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Coller Institute of Private Equity

Private Equity *Findings*

INSIGHTS from the WORLD'S BEST PRIVATE EQUITY RESEARCH

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SNAKES OR LADDERS?

The effect of private equity ownership on the careers of portfolio company employees

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FOREWORD

Professor
Francesca Cornelli

Welcome to the 11th issue of *Private Equity Findings*. We are excited about the range and depth of the content we have compiled for this issue, and we hope you find it both thought-provoking and relevant.

As with the past publications in the series, this issue showcases recent private equity and venture capital research from leading international academic thinkers, with debate and challenge from senior academics and practitioners. One of the benefits of academic research is that it can take an oblique look at some of the accepted "truths" of the industry. In this issue, we feature papers that challenge received wisdom and offer new insights into a broad range of topics, from performance measurement to state-backed innovation.

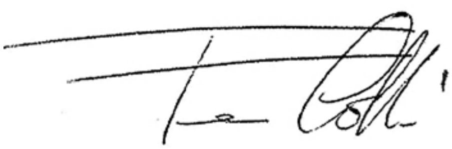
Our cover story, **Snakes or ladders?**, takes a look at new research that departs from the well-trodden path of whether PE creates or destroys jobs. By tracking the career paths of individuals at PE-backed and other companies, it reveals how, contrary to popular opinion, working for a PE-backed company can improve employees' employment prospects and boost their skillsets.

This issue's "head to head" article, **The entrepreneurial state?**, is similarly thought-provoking in that it challenges the assumption that the private sector is far better than the state in getting innovative projects off the ground. The piece explores Mariana Mazzucato's new book in which she makes compelling arguments that the state should play a key role in funding and promoting innovation – and should reap some of the financial rewards of doing so. In **Spot the difference**, meanwhile, we look back at Steven Kaplan's presentation at our 2014 Symposium, and find that the research unearthed some surprising results and caused the audience to rethink some of the basic tenets of general partner behaviour.

With a spotlight on GP performance measurement following the US Securities and Exchange Commission comments on the matter, we delve into the controversy in our roundtable, **Lipstick on a pig?**. Academics and practitioners debate whether GPs really do inflate performance numbers before fundraising – and the effect this might have on their success in drawing in limited partner commitments.

How important is the idea and how important is the team? In **Pick of the crop**, we examine new research that attempts to understand how early-stage investors decide whether to back a start-up company.

I hope you enjoy reading this issue, and wish you much happiness and success in 2016.



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Director, Coller Institute

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BY THE NUMBERS

A round-up of private equity trends and statistics

625

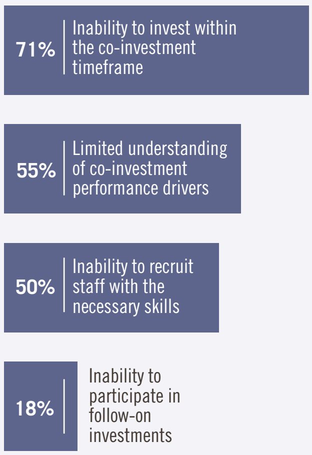
Number of new PE firms entering the market in 2015 to September, according to Preqin/FPL Associates' *2016 Preqin Private Equity Compensation and Employment Review* – a growth of over 10% on 2014's total number of funds and a record number of new entrants.

51%

Percentage of institutional investors seeking to increase their PE allocations over the long term, as reported by the *Preqin Investor Outlook: Alternative Assets, H2 2015*. This is the highest of any of the alternatives, with infrastructure in second place at 44%.

CO-INVESTMENTS PROVE TRICKY FOR LIMITED PARTNERS

LPs' views on the main challenges they face in making successful co-investments

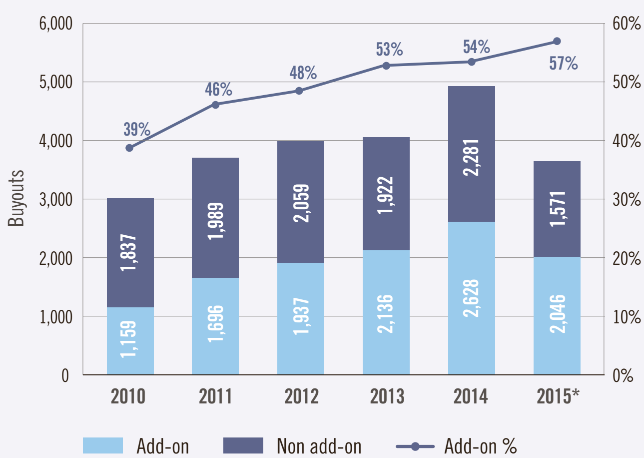


Source: Coller Capital, Global Private Equity Barometer, *winter 2015-16*

- LPs might clamour for co-investment rights in a bid to improve returns and reduce fees, but Coller Capital research shows that they are difficult to execute, with nearly three-quarters of LPs (71%) saying that investing within the timeframe is a major challenge when co-investing.
- Over half (55%) say they have a limited understanding of co-investment performance drivers, which backs up a 2015 Cambridge Associates paper that said: "A good set of universal co-investment data is hard to find." Some academic research also suggests that co-investments underperform relative to fund and direct investments (see *Private Equity Findings*, issue 9, pp12-14). Another challenge is recruiting people with the right skills for co-investments (cited by half of respondents), followed by an inability to make follow-on investments (18%).
- Co-investments are difficult, requiring quick decision-making and appropriate internal resources. Yet there is evidence that LPs may not always achieve the lower cost of access they seek: 25% of GPs do not reduce carry in co-investments and a further 27% offer a reduced rate of carry, according to *The 2015 Preqin Private Equity Fund Terms Advisor.*

BOLT-ONS CONTINUE UPWARD TREND

Add-ons as a percentage of buyouts, by year



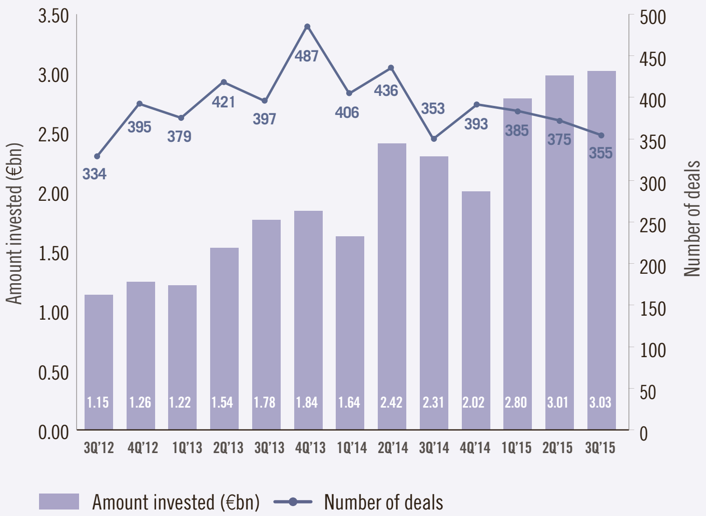
*To 30 September 2015

Source: PitchBook, M&A Report, *Q4 2015*

- With valuations continuing to trend upwards in a hot M&A market, PE is continuing to follow a strategy of making add-on acquisitions to increase the value of portfolio companies.
- As we noted in our last issue (see *Private Equity Findings*, issue 10, p4), add-ons have been steadily increasing as a percentage of buyout deals completed, to reach well over half of North American and European PE transactions – a record 57% – in the first three quarters of 2015, according to PitchBook data.
- PitchBook notes the high valuations that blue-chip and upper mid-market companies are currently fetching, and suggests that PE houses are searching for "more reasonable value" in the lower ends of the market to create synergies in existing portfolio companies.
- The proportion is greatest in the US, where 62% of buyouts were add-ons in 2015 to the end of Q3, although this upward trajectory started from a high base (48% in 2009). In Europe, the proportion was 49.5% (against just 26.8% in 2009).

EUROPEAN VENTURE CAPITAL ON A ROLL

Equity investments into Europe-based, VC-backed companies (2012-15)

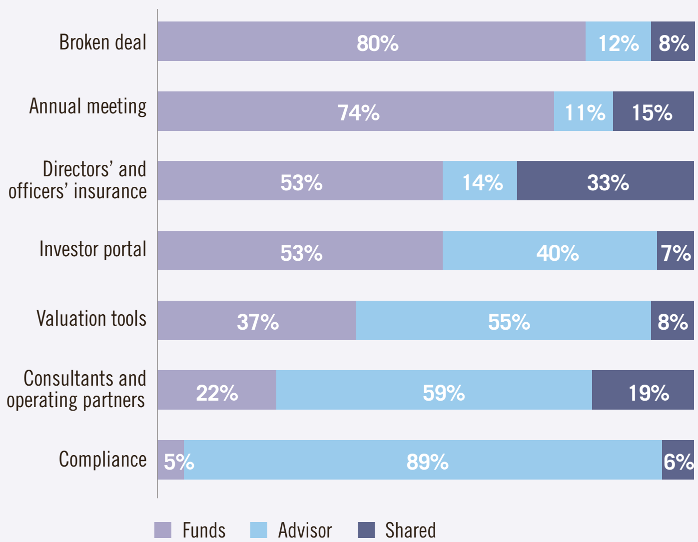


Source: Dow Jones VentureSource, Venture Capital Report Europe 3Q, 2015

- The value of European VC investments has been rising steadily over the past few years, as evidenced by the chart (see left) from Dow Jones VentureSource.
- During the first three quarters of 2015, nearly €9bn was invested by VC into European companies – a 31% increase on the €6.4bn invested over the same period in 2014, itself a significant improvement on previous years.
- Nevertheless, the volume of deals is on a downward path, attesting to the higher valuations of European VC deals. The median value of European VC deals has increased to over €2m in the past year – almost double the value of just over €1m in 2012.
- This rise in valuations reflects increased values on public markets and greater competition among VCs, in particular as US VCs increasingly spot opportunities to invest in later-stage European companies, plus the rise of the European unicorn (VC-backed companies valued at $1bn or more). A recent GP Bullhound report found that there are now about 40 European technology unicorns, 13 of which joined the list in the year to June 2015.

EXPENSE ALLOCATIONS ON LIMITED PARTNER AGENDAS

How are PE firms allocating expenses between funds and investment advisors?



Source: EY, Positioning to win: 2015 global private equity survey

- As regulators have highlighted the issue of how expenses are allocated in PE funds, so LPs have started scrutinising fund-manager practices. In a survey of PE firms and investors, EY found that broken deal fees are borne by the fund in 80% of cases; the costs of annual meetings in 74% of cases; and the costs of directors' and officers' insurance and investor portals in 53% of cases.
- The fund allocation is somewhat lower – 22% – for consultant and operating partner fees. Yet this is the area that most disgruntles LPs. When asked which expense allocations they were most and least satisfied with, those for consultants and operating partners provoked the most dissatisfaction and came out top for least satisfied, with nearly two-fifths (38%) of LPs citing this as an issue. (Only 16% of LPs said they were satisfied on this issue.)
- Charges for annual meetings were also a source of irritation, with 27% of LPs saying that they were dissatisfied with current arrangements.

ANALYSIS

SPOT THE DIFFERENCE

For investors, private equity is often considered a special case, requiring specialist knowledge and understanding to be successful. New research lifts the lid on some of the PE practices that differ between individual firms and from other types of ownership, and sheds some light on how the industry has changed over time. **By Greg Gille.**

Steven Kaplan

Steven Kaplan is the Neubauer Family Distinguished Service Professor of Entrepreneurship and Finance at the University of Chicago Booth School of Business, which he joined in 1988. Professor Kaplan is also the faculty director of Chicago Booth's Polsky Center for Entrepreneurship and Innovation.

What do PE firms actually do? While there is a large body of academic research that looks into issues such as performance and risk, the industry's job-creation record and management practices, not much has been said about how PE firms operate and how they approach investment strategies.

This was the starting point for Paul Gompers, Steven Kaplan and Vladimir Mukharlyamov when they surveyed 79 PE firms about their valuation, capital structure, governance and value creation strategies for their paper, *What Do Private Equity Firms Say They Do?*

Kaplan, of the University of Chicago's Booth School of Business, presented his findings as a keynote speaker at the Coller Institute of Private Equity's 7th annual Private Equity Findings Symposium in June 2014. *Private Equity Findings* caught up with him to discuss the results.

What, in your view, are the key highlights of the study, and, more importantly, was there anything that particularly surprised you?

"On the capital structure side, we got the interesting result that PE firms are engaged both in market timing and looking at the fundamentals of the business and the industry to put in an optimal capital structure. That makes quite a bit of sense, so it should not technically be that surprising, but we didn't know what we were going to find there.

"Another result that is not at all surprising to practitioners, but would be to academics,

"NEARLY A THIRD OF THE COMPANIES GO IN WITH THEIR OWN MANAGEMENT TEAMS ON DEALS, RATHER THAN STICKING WITH THE INCUMBENTS"

is that PE firms do not use discounted cash flows at all. If you talk to PE practitioners, you would know that is the case, and this was confirmed by the results.

"The third outcome that came as a bit of a surprise to me was that nearly a third of the companies go in with their own management teams on deals, rather than sticking with the incumbents. So this tells us there are very different strategies from the different firms, and it was unexpected to see the extent of that."

Your last observation ties in with another finding from the study: that for a significant number of the firms surveyed, the underlying business is more important than the management team – isn't this at odds with PE's mantra of backing management teams?

"Indeed, and I suppose it is consistent with Warren Buffett's quote: 'When a management team with a reputation for brilliance joins a business with poor fundamental economics, it is the reputation of the business that remains intact.' To be fair, they care about both, but ultimately what ranked higher was the state of the business itself."

One of the main findings is that PE managers seem to depart from the valuation and capital-budgeting methods most commonly used in finance theory. Why do you think that is?

"My guess is that they do that because it works – using discounted cash flows wouldn't necessarily lead to better outcomes. One of the reasons for that has to do with the debt involved; in some sense, the cost of capital is being accounted for there, as you have to have enough cash flows to pay off the debt.

"That immediately puts a floor on your present value, and looking for a 20% return on equity is going to get you close to the same result you would get using a discounted cash flow. The big value comes from figuring out whether cash flows are going to be bigger than debt payments. If that is the case, good things are going to happen, and then, whether you are looking for a 2.5x multiple or a certain net present value, your decisions are going to be pretty similar."

What about the operational engineering results of the study? Do PE firms really focus on this?

"First of all, PE firms have resources devoted to operational engineering, so it's not just talk. They have in-house people and use advisors, so they have clearly invested in that. I was also a little surprised that the number-one thing PE firms are looking at is the opportunity to grow the businesses they buy. This is the big value driver they are looking for – cost-cutting is important, but secondary.

"Another that ranked highly is change in incentives. We found that PE investors allocate on average 17% of company equity to employees and management, including 8% to the CEO – much higher than what one would assume are key PE tools, such as leverage and multiple arbitrage. PE firms are clearly not betting on such methods."

"PE FIRMS HAVE RESOURCES DEVOTED TO OPERATIONAL ENGINEERING, SO IT'S NOT JUST TALK. THEY HAVE IN-HOUSE PEOPLE AND USE ADVISORS, SO THEY HAVE CLEARLY INVESTED IN THAT"

"THERE IS MORE DIFFERENTIATION THAN THERE USED TO BE. WE ARE NOW SEEING A MUCH WIDER SET OF SKILLS AND BACKGROUNDS ACROSS THE INDUSTRY"

We could argue that PE firms are tempted to overemphasise these value creation techniques to paint the industry in a more positive light. To what extent is there a potential bias here?
"We touched upon this in the study. Certainly on the growth question it is possible that they want the world to know that they are growing businesses rather than cutting costs.

"The interesting thing in the data is that when we looked at the difference in what respondents thought was going to have an impact before the investment, as opposed to what happened afterwards, cost-cutting turned out to be more important than they initially thought. If they were deliberately downplaying cost-cutting as a value creation driver, this wouldn't have happened. That made us a bit more comfortable that they weren't deliberately skewing the responses.

"Another thing that seems a little high is firms putting the net returns they are selling to their limited partners at 20%. But I have asked LPs what general partners tell them and it is broadly similar, even though they rarely get it – so at least they are consistent on this as well!"

Your research also suggests that PE houses believe LPs focus on absolute returns, as opposed to other comparable metrics.
"That was another very surprising finding. That said, LPs do look at relative performance as well – not necessarily relative to a public benchmark, but they do look at how the PE funds do relative to other funds of the same vintage. I guess we picked up on the fact that the public pension funds need to earn something like 7%-8% returns to pay their pensions, and that is why PE is attractive, with the absolute floor of the 8% return hurdle."

Based on similarities in their characteristics, you were able to sort PE firms into wider groupings. What do you think the findings tell us about how the industry has developed in recent years?
"There is more differentiation within PE than there used to be. Most firms started out as financial engineers, and we are now seeing a much wider set of skills and backgrounds across the industry. After all, different strategies have been successful over the years, so it makes sense that there is not necessarily one best way to do PE.

"It was also pretty interesting to find that the firms that have spun out of other PE outfits tend to be more centred on operational engineering, which is consistent with the wider PE world becoming increasingly operationally focused."

What other research could be generated from this paper? Could you track the same sample over time and compare the actual performance generated and the value creation drivers against the GPs' original claims?
"Definitely. What you don't want to do is take data and look backwards at performance, assuming the results are the cause of the past performance, because then you would have a selection bias.

"But we now have all these data points, and three or four years from now we could look and see which of these things are actually related to how the funds performed, if they are at all. We'll now put this sample to bed and look at it in a few years.

"Also, there is more work to be done on the details of what these firms do, particularly on the operational engineering side: what impact does this really have, and can we measure it? Coming up with the accurate measurements would be the challenging part."

The research

What Do Private Equity Funds Say They Do? by Paul Gompers, Steven Kaplan and Vladimir Mukharlyamov surveyed 79 buyout and growth equity firms managing a total of over $750bn to explore how they determine capital structures, value transactions and source deals and look into their governance and operational engineering practices. More than half of the firms (44) only have offices in the US, while 35 operate offices outside of the country. A quarter of the firms have assets under management (AUM) under $750m, while a quarter have AUM above $11bn.

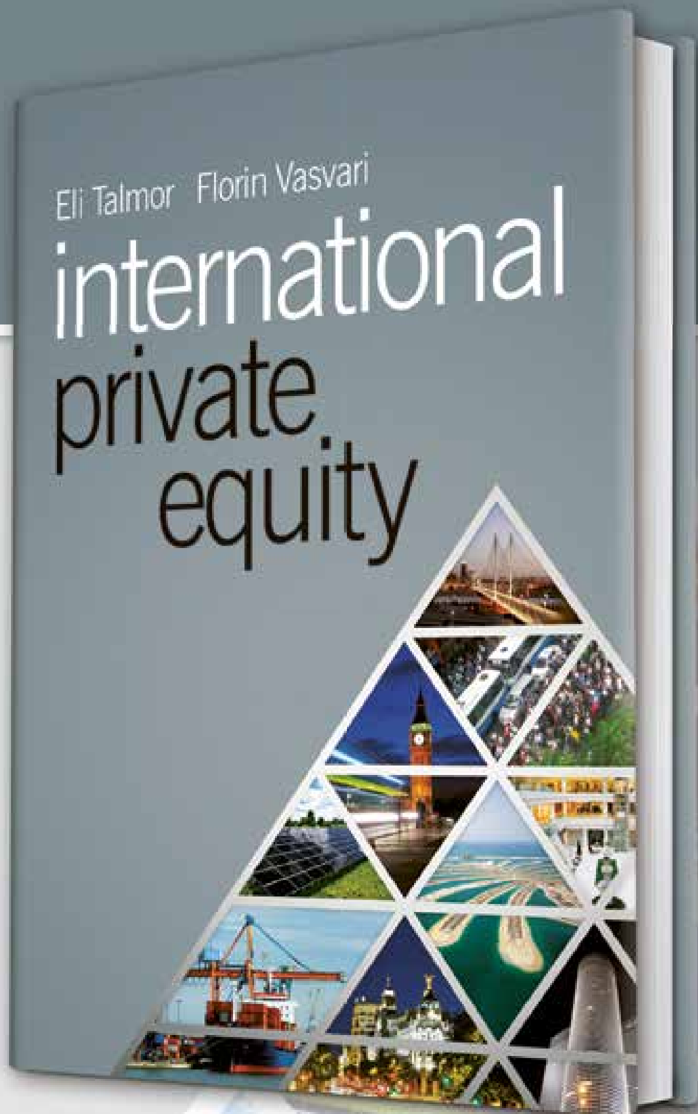
The research uncovered that PE firms do not follow some best practices taught in academic finance courses: unlike most CFOs, few of them use discounted cash flows and net present value techniques to assess investments, with IRRs and money multiples being firm favourites instead. A vast majority (70% of respondents) also incorporate comparable company multiples. In addition, PE firms discount management forecasts, viewing them as overly optimistic – the median and average discount, according to the survey, is 20%.

Another finding that seems to go against the grain of traditional practices is that PE firms believe that their LPs value an absolute measure of performance. With PE fund managers competing against both asset class allocation decisions and other PE firms for investment from LPs, one could assume that relative performance against a public benchmark would be key. Yet fewer than 8% of respondents believe that LPs view performance relative to public markets as the most important performance benchmark.

The survey finds that, in selecting deals, PE firms place greatest emphasis on the business model and the company's competitive position, followed by the management team, the firm's ability to add value, and valuation, all three of which are of equal importance. When asked about how they create value, increasing revenue is the most cited strategy, with firms saying that it was important in over 70% of their deals, and follow-on acquisitions are important in over 50%. Reducing costs, however, was important in only 36% of deals. Other important techniques were redefining the company's strategy, changing the CEO, and multiple arbitrage.

International Private Equity

Eli Talmor, Florin Vasvari



Written from a unique joint practitioner and academic perspective by renowned experts in the field, *International Private Equity* is designed to be truly international in focus, with examples and case studies drawn from Europe, the Middle East, Africa and Asia, and from a wide range of business sectors. The case studies, taken from the collection of the London Business School's prestigious Coller Institute of Private Equity, are used to exemplify and illustrate all stages of the private equity deal process.

This unprecedented access to the Coller Institute's collection of case studies, combined with comprehensive and timely coverage of this important topic, makes *International Private Equity* an indispensable guide for students and practitioners alike.

Praise for International Private Equity…

"Professors Talmor and Vasvari combine academic rigor and real world cutting edge experience to provide an insightful and detailed description of private equity today. This is a most valuable contribution to academia, the industry, and to business in general."

- Henry R. Kravis, Co-Chairman and Co-CEO, Kohlberg, Kravis Roberts

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THE ENTREPRENEURIAL STATE?

How involved should the state be in funding innovation? And how much payback should it get when state-funded ideas become commercial successes? A new book explores these issues. **By Lisa Bushrod.**

Mariana Mazzucato

Mariana Mazzucato is RM Phillips Professor in the Economics of Innovation, Science Policy Research Unit (SPRU) at the University of Sussex. Details of the book can be found at www.marianamazzucato.com/the-entrepreneurial-state. A new US edition was released on 27 October 2015.

"WE NEED TO LOOK AT SHARING BOTH RISKS AND REWARDS SO THAT THERE IS MONEY COMING BACK TO THE SAME PUBLIC FUNDING AGENCIES THAT MAKE THE INVESTMENTS"

The question of state funding of innovation is a controversial one, with many arguing that it is best left to the private sector. *The Entrepreneurial State: Debunking Public vs Private Sector Myths*, by Mariana Mazzucato, seeks to argue otherwise. It lays out the case that the state can drive innovation, despite the current narrative that clamours for paring back the state's influence, highlights its failures and ignores its successes.

The book began life as a report commissioned by centre-left think tank Demos in 2011 and has since been significantly expanded. "I wanted to convince the UK government to change strategy," explains Mazzucato. "To not cut state programmes in the name of making the economy 'more competitive' and more 'entrepreneurial', but to reimagine what the state can and must do to ensure sustainable post-crisis recovery."

Mazzucato points to a recent success story of state-backed involvement. "When the UK government wanted to create a website, it looked to outsource it to Serco," she explains. "This is because the mentality in government has become, 'We are stupid, we don't know how to make websites'." But Serco did not end up doing the work. "Key people in the BBC's iPlayer team stepped in and created the www.gov.uk site at a fraction of what Serco was charging," she says.

In the book, Mazzucato says: "...by dismissing the ability of the public sector to be an innovative force from within... this has created a self-fulfilling prophecy, where the smartest young graduates think that it will be more exciting and fun to work at Goldman Sachs or Google... The only way to rebalance this problem is to upgrade, not downgrade, the status of government – and the words and the images used to describe it." The iPlayer team, she believes, has done just that.

"Today, there is a negative perception of what the state can do and what it should be allowed to do," adds Mazzucato. "We need to change the narrative; have a mission and the confidence to do really different things. This means pushing the frontiers of markets, not just tweaking within existing ones."

Financing medicines is one area that Mazzucato cites. This, she argues, is only one part of the solution to health-related issues; it should be supplemented by government-funded research on lifestyle changes. The supply of capital for such initiatives would come from a rethinking of the way that the benefits that arise from these improvements are later apportioned. "We need to look at sharing both risks and rewards," she explains. "So that there is money coming back to the same public funding agencies that make the investments."

Indeed, the mechanism for state rewards is one that Mazzucato believes should mean that, "'winning' state investments should be able to cash in so as to cover losses when they arise...". She is concerned by how little reward the state receives, with big pharma companies being a case in point.

"How can we finance the welfare state if we get the details wrong?" asks Mazzucato. "At the moment, the state pays for the research and then pays for drugs [that stem from that research]. In the US, the Bayh-Dole Act allows for publicly funded research to cap the price at which drugs [stemming from state-funded research] are sold. Yet this is never enforced. The US Department of Defense has the right to have, at a pre-negotiated price, products for which it has underwritten the development, and this right has been exercised in the past. I don't see why healthcare could not work that way. And this is especially relevant today with the increasing number of cases where big pharma charges exorbitant prices for drugs – most of which were already paid for by the taxpayer."

Just how to socialise rewards, as well as the risks of state investment, remains a matter for debate. Mazzucato says: "What is the best mechanism for the state to make sure that the taxpayer receives a return on its publicly funded investments? The Israeli state retains royalties, for example, and in Finland the state retains equity. As we no longer have the tax system we used to (NASA was founded in a year when the top marginal rate was 93%), such direct mechanisms are increasingly important."

When it comes to the state capturing rewards, British Business Bank's Ken Cooper says: "It is very tempting for the state to take some kind of stake in the technology but there is a distinction between getting something back to reinvest and trying to make basic research commercial.

"You need to look at the failure rate of these projects and the need to leave value in the company for the next round of investors. To do that you would probably be looking at quite a small [equity] share, and then, unless it was some kind of golden share, you would face dilution issues over time. There will come a point where it isn't cost-effective."

While acknowledging that ensuring state rewards is complex, Cooper is clear about the impact of UK state funding on British Business Bank's portfolio. "About a year ago we looked at our investments in early-stage venture capital funds and we found that something like 20% of the underlying portfolio investments had received a grant of some kind from Innovate UK," he says. "If we widen that to include companies using the output of university research programmes, the percentage would increase."

He cautions that there could be an unintended consequence of ensuring state rewards. "The state would need to realise returns in a way that does not stifle further innovation. The research output of universities is very high. But if university research were treated like a VC fund, it would be ruthless in its cuts. That would be a failing because we would lose the blue-sky research and potential products that did not have an immediately apparent commercial value."

Singling out companies such as Apple (as Mazzucato's book does) can also be problematic, adds Cooper. "It's very easy to look back from a successful product and ask 'What if?', but it's a numbers game and a lot of the research goes nowhere," he says. "Apple's success has a lot to do with good design and marketing, not just having access to the technology."

The importance of innovation, however, and maintaining its momentum, appears universally accepted even if the mechanisms for supporting it are the subject of disagreement. "It is key that the private equity industry engages in the innovation debate, and it does – particularly at the venture end," says Cooper. "I find myself focusing on how to promote innovation without crowding out private sector activity, and recognising that the state is generally better at supporting the overall funding environment than it is at picking winning companies."

Ken Cooper

Ken Cooper is the managing director of VC Solutions at British Business Bank. He is responsible for the design and delivery of a range of British Business Bank programmes that support the flow of venture capital investment into smaller UK businesses.

"I FIND MYSELF RECOGNISING THAT THE STATE IS GENERALLY BETTER AT SUPPORTING THE OVERALL FUNDING ENVIRONMENT THAN IT IS AT PICKING WINNING COMPANIES"

The research

The argument that the state is not able to "pick winners" fails to address the different nature of state investment, says Mariana Mazzucato in her book, *The Entrepreneurial State: Debunking Public vs Private Sector Myths*. Mazzucato believes that the state is tasked with the more difficult issues, such as extending the life of mature industries or trying to launch new technologies such as the internet, where the probability of failure is higher.

Mazzucato argues that while the role of state funding to fix market failures or to fund research for the public good is acknowledged, in practice the state does more and does it well. She cites the funding of the creation of the internet and establishing the basis for a nanotech industry, at a time when neither terms existed. One chapter is devoted to Apple, and points out that the state funded all of the technologies on which the company's products rely – and that this is rarely acknowledged. State funding of the green revolution and clean tech is also explored.

Risk, the book argues, should always be borne by the state; investments or loans should be written off if the research does not bear fruit. In return for this socialisation of risk, Mazzucato says rewards should also be socialised.

In the age of well-documented corporate tax avoidance, the argument that the state's return (reward) will be reaped in greater tax revenues and job creation is broken, argues Mazzucato, as jobs may not be created in the country that funded the innovation.

Does private equity backing help or hinder the careers of portfolio-company employees? New research takes a look at this question and comes up with some surprising results. **By Vicky Meek.**

SNAKES OR LADDERS?

The 2012 US presidential campaign of Mitt Romney, co-founder of Bain Capital, is likely to be remembered as much for the criticism it brought the private equity industry as the policies he espoused. While Romney claimed his firm had created tens of thousands of jobs during his time there, his political opponents waded in with counter-claims of job losses.

Academics have long sought to determine which of these arguments is true, with studies showing through the years that PE either destroys or creates jobs. More recently, research has come up with more nuanced findings, such as PE's "creative destruction" effect, where less productive units are closed to concentrate on more profitable areas, thereby both destroying and creating jobs during the investment period (*Private Equity and Employment*, Davis, Haltiwanger, Jarmin, Lerner and Miranda – see *Private Equity Findings*, issue 2, pp17-20).

Until recently, however, few had considered the longer-term effects of PE on portfolio-company employees. This is what Ashwini Agrawal and Prasanna Tambe sought to examine in their paper, *Private Equity and Workers' Career Paths: The Role of Technological Change.* "The focus to date had been on the cost of PE in terms of lay-offs or net job creation," explains Agrawal. "We wanted to see what happened to individual workers following their involvement in a PE-backed company."

Using the data from CVs posted on a US online job-search platform, the academics compared the length of time staff of PE-backed companies remained in employment over their careers against that of people with similar profiles that had not worked in PE-backed companies (the control group). The overall finding is that those who have worked in a PE-backed company are employed for longer over the course of their careers than the control group. "We were very surprised that many people in the PE sample group seemed to be better off than the others whose companies hadn't been bought out," says Agrawal. "We really weren't expecting this."

Stepping up

This finding suggests that people who have worked in a PE-backed environment are somehow more employable. But why? "We had to find a reason for this," says Agrawal. "What changes were happening in these companies? If these individuals were more attractive employees, they had to be learning new skills."

Drawing on existing academic research that PE-acquired companies were subject to operational upgrades and therefore new practices and that these new practices were often brought about by IT improvements, the authors looked at the level of IT investment by PE backers. They discovered that IT investment increased following an LBO, in particular for those deals completed since 2003, and that the effect on employment durations for the PE-backed sample was strongest for workers in companies acquired from 2003 onwards. This suggests that it is PE's investment in IT that helps many workers upgrade their skills.

It's certainly the case that many PE firms – especially at the larger end – have increased their focus on IT over recent years. Warburg Pincus, for example, provides support to portfolio companies through its Information Technology Strategy and Assessment group. The firm assigns a partner and other senior team members to help advise on where improvements can be made. And while IT has been an important element of value creation for Warburg Pincus for some time now, an insider suggests that this has become more formalised over recent years.

Agrawal is confident that there is a PE effect on employees and that this is linked to technology investment. "Many studies look at big phenomena in PE, such as a government action or whatever, by comparing those who are affected with those who are not," he explains. "However, because we look at the longer-term effects and we match PE-backed workers with similar non-PE-backed workers to determine whether there is a difference in outcome, we have established a counterfactual: we can see what might have happened to PE-backed workers if they hadn't been employed in a PE-backed company – their employment prospects are actually limited by exposure to outdated working practices."

"WE WERE VERY SURPRISED THAT THE PE SAMPLE GROUP SEEMED TO BE BETTER OFF THAN THE OTHERS WHOSE COMPANIES HADN'T BEEN BOUGHT OUT"

Ashwini Agrawal,
London School of Economics

Agents of change

Having worked for the past 20 years as CEO, COO and CFO of PE-backed companies, Adrian Lamb has a bird's-eye view of how PE firms operate across a number of different strategies – from turnarounds and buy-and-builds through to providing expansion capital. His view is that technology may drive some of the results. "If we look at the period after 2003, technology has moved on considerably," he says. "The advent of the cloud, big data and the significantly reduced cost of computing for both hardware and

The research

In *Private Equity and Workers' Career Paths: The Role of Technological Change*, Ashwini Agrawal and Prasanna Tambe, both of New York University's Stern School of Business (Agrawal has since moved to the London School of Economics), sought to examine how PE ownership affects employees' careers. They did this by tracking the employment histories of more than 5,600 workers who had been employed by PE-backed companies and comparing the results with more than 196,000 similar workers who had not been employed in PE-backed companies (the control group).

They found that, on average, the employment spells in the PE-backed sample were 6-9% longer than in the control group; in effect, these workers are more employable. In addition, the research found that the longer an employee remains at the PE-backed company, the longer their employment spells. Those who stayed at the company for at least 1.3 years after PE investment were more able to find employment quickly at other companies.

The research then looked into why this might be. The authors worked on the hypothesis that PE firms make significant investments in IT at portfolio companies, which results in many employees acquiring new, transferable skills. They find that, over the entire period, IT labour flows (a measure of IT investment) increase by 3-7% following a PE acquisition, and that the increase is at the higher end of this scale for LBOs completed post-2003. This helps to explain the effect of IT investment – for workers in companies acquired after 2003, there is a significant increase in employment duration (12.1%), while those in companies acquired before this date are not employed for significantly longer than those in the control group.

Overall, the research suggests that significant IT-related investment by PE firms in their portfolio companies results in many workers updating their skillsets, making them more attractive employees over the long term and lengthening the amount of time they are employed. PE therefore appears to enhance many individuals' career paths.

storage shortens the payback period of an investment in IT considerably. Clearly, that applies to the corporate world as well as the PE portfolio-company world, but the difference is that corporates will often have legacy systems to deal with, where portfolio companies often won't; a corporate will often follow a zig-zag path to improvement, while a PE spin-out tends to be able to start from scratch and so follow a straighter line. It's also true that the PE firm may inject capital to invest in these systems, while a corporate may not have the cash available."

Yet IT investment by itself is unlikely to create value, says James Markham, partner, portfolio management, at Graphite Capital. "At our end of the market – that is, investing in businesses with an enterprise value of up to £150m – IT investment can be, but is not always, important," he says. "We have found over the years that upgrading IT can be very costly and difficult. It can go wrong in many cases, largely because of insufficient planning and a lack of buy-in among staff. There's little point in spending money on a new CRM [customer relationship management] system if you don't have the sales staff on board or use it the way it's intended. Too often, IT is used as a sticking plaster, when in fact it can only be value-accretive if there is proper planning and execution."

All trained up

What's implied by the research, however, is that PE investment in IT is usually backed up by sufficient training, and this is where practitioners tend to agree that PE focuses

"PE FIRMS MAY INJECT CAPITAL TO INVEST IN IT SYSTEMS, WHILE A CORPORATE MAY NOT HAVE THE CASH AVAILABLE"

Adrian Lamb, Executive, PE-backed companies

"EMPLOYERS TEND TO VIEW PEOPLE WHO HAVE WORKED IN THE FAST-PACED ENVIRONMENT OF A PE-BACKED COMPANY AS MORE RESILIENT AND COMMERCIALLY FOCUSED"

Helen Roberts, Skillcapital

heavily on employee development. Yet this training is across a range of areas rather than specific to IT, they argue. "Board members tend to get little training – the expectation is that they are the final article already," says Lamb. "However, below that, training can be seen as a good investment for PE backers," he adds. "Their three- to five-year investment period means they can take a long-term and more consistent view and will invest in training if they believe there is value in it; in the corporate world, where quarterly/half-yearly reporting often leads to a more short-term view, training budgets tend to be switched on and off according to how the company is doing."

Markham agrees, saying that his firm focuses on training in many of its portfolio businesses, but especially where there are control risks, such as in healthcare and the care sector, and that this may lead to employees enhancing their employment prospects over the longer term.

However, he also makes the point that PE ownership by its very nature can improve employees' skills. "PE firms tend to implement a whole range of initiatives," he says. "And the rate of change is such that employees update their skills by being involved in a fast-paced environment. IT may be a facilitator in this, but I don't think it's the number-one factor."

Another seasoned PE executive puts it this way: "I can think of a number of other reasons why employees of PE-backed businesses may fare better in their careers. Generally, PE brings a whole series of disciplines and skills that benefit employee skillsets, such as operating in a leveraged environment, or in one in which there is a clear set of value-adding objectives generally."

Halo effect?

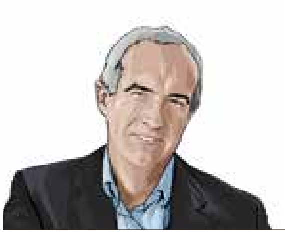
There may even be a "halo effect" created by PE when it comes to portfolio-company employees. "In my experience, employers tend to view people who have worked in the fast-paced environment of a PE-backed company as more resilient and commercially focused," says Helen Roberts, partner at Skillcapital. "I also think that the performance-driven culture in portfolio companies means that employees can demonstrate specific results to future employers, and that can make them attractive new hires."

Overall, practitioners – unsurprisingly – agree that there is a positive effect of PE on human capital, but the precise source of this positive effect appears to be subject to debate. Nevertheless, Agrawal does point out that the effect is not evenly spread.

"We see greater employment durations for functions that are related to IT in our research," he says. "Nevertheless, technology has changed the mix of tasks performed by many individuals. For example, people used to spend a lot of time in meetings rather than with customers or suppliers. The advent of email removed the need for so many meetings. It has also changed the importance of different tasks, with processing information and analysing data to reach decisions becoming much more a part of daily work life than before.

"Workers who perform these types of role acquire more new skills when technology is updated than, for example, workers whose main job is to guide subordinates," he explains. "Technology has allowed some types of worker to become more autonomous."

It is an area that Agrawal would like to study further. "I'd like to look at what needs to be in place to ensure the diffusion of technology," he says. "And I'd like to ask the question: how does the organisational form of companies change when new technology is introduced? How does this affect, for example, reporting structures? And, finally, how is the nature of work changing for PE-backed companies versus those firms not backed by PE?"



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LIPSTICK ON A PIG?

New research suggests that younger or smaller firms or those on the lower end of the performance spectrum manipulate their interim performance numbers in order to raise their next funds. We asked three academics and three practitioners whether limited partners can see through this sleight of hand, and how it impacts these funds over the long term. **Chaired by Bailey McCann.**

Private equity's interim valuations have come under increased scrutiny over recent times as the US Securities and Exchange Commission (SEC) has shone a spotlight on this area. The SEC is particularly focused on whether firms manipulate performance data at the time of fundraising in a bid to attract commitments to follow-on funds. But do PE firms really do this? Three recent academic papers have looked into the issue: one finds that all general partners engage in some form of performance number inflation during fundraising (although younger firms that have not yet built up a positive reputation do so more than established firms) and that the higher the interim valuations, the bigger the subsequent fund; another paper finds that only the poorer performers tend to manipulate performance, and that they are punished by a lack of new commitments by limited partners; and the third piece of research finds that, while GPs generally value their investments conservatively over the life of the fund, this conservatism disappears at the time of fundraising.

Starting first with our academic panellists. Your combined research suggests that there is at least some element of performance inflation happening during the fundraising process, doesn't it?

Yasuda: "Yes. Performance can hamper a GP's ability to raise the next fund, and thus affects its business. The SEC recently raised concerns about possible performance inflation, so we wanted to look at this and how these inflationary practices might be used by GPs. We looked at established and emerging GPs in traditional PE and venture capital. Our data showed that among high-reputation GPs – firms with more than one fund, a long track record and strong assets under management – performance was less important around fundraising. But for low-reputation GPs – for example, newer GPs – we did see interim performance peak around the time of fundraising."

Gredil: "From our data, it looks like there is less for a GP to lose by inflating valuations if they are near the bottom of performance and have been without a successor fund so far. Investors may already think the numbers are inflated among such funds, so it can be harder to prove that you have a conservative valuation anyway. The incentives change if you are a top-performing fund and a high-reputation firm; then, you risk

James J Zenni, Jr
Z Capital Partners

James J Zenni, Jr is president and CEO of Z Capital and is responsible for all portfolio management and business operations. Prior to founding Z Capital, he was president and managing partner of Black Diamond Capital Management. He has 19 years of experience investing in value-orientated PE, M&A and related strategies.

Antoine Dréan
Triago

Antoine Dréan is founder and chairman of Triago. He is in charge of the group's business development and manages Triago's strategic advisory missions for clients. He has also founded Palico, an online marketplace for PE, and Mantra, an investment company focused on listed PE and non-traditional PE funds.

Paul RT Johnson, Jr
Illinois State Universities Retirement System

Paul RT Johnson, Jr is a trustee for Illinois State Universities Retirement System (SURS) and is involved in the approval process for investments made by the pension fund. He is also the owner of LSU Trading in Chicago. Prior to founding LSU Trading, he was the CEO of Boston Cabot, a broker/dealer.

tarnishing the relationship. In the middle tier of GPs, the incentives are thoroughly mixed, but ultimately these mid-level GPs aren't likely to want to risk tarnishing their relationship with LPs by inflating the numbers. According to our tests, aggressive valuations reduce the odds of a successful fundraising for an average fund."

Jenkinson: "We've seen some evidence in our data of abnormal performance – on a relative basis – around times of fundraising, but interim performance is also pretty noisy as an overall metric, and I think investors are getting more savvy about that as well."

So what does the research tell us about how investors work around the issue of asymmetry of information?

Jenkinson: "Investors generally accept that there is some embedded uncertainty about how a current fund is going to play out. Typically, LPs are going to look at an even older fund – where there is one – to see how those exits have gone in order to get a better picture of what they can expect. They are also going to look at relative performance within a cohort, or check for independent valuations. Smart GPs tend to value their investments conservatively, in order to avoid too much multiple contraction from fund to fund, investment to investment."

Gredil: "We find no evidence of naive investors, at least in our sample: they scrutinise everything they are told by their GPs and they negatively mark inflated performance. Healthy market forces do not seem to be failing here."

What do the practitioners think? Do PE firms manipulate valuations to raise funds? And how can LPs work around the possibility of this happening?

Zenni: "I don't know about manipulation, but GPs do have a wide latitude on how to value things. So human nature may lead to different valuations at different times.

"But I also think that there's a timing element here. While I don't think GPs are trying to time the market *per se*, they have to act tactically when it comes to fundraising. If the numbers aren't good, the window isn't open. If the numbers are good you might have a shot at fundraising. We have a different approach from some others around valuations. We use [valuation specialist] Duff & Phelps to value all of our portfolio companies, so everything we own is independently valued on a quarterly basis, which takes out the guesswork. We've been doing that for years, and we've done that voluntarily because it gives the LPs comfort and acts as a validator for how we value things. I don't know how many other GPs do that, but we want to be very transparent from an LP standpoint. It keeps everyone honest."

Dréan: "It's not surprising to hear of some GPs inflating performance, but I think it is very difficult to fool LPs. PE was a tiny industry a while ago, but now it is a big, competitive business. I think one of the reasons certain GPs are successful in their fundraising is because they have gained the trust of LPs. It's about making sure that you are being transparent. You also cannot underestimate what LPs are

> "A LOT OF THE DATA CAN BE NOISE. IT'S HARD TO FIND PURE APPLES-TO-APPLES COMPARISONS"
>
> ***James J Zenni, Jr,***
> ***Z Capital Partners***

doing when it comes to due diligence. PE is a long-term game, so fooling around doesn't make you a winner. I think another answer is what is happening on the secondary market. The secondary market can show who is really optimistic and who is really negative about a fund. GPs would rather see their funds sold at a premium. So discount to NAV [net asset value] *vis-à-vis* peers is a good metric when reporting on values."

Reputation seems to make a big difference in this. Can investors trust the numbers of less well-known and experienced GPs?

Yasuda: "Reputation is a big factor. I think this is what differentiates our paper: we tried to differentiate GPs' behaviours and outcomes by class of reputation. We measure reputation by looking at the size: how much capital they manage, how many funds they manage and whether they have had a top-performing fund

“SMART GPs TEND TO VALUE THEIR INVESTMENTS CONSERVATIVELY TO AVOID TOO MUCH MULTIPLE CONTRACTION FROM FUND TO FUND, INVESTMENT TO INVESTMENT”

Tim Jenkinson, Saïd Business School

before. We combine these three benchmarks to sort these funds into high reputation and low reputation. All of our high-reputation funds are large and have had at least one top-quartile fund before. If a manager has a long track record and it's a good track record or a blockbuster fund, some poor performance matters less.

“Whereas if you have only one other fund and it's not top-performing yet, investors will focus more on each portfolio company and exit. So they are pressured by investors to show good performance and are also pressured to show good liquidations. A well-known name like TPG, for example, could decide to fundraise regardless of current performance, whereas the no-name guy really has to fundraise when their fund is doing well.”

Gredil: “Our results also suggest that reputation is a really important factor when raising a fund. But it's quite a complex picture. If a GP has been able to make a significant exit or distribution from previous funds, that could outweigh the generally lacklustre performance of the current fund.”

Johnson: “From the investor perspective, you see some LPs that are willing to overlook anything. We aren't. We're going to look into everything that happens. If someone is really consistent, and can explain what happens, then we will probably stay. You want to dig deep if someone is getting hired or fired, regardless of their experience levels.”

So how reliable is interim performance for investors?

Jenkinson: “Unless LPs only want to base their decisions on fully realised funds, they're going to have to look at the interim data. But investors generally accept that there is some embedded uncertainty about how a current fund is going to play out.”

Zenni: “LPs are very intelligent, and so our approach is to be transparent. If performance dips, it is my experience – although we haven't had much in the way of any losses – that they just want to know that your approach was sound and your thesis was sound at the time. We are only as good as the decisions we make and these need to be based on a whole variety of factors.

“As long as our decisions are thoughtful and logical based on extensive due diligence, that's as good as we can do at the time. I mean, right now we're having a rough time in oil, energy, metals and mining. I know GPs who are going to get decimated and it's not because they didn't have skill. But when oil prices were $114 a year ago and now they're at $30, you can't outsmart your way out of that.”

Is the integrity of data in PE strong enough to avoid GPs cherry-picking relative performance metrics?

Dréan: “I remember an LP at a conference a few years ago saying, ‘We're so glad to be invested in an industry where 70% of the members are top-quartile.’ I think you can always be top-quartile of something. Finding comparables can be difficult, so you have to take a thoughtful approach to finding a peer group.”

Zenni: “I think a lot of the data can be noise. It's hard to find pure apples-to-apples comparisons. But you do have to take what you can find. I think in the PE world it's not as complicated because IRR is IRR, cash flow is cash flow.”

If some funds are engaging in interim inflation, how much comfort can LPs gain from performance relative to peers?

Gredil: “In our paper we compared funds against their cohorts, so that any macro factors would be muted out. If you're looking at 2006, I think it is reasonable to assume that LPs knew they were giving money when the market was hot. So if you're looking at a group of funds that all lived through a challenging period, that's going to help everyone on a relative basis. We do, however, see in some of our studies that performance inflation is most pronounced when it is challenging for everyone to raise a fund.”

Zenni: “Relative performance helps a lot. I think the biggest problem LPs have today is finding managers that truly do deliver equity-like returns. So LPs are looking for relative performance and if you can demonstrate solid equity-like returns over a period of time – in our case it's 14 years – you get a following and you get solid institutional support. That's a little different from knocking on doors and looking for capital. It's a very different proposition if you already have strong relative performance.”

Johnson: “We always keep an eye on this across our portfolio – is everyone falling apart or just one GP? Who is doing well? Did someone get too far away from core style? You have to look at all the factors. At SURS we are in the process of changing our asset allocations, so this is front of mind for us. If someone does make a bad bet, you have to take that on a case-by-case basis. Was it just a one-time thing, or is it the whole business? But you also have to look beyond the numbers sometimes. If you get so far you're down to the last two funds in the same

“THE HARDEST PLACE TO BE IS THE MIDDLE GUY, BECAUSE INVESTORS CAN'T EASILY TELL IF YOU ARE MIDDLE BECAUSE YOU CHOOSE TO BE OR BECAUSE YOU FAILED AT BEING BIG”

Ayako Yasuda, UC Davis Graduate School of Management

“THE FUNDRAISING MARKET TODAY IS QUITE COMPETITIVE. IF YOU WANT TO STICK AROUND, YOU HAD BETTER STICK TO TRANSPARENCY AND TO TRUTH”

Antoine Dréan, Triago

strategy, where do you go? Sometimes it is a beauty contest. If everything else is equal, where do you go? Reputation will be a factor but only a factor. If they've made it to being in front of me, they're pretty good. They've made the cut. So you have to go with the human factors.”

For GPs that don't yet have the reputation behind them or that aren't raising mega-funds, is it fair to say that they have an incentive to be as good at being salespeople as they are at picking companies in order to build up fund size?

Yasuda: “I think that goes to the crux of what we are seeing here. I think the hardest place to be is the middle guy, because investors can't easily tell if you are middle because you choose to be or because you failed at being big. So there is always a nagging doubt among investors about your growth trajectory. And that's fascinating because investors have a point, and managers have a tougher time showing that they are there by choice. If you can buy a billion-dollar company and turn it around, there are fewer reasons to believe that you can't turn a $10bn company around.

“Whereas for VCs, the contrast is very interesting. With the VC you can convincingly argue that you're best at being at the accelerator level, and being good at spotting the early-stage company. If you are best at picking those companies, you can't really quadruple the size of your investments and convincingly call it a start-up. But with a buyout fund, if some of the middle guys are staying there by choice because they are best at the middle, they are still more pressured to show differentiation there. That's a hard place to be.”

Gredil: “Based on our paper specifically, it pays to be transparent and not send mixed signals to LPs. It's possible that you can be a good firm and just be unlucky at certain points, which is also why reputations count. Whether GPs think it's important or not, they have to communicate clearly with investors.”

Zenni: “For us, it's less about salesmanship and more of a mapping-out of what we do versus other players. LPs aren't going to get sold on anything. They are intelligent: they know the inner workings of firms like ours. It's a matter of explaining how our firm is different from others. We focus on turnarounds, so we are very transparent about how we have fixed a company and what was the value creation along the way; it's not as much about selling something.”

Dréan: “As a placement agent, if you want to be around for a long time, the only word that counts is ‘transparency’. We ask our GP clients to tell us about the worst story so it doesn't come up during fundraising. LPs will look under every rock, so not being transparent from the beginning will create problems. Every GP has a few skeletons, but you have to be transparent about what they are because LPs will ask. The fundraising market today is quite competitive. If you want to stick around, you had better stick to transparency and to truth.”

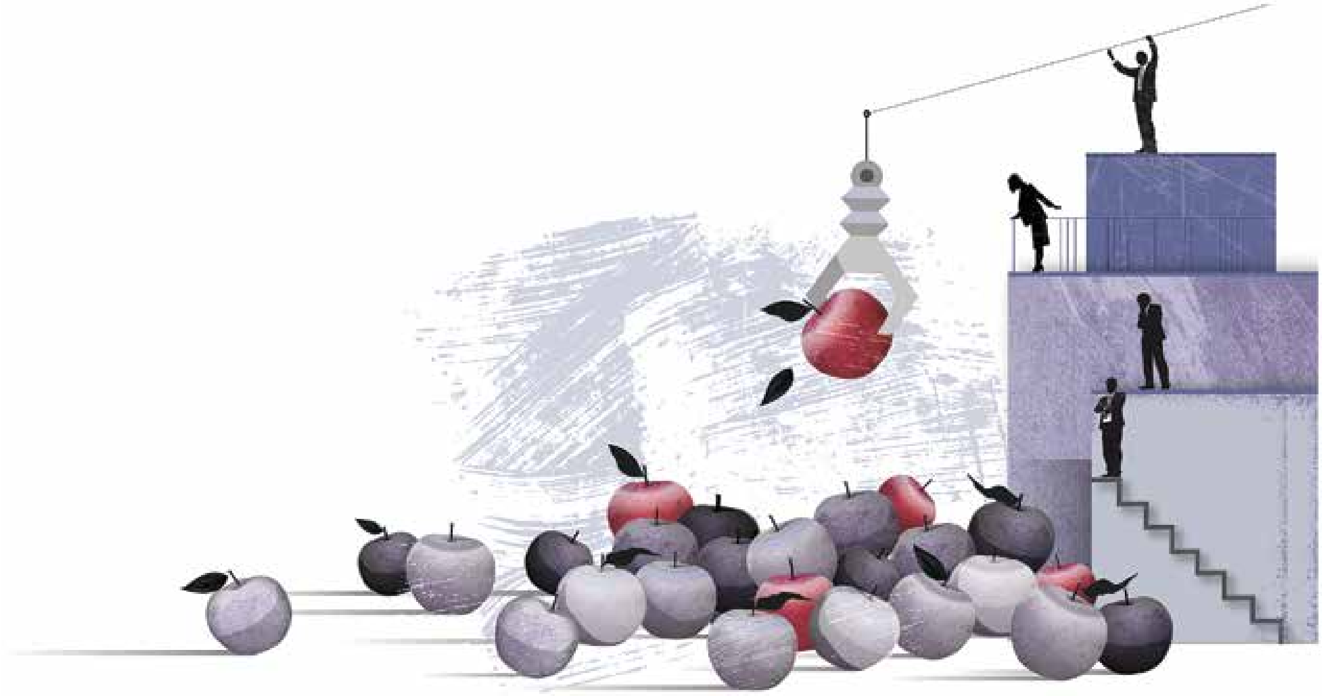
The research

In their paper *Interim Fund Performance and Fundraising in Private Equity*, Brad Barber and Ayako Yasuda, both of UC Davis Graduate School of Management, study the interim performance of PE funds around the time of fundraising, using fund-level cash-flow and valuation data for more than 800 VC and buyout funds raised between 1993 and 2009.

First, they find that the interim performance of a fund has a significant effect on a GP's probability of raising a successor fund, and this is especially true of smaller, younger firms that have not yet built up a reputation. Second, they find that a 10% improvement in a fund's percentile rank, such as from the 30th to the 40th percentile, increases the size of their follow-on fund by 20%. The authors also find a link between the timing of fundraising and an increase in interim performance figures. The performance of funds peaks either at, or shortly before, the time of fundraising, with GPs in the low-reputation sample seeing the greatest increase in performance at this time. In addition, the research finds that mark-downs are larger and more frequent after the fundraising period. Overall, the research suggests that GPs inflate NAVs during fundraising.

Do Private Equity Funds Game Returns? by Gregory Brown (University of North Carolina), Oleg Gredil (Tulane University) and Steven Kaplan (University of Chicago Booth School of Business) looks at a similar issue, but finds, overall, that managers that boost reported NAVs during fundraising periods are less likely to raise their next fund. Their research shows that the fund-timing increase in NAVs is limited to a subset of underperforming funds that are most concerned about survival and that GPs with reputations to maintain are much more likely to report conservative NAVs during fundraising efforts. The authors also find that LPs appear to punish GPs for what they may consider aggressive interim reporting at the time of fundraising by not committing to their next fund.

How Fair are the Valuations of Private Equity Funds?, the paper by Tim Jenkinson, Rüdiger Stucke (both of the University of Oxford's Saïd Business School) and Miguel Sousa (University of Porto), uses the quarterly valuations and cash flows for all the 761 fund investments made by CalPERs. It finds that, over the life of a fund, valuations tend to be conservative and to understate subsequent distributions by 35% on average. However, it finds evidence that valuations are inflated during fundraising, with a gradual reversal after the follow-on fund has been closed. In addition, the authors find that performance figures reported during fundraising have little power to predict ultimate returns, particularly when IRR is used as a measure.



PICK OF THE CROP

Early-stage investors are faced with a plethora of options when it comes to backing start-ups. So what are their initial screening processes? New research takes a look at what is most important to these investors, and explores the differences between how experienced and inexperienced backers make investment decisions. **By Gregory DL Morris.**

How do early-stage investors choose which start-ups to support? There is little systematic evidence on the selection process of early-stage investors. This paucity stands in sharp contrast to the wealth of evidence on investment decisions in public equity markets by institutional and retail investors.

However, recent research, *Attracting Early Stage Investors: Evidence from a Randomized Field Experiment*, by Shai Bernstein, Arthur Korteweg and Kevin Laws, attempts to fill this gap. "In teaching entrepreneurial finance, the question always comes up: how do venture capitalists make their decisions to proceed?" says Bernstein. "That is especially true at the early stage, which is characterised by large uncertainty, no track record and attempts to do untried things."

The research, which uses companies in an online database (AngelList) to track which characteristics are of most interest to venture capital investors in early-stage investments, seeks to answer this question – at least partly (see "The research", right, for an explanation of the methodology and findings).

The importance of teams

It finds that the characteristics and experience of the founding team are of most interest to early-stage investors, compared with the amount of traction the start-up already has (as measured by sales or number of users, for example) or its existing investor base. "One surprise is the importance of teams, versus the traction of the company or the behaviour of other investors," says Bernstein. "Coming in, I thought that what other investors were doing would be important, especially for increasing awareness of one project over another. I also thought that traction would be important. But it was the quality of the leadership team that resonated most strongly with investors."

Execution is key

Bernstein suggests that there may be two drivers to the findings. One is that, at the earliest stages, what matters most is execution. "Whatever the idea is at the start, it will likely change, so you need high-quality people to execute," he says. "The other driver could be that, whether the idea is sound or not, talented entrepreneurs, who have other options, chose this one, which could be a signal about the prospects of the project."

The research also found that inexperienced investors (those that had not made an investment before) were more likely to look at all three – team, traction and other investors in the company – while the experienced investors looked only at the team.

This finding chimes with some experienced investors. One of these is Robert Siegel, a partner with Xseed Capital, an early-stage VC firm based in Silicon Valley with $110m managed across two funds. "Bernstein may be on to something not obvious here," Siegel says. "The smart money does not just follow

> "A GREAT IDEA WITH A MEDIOCRE TEAM IS NOT GOING TO SCALE, BUT A GREAT TEAM WITH A MEDIOCRE IDEA CAN CHANGE AND ADAPT"
>
> ***Robert Siegel, Xseed Capital***

the smart money. It is also of great interest that, among early-stage investors like us, the cohorts, experienced versus inexperienced, behave differently."

Jockey before horse

Siegel also echoes Bernstein's point about execution. "Experienced investors know that the team is the big X," he says. "In the early stages, experienced investors know that they are betting more on the jockey than on the horse. But that does not mean that hitting milestones is not important. A great idea with a mediocre team is not going to scale, but a great team with a mediocre idea can change and adapt. That is what creates the chance for success."

Robert Johnston, executive director of the New York Venture Capital Association (NYVCA), entrepreneur and angel investor, sees the findings from a different angle. He lauds the researchers for their efforts to quantify the more elusive variables in the equation.

Getting emotional

"The paper starts to get at the emotional aspect of early-stage investing," Johnston says. "So much research in this field just looks at the unemotional, raw data but does not include the emotional component of this business."

He also suggests that VCs themselves are less inclined to acknowledge the emotional aspects of deal selection. "About 99% of VCs will tell you that they are very rational – that they look at the four corners of the spreadsheet and the investor deck, without emotion," he says. "But the truth is that a lot of early-stage investing is based on emotion, time constraints and fear of missing out. When I read a lot of research – and I am a voracious reader – that emotional component is often missing."

However, Siegel points to some of the study's limitations. "There are some very subtle things in this paper that can easily lead to incorrect conclusions," he cautions.

Too early for results

"It could seem that investors should only look at the team and ignore milestones to get better results," Siegel continues. "But that would be an over-simplification. In fact, the first thing that occurred to me upon reading the paper is that we don't know the results of the investments. The research only looks at the selection and decision process." Bernstein would agree, and he makes it clear that the paper only answers part of the question. He stresses, for example, that there is a wide variety of financial and behavioural factors in the VC decision-making process and that that complexity was not captured in the paper.

The paper also makes clear that investment outcomes are not explored, "as participating companies are still at a very early stage and long-run outcomes such as acquisitions or IPOs are as yet unknown". However, the paper does make the assertion that the team is important for fundraising, "which is a prerequisite for entrepreneurial success".

Looking ahead, Bernstein believes that there is much more research to be done in this area. He would like to delve further into the decision-making process. "The limiting factor for investors is not money, especially at the early stage," he says. "It is time and attention. Investors might see 1,000 business plans in a year," Bernstein points out. "Of those, they might meet for coffee with just 50, but that is still one a week. How do they decide whom to meet?"

> "WHATEVER THE IDEA IS AT THE START, IT WILL LIKELY CHANGE, SO YOU NEED HIGH-QUALITY PEOPLE TO EXECUTE"
>
> ***Shai Bernstein, Stanford Graduate School of Business***

The research

In *Attracting Early Stage Investors: Evidence from a Randomized Field Experiment*, Shai Bernstein from Stanford Graduate School of Business, Arthur Korteweg of the University of Southern California Marshall School of Business and Kevin Laws from AngelList sought to determine how VC investors decide which investment opportunities to pursue.

The authors sent 17,000 emails to nearly 4,500 investors on the AngelList online platform of investment opportunities, giving information about 21 different start-ups that revealed either the founding team's background, the start-up's traction (such as sales and user base) or the identity of existing investors – or a combination of two of the three characteristics. They then measured each investor's level of interest in a given company by recording whether the investor chose to learn more about the company based on which characteristics were revealed in the email. Additional results show that this effect is not mediated by market transactions such as mobility of workers or patent trade. Overall, results suggest that VC brings about knowledge spillovers and affects the direction of aggregate innovative activity.

The research finds that the average investor responds strongly to information about the founding team (which received a 13% higher click rate than the other categories), but less to firm traction or existing lead investors. When the results were analysed according to the investors' experience, the research found that the experienced investors respond only to team information, while inexperienced investors (18% of the sample) respond to all information categories. The results suggest that information about human assets is causally important for the funding of early-stage firms, and hence for entrepreneurial success.

2015 PRIVATE EQUITY FINDINGS SYMPOSIUM

At this year's Private Equity Findings Symposium, nearly 200 delegates from around the globe heard academic thought leaders and influential practitioners present their research findings and views on the industry's latest concerns. Here, we highlight the main issues discussed and offer a rundown of the featured papers.

Keynotes and roundtables argued that the PE industry has returned to a 2007 environment, with general partners enjoying strong EBITDA multiples and benign credit markets driven by governments and banks incentivised to keep interest rates low for some years to come. So overall the sentiment was that the industry was enjoying a period of success and stability. It was not, however, without some potential for adjustments and changes in the months to come: further discussions revealed that, despite current positive market conditions – illustrated by massive amounts of distribution back to limited partners and a receptive fundraising environment for GPs – the investment pace has not kept up. So GPs will need to explore new, unconventional ways of deploying investor capital (market dislocations or development projects were mentioned), or adjust their fundraising targets downwards.

Growth capital: where PE meets venture capital

Another discussion was about the perceptions and realities of "growth capital" which, rather than simply a different term for VC, was revealed as quite different in terms of the underlying portfolio businesses and the GPs' origination and management skills required. We learned that growth capital invests in companies that have not just a business plan but rather a track record and returns, alongside plenty of data for investors to analyse.

Featured academic papers

Where Experience Matters: Asset Allocation and Asset Pricing with Opaque and Illiquid Assets by *Adrian Buss, Raman Uppal* and *Grigory Vilkov* investigates alternative assets, such as PE, hedge funds and real assets which are illiquid and opaque, and thus challenge traditional models of asset allocation.

How Much for a Haircut? Illiquidity, Secondary Markets, and the Value of Private Equity by *Nicholas P.B. Bollen* and *Berk Sensoy* examines LPs of PE funds' commitment to invest with uncertainty regarding the timing of capital calls, payoffs and extreme restrictions on liquidity, and how secondary markets alleviate some of these associated costs.

Co-investment and Risk Taking in Private Equity Funds by *Carsten Bienz, Karin S. Thorburn* and *Uwe Walz* investigates how a GP's own personal co-investment in a given fund impacts and influences the acquisition strategy of the fund.

The Globalisation of Angel Investments by *Josh Lerner, Antoinette Schoar, Stanislav Sokolinski* and *Karen Wilson* analyses how the causal impact of angel financing varies with countries' differences in the development of the VC market and the ease of starting companies.

Business Accelerators: Evidence from Start-Up Chile by *Juanita González-Uribe* and *Michael Leatherbee* evaluates an increasingly important institutional form in the entrepreneurial ecosystem – the business accelerator: fixed-term, cohort-based, financial intermediaries that offer cash, shared office space and mentorship to start-ups.

Estimating Private Equity Returns from Limited Partner Cash Flows by *Ludovic Phalippou, Andrew Ang, Bingxu Chen* and *William N. Goetzmann.* By their very nature, traditional PE investing metrics hamper the investor's ability to use standard optimal portfolio allocation models. This paper describes a new method for overcoming these limitations by using cash-flow data derived from the LPs' cash contributions and distributions back to LPs.

Team Stability and Performance: Evidence from Private Equity by *Francesca Cornelli, Elena Simintzi* and *Vikrant Vig* examines the effect of staff turnover on GP performance. The paper argues that the common belief that turnover at the team level is disruptive on performance may be driven by reverse causality, as the individuals who leave are on average the underperforming ones.

The Leverage, Pricing and Return Puzzle in Leveraged Buyouts: The Impact of Competition by *Nicholas Crain, Reiner Braun* and *Anna Gerl* investigates how the competition for buyout targets between PE funds drives the relationship between deal leverage and performance. The paper further explores how the sellers of target firms ultimately benefit from easy credit.

While in many cases introducing the first external capital to those companies, the growth capital GP also needs the skillset to convince target businesses to take the next step (geographic expansion, say, or product expansion) alongside an actively involved new source of funding. Growth capital is all about accelerating the growth of a company by partnering a business with providers of global market entry, mid-level management talent and a clear vision for the founder's role or exit scenario in the much larger/different company of the future. From an LP strategy perspective, growth capital seems to offer lower risk than VC and faster growth than more established buyout investments. Industry experts challenged the common view that growth capital was focused on the technology/IT industry, saying that it was more about finding companies exploiting technology to overhaul traditional businesses and services.

Geographical focus or global footprint?

Another panel addressed the geographic dimensions of today's GP and LP portfolio decisions. Some argued that, while globalisation is ever increasing, PE still features large investors who often focus their strategies closer to home – limiting their return potential. On the other hand, GPs find that their investor base represents ever larger international participation and a growing number of super-LPs demanding proof of sophisticated GP working practices, infrastructure, reputational risk monitoring, IT and compliance procedures.

However, compliance with a globally fragmented regulatory framework comes at a cost. The implications of different and changing tax laws in different countries for portfolio company returns can be substantial and are therefore analysed by GPs.

The debate also touched on the trend of LPs dramatically reducing the number of GPs in their portfolios in a world of large investments (LPs allocating larger tickets to fewer GPs) and of diminished "persistence of returns" in the top/middle quartile. There is also the continuously rising demand for co-investments. As only the larger deals provide such opportunities, smaller LPs merge their buying power to get in. However, the jury is still out on whether LPs leading such deals will be able to perform the same value creation as GPs with operational expertise and track records. With portfolio companies all being international either in structure or business model, GPs assume global operational and market expertise to be a key performance driver.

The US private equity landscape: snapshots from SEC data

The results of a different research project, conducted at the Coller Institute, revealed an additional perspective on the PE industry based on a large, unique dataset, constructed by the authors and based on a large sample of PE advisor Securities and Exchange Commission (SEC) filings.

The presentation discussed findings such as: pension funds investing with larger advisors with a smaller overall PE AUM proportion potentially achieve lower returns; pension funds investing with advisors whose executives have weaker incentives or a lower investment professional per AUM proportion potentially achieve lower returns; and capital contributions by non-US investors to US PE firms are now an important source of funding and seem to pursue better-performing fund selection strategies.

EVENTS CALENDAR

RECENT EVENTS

THE MASTERCLASS IN PRIVATE EQUITY, OCTOBER 2015

This seminar, taught by London Business School faculty with contributions from leading industry experts, introduced key learnings about PE in Europe and around the globe.

THE NEW CAPITAL: HOW LARGE INVESTORS INFLUENCE PRIVATE EQUITY, 24 NOVEMBER 2015

The annual MVision Roundtable discussed the influence of very large PE investors and the implications of this on GPs and the PE industry as a whole.

LUXURY GOODS SECTOR AND PE: LOOKING FOR THAT TAILORED FIT, 1 DECEMBER 2015

This event, hosted with the Retail Luxury Goods Student Club, investigated the challenges and opportunities for the PE industry when it engages with the luxury sector.

UPCOMING EVENTS

MARCH 2016, LONDON

Adveq and the Coller Institute welcome delegates to a discussion of the Institute's sixth report under the Adveq Applied Research Series.

THE MASTERCLASS IN PRIVATE EQUITY, 16-19 MARCH 2016

This seminar, taught by London Business School faculty with contributions from leading industry experts, will introduce key learnings about PE in Europe and around the globe.

APRIL 2016, CHINA

The Coller Institute plans to host an academic event for PE and VC practitioners in China.

9TH SYMPOSIUM: SEARCHING FOR NEEDLES IN A HAYSTACK, 7-8 JUNE 2016, LONDON

Ticket sales have started and discounted tickets are currently available.