Final report

Project information and reporting objectives

Project information

Project number: 250211

Project title: Individual Investment Banker Connections, Advisor Choice, and Merger Performance

Activity / Programme: FINANSMARK

Project manager: Hull, Tyler

Project owner: SAMFUNNS- OG NÆRINGSLIVSFORSKNING AS

Project period: 2016.01.01 - 2022.12.15

Reporting objectives

1.	Main page of the progress report: Update progress report up to project completion date.	Completed
2.	Final accounts: Give a summary of the financial status of the project	Completed
3.	Outcomes and impacts: I understand that the information entered into the field for Outcomes and impacts will be made publicly accessible*	Completed
4.	Results report: Attach results report	Completed
5.	Special reports: Any requests for special reports must be fulfilled. Have special reports been submitted?	Completed
6.	Final data management plan: Has the final data management plan been uploaded?	Not applicable

Final accounts

Actual cost plan (Amount in NOK 1000)

Account	2022	2021	2020	2019	2018	2017	2016	Total sum
Payroll and indirect expenses	110	0	0	0	0	197	247	554
Procurement of R&D services	0	0	0	0	0	0	0	0
Equipment	0	0	0	0	0	0	0	0
Other operating expenses	0	1	0	1	0	0	142	144
Sum	110	1	0	1	0	197	389	698

Actual cost code (Amount in NOK 1000)

Account	2022	2021	2020	2019	2018	2017	2016	Total sum
Trade and industry	0	0	0	0	0	0	0	0
Research institutes	110	1	0	1	0	197	339	648
Universities and university colleges	0	0	0	0	0	0	50	50
Other sectors	0	0	0	0	0	0	0	0
Abroad	0	0	0	0	0	0	0	0
Sum	110	1	0	1	0	197	389	698

Actual funding plan (Amount in NOK 1000)

Actual funding plan (Amount in Not 1000)								
Account	2022	2021	2020	2019	2018	2017	2016	Total sum
The Research Council	23	0	0	46	0	139	440	648
Own financing	0	0	0	0	0	0	0	0
Public funding	0	0	0	0	0	0	50	50
Private funding	0	0	0	0	0	0	0	0
International funding	0	0	0	0	0	0	0	0
Deviation	-87	-1	0	45	0	-58	101	0
Deviation basis	110	1	0	1	0	197	389	698
Sum	23	0	0	46	0	139	490	698

Comment

We have reviewed all project costs and added hours for 2022.

Impacts and effects

Anticipated outcomes and impacts - from the grant application form

_

Achieved and potential outcomes and impacts - based on the project results

Results - Summary

Uploaded results - summary

Original filename: draft_PE_Exp.pdf

File reference: RESULTAT_Sluttrapport11850169.pdf

Message to the Research Council of Norway

Special reports

Comment

No special reports to disclose.

Uploaded file

Final data management plan

Uploaded final data management plan

Progress report

Project information and reporting objectives

Project information

Project number: 250211

Project title: Individual Investment Banker Connections, Advisor Choice, and Merger Performance

Activity / Programme: FINANSMARK

Project manager: Hull, Tyler

Project owner: SAMFUNNS- OG NÆRINGSLIVSFORSKNING AS

Project period: 2016.01.01 - 2022.12.15 **Rapporteringsperiode:** 2022.10.01 - 2022.12.15

Reporting objectives

1.	Popular science presentation: I understand that the text of the popular science presentation will be made publicly available*	Yes
2.	Results: Has information on publications been provided?	Yes
3.	Performance indicators: All results data that have emerged from the project are to be reported. Has this been done?	Yes
4.	Fellowship grants: Information regarding all fellowship grants must be complete and correct. Have you updated the man-months and other information for each fellowship-holder?	Yes
5.	International cooperation: The extent of international cooperation is to be indicated. Has any international cooperation taken place during the report period?	No
6.	Special reports: If any requests for special reports have been put forth by the case officer at the Research Council, these must be fulfilled.	Yes

Popular science presentation

Popular science presentation (Norwegian)

Individual experience and connections in private equity transactions.

Private equity (PE) investments have been extremely popular over the last decade in the U.S. and around the world, partly due to the lower interest rates prevailing during the 2000s. Many studies have attempted to analyze what factors impact PE investment's likelihood of having successful exits from their investments. However, all of these studies have focused on the PE firm as it if is one single entity and have never analyzed investment success as a function of the individuals employed by the private equity firm. This hole in the research is largely due to a lack of data availability. Our team has acquired individual specific private equity investor data. This data allows us the researchers to track an individual's past investments and test if the individual investors contribute more to deal success than the private equity company name that connects them together.

We now have access to past investment history for the managers overseeing particular deals. This allows us to look at co-investment patterns and to create a measure of a managers prior deal experience and even analyze past success rates. Additionally we supplemented this data with data on manager career history and educational history, including the type of degrees and the degree award year. With these detailed measures of management experience we will not only be able to indicate if management adds value beyond the brand name of the firm they work for, but also be able to indicate what part of a managers experience contributes most to favorable investment outcomes.

Also of interest is what are the types of companies that experienced PE managers tend to pursue. Our data is well suited to address this interesting question.

Preliminary results show that having a more experienced manager involved in a particular PE transaction increases the likelihood that the investment will successfully exit via an IPO. These results also point out that the likelihood that a PE transaction will have an IPO is influenced by if the manager attended a top tier undergraduate program and if the manager has prior investment banker experience. It is also notable that a manager's prior PE investing experience and prior strategic consulting experience is not show to meaningfully impact the likelihood that the investment will successfully exit via an IPO. The total PE firm experience is also shown to positively impact IPO exits, but manager level experience appears to be more impactful.

Additional results show that more experienced managers have significantly higher changes in sales growth and employment growth for the firms that they acquire.

Popular science presentation - Updated (Norwegian)

The Effect of Manager Human Capital in Private Equity Investments

We show that more experienced managers of private equity (PE) investments are more likely to have an IPO exit from their investments, even after controlling for total investment firm experience. Furthermore, we show that IPO exit success is more likely for management teams that have a higher percentage of their team which are graduates from top tier universities or had prior investment banking experience. Relatedly, we also find the fraction of the team that earned an MBA, had prior PE investing experience, or had prior Strategic consulting experience does not significantly contribute to the likelihood of a PE investment having an IPO exit. Additional results indicate that many M&A exits are likely disguised failures.

Popular science presentation (English)

Individual experience and connections in private equity transactions.

Private equity (PE) investments have been extremely popular over the last decade in the U.S. and around the world, partly due to the lower interest rates prevailing during the 2000s. Many studies have attempted to analyze what factors impact PE investment's likelihood of having successful exits from their investments. However, all of these studies have focused on the PE firm as it if is one single entity and have never analyzed investment success as a function of the individuals employed by the private equity firm. This hole in the research is largely due to a lack of data availability. Our team has acquired individual specific

private equity investor data. This data allows us the researchers to track an individual's past investments and test if the individual investors contribute more to deal success than the private equity company name that connects them together.

We now have access to past investment history for the managers overseeing particular deals. This allows us to look at co-investment patterns and to create a measure of a managers prior deal experience and even analyze past success rates. Additionally we supplemented this data with data on manager career history and educational history, including the type of degrees and the degree award year. With these detailed measures of management experience we will not only be able to indicate if management adds value beyond the brand name of the firm they work for, but also be able to indicate what part of a managers experience contributes most to favorable investment outcomes.

Also of interest is what are the types of companies that experienced PE managers tend to pursue. Our data is well suited to address this interesting question.

Preliminary results show that having a more experienced manager involved in a particular PE transaction increases the likelihood that the investment will successfully exit via an IPO. These results also point out that the likelihood that a PE transaction will have an IPO is influenced by if the manager attended a top tier undergraduate program and if the manager has prior investment banker experience. It is also notable that a manager's prior PE investing experience and prior strategic consulting experience is not show to meaningfully impact the likelihood that the investment will successfully exit via an IPO. The total PE firm experience is also shown to positively impact IPO exits, but manager level experience appears to be more impactful.

Additional results show that more experienced managers have significantly higher changes in sales growth and employment growth for the firms that they acquire.

Popular science presentation - Updated (English)

The Effect of Manager Human Capital in Private Equity Investments

We show that more experienced managers of private equity (PE) investments are more likely to have an IPO exit from their investments, even after controlling for total investment firm experience. Furthermore, we show that IPO exit success is more likely for management teams that have a higher percentage of their team which are graduates from top tier universities or had prior investment banking experience. Relatedly, we also find the fraction of the team that earned an MBA, had prior PE investing experience, or had prior Strategic consulting experience does not significantly contribute to the likelihood of a PE investment having an IPO exit. Additional results indicate that many M&A exits are likely disguised failures.

Message to the Research Council of Norway

The project is now ready for final submission. The paper is now in written form and is ready for submission to conferences. These submission will further help refine the work.

Results

Performance indicators

Fellowship grants

Fellowship grants funded under the project

International cooperation

International cooperation funded under the project (in NOK 1000)

Amount in NOK 1000

/ IIII Ouric III IVO	11 1000							
Country	2016	2017	2018	2019	2020	2021	2022	

Special reports

Comment

The paper is now in a written format and is attached here. The paper is now ready for conference submissions, which will help to further refine the paper.

Uploaded file

Original filename: draft_PE_Exp.pdf

File reference: SARSKILT_Framdriftsrapport11850169.pdf

Background and objectives:

US M&A activity in 2021 reached the historic level of nearly 5 trillion dollars, which is 3 times more than what it was in 2010¹. Despite how large this market has become there is still very little understanding as to what are the determinants of whether a private equity (PE) investment will be successful. Many studies have attempted to analyze what factors impact PE investment's likelihood of successful exit from their investments (See for example, Phalippou & Gottschalg, 2009, Robinson & Sensory, 2016, and Braun et al., 2017). However, these studies have focused on the PE firm as it if is one single entity and have never analyzed investment success as a function of the individuals employed by the private equity firm. A working paper, Braun, Dorau, Jenkinson, and Urban (2019) documents that PE managers exhibit return persistence that is unrelated to their PE firm employer. However, Braun et al. (2019) was not able to document any human capital metric that could explain this persistence. It is our intent to explore the relationship more fully between human capital and PE investment success. Zarutskie (2010) conducts a related study on venture capital investments and finds that managers with more task- and industry-specific human capital have more successful fund outcomes. We intend to add to the private equity literature by documenting which types of human capital significantly contribute to future investment outcomes.

The importance of human capital has been suggested in investment banking (Chemmanur, Ertugrul, and Krishnan, 2019)), venture capital (Ewens and Rhodes-Kropf, 2015), and in many other fields. Concerning the importance of human capital in private equity

_

¹ Data collected from https://www.pwc.com/us/en/services/consulting/deals/outlook.html.

investments, Gompers, Kaplan, and Mukharlyamov (2016) states that "PE investors expect to provide strong equity incentives to their management teams and believe those incentives are very important. They regularly replace top management, both before and after they invest," thus suggesting how critical individual managers are to the success of an investment. To better understand the effect of human capital on private equity investments we gather detailed deal specific PE transaction data from Merger market database, one of the special features of this database is that it indicates by name the managers involved in each transaction. This rich data source allows us to both measure the number of prior investments the manager has been involved in as well as supplement this data with biographical data taken from these managers web profiles.

Using our rich combined data source, we test the following research questions: 1. Does a manager's human capital add value above and beyond the brand value associated with the PE firm? 2. If it is the case that human capital adds value, then which types of human capital more meaningfully contribute to PE value creation?

Results:

We analyze whether PE manager's human capital significantly influences if PE firm will have a successful exit from their investment. Our results show that more experienced PE managers are significantly more likely to have an IPO exit and that this effect is above and beyond any firm experience effect. Furthermore, we show that IPO exit success is more likely when a management team has a higher fraction of their team which are graduates from top tier universities or have prior investment banking experience. However, we also find the fraction of the team that earned an MBA, had prior PE investing experience, or had prior strategic consulting

experience does not significantly contribute to the likelihood of a PE investment having an IPO exit. Additional results suggest that not all PE exits are similarly positive outcomes, where IPO exits represent a significantly better exit outcome than subsequent M&A activity.

Research approach:

Key to our study is being able to distinguish PE managers involvement on any particular deal. We gather PE manager deal participation from Mergermarket database, which indicates the names of all the managers involved in each PE transaction. We then collect firm specific accounting data for the target or investment firm in each of these transactions from Capital IQ database. Lastly, we supplement this data with the National Establishment Time Series (NETS) database, which contains embellishment level data, allowing us to measure sales and employment for the target firm before and after an acquisition takes places. The triangulation of these three databases leaves us with our core sample of 3,294 PE transactions from 1998-2019.

To further explore the effects and consequences of specific types of human capital, we additionally collected educational and work experience data for the managers involved in these transactions. Lastly, the data was supplemented with exit outcome data collected from Mergermarket, Capital IQ, VentureXpert, Compustat and SDC's MA and IPO databases.

Implications of the research:

In this paper we see that more experienced managers of private equity (PE) investments are more likely to have an IPO exit from their investments, even after controlling for total investing firm experience. Digging deeper we show that IPO exit success is more likely for management teams that have a higher percentage of their team which are graduates from top tier universities or had

prior investment banking experience. On the other hand, we also show the fraction of the management team that earned an MBA, had prior PE investing experience, or had prior strategic consulting experience does not significantly contribute to the likelihood of a PE investment having an IPO exit. These results strongly show the importance of prior investment banking experience and of hiring individuals from top tier universities. More generally our results imply the importance of individual human capital. Additional results provide clues that many M&A exits are failures in disguise and that exit dollar valuations are more indicative of valuation creation than a broadly defined measure of M&A activity.

These results provide the first evidence that the human capital of private equity managers significantly affects exit outcomes. Our results also suggest that one of the channels by which managers create value is by increasing sales and employees while maintaining the number of target firm establishments.

Dissemination of the results:

The project has produced a preliminary working paper. It is our objective to publish these results in a top-ranked finance journal. Due to the time required for publication, this paper will continue to be refined over the next few years. After the paper is published, we plan to write a popular version to present the results to a broader audience.