



Partners Group

REALIZING POTENTIAL IN PRIVATE MARKETS

# Private Markets: challenges for risk managers

1 September 2023



Private Infrastructure

Not for use in the United States



**Dr. Michael Studer, Partner, Portfolio Solutions, Senior Member of Management**

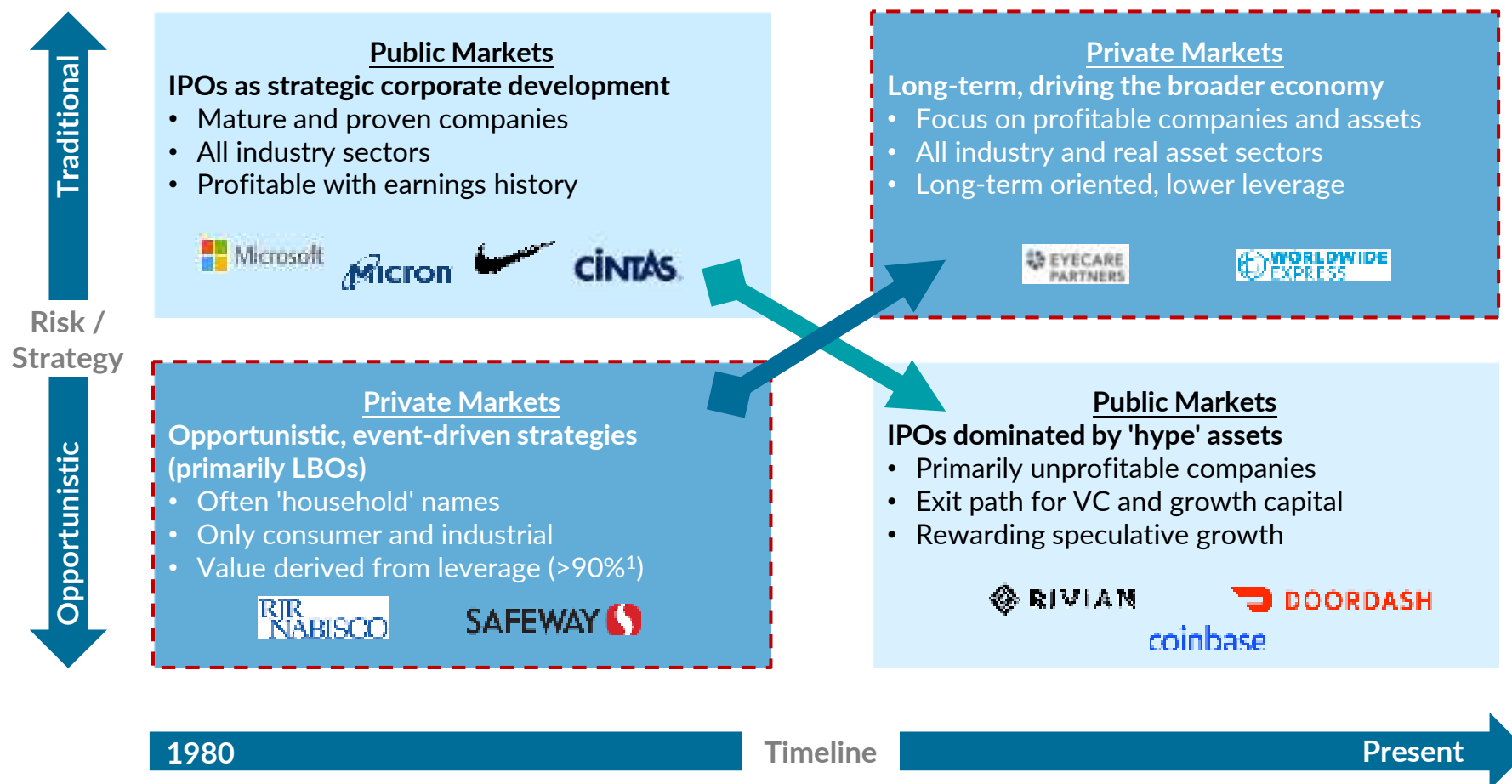
Dr. Michael Studer is part of the Portfolio Solutions business department, based in Zug. He is a member of the Global Investment Committee and the Private Markets Relative Value Committee and the Deputy Chair of the Global Portfolio Committee. He has been with Partners Group since 2001 and has 26 years of industry experience. Previously, he was a member of the Global Executive Board and served as the firm's Chief Risk Officer as part of the Executive Committee from 2013 to 2021. He holds a PhD in mathematics from the Swiss Federal Institute of Technology (ETH) in Zurich, Switzerland.

# Table of contents

- 
- |   |  |
|---|--|
| 1 | Private Markets: New 'Traditional' Asset Class |
| 2 | Measuring and managing risks                   |
| 3 | Conclusions                                    |
- 

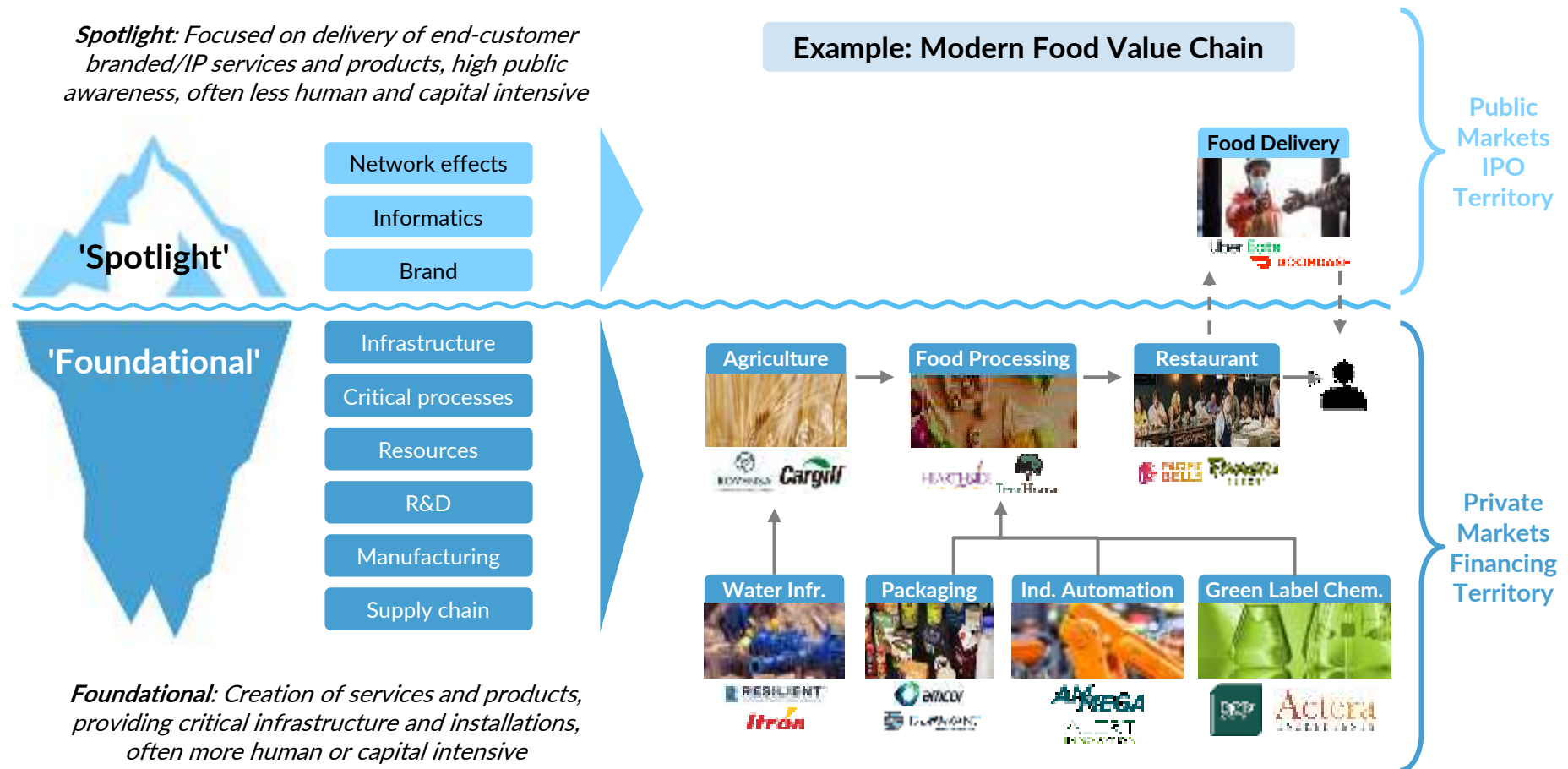


# Public and private markets have swapped roles in financing the economy...



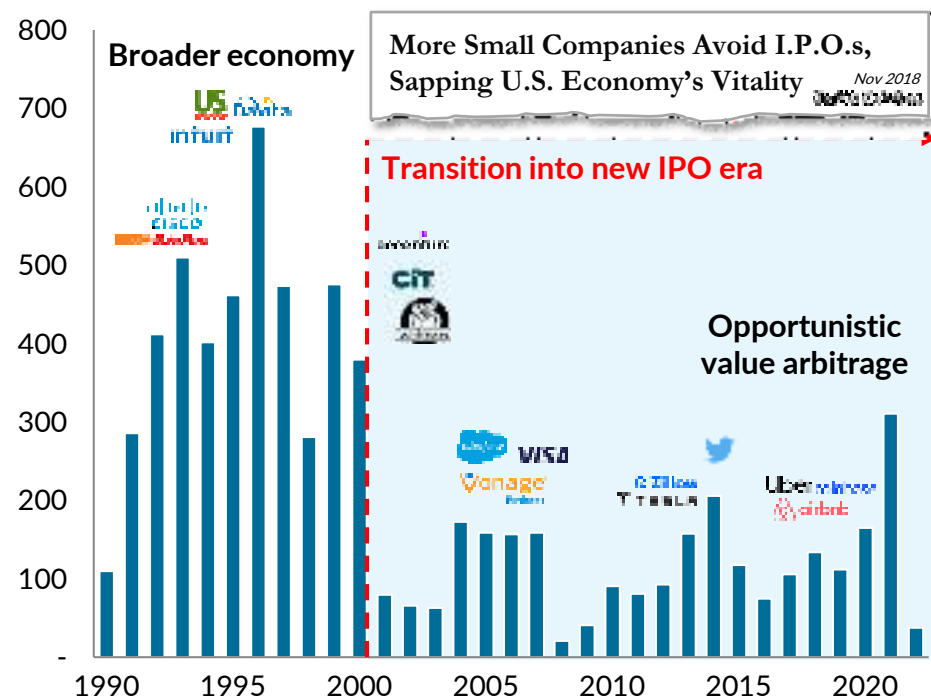
For illustrative purposes only. 1 As % of total capital in buyouts. Source: The Economist (2022).

## ...and have separated on backing 'Spotlight' vs. 'Foundational' businesses

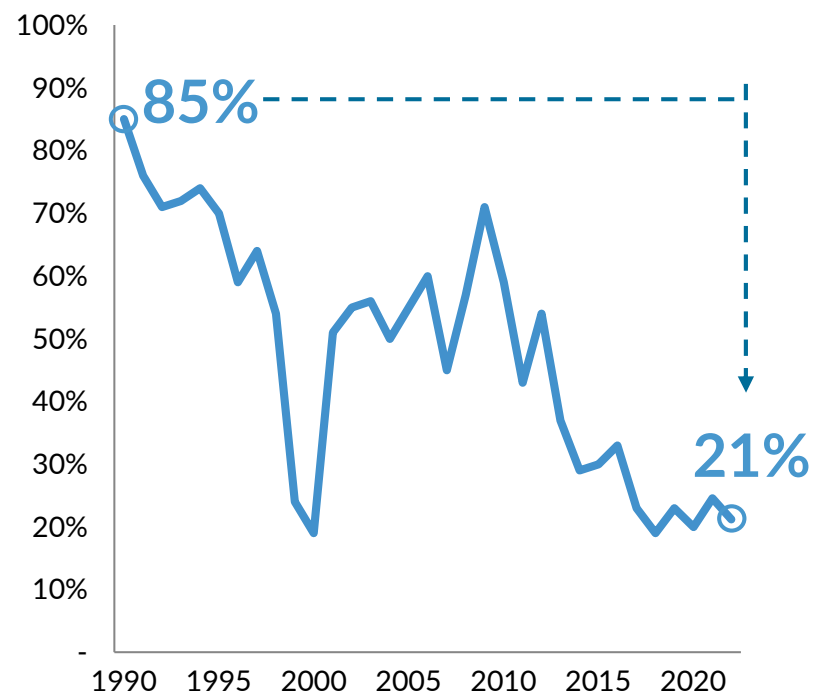


## With a 'Spotlight' focus, IPOs now feature unprofitable businesses...

Number of IPOs, 1990-2022<sup>1</sup>



% of IPO-ed businesses with positive earnings, 1990-2022<sup>1</sup>



IPOs and public markets have shifted from the real economy to opportunistic 'Spotlight' companies

For illustrative purposes only. 1 Earnings per share > 0; Annual data, 8,775 IPOs in total. Source: Dr. Jay Ritter's global dataset of IPOs as of 15 February 2023. Excludes IPOs with an offer price below USD 5 per share, unit offers, ADRs, closed-end funds, partnerships, acquisition companies, REITs, bank and S&L IPOs.

...whereas 'Foundational' businesses are now primarily built in the private markets

## Private Equity

### Goods & Products



### Technology



### Health & Life



### Services



## Infrastructure and Real Estate



Most modern transformation themes are 'Foundational' and may need private markets ownership



'Spotlight' and 'Foundational' relevant



Primarily 'Foundational' driven

For illustrative purposes only. Source: "Private Markets Navigator", Partners Group (2022).



**Partners Group**  
REALIZING POTENTIAL IN PRIVATE MARKETS

# Investment example Private Equity: International Schools Partnership



## Key Metrics



Entry Date: July 2021  
Sector: Social infrastructure  
EV: EUR 2.1bn



## Asset Overview

- ISP is **one of the largest K-12 education platforms globally**, with its schools being non-selective, serving local children and having a strong English language offering
- Global social infrastructure platform ISP currently **educates c.55k children** in 57 schools across 16 countries

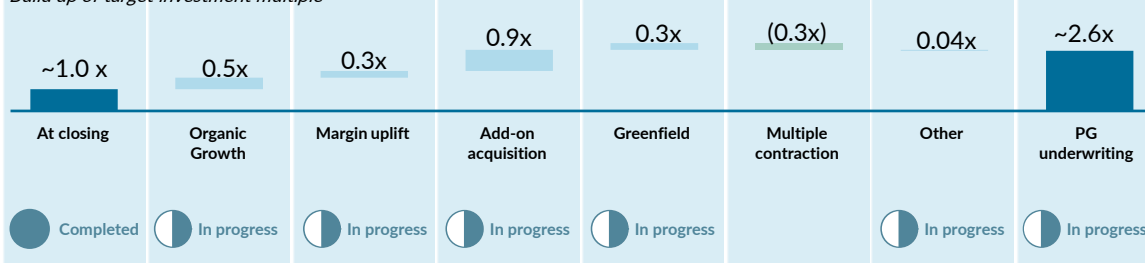
## Investment Merits

- Stable cash flows:** Established sector resilience through the GFC, with average student lifetimes of 8-10 years, low churn
- Leading market position:** One of the largest K-12 education platforms globally in a highly fragmented market
- Barriers to entry:** Asset base is difficult to replicate given regulation and licensing requirements at the local level
- Low disruption risk:** Distance learning falls short in developing crucial socio-emotional skills, with a large platform such as ISP best equipped to manage changes brought on by Covid-19 and to embrace innovation

## Value Creation and Key Developments

**Transformational thesis** – To expand International Schools Partnership (ISP) into the leading international schools group globally, with its schools recognized across local communities and the global education sector for outstanding learning outcomes, ambition and growth.

### Build up of target investment multiple



- M&A strategy:** Execute on the company's proprietary M&A target database within the highly fragmented K-12 education market
- Improve educational offering and increase enrollment:** Drive growth in enrollments by leveraging (i) the strong and continuously improving educational offering, (ii) further investments in school facilities, and (iii) professionalization of admissions and marketing
- Organic growth and campus expansion:** Continue to drive growth of existing schools and addition of new ISP-developed schools to the portfolio
- Drive platform integration:** Deliver further synergies from recent acquisitions & across ISP

### Key Developments

- Since PG entry, ISP acquired nine additional schools, adding c. 9k students to the platform
- Two new school opening are planned for Q3 2022 in Vietnam adding an additional 3k seats
- M&A continues to be a focus also for FY23 with a strong pipeline of schools

**Past performance is not indicative of future results.** For illustrative purposes only. Figures as of 30 June 2022. There is no assurance that similar investments will be made or that similar returns will be achieved. Performance is calculated net of underlying fees (if any) and gross of Partners Group fees. Targets are based on investment base case. There is no guarantee that targets will be achieved or that the investment will be successful. There is no assurance that the stated investment strategy will occur. Asset represents a typical investment in the social infrastructure sector. Source: Partners Group (2022).



**Partners Group**  
REALIZING POTENTIAL IN PRIVATE MARKETS

# Investment example Infrastructure: VSB Group



## Key Metrics

Entry Date: April 2020

Sector: Renewable Energy

EV: n.a.



## Asset Overview

- VSB is a leading **European renewables platform**, active in the **development, construction and ongoing management** of projects in solar PV, wind, hydro and battery
- Key markets are **Germany and France**
- Significant operational assets** across the platform



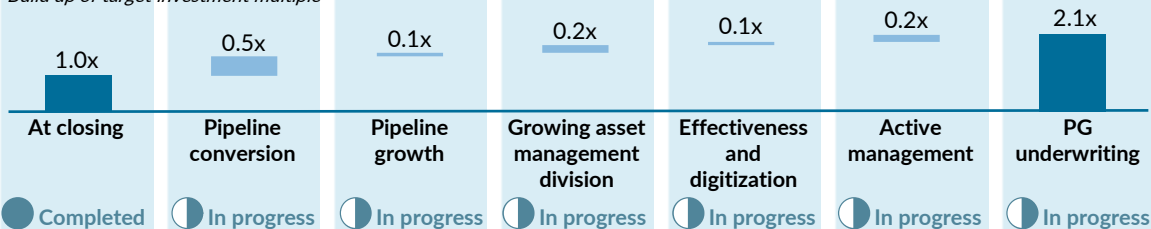
## Investment Merits

- Established development platform** with more than 1.1 GW of successful project development in core European markets with long-term subsidy schemes
- Sizeable pipeline** of more than 7 GW in capacity, diversified across geographies and technologies
- Ideally positioned to benefit from the **trend of electrification** in the energy sector globally

## Value Creation and Key Developments

**Transformational thesis** - to transform VSB into a leading European renewables platform with a strong expansion pipeline.

Build up of target investment multiple



- Conversion of the sizable pipeline** into operating projects on time and budget as well as the continuous advancement of pipeline projects
- Pipeline growth** via investments in land & project acquisitions, a move into new markets and the positioning of VSB as a repowering pioneer
- Profitable growth in the Asset Management division** on the back of the pipeline conversion and an extended service offering into new markets and technologies to become a market leader for asset management services
- Effectiveness & digitization** by implementing a company-wide ERP system, cash-pooling and tax-efficient fiscal unity
- Active Management** through structuring of efficient financing of operational assets to recycle the cash into new developments

### Key Developments

- Significant growth achieved during PG's ownership with 300MW of project rights acquired across Europe in Finland, France, Germany and Poland
- In July 2022 VSB sold two wind farms to a Finnish utility company (190 MW installed capacity)
- Over Q2 2022, PG increased its commitment to VSB to accelerate project development, unlock capital-intensive repowering projects and M&A opportunities

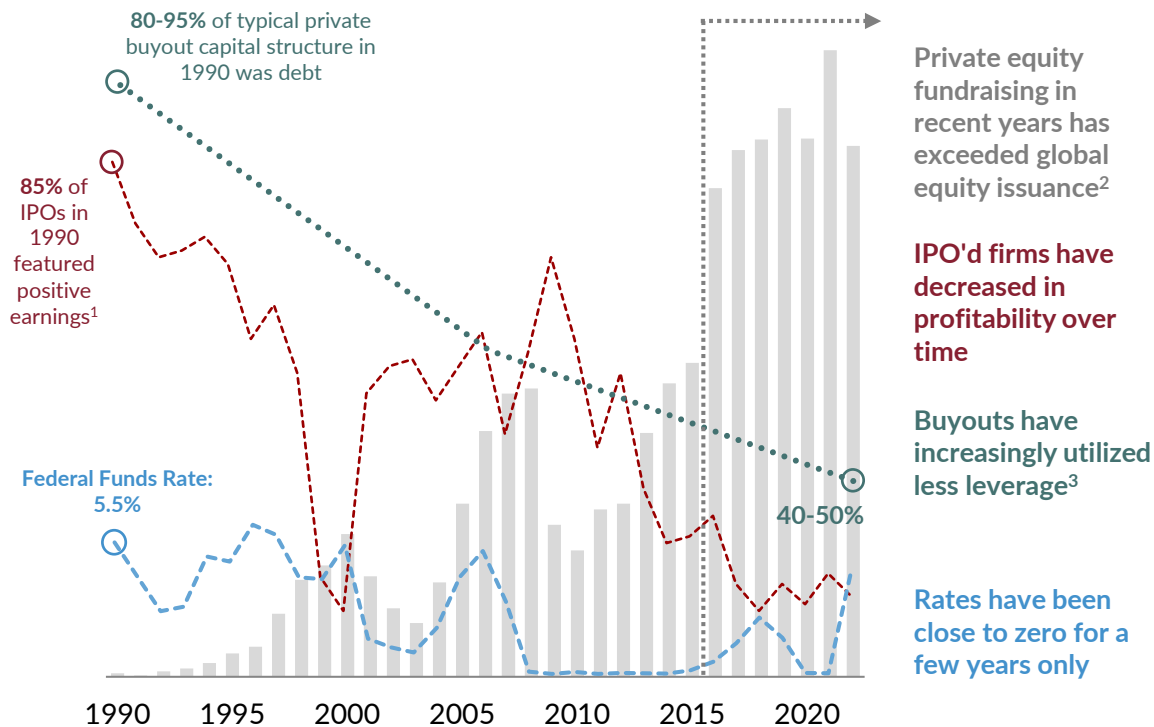
**Past performance is not indicative of future results.** For illustrative purposes only. Figures as of 30 June 2022. There is no assurance that similar investments will be made or that similar returns will be achieved. Performance is calculated net of underlying fees (if any) and gross of Partners Group fees. Targets are based on investment base case. There is no guarantee that targets will be achieved or that the investment will be successful. There is no assurance that the stated investment strategy will occur. Asset represents a typical investment in the European renewable energy infrastructure sector. Source: Partners Group (2022).



**Partners Group**  
REALIZING POTENTIAL IN PRIVATE MARKETS

# The rise of private markets and its role change with public markets is structural

## Private markets have grown independent of a low-rate environment



The typical profile of an IPO investor has changed:

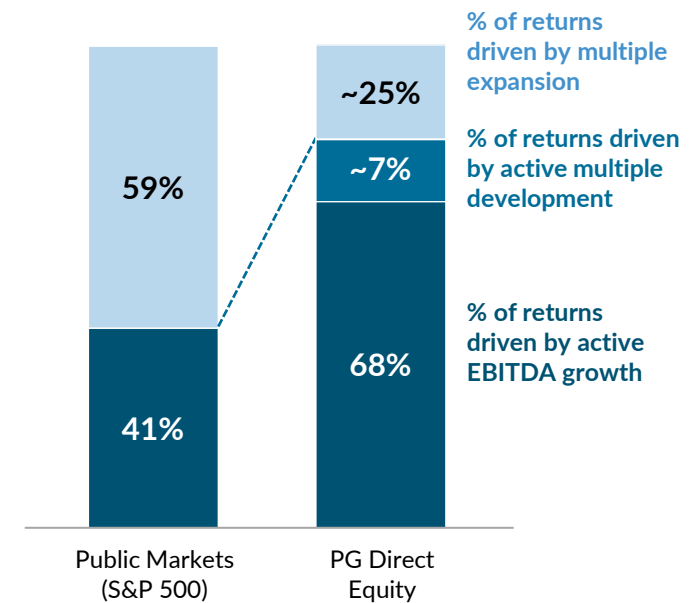
End of Era: Passive Equity Funds  
Surpass Active in Epic Shift

BlackRock

Retail traders are coming for  
the IPO market

S&P Global

## Private markets drive outperformance through active EBITDA growth vs. valuation change<sup>3</sup> (Dec 2011 – Dec 2021)



Valuation change and low rates have been an outsized tailwind for public markets, showing there was no tactical shift to private markets



Partners Group  
REALIZING POTENTIAL IN PRIVATE MARKETS

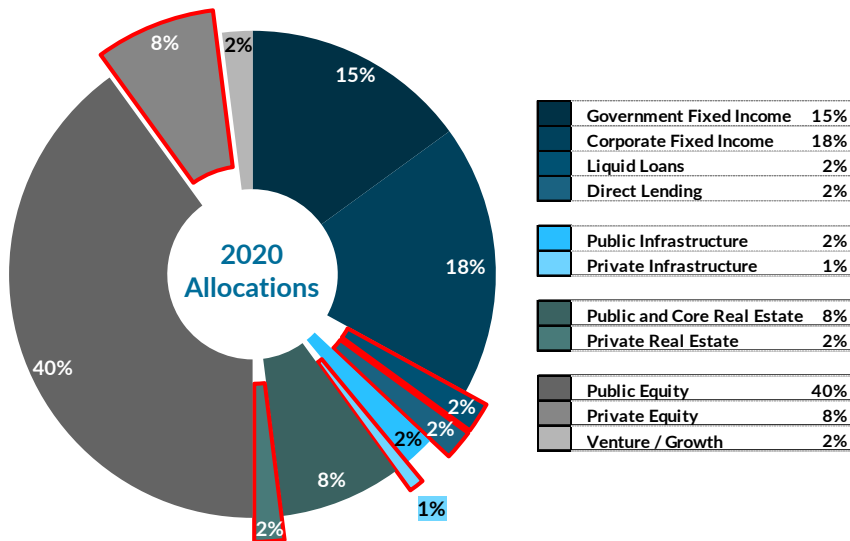
For illustrative purposes only. There is no assurance that similar results will be achieved. 1 Earnings per share > 0. Annual data, 8,775 IPOs in total. Source: Dr. Jay Ritter's dataset of global IPOs. Excludes IPOs with an offer price below USD 5 per share, unit offers, ADRs, closed-end funds, partnerships, acquisition companies, REITs, bank and S&L IPOs. 2. Figures shown are for private equity inclusive of venture capital. Source: Preqin. 3 Source: Partners Group Analysis (2023).

# Significant scale of private markets will require new allocation strategies and more focus from a portfolio and risk management perspective

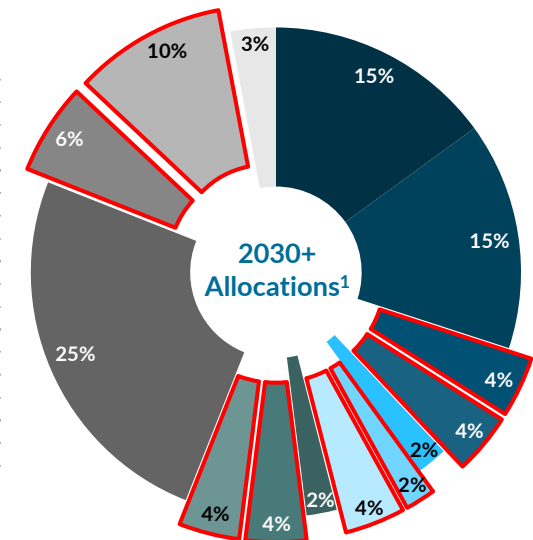
Private Markets Allocation: ~15-20%

~2x

Private Markets Allocation: ~30-40%



Government Fixed Income	15%
Corporate Fixed Income	15%
Liquid Loans	4%
Direct Lending	4%
Public Infrastructure	2%
(Passive) Core Private Infrastructure	2%
(Active) Non-Core Private Infrastructure	4%
Public Real Estate	2%
(Passive) Core Private Real Estate	4%
(Active) Non-Core Private Real Estate	4%
Public Equity	25%
(Passive) Core Private Equity	6%
(Active) Non-Core Private Equity	10%
Venture / Growth	3%



"The **trade into private assets has further to go**, the case against bonds is less strong but based on our inflation outlook, many **investors still need a higher real return**, and investors still should hold **more exposure to real assets** in their strategic allocations...**earning the equity risk premium requires a larger default level of private assets** than in earlier decades."

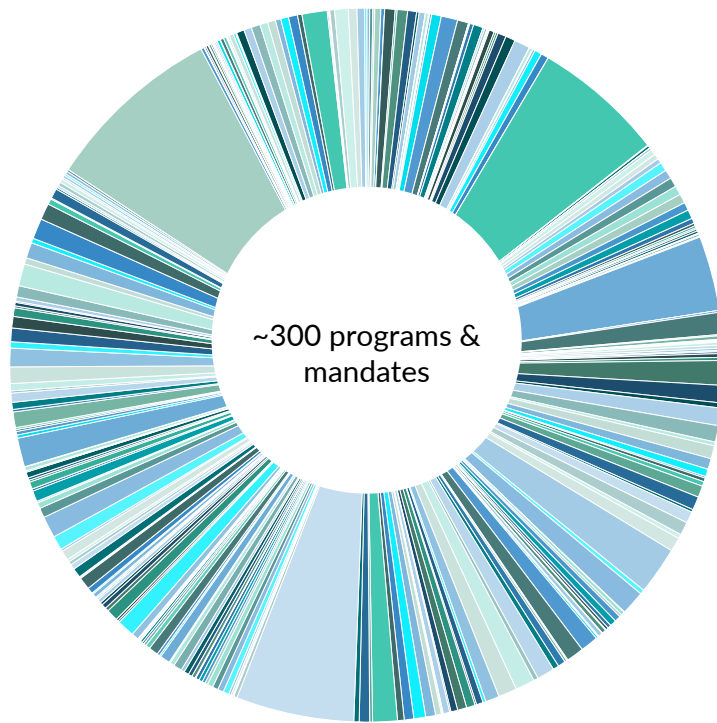
Jul 2022 BERNSTEIN

"The knock-on effect of the pandemic on listed markets since early 2020 has **accelerated asset owners' allocations to [private markets]**...At Alaska Permanent Fund Corporation, for example, private markets exposure comprised around 20% of the overall portfolio...this has risen to current levels of around **20% for private equity, 12% for real estate and 9% for private credit.**"

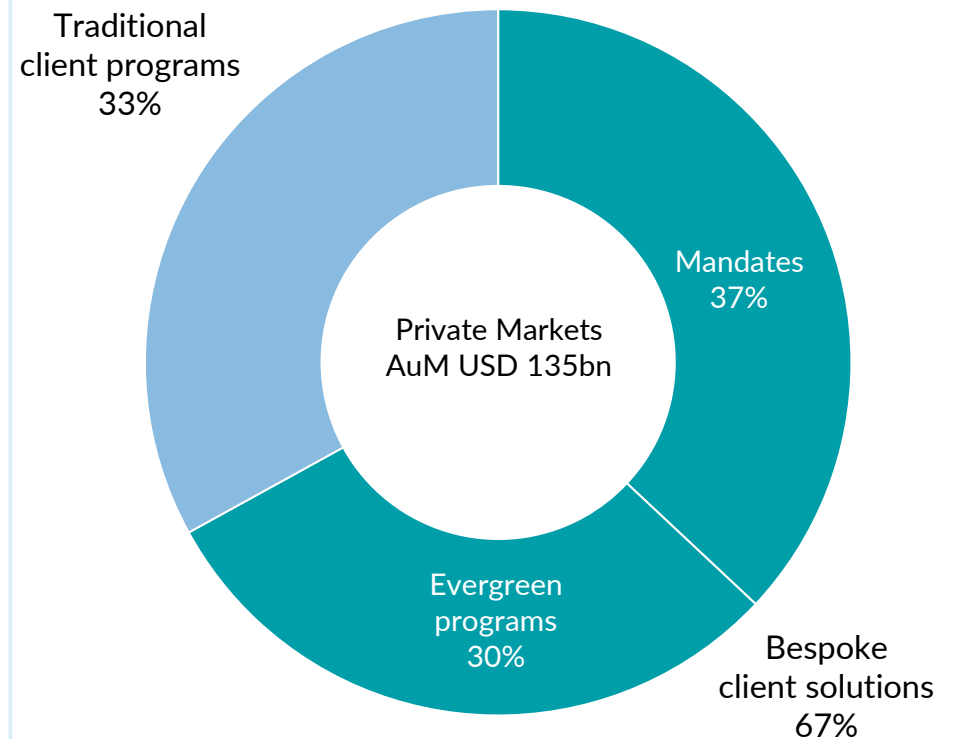
May 2022 RBC M&A

# Mandate platform and private markets portfolio and risk management at scale

Breakdown by private market programs and mandates<sup>1</sup>



Breakdown by program structure<sup>1</sup>



Clients have different needs leading to a variety of challenges for risk managers

<sup>1</sup> Assets under management as of 31 December 2022. For illustrative purposes only. Diversification does not ensure a profit or protect against loss. Source: Partners Group (2023).

## Table of contents

- 
- |   |  |
|---|--|
| 1 | Private Markets: New 'Traditional' Asset Class |
| 2 | Measuring and managing risks                   |
| 3 | Conclusions                                    |
-

## Questions for the risk manager

- |             |   |
|-------------|---|
| 1 Data      | How to deal with the fact that data availability is limited and NAVs are "self-reported"? |
| 2 Measures  | Which of the traditional risk management methods are applicable/relevant?                 |
| 3 Liquidity | How does the illiquidity of the asset class affect the challenges of a risk managers?     |
| 4 Access    | What are the consideration from the fact that the asset class is not easily accessible?   |
| 5 ...       | • ...   |

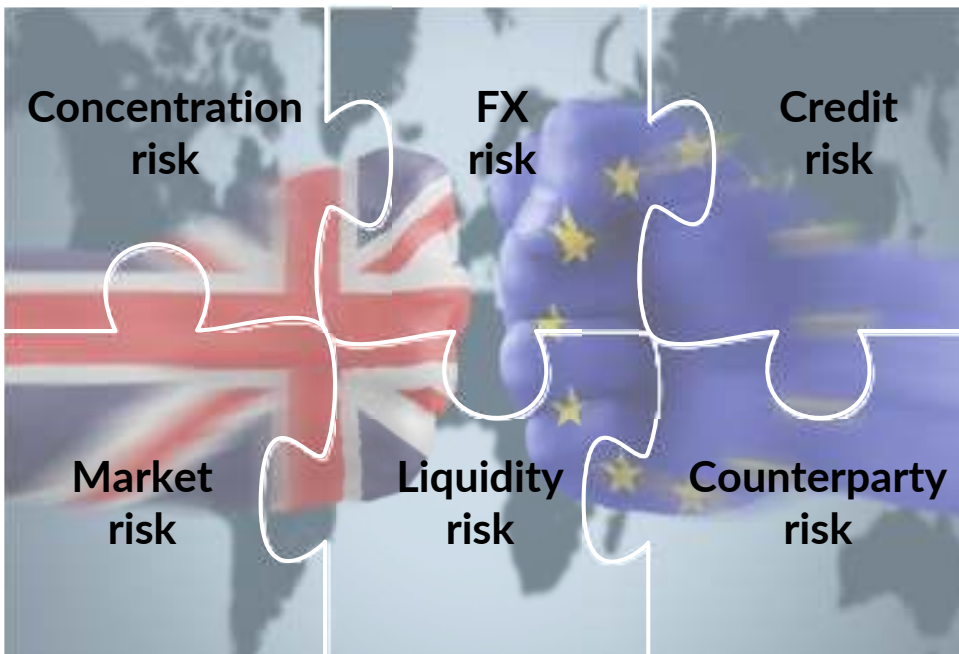
Access to data and liquidity as additional focus points for risk managers



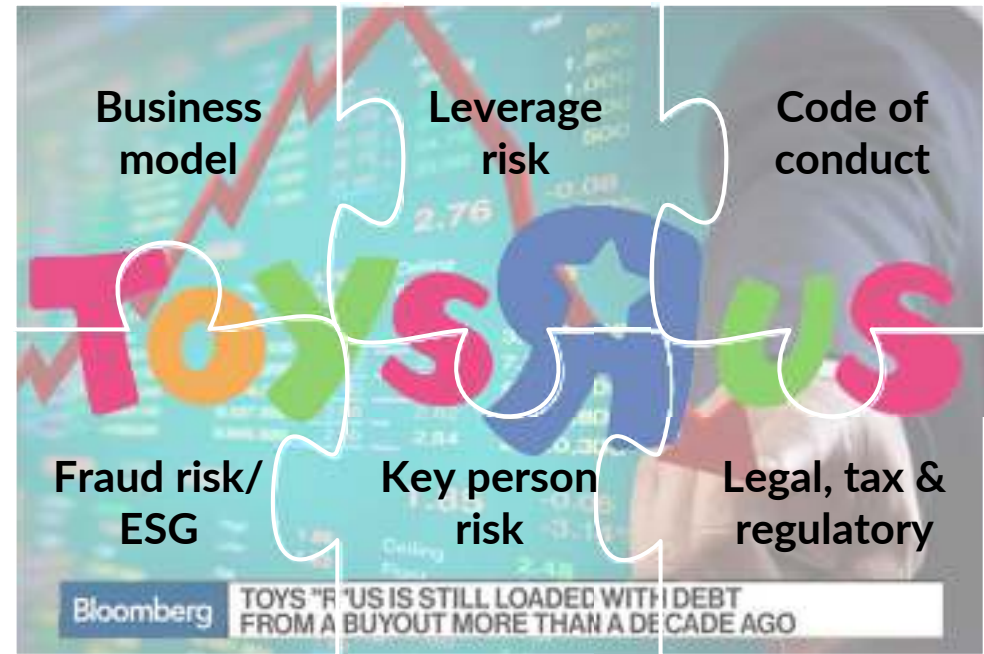
Partners Group  
REALIZING POTENTIAL IN PRIVATE MARKETS

# Investment risk landscape

## Portfolio risks

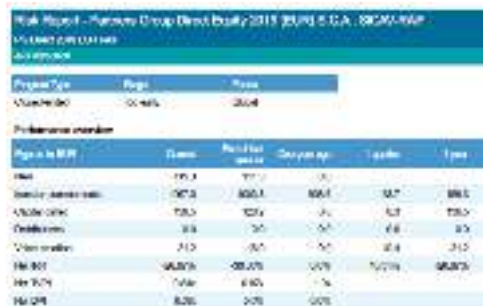
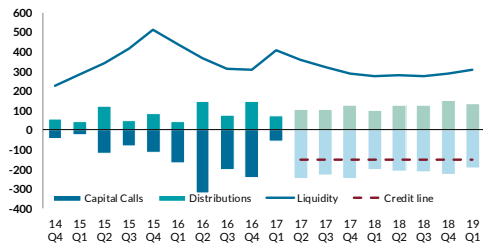


## Investment specific (idiosyncratic) risks



Identifying the risk factors and developing the strategies/ways to measure risks is paramount to successfully manage risks

## Investment risk management – Main responsibilities



## Investment level steering / liquidity risk management

- determination of optimal investment strategy
- cash flow forecasting / stress testing

## Market risk analysis

- proprietary factor modeling
- VaR / historical scenario analysis / expected shortfall

## Direct asset risk tracking

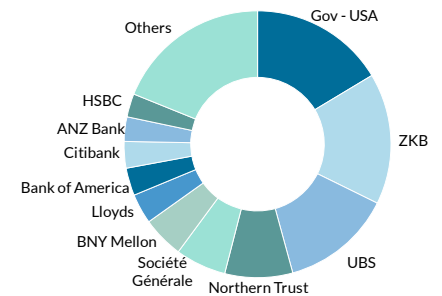
- independent risk assessment of asset specific risks
- escalation to the investment committees

## FX and counterparty risk management

- currency hedging strategies
- Partners Group counterparty rating / diversification

## Compliance & governance

- investment guidelines / concentration risk
- reporting to external parties (e.g. board)
- regulatory and contractual obligations



# Liquidity risk – Cash flow and investment level forecasts allow investors to manage their exposure

## Deep dive 1

### Investment level steering

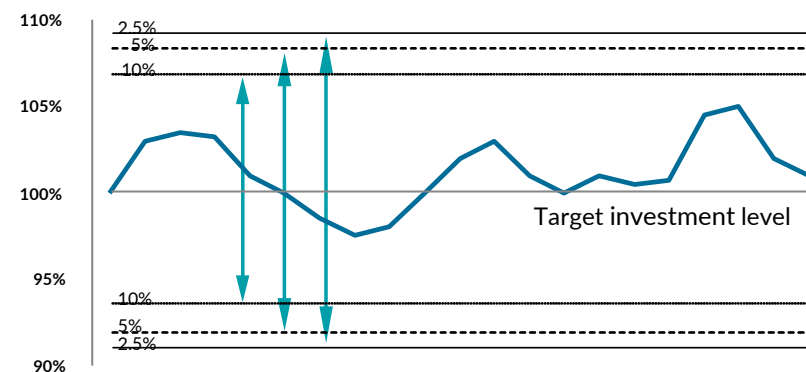
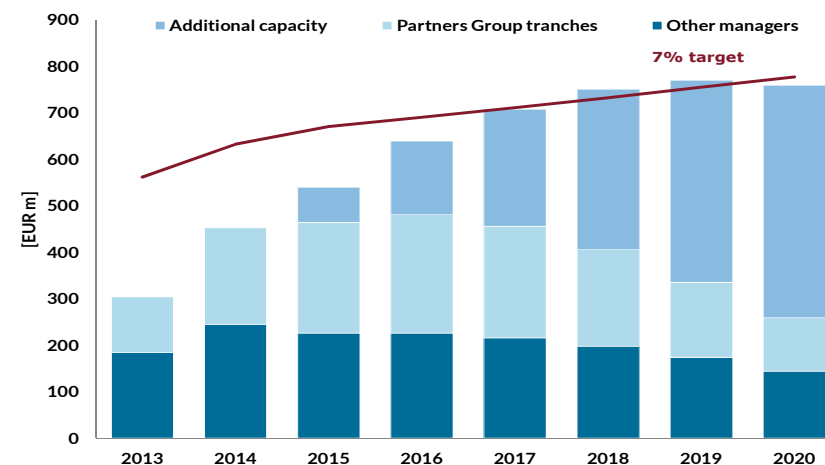
Being able to forecast exposure to private markets is a prerequisite to plan commitments, **achieve and maintain the targeted investment level** and **minimize return dilution**

### Cash/liquidity management

Anticipating cash flows is paramount to **manage liquidity**

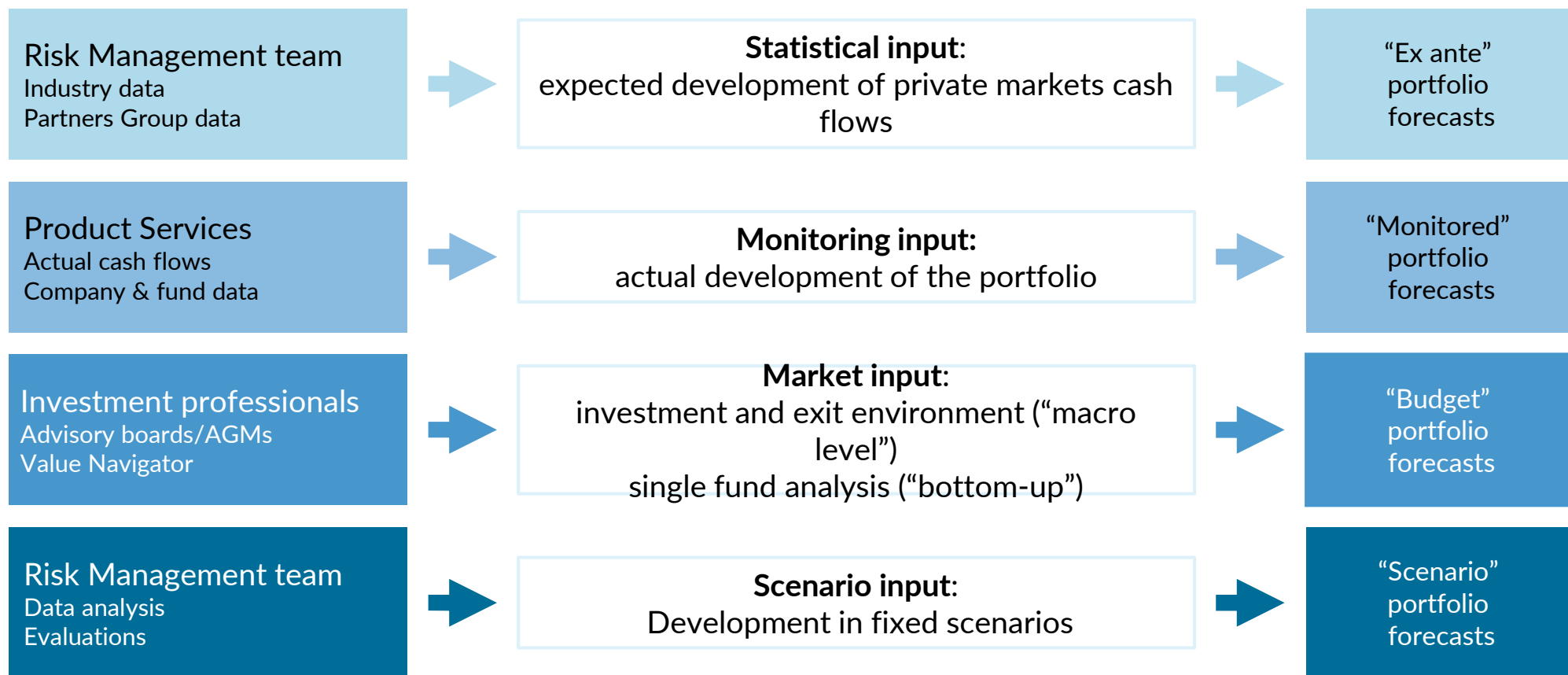
### Risk management

Assessing the variability of private markets cash flows, valuations, FX rates, etc., allows for **defining possible bandwidths for the portfolio development**



# Investment level steering - Partners Group's cash flow forecasting model

## Deep dive 1

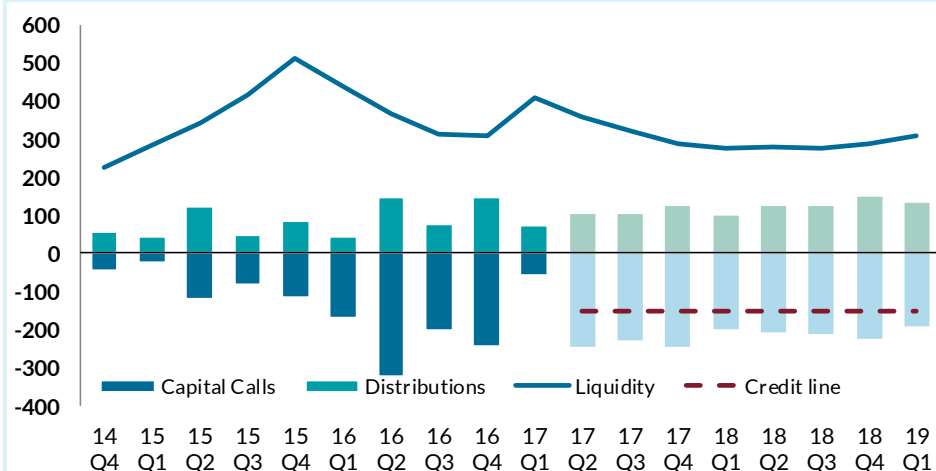


Cash flow modeling is more than statistics and mathematics

# Managing liquidity and investment levels

## Deep dive 1

### Base case liquidity profile



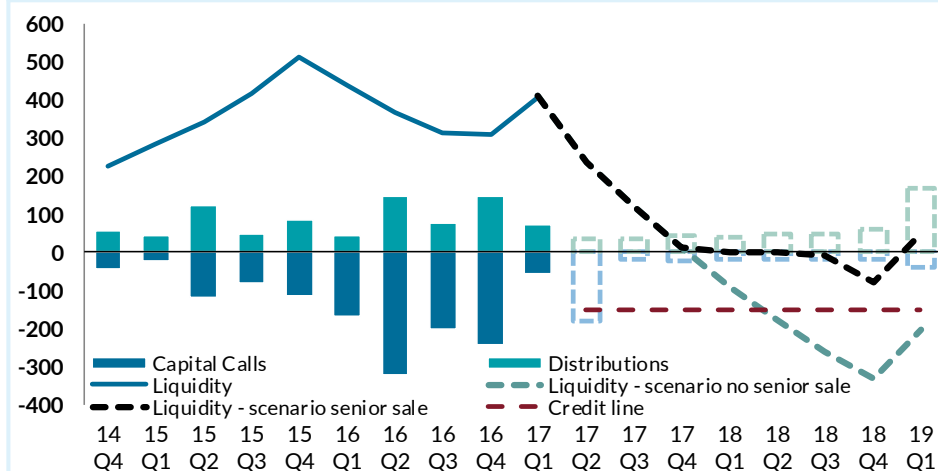
#### Forecast

- Net inflows
- Portfolio cash flows

#### Investment strategy

- How much to invest
- When to invest

### Liquidity stress scenario



#### Stress test

- Net outflows
- Portfolio cash flows and performance

#### Calibrate

- Allocation to (semi-) liquid assets
- Credit line

Achieve target investment level while balancing liquidity needs and sources in stress scenarios

Illustrative examples. Source: Partners Group model based on various assumptions. The illustration includes planned commitments. The actual development can deviate significantly. Past performance is not indicative of future performance.

# Direct Asset Risk Tracking (DART)

## Deep dive 2

### Purpose

- **Second line of defense** on direct investments
- **Comprehensive set of indicators** allow for holistic assessment of direct assets
- **Timely escalation** of underperformance to the Investment Committees

### Process

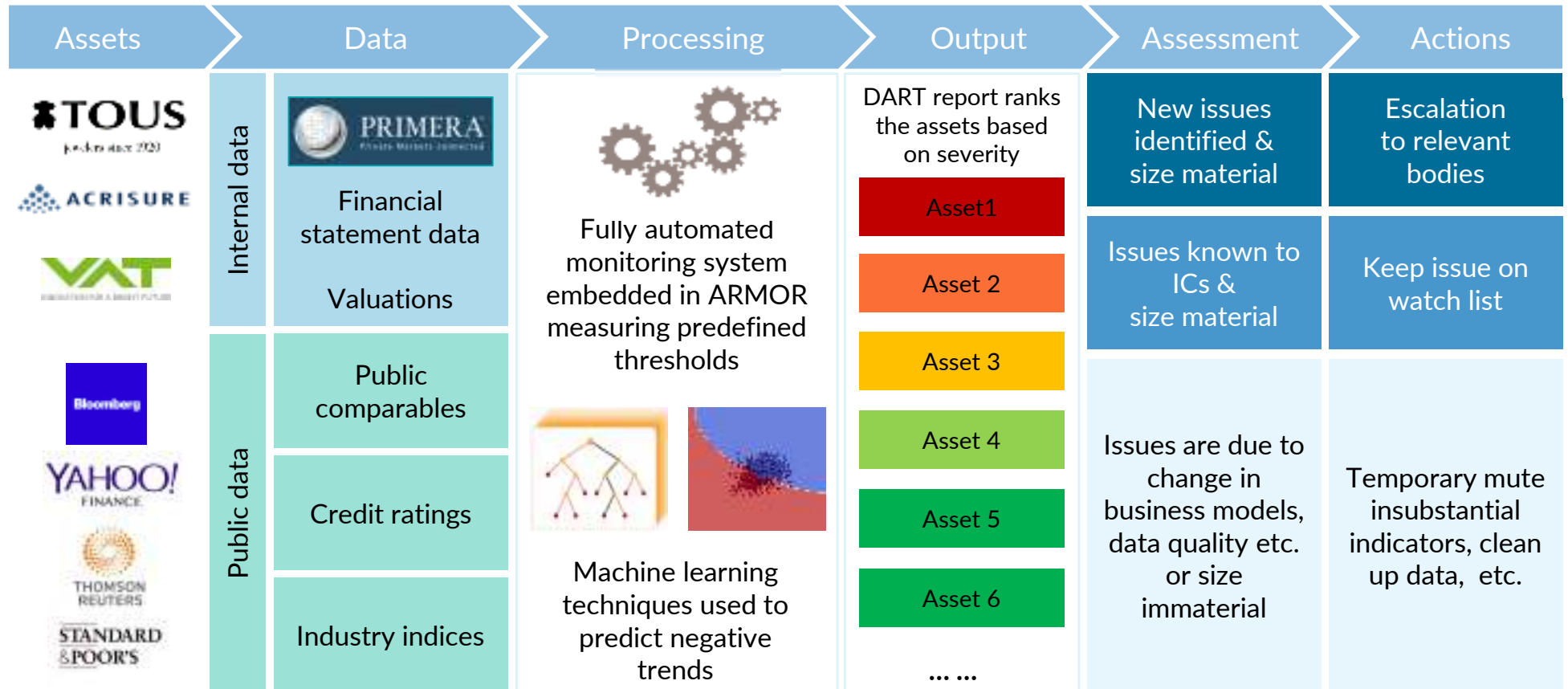
- **Independent risk assessment** of asset specific risks by the investment risk team
- **Tailored risk groups** for different private markets segments using proprietary and public data sources
- Flags are raised by comparison of several indicators against their **thresholds, which are calibrated based on regular backtesting and extensive analysis**

### Outcome

- **Automated report** scheduled within the ARMOR framework (Alert and Risk Monitor) embedded in PRIMERA with qualitative overlay
- **Escalation to the Global or Specialized Investment Committees**
- **Interest rate risk monitoring** on PEDI and INFR assets

# DART process overview

## Deep dive 2



Timely identification and escalation of possible negative developments in portfolio assets

# Data - DART indicator groups

## Deep dive 2

### Event

Sudden movements in short-term financial developments



### Trend

Continued underperformance in long-term financial developments



### Leverage

Healthy debt/EBITDA ratio\*



### Growth

Evaluate growth using net revenues



### Profitability

Monitor company profitability via EBITDA margin\*



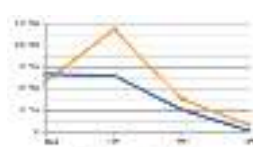
### Entry

Current financial status vs entry levels



### Base case / budget

Monitoring of up-to-date financial forecasts



### Industry/Macro

Monitor broad industrial trends, and the country's GDP, unemployment and interest rates



### Peer group

Company vs public comparables in terms of trend, growth and profitability



### Covenants

Monitor company contractual obligations via leverage headroom



\* For RE assets DART monitors occupancy rate, NOI and LTV instead of EBITDA, EBITDA margin and debt/EBITDA. For illustrative purposes only. Source: Partners Group

## Table of contents

- 
- |   |  |
|---|--|
| 1 | Private Markets: New 'Traditional' Asset Class |
| 2 | Measuring and managing risks                   |
| 3 | Conclusions                                    |
- 



## Private Markets risk management: So What?

“

Private markets is the new 'traditional' asset class

“

Private Markets growth and role change is structural...

“

... with real economy primarily build in private markets

“

Completely re-think asset allocation

“

Significant scale will necessitate more focus

“

Liquidity risk will need to be carefully managed

“

Close collaboration between risk and investments to understand underlying



## Contacts

Michael Studer  
Partner, Portfolio Solutions  
T +41 41 784 65 45  
[michael.studer@partnersgroup.com](mailto:michael.studer@partnersgroup.com)

Zugerstrasse 57  
6341 Baar-Zug  
Switzerland  
T +41 41 784 60 00

[partnersgroup@partnersgroup.com](mailto:partnersgroup@partnersgroup.com)  
[www.partnersgroup.com](http://www.partnersgroup.com)



**Partners Group**

REALIZING POTENTIAL IN PRIVATE MARKETS

# Disclaimer

Any security offering is subject to certain investor eligibility criteria as detailed in the applicable offering documents. The information contained herein is confidential and may not be reproduced or circulated in whole or in part. The information is in summary form for convenience of presentation, it is not complete and it should not be relied upon as such.

Any interests referenced herein have not been and will not be approved or disapproved by the U.S. Securities and Exchange Commission or by the securities regulatory authority of any U.S. state or any other relevant jurisdiction, and no other authority or commission has passed upon the accuracy or adequacy of this presentation. Any representation to the contrary is a criminal offense.

All information, including performance information, has been prepared in good faith; however, Partners Group makes no representation or warranty express or implied, as to the accuracy or completeness of the information, and nothing herein shall be relied upon as a promise or representation as to past or future performance. This material may include information that is based, in part or in full, on hypothetical assumptions, models and/or other analysis of Partners Group (which may not necessarily be described herein), no representation or warranty is made as to the reasonableness of any such assumptions, models or analysis. Any charts which represent the composition of a portfolio of private markets investments serve as guidance only and are not intended to be an assurance of the actual allocation of private markets investments. The information set forth herein was gathered from various sources which Partners Group believes, but does not guarantee, to be reliable. Unless stated otherwise, any opinions expressed herein are current as of the date hereof and are subject to change at any time. All sources which have not been otherwise credited have derived from Partners Group.

No representation is being made that any account or fund will or is likely to achieve profits or losses similar to the results being portrayed herein. The gross annual rate of returns represents the compound annual rate of return ("IRR") before management fees, organizational expenses and the general partner's allocation of profit, but in some instances (where indicated), net of the underlying general partner's fees and expenses. The net annual rate of return represents the IRR after management fees, organizational expenses and the general partner's allocation of profit. Actual realized returns on unrealized investments will depend on, among other factors, future operating results, the value of the assets, market conditions at the time of disposition, any related transaction costs, and the timing and manner of sale, all of which may differ from the assumptions and circumstances on which the valuations used in the performance data contained herein are based. Accordingly, the actual realized returns on these unrealized investments may differ materially from the returns indicated herein. Nothing contained herein should be deemed to be a prediction or projection of future performance of any investment.

Certain information contained in this presentation constitutes "forward-looking statements," which can be identified by the use of forward-looking terminology such as "may", "will", "should", "expect", "anticipate", "target", "project", "estimate", "intend", "continue" or "believe" or the negatives thereof or other variations thereon or comparable terminology. Due to various risks and uncertainties, actual events or results or the actual performance of any investment may differ materially from those reflected or contemplated in such forward-looking statements.

**Material notes to investors based in Australia Where product is available for acquisition:** The information provided in this [document] is provided by Partners Group Private Markets (Australia) Pty Limited ACN 624 981 282 AFSL 509285 (PGA). The information contained in this [document] is not financial product advice and does not take into account your objectives, financial situation or needs. You should consider how appropriate the information is having regard to your objectives, financial situation and needs. You should consider the [document] for the [Fund], and consider talking to a financial adviser before making a decision to invest in, or continuing to hold, interests in the [Fund]. Interests in the [Fund] are issued by [the General Partner]. Please approach your Client Solutions representative for the [document] for the [Fund]. **Where product is not available for acquisition:** The information provided in this [document] is provided by Partners Group Private Markets (Australia) Pty Limited ACN 624 981 282 AFSL 509285 (PGA). The information contained in this [document] is not financial product advice and does not take into account your objectives, financial situation or needs. You should consider how appropriate the information is having regard to your objectives, financial situation and needs. Interests in the [Fund] will be issued by [the General Partner]. You should consider the [document] for the [Fund] which will be made available when the [Fund] is released, and consider talking to a financial adviser before making a decision to invest in interests in the [Fund].

**Material notes to investors based in Brazil** This document has been prepared exclusively for the purpose of providing information, and it is not to be considered as an offer for the sale of any security. The securities may not be offered, sold, redeemed or transferred in Brazil, as any public offering or distribution of securities in Brazil is not legal without prior registration with CVM. Persons wishing to offer or acquire securities in Brazil should consult their own counsel as to the applicability of the registration requirement or any exemption therefrom.

# Disclaimer

**Material notes to investors based in Canada** This material is presented to investors on behalf of Partners Group AG. Statements herein do not necessarily pertain to Partners Group (USA) Inc., an affiliate of Partners Group AG. Partners Group (USA) Inc. is registered as an exempt market dealer and portfolio manager under the securities laws of each of the Provinces of Canada. For information specifically regarding Partners Group (USA) Inc., please contact us.

**Material notes to investors based in the People's Republic of China** This material is presented to investors by Partners Group (Shanghai) Co., Ltd. on behalf of Partners AG. Partners Group (Shanghai) Co., Ltd is not representing any other entity. Any products referenced herein have not been submitted to or approved/verified by or registered with the China Securities Regulatory Commission or other relevant governmental authorities in the PRC. Such products may not be offered, sold or delivered or available for reoffering, resale or redelivery directly or indirectly to any person in the PRC, other than in full compliance with the relevant laws and regulations of the PRC. PRC investors are responsible for obtaining all relevant government regulatory approvals/licenses, verifications and/or registrations.

**Material notes to investors based in the Dubai International Financial Centre** Partners Group Advisors (DIFC) Ltd. is regulated by the DFSA. This material relates to a financial product which is not subject to any form of regulation or approval by the Dubai Financial Services Authority ("DFSA"). The DFSA has no responsibility for reviewing or verifying any prospectus or other documents in connection with this financial product. Accordingly, the DFSA has not approved this document or any other associated documents nor taken any steps to verify the information set out in this document, and has no responsibility for it. The financial product to which this document relates may be illiquid and/or subject to restrictions on its resale. Prospective purchasers should conduct their own due diligence on the financial product. If you do not understand the contents of this document you should consult an authorized financial adviser. This material and related financial products or services are only available to Professional Clients, as defined by the DFSA.

**Material notes to investors based in Hong Kong** The contents of this document have not been reviewed by any regulatory authority in Hong Kong. If you are in any doubt about any of the contents of this document, you should obtain independent professional advice. The shares / units of the collective investment scheme(s) mentioned may not be offered or sold by means of any document in Hong Kong other than (a) to "professional investors" as defined in the Securities and Futures Ordinance (Chapter 571 of the Laws of Hong Kong) (the "SFO") and any rules made under the SFO; or (b) in other circumstances which do not result in the document being a "prospectus" as defined in the Companies (Winding Up and Miscellaneous Provisions) Ordinance (Chapter 32 of the Laws of Hong Kong) (the "CO") or which do not constitute an offer to the public within the meaning of the CO. The shares / units of the collective investment scheme(s) mentioned in this document are or are intended to be disposed of only to persons outside Hong Kong or only to "professional investors" as defined in the SFO and any rules made under the SFO. **The content of this material is directed at "professional investors" as defined in the SFO and any rules made under the SFO, only.** Therefore, neither the information made available in this document shall be construed as a distribution in or from Hong Kong to any person other than "professional investors" as defined in the SFO and any rules made under the SFO.

**Material notes to investors based in Italy** This information material is presented to investors by Partners Group (Luxembourg) S.A., Milan Branch, a branch enrolled in a dedicated section of the Bank of Italy's Register (registration number 11). Partners Group (Luxembourg) S.A., Milan Branch is a branch of Partners Group (Luxembourg) S.A., an AIFM duly licensed by the Commission de Surveillance du Secteur Financier (CSSF). This document has been prepared exclusively for the purpose of providing information, and it is not to be considered as an offer for the sale of any security. Pursuant to this document, the interests may not be offered and a circular, advertisement or other document or offering material relating to such interests, may not be published, distributed or made available in the Republic of Italy or to any Italian resident investor in circumstances which would be in breach of relevant laws and regulation.

**Material notes to investors based in Japan** The registration number for Partners Group Japan Kabushiki Kaisha in Japan is Kanto Local Finance Bureau No. 3099. (Financial Instruments business). Partners Group Japan Kabushiki Kaisha is a member of the Type II Financial Instruments Firms Association. The Financial Instruments Mediation Assistance Center ("FINMAC") is the appropriate financial arbitrator for any complaints or disputes regarding the firm's Type II Financial Instruments Business. (FINMAC phone +81 3 3667 8009 Fax +81 3 3669 9833)

**Material notes to investors based in Korea** This document has been prepared exclusively for the purpose of providing information, and it is not to be considered as an offer for the sale of any security. The securities may not be offered, sold, redeemed or transferred in Korea, as any public offering or distribution of securities in Korea is not legal without prior registration with the Korean Financial Services Commission. Please note that Partners Group Singapore Pte. Ltd., Korea Branch is not a licensed entity in Korea.

# Disclaimer

**Material notes to investors based in Singapore** Partners Group (Singapore) Pte. Ltd. holds a Capital Markets Services Licence (Fund Management) of the Monetary Authority of Singapore (MAS), Licence No. CMS1000493-1. The collective investment scheme(s) mentioned in this document is/are not authorised or recognised by the Monetary Authority of Singapore (MAS) and units in the scheme(s) are not allowed to be offered to the retail public. The content of this document is directed solely at persons who are "institutional investors" as defined in section 4A of the Securities and Futures Act, Chapter 289 of Singapore (the "SFA"), or "relevant persons" as defined in section 305(5) of the SFA.

**Material notes to investors in Sweden** This marketing material has not and will not be registered with or approved by Finansinspektionen (the Swedish Financial Supervisory Authority). Accordingly, this marketing material may not be made available, nor may the interests offered hereunder be marketed and offered for sale in Sweden, other than under circumstances which are deemed not constitute an offer to the public in Sweden under the Swedish Financial Instruments Trading Act (1991:980) or the Swedish Investment Funds Act (2004:46).

**Material notes to investors based in Switzerland** The information in this document is to be considered promotion. The collective investment schemes mentioned have not been licensed by the Swiss Financial Market Supervisory Authority (the "FINMA") for distribution to non-qualified investors pursuant to Article 120 para. 1 to 3 of the Swiss Federal Act on Collective Investment Schemes of 23 June 2006, as amended ("CISA"). The paying agent in Switzerland for the collective investment scheme is Credit Suisse (Switzerland) Ltd. (Mailing address: Credit Suisse (Switzerland) Ltd., Paradeplatz 8, CH-8001 Zurich) and the representative is Partners Group AG (Mailing address: Partners Group AG, Zugerstrasse 57, 6341 Baar, Switzerland). The Prospectus, Articles of Association and further information documentation, such as the annual and half-yearly reports as well as the information on the historical performance (if any) may be obtained free of charge at the registered office of Partners Group AG.

**Material notes to investors based in the United Kingdom** The products outlined in this communication are controlled investments for the purposes of the financial promotion restriction under section 21 of the Financial Services and Markets Act 2000 ("FSMA") and are unregulated collective investment schemes for the purposes of section 238 of FSMA. This communication is exempt from the general restriction under sections 21 and 238 of FSMA on the communication of invitations or inducements to engage in investment activity on the grounds that it is made only to or directed only at persons to whom it may lawfully be distributed. Where products or services are provided from outside the United Kingdom, they may not be covered by the UK regulatory regime or the Financial Services Compensation Scheme.

**Material notes to investors based in the United States of America** Any interests referenced herein may not be sold, transferred or resold (i) except as permitted under the constituent documents of that fund and (ii) in accordance with applicable securities laws, including the US Securities Act of 1933, as amended, and the US Investment Company Act of 1940, as amended. This presentation may relate to investments managed by any of the following: (i) Partners Group AG, which is not registered with the SEC as an investment adviser pursuant to the US Investment Advisers Act of 1940, as amended (the "Advisers Act"); (ii) Partners Group (USA), Inc., which is registered as an investment adviser pursuant to the Advisers Act or (iii) another Partners Group advisory affiliate. Please contact us for more information regarding how specific assets may be managed within the Partners Group enterprise. The information provided herein by Partners Group and its affiliates (the "Provider") is not intended to be, and should not be regarded as, "investment advice" or a "recommendation" within the meaning of 29 C.F.R. § 2510.3-21. All of the information provided herein is intended to be responsive to requests made by the requesting party (the "Client") in order to facilitate the Client's independent decision making process regarding whether to engage the Provider for the services described herein. The Client is advised to consult with its legal, tax and other independent advisers that are unrelated to the Provider before making a decision regarding whether to engage the Provider. The information provided herein is solely in response to the informational requests made by the Client herein and is not intended to constitute advice with respect to whether the Provider should be engaged to provide the services requested. The information provided herein is intended to be used solely by the Client in considering the services described herein and may not be used for any other reason, personal or otherwise. The Provider did not participate, offer input, and was not involved in any way in the preparation of the requests herein, and the Provider has not expressed any opinion on whether the requests are appropriate or sufficient for the Client to make its determination regarding whether to engage the Provider. Notwithstanding this intention, any and all information provided herein that is determined to constitute "investment advice," or a "recommendation," within the meaning of 29 C.F.R. § 2510.3-21 is provided solely on the basis that the Client is, or is represented by, an independent fiduciary that satisfies the criteria set forth in 29 C.F.R. § 2510.3-21(c)(1).