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Asset Allocation and Private Markets

A Guide to Investing with Private Equity, Private Debt and Private Real Assets

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To my family and friends, with a warm thank you for your support. Nothing would have been possible without you.

—Cyril Demaria

To Dr. Cyril Demaria for giving me the opportunity to work with him on this interesting project. To my family and my wife Yuchen, a warm thank you for your love and support.

—Rémy He

To my professor Cyril Demaria, a massive thank you for his consideration, time, and trust. I also would like to warmly thank my parents, Anne and Philippe, my three elder brothers, Mathieu, Thomas, and Quentin, and my fiancé Florent for their kind support.

—Sarah Debrand

Foreword

In *Asset Allocation and Private Markets*, Cyril Demaria, Maurice Pedergnana, Rémy He, Roger Rissi, and Sarah Debrand bring their academic background and real-world experience to bear for the benefit of readers wishing to understand the ins and outs of private markets investing, or so-called alternative investing. Relatively little has been written about this field, which has gone from an exotic investment specialty to an essential component of most investment funds. A book on this subject is sorely needed.

Fifty years ago, when people talked about "investments," they basically meant publicly traded stocks and bonds. While there's no standard definition of alternative investments, they can be understood as "alternatives to stocks and bonds" or simply "everything else," and decades ago they were largely unknown. (People were working in many of the fields that are now aggregated under the label "alternative investments," but they were few in number, the capital they managed was modest, and their activities were anything but the household word many of them have become).

The main categories of alternative investing came to prominence over the last 30–40 years. The biggest, now called "private equity," was called "leveraged buyouts" in the mid-1970s and grew many-fold in the 1980s, facilitated by the availability of high yield bond financing. Real estate investing, venture capital, and private lending joined private equity in more frequent use. And 15 or 20 years ago, the term "alternative investments" sprung up to describe them all.

Alternative or private markets strategies remained relatively obscure sidelines until roughly the mid-2000s. Then the poor performance of public equities in 2000–02 (the first three-year decline in the Standard & Poor's 500 equity index since the Great Depression) sent investors looking for alternatives to public stocks, and the reduction of interest rates to low levels to fight the Global Financial Crisis in 2008 vastly reduced the yields available on bonds.

Twenty or 30 years ago, most institutional investors such as pension funds, endowments, and insurance companies treated asset classes other than stocks and bonds as luxuries, a bit of which might be added to spice up portfolios. Now, with equities felt to be at full to high prices and bond yields at all-time lows, they have become indispensable portfolio components, and their use has grown exponentially. And yet relatively little has been written to establish their intellectual foundation.

Now, in their book, Cyril Demaria and his co-authors point out some of the aspects that require the serious investor's attention.

- As with interest rates (actually, due in good part to the low level of today's interest rates), the prospective returns on all asset classes—and certainly publicly listed stocks and bonds—are some of the lowest in history.
- And yet the returns desired or required by many institutional investors have not been reduced correspondingly.
- So-called beta markets have become increasingly efficient (that is, have become more “perfect” markets, where it is expected that the vast majority of investors' returns will be a function of the performance of the underlying market). Thus it is assumed that investor

skill will contribute relatively little to investment returns there.

- Investors have concluded that (a) alternative investments are capable of providing returns that are at high absolute levels and superior to stocks and bonds, as they have in the past, and (b) part of this edge will come from the skill (or “alpha”) of investment managers working in private markets, which are less picked over and thus are “less perfect.”
- Thus, capital flows to alternative investments have surged.

The foregoing has raised some questions:

- To what extent did the past superior returns on alternative investments come as compensation for incremental risk borne, rather than as a “free lunch”?
- To what extent was it merely compensation for these investments' inherent illiquidity, and what are the ramifications?
- To what extent have the increased capital flows and increased attention on alternative investments rendered these markets more competitive and “perfect”—reducing investors' ability to demonstrate alpha and hampering the search for incremental return?
- To what extent have the factors mentioned added to these investments' riskiness?

Alternative or private markets investments present an interesting conundrum: Many investors face goals that require them to pursue high returns in today's low-return world. They have no choice but to turn to alternative investments for a good part of the solution. But alternative investments entail increased risk, reduced liquidity, and reliance on managers for skillful management (and thus the introduction of “manager risk”).

Will alternative investments turn out to be a panacea or a pitfall? Because of the uncertainty inherent in investment and the competitive nature of the markets themselves, there cannot be an easy answer that applies to everyone. Skillful managers will help investors reach their goals in alternative investments, while the rest will frustrate their efforts. The risk and illiquidity entailed will be bearable for investors who approach the subject prudently and knowledgeably, but they may sink others. At a minimum, *Asset Allocation and Private Markets* by Cyril Demaria and his co-authors will help open investors' eyes to the considerations entailed in trying to be among the winners rather than the losers.

Howard Marks
Co-founder and Co-Chairman
Oaktree Capital Management

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First, this book would not have been the same without the unprecedented access to high-quality data. We would like to thank eFront, and namely Thibaut de Laval, for their continued support and the access to the eFront Insight (formerly Pevara) data. Our thankfulness extends to StepStone, and namely Thomas Häfliger and Marc Lickes, for their exclusive access to data regarding senior debt. It is thanks to this highly valued cooperation that our book can be more comprehensive in its coverage and hopefully more relevant to the readers. Any mistake or omission remains ours, as well as the conclusions drawn upon the use of the data.

We would also like to thank Thomas Meyer for his time, perspectives, and constructive conversations. We also owe a debt of gratitude to Gontran Duchesne, who provided invaluable support, helping us with some of the thorny mathematical aspects of certain questions. Often, the simplest questions are the most difficult to answer, and Gontran was always extremely helpful in finding out answers.

Finally, we would like to thank our publisher, John Wiley & Sons, and the team, for their patience and kind support in facing the multiple obstacles that the writers encountered in the process of drafting this book.

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Cyril Demaria is general partner and president of the Pilot Fish funds, a series of venture capital finder's funds for family offices and high net worth individuals. He was also partner and head of private markets at Wellershoff & Partners. Before that, he was in charge of private markets research at the Chief Investment Office of UBS Wealth Management. He also co-founded and was chief investment officer at Tiaré Investment Management AG, a Zürich-based wealth and investment management company. Previously, he created a multi-strategy fund-of-funds focused on environmental matters. He was also portfolio manager responsible for private equity fund investments at a French insurance group. As head of corporate development for a French IT firm, he managed four asset acquisitions and structured debt financing to do so. He started his career in a hybrid venture capital and funds-of-funds firm in San Francisco and Paris.

A French and Swiss citizen, Cyril Demaria is a graduate from HEC Paris, holds a BA in political sciences from the Institut d'Etudes Politiques (Lyon), master in geopolitics (Paris), master in European business law (Paris), and a PhD from the University of St. Gallen, with a thesis on the topic of "Alignment of interests of fund investors and fund managers in private equity," later published by Palgrave under the title *Private Equity Fund Investments*.

He is an affiliate professor at EDHEC Business School (Nice), and lectures at EADA (Barcelona) and other business schools. He collaborates regularly as an expert with the European Commission, Invest Europe, SECA, France Invest, the CFA, and the CAIA. He is the author of:

— *Développement durable et finance*, Maxima, 2003;

— *Introduction au private equity*, Revue Banque Editeur, 2006, 2nd ed. 2008, 3rd ed. 2009, 4th ed. 2012, 5th ed. 2015, 6th ed. 2018, 7th ed. 2020

— *Profession: business angel — Devenir un investisseur providentiel averti*, with Marc Fournier, Revue Banque Editeur, 2008

— *Le marché, les acteurs et la performance du private equity suisse*, with Maurice Pedergnana, SECA, 2009, 2nd ed. 2012

— *Introduction Private Equity, Debt and Real Assets*, John Wiley & Sons, 2010, 2nd ed. 2013, 3rd ed. 2020

— *Private Equity Fund Investments*, Palgrave, 2015.

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Maurice Pedergnana heads the investment committee and acts as chief economist of Zugerberg Finanz AG (Zug). He is also the managing director of the Swiss Private Equity & Corporate Finance Association (SECA) and is a member of various boards of directors (Viability Consulting AG, IG Bank, Switzerland, and Uniserv AG). He is part-time professor at the Lucerne University of Applied Sciences and Arts (HSLU) since 2000. From 1999 to 2011 he was a member of the Bank Council of the Zürcher Kantonalbank. He also worked as a management consultant in the area of small and medium-sized enterprises. He lectured at the Zurich University of Applied Sciences in Winterthur

(ZHAW) between 1997 and 2001. From 1989 to 1991 he worked as an assistant at the Malik Management Center at the University of St. Gallen, university where he studied economics from 1984 to 1988. From 1992 to 1993 he was a scholarship holder at Sophia University in Tokyo. Back at the University of St. Gallen, he completed his doctorate studies with a thesis on “Competitiveness and success factors of Swiss companies in foreign markets (using Japan as an example).”

RéMY HE

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European Parliament, and the European Commission. From 1994 to 2000, he studied economics with a major in finance at the University of Zurich.

SARAH DEBRAND

Sarah Debrand is a French capital markets analyst at Citi Bank, in London. She graduated from EDHEC Business School (Nice) with a double degree: a master in financial economics and a MSc in corporate finance and banking. She was on the EDHEC Dean's List, thus qualifying in the top 5% of her class.

In parallel to her studies at EDHEC, she completed diverse financial internships within the investment banking and accounting industries, where she developed strong and valuable analytical and communication skills.

Sarah has developed a keen interest in private equity and more generally in private markets, notably when following Cyril Demaria's lectures at EDHEC. Recognized for her attention to detail, understanding of the sector and critical approach, she was invited to co-author this book.

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Data Sources

Data sources are a particular topic of interest for private markets: there is no comprehensive database of activity and performance of private equity funds. Practitioners and academic writers access various complementary or competing sources, some of which are restricted and some are accessible to a larger public. Table 1 provides an in-depth perspective on the mosaic of sources available.

Databases with a restricted access are often provided to academic writers by fund investors or built by academic institutions (such as the Private Capital Research Institute[1]). We could access one of these sources for this book, provided by StepStone[2], a fund investor (see below). We are very grateful for this opportunity.

Databases accessible to the public can be sorted into two categories: bottom-up and top-down sources. Bottom-up databases rely on different sources of variable to low quality from voluntary disclosures by fund investors and fund managers, public information, and disclosures under the US Freedom of Information Act (FOIA) in the US. They usually lack historical depth, as they usually start at best from the mid-1990s. The geographical coverage is also uneven and difficult to assess in its representativeness. The advantage of these databases is that providers such as Preqin[3] and Pitchbook[4] provide full access to the data, down to single individual funds or investments. We have used the Preqin database for statistics of activity and to assess our own statistics on fund performance.

Top-down databases deliver an aggregate access to the underlying data, often collected directly at the source from fund investors and fund managers. These are essentially fund performance data. **eFront Insight, Cambridge Associates**, and **Burgiss** collect data about private market funds and aggregate them so that they are anonymized. Data is aggregated according to the year of the creation of funds (their “vintage year”). Data is homogeneous, of good quality, and delivers a good perspective on the cash flows and valuations of funds. For this book, we have had access to the data of Cambridge Associates and eFront Pevara (now Insight, see below). We are very grateful to eFront for having granted us access to this data.

Therefore our sources combine high quality sources from eFront, StepStone, and Cambridge Associated (through Thomson Reuters Eikon, now Refinitiv). These data sources are further detailed below.

EFRONT INSIGHT

The eFront Insight database is generally considered as one of the most accurate and reliable sources of performance benchmark data in private markets. This database has been developed by eFront, a leading software provider specializing in alternative investments since 1999. Benchmarks based on the Insight database can be produced through eFront's software online. This software provides analytical tools supporting investors so they can make informed decisions, by quickly and easily benchmarking the performance of a portfolio, identifying market trends, and performing due diligence on potential investments.

This database contains information on more than 4000 funds, including the underlying cash flows. The source of the information is the data contribution of a wide variety of investors across the globe, including pension funds, funds-of-funds, and insurance companies, among others. The broad range of contributors makes the database diverse in terms of geographical coverage, investment strategies, and vintage, which in turn reduces the risk of bias. In terms of composition:

- North America and Europe account for 85% of the information contained in the database;
- Strategies include a wide range of private market strategies, from private equity (such as leveraged buyout, and venture capital), private debt (such as mezzanine and distressed debt), private real assets (private real estate, infrastructure, and natural resources), as well as secondary and funds-of-funds; and
- Vintages are rather well represented in the database from 1991 to date.

This data is sourced directly from the middle and back office software of the investors. Data (including data points on capital calls, distributions, net asset values, etc.) is collected directly from limited partners on a quarterly basis. Contributors provide data that is both anonymized and normalized, spanning from inception to date.

This data is cross-checked by eFront, thus guaranteeing the high quality and reliability of the aggregated data. Data consistency and reliability are ensured by a comprehensive series of manual and automated validation checks, run by a dedicated team of data specialists. These quality checks aim to:

- Identify inconsistencies in historical values or fund attributes;
- Detect gaps in data, duplicates, or null values;
- Identify cash flow issues;
- Neutralize currency effects; and
- Validate complete cash flow extraction by looking into PICC, DPI, and TVPI ratios.

STEPSTONE

StepStone is a global private markets investment firm focused on providing customized investment solutions and advisory and data services to its clients. Its clients include some of the world's largest public and private defined benefit and defined contribution pension funds, sovereign wealth funds and insurance companies, as well as prominent endowments, foundations, family offices and private wealth clients, which include high-net-worth and mass affluent individuals. StepStone partners with its clients to develop and build private markets portfolios designed to meet their specific objectives across the private equity, infrastructure, private debt and real estate asset classes.

StepStone Private Markets Intelligence (SPI), the firm's proprietary analytics platform, has gathered performance data on more than 10,000 investment managers and 26,000 private market funds. StepStone has accumulated through its research and due diligence activities performance data and cash flows on more than 65,000 private investments.

We have had access to its private debt loan database, which includes 124,000 tranches with up to 170 single characteristics. The cash flows are a generic replication of average private debts of different vintage years. Included in the construction are funds with a target size of 40–50 loans, where loans can be associated to a unique fund. After evaluating the database, 23 funds comprising approximately 1,000 loans were analyzed. Assumptions to replicate cash flows were[5]:

— 1.25% management fees and 15% carried interest over a 6% hurdle rate;

— Loans contributed to 90% of the fund sizes;

— Loans are drawn at launch and repaid at realization date;

— Coupons are paid assuming a gross yield equal to the internal rate of return; and