PRIVATE EQUITY DURING THE GLOBAL FINANCIAL CRISIS

INVESTING IN THE NEXT GENERATION

CapitalDynamics

PRIVATE EQUITY DURING THE FINANCIAL CRISIS

Private equity is often assumed to be one of the riskiest asset classes. If this assumption were correct, you could expect it to have been hit particularly hard during the global financial crisis. This was not the case. Private equity suffered from losses just as public equity did, however the magnitude of the losses was much lower and the recovery time was significantly shorter when compared to public equity. Yves Arnet, a student at the Hochschule Luzern – Wirtschaft, compared private and public equity indices for his bachelor thesis[1] - supervised by Dr. Philippe Jost of Capital Dynamics. The private equity indices were computed from the Cambridge Associates database and Capital Dynamics data. He concluded that private equity investments offer greater protection against financial downturns than public equity indices, with the stipulation that the investor is able to avoid a forced sale for liquidity reasons.

YVES ARNET,
HOCHSCHULE LUZERN

THE GLOBAL FINANCIAL CRISIS

Before 2007, many commercial banks had disbursed mortgages to borrowers with low creditworthiness. When US home prices started to decline and interest rates began rising, borrowers were no longer able to meet interest or principal payments. As a result, securities backed with subprime-loans lost most of their value. As banks were unaware of how hard the credit defaults hit other financial institutions, they lost faith and banks around the globe stopped interbank lending. Due to this breach of trust, the interbank market immediately froze. Even the excessive expansionary monetary policy of central banks did not prevent markets from collapsing. The financial crisis resulted in a massive downturn across most national economies and enormous losses on public equity markets. The private equity industry was similarly affected.

[1]Yves Arnet, "Die Performance von Private Equity während der Finanzkrise", June 2017, Bachelor of Science in Business Administration, Finance & Banking, Hochschule Luzern – Wirtschaft

Private equity vs. public equity returns: Comparing apples to apples

The irregular nature of private equity cash flow makes comparison with other asset classes challenging; therefore, various methods have been developed by academic and industry participants to address this matter. Capital Dynamics was an early contributor to this effort with the development of PME+[2]. Methods from the PME family modify the amplitude of private equity cash flows and/or final net asset value to mimic public market returns. On the contrary, Yves Arnet computed quarterly private equity performance indices from cash flows and net asset values. Comparing these two indices allows the use of familiar measures to quantify the risk of an asset class, such as: Volatility, Maximum Drawdowns[3], or Time-to-Recovery. Maximum Drawdowns and Time-to-Recovery are two particularly interesting measures for calculating the behavior of an asset class in a market downturn.

Another advantage of indices is the ability to visually compare evolution over time, as shown in the next figure comparing a public market index (MSCI World Total Return), a listed private equity index (LPX 50 Total Return) and two private equity indices (Cambridge Associates and Capital Dynamics[4]). When considering private equity indices or market data, it is important to note that these are not investable indices as the equivalent public indices are. An investor in private equity must be able to identify all market opportunities as well as invest in access constrained funds. Even the largest investors rely on advisors, intermediaries or asset managers for support with this process. As the chart below shows, the performance of the non-investable global private equity index from Cambridge Associates indicates a clear outperformance of the global public equity market. The performance index computed from Capital Dynamics investments, which were able to be invested in by clients over the same period, also outperformed the private equity market as a whole. The LPX50 TR, mistakenly considered by some to be a liquid proxy to the private equity market, significantly underperformed.

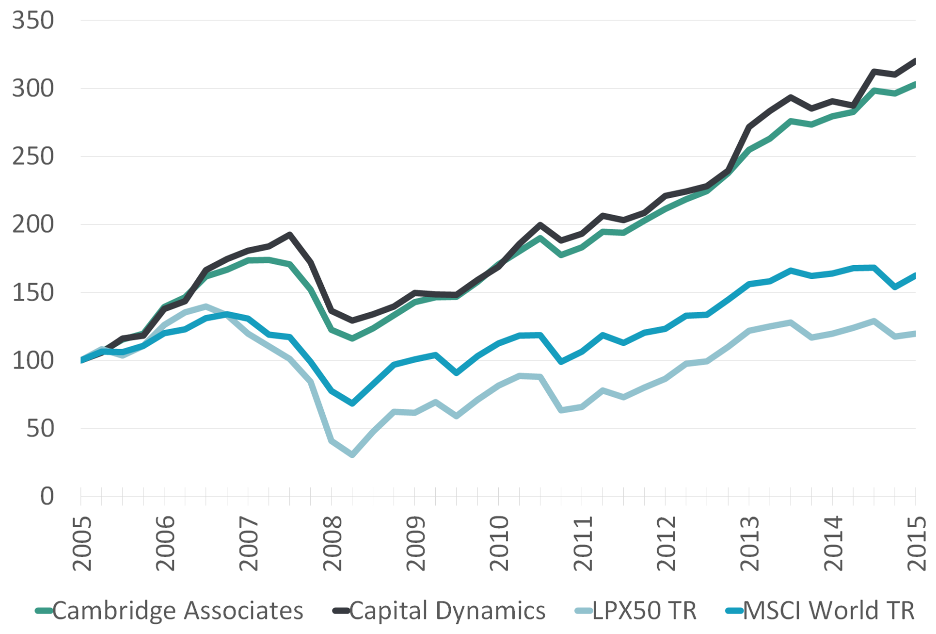


Figure 1. Comparison of global performances set to 100 on December 31, 2005. All values are in USD.[5]

[2]A recent paper, "Public benchmarking of private equity: quantifying the shortness issue of PME", reviews the advantages of PME+ over PME. https://capdyn.com/research/201507-white-paper-pe-benchmarking/

[3]The Maximum Drawdown is the maximum loss from a peak to a trough, before a new peak is attained. [4]Quarterly returns are computed using the same methodology as for the Cambridge Associates database. All buyout, generalist and co-investment funds part of Capital Dynamics funds of funds have been used.

[5]Past performance is not a reliable indication of future performance. Currency rates may increase or decrease returns.

Private equity is more crisis resistant than public equity

As shown in Table 1, the Maximum Drawdown across private equity indices is lower than that of the public market index. This observation is not surprising for those familiar with private equity. The Time-to-Recovery is a more surprising result. It is commonly believed that public markets tend to overreact to bad news, but also recover faster when compared to private equity. This assumption does not hold true as the time to recovery for private equity is approximately two times faster than for the equivalent public benchmark.

	CAMBRIDGE ASSOCIATES INDEX	CAPITAL DYNAMICS INDEX	MSCI WORLD TOTAL RETURN INDEX
ANNUALIZED INDEX RETURN	11.7%	12.3%	5.0%
MAXIMUM DRAWDOWN	33%	33%	49%
TIME-TO-RECOVERY	2.75 YEARS	2.75 YEARS	5.75 YEARS

Table 1. Public equity and private equity during the global financial crisis over the period 2006-2015 [5]

Based on these facts, Yves Arnet concluded that private equity offered greater protection of value during the global financial crisis than public equity. Other academic research has reached the same conclusion. For example, an analysis[6] of private equity-backed companies in the UK during the same crisis shows that companies faced less financial constraints and were better able to continue investing compared with non-private equity-backed companies.

"...private equity offered greater protection of value during the financial crisis than public equity."

Avoid liquidity pressure during financial distresses

As private equity is an illiquid asset class, the conclusion presented previously holds true only for investors who have not been forced to sell their assets for liquidity reasons. The urge to liquidate assets for cash during a period of financial distress generally results in a supply and demand imbalance, which was amplified during the global financial crisis when liquidity needs forced some investors to sell. The result was rapidly declining prices, as observed across buyout funds, where the average discount to market value was close to 40% in 2009[7].

[6] Bernstein, Shai and Lerner, Josh and Mezzanotti, Filippo, "Private Equity and Financial Fragility during the Crisis", July 2017. NBER Working Paper No. w23626. Available at SSRN: https://ssrn.com/abstract=3011104

[7] Greenhill Cogent, "Secondary Market Trends & Outlook", January 2016

“Our research indicates that investors with an equity allocation and a tolerance for illiquidity should consider investing in private equity.”

Private equity: safe to invest in any market condition?

Private equity indices are built on quarterly returns from portfolios that are committing regularly to private equity. Instead of analyzing such a broadly diversified set of funds, one may also look at the returns of the individual subsets of private equity funds that have been launched before, during and after the crisis as shown in Figure 2. Funds raised during the crisis have a lower outperformance to public equity but are still in line with the 3-5% outperformance generally attributed to private equity[8].

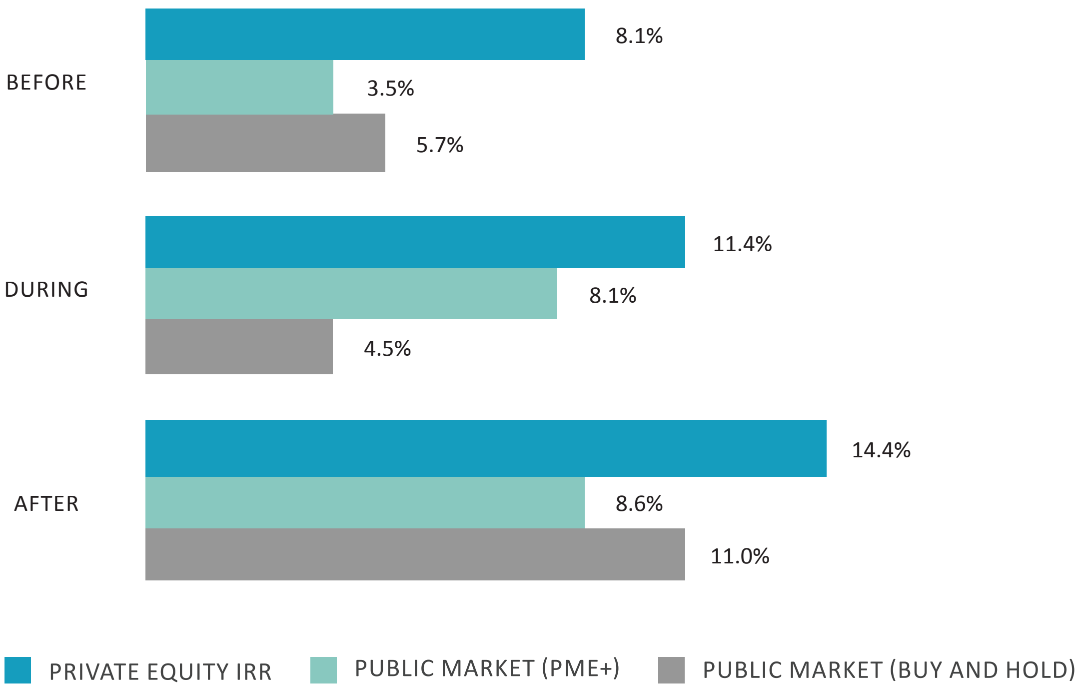


Figure 2. Private equity performance (IRR) compared to public equity performance (PME+) for buyout funds that have been launched before (2004-2006), during (2007-2009) or after (2010-2012) the global financial crisis. Buy and hold performance is the annualized return of the public benchmark from the middle of the considered period (e.g. June 30, 2005 to December 31, 2015). Source: Cambridge Associates data as of Q2 2017, Bloomberg for the public equity index (MSCI World TR).[5]

Private equity funds have generally outperformed public equity irrespective of the phase of the economic cycle they are raised in. From a risk point of view, private equity can increase the diversification of an investor’s equity allocation[9]. The much larger universe of private companies compared with quoted companies provides more investment opportunities. Our research indicates that investors with an equity allocation and a tolerance for illiquidity should consider investing in private equity.

[8]Robert Harris, Tim Jenkinson and Steven N. Kaplan, “Private Equity Performance: What Do We Know?”, 2013

[9]Rainer Ott and Mauro Pfister, “Diversify your portfolio with private equity”, May 2017

INVESTING IN THE NEXT GENERATION

As a global asset manager, we are committed to offering our clients attractive investment solutions. However, creating a better future for generations to come is our most meaningful goal.

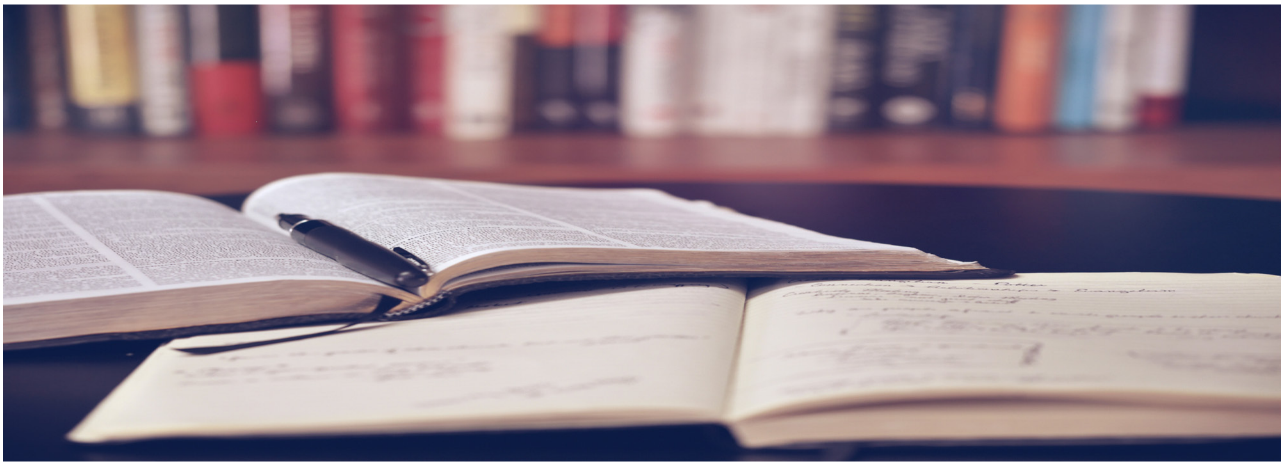
GIVING BACK

Over the past five years, Capital Dynamics has welcomed more than 20 interns offering mentorships and sharing our knowledge to help boost their careers. We are dedicated to helping each young professional build a strong foundation and an understanding of the asset management industry by leveraging our expertise.

Interns at Capital Dynamics have worked across various departments gaining knowledge from specialists throughout the firm – many of which have written their bachelor's or master's thesis with our guidance. Their responsibilities have ranged from reviewing fund opportunities and collaborating on research projects to clean energy infrastructure support and marketing initiatives - and everything in between.

Through our interns, we are proud to have contributed to research papers exploring the following topics:

- Private equity during the global financial crisis– attached
- Value creation in private equity
- Team stability and performance in private equity
- Public benchmarking of private equity: Quantifying the shortness issue of PME
- How management control systems are integrated in the management processes of private equity firms



PROVIDING A PLATFORM TO GROW

We understand the value in offering young adults an opportunity to flourish professionally, which is why we recruit talented recent graduates to join our experienced team. Having a place to continue learning as well as encouragement and support to showcase their knowledge and professional skills are key elements to a successful future.

Working closely together with tomorrow's leaders exemplifies the diversity across our global offices. This strategy has proven to not only help our young professionals reach their full potential, but has also been an effective and valuable factor to the company's overall success. We welcome new ideas and fresh perspectives and believe today's youth hold the keys to those doors.

"Today's young people are our future and supporting them is our responsibility."

LENDING A HAND

Our passion to support the next generation has led us to various academic organizations.

Capital Dynamics employees have been invited to speak at schools around the globe to share our insight and help educate students on the private equity industry and related topics. We are thankful for the opportunity to connect with students at the following schools:

- Zürcher Fachhochschule
- Emerging Markets Seminar at the Cass Business School
- Oxford Risk Symposium at Oxford University

Our colleagues have volunteered a considerable amount of time grading papers for the BAI Wissenschaftpreis – an award recognizing excellent work in the alternative investment field, supporting young researchers as well as furthering research across the industry.

CREATING A BETTER FUTURE

Today's young people are our future and supporting them is our responsibility. We remain dedicated to encouraging, empowering and guiding today's youth in the hope of creating a better future for them and the generations to come.

ABOUT THE AUTHORS

MAURO PFISTER

Mauro is a Senior Director in the Investment Management team and covers infrastructure fund investing. He has over 12 years of private equity and investment management experience, and has been involved in primary and secondary investments across the entire private equity spectrum. He is also Head of Solutions, which includes Portfolio and Risk Management as well as Structuring. Mauro has distinguished himself by developing Capital Dynamics' proprietary quantitative model for analyzing performance, through his ongoing work evaluating and implementing investment strategies to align with the firm's business focus and in helping to establish the firm's strategic business partnerships around the world. Mauro holds a Master's degree in Mathematics from the Swiss Federal Institute of Technology (ETH) and the professional designation of Chartered Financial Analyst (CFA).

PHILIPPE JOST

Philippe is a Senior Vice President in Solutions, focusing on Portfolio and Risk management. He has over 9 years of experience in the financial industry. Prior to joining us, Philippe was a quantitative researcher at Fundo, where he created dynamic risk management solutions for pension funds. Earlier in his career, he was a researcher at the Swiss Federal Institute of Technology, where he wrote his thesis on sparse approximation. Philippe holds a Master's degree in Communication Systems and a Ph.D. in Signal Processing from the Swiss Federal Institute of Technology.

ABOUT CAPITAL DYNAMICS

Capital Dynamics (the "Firm") is an independent, global asset manager, investing in private equity, private credit and clean energy and infrastructure. We are client-focused, tailoring solutions to meet investor requirements. The Firm manages investments through a broad range of products and opportunities including separate account solutions, investment funds and structured private equity products. Capital Dynamics currently has over USD 28 billion in assets under management/advisement[10].

Our investment history dates back to 1988. Our senior investment professionals average over 20 years of investing experience[11]. We believe our experience and culture of innovation give us superior insight and help us deliver returns for our clients. We invest locally while operating globally from our London, New York, Zug, Tokyo, Hong Kong, San Francisco, Munich, Birmingham, Seoul and Scottsdale offices.

[10]Capital Dynamics comprises Capital Dynamics Holding AG and its affiliates; assets under management/advisement, as of March 31, 2017 include assets under discretionary management, advisement (non-discretionary), and administration across all Capital Dynamics affiliates.
[11]Average years of experience held by Capital Dynamics' Managing Directors and Directors in Investment Management.

DISCLAIMER