



«Your bridge to the world of private assets.»

# Team Stability And Performance In Private Equity

November 2011

By

Prof. Francesca Cornelli, London Business School

Dr. Katharina Lichtner, Capital Dynamics

# A prevailing paradigm in Private Equity...

---

## Team stability: key to persistence of performance in the Private Equity industry

“We have one of the most experienced and **stable teams** in the private equity industry...”

“The Manager has one of the most **stable private equity teams** in Asia”

“..has been making investments together for over two decades, creating one of the most **experienced and stable investment teams** in the private equity business...”

## ...has never been questioned

---

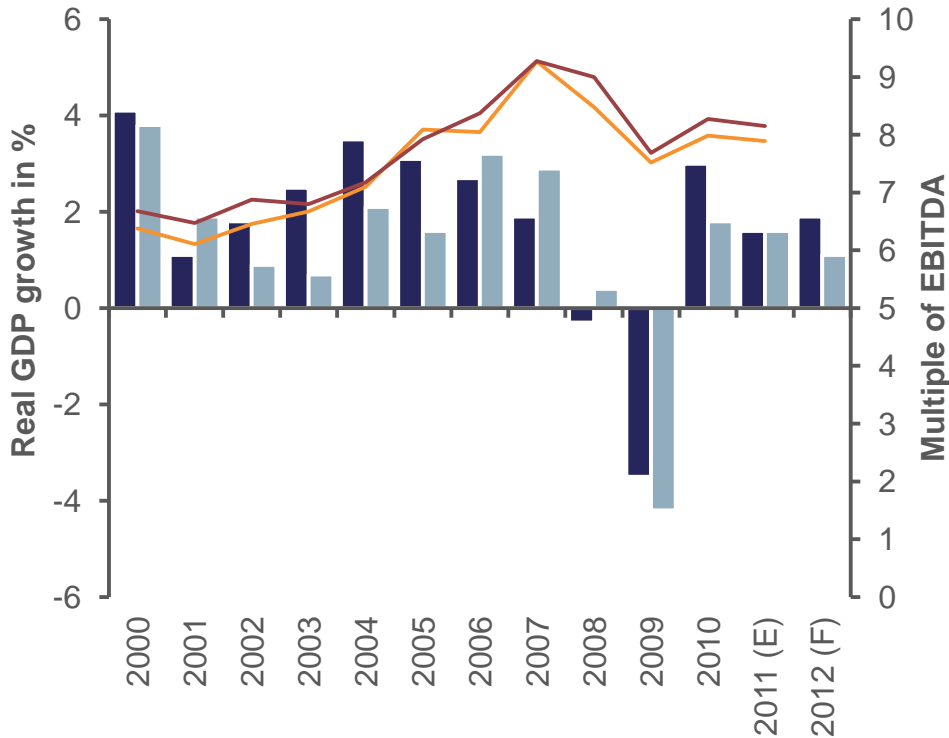
- There has been no research, so far, validating this well-accepted wisdom...
- Is turnover bad indeed?

OR

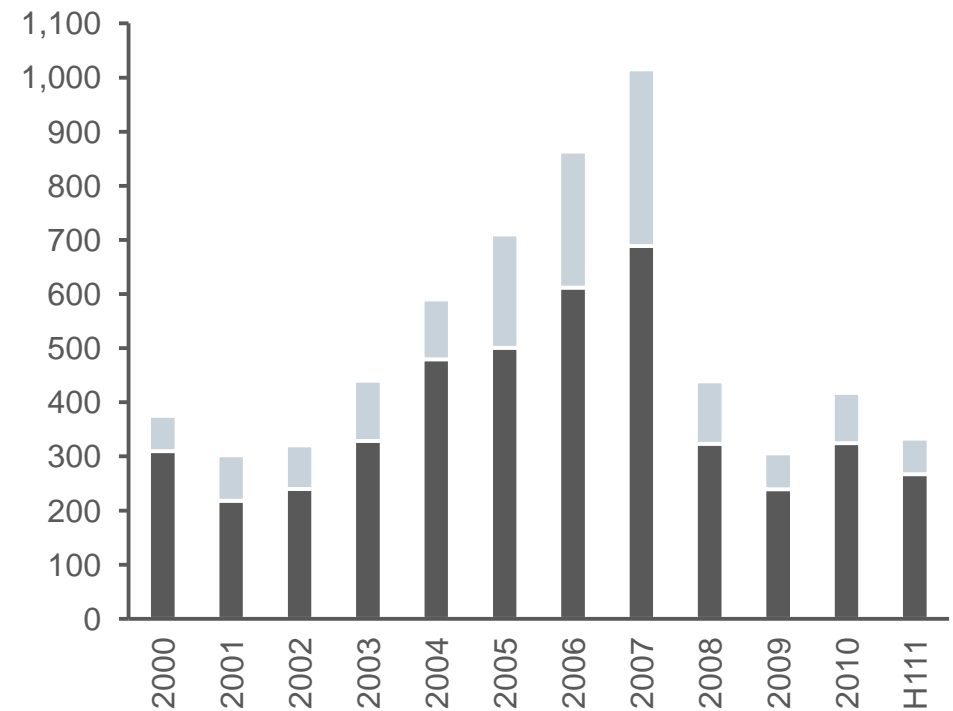
- Can team turnover be value-enhancing?
- PE has undergone a substantial shift in its business model driven by the financial crisis.
  - What about teams' adaptability to new conditions? Do flexible teams perform better?

# Environment has changed dramatically for Private Equity

## GDP growth & avg. buyout purchase price/EBITDA multiples



## New leveraged loan issuance volume (US bn)



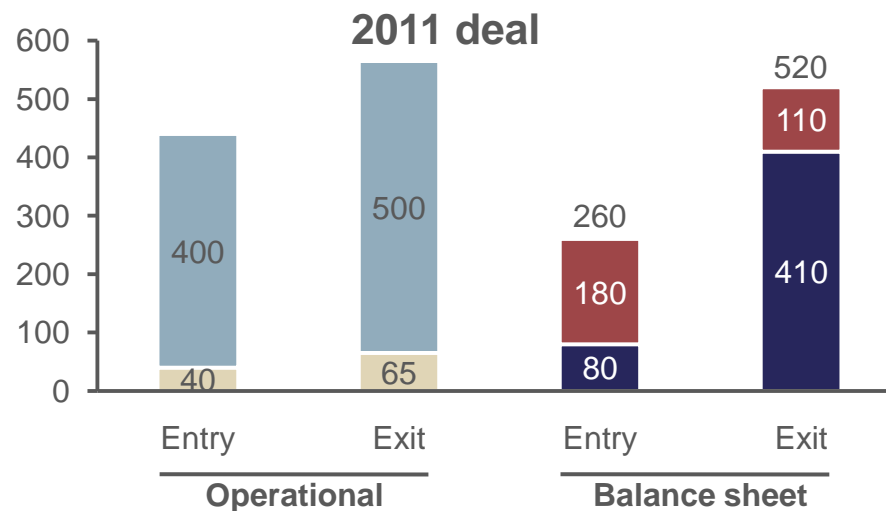
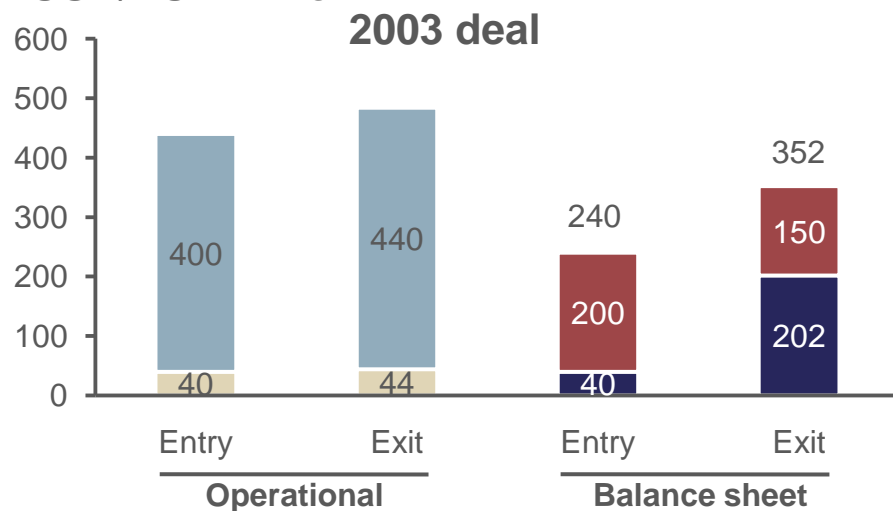
■ US GDP   ■ Euro Area GDP   — US buyouts   — European buyouts

■ US new leveraged loan volume   ■ European new leveraged loan volume

Source: IMF World Economic Outlook September 2011, S&P M&A data to July 31, 2011, Credit Suisse Leveraged Finance Market Update September 2011 .

# Value will have to be generated through operational improvements

In USD/EUR million



	Entry	Exit
Sales	400	440
EBITDA Multiple	6.0	8.0
EBITDA Margin	10.0%	10.0%
EBITDA	40	44
Debt Multiple	5.0	3.4

	Entry	Exit
Sales	400	500
EBITDA Multiple	6.5	8.0
EBITDA Margin	10.0%	13.0%
EBITDA	40	65
Debt Multiple	4.5	1.7

Exit	2007
Gross Multiple	5.1
Gross IRR	50%

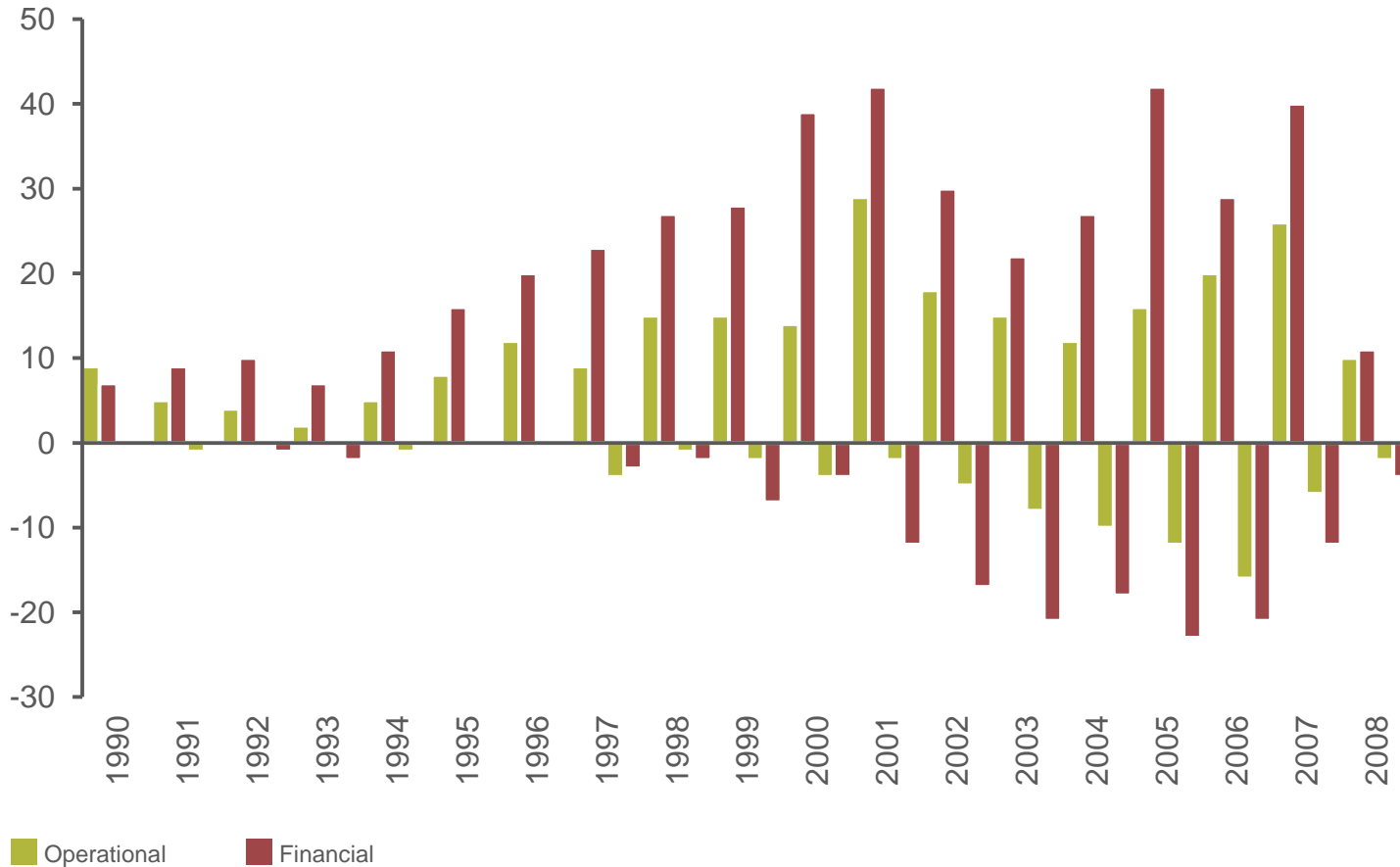
Exit	2016
Gross Multiple	5.1
Gross IRR	39%

Equity Debt EBITDA Sales

Source: Capital Dynamics model calculations

# How do the developments of the last years influence team evaluation approach

## Number of senior Private Equity professionals hired/departed



Over the last two cycles more professionals with a finance background have been hired.

Netto operational: 170

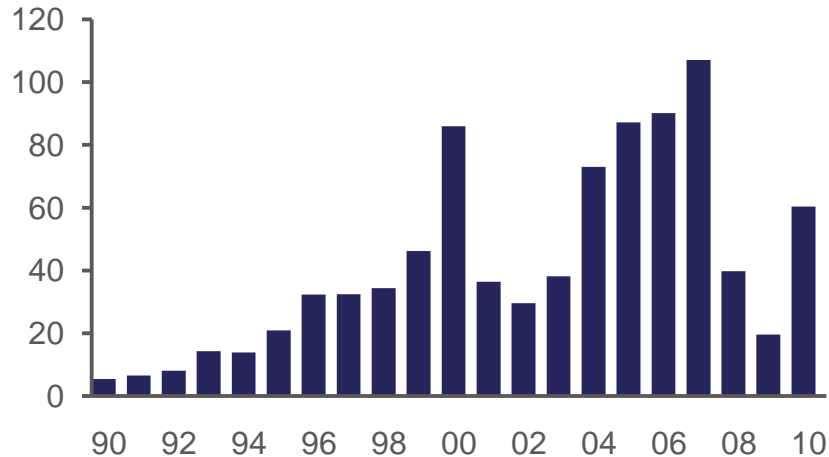
Netto financial: 293

**Delta: 120 more professionals with financial background**

Source: Joint study of Capital Dynamics Study and Prof. Francesca Cornelli from London Business School.


# Who has the right team to capture the opportunity?

## Annual private equity distributions (USD bn)



- Teams have expanded rapidly throughout 2002-2008
- 415 new firms have been founded over the period, despite the crisis
- Many hires come from investment banking

Senior professionals cashed in an estimated USD 125 bn<sup>1</sup> of carry over the last 30 years

- 
- **Who is really generating the value?**
  - **Does the team have the right mix of backgrounds for the challenges ahead?**
  - **Do teams have a sufficiently deep operational bench?**

(1) Capital Dynamics estimated carry for 1,839 US and European private equity funds formed between 1980 and 2005.  
Source: Thomson One, as of May 18, 2011.

## So far, there were no data available...


- We build a ***novel dataset*** with joiner and leaver time series covering 1990 to 2008, based on Capital Dynamics due diligence archive.

We collect information on 56 PE firms:

- Individual members of the teams of Private Equity Firms;
- Fund characteristics;
- Time-series of Funds' Performance;
- Performance of all individual deals/companies a fund has invested in (including written-off investments).

We collect all individuals' characteristics that are available, including:

- Name
- Short bio
- Age
- Date of joining and leaving the firm
- Reasons for leaving (where available)
- Inclusion in key man clause
- Carry entitlement
- Deal attribution



The database includes over 2500 individuals covering approximately 2 decades of private equity team development

# Representation of backgrounds and age distribution across private equity managers

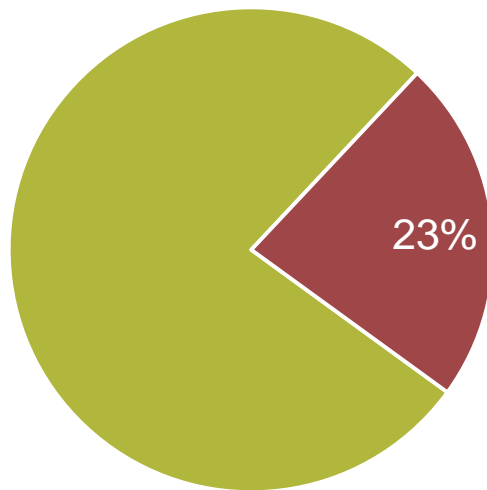
	Average age (in years)	Finance studies	Science studies	Top 10 MBAs	All MBAs	Operational & PE work experience	Financial work experience
All Individuals	39	73%	27%	27%	35%	40%	60%
Individuals in the keyman clause	46	69%	31%	30%	40%	51%	49%
Individuals entitled to carry	41	72%	28%	31%	39%	44%	56%

Contrary to a perception often held in the media over half of the key decision makers have solid operational and PE experience

Source: Joint study of Capital Dynamics Study and Prof. Francesca Cornelli from London Business School.

# How strong is overall Team stability in the private equity industry

**23% of team members leave**  
*of which: 55% have financial and 45% have operational & PE experience*



Team turnover has always been a part of private equity team evolution over the past 20 years

- 16% of those individuals mentioned in the keyman clause leave
- 20% of those entitled to carry leave

Source: Joint study of Capital Dynamics Study and Prof. Francesca Cornelli from London Business School.

# Turnover can happen at different levels

---

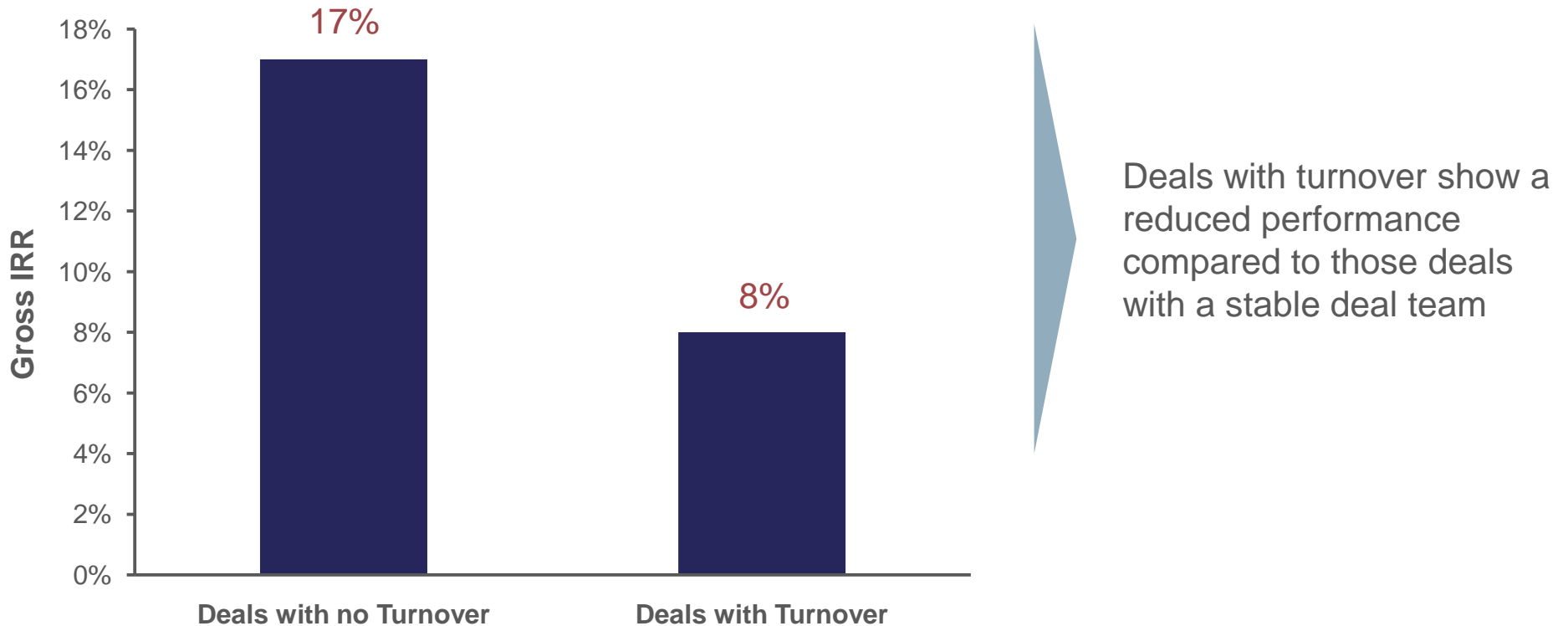
Fund turnover

Professionals joining and leaving the management team of a GP

Portfolio company turnover

Team members that either sourced the deal or hold a board seat leaving the firm prior to exit of the firm

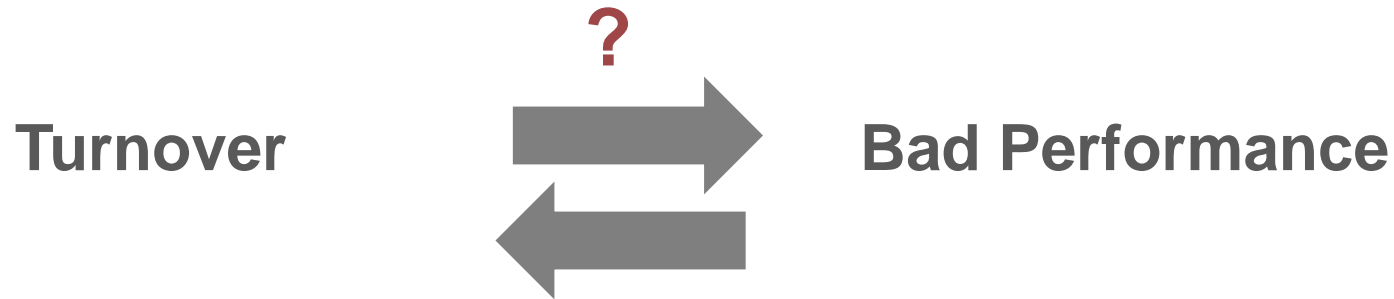
# Analysis I: Deal Turnover and Performance of investments



Note: The difference is statistically significant at the 1% level.

Source: Joint study of Capital Dynamics Study and Prof. Francesca Cornelli from London Business School.

# Analysis I: Turnover leads to Bad Performance or Bad Performance to Turnover?

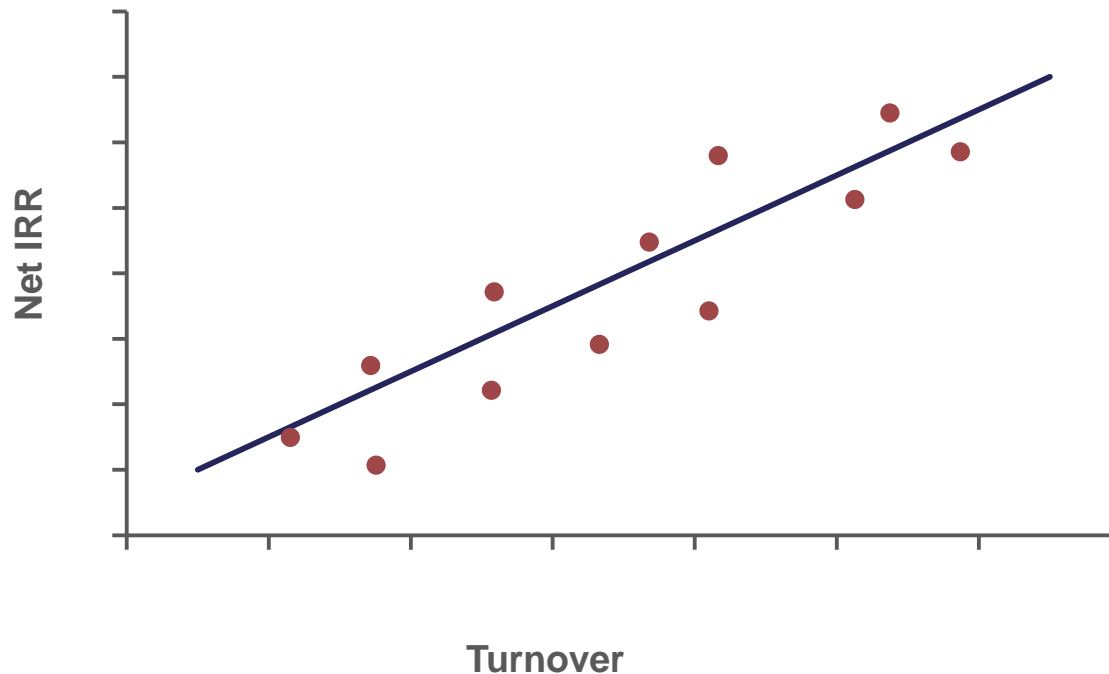


- **Endogeneity** is an issue!!

# Method of analysis

Subsequent results are analyzed by using regression analysis.

$$\text{Net IRR}_{i, t+k} = a + \beta \cdot \text{Turnover}_{i, t} + \gamma \cdot X + \varepsilon_{i, t+k}$$



Individuals join and leave the teams at different points in time.

- We look at turnover and how it relates to performance.
- Time series of performance available for 56 funds from their vintage year until the time they exit or until 2010 (last observation).

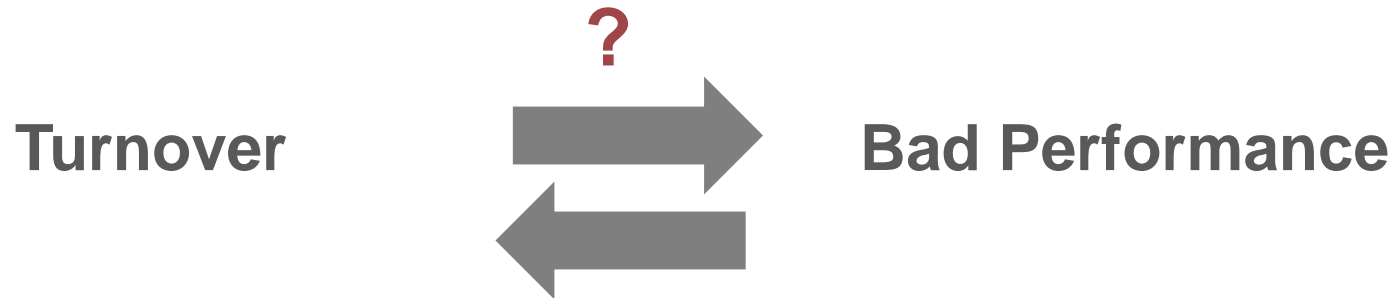
# Analysis II: Turnover and subsequent fund performance

	Log(1+IRR)
<b>Total Turnover</b>	<b>0.027</b>
	<b>(0.026)</b>
<b>Controls</b>	
Macro Controls	X
Fund Manager Controls	X
Geography Controls	X
Obs.	1,368
R <sup>2</sup> adj	0.30



There is *no* clear effect.

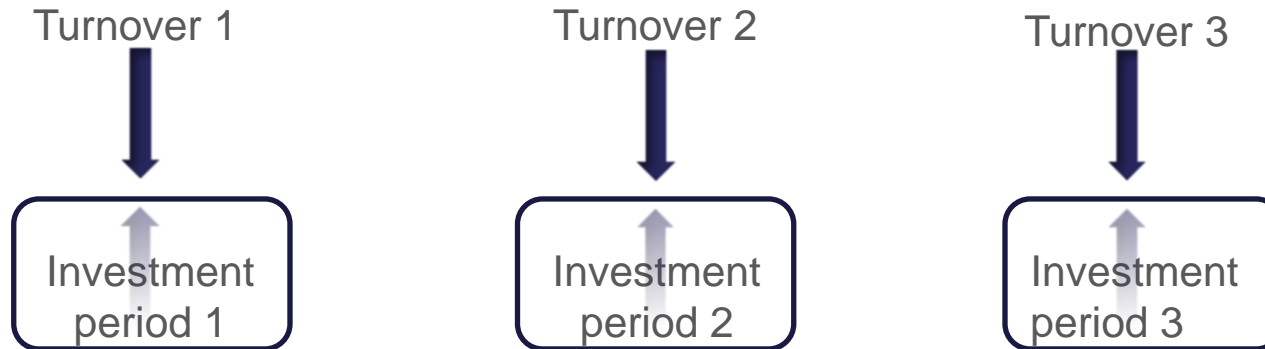
# Turnover leads to Bad Performance or Bad Performance to Turnover?



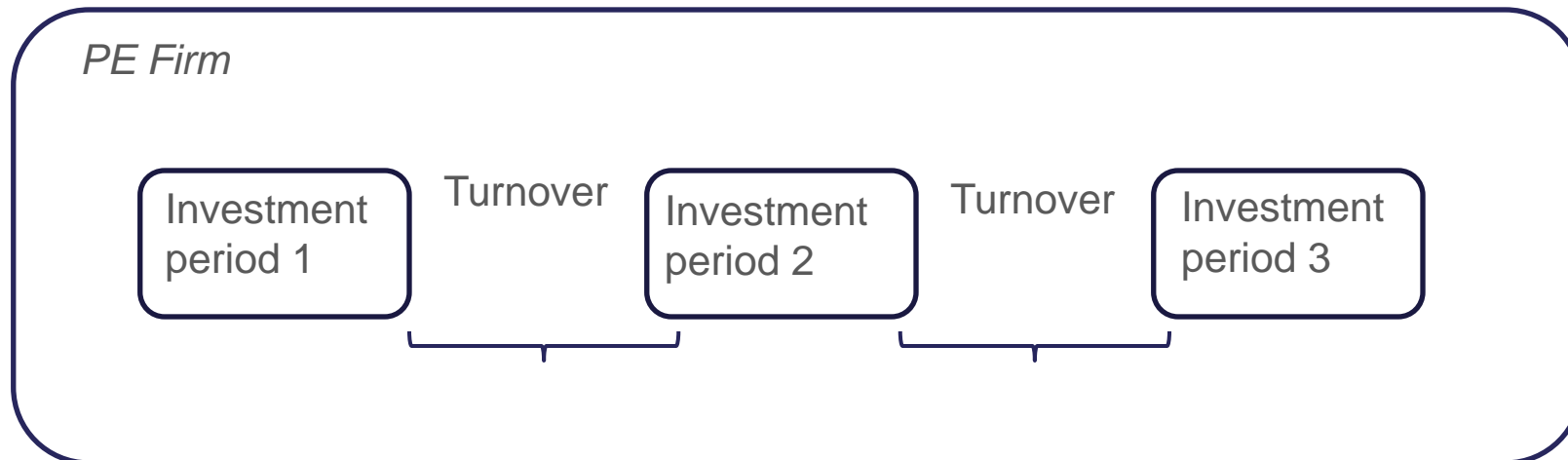
- **Endogeneity** is an issue!!

# Team turnover requires a differentiated understanding

## (a) *within* Investment Period variation

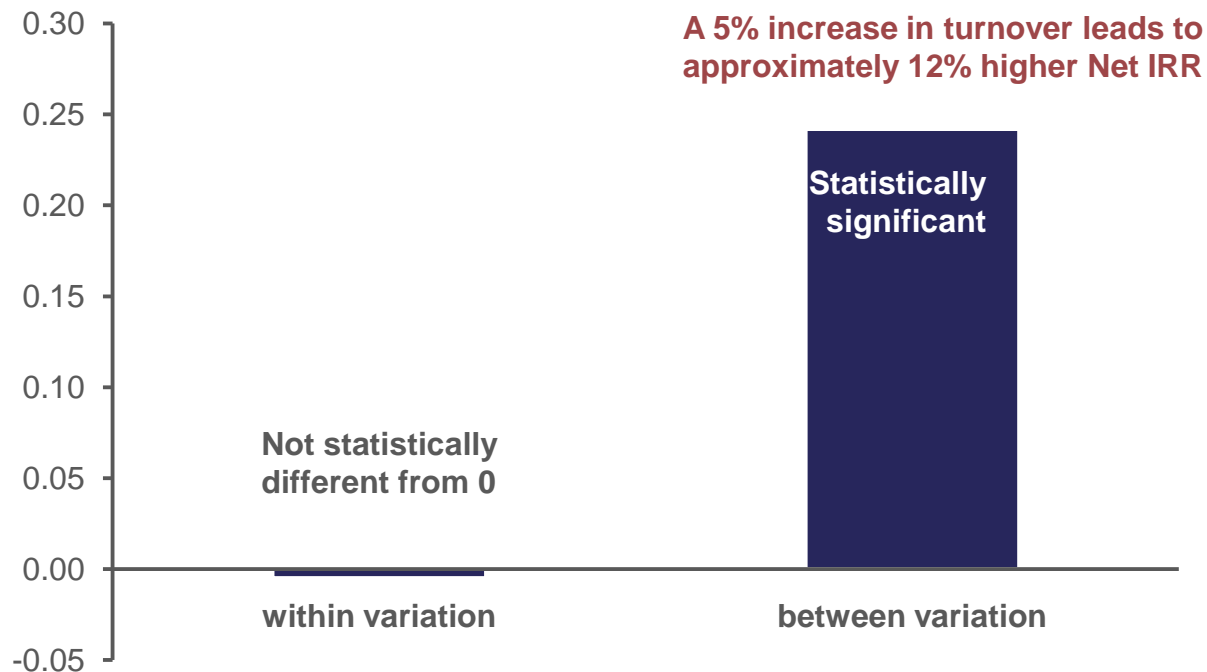


## (b) *between* Investment Period variation



# We can separate the two and we find...

## Estimated Effect of Turnover on Net IRR



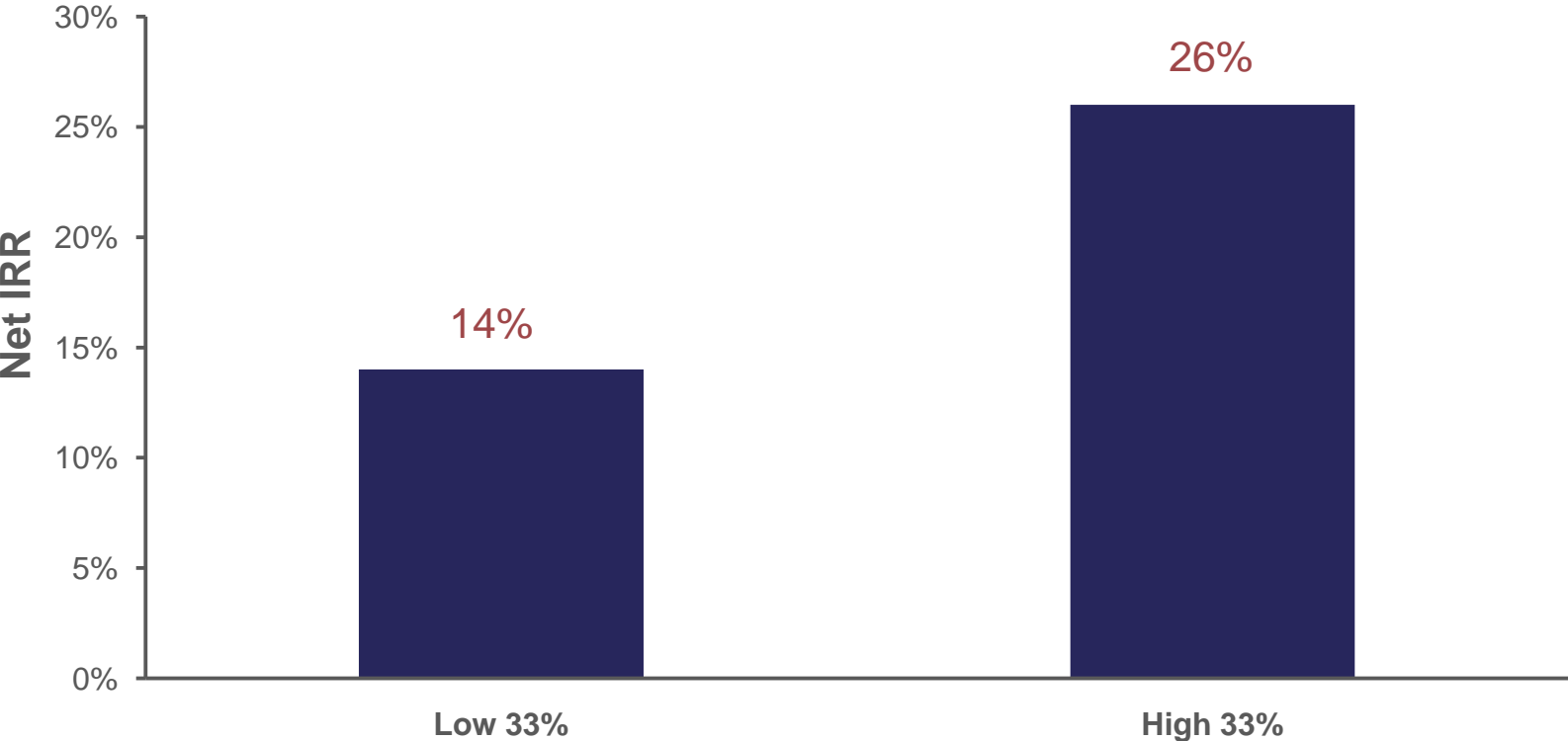
Bulk observation of team turnover and turnover within the investment period are inconclusive, However, team evolution between funds greatly enhances returns.

 Investment period

Source: Joint study of Capital Dynamics Study and Prof. Francesca Cornelli from London Business School.

# Managers with top tercile turnover between investment periods perform better

## Average Fund Manager Performance at the bottom and top Turnover Tercile

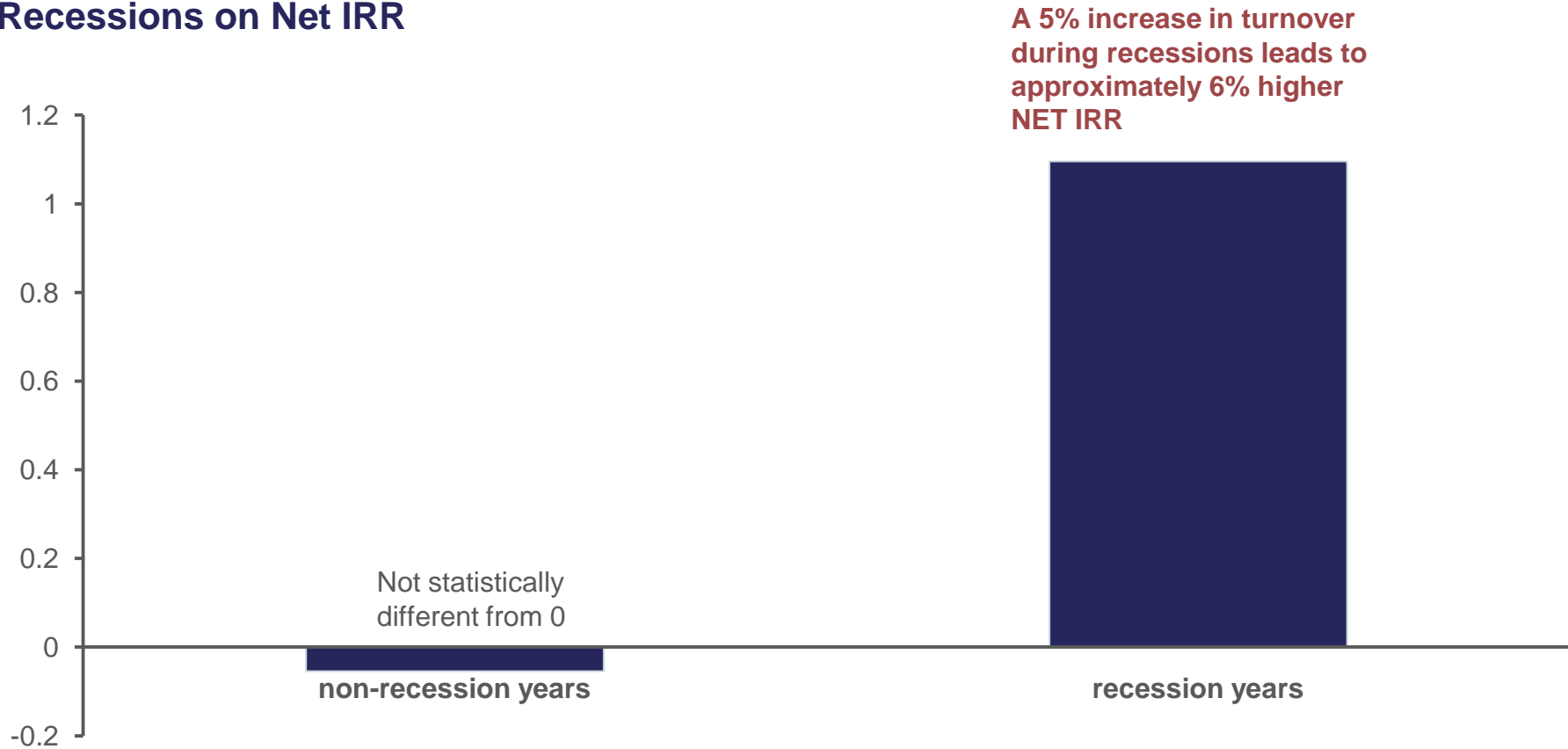


Note: The difference is statistically significant at the 1% level.

Source: Joint study of Capital Dynamics Study and Prof. Francesca Cornelli from London Business School.

# Fund Managers with high turnover during recessions perform better

## Estimated Effect of Turnover during Recessions on Net IRR




Source: Joint study of Capital Dynamics Study and Prof. Francesca Cornelli from London Business School.

# Individuals with different backgrounds

We code the bios of the individuals and we classify them in Operational, Financial and mostly PE depending on their previous work experience.

**Is there a different effect on subsequent fund performance when people with different backgrounds leave?**

	between variation
Operational	+ significant
Private Equity	- significant
Financial	insignificant



Turnover of professionals with financial background has little impact on returns

Operational skills require frequent updating

And PE experience is critical to performance


# Summary

---

- Turnover during holding period of a deal is associated with lower performance
- Turnover within an investment period is associated with lower performance
- **BUT**, this is not the correct way to infer where to invest

The evidence shows that:

- **Teams which adapt more perform** better (in the cross-section);
- Private Equity people seem to be critical whereas teams with more operational turnover seem to do better;
- During recessions, operational skills seem to be valued more.



This new set of evidence brings forward a new attribute: the ability of teams to “**change**” and “**adapt**” seems more important than its stability

# Practical Implications

---

Team stability is not the industry's panacea particularly in the light of the current economic changes and uncertainties

Recessions require team evolution for managers to continue to be successful

Uncontested re-ups to a manager's next fund become more questionable

Particularly post recessions fresh and detailed Due Diligence becomes even more necessary



A thorough Due Diligence is indispensable even with well known managers

# Outlook

---

Continue to expand data set

Further detail the analysis with more detailed geographic and time splits

Look at venture and buyout separately

Review findings in detail with subgroup focus



The study only marks the beginning of understanding team evolution in private equity

## For further information please contact

---

**Dr. Katharina Lichtner**, Managing Director  
Capital Dynamics  
Bahnhofstrasse 22  
6301 Zug  
Switzerland

Phone: +41 41 748 8402  
Mobile: +41 76 314 8402  
Email: [klichtner@capdyn.com](mailto:klichtner@capdyn.com)

**London**  
**New York**  
**Zurich**  
**Tokyo**  
**Hong Kong**  
**Silicon Valley**  
**São Paulo**  
**Munich**  
**Birmingham**  
**Zug**

[www.capdyn.com](http://www.capdyn.com)

**Prof. Francesca Cornelli**  
Head of Department of Finance  
London Business School  
Regent's Park  
Sussex Place NW14SA  
London  
United Kingdom

Phone: +44 20 7000 7000  
Email: [fcornelli@london.edu](mailto:fcornelli@london.edu)

# Disclaimer (1/2)

---

This presentation contains information that has been provided by a number of sources not affiliated with Capital Dynamics. “Capital Dynamics” comprises Capital Dynamics Holding AG and its affiliates. Capital Dynamics has not verified the information provided. Nothing contained herein shall constitute any representation or warranty and no responsibility or liability is accepted by Capital Dynamics as to the accuracy or completeness of any information supplied herein.

This presentation does not constitute an offer to sell or a solicitation of an offer to purchase any securities of any kind in Capital Dynamics, including any of its funds of funds. Any such offer or solicitation shall be made pursuant to a private placement memorandum furnished by Capital Dynamics. Before relying on this information in any way, Capital Dynamics advises the recipient of this information (the “Recipient”) to perform independent verification of the data and conduct his or her own analysis hereto with appropriate advisors. Statements contained in this presentation may include statements of future expectations and other forward-looking statements. Any projections or other estimates in these materials are based upon certain assumptions. Actual events may differ materially from those assumed, which may have a material impact on any projections or estimates provided herein. In addition, certain assumptions may have been made to simplify the presentation and/ or calculation of projections or estimates. Capital Dynamics does not purport that any such assumptions will reflect actual future events, and reserves the right to change its assumptions without notice to the Recipient.

The information contained herein may contain general, summary discussions of certain tax, regulatory, accounting and/ or legal issues. Any such discussions and issues may be generic and may not be applicable to or complete for the Recipient. Capital Dynamics does not offer tax, regulatory, accounting or legal advice and this presentation should not and cannot be relied upon as such. Prior to entering into any proposed transaction or agreeing to proposals made herein, the Recipient should determine, in consultation with the Recipient’s own legal, tax, regulatory and accounting advisors, the economic risks and merits of any action, as well as the legal, tax, regulatory and accounting consequences of such action. When considering alternative investments, such as private equity funds, the Recipient should consider various risks including the fact that some funds may use leverage and engage in a substantial degree of speculation that may increase the risk of investment loss, can be illiquid, are not required by law to provide periodic pricing or valuation information to investors, may involve complex tax structures and delays in distributing important tax information, are not subject to the same regulatory requirements as mutual funds, often charge high fees, and in many cases the underlying investments are not transparent and are known only to the investment manager.

With respect to alternative investments, such as private equity funds, in general, the Recipient should be aware that:

- (1) Returns can be volatile
- (2) The Recipient may lose all or portion of your investment
- (3) The manager has total portfolio authority, and the use of a single manager could mean a lack of diversification and higher risk
- (4) Many funds are subject to substantial expenses that must be offset by portfolio profits. A portion of the profit is paid to the investment manager in the forms of carried interest and management fees
- (5) There is often a lack of transparency as to the fund's underlying investments

## Disclaimer (2/2)

---

- (6) With respect to funds of funds, the fund of fund's manager has complete discretion to invest in various sub-funds without prior disclosure. There is no way to ascertain with certainty the specific investments made by the sub-fund or to know whether the sub-fund investments are consistent with the fund of fund's historic investment philosophy or risk levels
- (7) A fund of fund invests in other funds and fees are charged at both the fund of fund and sub-fund level. Thus the overall fees paid by an investor will be higher than such investor would pay by investing directly in the sub-fund. In addition, each sub-fund charges or may charge an incentive fee, or carry, on new profits regardless of whether the overall operations of the sub-fund are profitable
- (8) There may be no secondary market for fund interests. Transfers of interests are subject to limitations. The fund's manager may deny a request to transfer if it determines that the transfer may result in adverse legal or tax consequences for the fund
- (9) The fund's offering memorandum and the investment manager's disclosure document describes the various risks and conflicts of interest relating to an investment and to its operations. The Recipient should read those documents carefully to determine whether an investment is suitable in light of, among other things, the Recipients financial situation, need for liquidity, tax situation, and other investments
- (10) The Recipient should only commit risk capital to any investment product. Alternative investment products, including private equity funds, are not for everyone and entail risks that are different from more traditional investments.

Should this presentation contain performance information, then please note: Except where otherwise specified,

- (i) all gross and net IRRs are "pooled IRRs", i.e. calculated on the basis of aggregated cash flows of all products of each generation of products, and
- (ii) all cashflows since inception (July 1991) have been taken into account up to, unless otherwise stated, the track record date. Cashflows between Capital Dynamics' funds of funds are excluded. The latest value that an underlying manager reports for its fund is counted as a positive cash flow. The calculations depend on valuations, therefore, in particular in respect of unrealized value, that have often been determined by third parties, which third parties are typically the underlying funds' general partners. Actual realized returns on any unrealized investments will depend on the value of investments at the time of disposition, any related transaction costs and the manner of sale.

"Net" means Gross less Capital Dynamics fees. "Multiple" stands for the TVPI (Total Value to Paid-In) multiple (i.e. the ratio of the sum of distributions plus current NAV to the sum of draw downs). Where investments have been made in a currency other than the reference currency of the track record: (i) actual cash flows have been converted into the reference currency at the exchange rate for the relevant payment or receipt; and (ii) unrealized investments have been converted into the reference currency at the prevailing exchange rate as at the track record date. Past performance is not an indication of future results. The information compiled by Capital Dynamics has not been audited.

Where gross performance numbers are indicated herein without net performance, be advised that: actual performance will not reflect gross performance, and will be reduced due to fees and expenses; a general description of Capital Dynamics, Inc.'s advisory fees are contained in Part 2 of Form ADV; an example that illustrates the effect of the inclusion of advisory fees and expenses is contained herein or has been provided to you, concurrently, under separate cover along with this document.

# Material notes to investors (1/2)

---

**Based in United States of America:** Capital Dynamics, Inc. is registered as an Investment Adviser with the Securities and Exchange Commission (SEC). Securities are offered through Capital Dynamics Broker Dealer LLC, a registered broker-dealer with the SEC, and a member of the Financial Industry Regulatory Authority (FINRA) and Securities Investor Protection Corporation (SIPC). Any Recipient not interested in the analysis described herein should return this presentation to Capital Dynamics, Inc. or Capital Dynamics Broker Dealer LLC, 645 Madison Avenue 19th floor, New York, NY 10022 USA and contact Capital Dynamics as soon as possible (t. +1 212 798 3400).

**Based in Switzerland:** Material is presented to investors by Capital Dynamics AG. It does not constitute a public offering or marketing within the meaning of the Swiss Act on Collective Investment Schemes. It is addressed to a limited group of qualified investors. Any Recipient not interested in the analysis described herein should return this presentation to Capital Dynamics AG, Bahnhofstrasse 22, 6301 Zug, Switzerland and contact Capital Dynamics AG as soon as possible (t. +41 41 748 84 44).

**Based in Germany:** This presentation is issued and distributed by Capital Dynamics GmbH. This presentation has not been filed with or approved by the Federal Financial Supervisory Authority (BaFin). It does not constitute a public offer of sales prospectus within the meaning of article 8f Law on the Prospectus for Securities offered for Sale (VerkProspG). It is addressed to a limited group of professional investors. Any recipient not addressed by Capital Dynamics GmbH should return this presentation to Capital Dynamics GmbH, Possartstrasse 13, 81679 Munich, and contact Capital Dynamics GmbH as soon as possible (t. +49 89 2000 4180)

**Based in the United Kingdom and select countries in the European Union:** Material is presented to investors by Capital Dynamics Ltd. Capital Dynamics Ltd is authorized and regulated by the Financial Services Authority (FSA). Any Recipient not interested in the analysis described herein should return this presentation to Capital Dynamics Ltd, 9 Colmore Row, Birmingham, B3 2BJ, United Kingdom and contact Capital Dynamics as soon as possible (t. +44 121 200 8800).

**Based in Israel:** The securities discussed in this presentation have not been and will not be authorized by the Israeli Securities Authority or any comparable securities authority of any other jurisdiction and no securities authority has confirmed the accuracy or determined the adequacy of this document. The securities discussed in this presentation will not be registered under the securities laws of the state of Israel or any other jurisdiction. The securities discussed in this presentation do not involve any public offering. The materials in this presentation should be considered only by sophisticated professional investors.

## Material notes to investors (2/2)

---

**Based in Australia:** This offer is only open to wholesale clients (as that term is defined in the Corporations Act 2001 (Cth)). Prospective investors should not treat the contents of this document as investment advice or advice relating to legal, taxation or any other matters. The offer is issued by Capital Dynamics Investments (Australia) Limited ARBN# 145 827 738, a foreign company registered in its original jurisdiction of the United Kingdom as Capital Dynamics Limited. The Issuer is operating in Australia under relief issued by the Australian Securities and Investments Commission from the requirement to hold an Australian financial services (AFS) license and therefore the Issuer does not hold an AFS license.

**Material notes to investors in Japan:** Material is presented to investors by the issuer. The registration statement under Article 4, Paragraph 1 of the Financial Instruments and Exchange Law of Japan, as amended (the "FIEL"), has not been and will not be filed with respect to the offering of the interests of the fund (the "Interests") as the offering consists of a "solicitation for a small number of people" (as defined in Article 23-13, Paragraph 4 of the FIEL), and the Interests, which are "securities" within the meaning of Article 2, Paragraph 2, Item 6 of the FIEL, will be offered in accordance with Article 2, Paragraph 3, Item 3 of the FIEL, where the Interests shall not be held by 500 or more investors. The offering and sale of the Interests by the general partner is intended to be exempt from the registration requirement under the FIEL in reliance on the exemption provided for in Article 63, Paragraph 1, Item 1 of the FIEL, and the management of the fund's assets by the general partner is intended to be exempt from the registration requirement under the FIEL in reliance on the exemptions provided for in (i) Article 63, Paragraph 1, Item 2 of the FIEL or (ii) Article 16, Paragraph 1, Item 13 of the Cabinet Office Ordinance Concerning Definition Provided in Article 2 of the FIEL. The general partner has not been and will not be registered under the FIEL as "investment management business" (toshi unyo gyo) as defined in Article 28 of the FIEL and no Interests held by an investor can be transferred in any manner whatsoever if the transfer causes the general partner to be registered as "investment management business" under the FIEL.

**Based in other jurisdictions:** The distribution of this presentation in certain jurisdictions may be restricted by law. Persons into whose possession this presentation comes are required by Capital Dynamics to inform themselves about, and to observe, any such restrictions. This presentation does not constitute an offer to sell or the solicitation of an offer to purchase any securities in any state or other jurisdiction: (i) in which such offer or invitation is not authorized; (ii) in which the person making such offer or invitation is not qualified to do so; or (iii) to any person to whom it is unlawful to make such offer or solicitation.

This presentation is for informational purposes only, is confidential and may not be reproduced in whole or in part (whether in electronic or hard-copy form).