PEI

Scientific Infra & Private Assets

TOTAL PORTFOLIO APPROACH & PRIVATE ASSETS

PART IV

Factor Allocations

Same factor exposures, a better outcome: adding private assets lifts the portfolio Sharpe ratio from 0.55 to 0.67 — because allocation weights are not the same as factor exposures.

This paper is the final part of a series on the Total Portfolio Approach (TPA). It discusses how to implement TPA using private assets in a practical setting.

A PEI GROUP COMPANY

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SIPA is a private market index provider, part of the PEI group of companies. This paper was written independently using SIPA's data, by Evan Clarke of the EDHEC Infrastructure & Private Assets Research Institute (EIPA), an academic team based at EDHEC Business School. Contact frederic.blanc-brude@pei.group for more information.

Executive Summary

Factor-Based Portfolio Construction: Within a TPA framework, an institution may seek to allocate across broad macro risk exposures such as growth (equity), interest rates, and credit, among others, aligned with long term risk and return objectives. In this paper, we demonstrate how these targeted exposures can be quantified using both listed and private asset classes, with private assets proxied by privateMetrics® and infraMetrics® indices. A growth oriented portfolio targeting 65/25/20 exposure to the equity, interest rate, and credit factors respectively can be constructed across listed and private assets. We compare a simple portfolio comprised of listed assets with one that incorporates private assets, with both portfolios having the same broad exposures.

Diversification Within the Factor Allocation: Private assets are not simply a leveraged version of their listed proxies. Regression analysis shows that private asset classes have meaningful residuals, or unexplained variation, that is uncorrelated with listed asset class returns. This residual, or idiosyncratic component, represents a diversification opportunity within the factor allocation. For infrastructure equity, infrastructure debt, and private equities, there are meaningful uncorrelated residuals relative to the nearest listed proxy. By obtaining a portion of the risk exposures with private assets, a portfolio may show an improved Sharpe ratio.

Infrastructure's Dual Factor Role: Infrastructure equities occupy a distinctive position within a factor allocation framework. With statistically significant betas to both the equity factor (~0.36) and interest rates (~1.01), infrastructure equities contribute meaningfully to desired exposures, not easily replicated from equity or bond only assets. Similarly, infrastructure debt provides diversification relative to investment grade bonds, with lower equity beta and credit exposure than IG bonds, and differing rates beta. The uncorrelated residuals suggest that obtaining rates and credit exposure via infrastructure debt may enhance risk adjusted performance, and reduce duplicating exposures.

Time varying Betas and Uncertainty: In our last TPA piece (TPA III), we showed that the macro betas are time varying. There are periods when private equities and infrastructure equities may have higher/lower sensitivity to macro factors that are defined by tradeable listed assets. This creates a challenge for allocators seeking a certain level of exposure across equities, rates, credit, or other factors. Related to this is the uncertainty around the coefficients. For infrastructure equities, we find an average equity factor beta of ~0.36 using 20 years of monthly (~250 months of returns). At a 5% confidence level, the beta is 0.25 to 0.47. This can make it a challenge to understand true exposure. Extending this across other betas and unlisted asset classes and the confidence in the betas may become an issue.

Data and Methods

Drawing on data from infraMetrics® and privateMetrics®, this paper explores how market-based private asset data can be used to quantify macro betas across listed and private asset classes, allowing one to construct a portfolio based on desired factor exposures.

Both infraMetrics® and privateMetrics® databases can be used to download monthly index prices and risk metrics for private infrastructure equities, private infrastructure debt, and private equities. The flagship indices, infra300 and private2000, represent broad market indices diversified by sector, geography, and risk profile, best capturing the systematic risk of their respective markets. Both represent excellent starting points for capturing systematic risk and returns in their respective markets, private equity and infrastructure. Find infraMetrics indices (here) and privateMetrics indices (here). Further, our MSExcel Add-in allows for seamless download of the index data (see here).

A brief description of each index is below:

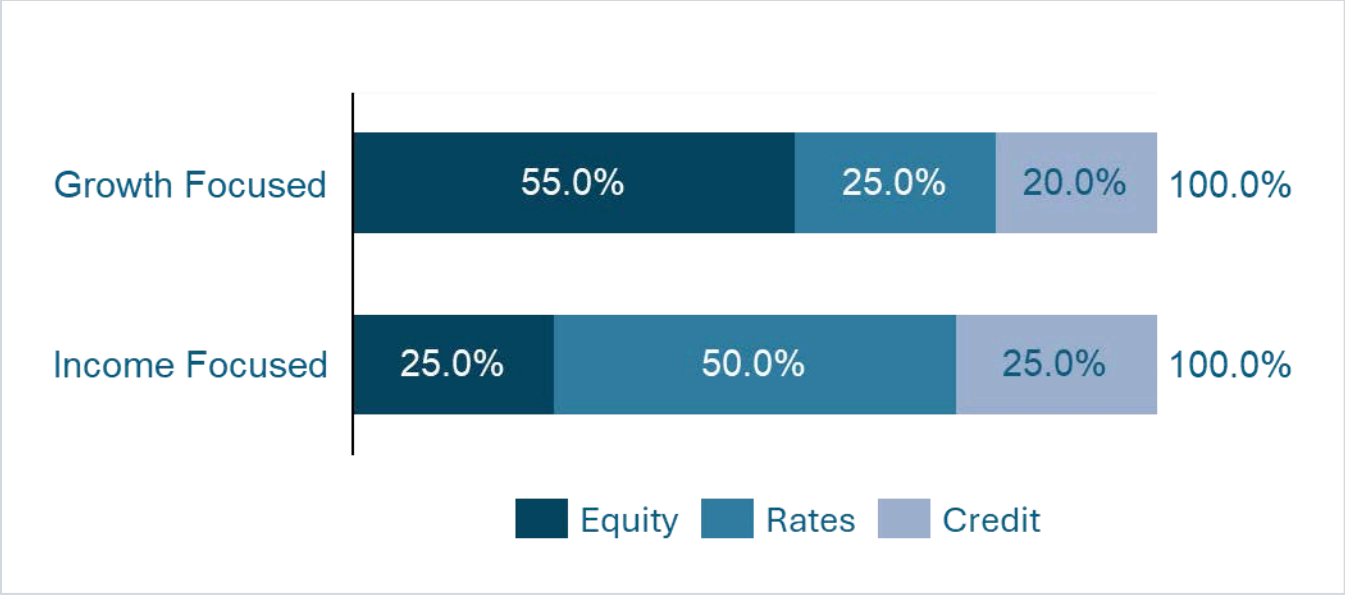
- **The infra300 index** is a representative set of 300 unlisted infrastructure companies. The companies are selected to form a representative sample by TICCS® categories from an underlying universe of close to 9100+ firms in 27 countries. The index is represented globally in both corporate and project finance companies.
- **The private2000 index** includes the top 2000 private companies by value across 30 countries and diversified by sector. The companies are selected to form a representative sample by PECCS® categories from an underlying universe of close to 1 million firms.

Introduction

In this paper, we consolidate aspects of our previous papers on TPA and explore portfolio construction based on desired exposures to key macro factors: Growth (equity), interest rates, and credit. We start with listed asset classes for the simple reference portfolio and then construct a second portfolio that includes private assets, both with the same desired exposures.

In figure 1, two hypothetical portfolios are shown. The Growth Focused portfolio has a larger desired exposure to growth assets (equities), with interest rates and credit exposure still meaningful. This would be relevant for a pension fund, endowment fund, or sovereign wealth fund. For the Income Focused portfolio, interest rate sensitive assets dominate given a greater need to hedge liabilities. This would be closer to a life insurers portfolio. In this paper, we will focus the example on the former case (Growth), though the insights would apply much the same, particularly for infrastructure equity and debt.

FIGURE 1 — POTENTIAL TARGETED MACRO BETAS TO EQUITY, NOMINAL RATES, AND CREDIT



Note: Stylised example.

The definitions of proxies used for computing macro factor exposures in this paper are:

- **Growth / Equity Factor:** returns on a global listed equities index (MSCI ACWI)
- **Interest Rates:** returns on 7-10 year UST Bonds
- **Credit:** returns on a long credit and short UST Bonds portfolio

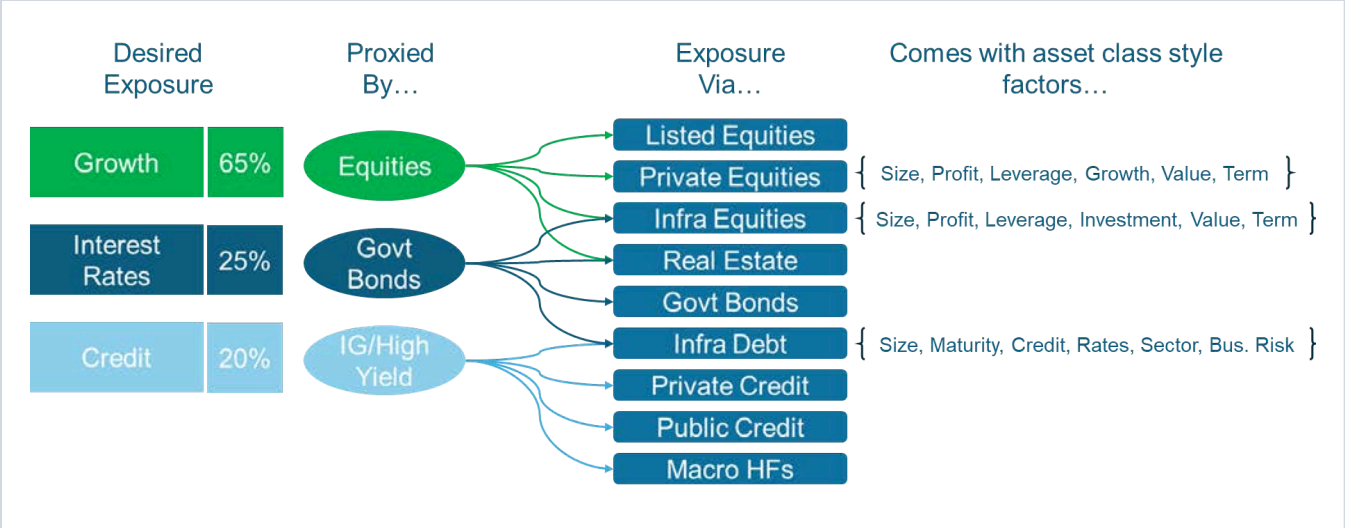
Table 1 details the asset classes used to construct a portfolio based on target macro factor exposures. Both the reference and actual portfolio have 65/25/20 exposures to the equity factor, interest rates, and credit. Private assets exposure will be proxied using privateMetrics and infraMetrics asset level indices for private equities, private infrastructure equities and debt.

TABLE 1 — ASSET CLASSES AND PROXIES

ASSET CLASS	PROXY OR INDEX
Government Bonds	UST 1-3, 7-10, and TLT
Credit	US Investment Grade Bonds
Inflation Protection	TIPS
Global Equities	MSCI ACWI
Small Cap Equities	Russell 2000
Infrastructure Debt	**infra300 debt index**
Infrastructure Equity	**infra300 equity index**
Private Equity	**private2000 index**

Figure 2 shows conceptually what we are trying to achieve. Desired equity, rates, and credit betas for the portfolio of 0.65, 0.25, and 0.20. As illustrated, this is achieved by allocating across a number of asset classes. Some of these asset classes contribute to one exposure (eg govt bonds), while other such as infrastructure equities, have exposure to both interest rates and equities. For listed assets, it is fairly straightforward to quantify these exposures. The absence of a long history of high frequency data for private assets makes it more challenging. With the privateMetrics and infraMetrics indices, we have monthly data stretching back 12.5 (private equities) to 25 years (infra equities) - enough datapoints to quantify exposures.

FIGURE 2 — MAPPING DESIRED FACTOR EXPOSURES TO ASSET CLASSES OR OPPORTUNITIES



Note: Stylised example.

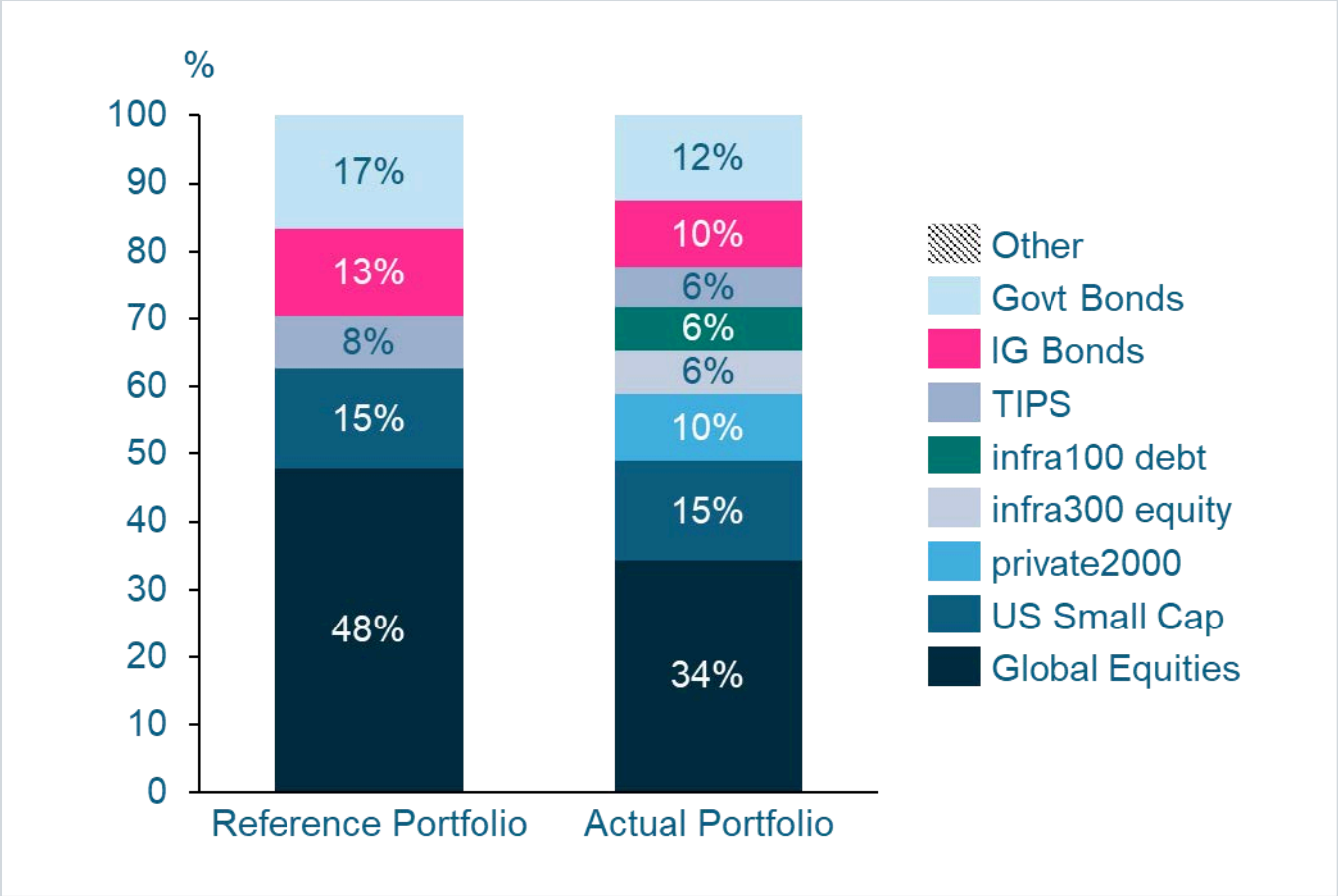
Portfolios By Macro Factors

In figure 3, the allocations for the reference portfolio and a proposed portfolio (actual portfolio) are shown. The reference portfolio achieves the desired exposures via listed assets, with equities exposure through a global equities index (MSCI ACWI) and a small cap index, in this case the Russell 2000. Rates exposure comes via government bonds, TIPS, and investment grade bonds. This portfolio has an annualised realised volatility of 10.32% and achieved a Sharpe ratio of 0.55 for the period covering 2014 to 2025.

The proposed portfolio (figure 3 – right), seeks to optimise the Sharpe ratio while adhering to the same targeted exposures. Private equity, represented by the private2000 index captures a near 10% weight, while infra equity and debt each have an approximate 6% weight. This portfolio has an annualised volatility of 8.91% and a Sharpe ratio of 0.67. This compares favourably to the reference portfolio.

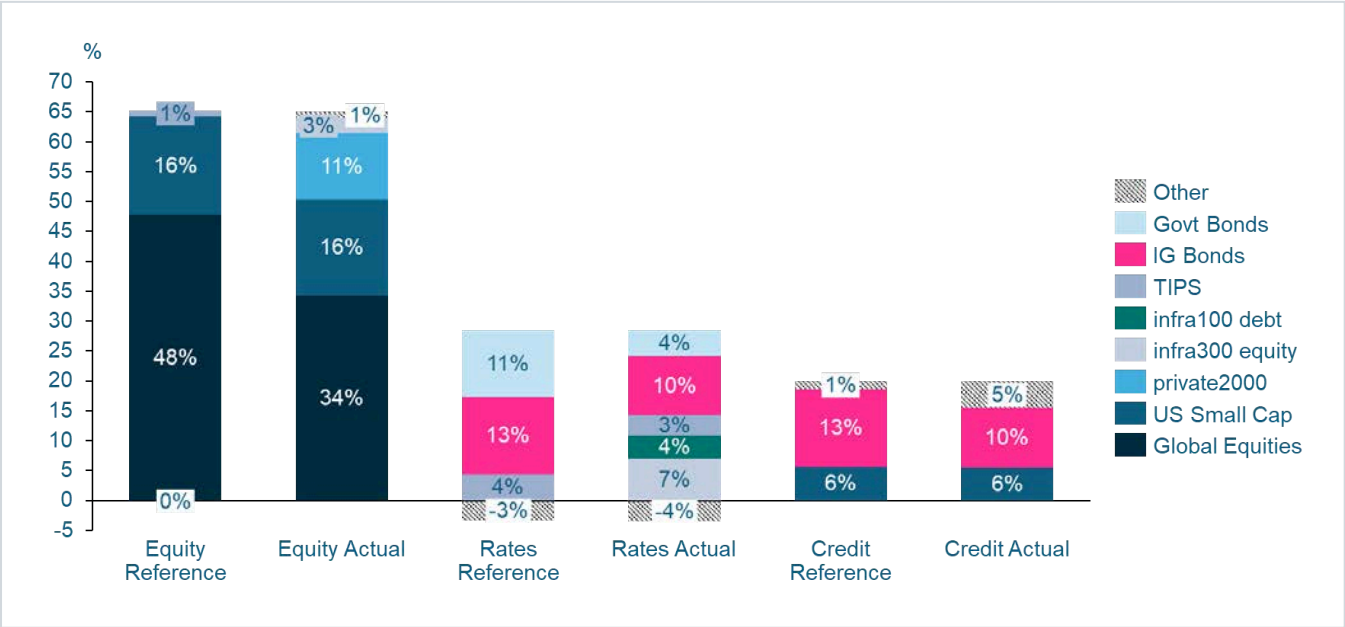
In figure 4, we show which asset classes or investments contribute to each desired exposure and to what extent. Of the 65% equity factor exposure, nearly 50% comes from global equities and small caps, while private equity contributes 11% and infrastructure equity, 3%, based on its lower beta to equities. Compared to the reference portfolio, private assets contribute over 20% to the equity factor (14%/65%). For interest rate exposure, private assets are even more pronounced. Infra equities (7% contribution), and Infra debt (4%) together account for over 40% of the rates exposure. The remainder comes from IG bonds and government bonds. Credit exposure is largely achieved through IG bonds, small cap equities, and a small contribution from infra debt.

FIGURE 3 — REFERENCE PORTFOLIO ASSET MIX (LEFT) VS ACTUAL PORTFOLIO (RIGHT)



Source: privateMetrics, infraMetrics.

FIGURE 4 — FACTOR CONTRIBUTIONS BY ASSET CLASS



Source: privateMetrics, infraMetrics, Bloomberg.

Table 2 summarises the exposures, annualised returns, volatility, and Sharpe ratio for each portfolio covering the 2014 to 2025 period. The portfolio with private assets achieves a higher Sharpe ratio, given the diversification benefits that the three private assets indices provide relative to the existing liquid sleeves.

TABLE 2 — PORTFOLIO RISK AND RETURN METRICS

PORTFOLIO	EQUITY %	RATES %	CREDIT %	ANNUALISED RETURN	ANNUALISED VOLATILITY	SHARPE RATIO
Actual	**65**	**25**	**20**	**7.72%**	**8.91%**	**0.67**
Reference	65	25	20	7.39%	10.32%	0.55

Source: privateMetrics.

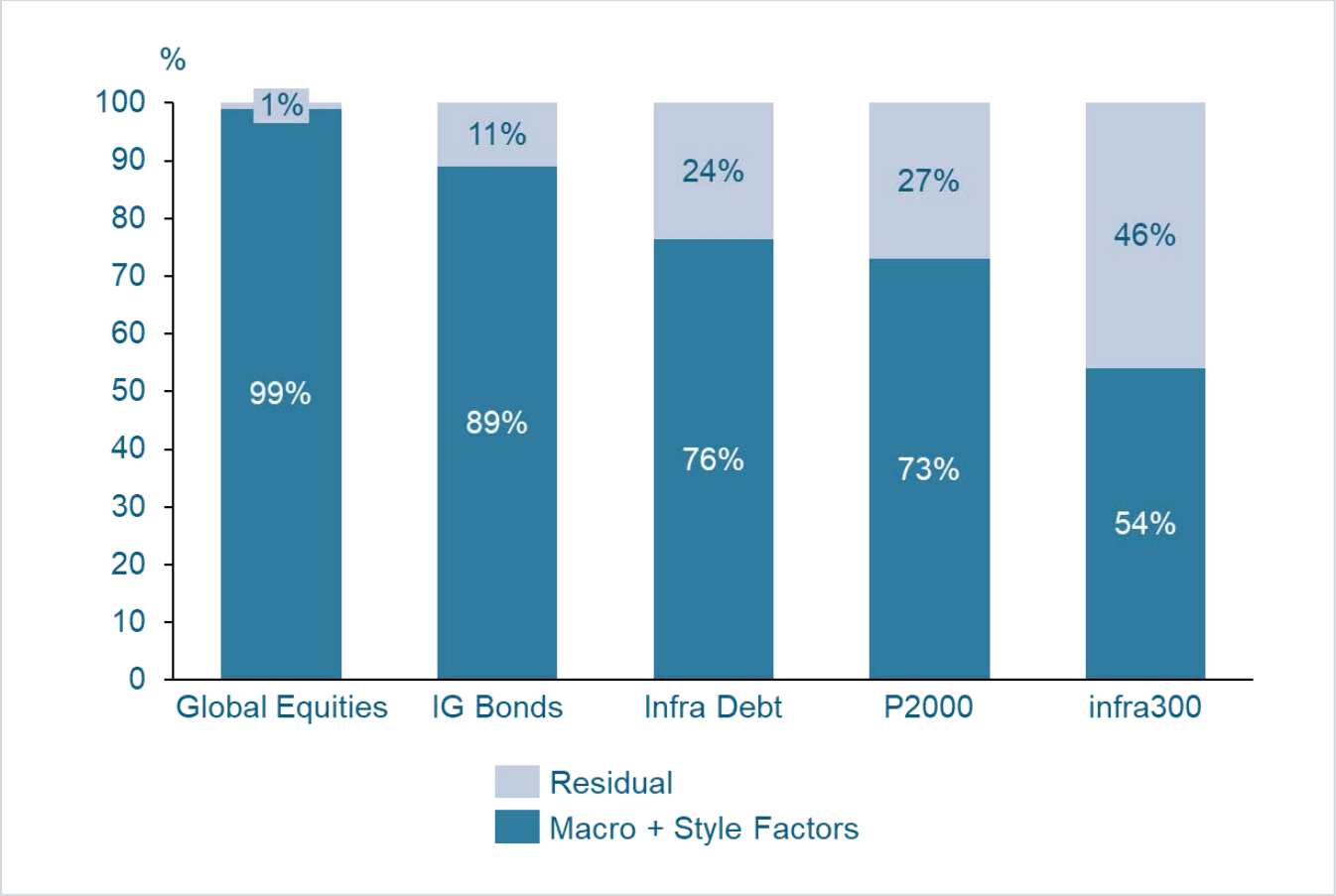
In figure 5, we explore the diversification benefits more by looking at the results from a simple OLS regression with asset class, macro factor returns (equity, rates, and credit), and style returns particular to infrastructure and private equities. Global equities, by definition, will be almost entirely explained by the equity factor. For investment grade bonds (IG bonds), the returns were largely explained by exposure to the three macro risk factors, with an r-square of 89%. This compares to 76% for infrastructure debt. IG bonds have a greater equity and credit beta than infrastructure debt. Though both IG bonds and infra debt provide rates exposure, their sensitivity to credit spread changes or the equity markets are different. Further, the residual (unexplained portion) for infra debt is larger and is uncorrelated with the residual for IG bonds, suggesting diversification benefits. The macro betas, confidence intervals, and significance can be found in table 3.

Within TPA, identifying asset classes or opportunities with large residuals that are uncorrelated with core asset classes offers diversification benefits, potentially leading to a higher Sharpe ratio. We observe a similar outcome for private equities and private infrastructure equities in figure 5. Here we extend the regression to include both macro and style factors. Listed equities, by definition will be almost entirely explained by the equity factor. The private2000 index has an r-squared of 73%, with a large portion explained by private equities style factor exposures. For infrastructure equities, the r-square is 54%. Both asset classes offer diversification benefits relative to their listed proxies. For infrastructure equities, this is the case relative to bonds or equities given the dual exposure. Table 3 shows the macro betas more explicitly.

The uncorrelated residuals across these private asset classes provide diversification at the portfolio level. When several asset classes each contribute modest idiosyncratic returns that are uncorrelated with each other and with listed benchmarks, the portfolio-level diversification benefit is amplified. This is to a large extent why we observe lower volatility and a higher Sharpe ratio in the portfolio with private assets.

Table 1 shows the macro betas for IG bonds and infra debt. IG bonds show more exposure to credit and even equity, while having a larger rates beta. Infra debt offers differentiated exposure – lower rates beta, lower credit beta and no equity exposure.

FIGURE 5 — EXPLAINED VARIANCE (MACRO + STYLE FACTORS) VS RESIDUAL BY ASSET CLASS



Source: privateMetrics, infraMetrics, Bloomberg.

TABLE 3 — OLS RESULTS: IG BONDS VS INFRA DEBT

METRIC	IG BONDS	INFRA DEBT
Equity Beta	0.12 [0.060, 0.175]***	**0.033**
Rates Beta	1.18 [1.066, 1.295]***	**0.606 [0.545, 0.668]*** **
Credit Beta	0.42 [0.301, 0.531]***	**0.118 [-0.003, 0.239]*** **
R-square	89%	**76.3%**
Residual	11%	**23.7%**
Residual Correlation	0.0065	**0.0065**
N	144	**144**

*Note: p < 0.01 = ***. Infra debt represented by infra300 index in LCU.*

For infrastructure equities, the exposure is differentiated relative to both IG bonds and listed equities. The rates beta is similar to IG bonds, but the equity beta is much larger. Like with infra debt, the residuals are uncorrelated with those of the listed asset class proxies.

It is worth noting that the macro betas reported here reflect the full sample period (2014–2025). As discussed in Part III of this series, the macro betas are time varying and regime dependent. Betas behaved differently for the period 2014–2021 vs 2022-2025. Institutions that want to manage factor exposures dynamically, rather than relying on a longer term average (implied by the OLS) would need to monitor these betas on a rolling basis and potentially use listed asset classes to adjust the portfolio exposures. Moreover, outside of the time varying nature of the betas, one may want to assess the confidence intervals to better reflect the uncertainty of trying to define private asset exposures through listed proxies.

TABLE 4 — OLS SUMMARY RESULTS: IG BONDS, LISTED EQUITIES, AND INFRA EQUITY

COEFFICIENT	IG BONDS	LISTED EQUITIES	INFRA EQUITY
Equity Beta	0.12 [0.060, 0.175]***	1.00***	**0.36 [0.247, 0.470]*** **
Rates Beta	1.18 [1.066, 1.295]***	—	**1.01 [0.810, 1.212]*** **
Credit Beta	0.42 [0.301, 0.531]***	—	**0.02**
R-square	89%	100%	**54%**
Residual	11%	0%	**46%**
N	144	144	**250**

*Note: p < 0.01 = ***.*

Conclusion

This paper brings together the key themes of the TPA paper series, demonstrating how higher frequency, market based private assets data can be utilised to measure exposures to macro risk factors, putting private assets alongside listed securities. This includes the ability to look through to the private asset classes to understand how they contribute to various exposures. For asset classes that have multiple exposures (eg infrastructure), this may impact allocations from both the equity and rates buckets.

The approach reinforces a key point from earlier papers: that asset allocation weights and risk factor exposures are not the same thing. A 10% allocation to private equity does not simply add 10% to a portfolio's equity factor exposure. It is impacted by the private equities' beta to the equity factor, which has itself proven to be time-varying and regime-dependent. Similarly, an allocation to infrastructure equity contributes to both the equity and interest rate factor simultaneously.

Meaningful private asset allocations require market-based, high-frequency data to quantify factor exposures accurately and manage total portfolio risk with confidence. Without this, the mapping of private assets to factor exposures remains imprecise, and the perceived benefits of TPA can be undermined. privateMetrics® and infraMetrics® provide the data infrastructure that makes factor-based portfolio construction with private assets both rigorous and actionable.

privateMetrics API integration

Access all privateMetrics data programmatically and build your own applications for private market investing and reporting.

Index Catalogue

Browse our catalogue of hundreds of private equity, infrastructure and infra debt indices, inc. market indices like the infra300 and private2000, and thematic indices representing specific market segments.

Taxonomies

Query the PECCS® and TICCS® taxonomies used to create the privateMetrics universe. Access class codes, names and definitions to build your own index and comps customisations applications.

Index Data

Access a comprehensive set of performance and risk metrics for hundreds of private equity, infrastructure and infra debt indices tracking numerous geographies and segments.

Custom Benchmarks

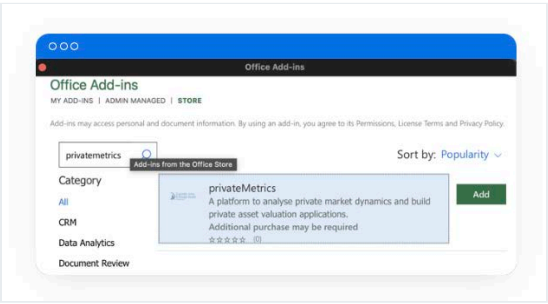
Build custom benchmarks setting target weights by PECCS, TICCS, style and geography that align with your strategy. All index metrics are recalculated for you.

Custom Comps

Create customised comp sets using PECCS® and TICCS® segments, geography and systematic risk profiles. Get metrics like discounts rates and EBITDA multiples.

Yield Curves

Query risk-free rates for a given pricing and maturity date to support discounted cash flow (DCF) calculations, valuation models, and other financial analyses.



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With the SIPA Assets Excel add-in, you can integrate market data about private asset markets directly into your investment workflow.

privateMetrics Excel Add-in Documentation →

The privateMetrics® Valuation Model

Our approach to the valuation of private companies is designed to maximise the available transaction and financial data in private markets and provide a standardised and systematic manner to update prices with every observed transaction.

First, we construct a multi-factor model of prices using a sample of observed transactions over time which can infer the unbiased and precise factor prices that investors pay for different characteristics of a private asset. Although every transaction is idiosyncratic or unique, in a large sample of transactions, the individual errors in each transaction price can be diversified away to discern the price attributable to each factor. Factor prices refer to the premium (or discount) that an investor is willing to pay to seek exposure to a specific factor of return in private companies. For example, observing the relationship between size and valuation among reported transactions, it can be inferred how much premium or discount an investor is willing to pay for purchasing a larger private company.

Second, an important and key application of this approach is that, with the estimated factor prices, say for size, it would then be possible to price unlisted private companies whose size information is available, irrespective of whether they are traded or not. This approach provides a more robust estimate for FV and enables the creation of representative indices of private companies.

Our approach's novelty is calibrating the model to newly observed transactions obtaining the factor price evolution over time, which allows us to update the valuation for all tracked unlisted private companies.

Common Risk Factors

If investors trade unlisted private companies from each other in mutually negotiated transactions, there must be some common characteristics that at least partially explain prices. For example, private companies that have higher profits or growth opportunities may be more valuable to investors than those that are not.

To arrive at a potential list of factors, we follow simple criteria that there needs to be an economic rationale for the factor to affect valuation. The factor should also be statistically related to the valuation. Moreover, the factor should also be objectively observable or measurable. With a potential list of factors, our factor selection is the result of a statistical approach, where the factors that can satisfactorily explain the variation in observed transaction valuations are included in the final model while trading off being parsimonious with being able to explain a higher variance in valuation. The privateMetrics asset pricing model uses five key risk factors as below:

- **Size:** Larger companies may be more complex, have higher transaction costs, and be less liquid, all of which can make them trade at a lower valuation per $ of revenue.
- **Growth:** As traditional PE strategies rely on growing the entry multiple, that may involve both increasing its top and bottom lines, i.e., revenue and profits. Thus, companies that can grow faster can be more sought after, making them more valuable.
- **Leverage:** Leverage can make a company riskier as it increases the risk of default. However, there is also a signaling effect of leverage, as companies with stable consistent cash flows can support a higher leverage, and vice versa. Thus, leverage is expected to influence the valuation of a company.
- **Profits:** More profitable companies have more predictable (less risky) future payouts and hence attract a lower risk premium, making them more valuable.
- **Maturity:** Younger companies have fewer track records and face higher information uncertainty. Studies have shown that firms with high uncertainty tend to be overvalued and earn lower future returns. Thus, the maturity negatively affects valuation.
- **Country risk:** Investors may require a high return when investing in a high-risk country, thus depressing the current valuation. In other words, in countries with lower risk, investors may be willing to purchase assets at a higher valuation as government policies may be more predictable with lower macroeconomic risks.

TABLE A1 — KEY FACTORS, THEIR EFFECT ON VALUATION & THE ECONOMIC RATIONALE FOR INCLUDING THEM

FACTOR	DEFINITION (PROXY)	EFFECT ON PRICE	ECONOMIC RATIONALE	REFERENCES
Size	Revenues	▼ Negative	Larger firms are more illiquid and trade a lower price	Fama & French (1993)
Growth	Change in Revenues	▲ Positive	Companies with higher revenue growth trade at a higher price	Fama & French (1992), Petkova & Zhang (2005)
Leverage	Total debt / Revenues	▲ Positive	Companies that can borrow more have a lower cost of capital and a higher value	Gomes & Schmid (2010), George & Hwang (2010)
Profits	Ebitda Margin	▲ Positive	Companies that have higher profits have a higher value	Novy-Marx (2013), Hou et al. (2015)
Maturity	Years since incorporation	▼ Negative	Companies that are mature exhibit less growth potential and trade a at a lower price	Jiang et al. (2005)
Country Risk	Term Spread	▼ Negative	Companies in high-risk countries face more uncertain prospects	Chen & Tsang (2013)

Source: calculated using over 10k deals from PitchBook, CapitalIQ, Factset, and other primary sources between 1999-2022.

Our factors have been documented in prior academic studies to be associated with valuation. We also include factors that have been identified as key determinants of valuation from a survey of private equity practitioners that we conducted in 2023. Table A1 summarises the key factors that we use in the model, how they are measured, each factor's effect we document in the data on average, the economic rationale for their inclusion, and citations for the work that underpins their inclusion.

Model Set Up

The privateMetrics asset pricing model uses the Price-to-Sales ratio of observable transactions (the entry price multiple) as the modelled variable. The model is estimated as the linear sum of the product of factor exposures and factor prices. The estimation can then separate the systematic part of the valuation while leaving out "noise" in each valuation.

Following standard asset pricing notation, the factor exposure or factor loading is called a beta (β), and the factor premium is called a lambda (λ) for the k factors in the model. α is the intercept and ε is the noise or idiosyncratic part of the valuation.

Model Calibration

The privateMetrics model uses a carefully curated dataset of more than 10k+ unlisted private company investments going back two decades sourced from a wide variety of datasets including PitchBook, Factset, Capital IQ, fund manager reports, and other publicly available data sources.

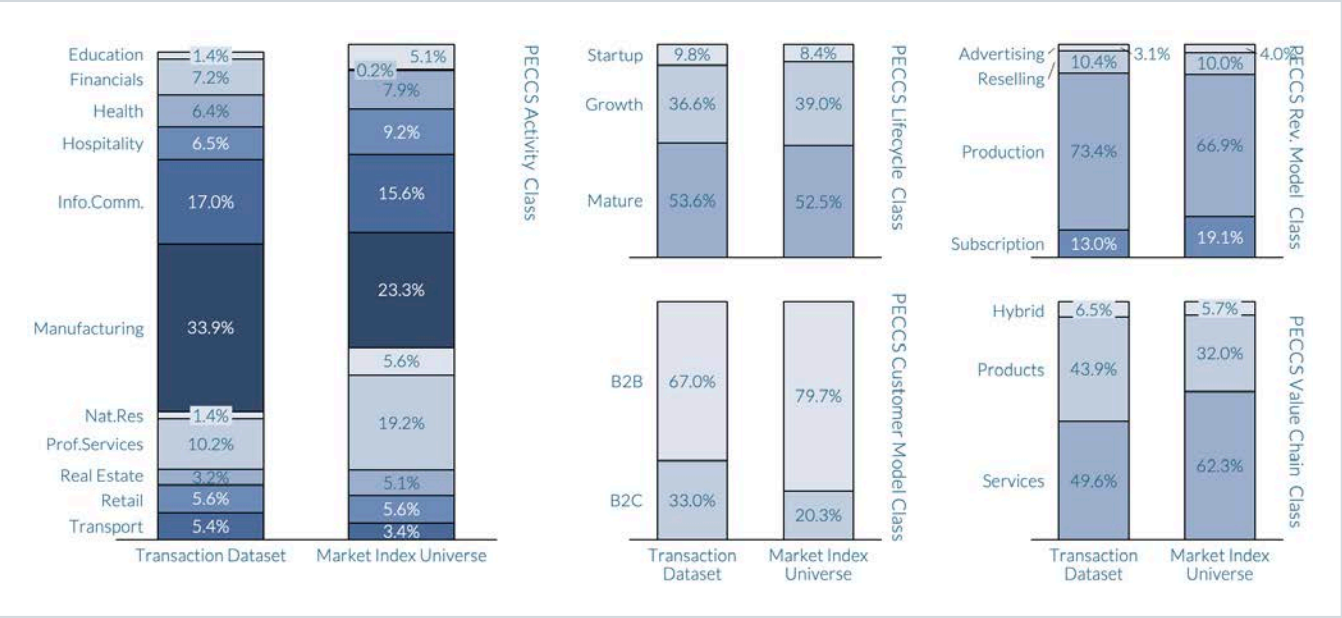
We calibrate this model using new observations monthly to update its estimation of the price of risk of each factor. In other words, each transaction observed is then used to 'update' this model (i.e., obtain new λs) through a dynamic estimation (using a Kalman filter), which retains the memory of past λs while also allowing the new transaction to influence the relationship while keeping the average ε close to zero. More details on the implementation of the model are available in our online documentation and Selvam and Whittaker (2024). The dataset covers all key segments of the market as shown in Figure 1.

A good application of using the model to value unlisted private companies is to create a representative marked-to-market index of private companies that are regularly valued. The privateMetrics index universe in Figure 1 includes the constituents of the private2000® index constructed by Scientific Infra and Private Assets, which is developed on this shadow pricing idea and captures the performance of private companies in 30 countries globally that are important for private equity investors (read more about the index here).

How Precise are the Predictions across PECCS® Pillars?

To examine how closely the predicted valuations track the raw modelled valuations in transactions, we compute the average estimation errors of the full sample, and also by classes within each PECCS® pillar. What stands out is that although the model by design is expected to have lower estimation errors in the full sample, the within PECCS® class estimation errors are also very small. All the errors are within ±10%, reassuring that the model predictions on average even within each segment of PECCS® are reasonable. The errors are summarised in Table A2.

FIGURE A1 — PRIVATEMETRICS TRANSACTION DATASET COMPARED TO THE INDEX UNIVERSE BY PECCS PILLAR & CLASS



The most commonly used metric of valuation in private markets is EV/EBITDA as PE owners have the flexibility to alter the capital structure of their holding company and hence are more interested in operational profitability without factoring interest costs. However, our model is based on P/S because P/S is statistically better, stable, and not affected by loss-making companies. Thus, one may be concerned whether our predictions for EV/EBITDA might be biased.

To ensure that is not the case, we compute the EV based on the book value of debt and predicted equity valuation and divide the sum by the EBITDA to get a predicted EV/EBITDA and compare it to transaction implied ratios. Figure A2 presents the average predicted and observed EV/EBITDA by PECCS® activity classes. We find that the predictions are very close to the observed values, thus mitigating this concern.

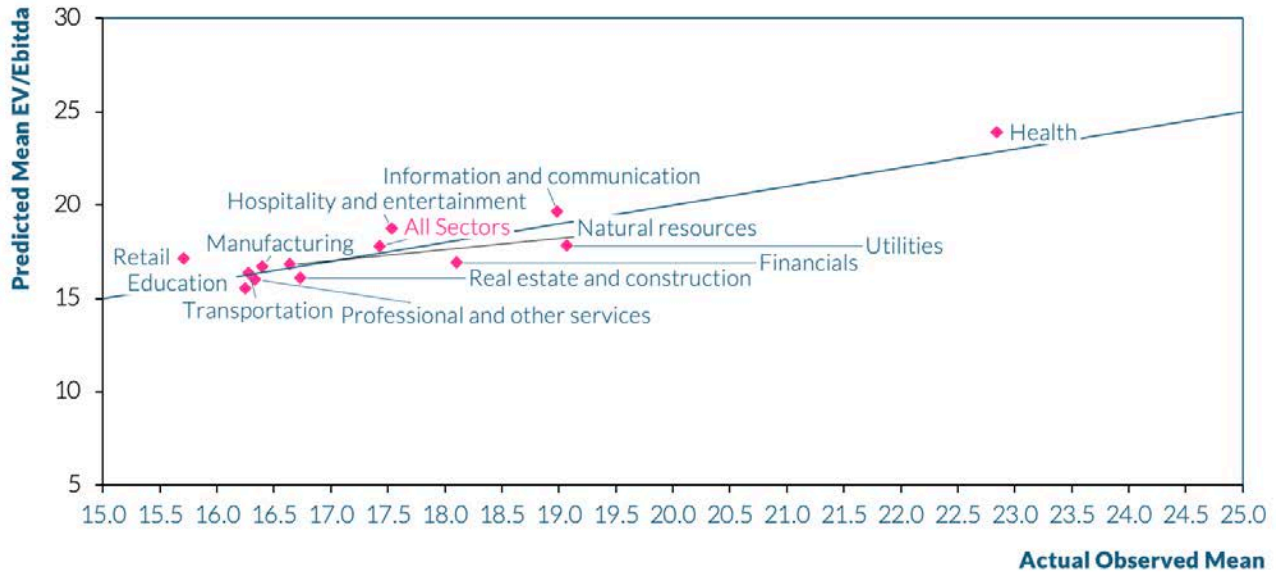
TABLE A2 — AVERAGE ESTIMATION ERRORS ACROSS PECCS® CLASSES

PECCS ACTIVITY	MEAN EST. ERROR
Education and public	0.9%
Financials	1.8%
Health	2.6%
Hospitality and entertainment	-1.1%
Information and communication	-4.4%
Manufacturing	2.5%
Natural resources	9.4%
Professional and other services	3.3%
Real estate and construction	1.9%
Retail	0.5%
Transportation	7.2%
Full Sample	**1.1%**

PECCS CLASS	MEAN EST. ERROR
LIFECYCLE PHASE	
Startup	0.1%
Growth	-1.7%
Mature	2.8%
REVENUE MODEL	
Advertising	1.2%
Reselling	4.6%
Production	2.9%
Subscription	-6.9%
CUSTOMER MODEL	
B2B	1.5%
B2C	0.9%
VALUE CHAIN	
Hybrid	0.6%
Products	1.1%
Services	3.4%

Source: Calculated using over 10k deals from Pitchbook, CapitalIQ, Factset, and other sources between 1999-2022.

FIGURE A2 — PREDICTED VERSUS ACTUAL EV/EBITDA RATIOS BY PECCS® ACTIVITY CLASSES



Source: Calculated using over 10k deals from PitchBook, CapitalIQ, Factset, and other sources between 1999-2022.

About Scientific Infra & Private Assets

Our products come from the cutting-edge R&D of the EDHEC Infrastructure & Private Assets Research Institute, established in 2016 by EDHEC Business School. In 2019, we transformed this academic research into a commercial enterprise, providing services like private market indices, benchmarks, valuation analytics, and climate risk metrics. We take pride in our unique dual identity, bridging scientific research and market applications.

The EDHEC Infrastructure & Private Assets Research Institute (EIPA) continues to advance academic research and innovate with technologies in risk measurement and valuation in private markets, especially utilising artificial intelligence and language processing. Our company, Scientific Infra & Private Assets (SIPA), supplies specialised data to investors in infrastructure and private equity.

Merging academic rigor with practical business applications, our dedicated team excels in integrating quantitative research into private asset investing. Our products, infraMetrics® and privateMetrics®, are unique in the market, stemming from thorough research rather than being ancillary services of larger data providers. We are the Quants of Private Markets, leading with innovation and precision.

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