efficiently, but strategic investment opportunities which will increase the value of the company will be delayed.

Finally, managers have all the incentives to bias the information given to potential buyers and therefore their investment decisions may be directed to scramble information. Cornelli says: "Taking these factors into account, they do not fool the investors and the share price is the correct one, but the damage – the lack of restructuring or the loss of good investment opportunities – has already taken place."

Frank Carter

Frank Carter is an M&A partner and heads KPMG Corporate Finance's Private Equity Group. He specialises in providing strategic and advisory assistance to government, listed and unlisted companies and financial sponsors. He has worked internationally, including in Spain, the US and France, where he was president of KPMG's Corporate Finance business.

"IF YOU ARE A MANAGER OF AN UNLOVED ASSET, CLEARLY YOU WILL HAVE ONE EYE ON THE OPPORTUNITY OF OWNING THAT ASSET PERSONALLY"

"Given what has happened over the past 20 years, it is inconceivable that management teams who are financially astute would not have considered that one option for a business – whether owned by government or corporate – is a buyout," says Frank Carter, head of the private equity group at KPMG Corporate Finance. "If you are a manager of an unloved asset, then clearly you are going to have one eye on the opportunity of owning that asset personally."

Yet even if there may appear to be a conflict of interest, managers are usually not in a position to run a company down, he believes. "It is usually the company's board, not management, that is responsible for making investment decisions," says Carter.

"It is all about capital and return. If a company's market position is such that it cannot generate what you might call premium returns, and the cost of investment to get it to a stronger market position is such that capital would be better utilised elsewhere, then it is the board and not executive management that makes the decision that that business is not core."

Carter agrees that in theory, management could provide information that influences that decision. However, he argues, if there are appropriate checks and balances in place and an astute level of oversight by the board, then trend analysis will show how the business is performing relative to other units within the group and the industry through its key performance indicators (KPIs).

There are also steps that business owners and executives can take to mitigate the potential for conflict of interest. "As with the monitoring of a company's performance to assess investment viability, sufficiently detailed scrutiny of KPIs and other data should be applied to provide the board with an accurate and independent view of the company's market position, performance and potential value," says Carter.

Such scrutiny becomes all the more important if the remuneration packages of management include incentives contingent upon a successful sale of the business, which is commonplace in Europe.

Having decided to sell, vendors should keep in mind their key objectives of positioning that business to present it in the best possible light and achieve the maximum price for shareholders. Buyers are not the only party to a sale who are able to conduct due diligence on the business to be acquired.

"Vendor due diligence is widely accepted in Europe and parent boards should use this opportunity to do as the buyers do and challenge not just the financials, but also the strategy, business plan and operational performance of the business, tidying up potential problem areas such as property leases, insurance or litigation," says Carter.

Finally, while giving management appropriate opportunities to compete to buy the business, responsible vendors will ensure that the business is widely presented to a full range of potentially interested parties, establishing a market benchmark and ensuring maximum value is delivered to shareholders.

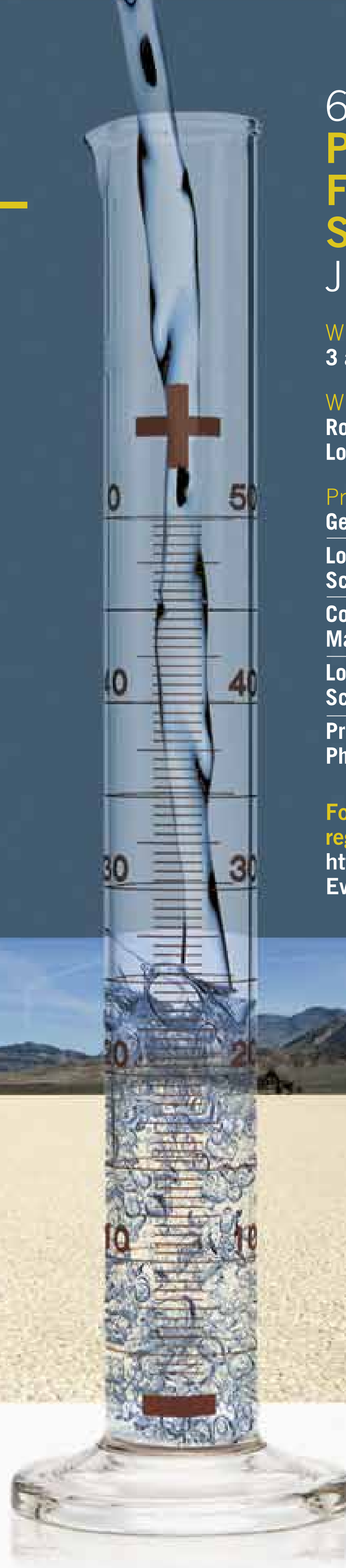
The research

In the *Ex Ante Effects of Ex Post Managerial Ownership* study, Francesca Cornelli of London Business School and David Li of Tsinghua University examine the difficulties of properly balancing incentives to managers in the run-up to a leveraged buyout (LBO) or privatisation.

Agency theory literature stresses the importance of managerial ownership. It is widely accepted that in order to provide managers with appropriate incentives to run the company, it is optimal to let them acquire equity in the firm. However, when there is an expectation that managers might be able to buy a substantial shareholding in the future it may create *ex ante* ("before the event") incentives to delay investment.

The paper does not claim that shares in privatisations or LBOs are underpriced as such, but that delays in restructuring or the loss of good investment opportunities in the period before the transaction reduces the value of the company.

LIQUIDITY AND PERFORMANCE – THE PRIVATE EQUITY MODEL: STILL FIT FOR PURPOSE?



6th Annual
Private Equity Findings Symposium
June 2013

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* First 50 LPs to register receive a free ticket. To qualify, the representative must be at a senior level e.g. investment manager, investment director, CIO, head of alternatives, head of private equity.

** A limited number of tickets available.

IS BIG BEAUTIFUL?

Do pension funds benefit from economies of scale in their investments? And how significant an advantage can size be when it comes to private equity investing? Two recent papers explore these issues. **By Clancy Nolan.**

In many areas of business, scale is considered to offer reduced costs and the ability to run operations more efficiently. But to what extent is this true for institutional investors, such as pension funds? How does an investor's scale influence the overall returns it can generate? And what is the relationship between private equity's contribution to performance and an investor's size? Two groups of academics have recently addressed these questions in two papers studying the returns of defined benefit pension plans across North America.

In their paper, *Is Bigger Better? Size and Performance in Pension Plan Management*, University of Toronto professors Alexander Dyck and Lukasz Pomorski analyse data from an international sample of multi-class, defined benefit pension plans from 1990 to 2008, provided by Toronto-based CEM Benchmarking. Their key finding is that the largest plans outperform smaller ones by 43 to 50 basis points per year. Furthermore, over the course of the nearly two decades-long sample, the largest pension funds see roughly 7% per year more returns from private equity investments than small pension funds, the academics find.

"In a very competitive asset class, the idea that being bigger can be better is theoretically and empirically a bit of a challenge," says Dyck. "The more money that flows in, the more difficult it is to perform better… But there is evidence that private equity managers show extra gross returns. They seem to be able to beat the market. And LPs share in those returns. The question is which investors are more likely to share those returns."

Aleksandar Andonov, Rob Bauer and Martijn Cremers find some similarities in their

"THE HYPOTHESIS IS THAT LARGER GUYS HAVE A BETTER SYSTEM FOR UPDATING INFORMATION. YOU HAVE MORE SOPHISTICATION, SKILL AND TALENT IN LARGER PENSION FUNDS"

Alexander Dyck, University of Toronto

recent study. In *Can Large Pension Funds Beat the Market? Asset Allocation, Market Timing, Security Selection and the Limits of Liquidity,* they find that larger funds appear to pay lower costs partially due to superior negotiating power and an ability to manage some assets in-house. "The main benefit we see for large funds is a significant cost advantage," says Cremers, professor of finance in the Mendoza College of Business at the University of Notre Dame. External managers and funds of funds are often three times as expensive as managing assets in-house, he adds. Yet despite this, his study finds that only 12% of assets in the sample data are managed internally, mostly by the largest funds.

Going external

Smaller funds, by virtue of their lower allocation amounts, are often forced to employ funds of funds to access the types of alternative assets they seek – very large private equity funds or top-tier hedge funds, for example – or to gain adequate diversification. "Yet even if a large fund uses external managers, it will have better negotiating power with those managers because of the amount it is investing," says Martin Fridson, the chief executive of advisory firm FridsonVision and former global credit strategist at BNP Paribas Asset Management.

One further potential explanation is governance. Dyck and Pomorski posit that larger plans see better gross returns in alternative assets compared with smaller funds perhaps because they are better equipped to evaluate those assets. It takes larger resources to evaluate private equity firms, or real estate investments, and execute co-investments (which are subject to lower fees than fund investments and therefore have a greater potential for boosting returns) in-house.

"The hypothesis is that larger guys have a better system for updating information," Dyck says. "You could compare Canada Pension Plan Investment Board or Ontario Teachers, plans that have significant, sophisticated teams analysing funds when they are re-upping. Compare that with someone with $50m or $100m invested in private equity, who might not even specialise in PE, and still has to make a decision about where to invest. You have more sophistication, skill and talent in larger pension funds."

Brant Maller, founder and chief executive of the Alternative Investment Forum and a former member of the NYS Common Retirement Fund's real estate advisory committee, agrees that having sufficient resources is key to success in alternatives. "A fund could have one person overseeing an entire portfolio of fixed income investments," he says. "On the other hand, if you were doing a real estate development project in midtown Manhattan, you would need one person full-time on that alone."

"HERE ARE THESE OTHER ALTERNATIVE ASSET CLASSES, WHERE THERE IS LESS EFFICIENCY AND GREATER OPPORTUNITY FOR MANAGERS TO FIND UNDERVALUED ASSETS"

Martin Fridson, FridsonVision

However, in contrast to the Dyck research, the Cremers et al study does not conclude that bigger is always better. They argue that smaller funds can actually perform better than large funds by being more nimble. "We found some evidence that smaller funds actually do better, notwithstanding their cost disadvantage," says Cremers. "We find they are better able to move money across asset classes, and better able to temporarily deviate from strategic allocation weights."

The alternative route

While neither paper focuses solely on allocations to private equity, both agree that large funds enjoy competitive advantages such as cost savings and negotiating power when it comes to alternative assets – an important finding, given the increased focus on alternatives among many pension funds. Some of the largest public pension funds in the US, for example, have dramatically increased their allocations to areas such as real estate and private equity to chase returns they cannot find in equities and fixed income.

"The pressure is really on at the large pension funds," says one senior manager at a large US pension fund. "The markets are very tough. Public equities are no longer returning 8%." He added that some funds – especially those that are underfunded currently, might not be moving aggressively into alternatives, but that most will likely shift more into alternatives over the long term. "Currently, if you are underfunded significantly, you might not move out of public equities that quickly, because you need cash to pay the bills," he says. "You might be more conservative going into alternatives. Longer term, however, there is likely to be a shift to alternatives as a way of seeking alpha."

That may already be happening. Public plans with more than $1bn under management saw a median 15.07% allocation to alternatives as of June 2012, according to the Wilshire Trust Universe Comparison Service – up from 9.2% a year earlier, and a mere 4.7% in 2007. Wilshire's classification of alternative investments includes private equity funds, hedge funds and funds of

funds. The California Public Employees' Retirement System – the US's largest public pension fund with roughly $237bn under management – had 14% of its assets in private equity in 2012, up from 12.5% of assets at the end of fiscal year 2010.

This pressure to chase returns has been magnified by the global financial crisis. In recent years, investors have faced volatility, historically low interest rates, and lacklustre results from equities and fixed income portfolios. "It's hard to get an edge in those asset classes," says Fridson. "They are very competitive and intensely researched. You aren't going to squeeze much more out of them. So, here are these other alternative asset classes, where there is less efficiency and a significantly greater opportunity for managers to find undervalued assets."

And it's this type of investment that is driving the outperformance of larger pension plans, according to the Dyck research. They find that larger LPs are able to find superior returns in their private equity investments. "Most of the superior returns come from large plans' increased allocation to alternative investments and realising greater returns in this asset class," Dyck says.

Size matters

Overall, practitioners agree that large pension funds do have competitive advantages over smaller funds. "Like anything else in life, if you're the guy with the big cheque, you are going to have some negotiating advantages," says Maller.

"Size definitely matters," agrees the pension fund manager. "It's a benefit. Fund managers are often willing to make adjustments on the financial terms for large investors." And the pension funds know this – the Dyck study found that larger pension plans tended to deploy capital much more in asset classes where negotiating power and scale count most.

When it comes to private equity investing specifically, better returns may also be the result of factors related to resources – such as an ability to bypass managers' fees through co-investment and the use of sophisticated fund selection processes. "It's tough for a $25m pension fund to have the resources in-house to investigate and monetise those private equity investments. It's the bigger funds that will be bigger players," says Fridson. Of course, competitive advantages don't always translate into higher returns. "A larger fund may be able to devote more resources to allocating assets. Will this cause you to get better performance? That's not guaranteed."

The research

In their paper, *Is Bigger Better? Size and Performance in Pension Plan Management*, University of Toronto academics Alexander Dyck and Lukasz Pomorski analyse data from an international dataset of multi-class defined benefit pension plans. They find that the largest quintile of pension funds outperform the smallest quintile by 43-50 basis points per year. Dyck and Pomorski attribute such gains to cost savings related to internal management (where costs are lower than under externally managed assets), as well as large plans' increased allocation to alternative investments. They find that in private equity and real estate investments, large plans have "both lower costs and higher gross returns, respectively yielding up to 6% and 4% per year improvement in net abnormal returns". In private equity, they find that larger funds can yield up to 7% more per year than smaller funds in that specific asset class.

They attribute this advantage to larger plans' ability to access co-investment opportunities, as well as being better able to identify top-performing private equity funds. They also find that large plans shift assets into asset classes where scale and negotiating power matter most – they are, in effect, leveraging their purchasing power. Dyck and Pomorski suggest that plan governance affects performance, saying that stronger governance provides higher returns and a greater ability to take advantage of scale economies. They find that corporate pension plans perform more strongly (by 16 basis points on average) than public pension plans, which are often more subject to politically driven resource constraints (ie, they are unable to pay their investment staff as much) and can be subject to other political influence that has the potential to dilute focus on economic returns.

In *Can Large Pension Funds Beat the Market? Asset Allocation, Market Timing, Security Selection and the Limits of Liquidity*, Aleksandar Andonov and Rob Bauer, both of Maastricht University, and Martijn Cremers, of the University of Notre Dame, analyse three components of active management – asset allocation, market timing and security selection – in the performance of US pension funds.

They use the same data source as the Dyck and Pomorski paper – CEM Benchmarking – and find that on average, large funds "outperform, net of costs and after risk-adjusting, with an annual alpha of 89 basis points that is evenly distributed across the asset allocation, market timing and security selection components".

They find, however, that lower costs do not necessarily lead to better performance, as their impact varies between asset classes. When a pension fund modifies its strategic asset allocations, larger funds face especially notable liquidity limitations. It is in frequently balancing allocations over a short period of time that the largest funds face a diseconomy of scale and added costs. The academics conclude that larger pension funds would do better if they invested more in passive mandates without frequent rebalancing across asset classes.

Nevertheless, they find that large funds enjoy advantages when it comes to alternative asset classes and that funds managing more of their assets internally show better performance compared with peers that have mostly externally managed assets.

“How does private equity benefit from today’s volatile financial environment?”

Professor Eli Talmor
Chairman, Coller Institute of Private Equity, London Business School

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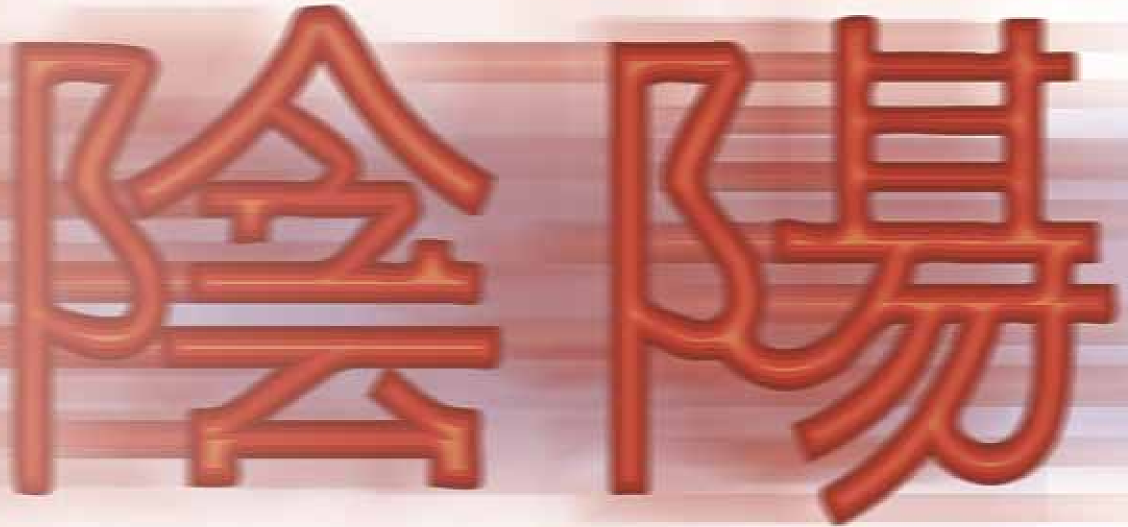

CASE STUDY

YIN AND YANG

China's rapid growth has fostered a proliferation of private equity and venture capital firms. But, in a fast-changing environment, what marks out those that can survive over the long term from those that will fall by the wayside? A new case study helps to shed light on this.

China's rampant growth over the last decade has been accompanied by a burgeoning private equity and venture capital industry, transformed by regulatory shifts and a booming IPO market. There are now more than 3,000 Chinese PE firms, most of them formed over the past five years, while China-focused funds now account for 9% of global PE commitment values, up from just 1% in 2007.

At the heart of that growth lies Shenzhen, the city in southern China's Guandong Province that within 30 years has mushroomed from a small fishing village of 30,000 inhabitants in the 1970s to a sprawling metropolis of more than 10 million people.

The Shenzhen Stock Exchange's (SZSE) establishment of an SME Board in 2004 and the NASDAQ-like ChiNext in 2009 make it a highly attractive venue for private equity firms. The number of listed companies on the SZSE has doubled since 2004. Against this background, the Shenzhen Cowin Venture Capital fund represents a perfect opportunity for a case study by the London Business School's Coller Institute of Private Equity. "There are unique issues in Chinese venture capital because of the country's scale," says Eli Talmor, the Institute's chairman. "And while in the West, 90%-95% of exits are done via trade sales, in China there has been an unsaturated appetite for new listings and hence the most desirable form of exit was via IPOs. So there's also an element of uniqueness being based in Shenzhen, close to the exchange."

The result is *Cowin Capital: The Evolution of the Chinese PE & VC Industry*, produced by Professor Talmor, together with MBA students Wei Cao, Masaki Takeda and Carolyn Tiet.

Surviving the crash

Founded during the dot-com bubble in 2000, Cowin survived the ensuing crash that saw many nascent Chinese VC funds fold. Not only that, but it went on to achieve impressive success following the regulatory changes of the mid-2000s. "The key questions are: how Cowin has managed to transform itself and what it is doing to perpetuate its success," says Talmor.

Cowin grew from cautious beginnings to become one of Shenzhen's leading PE lights. Having launched six funds in total, the firm currently manages RMB 5.5bn of capital and assets valued at more than RMB 7.5bn. As of June 2012, 31 of its investments had resulted in distributions to Cowin's investors, including 23 IPOs and eight buybacks or trade sales. Its success has earned Cowin founder Weihe Zheng the moniker "Star Shooter".

However, this success has not been easily

> “COWIN USED TO BE PASSIVE, BUT NOW HAVE TO BE MORE ENGAGED. THEIR NEW RECRUITS ALSO HAVE A MORE DIVERSE INTERNATIONAL BACKGROUND”
>
> ***Eli Talmor, Coller Institute of Private Equity***

achieved. In particular, the period between the dot-com crash and the establishment of the SZSE's SME Board in 2004 was fraught with difficulty. “All hell broke loose,” says Dr Xiao Zhang, the firm's executive vice president. “A couple of hundred funds folded. Unless you were really good and performing well, paying dividends or making some exits to reduce investors' anxiety, you would fold too.”

So how did Cowin survive? “We have different genes from other firms,” says Zhang. “For the first six to seven years we didn't touch anyone else's money.”

Patience and experience

Indeed, when Zheng and his wife Li Huang started out in 2000, they used their own funds of RMB 80m as registered capital, investing in six companies within a year. Without the pressure from limited partners, Cowin had the luxury of patience.

Zheng could also rely on inside knowledge of the SZSE, where he worked during the 1990s before advising companies such as Vanke and Shenzhen Development Bank on IPOs as one of China's first securities lawyers. In 2007, Zheng helped to draft China's revised Partnership Law, setting the legal framework for limited partnership PE funds. These experiences gave Cowin expertise of the Shenzhen IPO process as well as contacts within key regulatory bodies.

In 2007 Cowin raised its first fund, the RMB 50m Nanhai Growth Fund I, attracting investment from high-net-worth individuals from among China's burgeoning entrepreneurs. Yet crucially, Zheng and Huang were the biggest shareholders, matching 20% of any funding. “It's a commitment to our investors,” Zhang says. “If you're making money, so are we and if you're losing money, we're losing more.” Between 2007 and 2011, Cowin expanded rapidly, raising five funds and RMB 4bn in total. In 2010 it raised more than RMB 1bn for the first time and in 2011 more than RMB 2bn. While maintaining the same fee structure, Cowin's funds had a shorter tenure of five years rather than the 10 years common to their Western counterparts.

Picking winners

The firm soon became known for a knack of picking strong IPO candidates. “We backed the right car on the right track with the right driver,” says Zhang.

Overall, Zhang sums up Cowin's investment strategy as “like the Yin and Yang of Dao”, involving a mix of defensive and offensive investments during portfolio construction. Cowin had invested in 72 companies across the five funds as of May 2012. Of these, 18 were in low-carbon industries (renewable and efficient energy), while defensive industries such as consumables, healthcare and agriculture were also strongly represented.

Within this framework, the firm would look for “hidden champions” in “rising sectors” – high-growth companies that could lead their sectors in three to five years. It would buy at a price/earnings ratio of four to 10 times, investing RMB 15m-50m. The firm then applied “detail-oriented management” principles and used its SZSE expertise and network of contacts to guide the company to an IPO – something that tends to happen much more quickly in China than in more mature economies.

For example, in 2007 Cowin invested RMB 7.25m for a 9% stake in Beijing Easpring. Although the lithium ion battery-producer was making only RMB 3m profit at the time of investment, Cowin saw that it had the potential to rise to the top of its industry. Cowin introduced Easpring to more downstream clients to improve sales, developed its commercial team and set up an employee stock option scheme. Easpring was floated on ChiNext in 2010, in a heavily oversubscribed IPO.

Apart from two companies that exited via buyback, Cowin's first fund enjoyed average annual revenue growth for its portfolio companies of 56%, while the eight portfolio companies in the second fund saw average annual growth of 66%. This track record resulted in the company ranking among the top 10 Chinese VC firms, according to the case study.

Increasing engagement

The study showcases the lessons Cowin has learned and applied in order to maintain its success in this new environment. “They used to be passive, taking a back seat, but now have to be more engaged. Their new recruits also have a more diverse international background,” says Talmor.

In 2012, Cowin raised RMB 27m in a new round of funding, the key difference being that the capital is earmarked for earlier-stage opportunities. This means Cowin needs to be more involved in the team, business model and cash flow generation of its companies. So far the new fund has made a dozen investments.

Cowin is now an established player in an increasingly crowded marketplace, during a cycle of a cooling Chinese economy – two new dynamics that Zhang sees as positives. “People aren't in the mood when things are rosy to discuss terms, pricing and volatility, but now those conversations are taking place,” he says.

More competition, meanwhile, will weed out weaker participants in an overcrowded and overhyped market. “When tough times come, these firms lose,” adds Zhang. “We see good deal flow now and entrepreneurs know they have to work with a reputable firm for all strategic purposes.”

Cowin, which now has a team of 35 investment professionals, is also expanding its investment base globally through the process of raising its first US dollar-denominated fund.

The Cowin case study is to be taught in London Business School and will be included in the next edition of Florin Vasvari and Eli Talmor's book, International Private Equity *(John Wiley* & Sons).

> “FOR THE FIRST SIX TO SEVEN YEARS WE DIDN'T TOUCH ANYONE ELSE'S MONEY”
>
> ***Xiao Zhang, Cowin***

Jeff Bunder
Ernst & Young

Jeff Bunder is Ernst & Young's global private equity leader and has served PE clients for most of his 25 years at the firm. He has extensive experience leading due diligence engagements for private equity and corporate acquirers. He has also been a member of the On-Call Advisory Practice, focused on transaction-related technical accounting matters.

Paul Oyer
University of Stanford

Paul Oyer is the Fred H Merrill professor of economics at Stanford University's Graduate School of Business. He is also the incoming editor-in-chief of the *Journal of Labor Economics* and a research associate at the National Bureau of Economic Research.

Edith Hotchkiss
Boston College

Edith Hotchkiss is an associate professor in the finance department at the Carroll School of Management of Boston College. She is also a member of the academic advisory board and board of directors of the Turnaround Management Association.

FINANCIAL ENGINEERS OR VALUE CREATORS?

Private equity makes much of its ability to add value to the businesses it backs, while many critics suggest that the industry is simply employing a financial engineering strategy by loading companies with debt and reaping the tax benefits. Which view is more accurate? We got to the heart of the matter with the authors of three pieces of research, an adviser and two LPs.
Chaired by Vicky Meek.

Private equity firms claim to add value to their portfolio companies through significant operational improvements. Yet three pieces of research appear to suggest this isn't the case. All three use samples of large US deals completed before the crisis and find that there is little evidence of a greater increase in operational performance compared with similar companies that are not subject to LBOs. They also suggest that the key difference between the study samples and comparable companies – increased leverage in PE-backed companies – is the key driver in the returns generated by private equity, with one study even suggesting that a change in capital structure is the primary purpose of an LBO. Does this mean that PE is simply a financial engineering play? Three academics and three practitioners discuss.

Jonathan Cohn
University of Texas

Professor Jonathan Cohn has been an assistant professor of finance at the University of Texas at Austin for four years. Before joining the faculty, he earned his PhD in finance from the University of Michigan. He also has worked in commercial banking and litigation consulting, and holds an MBA from Washington University in St Louis.

Monte Brem
StepStone Group

Monte Brem is CEO of StepStone Group, which provides customised private equity investment management and advisory services to institutional investors. He oversees the management of StepStone Group and its client relationships, chairs the management committee and is a member of the investment committee. Before founding StepStone Group in 2007, Brem was the president of Pacific Corporate Group.

Simon Moss
Hermes GPE

As head of Europe at Hermes GPE, Simon Moss is responsible for all of the firm's private equity manager relationships in Europe and for coordinating the sourcing, due diligence and monitoring of European funds and co-investments. Simon joined the company in 2002 and was a founding member of predecessor organisation Gartmore Private Equity.

Edith, your research starts by saying that studies using data from the 1980s suggest that LBOs create value, but then it questions whether this is still the case for more recent deals. Why?
Hotchkiss: "The industry has grown so much over the past 20 or so years and its structure has changed considerably so that the characteristics of the industry are quite different from those that brought about the early buyouts. Yet it has somehow been taken for granted that findings in studies using 1980s data still stood. We wanted to see if the results differed using more recent deals – those completed between 1990 and 2006.

"In earlier transactions, the management buyout was the dominant deal type. The previous notion of what buyouts were doing was that companies selected for buyouts were underperforming for some reason. As the industry developed, private equity firms started initiating deals rather than management and it is clearly not the case that targets are all underperforming any more. We wanted to see how PE generated returns when it was no longer clear what the operational improvements might be in a company."

And your findings seem to suggest that there is little evidence that PE is now any more effective at making operational improvements than public companies?
Hotchkiss: "Overall, the operational gains in the PE-backed companies we looked at were not stellar. They were certainly not that different from publicly listed benchmark companies and nowhere near those documented by the previous studies. That was puzzling because we found that the median and risk-adjusted returns on the deals were large – 72.5% on capital before the buyout and nearly 41% on post-buyout capital. And that even included distressed companies.

"So we looked at whether the outsized returns were being generated by the tax benefits of leveraging up or whether multiple expansion (an increase in market valuations) was the source. We found that the tax benefits from leverage, multiple rises and operational gains were all equally important in returns attribution. However, there was a substantial variation in operating gains across our sample, with some deals showing a good improvement in operational performance. So we can't rule out that this is still an important factor in explaining returns – in some deals."

Paul and Jonathan, your studies found similar results, didn't they?
Oyer: "We also wanted to answer the question of whether PE firms still carry out the strategic work pointed to by [Michael] Jensen 30 years ago. There is a perception that PE firms lever up companies and crank up the incentives for the top managers, but we wanted to determine whether this had an effect on performance. We certainly found a difference in compensation between public companies and PE-owned ones, but we're in broad agreement with the Hotchkiss et al study: operational improvement exists, but it's not significant in LBOs. Neither is there a marked improvement in profitability. We go on to suggest that the returns generated in LBOs may well be the result of efficient use of leverage or tax advantages of debt."

Cohn: "The Hotchkiss et al study raises questions about company performance following an LBO and finds mixed results – some showed improved operational performance; others didn't. Yet that study uses a public data set of companies that either went on to IPO or that had debt outstanding. We looked at deals of a similar size and time frame – larger deals involving companies with assets of $10m or more completed between 1990 and 2005 – but we were able to broaden the sample because we had access to the Internal Revenue Service corporate tax returns data.

"We found that there was not much evidence of performance improvement in LBO companies

across the sample, which, because it is so broad, enables us to question whether the findings apply to LBOs as a whole. Using a variety of measures, such as return on assets, we found the figures were essentially flat. We also studied underperforming businesses and matched the results to companies that didn't undergo an LBO and found little difference – this suggests that previously underperforming LBO companies would have reverted to the mean even without PE involvement."

Jonathan, you conclude that the primary purpose of an LBO is to effect a one-time change in capital structure. Why?

Cohn: "Well, we looked at how the capital structure of companies evolved following the LBO, something that wasn't studied for LBOs during the 1990s and 2000s. We found that leverage is maintained at a high level – and even increases during PE ownership. Five years after the LBO, leverage was higher than in the first year post-transaction. We were surprised by this because we would have expected payments to be made over time or in stages if bullet terms were employed. The notion that debt puts pressure on management to create cash flow to pay down debt just doesn't seem to be true. The only other possible explanation is that the motivation for LBOs is to make this change in capital structure."

> "WE FOUND THAT LEVERAGE IS MAINTAINED AT A HIGH LEVEL – AND EVEN INCREASES DURING PE OWNERSHIP. FIVE YEARS AFTER THE LBO, LEVERAGE WAS HIGHER THAN IN THE FIRST YEAR POST-TRANSACTION"
>
> *Johnathan Cohn, University of Texas*

Given these results, are PE executives simply financial engineers?

Bunder: "Certainly not any more. I'm surprised by the results of the studies. We conduct an exit study of larger deals annually and our analysis shows that while leverage and multiple expansion are integral to PE returns, operational improvements are significant and are increasing over time. PE firms do create value.

"Most funds would agree that in the 1990s, they spent less time focused on operational improvements. That was the early phase of the PE business model, which could be characterised as passive investing. But over the last 10 years, this approach has changed. PE firms are much more involved in driving transformation – they're not running the businesses, but they are using their control positions and helping with operations. They are spending considerable resource and time dedicated to strategically identifying value creation opportunities and bringing in operational experts and hiring consultants to execute on these.

"Our studies find significant EBITDA growth in private equity-backed companies. While it's possible to argue that this could be the consequence of picking an expanding sector or sub-sector, our experience shows there is much more to it than that. PE firms put in place a detailed plan from day one of how they will achieve EBITDA growth. There is often a decline initially because the plans require significant investment, but after that, we see growth as companies expand into new markets, expand product lines or pursue add-on acquisitions."

Brem: "Financial engineering was a large part of the PE strategy in the early 1990s, but these days it really depends on which funds you are talking about. If you're investing in the average/median fund, it's not worth investing in private equity at all. In the same way, if you look at an average, it's easy to say that there isn't much operational improvement by private equity. Yet in the funds we back, leverage is the smallest part of the returns they generate; multiple expansion and operational improvement are the greatest.

"We co-invest with many large GPs and so we know how much work goes into operational improvements in portfolio companies – we've seen it firsthand and have the data. A huge effort goes into drawing up and implementing operational improvement plans."

Oyer: "Even I'd hesitate to say that PE executives are just financial engineers, despite our results. When you talk to the private equity guys, they are clearly taking a very active stance on achieving an improvement effect in the companies they back. That may be there, it is just not showing in our data.

"But it's worth pointing out that the data are not easy to read. It's not easy to get at. So you have to look at figures before and after the LBO and then you need to work out what is operational performance and what is not. And on measures such as return on assets, you have the added problem that this varies according to industry. It's highly complex."

Moss: "There is also a problem with the fact that to study private equity, you have to use data stretching back a long way. LBOs in the 1990s are very different from those completed in the 2000s – the market, firms and leverage conditions changed over that time.

"It's fair to say, though, that our returns attribution analysis tallies to a degree with that seen in the Hotchkiss study – across the universe, we find that returns are generated by a mix of leverage, multiple expansion and operational improvement. Yet, while we believe leverage presents a real risk that is often skimmed over by private equity houses, I don't think you can characterise firms simply as financial engineers.

"Much of the value of PE investment stems from its ability to concentrate ownership, take a control position and attract the most talented management teams by offering them high levels of performance-related remuneration. This enables them to manage their investments more effectively than with a public equity structure, where ownership is much more dispersed. In the larger deals, it may be that firms are only making incremental improvements to operating performance, but their control positions enable them to move quickly when things aren't going right, including changing management. To my mind, that demonstrates that PE's strategy goes much further than simply applying financial engineering techniques."

What do you think, Edith?

Hotchkiss: "I'd offer a personal opinion that goes beyond our paper because we study public-to-

private transactions – these are necessarily large deals – and our research looks at US deals only. So there is a possibility we are missing part of the picture. Private equity appears to be a useful tool for helping capital-constrained companies to grow. A number of academics have looked at other markets, such as Europe, and they have looked at mid-market companies. These studies demonstrate that PE is able to create value because there is much more room to do this in markets where capital is not as easy to source and in the mid-market where scope for growth and improvement is much greater.

"Nevertheless, if you look at our sample, I would question whether PE firms going into large, public companies bring a lot in terms of value. And if they are only holding a company for a year or two – as has been the case with a number of deals – I'm not sure what they can achieve operationally over such a short time span."

So would others agree that PE is more able to add value on smaller deals?
Bunder: "In our experience and based on our study results, with smaller deals you typically see higher returns. These can be attributed less to leverage because there are either lower levels of leverage or none at all if you look at growth equity deals. The opportunity to provide increased governance, improve operational structure, support expansion beyond the domestic market and assist in activating add-ons is more likely to occur in smaller investees. With larger deals, especially in public to privates, I'd agree that it is harder to achieve comparable returns. Because these companies are more established and there is less scope for change, significant operational improvements may yield returns but not at the levels observed in growth equity situations. That doesn't mean there aren't improvements identified and executed on; it's just that they are not of the same scale and so may move the needle less."

Brem: "Our experience is certainly that there are some very good firms in the mid-market producing returns through operational improvement, partly because the companies they are investing in start from a lower base – there is more to improve. But the larger firms have invested much more heavily in their operating capability than smaller ones so they really have the edge."

"PE FIRMS ARE MUCH MORE INVOLVED NOW IN DRIVING TRANSFORMATION – THEY ARE USING THEIR CONTROL POSITIONS AND HELPING WITH OPERATIONS"
Jeff Bunder, Ernst & Young

If PE houses really have increased their focus on operational improvements since the crisis, would the results be different on post-crisis deals?
Cohn: "There is certainly plenty of anecdotal evidence to suggest that PE is now genuinely focusing on operational improvements as a means of value creation. But we won't see for some years to come whether they are successful or not."

Brem: "I think we'd see very different results. The past 10 years has seen significant investment by GPs in their operational capabilities, which has been driven in large part by LPs – they want to see evidence that they generate returns through improving the businesses they back. It's a trend that was already there pre-crisis, but has accelerated since."

Bunder: "There was such a loss of value during the period immediately post-crisis that funds accept they may not achieve the great returns they had become accustomed to pre-crisis. Yet the returns that they will achieve will largely be attributable to the 'roll up your sleeves' work they did on portfolio companies, not just to stabilise them but to materially improve performance. PE professionals went deep into these companies and I think there has been a change in mentality as a result. PE has really learned from the experience and understands how to assist and ultimately improve businesses better than it did before. The time they spent with companies in the aftermath was not just about getting the capital structure right – although that was an important part of ensuring survival – the subsequent focus was on resetting the foundation, putting them on the right footing to survive and thrive in a difficult environment. They now see that there is far more value they can drive if they stay close to their portfolio companies. So, yes, I suspect the results would be very different if you conducted these studies in a few years' time."

Moss: "I'm not convinced we'd see a great deal of difference. Firms were forced to focus on operational improvements through the downturn; in many cases this was reactive and not proactive. Some have moved quickly and effectively, others proved too slow to implement change despite concentrated ownership. In terms of operational improvements, theoretically PE should fare better than public companies given that concentrated ownership should allow for swifter decision taking and implementation. However many firms in practice remain very transactional, with their mentality and culture focused on getting the deal done and then moving on.

"Some firms have built operational teams in-house over the last few years. But no one has quite cracked this model yet – issues remain around how you compensate the operational experts and whether that should be on the same basis as the deal-doers, and around the different mindsets between the two types of people. In other cases, firms may be full of smart, highly professional people, but they are still too reliant on external consultants. They are brought in to do the commercial due diligence and it's in their interest for the deal to go ahead because they'll get paid more through further work on the company post-deal."

Ultimately, though, as long as firms can generate good returns, does it really matter if PE is simply engaging in financial engineering?
Hotchkiss: "That is a big 'if'. When we wrote our paper – shortly after the onset of the crisis – we posed the question that if the amount of leverage available reduced and multiple increases were removed, where would returns come from? At the time, it seemed the picture would be bleak. Yet many companies have been able to refinance, which has helped equity returns.

"However, from a company point of view, the source of returns does matter. You have to question who PE firms are creating value for. It

doesn't appear to be the companies and yet it should be for all concerned."

Oyer: "But if you look at it from the GP or LP perspective, it's not their place to worry whether operational improvements are happening or not – they should be concerned about the returns. That's what matters to them."

Cohn: "I'd disagree. Given the reduction in leverage in the market we see now, as an LP I'd want to see clear evidence of value creation in any GP I back because leverage alone will no longer produce the returns they need."

Moss: "It really does matter. Adding significant leverage adds huge risk onto the investment – that's fine if the investment works out; it's not if it doesn't because it's not the GP's capital that is lost, it's our clients' capital. I can't see why there aren't regulatory caps placed on this at, say, 50-50 debt-equity. That would reduce volatility for the fund's investors as well as protect the company stakeholders.

"We are also very interested in how GPs' returns are generated because our clients are pension funds that are looking for low levels of volatility – they don't get that if companies are piled high with debt. We prefer GPs to make profits through buying at the right price, putting in conservative levels of debt where appropriate and ensuring the companies they back are well managed."

Brem: "I agree that it does matter – to a degree. If as an investor you are committing to the asset class because it has a lower correlation with public markets than other investments and a GP is not improving the business, the strategy is linked to public market volatility. It's also riskier to take on high leverage. That said, if we saw a fund able to find businesses with low leverage, add debt – particularly if they can negotiate better terms on this than others – and manage the risk effectively to generate good returns – we'd consider it. At the same time, we would take into consideration the correlation and risk elements of the strategy.

"Not every fund we back is focused on operational improvements. Some may be great at navigating the regulatory landscape in Brazil, for example. And in Asia, investments tend to be about public market arbitrage more than operational improvements. Over the years, private equity has proved itself to be the ultimate in opportunistic asset classes – it's nimble and has the knack of spotting different investment areas and strategies that will generate good returns."

The research

In *Do Buyouts (Still) Create Value?*, Shouron Guo of Duke Energy Corporation, Edith Hotchkiss of the Carroll School of Management at Boston College and Weihong Song of the Department of Finance at the University of Cincinnati, examine whether and how US public-to-private leveraged buyouts completed between 1990 and 2006 created value.

They find that on average there were large increases in total value from buyout to exit. Median market and risk-adjusted returns were 72.5% based on total capital just before the buyout to subsequent sale, IPO or bankruptcy, even including those where the outcome was distress. When examining the source of these returns, the paper finds that improvements in operating performance are significantly smaller than those studied in the 1980s and in many instances no greater than those seen in benchmark firms that were not subject to LBO. In addition, it finds that improvements in cash flows (net of tax benefits) increase when, after the buyout, the leverage of the target company is higher than the average. This suggests that leverage has the effect of increasing discipline and improving governance.

Overall, the paper finds that improvements in operating performance and increases in industry valuation multiples each account for approximately 20% of returns. A further finding is that the effects from tax benefits from increasing leverage are substantial, although they depend on whether the increased leverage is maintained post-exit.

The findings of *The Evolution of Capital Structure and Operating Performance after Leveraged Buyouts* suggest broadly similar patterns. The authors, Jonathan Cohn, Lillian Mills and Erin Towery, all of McCombs School of Business at the University of Texas, include a broader sample of LBOs by using federal corporate tax return data of US deals completed between 1995 and 2007 rather than relying on existing data sources. It finds little evidence of operating improvement following an LBO, in contrast with the literature that studies cases where the public financial statements are available for the target companies. The authors suggest that the substantial operating improvements of such companies are found because only the best-performing LBOs are likely to go public or issue public debt.

The authors study mean and median pre-interest return on sales, return on assets and a measure of economic value added in the sample companies. They find that all of these measures are broadly flat, although there is a slight increase in pre-interest return on sales. The authors find evidence of improved operating performance when a buyout target is underperforming before the deal, although this is no greater than for the control sample, suggesting the improvement is not the result of an LBO. In addition, the paper examines whether increased debt levels post-LBO reduce over time. They find no evidence this is the case even where companies produce high cash flows. The paper therefore concludes that effecting a one-time change in capital structure is the primary purpose of LBOs.

Managerial Incentives and Value Creation: Evidence from Private Equity by Phillip Leslie and Paul Oyer, both of the Graduate School of Business of Stanford University, analyses the differences in the incentive schemes for top executives between US PE-owned companies that went public from 1996 to 2005 and similar public companies. It finds that PE-owned companies use much greater incentives for top management: the highest-paid executive in a PE-owned company owns approximately twice as large a share of the business, earns about 12% less in base pay and receives a substantially larger proportion of his/her cash compensation through variable pay than in public companies. Yet even despite this high level of incentivisation, the study finds little evidence of PE-owned companies outperforming public companies in profitability or operational efficiency. The study also finds substantially higher levels of debt in private equity-owned companies.

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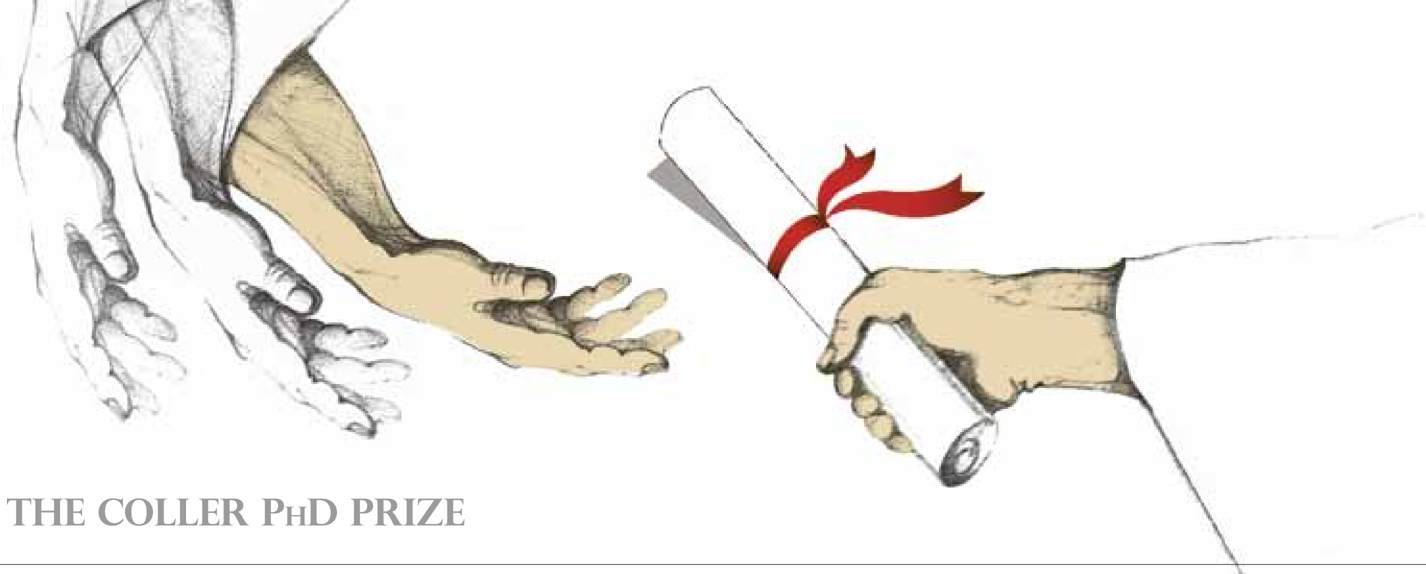

THE COLLER PHD PRIZE

DEGREES OF SUCCESS

Common educational ties increase the chances of syndication between VCs, according to recent research. So is this just another example of the 'old boy network' playing out?

Nicholas Neveling investigates.

Syndication in venture capital is a well-studied area. Research into what motivates VC firms to syndicate investments has already been carried out by academics such as Josh Lerner in *The Syndication of Venture Capital Investments*, which found a desire to diversify portfolios as a principal reason to syndicate. More recent research by Yael Hochberg, Alexander Ljungqvist and Yang Lu (see *Whom You Know Matters: Venture Capital Networks and Investment Performance*, featured in *Findings* issue 4, pp12-15) into the subject found that syndications tend to arise when firms are looking for partners that have specific abilities or resources that they may lack.

However, in his paper, *Manager Networks and Success of Venture Capital Syndications*, which was the runner-up in the 2011 Coller PhD Prize, Vineet Bhagwat explored the effect personal relationships had on the performance of venture capital deals. A PhD student at Northwestern University's Kellogg School of Management, he explored personal relationships in the form of educational ties to discover whether they are as influential in dealmaking as people often believe.

"Talk to anybody in the venture capital and private equity industry and they will tell you that personal connections and relationships matter a lot," says Bhagwat. "They matter for deal sourcing, collaboration, investment and many other areas. However, this had not been explored in detail, in a quantitative way and in particular it had not been investigated whether personal connections could actually improve deal performance."

Although he is interested in the impact of other types of personal relationships on the formation and success of syndicates, Bhagwat focused solely on educational ties for this study. "I used educational ties because these are made in the formative years of a person's life, in a context where people are looking to make connections and branch out," he says. "This implies that these ties will be more salient and meaningful even decades later."

He also looked specifically at early-stage venture capital deals, where outcomes are more uncertain and the viability of a product, market or management team more subject to disagreement. This means the "contracting frictions" or the pressures placed on a relationship between co-investors are high, so trust is essential if the parties are to share information and work successfully together.

College counts

Bhagwat found that two VC firms are more than twice as likely to syndicate an investment if the managers at the firms received the same degree from the same educational institution.

The truly striking finding, however, was the impact on post-syndication performance. Bhagwat found that syndicates with educational connections outperform those without these connections by about 30%, and are also more likely to receive follow-on funding or reach an exit. "The impact on deal performance surprised me. I really had no prior views as to which way the results would go, but I did not expect such a dramatic increase in performance for deals that have connected syndicates," Bhagwat says.

The experience of many VCs backs up the findings. Alex van Someren, a partner at European venture capital firm Amadeus Capital Partners, says he has regularly seen the value educational ties can bring to syndicates. "There is a logic to working with people from the same educational background. Working together in a syndicate requires good faith," he says. "People with educational links will place a similar value on reputation and good behaviour."

Venky Ganesan, managing director at Globespan Capital Partners, a venture capital firm based in Palo Alto and Boston, also agrees that educational ties are one of many personal relationships that can drive the formation and performance of a syndicate. "Social ties, including educational ties, are some of the biggest drivers of syndicate formation and they absolutely have an impact on performance," he says. "If people know each other and have personal ties they are more likely to be aligned and focused."

Degree dangers

Yet at what point does working with people you know become limiting? Some venture capital

> “PEOPLE WITH EDUCATIONAL LINKS WILL PLACE A SIMILAR VALUE ON REPUTATION AND GOOD BEHAVIOUR”
>
> *Alex van Someren, Amadeus Capital Partners*

partners suggest that placing too much emphasis on common educational background is risky. “You can have a lot of guys from Ivy League universities floating into firms with a sense of entitlement. That can be really damaging,” says one venture capital investor.

Indeed, no firm can afford to focus its recruitment efforts on people with a certain set of letters behind their name rather than raw ability and expertise. Erik Sebusch, a partner at US venture capital firm CMEA Capital, says there are too many other factors to consider when joining a syndicate to pay too much undue attention to what degrees people have.

“I attended Thunderbird School of Global Management and it has provided me with an incredible network, but it is important to remember that venture capital is a cottage industry and that diversity is key,” Sebusch says. “If you are investing in a biotech company, you want to work with people with the research credentials and skills, not with people from a particular school.”

Bhagwat acknowledges such concerns. Indeed, the focus on the performance of syndicates featuring educational ties was specifically designed to test whether co-investments based on personal relationships were a result of “nepotism, or lack of objectivity” rather than “any valid economic rationale”. He also looked into the influence of educational ties on syndicate formation and performance when the firms involved have worked together previously. He found it was negligible.

Bhagwat argues that when firms are new to each other, the positive impact of educational links is clear. This is not to say that common educational background trumps other factors that influence syndicate formation, such as availability of capital, expertise and market reputation. But it does help with the formation of relationships that are so important for syndicate success.

It is “connections”, Bhagwat says, that aid syndicate formation. Educational ties are one set of such connections. “It is not educational connections per se. It is having a channel and context through which the parties involved can share information and collaborate more easily,” he explains.

For Steve Fredrick, general partner at Grotech Ventures in the US, any kinds of connections between parties are a great help when doing business. “Nobody goes out determined to do deals with people from specific schools, but a shared educational background opens the door and starts a discussion,” he says. “There are multiple touch points that bring people together and begin a dialogue. What school you went to is one of those touch points.”

For Bhagwat exploring the influence of other “touch points”, including board relationships and club memberships, is also worth investigating. Trying to quantify whether some connections are more powerful than others is another area of interest. “I have not yet explored the effect of board connections or other types of ties on syndication. It will be interesting to see how that plays out,” he says.

For further analysis of how employment networks impact PE advisory appointments and the bidding process, see Private Equity Findings *issue 5, pp23-24.*

The research

In *Manager Networks and Success of Venture Capital Syndications*, Vineet Bhagwat analyses whether the personal relationships of managers formed through overlap at an educational institution can have an impact on the syndication decisions of venture capital firms.

Bhagwat specifically asks whether venture capital firms syndicate investments more often if the managers at the two firms have a common educational background, and whether syndications formed with educational relationships outperform syndicates where no such relationship exists.

Bhagwat’s sample is made up of 31,501 investment rounds by 956 managers at 390 venture capital firms involving 10,314 companies between 1980 and 2008.

Bhagwat’s analysis shows the probability of syndication in a given year between two firms without an educational connection is 1.2%, while for those where the managers have received the same degree from the same educational institution, the probability is 3% – or more than twice as likely.

The research finds that these connections create value: syndicates with educational connections outperform those without these connections by approximately 30%. However, this is only true when comparing first-time syndicates. This effect is not seen in second-time syndicates and the increase in success as a result of personal relationships is higher only in the earlier stages of an investment.

In addition, the study finds that the likelihood of follow-on funding or successful exit increases to 77% where educational ties are present from 68% where they are not. Overall, the study demonstrates that educational ties are important in opening channels of information between firms that have not worked together before.

PRIVATE EQUITY: A MARATHON OR A SPRINT?

The Coller Institute of Private Equity held its **5th Annual Private Equity Findings Symposium** on 28 and 29 May 2012. A diverse audience from industry and academia took part in a number of fascinating discussions on issues affecting the industry.

Delivered by **Alexander Ljungqvist** of NYU Stern, the opening keynote speech provided new insights into the behaviour of public vs private firms. Ljungvist supplied evidence that private firms are investing more than public firms and reacting better to investment opportunities.

Edmund Truell of Disruptive Capital spoke on the current disruptive nature of markets in terms of high volatility and a substantial volume of forced asset sales brought about by new regulation such as Basel III and Solvency II. He also made some candid remarks about how private equity has reacted to opportunities during the financial crisis.

The first panel of the day, which discussed private equity's nexus to the **financial services** industry, followed up these comments. This lively debate covered a number of aspects, including the role PE could play in filling the gap left by banks in the lending market.

Next came a discussion on **team turnover** at GPs, challenging the dogma that LPs do not want any material change in investment team composition. The panel highlighted that the reality is much more complex. While LPs typically do not want complete chaos in terms of departures, they do support some change.

"THIS LIVELY DEBATE COVERED THE ROLE PRIVATE EQUITY COULD PLAY IN FILLING THE GAP LEFT BY BANKS IN THE LENDING MARKET"

Our keynote speaker from a non-private equity background this year was **Lynda Gratton**, of London Business School. She spoke on the future of work and how major trends such as technology, demographics, low carbon and globalisation can affect business. She gave some pertinent insights on how firms can look for talent and seek out growing industries.

The final panel examined the **exit environment** in PE. The panel provided views on how to manage an exit process and the importance of running different tracks – IPO, strategic sale and secondary buyout. They also discussed how demanding an exit process is.

Symposium speakers: Right to left, Tim Parker, CVC Capital Partners; Karen Simon, JP Morgan; Laurent Haziza, Rothschild

On the second day, a range of new academic papers in the private equity field were presented and discussed. The first two papers looked at issues affecting financial vs strategic buyers. **Matthew Rhodes-Kropf** of Harvard University discussed the economic factors that drive financial or strategic buyers to dominant positions in M&A activity. The second paper, presented by **Uli Hege** of HEC Paris, explored the bidding behaviour of strategic buyers and private equity in asset sales. This research is featured in Private Equity *Findings* issue 6.

At the second session, **Morten Sorensen** of Columbia Business School presented an innovative research paper on how to value private equity by calibrating a portfolio choice model for institutional investors. **Adair Morse** of Chicago Booth School of Business then presented her research on activist investors and performance in PE and VC funds. This research uses a dataset of SWF investors and endeavours to identify links between activism and performance.

The third session explored performance issues in private equity. First, **Chris Higson**, of London Business School, presented his research on industry performance. Using a dataset from Cambridge Associates, he demonstrates significant industry outperformance over the public markets. See *Findings* issue 6 for further coverage. **Berk Sensoy** of The Ohio State University then presented his paper on whether PE managers earn their fees. This research looks at whether higher compensation or lower managerial ownership is associated with lower net-of-fee performance, with some interesting results.

The final paper was presented by **Bilge Yilmaz** of Wharton School at the University of Pennsylvania. This research, which looks at information asymmetries between PE firms and potential portfolio companies, shows how adverse selection problems can be solved by using earn-out provisions.

Many of the papers and presentations are now available for download from our research library at www.collerinstitute.com/Research. We also held video interviews with a number of the panellists and speakers, which are available at www.collerinstitute.com/News.

EVENT CALENDAR

RECENT EVENTS

PRIVATE EQUITY SECONDARIES – 1 OCTOBER 2012

The event follows a recent working paper by **Eli Talmor, Florin Vasvari** and **Anya Kleymenova**, all of London Business School, on the drivers of liquidity in the PE secondaries market. A panel also discussed the implications of this research and broader issues inherent in the PE secondaries market.

LISBON - ELI TALMOR: KEYNOTE SPEAKER AT THE "BUILDING GLOBAL INNOVATORS 3RD EDITION TRACK FINALS" – ISCTE, IUL, MIT PORTUGAL – 13 NOVEMBER 2012

During his keynote address **Professor Talmor** gave the audience an introduction into the rich insights and teachings that can be derived from the Coller Institute's case studies.

DUBAI – AN EVENING WITH CHRIS FLOWERS AND ELI TALMOR – THE GLOBAL OUTLOOK OF FINANCIAL SERVICES – 26 NOVEMBER 2012

Co-hosted by the Coller Institute of Private Equity and the London Business School in Dubai, **Chris Flowers**, the chairman of J.C. Flowers & Co, and **Professor Eli Talmor** debated the prospect of financial services in the current environment.

ANNUAL MVISION ROUND TABLE – 4 DECEMBER 2012

This year's **MVision Round Table** debated the topic 'The Defence of Europe: Strategies to Survive and Thrive in an Uncertain Market'. The panel discussed a number of issues, including whether the European crisis is an opportunity or a threat, setting new value creation strategies and contingency planning.

UPCOMING EVENTS

RISK MANAGEMENT IN PRIVATE EQUITY – SPRING 2013

This event will examine risk management frameworks and systems in PE. Stay tuned for further details.

PRIVATE EQUITY IN CHINA – APRIL 2013 TO BE HELD IN HONG KONG

The Coller Institute will host its first event in Hong Kong in April 2013. It will examine the private equity ecosystem in China, including local firms and international firms that have set up an office in the country. A panel will be convened to examine trends in China, critical success factors for PE firms and how PE differs from Western markets.

2013 PRIVATE EQUITY FINDINGS SYMPOSIUM – 3 AND 4 JUNE 2013

Save the date for our 6th Annual Private Equity *Findings* Symposium, to be held at the Royal College of Physicians. With a platform of 'Liquidity and Performance – the private equity model: still fit for purpose?', the symposium will convene a number of PE practitioners and academics to debate a range of industry hot topics under this umbrella theme.

DISTRESSED RESTRUCTURING – TBD

This event will examine how PE firms have managed their debt refinancing and coped with distressed situations and how debt covenants are being structured.

COLLER PRIZE IN PRIVATE EQUITY

The Institute hosted the Coller Prize Award Evening on 6 November 2012. Following a keynote speech by **Hanneke Smits** of Adams Street Partners, Professors **Francesca Cornelli** and **Eli Talmor** awarded the prizes – Best Case Study, Best Management Report and the PhD Prize – for the best student research in private equity.

The prize for the **Best Case Study** was awarded jointly to **Adam Dawson** and **Rogelio Prieto**, MBA 2012, for ***Adams Street Partners: A Pioneer Investor's Approach to the Management of a Large Private Equity Portfolio*** and to **Wei Cao**, **Masaki Takeda** and **Carolyn Tiet**, also MBA 2012, for ***Cowin Capital: The Evolution of the Chinese PE & VC Industry***.

The former case examines Adams Street Partners, considered the oldest PE fund of funds manager in the industry. First taught at London Business School's Private Equity Elective in September 2012, the case looks at how the firm makes capital allocation and risk management decisions. It explores a range of issues relevant to a fund of funds investor when constructing a PE portfolio.

The Cowin Capital case study, featured in this issue of *Findings* on p16, examines the burgeoning Chinese PE and VC market and looks the Shenzhen Cowin Venture Capital fund against this background.

The winner of the **Best Management Report** category was ***Private Equity in African sub-Saharan Countries: Why, How and Where to Invest in 2012*** by MiF students, **Fatoumata Ly** and **Mariya Nurgaziyeva**. The aim of this report was to provide PE practitioners with an overview of opportunities and risks in the fast-growing sub-Saharan region. The runner-up was ***European Banks – Indicators of Distress***, authored by MBA 2012 students **Ryan Brewer**, **Romain Prouvost** and **Cameron Taylor**. Written on behalf of a PE firm, this report screens a range of banks in Europe and identifies a subset that could be compelling investment opportunities during the current state of volatility in Europe.

The **PhD Prize** was won by **Jean-Noël Barrot**, of HEC Paris, for ***Investor Horizon and Innovation: Evidence from Private Equity Funds***. Starting with the premise that investments associated with new ideas entail a longer payback period than those exploiting existing ideas, the paper explores the relationship between the temporal horizon of a fund and its effect on the fund's investment choices. It finds that funds with a longer time horizon invest in earlier stage companies, are more likely to stage investments and hold their stake for a longer duration. The runner-up award went to **Nicholas Crain** of The University of Texas at Austin for ***Career Concerns and Venture Capital***. This paper shows that VC firms start with more conservative investments when poor performance at this stage would affect their ability to raise their next fund.

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