Investing in stable assets and transformative growth

Private Markets Navigator First Half 2017
Private markets outlook 04
Private equity 09
The industry view 15
Private real estate 18
Private debt 23
Private infrastructure 27
Liquid private markets 32
Portfolio perspectives 34
Contacts 38

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Welcome to Partners Group’s Private Markets Navigator for H1 2017. Published twice a year, the Private Markets Navigator shares Partners Group’s outlook for all private markets asset classes over the next six months.

The global economy continues to expand at a modest, yet resilient pace. However, since our last relative value assessment, a number of unexpected geopolitical events have further increased uncertainty as well as volatility in capital markets. In this environment, we continue to center our investment strategy around predictability and stability on the one hand, and transformative trends on the other. We focus on value creation strategies as the principal means of generating sustainable returns and look for assets characterized by valuation resilience.
Eight years after emergency monetary policies were set in motion, capital markets remain flush with liquidity and valuations are oscillating at lofty levels. External shocks (Brexit, the surprise US election outcome) have so far only temporarily pulled down asset prices as the low-rate, high-liquidity environment continues to trigger yield-seeking behavior. At the same time, the global economy continues to expand at a modest, yet solid pace. Select indicators give reason for mild optimism: emerging markets are bottoming out; potential infrastructure spending, tax cuts and deregulation in the US would be supportive of growth; and the impact of the Brexit vote on the UK has been less significant than expected thus far. We stick to our projection of continued low growth in the mid term.

On the capital markets side, however, there may be more significant stints of volatility, with inflation and wage pressure picking up in the US, monetary policy in the Eurozone and Japan running out of steam, and persistent tail risks (e.g. uncertainty around the new administration’s political agenda in the US, Brexit negotiations, German/French elections, China debt). The prospect of rising rates in the US, continued muted earnings growth, increasing corporate leverage in parts of the world and stretched asset prices may indicate valuations are approaching peak levels for the current cycle. In this environment, we place even more emphasis on a prudent investment approach and on selecting assets with strong valuation resilience that benefit from transformative trends, offer better growth opportunities and where we can create value through active management to strengthen end valuations.

One important consideration is the evolution of rates, which in the US have started turning up over the past few months. Higher rates would have an impact on the attractiveness and valuation of nearly all asset classes, albeit in different ways. Indeed, there can be many different rate outcomes – two of which we describe at the end of this chapter (see box texts on pages 7-8: ‘Rising (US) interest rates and their impact on private markets’). Our base case outcome is closer to the ‘positive’ rate scenario, where rates rise at a more gradual pace on the back of higher inflation and modest GDP growth, which should be neutral to even slightly positive for most types of private market assets and strategies. We do, however, acknowledge the risk of the ‘adverse’ scenario where rates rise at a faster pace, potentially also with an increase in real rates and more disappointing GDP growth. Furthermore, rate developments will not be the sole driver of the investment landscape; coupled
with the presence of other political and economic risks, such as those mentioned above, our investment approach incorporates many elements of the strategies that would somewhat shield our portfolio assets from the adverse impact of higher (real) rates. In particular, these include the strong focus on value creation and revenue stability. These characteristics are of particular interest in an unfavorable market environment and are highly valued and appreciated by future buyers. And while we believe in a more positive outcome, the adverse scenario also has its virtues and we stand ready to deploy capital at more attractive entry valuations in the right sectors and strategies should it materialize.

US: demand for modernized and digital ‘live, work, play’ lifestyles

The US economy is expanding at a relatively solid pace, predominantly as a result of domestic demand dynamics. Real wages are increasing and gradually rebounding house prices are enhancing personal finances. Corporate earnings have turned positive again and fiscal spending is contributing to the economic expansion. Business investments remain sluggish though and, post-election, may be further delayed by policy uncertainty. All in all, the outlook is modestly encouraging, with the prospect of potentially higher infrastructure spending, corporate and personal income tax cuts and deregulation of select industries. Nonetheless, potential trade barriers contain material downside risks to the economy. With rising inflation and a vibrant labor market, US rates are likely to rise. The higher expected fiscal deficit spending may put further upward pressure on longer-dated government bonds and there is a risk that a strong US Dollar and higher financing costs will weigh on margins and purchasing power. On the corporate side, low top-line growth and potentially higher rates make us focus on high-growth niche industry sectors (or sub-sectors) where pricing power is significant and margins robust.

As an example, a transformative evolution relevant to all sectors is the acceleration of digitalization, which now impacts many spheres of our lives and is actively altering the way people work and live, as well as the way companies operate. Examples of this trend include online shopping, remote health monitoring, robotic manufacturing, and B2B and B2C communication through apps and online portals. Leaders in digital adoption are one step ahead of their peers, typically making it a focus of any active ownership business strategy. In order to keep up with the trend towards digitalization, companies often revert to specialized outsourced service providers with the aim of enhancing efficiency (data center manageability, work flow processes) or improving customer experience (online presence, new offerings). One attractive investment focus is represented by IT service providers facilitating digital adoption and usage by means of cloud services, big data analytics or cyber security.

Digitalization now impacts many spheres of our lives. It is actively altering the way people work and live, as well as the way companies operate.

Digitalization also has an infrastructure component, as growing data traffic results in higher demand for communication infrastructure. The build-out of towers and fiber cables enables data traffic growth and the adoption of 3G/4G. Regulatory support is strong, simplifying the permitting and licensing process for these assets. A factor that further supports this investment theme in the infrastructure space is the trend towards ‘open access networks’, which keep ownership of communication assets separate from service provision. New build and growth stage fiber assets, both subsea and terrestrial, offer attractive relative value propositions.

In real estate, there is a trend towards a new style of urbanization. Many tier two cities are transforming into major metros where the urban spirit is characterized by a combination of ‘live, work and play’ options. Office users are attracted by
highly ammenitized urban locations while people looking for a place to live are enticed by greater affordability and modernized property types. As part of this broader trend, we look for residential and office space located in cities where employment and population growth is above national averages. Examples include new residential developments in Austin, Texas, or redevelopments of downtown office markets, for example in Jacksonville, Florida.

Urban developments are in high demand

<table>
<thead>
<tr>
<th>City</th>
<th>Forecast population growth 2015-2020, advanced world</th>
</tr>
</thead>
<tbody>
<tr>
<td>Austin</td>
<td>15.1%</td>
</tr>
<tr>
<td>Brisbane</td>
<td>8.5%</td>
</tr>
<tr>
<td>Singapore</td>
<td>7.8%</td>
</tr>
<tr>
<td>Melbourne</td>
<td>7.1%</td>
</tr>
<tr>
<td>Jacksonville</td>
<td>7.1%</td>
</tr>
<tr>
<td>Toronto</td>
<td>6.5%</td>
</tr>
<tr>
<td>Washington, D.C.</td>
<td>5.5%</td>
</tr>
<tr>
<td>London</td>
<td>5.2%</td>
</tr>
<tr>
<td>Sydney</td>
<td>5.0%</td>
</tr>
<tr>
<td>Seattle</td>
<td>4.5%</td>
</tr>
<tr>
<td>Paris</td>
<td>0.8%</td>
</tr>
<tr>
<td>New York</td>
<td>0.2%</td>
</tr>
<tr>
<td>Tokyo</td>
<td>0.2%</td>
</tr>
</tbody>
</table>


Europe: focus on tangible growth strategies

Our top-down outlook on Europe remains modestly constructive. The solid but slow recovery in the Eurozone is supported by ECB stimulus and domestic demand as unemployment rates are slowly edging lower and fiscal spending has become supportive of growth. Inflation has recently shifted upwards but remains low in the overall context, implying a continued low-rate environment. Risks remain, raising clouds over the mid-term outlook, including Brexit negotiations, rising populism and anti-EU sentiment, elections in France and Germany, a weak banking sector, continued high fiscal debt levels, lack of structural reform and a potential spillover risk from higher US rates. In the UK, the immediate economic fallout from the Brexit vote has been limited, somewhat cushioned by the depreciation of the British Pound. Longer-term implications remain uncertain (investment, hiring, consumption) but growth should remain positive. Higher inflation and increased deficit spending has lifted rates at the longer end of the curve, but as opposed to the US, we expect no significant monetary tightening in the mid term.

In this period of subdued top-line growth, we focus our sourcing efforts on assets characterized by revenue stability in niche sectors benefitting from promising growth prospects. For example, select innovative businesses in more traditional sub-sectors of the industrials sector, such as packaging, industrial product testing, quality assurance and smart meters and sensors, have exposure to stable end-markets. Similarly, increased financial regulation is driving the trend for so-called ‘regtech’ firms that use technology to help firms decrease their regulatory burden, as well as the trend of outsourcing services to specialized business experts.

In infrastructure, given the low growth and high fiscal debt levels, investment themes should be supported either by strong regulation and government incentives or an underlying transformational shift. Renewables remain an overweight as many European countries are struggling to reach their 2020 renewable energy targets. Select renewables are on the verge of achieving cost competitiveness through innovation and maturing technology, as is the case for offshore wind. Offshore wind in particular benefits from high load factors, reliability as an energy source and improved energy generation predictability – all of which promote network stability – making it a viable long-term investment theme even without government support.

We focus our sourcing efforts on assets characterized by revenue stability in niche sectors benefitting from promising growth prospects.

Within real estate, continued elevated unemployment rates and/or quickly accelerating property prices are curbing home ownership, making rental apartments a preferred investment focus in many parts of Europe. An added benefit of residential real estate is its defensive nature and revenue stability even during economic downturns. Further stable investment opportunities arise in the logistics space, where e-commerce has led to the need for distribution networks in close proximity to urban centers. We target value-added industrial properties in key distribution markets, including London, the Benelux countries and Germany.

Asia-Pacific/emerging markets: a case-by-case approach

In Asia-Pacific and the emerging markets, growth momentum has somewhat improved as Russia and Brazil are exiting recession and commodity prices are recovering. China’s near-term growth has stabilized, but at the cost of rising tensions in its economic strategy with the continued accumulation of debt and downward pressure on the Renminbi. Emerging markets growth should remain below pre-crisis levels as structural tailwinds, such as the inclusion into the global economy, slowing workforce growth, easing credit growth/deleveraging and China’s strong economic growth, are wearing off. In Japan, Abenomics is struggling to spur growth and inflation, as demographics and structural challenges prevent stronger growth. More positively, in economic terms, Japan should be shielded from international events and growth should be relatively unaffected. From an investment perspective, potentially rising US rates and US protectionism should not put emerging markets under increased scrutiny. USD-denominated
debt has accumulated in the emerging markets and margins are likely to suffer as a result. Furthermore, capital is likely to leave the region as US Treasuries are gaining in relative attractiveness. A stronger US Dollar is putting pressure on the Chinese Renminbi. Consequently, emerging market currencies are likely to remain volatile and underwriting assumptions should incorporate adequate risk premia.

We continue to place our investment efforts on higher-growth sub-sectors that benefit from secular trends, such as rising purchasing power and growing consumer preference for a more health-conscious lifestyle. Healthcare offers a vast range of opportunities, including for example, medical coverage in Indonesia and healthcare delivery in India. Typically, rising incomes result in a disproportionate increase in healthcare spending. In addition, in past editions of the Private Markets Navigator, we have reported on certain trends supporting the education sector: increased female participation in the workforce and demand for early childhood education is buoying the demand for education-focused childcare facilities. This transformative trend still translates into one of our investment preferences and is also further promoted by government support in certain countries.

Within infrastructure, fundamental growth requires asset enhancement and construction projects. For example, demand for electricity across emerging markets is growing. In Latin America, authorities are committed to improving supply quality for conventional energy, while countries in the Asia-Pacific region are incentivizing the construction of renewable energy projects.

In real estate, the current investment approach is more granular given local developments and regulations. Generally speaking, transformative trends, such as e-commerce and rising interconnectedness, favor logistics properties in locations within close proximity either to major infrastructure hubs (ports, airports, roads) and/or final-demand destinations. Select investment opportunities arise from changes in regulations. In Singapore, cooling measures for the residential market have led to an inflection point in the luxury housing market. As the segment starts bottoming out, coupled with the fact that developers are facing penalties for holding unsold property, residential units can be acquired at steep discounts to face value. In Hong Kong, the government set a 20-year target to redevelop 2,000 of the more than 9,000 buildings in the metropolitan areas that were built more than 30 years ago, opening value-add opportunities to acquire under-performing properties in prime or supply-constrained locations, supported by continued strong demand from Mainland Chinese firms.

Continued focus on stability and value-add opportunities

Low global growth combined with continued elevated valuations and tail risks warrant a highly selective investment approach. Across private markets, we look for assets that are characterized by valuation stability throughout adverse economic and market scenarios (including rising rates) and that have value creation potential to enhance end valuations. Value-accrative strategies provide for bottom-up growth beyond industry averages. We also continue to focus on assets that have the potential to flourish under transformational trends or that are protected by a natural barrier to competition, either as a result of their positioning or due to a proprietary advantage, such as, for example, a technological edge.

Rising (US) interest rates and their impact on private markets

The impact of rising rates on private markets and their expected future returns differ by asset class, depending on the cause and pace of rate rises.

- **Rising rates on the back of gradually rising inflation expectations and materially improving GDP growth** tend to be less disruptive to capital markets and may have a neutral to slightly positive impact on expected returns. Higher top-line growth (or occupancy rates for real estate) benefits revenues, somewhat mitigating the impact of rising financing costs (it should also be noted that many portfolio assets are required to hedge at least part of their interest rate exposure). Investor sentiment should remain resilient, partially or fully offsetting the negative impact of higher discount rates (or cap rates for real estate/project yields for infrastructure) on valuations.

- **A faster increase in yields**, possibly also driven by reasons other than rising inflation (expectations), however, could have more adverse repercussions. An unexpectedly fast increase in rates may not be compensated for by improving top-line growth or may even slow GDP growth. The pace of deleveraging slows as margins tighten and default rates are likely to increase. Higher discount rates (or cap rates/project yields), exacerbated by more conservative underwriting assumptions and lower risk appetite in capital markets would weigh on valuations, while an IPO exit path would become less tangible.

Using private equity as an example and acknowledging the fact that there is a wide range of potential outcomes, the table on page 8 shows how we believe the asset class would be affected by rising rates under two potential scenarios (positive and adverse); with the actual outcome most likely closer to the positive outcome.
Private equity return drivers under different rate scenarios

<table>
<thead>
<tr>
<th>Return drivers</th>
<th>‘Positive’ rate hike cycle: positive GDP growth, modestly rising inflation expectations, gradual rate increase</th>
<th>Risk scenario: ‘adverse’ rate hike cycle: fast rate hikes and/or rising real yields, unchanged/slowing GDP growth</th>
</tr>
</thead>
<tbody>
<tr>
<td>Revenues</td>
<td>(+) revenue growth remains robust.</td>
<td>(-) decelerating revenue growth.</td>
</tr>
<tr>
<td>Cash flow</td>
<td>(+/-) rising financing costs but partially hedged and somewhat offset by higher revenues.</td>
<td>(-) lower growth and higher rates (partially hedged) weigh on cash flow growth.</td>
</tr>
<tr>
<td>Margin</td>
<td>(+) margin expansion due to economies of scale.</td>
<td>(-) higher financing costs weigh on margins but are partially hedged.</td>
</tr>
<tr>
<td></td>
<td>(-) higher financing costs weigh on margins but are partially hedged.</td>
<td>(-) slowing pace of leverage reduction.</td>
</tr>
<tr>
<td></td>
<td>(-) slowing pace of leverage reduction.</td>
<td>(-) rising default rates.</td>
</tr>
<tr>
<td></td>
<td>(+/-) impact on default rate.</td>
<td></td>
</tr>
<tr>
<td>Multiple</td>
<td>(+) high liquidity and debt availability.</td>
<td>(-) risk aversion.</td>
</tr>
<tr>
<td></td>
<td>(-) higher discount rates.</td>
<td>(-) higher rates reduce liquidity and debt availability.</td>
</tr>
<tr>
<td></td>
<td>(+) increased competition for deals fuelled by liquidity and potentially lower multiples.</td>
<td>(+) lower discount rates.</td>
</tr>
</tbody>
</table>

Summary of the implications of rising rates by asset class for the broader private markets industry

<table>
<thead>
<tr>
<th>Impact on expected returns/investment implications</th>
<th>‘Positive’ rate hike cycle: positive GDP growth, modestly rising inflation expectations, gradual rate increase</th>
<th>Risk scenario: ‘adverse’ rate hike cycle: fast rate hikes and/or rising real yields, unchanged/slowing GDP growth</th>
</tr>
</thead>
<tbody>
<tr>
<td>Private equity</td>
<td>Income/growth: growth effects should outweigh higher (but still low) rates. Valuations: higher discount rates weigh on valuations, countered by increased risk appetite. Lower multiples should offer better entry prices for new investments. Implications: neutral to positive for most types of assets and strategies. In particular, cyclicals should do well; companies with pricing power can pass on higher input costs.</td>
<td>Income/growth: lower revenue/earnings growth if inflation (inputs) cannot be passed on; higher financing costs. Valuations: higher discount rates weigh on exit valuations and IPO activity. Implications: focus on companies with strong/resilient business models characterized by high margins and pricing power and value-add opportunities.</td>
</tr>
<tr>
<td>Private debt</td>
<td>Income/growth: rising Libor raises floor, but spread compression is driven by the positive growth environment. Default rates may rise modestly. Valuations: not applicable, given floating rate nature. Implications: mostly positive for most types of assets and strategies.</td>
<td>Income/growth: spread widening due to risk aversion. Lower growth/earnings increase (expected) default rates and refinancing risk. Valuations: not applicable, given floating rate nature. Implications: focus on companies with strong/resilient business models characterized by high margins/pricing power.</td>
</tr>
<tr>
<td>Private real estate</td>
<td>Income/growth: increasing occupancy (capped by full occupancy) and rising rental income (inflation-linked, rising demand), somewhat offset by higher financing costs. Valuations: impact on cap rates uncertain but most likely neutral to positive (i.e. unchanged or lower cap rates) given buoyant risk appetite and debt availability. Rising (inflation-linked) income should also support cap rates (and/or compensation for potentially lower end valuations). Implications: mixed; more likely positive for most asset types and strategies, particularly for assets with the ability to benefit from rising occupancy and rental income.</td>
<td>Income/growth: higher financing costs and potentially lower rental income (rents/occupancy; inflation unchanged/coming down). Valuations: higher cap rates and risk aversion in capital markets weigh on exit valuations. Implications: focus on locations where spread between cap rate and government bond yield remains relatively wide and that are supported by fundamental growth (population/employment). Place particular focus on value-add opportunities.</td>
</tr>
<tr>
<td>Private infrastructure</td>
<td>Income/growth: rising demand (volume-based assets) and inflation-linked revenues benefit income, given short-term interest rate risk is often fully hedged. Valuations: higher project yields at exit (higher financing costs) somewhat weigh on valuations, countered by increased risk appetite. Rising (inflation-linked) income should support project yields (and/or compensate for potentially lower end valuations). Implications: rather neutral for most availability-based assets. More likely positive for volume-based assets with strong and frequent contractual inflation adjustment.</td>
<td>Income/growth: for volume-based assets, lower demand hurts revenues. For availability-based assets, there is limited impact on profitability, given stable revenues and interest rate hedging (interest rate guarantee). Deflation could pose a threat. Valuations: higher project yield assumed by future buyer, coupled with risk aversion, lower debt availability at exit and more conservative underwriting. Availability-based assets tend to have higher leverage, rising real yields have adverse impact, somewhat offset by stable, predictable revenue growth. Implications: focus on value-add component (de-risking, e.g. through construction, country premia). For regulated assets, focus on strong contractual revenue stream. Avoid highly-levered core space.</td>
</tr>
</tbody>
</table>

Source: Partners Group, for illustrative purposes only.
Private equity
Building on growth.

Market overview
As we head into 2017, private equity markets are frothy and competition for deals remains fierce. Fundraising was strong throughout 2016 and global dry powder for private equity buyout funds stood at a total of USD 525.5 billion as of January 2017. Though we still maintain that this is not an extraordinary amount for the market to digest – enough for around 2-3 years of investments with no further fundraising – it is sufficient to put managers under pressure to deploy capital, with the result that in 2016 the average purchase price multiple of pro forma trailing EBITDA in LBO transactions surpassed even the peaks seen in 2015 in Europe and almost matched them in the US.

Debt markets favorable to borrowers buoyed the prices that managers were able to pay to clinch transactions, albeit that due to lending restrictions at banks, the new ‘normal’ for debt participation in 2016 was just above 50% in Europe and just under 60% in the US – both low compared to historical averages. Nonetheless, bank appetite for lending within the boundaries set by these new constraints remained high, as was reflected in the proportion of leveraged buyouts we observed financed only with senior debt versus other types of debt.

In the US, managers are still adjusting to these tighter restrictions on bank lending, which effectively cap leverage levels in transactions and change the traditional industry deal blueprint. Meanwhile, managers and the corporate world at large seem to have taken a ‘business as usual’ approach while they wait and see what the new Trump administration has in store for them: global buyout transaction volumes dipped only slightly following the US election result (to 961 transactions in Q4 2016, a 3.0% and 5.8% decline compared to Q3 2016 and Q4 2015, respectively).

In Europe, deal activity also saw a slight dip in H2 2016 (and especially in Q3 2016), following the UK’s decision in June to leave the European Union – an air of caution remains around the UK going into 2017. Though club deals in the large-cap space are on the rise, there has been an absence in Europe of some of the ‘mega-cap’ deals seen in the US, with the result that prices at the large-cap end of the market have rocketed beyond the regional average (and the prices for equivalent US deals) and large-cap managers have been forced to dip down into the mid-market. Excess liquidity in China has added to the competition in Europe in the form of Chinese strategic investors with deep pockets and the ability to transact quickly on conviction assets. In 2016, these corporate buyers transitioned from being challengers on the periphery to becoming real contenders in the market, evidenced for example by Sinochem’s presence in the last round of bidders for Total’s metal plating company Atotech and the acquisition of German robotics maker Kuka AG by household appliance manufacturer Midea Group early in 2016.

Asian strategic investors have also become strong competitors for deals on their home turf, adding another challenge for Asia-focused private equity funds in a region that has also seen an uptick in dry powder levels. In Latin America, though private equity fundraising for the region dipped in H1 2016 to levels not seen since 2005, the year did see some recovery from 2015 in terms of number of investments being made and also exit activity. With plenty of dry powder stored up in the region, it is anticipated that investments will continue to pick up into 2017.

1 Preqin; as of 9 January 2017.
4 Preqin; as of 9 January 2017.
5 Preqin; as of 9 January 2017.
6 Partners Group; H2 2016.
7 LAVCA; H1 2016 Industry Data & Analysis.
On the secondaries side, there has been a moderate decrease in deal flow volumes, with fewer larger portfolios available in the market and a general decrease in the quality of assets available. Older vintage funds typically contain a large proportion of publicly listed assets held at stretched valuations in line with the high multiples seen in public markets – if and when markets contract, valuations will also come down. Post-crisis vintage funds are becoming a larger share of the traded market, rising from 5% of the volume traded by NAV in 2015 to 18% in 2016. Specialist secondary investors are increasingly acting as sellers too as they manage their own portfolios and try to provide exits for older vintage funds. This has led to a rise in so-called ‘tertiary’ sales – in 2016, we witnessed many of the best-known buyers in private equity secondaries transacting as sellers in the market too.

Looking ahead into 2017, we think it is unlikely that there will be further pricing expansion in LBOs, even though the overall trend in terms of EBITDA multiples paid has been upwards since 2010. In fact, with a number of political and economic uncertainties globally (Trump, Brexit, China) and a continued low-growth environment, we think valuations will be capped at the current high-water mark. While the overall picture appears relatively challenging, given that prices are high and growth is hard to source, it is important to look at the relative performance of private equity as an asset class compared to others. In fact, it is in periods of low growth and high valuations that we have seen the best outperformance of private equity against public markets and today we see a greatly increased discrepancy between the expected returns of public and private equity. Whereas historic average expected net returns for public equities range from 6-10%, today we are forecasting returns of only 4-6%. Meanwhile, we forecast net returns for the broader private equity industry of 9-13% - down from historic average returns of 11-16%, but representing a larger spread between the public and private sectors.

Return expectations have come down

<table>
<thead>
<tr>
<th>Expected net returns for private equity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Today</td>
</tr>
<tr>
<td>9-13%</td>
</tr>
<tr>
<td>Long-term average</td>
</tr>
<tr>
<td>11-16%</td>
</tr>
<tr>
<td>Strong PE years</td>
</tr>
<tr>
<td>15-20%</td>
</tr>
</tbody>
</table>


Opportunities in the current market

In a generally sluggish growth environment globally, we continue to see notable differences in the pace of growth of different sub-sectors. While healthcare, education, consumer and business and financial services are the headline sectors that we are most focused on globally, our investment appetite is centered around specific sub-sectors or market niches where growth is transformative and outpaces the mean.

For example, within healthcare (which is the focus topic of our Q&A with an industry expert on page 15), the transformative mega-trends we focus most attention on are cost rationalization, the rise of consumerism in healthcare and the move towards cloud-based platforms. If we look only at cost rationalization, which we believe is one of the main healthcare trends in developed countries, there are three potential investment themes we can derive: pricing pressure, outsourced specialty care services and downstream rationalization. This in turn leads us to focus our deal-sourcing activities on accountable care organizations, ambulatory hospitals, laboratory and imaging service providers and medtech category leaders, all of which we believe are positioned for outsized growth given their ability to enable other healthcare providers to cut costs associated with non-core activities.

8 Greenhill Cogent; October 2016.
Certain other growth trends, such as digitalization or outsourcing, are often sector-agnostic, providing a potential spur even to companies not remotely related to technology or business services. Exploitation of such trends can be a value creation lever for private equity investors. We focus our deal-sourcing within these sub-sectors or trend-based pockets of growth and seek out companies with two additional key characteristics: stable valuations and opportunities for value creation.

Valuation resilience normally applies to companies with recurring revenue streams, sticky customer contracts and highly visible cash flows, as these should hold their value in the case of volatility and/or contraction. However, another way of achieving more stable valuations through value creation is through the building out of ‘platform’ companies, using add-on acquisitions as one of the main pathways to growth and returns for our clients alongside operational improvements. A larger company is more likely to retain its valuation in terms of price multiple. Additionally, while the initial platform asset may be relatively expensive in this high multiple environment, we can average down the multiple paid by purchasing smaller, add-on companies at lower multiples during the holding period as we build out the company.

Platform-building is one of Partners Group’s key long-term investment strategies (see box text on page 14), but in the current environment has become the predominant investment approach for new investments. We are looking to identify ‘anchor assets’ with strong management teams in sub-sectors experiencing above-average growth, with potential for consolidation. Platform-building is also a critical value creation lever at existing investments for the reasons outlined above. Among the lead investments in Partners Group’s current direct private equity portfolio, only two do not feature M&A as one of their active value creation projects, with the others having completed a total of 15 add-ons in the past 18 months.

**US: capitalizing on platform expansion opportunities**

A clear example of our platform expansion investment thesis in practice is our acquisition of global IT support services provider **Systems Maintenance Services (SMS)** in October 2016. Founded in 1981, US-based SMS is headquartered in Charlotte, North Carolina, and provides IT infrastructure services to a client base of more than 3,000 businesses. SMS is the global market leader in third-party maintenance services, which it offers in conjunction with its full suite of IT system support services, serving clients through more than 100 service centers across North America, Europe and Asia-Pacific and covering equipment from all the major IT original equipment manufacturers. We aim to work with management to continue the company’s growth trajectory both organically, with particular emphasis on growing the company’s global sales force and expanding its portfolio of client services, and through select acquisitions. One significant add-on acquisition for SMS is already well-advanced: in January 2017, SMS and Curvature, the industry leader in new and pre-owned network hardware and IT infrastructure services, announced a definitive agreement under which the two companies would merge to become the world’s premier IT network and data center lifecycle services and solutions provider.

The SMS acquisition also illustrates that outsourcing continues to be a major area of focus for Partners Group in the US, as was highlighted in our H2 2016 Private Markets Navigator. We particularly like service providers in the technology space, which are positioned for growth around key sector themes including cloud and ‘software as a service’ adoption, security concerns, and ‘big data’ and analytics. These themes are relevant to every single company today, regardless of its core business. Traditional businesses in North America are being pressured to modernize their operations, better understand the behavior of their customers, and expand their web presence – all on a lower budget and with limited expertise (see box text on page 13: ‘The trend of digitalization’). This has led them to outsource these non-core functions to external technology providers, like SMS, allowing them to focus on core business activities. The service providers that will have most success in this competitive space are those that can compete on something other than price alone.

In terms of platform-building at existing portfolio companies, **Dynacast International**, a global manufacturer of precision engineered components acquired by Partners Group in January 2015, completed its second add-on acquisition, of Austrian zinc die caster Schlieper Druckguss, in July 2016. Schlieper has been in operation since 1995, primarily producing components in the automotive sector. The merging of Dynacast Austria and Schlieper will expand product and service choices to customers in the region, while those clients with international operations will also benefit from the support of Dynacast’s global network of 23 international facilities in 16 countries. Meanwhile, restaurant business **Pacific Bells**, a leading US franchisee of the Taco Bell and Buffalo Wild Wings brands acquired by Partners Group in October 2015, has in the course of 2016 acquired two other franchises adding 39 stores to its existing 139.

**Europe: more traditional industrial sub-sectors offer relative value**

In Europe, there has been an increase in corporate carve-outs as a source of deal flow for the private equity market – in several cases driven by the need of the corporates themselves to refinance
M&A activity. This offers some interesting opportunities for investment, particularly in a sluggish deal environment, albeit that these tend to be highly competed auction situations. While not a major focus of our strategy, we will look at these opportunities on a highly selective basis when we believe we have a competitive advantage and a track record of experience in the sector.

While we also like opportunities in the technology space in Europe, particularly companies offering outsourced cloud-based solutions for business processes, we still favor some of the resilient, non-cyclical business models that can be found in more traditional industrial sub-sectors with stable end-markets and lower dependency on raw materials. Examples of these traditional industrial sub-sectors include packaging and component manufacturing for stable end industries, smart meters and sensors, and industrial product testing and assurance. Tightening regulatory standards in the EU and the trend towards adopting established standards in emerging countries are two trends that provide attractive growth opportunities for these sectors. Additionally, the trend towards industrial digitization has allowed for advanced analytics, driving demand for sensors and measurement devices. Partners Group has an active pipeline of assets in this niche in due diligence.

As in the US, an active platform/consolidation strategy at several of our existing portfolio companies has also borne fruit. For example, Vermaat Groep BV, the Dutch market leader in high-end catering and hospitality services acquired by Partners Group in December 2015, purchased OSP Catering, a catering company operating in more than 60 locations in the Netherlands, in May 2016, consolidating its presence in its home market.

Meanwhile, Hofmann Menü Manufaktur, a leading German provider of ‘cook and freeze’ catering products to small businesses and institutions, is carrying out due diligence on a potential acquisition of a company in the UK with the same business model in a bid to build out its international presence.

Asia-Pacific/emerging markets: healthcare and education sectors continue to grow

In emerging markets in particular, our investment appetite continues to be largely driven by the growth of the middle class and related growth in demand for services, goods and social infrastructure.

One continuing pocket of growth tied to this demographic shift is the healthcare sector in India, which remains highly underpenetrated – measured in beds per 10,000 people, India, with 9/10,000, ranks far below its BRIC peers Brazil and China, which have 24/10,000 and 42/10,000, respectively. In this region, our investment thesis focuses on building out capacity in domestic or regional areas of high demand.

In Australasia meanwhile, where private education is a USD 20 billion market, there is strong government support in the form of subsidies for the private education sector. Demand is driven by increased female participation in the workforce – plus there are opportunities for consolidation due to regulatory and quality requirements. For this reason, in Australasia, our education investment thesis focuses on a ‘buy-and-build’ strategy in line with our global platform-building strategy.

The trend of digitalization

Digitalization is an all-encompassing and borderless trend incorporating technological advances such as cloud adoption, the use of big data, machine learning and artificial intelligence. It is changing the way we approach marketing, content production and branding, as well as internal processes in planning, production and administration.

A defining feature of digitalization is that it is a state of ‘constant change’: as the pace of technological development has sped up, product life cycles have got shorter across all industries. Customer service has also become increasingly transparent and competitive as a result of digitalization and consumers today are able to easily compare service providers or products online and, in most cases, switch providers with a few clicks.

The sheer pace of change has left many companies with a skills gap, meaning that even when they have a digital strategy in place (as 90% of organizations surveyed recently by Russell Reynolds Associates claim to), they cannot necessarily keep up with the pace of change. In a recent survey of almost 1,200 C-level business leaders, 98% of those surveyed stated that digital disruption had impacted and would continue to impact their businesses – in fact, 52% guessed their companies would not exist in their current forms by 2021 due to digital disruptions.

The digital upgraders

- **Hofmann Menü Manufaktur**: two years ago, Hofmann accelerated its transition to a fully online ordering system, which is expected to both reduce costs for the company and increase sales. Today, more than 700 of its business customers have an entirely web-based ordering system and in the last twelve months more than 1.5 million meals were ordered online. Further, Hofmann has been able to open up a direct-to-customer sales channel, which had previously been disregarded in favor of B2B.

- **Foncia**: Foncia manages 1.5 million homes, the majority of which are owned by private individuals. In a first step towards digitalization, Foncia introduced a digital platform to facilitate communication and document exchange with its large and widely dispersed client base. As part of our value creation strategy, we plan to further expand this platform and also incorporate the large number of local suppliers into the digital ecosystem of Foncia.

Here is a snapshot of how digitalization is impacting – and being utilized by – a handful of Partners Group’s portfolio companies. The initiatives listed below can be anticipated to variously improve operational efficiency, increase and simplify stakeholder communication, reduce costs and increase business opportunity.

The digital supporter

- **Systems Maintenance Services**: there is increasing demand for SMS’ hardware support services as digital adoption increases within its client base across a range of industries. Many of its Fortune 1000 clients have global footprints and data centers all over the world. For these companies, it is important to have a single provider for all their operations.

The digital thought-leader

- **Guardian Early Learning Group**: the early childhood education provider successfully introduced a social engagement platform to allow parents and care-givers to interact with each other and with Guardian educators about their children’s educational journey.

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Executive who anticipate digital disruption in the next 12 months, by industry

<table>
<thead>
<tr>
<th>Industry</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Media</td>
<td>72%</td>
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<tr>
<td>Telecom</td>
<td>64%</td>
</tr>
<tr>
<td>Consumer financial services</td>
<td>61%</td>
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<tr>
<td>Retail</td>
<td>57%</td>
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<tr>
<td>Technology</td>
<td>57%</td>
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<tr>
<td>Insurance</td>
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<tr>
<td>Consumer products</td>
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<tr>
<td>Nonprofit</td>
<td>52%</td>
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<tr>
<td>Business &amp; professional services</td>
<td>51%</td>
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<tr>
<td>Education</td>
<td>50%</td>
</tr>
<tr>
<td>Healthcare</td>
<td>47%</td>
</tr>
<tr>
<td>Asset wealth management</td>
<td>43%</td>
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<tr>
<td>Industrial</td>
<td>39%</td>
</tr>
</tbody>
</table>


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How to interpret the table: the relative value matrix divides the private equity market into various private equity segments, defined by regions (North America, Europe and Asia/emerging markets) and transaction type (directs, secondaries and primaries). For direct and primary investments, we classify the investment by size (small cap up to EUR 250m (Europe) or USD 250m (US); mid cap from EUR 250m to EUR 2bn (Europe) or USD 250m to USD 2bn (US); and large cap over EUR 2bn (Europe) or USD 2bn (US) enterprise value) and also include a growth segment (for firms with positive cash flows and exceptional growth potential in need of additional capital to finance further expansion). For secondary investments, we classify by financing stage (buyout and venture/growth) and we distinguish between inflection assets (early stage) and mature assets according to asset/portfolio age. Green and light green highlight a segment with high relative attractiveness given Partners Group’s specific capabilities and deal flows. White highlights a neutral segment. Yellow and light yellow mean that Partners Group underweights the segment and requires an even more dedicated bottom-up selection and due diligence effort.

Relative value analysis

On the direct investment side, we are increasingly balancing the search for investment opportunities within higher-growth sub-sectors with the need to protect against increasing volatility. We are looking for businesses within stronger growth industries with defensive characteristics such as recurring revenues and sticky client contracts. At the current point in the market cycle, we continue to find most opportunities fitting this description in the mid-cap space.

The healthcare, education, consumer and business and financial services sectors are where we currently find most of the investment opportunities offering the combination of growth and defensive characteristics outlined above. Across all sectors, we particularly like companies that focus on the provision of outsourced services to consumers or other businesses.

Secondary prices have remained at highly elevated levels overall. We continue to remain highly selective with a focus on inflection assets, which have years of value creation ahead of them. Additionally, we expect increased volatility and market uncertainty to be a stimulus for portfolio management exercises among some investors, leading to opportunistic and often proprietary buying opportunities.

Our key investment strategies

Build out platform companies

We acquire platform companies with a strong management team and infrastructure, and then purchase add-on companies to further grow the platform. This allows us to bring small or lower mid-market businesses into the platform and benefit from the lower acquisition multiples of these segments compared with upper mid-market and large-cap companies.

Capture category winners

We actively screen sub-segments of specific industries benefitting from trend-based tailwinds and focus on finding the ‘category winners’ that are leaders in the sub-segment in terms of market share or growth potential. Our Industry Value Creation team then works with the companies’ management teams to further develop growth and increase profitability via effective value chain improvements.

Seek out defensive leaders

We search for niche leaders, not only with value creation potential, but also with strong defensive capabilities, high cash flow generation and the ability to quickly de-leverage in an uncertain economic context.
The industry view
Q&A with an industry expert.

A veteran of the pharmaceutical industry, Dr. Franz B. Humer is the former CEO and Chairman of Roche, the Swiss-headquartered healthcare multinational. Here, he shares his views on the innovations and challenges that are shaping the future of the pharmaceutical industry.

You have had a long and prestigious career in the pharmaceutical industry. In your view, what are the biggest differences between the pharmaceutical industry today and when you first started working?

If you look back at how diseases were treated 40 years ago, it was as if we were still in the Middle Ages. There was no biotech industry and many of the major scientific advances had not yet occurred. From a patient’s point of view, it was an abysmal situation.

In contrast, the scientific revolution in the last 20-30 years has been phenomenal – if you look at how diseases such as cancer, multiple sclerosis, diabetes and HIV are treated today, we have entered a remarkable new era. For example, people with HIV usually died after six months in the mid 1980s. Now, only 30 years later, HIV has ‘simply’ become a chronic disease. Sometimes people do not realize just how significant these advances are because 30 years is still a relatively long time.

Product development cycles are getting shorter in other industries, can we expect to see an even greater speed of development from the pharmaceutical sector in future?

In the pharmaceutical industry, the development cycle is relatively long and the transition from scientific discovery to research to product can take up to 20 years. This pace is attributable to the nature of the industry and there are only limited ways of speeding it up. For example, if you develop a new cancer drug that is expected to prolong life, the only way to really test this is by observing the drug’s impact over a long period of time.

How are technological advances shaping the pharmaceutical industry?

Big data will have an increasing impact on shaping innovation in pharmaceutical R&D. For example, if you have 10,000 patients with colon cancer, you can screen and sequence tissues from all of these patients’ tumours and compare them on a much larger scale than was previously possible. This will enable pharma companies to identify specific targets for which they can develop a drug that will be effective for a larger number of patients. It will still take ten years to develop the product, but technology is shaping and aiding the research behind it.

Technology and big data will also enable research to continue even after the product enters the market. Clinical trials typically include 100 to 10,000 patients, but the drugs themselves are used by hundreds of thousands or millions of patients and to-date there has been little chance to observe what they do in real life. The industry is starting to collect real-world data on actual drug use and this will lead to new conclusions and new benefits for patients. I see technology and big data as tools for innovation, which will in turn drive the success of pharma companies.

The [pharma] industry is having to find ways to become more cost-effective and one of the ways they have found is the outsourcing of non-core activities.
What do you see as the core challenges for the pharmaceutical industry today?

The biggest challenge for the industry is to constantly innovate – innovation drives everything in pharmaceuticals. Drug patents eventually expire; when a patent ends, sales decrease, so it is a constant race for pharma companies to innovate and find the next new product.

At the same time, there is an enormous amount of potential for future innovation as the vast majority of diseases are still incurable, even though many are chronic or semi-chronic diseases today. We need to discover drugs that are better, safer and that not only slow the progression of a disease but can also cure.

The venture capital industry has historically been an important sponsor of innovation in the pharmaceutical industry. Will big pharma continue to buy innovation from VC-backed businesses or will we see a different innovation model for the future?

The model of venture capital or private equity firms funding biotech start-ups and spinoffs from universities will continue. There is a significant amount of innovation in universities and the interaction between them and big pharma companies is extremely important. Big pharma companies receive up to 3,000 approaches from small biotech firms a year but typically only sign around 20 contracts, chosen according to the companies’ internal scientific judgment and priorities. Private equity can help smaller pharma companies in two ways: it can help them focus on the development of a technology or a product in-house; and it can help them design a strategy to bring the product to successful commercialization.

What are currently the biggest focus areas for innovation in the pharmaceutical industry?

I would highlight three focus areas. The first is of course continued scientific discovery and research in relation to currently untreatable major diseases: for example, the search for a treatment to delay the effect of Alzheimer’s.

The second focus area is the ability to target pharmaceuticals to an individual’s genetic make-up – i.e. to tailor drugs to the
When new cancer patients are diagnosed, their specific genetic defects can now be targeted and I believe this will happen with the treatment of other diseases too in the future.

The third is an increased focus on the affordability and pricing of innovation. The development of a single new product typically costs between USD 1.3 and 1.5 billion and a pharma company like Roche spends around USD 10 billion every year on R&D. These are staggering numbers. To-date, pharma companies have only been able to finance their successes and their failures through the pricing of the successful products that make it to market. However, a new value-based pricing model is emerging – one based not only on the cost of drug development, but also on the success of the outcome for the patient. This is known as ‘outcome-based pricing’.

What is ‘outcome-based pricing’?

If we take cancer drugs as an example, treatment can currently cost up to USD 200,000-250,000 per patient per year. If, as a result, an individual patient’s life is prolonged by three months, the question remains how cost-effective this treatment is.

On the other hand, if a specific drug prolongs life by 12 months on average during clinical trials, this indicates a range of individual outcomes. You could argue that it does not make sense for all patients treated with the drug to pay the same for it, regardless of its specific impact on their life expectancy. If one patient’s life is prolonged by 3-4 years by the drug, why shouldn’t they pay a different price compared to the patient whose treatment with it is less successful?

In general, the pharma industry needs to talk less about price and more about value. It is a major challenge for the industry to prove its value, especially as the conversation is taking place in the context of rising healthcare costs everywhere. A broader societal question is: how will we manage these costs in future and how will we ensure the population has equal access to innovation? There will have to be increased collaboration between pharma companies, regulators and governments in the future, which is already starting to happen.

Is there growing regulatory pressure on the pharmaceutical industry to reduce costs?

There is increasing cost pressure coming from regulators, yes. The industry is having to find ways to become more cost-effective and one of the ways they have found is the outsourcing of non-core activities, which will continue to become more prevalent across the entire pharma industry.

Typical examples of outsourced activities include clinical trials, regulatory submission programs, chemical manufacturing, formulation and packaging. These activities are all related to different stages of product development and are therefore subject to peaks and troughs in activity levels, so outsourcing is a logical step.

For example, if a pharma company plans to carry out a clinical trial with 15,000 patients around the world, it would need to hire hundreds of people to run the trials. But if the trial fails, it would no longer need those hundreds of people. It is much more cost-effective to work with an outsourced provider from the outset.

The same goes for packaging – there are peaks and troughs in this too, so why not outsource it? By outsourcing packaging, the company gains flexibility and cost advantages and gives the task to another company which has the precise expertise that is required.

You have joined and chair the board of PCI Pharma Services, a recent Partners Group investment providing outsourced pharmaceutical packaging services. What attracted you to the company?

PCI Pharma Services is uniquely positioned to benefit from the outsourcing trend as it has a market presence in both the US and Europe and is looking at opportunities to expand in Asia. The technology PCI has for serving its client base gives it a unique advantage; it would not be cost-effective for individual investors to acquire or develop that. Plus, pharmaceutical packaging is not straightforward as individual markets have specific and often onerous requirements. For example, in Switzerland, you need to have packaging in three languages; in the US meanwhile, you need barcodes on all new products. It is much more cost-effective for PCI’s global clients to use PCI for their packaging than to do it themselves.

What do you see as your key contribution to the company as a board member?

I can bring the customer viewpoint – i.e. a ‘reality check’ – to PCI and help the management team to run a global business. The growth horizon for PCI is very significant given the changing dynamics in the industry that I have been discussing. Together with Partners Group, I believe PCI can become the leader in its field.

Final question: if you could wish one thing for the future of the pharmaceutical industry, what would it be?

I would wish for science to progress much faster and give us a deeper understanding of biology. Only by understanding biology can we develop better and more effective drugs.
Private real estate
Transformative trends redefine real estate.

As core properties in prime locations maintain high valuations despite weakening investor appetite for the asset class, we focus on properties and locations that stand to benefit from the key transformative trends that are reshaping real estate markets.

Market overview
While investor appetite for real estate remains strong, an uncertain political environment, modest growth, modest economic recovery, as well as the risk of rising interest rates have begun to suppress investors’ seemingly unending appetite for the asset class. The current ‘risk-off’ sentiment has driven a narrower focus on prime properties and greater scrutiny of quality of income. This attitude is also reflected in global transaction volumes for the first three quarters of 2016, which were the lowest three-quarter levels of activity since 2012.¹

Core properties maintain high valuations and investors are still highly attracted to quality cash flows from prime properties in excellent locations. However, events such as the UK’s Brexit referendum and the subsequent repricing of London’s real estate market highlight the susceptibility prime real estate has to geopolitical and macro-economic events. To mitigate the impact of some of these risks, we strategically focus on properties and locations that stand to benefit from key transformative trends that are redefining real estate markets globally: new urbanization influencing property design that caters to ‘live-work-play’ lifestyles; demographic shifts influencing residential and office occupier requirements; and the rise of the global consumer and growth in e-commerce impacting changing retail and logistics demand.

From social and demographic change to technology, the forces reshaping real estate continue to grow and are becoming more interconnected. Successful real estate investments now more than ever before are dependent on cities, districts and buildings which embody the ‘sharing economy,’ allowing people to collaborate effectively and share resources – from infrastructure and technology to ideas.

From a relative value perspective, we believe the current environment offers a wide variety of investment opportunities, particularly in properties that are located within ‘up-and-coming’ secondary cities that are on the verge of becoming major metros – areas where walkability is often a priority over drivability, where in-fill developments are regularly occurring with not one, but multiple tenant uses in mind. Areas once not considered prime CBD locations are being transformed by infrastructure into key transit-oriented locations and formerly blighted urban pockets are offering opportunity for new development.

In the US, these broader trends have shifted our investment focus toward smaller economies that continue to show strengthening above that of the broader US economy, as job growth and population growth spread outward to new areas. In Europe and Asia, we have focused less on expectations of growth and have instead targeted markets which offer unique structural imbalances, high degrees of liquidity or potential opportunities to exploit unique seller situations that are a benefit to buyers of quality properties.

Opportunities in the current market
Europe: in an uncertain environment, look for defensive property types
While investors’ appetite for yield in European property markets is as strong as ever, uncertainty clouds the outlook for Europe in 2017 and beyond. Global real estate investors are largely

'playing it safe' by focusing on key gateway cities and ratcheting down return expectations. Europe’s macro-economic and political developments generally make it difficult to underwrite growth, but this is not to say that a region, country or metro that is forecast to have a shrinking population does not possess cities or specific locations that are experiencing positive demand trends and thriving real estate opportunities. More broadly, our relative value assessment has compelled us to move down the capital structure toward more conservative investments within defensive property types. In addition, residential and logistics properties in particular will be an overweight strategic focus due to the defensive characteristics of these property types.

From a regional perspective, we currently overweight the real estate markets of Germany, the Nordics and select locations in Southern Europe, where we believe we can still achieve attractive returns on a risk-adjusted basis. An example of an investment made in one of these markets in 2016 includes our secondary purchase of a portfolio of 97 retail, office and hotel properties located across Sweden and Finland. We believe Nordic markets are well-positioned to perform strongly and also see potential for further value creation in the assets in the portfolio.

UK real estate post-Brexit vote

If we focus on the residential segment, the events clouding Europe’s future have not dislodged the major undersupply of residential accommodation blighting the region’s major cities. London is no exception, with government figures indicating that there will be an annual shortfall of 20,000 to 25,000 housing units each year for the next four years. UK housing delivery has struggled to keep pace with the growth in the number of households and this trend has been exacerbated by the economic downturn.

While London has recently experienced the greatest surge in residential development since the end of the First World War, this has been mainly concentrated at the higher end of the market and, more importantly, new supply still falls short of the 42,000 new homes required to balance the market. The combination of stretched affordability of first-time buyers and constrained supply is leading to structural changes in the housing market. The most significant of these patterns will be the continued rise of the private rental sector. We focus on investment opportunities that couple London’s undersupply of residential property with our interest in taking more defensive positions in the market, for example through mezzanine financings.

Furthermore, while generally the environment following the Brexit referendum has prompted us to take a more measured investment approach in the UK, it has also compelled us to take a harder look at investments being offered by asset owners in the UK eager to dispose of properties subsequent to the Brexit vote. In this market, downside protection remains key for us.

One such recent example, which closed in October 2016, includes our junior debt financing of a mixed use site adjacent to a major tube station in the City of London. The buildings comprising the site have a net lettable area of over 645,000 square feet and are currently 73% occupied. The business plan consists of complete rent reviews and lease renewals for a portion of the buildings, and a GBP 47 million capex refurbishment of several vacant buildings to Class A standard. This junior debt opportunity arose as a direct consequence of the Brexit announcement. A decrease in senior lender appetite

UK housing completions private vs. social housing

Source: Department for Communities and Local Governments, August 2016.
for central London office property forced the refinancing of this property. A new junior debt piece was incorporated in the capital stack to keep the senior tranche below a 55% LTV. It is anticipated that upon exit the property will offer a cost-competitive location to a broad tenant base, flexible leasing on various sized floorplates and the potential to be exited on a single asset or portfolio sale basis.

US: invest in cities with a metropolitan feel and millennial appeal

Amid the buzz of activity in US real estate markets, we are seeking investment opportunities which capitalize on strong underlying key drivers such as population and employment growth, industry trends – high tech growth for instance – and urbanization. We will be particularly focused on markets in the midst of transition which lack properties that adequately cater to the changing ways in which people live, work and play. Within this context, the office market in the country’s secondary cities remains a key focus area.

In the US, more than in other regions, job flexibility translates into mobility, as Americans are prone to picking up and moving to new cities in search of better job opportunities. Today, somewhat counter-intuitively, some of the best employment opportunities are to be found in the country’s smaller cities. These up-and-coming US office markets continue to benefit from economic expansion with increased hiring and office leasing activity, as well as increases in development and transaction volumes.

Nationally, US office leasing totaled nearly 60 million square feet in Q3 2016, 4.4% higher than the 4-quarter moving average. Employment has also continued to grow with more than 2.4 million jobs added in the past twelve months. While primary markets welcoming this new office supply are nearing the point where supply catches up with demand, smaller economies continue to strengthen and have become an increasingly attractive hunting ground for potential investors.

Our recent acquisition, Bank of America Plaza, a 20-story, over 435,500 square foot office tower located in Nashville, Tennessee’s CBD, has already experienced strong lease-up activity in line with underwritten expectations that capitalize on this trend. Our investment in Riata Corporate Park, an over 688,400 square foot Class A eight-building office park in Austin, Texas, is also positioned to benefit from similar momentum in the market.

A more recent example of our ability to capitalize on this trend includes an office investment in Jacksonville, Florida. The Jacksonville office market benefits from a low-cost business environment and quality of life that has led to the establishment of more than 80 national and divisional headquarters.

Jacksonville was recently named the number two city Americans – including many millennials – are moving to today. Redeveloping the urban core continues to be a point of focus for the city of Jacksonville, with a number of development projects underway downtown utilizing both public and private funding. Downtown Jacksonville’s office market totals approximately 16 million square feet, which includes a significant government and healthcare presence. From an investment standpoint, Jacksonville’s office market benefits from replacement costs too high to drive speculative development and a lack of large available blocks of office space, creating a barrier to entry for larger office tenants. As a consequence, larger office buildings in the market are either unavailable or trade at a premium.

To capture this opportunity, in November 2016, we invested in Riverplace Tower, an over 440,000 square foot office building in Jacksonville’s premium Southbank submarket, which is more attractive for office users than the Northbank submarket due to easier thoroughfare access and more attractive amenities.

### Jacksonville office vacancy rates

Standing at 28 stories high, Riverplace Tower is the fourth-tallest office building in Jacksonville and the tallest office building in the Southbank submarket. At acquisition, the property was around 83% occupied and its rent roll averaged USD 19.09 per square foot compared to in-place submarket occupancy of 95% and average market asking rents at comparable properties of USD 22.52 per square foot. The business plan consists of executing a ‘buy, fix, sell’ value-added strategy to roll in-place rents and occupancy at the property to market levels. Once the property is stabilized, we anticipate exiting the project to a core buyer or office-focused landlord with a presence in the region.

### Asia-Pacific: unique buying opportunities in residential markets

Asia-Pacific’s role as a driver of global growth has intensified in recent years. Asia’s share of world output rose from 23% in 1990 to almost 40% as of the end of 2014. Five markets – China, Australia, Japan, Hong Kong and Singapore – accounted

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3 JLL; “United States Office Outlook Q3 2016”; November 2016.
4 JAXUSA; December 2016.
6 JLL; Q3 2016.
opportunities for savvy real estate investors. Australia’s residential housing boom is plateauing, as lenders are pulling back due to an increase in the capital requirements for Australian banks. Faced with dramatically tougher lending requirements, property developers, investors and buyers have been scrambling to fill this estimated USD 68 billion gap. We are currently exploring opportunities to provide structured credit solutions to residential developments with significant pre-sales in Australia as banks pull back on lending. Opportunities exist to support liquidity constrained developers by providing mezzanine and preferred equity financing with a focus on defensive markets with liquidity, backed by strong properties and the potential for compelling risk-adjusted returns.

For 60% of Asia-Pacific regional GDP in 2015, these five markets have absorbed between 75% and 85% of real estate capital flows into the region.

Within the region, we are focused on markets that afford appropriate amounts of liquidity and cities with strong employment and population growth trends. The two markets which most clearly represent this opportunity are Singapore and Australia. Singapore remains one of Asia’s most well established financial centers, while Australia offers a domestic economy that rivals the US in terms of diversity.

The Monetary Authority of Singapore (MAS) implemented cooling measures on Singapore’s residential market between 2009 and 2013. These included raising the rates for Additional Buyer’s Stamp Duty and capping the Mortgage Servicing Ratio for housing loans granted for public housing by financial institutions at 30% of a borrower’s gross monthly income. In addition, foreign housing developers must obtain a Qualifying Certificate to buy restricted land in Singapore. This imposes a strict timeline to complete the construction and sale of development projects, after which developers become subject to penalties. While the cooling measures have been effective in stabilizing the residential market, they have also left developers with unsold stock potentially facing stiff penalties, with foreign developers particularly impacted. This has given rise to a unique investment opportunity in Singapore’s luxury housing market to possibly acquire residential properties at a discount from affected foreign developers.

In light of this, we are currently evaluating a potential significant investment into a portfolio of high-end luxury residential units in newly constructed buildings in Singapore. The targeted entry price would represent a significant discount to NAV and offer a highly competitive entry basis on which to exit the properties when supply and demand fundamentals begin to improve.

In Australia, a different trend is reshaping the residential financing market and offering potential investment opportunities for savvy real estate investors. Australia’s residential housing boom is plateauing, as lenders are pulling back due to an increase in the capital requirements for Australian banks. Faced with dramatically tougher lending requirements, property developers, investors and buyers have been scrambling to fill this estimated USD 68 billion gap. We are currently exploring opportunities to provide structured credit solutions to residential developments with significant pre-sales in Australia as banks pull back on lending. Opportunities exist to support liquidity constrained developers by providing mezzanine and preferred equity financing with a focus on defensive markets with liquidity, backed by strong properties and the potential for compelling risk-adjusted returns.

Our key investment strategies

Buy below replacement cost
We target assets with low valuations located in rebounding markets that can be repositioned and then leased-up by under-cutting market rents. These opportunities typically arise as a result of ineffective management, inadequate leasing or physical deficiencies—often these issues can be addressed in our value creation approach.

Buy, fix, and sell
This approach typically targets older buildings in great locations that are in need of owner-oriented asset management initiatives including capital expenditure, repositioning, lease-up and the implementation of building efficiencies to capture rental and pricing differentials.

Develop core
In markets with strong long-term fundamentals and trends that support additional absorption, we will selectively develop properties through ground-up construction. We focus on developments that will meet end-user demand and appeal to core investors.

Pamela Alsterlind | Head Private Real Estate Asset Management
Erik Kaas | Chairman of Europe

First Half 2017 | 21
Relative value analysis

From a regional perspective, relative to Europe or Asia, the US real estate market has remained remarkably resilient to the events that shook global markets earlier in the year. European properties remain more attractively priced than properties in the US, but geopolitical events and macro-economic uncertainty are risks that need to be adequately compensated. Asia remains regionally nuanced – we tend to overweight the developed markets that offer transparency, strong fundamentals and adequate liquidity.

Among property types, office is a relative overweight globally due to historically low vacancy rates, below average new completions and strong job-creation levels. Retail properties are generally underweight across regions, due to increasing threats from e-commerce, whereas logistics and industrial properties are a significant overweight due to accelerating demand for large modern warehouses in distribution hubs, as well as small well-located facilities close to urban populations. Apartments are a neutral weighting due to lower income-generated returns, but still remain a property type that is in healthy demand with solid fundamentals across regions.

From a secondary perspective, deal flow continues to grow as the private real estate secondary market evolves. However, we believe the pool of ‘traditional’ secondary opportunities originating from sellers like public pension plans, banks and insurance companies could reduce in 2017, as pricing expectations remain high and regulatory pressure eases. In our view, the biggest opportunity for buyers lies off the beaten track in ‘non-traditional’ secondaries, for example, in secondary transactions originated by GPs. Many pre-global financial crisis programs are still full of under-capitalized assets that would benefit from more time and capital. From a relative value perspective, we have a strategic overweight to these mature programs, where we can structure tail end liquidity solutions or provide liquidity to fatigued investors.

Relative value matrix

<table>
<thead>
<tr>
<th>Region/Country</th>
<th>Americas</th>
<th>Europe</th>
<th>Asia-Pacific</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>North-east</td>
<td>Mid-Atlantic</td>
<td>Mid-west</td>
</tr>
<tr>
<td>Core</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Value-added &amp; opportunistic</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Capital structure</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Inflection assets</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Mature assets</td>
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<tr>
<td>Core</td>
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<tr>
<td>Value-added</td>
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<tr>
<td>Opportunistic</td>
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<tr>
<td>Region/country</td>
<td>Americas</td>
<td>Europe</td>
<td>Asia-Pacific</td>
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<tr>
<td></td>
<td>North-east</td>
<td>Mid-Atlantic</td>
<td>Mid-west</td>
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<tr>
<td>Office</td>
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<td></td>
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<tr>
<td>Retail</td>
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<td></td>
<td></td>
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<tr>
<td>Industrial/logistics</td>
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<td></td>
<td></td>
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<tr>
<td>Apartment</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Hotel</td>
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</tr>
</tbody>
</table>

How to interpret the table: the relative value matrix divides the private real estate market into various segments, defined by regions (Americas, Europe and Asia-Pacific) and investment type (directs, secondaries and primaries). Direct investments are divided into senior debt, mezzanine, preferred equity and equity. For secondaries, we distinguish between inflection assets (early stage) and mature assets according to asset/portfolio age. Primary investments are classified by investment type (core, value-added and opportunistic). For locations, we classify either by geographical region or by individual countries. Green and light green highlight a segment with high relative attractiveness given Partners Group’s specific capabilities and deal flow. White highlights a neutral segment. Yellow and light yellow mean Partners Group underweights the segment and requires an even more dedicated bottom-up selection effort.
Private debt
Opportunities remain outside traditional debt markets.

With margin compression in the senior loan syndicated market in both the US and Europe, we believe there are more attractive opportunities to be captured outside of traditional syndicated loan markets.

Market overview
Debt markets were very liquid and robust in H2 2016, despite a number of unexpected geopolitical events. LBO senior debt issuance volumes in 2016 amounted to EUR 253 billion across Europe and the US, approximately 25% above levels observed over the same period last year, with leveraged markets less volatile in H2 2016. Investor concerns in H1 2016 regarding a slowdown in China and oil price volatility have abated with quantitative support provided by central banks, particularly in Europe, driving liquidity into the leveraged finance asset class. As a consequence, new issue margins for senior loans declined in H2 across both Europe and the US.

In the US, first lien issuance increased significantly in H2 2016 year on year, reversing the trend of debt market issuance lagging behind 2015 through H1 2016 as the senior debt market improved. By contrast, second lien institutional volume continues to be slightly behind 2015 levels. Margin compression in the US senior loan syndicated market was evident, with primary issuance spreads decreasing roughly 40bps for B-rated deals between H1 2016 and H2 2016, but more subdued in comparison to Europe. Although opportunistic refinancing activity was also not as pronounced as in Europe, approximately 40% of activity in the US loan markets was driven by refinancings to take advantage of the lower rate environment.

On the macro-economic front, the outcome of the US presidential election adds uncertainty to numerous industries given the changing of the guard at the White House to a Republican-controlled presidency, house and senate. Federal Reserve behavior under a new administration is also another unknown and potential source of rate volatility that will have to be considered in the coming months to understand any changes in policy.

In Europe, senior loan volumes in 2016 were significantly higher year on year, with Brexit having a muted impact on issuance activity. New issue margins in the syndicated loan market tightened significantly in H2 2016, with senior loan new issue yields for B-rated deals tightening by 100bps in H2 2016.

### Weighted average new issue spreads for senior loans

![Graph showing weighted average new issue spreads for senior loans](image)

Source: S&P Capital IQ, Q4 2016.

In Europe, senior loan volumes in 2016 were significantly higher year on year, with Brexit having a muted impact on issuance activity. New issue margins in the syndicated loan market tightened significantly in H2 2016, with senior loan new issue yields for B-rated deals tightening by 100bps in H2 2016.

1 S&P and Moody’s.
2 S&P and Moody’s.
versus H1 2016. The strong demand from institutional investors (including CLOs) and banks, underpinned by central bank monetary support and the lack of primary new issue deal flow, gave rise to a borrower-friendly environment.

Issuers have taken advantage of the favorable environment in the syndicated loan market to refinance and re-price their debt. Opportunistic refinancing and re-pricing activity constituted approximately 60% of new loan issuance in H2 2016. In addition, many issuers were able to price at significantly tighter margins versus the initial guidance provided to investors at the start of syndication (‘reverse flex’). Documentation was looser during H2, with 70% of senior loan issuance issued in covenant-lite form.

As a lender, we believe that there are more attractive opportunities to be captured outside the syndicated loan markets. For example, the margin compression in the European senior loan syndicated market has not impacted the European mid-market and unrated lending space as significantly, due to the different investor bases addressing each market and the need for flexible and creative financing from the borrowers in this space. Mid-market lending activity therefore continues to benefit from a tailored structuring premium and more stable spreads.3

Opportunities in the current market

US: sponsors appreciate the value of privately placed debt

Sponsors continue to rely on privately placed second lien debt in lieu of traditional syndicated debt financing as a result of the bank pullback from underwriting second lien financing which has been mentioned in prior Private Markets Navigators. Privately placed second lien continues to offer strategic advantages to sponsors in the form of firm pricing that is not subject to market flex risk (i.e. the risk that financing terms can be amended if necessary to successfully syndicate loans), a known lender group, and additional capacity for future financings. Certain banks are looking to re-enter the second lien market, but have had minimal success to-date and have not been able to be as flexible as private debt providers. Alternative (i.e. non-bank) sources of capital in the second lien market are expected to continue to restrain traditionally underwritten second lien debt for the foreseeable future as sponsors appreciate the flexibility and certainty of privately placed solutions. As a result of the closely held nature of privately placed second lien and the limited number of market participants, spreads to the first lien have proven to be more attractive than in past years under the prior bank underwriting model.

First lien margins have compressed, but attractive yields remain to be found in certain deals, especially club-style first lien executions, lower middle market investments, and companies with niche business models which the capital markets are not so familiar with. From an industry perspective, similar to private equity, we favor resilient niche businesses within the healthcare, business and financial services sectors and sub-segments of the information technology sector.

An example of an investment into a second lien held by a small number of institutional capital providers in an attractive sector with higher relative value is our investment in Bioclinica, a global provider of clinical trial services and technology to pharmaceutical companies and contract research organizations. Bioclinica is the largest provider of outsourced medical imaging services, supporting over 4,000 clinical trials to-date globally. The company also offers numerous software solutions used in

3 All figures in the ‘Market overview’ section are sourced from S&P Global Market Intelligence; LCD Q4 2016.
clinical trials and a clinical research site network. It benefits from high revenue visibility, underpinned by multi-year contracts, and an asset light business model, with limited capex and working capital needs driving high free cash flow conversion. Due to our internal expertise in the space from prior investments, we were able to provide an early commitment in the second lien tranche in support of our sponsor partner, Cinven. The second lien tranche will pay interest with a margin of 8.25% over a LIBOR floor of 1.00% and was issued at a discount to par. We expect our investment in the second lien tranche to generate returns of around 10%.

**Europe: still focused on acquisition financing in the mid market**

In Europe, we continue to support the financing needs of mid-market companies with platform growth potential. Increasingly, sponsors are seeking to supplement a traditional bank club with private debt providers that offer scalable capital in support of future growth activities. Tighter limits on counterparty exposure restrict the ability of banks to provide incremental capital, allowing private debt to fill the gap. Private debt providers also offer creative alternative solutions to a bank club deal such as unitranche financing, allowing sponsors the flexibility to stretch leverage for selected companies with strong credit characteristics.

Mid-cap companies are constrained in accessing the syndicated loan and high-yield markets due to size limitations and rely instead on privately placed financings with banks and private debt providers. Investments in the mid-market space are therefore less exposed to the decreasing yields and repricing activity that have more recently impacted the returns of syndicated loans in the larger cap space. Average new issue yields in the syndicated loan market have declined by around 100bps in H2 2016 vs H1 2016 for B-rated deals to approximately 4.50%

In comparison, yields for club senior deals in the mid-market space benefit from a 1.0–2.0% yield premium to the syndicated market with higher yields demanded for more creative and flexible financing structures such as unitranches.

Furthermore, documentation protections are also more stringent for mid-cap transactions. Consequently, we continue to see good relative value in this space. Industry-wise, similar to the US, we focus on opportunities in the healthcare and financial and business services sectors, as well as in segments of the information technology sector.

As an illustration of where we supplied scalable capital as part of a traditional bank club, we provided senior term loan financing in support of Ardian and GHO Capital’s acquisition of Envision Pharma, an outsourced service provider of technology and publication services to global pharmaceutical companies. Envision Pharma is a trusted partner to a customer base that includes 28 of the top 30 global pharmaceutical and life science companies. The company benefits from good visibility of revenues through long-term licensing and service contracts for its technology and services. Its high-quality products and excellent reputation in this niche have driven a high retention rate of 95% among its customer base. The company is also highly cash generative and has a long-term track record of revenue growth. We will seek to support the company as it rolls out its buy-and-build strategy. We expect our investment in Envision Pharma to generate returns in excess of around 7%.

In the large-cap space, banks seek to provide aggressive underwriting terms to sponsors with lower pricing flex and looser documentation on both senior syndicated term loan and bond structures, recognizing the supply/demand imbalance currently prevailing in the capital markets. Given this backdrop, in the large-cap space we continue to see better relative value for our investors in providing bespoke junior capital solutions to our partners’ sponsors to avoid market risk and preplace junior capital such as second lien, private high yield and mezzanine with private debt providers. Lenders benefit from a pricing premium due to the bespoke financing structure and negotiate documentary protections directly with sponsors. Access to high-quality deals and high investment selectivity are key factors for success in the current market.

**Asia: flexibility to also switch focus onto junior part of the capital structure**

Abundant liquidity remains in Asia, driven by regional and domestic banks that provide senior debt for local deals. These regional banks (such as the Taiwanese and Japanese banks) are moving beyond their traditional home markets and are stepping up to become active arrangers for deals throughout Asia. A few notable recent examples include GenesisCare (Australia), Wharf (Hong Kong) and Interplex (Singapore).

Senior debt opportunities catering to non-bank investors such as institutional investors and private debt funds have emerged, but form a relatively small proportion of the market, currently limited to Australasia. Instead, Partners Group has identified relative value in the subordinated parts of the capital structure, where banks are not typically natural long-term holders.

In September 2016, we executed a mezzanine commitment to support Permira’s acquisition of Tricor Holdings (Tricor), a leading Asian provider of corporate, business administrative and investor services, headquartered in Hong Kong. Tricor has a diversified customer base of more than 29,000 customers, with 85% of its earnings being recurring in nature. Its leading position in Asia enables Tricor to tap into the growing markets of business and corporate services. The defensive nature of the company’s business allowed it to exhibit a stable profile during the last global financial crisis, consistently generating profits and cash flow, which makes it an appropriate subordinated debt investment for Partners Group. We acted as a solution

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4 S&P and Moody’s
5 S&P Global Market Intelligence; LCD Q4 2016
6 S&P Global Market Intelligence; LCD Q4 2016
provider to the sponsor in arranging the mezzanine, an important financing source. The mezzanine consisted of a tailored structure, featuring financial maintenance covenants for downside protection.

Relative value analysis

We overweight mid-cap first lien debt investments in both Europe and the US and mid- and large-cap second lien investments in the US. The US market continues to offer good risk/reward outcomes with regulators imposing discipline on the markets by restraining leverage levels. In Europe, club-style loan executions in the first lien mid-cap space that offer a club deal premium continue to be attractive. We are highly selective in the second lien space in Europe given the more competitive environment, which is leading to more aggressive terms.

We focus on companies with three key defining characteristics: recession resilience; stable recurring cash flows; and high cash conversion levels. Niches within the healthcare and financial services sectors continue to offer good investment opportunities. The information technology sector, particularly in the software niche, has emerged as an attractive area of investment more recently with a number of software transactions aligned with the characteristics identified above.

Our key investment strategies

We provide financing solutions that plug gaps in traditional debt market coverage and are often more attractive and flexible than those offered by the broader capital or syndicated loan markets, providing excess yields to our investors. We focus on three key strategies:

Offer creative structures

We offer flexible and tailor-made capital structures. This is a key differentiator, especially in the US where banks are restricted in terms of their ability to provide leverage.

Focus on niche markets

We focus on resilient companies active in niche markets, protected by high barriers to entry and able to offer premium products or services crucial for their clients.

Support buy-and-build strategies

We support successful sponsors and management teams in their buy-and-build strategies by providing add-on acquisition financing in a timely manner, particularly under strict time constraints.

Relative value matrix

<table>
<thead>
<tr>
<th>Industry sector</th>
<th>NORTH AMERICA</th>
<th>EUROPE</th>
<th>ASIA/EMERGING MARKETS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Media / telecom</td>
<td>Large</td>
<td>Large</td>
<td>Large</td>
</tr>
<tr>
<td>Consumer</td>
<td>Large</td>
<td>Large</td>
<td>Large</td>
</tr>
<tr>
<td>Information technology</td>
<td>Large</td>
<td>Large</td>
<td>Large</td>
</tr>
<tr>
<td>Healthcare</td>
<td>Large</td>
<td>Large</td>
<td>Large</td>
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<tr>
<td>Financial services</td>
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<tr>
<td>Industrials</td>
<td>Large</td>
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<th>ASIA/EMERGING MARKETS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mezzanine</td>
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<td>Large Mid/m( small)</td>
<td>Large Mid/m( small)</td>
</tr>
<tr>
<td>Second lien</td>
<td>Large Mid/m( small)</td>
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<td>Large Mid/m( small)</td>
</tr>
<tr>
<td>First lien</td>
<td>Large Mid/m( small)</td>
<td>Large Mid/m( small)</td>
<td>Large Mid/m( small)</td>
</tr>
<tr>
<td>Senior secondaries</td>
<td>Large</td>
<td>Large Mid/m( small)</td>
<td>Large Mid/m( small)</td>
</tr>
</tbody>
</table>

How to interpret the table: the relative value matrix divides the private debt market into various private debt segments, defined by regions (North America, Europe and Asia/emerging markets) and debt strategy (mezzanine, second lien, first lien and senior secondaries). In each segment, we classify the investments by size (small/mid and large cap). Green and light green highlight a segment with high relative attractiveness given Partners Group’s specific capabilities and deal flows. White highlights a neutral segment. Yellow and light yellow mean that Partners Group underweights the segment and requires an even more dedicated bottom-up selection effort.
Market overview

High valuations, particularly for operating assets, have been a defining characteristic of large parts of the private infrastructure market for some time. Inflated by unconventional monetary policy and strong investor appetite, asset prices for established infrastructure have risen above pre-crisis levels and are set to remain elevated during H1 2017. As discussed in our last Private Markets Navigator, we have observed that multiple expansion has been more pronounced in developed markets. We attribute this, among other things, to the fact that operating assets in Europe, North America and Australia are particularly sought after due to their (perceived) low risk profile.

A growing number of institutional and strategic investors are also directly investing in these assets, thus exacerbating competition levels. Two recent examples include the privatizations of Nice and Lyon airports, both in France, where the French state sold its 60% stake in the two assets in a competitive bid process. The transactions reportedly attracted infrastructure heavyweights including Meridiam, Ferrovial, Cube, Aéroports de Paris, Allianz and IFM, before being awarded to two separate consortia led respectively by Atlantia (Nice airport) and Vinci Airports (Lyon airport) for EV/EBITDA multiples reported to be in excess of 20x.\(^1\)

In terms of overall market activity, the number of completed infrastructure deals was largely on par with the three previous years, while the aggregate value of deals announced in 2016 was the highest on record in the last ten years, albeit by a small margin (approximately 14%).\(^2\) The increase underlines our observation that many infrastructure assets are trading at elevated valuations. Conversely, we believe that attractive investment opportunities can instead be found by having a competitive angle: flexibility and proprietary access to opportunities outside large processes remain important differentiators among investors in the current market environment. On this basis, Partners Group invested EUR 1.2 billion in eight new direct infrastructure assets in six countries in 2016, including fiber networks in France and Canada, high capacity metro trains in Australia, an offshore wind farm in Germany, solar plants in Taiwan and natural gas processing facilities in the US.

Opportunities in the current market

We have identified three global trends which we expect will continue to generate attractive infrastructure investment opportunities for us in the coming quarters: the continued...
global increase of renewable energy targets; the growing demand for communication infrastructure; and corporate divestitures driven by the correction in power and commodity prices. In line with these trends, we favor the renewable energy, communications, and power and energy infrastructure sectors globally. We also observe more secondary sales from mature funds seeking portfolio liquidity solutions, and we see this as an opportunity to selectively acquire assets in the core infrastructure segment if risk/return parameters for these appear sufficiently favorable.

**North America: opportunities in the midstream**

In North America, the majority of our deal flow continues to be in the power and energy infrastructure sectors. Power opportunities are abundant as older thermal and nuclear plants continue to be replaced by both renewable and gas-fired capacity – a development driven by low natural gas prices and tougher environmental restrictions, coupled with an improvement in technology efficiencies and a supportive regulatory environment for renewables in the US. The attractiveness of individual opportunities is very situation-dependent, especially for new-build gas-fired projects where long-term off-take contracts are in short supply.

Opportunities in the energy-related infrastructure sector are driven by shale oil and gas production. According to the Interstate Natural Gas Association of America (INGAA), up to USD 330 billion of natural gas infrastructure capital expenditure is needed over the next 20 years in North America.

**Projected Natural Gas Liquids Capital Expenditures**

North America 2017-2035


New-build midstream infrastructure will be necessary to transport, process, store and deliver cheap natural gas and its derivative products to end markets, including assets needed to process, transport, and store natural gas liquids (NGLs).

Within the natural gas liquid (NGL) value chain, our preference is for assets in the midstream segment with fee-based term contracts with creditworthy counterparties, rather than assets close to the wellhead (upstream) with concentrated drilling and/or production exposure. In line with this preference, we recently invested in Raven, a new-build midstream processing facility in East Texas.

The Raven facility is essential energy infrastructure within the North American natural gas liquids (NGL) value chain. The state-of-the-art facility will use proven and clean technology to process ethylene, a readily available derivative of natural gas, into Butene-1, which is used as a critical input in the manufacture of polyethylene and a variety of other products. Long-term, fee-based off-take contracts with no commodity price exposure have been signed with several major petrochemical companies for all of Raven’s initial production capacity, and there is near-term expansion potential. The project responds to the need for more processing capacity within the US NGL value chain arising from the abundance of natural gas and the significant expansion of cost-advantaged polyethylene production.

In addition to the power and energy infrastructure sectors, the communications infrastructure sector continues to provide attractive deal flow as future infrastructure needs grow commensurate with increasing online and mobile data traffic. Competition in the sector is also increasing, especially in the towers segment, which attracts high valuation multiples. Fiber networks, both terrestrial and subsea, are less competed for given higher barriers to entry and the smaller number of investors with a mandate or know-how in the space. We prefer platform expansion opportunities in the subsea and terrestrial fiber spaces, where we can leverage existing assets and partnerships into accretive growth. In the subsea cable segment,
we are focused on branching and add-on opportunities for our investment in Seabras-1, the first direct subsea fiber optic cable between New York and São Paulo. For Axia NetMedia, one of our other recent communication infrastructure investments in the terrestrial fiber space, we are developing a plan, together with the Axia NetMedia management team, to roll out fast broadband networks in a priority subset of 24 US cities, representing 2.7 million inhabitants, over the next three to five years.

**Europe: investment needed to meet renewable energy targets**

In Europe, the global trends mentioned above – rising renewables targets, growing communications infrastructure needs and corporate divestitures in the power sector – are also generating attractive investment opportunities. For instance, one area where we see divestiture opportunities is the energy infrastructure sector, particularly in gas transmission, processing and storage. The attractiveness of the sector is driven primarily by low oil and gas prices, which are leading to the disposal programs of European oil and gas majors, who are under pressure to divest big portions of their non-core assets to free up capital for reinvestment in new projects. We prefer operating assets that offer scope for operational value creation, for example through a platform strategy.

As far as the communications and renewable energy infrastructure sectors are concerned, the latter in particular offers strong deal flow as European governments are scrambling to achieve their 2020 renewable targets and are forecast to install between 3-4GW of renewable capacity each year between now and 2020. European utilities have also been investing heavily in the sector in the last ten years and as owners of the majority of the current project pipeline are increasingly looking to enter into partnerships with financial investors. We continue to focus on sourcing opportunities through our proprietary network and pro-actively approach the owners and developers of assets we like, as for example with Merkur Offshore (Merkur), our most recent renewable energy investment in Europe.

The renewable energy sector offers strong deal flow as European governments are scrambling to achieve their 2020 renewable targets.  

Merkur is a construction-ready, well-contracted offshore wind farm development located approximately 50km off the German cost. The project uses 66 General Electric turbines with a total generation capacity of around 400MW – enough clean energy to power 500,000 households. Since closing the investment, we have started construction and are focusing our value creation efforts on assembling a strong project team, ensuring capex and O&M discipline, and implementing industry-leading health and safety procedures.

**Asia-Pacific: build core in select key markets**

In the Asia-Pacific region, we are focusing on a select number of key markets including Taiwan and Australia. These countries have stable regulatory frameworks and government policies that promote the attractiveness of investment in certain sectors, for example, the renewable energy sector. Generally, we prefer to build core in the Asia-Pacific region over acquiring existing core assets, which are rare and highly sought after, with high valuations attributed to them by Asian strategic investors.

On the other hand, we are aiming to capitalize on the current market dynamic by selectively realizing some of our portfolio assets (which we have developed into core assets) in both the renewable and PPP sectors.

In addition to the over-arching global investment themes outlined at the beginning of this section, within the Asia-Pacific region we also see good relative value in availability-based Public Private Partnership (PPP) projects. The Australian PPP sector in particular is attractive with good deal flow, but picking the right projects with clear political support is important. The sector also requires proven prior experience and good relationships on the ground, as these are key to gaining access to the most competitive consortiums. With the right expertise and network, the sector allows for attractive returns from value creation upside. Having previously invested in the Victorian Comprehensive Cancer Centre project and Sydney Metro Northwest, we have built up extensive PPP experience in Australia and have developed strong local relationships with consortium partners. The synergies derived from our previous investments allowed us to efficiently run the process for our most recent Australian PPP investment, the Melbourne High Capacity Metro Trains project (HCMT PPP).

In November 2016, we agreed to invest in the HCMT PPP, an AUD 2 billion project to design and deliver 65 trains to the State of Victoria as part of its 10-year Rolling Stock Strategy. With a 49.9% stake, Partners Group will be the largest equity investor in the Evolution Rail consortium, which includes fellow investors Downer Group, CRRC Changchun Railway Vehicles and Plenary Group. The HCMT PPP project will be delivered jointly by industrial partners Downer and CRRC, with the first train due to come into service in mid-2019. All 65 trains are anticipated to be rolling out as a dedicated fleet prior to the opening of Melbourne’s Metro Tunnel. Downer will then maintain the trains for 30 years.
In September 2016, we closed a secondary investment in a portfolio of European core assets in a bilateral transaction. In previous transactions in the fund we had gained in-depth knowledge of the assets and were able to offer speedy execution, a key concern for the seller, and thus managed to obtain exclusivity early on in the process.

The investment, which will benefit from stable and recurring cash flows from availability-based payments by the AAA-rated state of Victoria, is a great fit with our investment strategy and highly complementary to other social and transport infrastructure investments in our global portfolio.

The Australian PPP sector is attractive with good deal flow, but picking the right projects with clear political support is important.

**Secondaries: focus shifting towards tail-end secondary transactions**

We are observing an increased focus in the infrastructure secondary market on tail-end liquidity solutions and less deal flow in traditional secondary opportunities. The return premium of traditional secondaries over directs has largely disappeared and, in today’s market, can only be obtained by having a unique angle, such as fast execution, significant insight into the portfolio, or direct access to the fund manager. In tail-end situations, where maturing funds are seeking long-term liquidity solutions, the pricing is similar to direct assets but the return is often more attractive as portfolios are typically well-diversified and core asset-heavy, meaning there is lower inherent risk. As such, tail-end liquidity solutions may offer an attractive opportunity for us to engage in the core infrastructure segment via the secondary market.

Our key investment strategies

**Focus on value enhancement potential**

We focus on investment opportunities that offer us the potential to enhance operational value through growth and efficiency improvements. A key source of these opportunities is the ongoing trend for corporate owners of infrastructure to sell assets as part of a restructuring.

**Search for transformative growth**

We seek out opportunities where strong long-term fundamentals in a particular market support the demand for building a select type of infrastructure, for example, due to evolving infrastructure needs or changing market fundamentals.

**Build out market-leading infrastructure platforms**

We look for investments that offer us the opportunity to build scale, for example, through investing in fragmented markets that have the potential for consolidation and platform-building.
Relative value analysis

Renewable power is a relative overweight in all regions, although we currently see the most relative value in Asia/emerging markets compared to other regions. This is based on attractive risk/return dynamics in select renewable energy segments and countries, such as solar PV and onshore wind in Taiwan and Australia. Platform expansion opportunities offer the best relative value in renewables in the region. In Europe, we favor the offshore wind segment, although we do note that returns have compressed slightly over the last twelve months.

Energy infrastructure opportunities have become relatively less attractive in Asia as assets are highly priced and competitive, with keen interest from Asian strategic buyers. Low power prices and limited long-term contract off-takers have further reduced the attractiveness of conventional power assets in the region, although we do see interesting opportunities in other emerging markets like Latin America, where electricity demand is expected to grow along with governments’ commitment to improve the quality of electricity supply in the region.

Social infrastructure is relatively unattractive in Europe owing to a high level of competition and small investment sizes and in North America owing to generally limited deal flow. An exception in the social infrastructure space is Australia, where availability-based PPPs remain attractive on a risk-adjusted basis.

In the traditional secondary market, we see better relative value in portfolios containing inflection assets than in portfolios of mature funds, which are generally priced to match the current high valuations environment. Long-term liquidity solutions for maturing funds offer opportunities to access the core space via a non-traditional secondary transaction.

Relative value matrix

<table>
<thead>
<tr>
<th>Sector</th>
<th>NORTH AMERICA</th>
<th>EUROPE</th>
<th>ASIA/REST OF WORLD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transportation</td>
<td>Energy</td>
<td>Social</td>
<td></td>
</tr>
<tr>
<td>Power</td>
<td>infrastructure</td>
<td>infrastructure</td>
<td></td>
</tr>
<tr>
<td>Power</td>
<td></td>
<td>Social</td>
<td></td>
</tr>
<tr>
<td>conventional</td>
<td>Energy</td>
<td>infrastructure</td>
<td></td>
</tr>
<tr>
<td>Power</td>
<td></td>
<td>Social</td>
<td></td>
</tr>
<tr>
<td>conventional</td>
<td>Energy</td>
<td>infrastructure</td>
<td></td>
</tr>
<tr>
<td>Communication</td>
<td>Transport</td>
<td>Social</td>
<td></td>
</tr>
<tr>
<td>Power</td>
<td>Power</td>
<td>Social</td>
<td></td>
</tr>
<tr>
<td>renewable</td>
<td>conventional</td>
<td>Energy</td>
<td></td>
</tr>
<tr>
<td>Water</td>
<td>Energy</td>
<td>infrastructure</td>
<td></td>
</tr>
<tr>
<td>Waste</td>
<td>management</td>
<td>Social</td>
<td></td>
</tr>
</tbody>
</table>

Strategy

| Building core   | Platform       | Core | Building core | Platform       | Core | Building core | Platform       | Core |
| Building core   | expansion     |      | Building core | expansion     |      | Building core | expansion     |      |
| Operational     | value creation|      | Operational   | value creation|      | Operational   | value creation|      |
| Core            |               |      | Core          |               |      | Core          |               |      |

Directs

| Equity          | Junior debt   |                   | Equity          | Junior debt   |                   | Equity          | Junior debt   |                   |
| Inflection assets | Mature core | plus assets         | Inflection assets | Mature core | plus assets         | Inflection assets | Mature core | plus assets         |
| Mature core assets |           |                   | Mature core assets |           |                   |

Secondaries

| Inflection assets | Mature core | plus assets         | Inflection assets | Mature core | plus assets         | Inflection assets | Mature core | plus assets         |
| Mature core assets |           |                   | Mature core assets |           |                   |

How to interpret the table: the relative value matrix divides the private infrastructure market into various regions (North America, Europe and Asia/Rest of World) and segments, which are then divided into sectors (transportation, communication, power conventional, power renewable, energy infrastructure, water, waste management, and social), strategy and investment types (directs or secondaries). For directs, we distinguish between equity and debt. For secondary investments, we distinguish between inflection assets (early stage) and mature assets according to asset/portfolio age. Green and light green highlight a segment with high relative attractiveness given Partners Group’s specific capabilities and deal flows. White highlights a neutral segment. Yellow and light yellow mean that Partners Group underweights the segment and requires an even more dedicated bottom-up selection effort.
Liquid private markets
Searching for pockets of value.

Although the performance of listed infrastructure equities was impacted by the recent increase in market volatility, we still believe the sector offers pockets of growth. Meanwhile, listed private equity performed strongly during the second half of 2016, with all sub-sectors generating a positive return.

**Market overview**

Despite more volatile equity markets in H2 2016, listed infrastructure equities\(^1\) have continued to provide stability and growth, even though the sector modestly underperformed overall (+4.5% versus equity markets measured by the MSCI World TR EUR of +6.1%).

While we remain cautious on infrastructure equities overall given elevated valuation levels in equity markets, we believe there are still pockets of value to be found, backed by solid fundamentals and supportive government policies. Specifically, we place strong emphasis on North American railroads, European regulated utilities and the Chinese gas sector.

In China, gas demand has grown strongly since 2000 and is expected to continue to grow as new sources of gas supply are made available.

If we look at the example of the Chinese gas sector, China suffers from a well-known air and water pollution problem, which it has been tackling through various forms of government support, such as promoting the use of gas, a cleaner fuel source compared to coal and oil, to increase its share in the country’s total energy consumption. China has among the lowest shares of gas in total primary energy consumption, even when compared to other emerging markets. Gas demand has grown strongly since 2000 and is expected to remain on the ascendant as new sources of gas supply are made available and the country continues to tackle its growing pollution problem.

Chinese gas utilities are direct beneficiaries of increasing gas usage: they typically have exclusive command of supply in their concession areas; the regulatory environment is expected to remain attractive; gas prices are a direct pass-through (local municipalities often hold some discretion over pricing); and gas penetration levels remain well below the theoretical maximum. Additionally, the balance sheets of most of the companies are in good shape. Buoyed by continuing government measures to tackle air pollution, and backed by solid financials, we expect the sector to offer good upside over the next 12-24 months.

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\(^1\) Measured by Partners Group Listed Investments SICAV – Listed Infrastructure EUR-I.
**Listed private equity** performed strongly in H2 2016 and significantly outperformed the broader equity market measured by the MSCI World TR EUR by 8.8%, accompanied by declining volatility. All sub-sectors generated a positive return. US asset managers performed best with a total return of 8.0% during H2 2016. After a disappointing H1, the sub-sector picked up as fundamentals improved. UK listed public partnerships generated the second best performance during H2, though to a large extent driven by currency.

In the current environment, we focus on US asset managers and select direct investment vehicles with strong potential for NAV growth and discount contraction. The valuations of US asset managers are still attractive considering that they benefit from a strong fundraising environment and expected increase in carried interest. In addition, US asset managers’ valuations might benefit from the proposed taxation of carried interest as income, combined with lower corporate tax rates. While in general this is negative for the receiver of carried interest, asset managers might decide to cease trading as limited partnerships, converting to more simple and transparent C corporations, which should lead to increased investor interest.

Accrued performance fees of select US asset managers

![Accrued performance fees of select US asset managers chart](attachment:image)

**Relative value matrix**

<table>
<thead>
<tr>
<th>Listed private equity</th>
<th>Listed private infrastructure</th>
<th>EU</th>
<th>US</th>
<th>Asia / Emerging Markets</th>
</tr>
</thead>
<tbody>
<tr>
<td>Public partnerships</td>
<td>Transport</td>
<td>Managers</td>
<td>BDCs</td>
<td>Fund of funds</td>
</tr>
<tr>
<td>Utilities</td>
<td>Communication</td>
<td></td>
<td></td>
<td>Managers</td>
</tr>
<tr>
<td>Social / diversified</td>
<td></td>
<td></td>
<td></td>
<td>Public partnerships</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Fund of funds</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Managers</td>
</tr>
</tbody>
</table>

**How to interpret the table**: the relative value matrices divide the listed infrastructure and listed private equity markets into regions (North America, Europe and Asia/emerging markets) and types of investment available. Green and light green highlight a segment with high relative attractiveness given Partners Group’s specific capabilities. White highlights a neutral segment. Yellow and light yellow mean that Partners Group underweights the segment and requires an even more dedicated bottom-up selection effort.

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2 Measured by Partners Group Listed Investment SICAV - Listed Private Equity.
The investment landscape continues to be characterized by fierce competition, a vast supply of liquidity and lofty pricing across most asset classes. Hot fundraising, high dry powder levels and tough competition have kept private market valuations of quality and core assets at or near record highs over the past six months. Private debt spreads have narrowed somewhat but remain attractive in absolute terms. To a certain extent, above-average valuations are justified by the modestly positive economic backdrop and low interest rates. A possible turn of the rates cycle in the US and other (political) risks should, however, put an upper barrier on asset pricing. Seven-year annual return expectations for the broader private markets industry, a framework that we introduced early last year, remain relatively unchanged from H2 2016. Public equities experienced further multiple expansion and yields on high-yield bonds have fallen, suppressing the already historically low expected returns for public markets. As such, private markets have become even more attractive in relative terms.

It is widely accepted that an allocation to private markets can improve the risk-adjusted returns of a long-term investment portfolio.
The Partners Group Expected Return Framework

Our Framework calculates expected asset class returns for private and public markets based on fundamental drivers (income, growth and valuation change) over a seven-year horizon. The Framework complements our qualitative relative value investment approach by adding a quantitative component, reflecting broad industry returns.

**Return from income:** annual cash flows from the investment and other income-like components of an asset’s return, like buyback-adjusted dividend yield on equities or interest received on a bond.

**Return from growth:** the rate at which the value of an investment increases due to fundamental drivers. For fixed income instruments, return from growth is usually zero. For equities, this is earnings growth. In the case of private markets, in addition to the beta-related earnings growth that can also be observed in public markets, return from growth is complemented by any returns generated through value creation strategies, like platform growth or operational improvements.

**Valuation change:** the change in the price the market pays for a cash flow stream consisting of both income and growth. For public market equities, this is the change in the price to earnings ratio, for private equity it is Enterprise Value (EV) to Earnings before interest, tax, depreciation and amortization (EBITDA) changes. For private infrastructure and private real estate it is the asset’s sensitivity to a change in underwriting IRR (internal rate of return) and cap rate, respectively. Given the floating rate nature of private debt, valuation change is usually close to zero while fixed-income, public market bonds are impacted by duration. The underlying assumption is that valuations revert to long-term averages over the seven-year horizon.

It is widely accepted that an allocation to private markets can improve the risk-adjusted returns of a long-term investment portfolio. Taking private equity as an example, indices representing broad industry averages suggest a historical net outperformance of +4.1% vs. public markets over the last 16 years.¹ We believe this is due to a number of factors, including better access to information on the part of private equity managers, improved governance as a result of private equity ownership, an operational, long-term outlook focused on hands-on value creation, and greater ability to time exits. In order to illustrate the potential positive impact of an allocation to private markets, we modeled a set of scenarios using glidepath analysis to show the return impact an allocation to private markets could have on an underlying DC beneficiary’s monthly income.

**A case study using the Partners Group Expected Return Framework: DC pension plans²**

For our analysis, we compare two portfolios: a standard glidepath portfolio, consisting exclusively of public securities (bonds for income and equities for growth), and a private market glidepath portfolio, where the initial private market exposure is set at 20% over the first 20 years of retirement savings, and then is gradually reduced to 15% at the time of retirement and eventually to 0%. To represent a typical DC default design, both portfolios start with a high exposure to growth assets at the

**Low returns dragging on pension savings**

The low-return environment is having a material impact on diversified portfolios globally. This is especially worrisome for pension savings where future spending power and peoples’ wellbeing depends on the contribution and returns achieved on those savings. Depending on the regulatory format, a potential shortfall in terms of target returns is borne by different parties. For example, under a Defined Contribution (DC) pension scheme, the employee bears the investment risk, whereas the employer bears the shortfall risk under a Defined Benefit (DB) pension scheme. Unfortunately for DC beneficiaries, early studies have shown that DC pension plans are lagging DB plans in terms of performance – in our view, this can be partly explained by a lower allocation to alternative assets.

² This analysis is taken from a research paper published by Partners Group in January 2017: Adding private markets to DC pension plan portfolios – a case study. To access the full case study, which includes a detailed explanation of calculations, data, benchmarks and assumptions used, please go to: www.partnersgroup.com/research.

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**Adding private market investments to a DC glidepath**

outset, transitioning gradually into a more income-oriented allocation along the glidepath as retirement approaches. As the private market allocation is growth-oriented with only limited income characteristics, it is funded from the allocation to public equities.

Using historical data from 1975 to 2015 derived from broadly accepted asset class benchmark indices, the enhanced private market glidepath outperforms the standard glidepath by 0.4% per year, increasing the income available at retirement by more than 15%. What at first glance seems to be a relatively modest annual outperformance, results in a marked improvement in the income of the beneficiary at retirement due to compounding over several decades.

Not surprisingly, applying forward-looking asset class return estimates based on today’s prevailing low risk premia results in a substantially lower potential return for pension portfolios going forward. However, the difference in performance between the private market glidepath (+4.6% p.a.) and the standard glidepath (+3.7% p.a.) in the forward-looking analysis is even more pronounced than in the historical analysis. The private market glidepath outperforms the standard glidepath by +0.9% p.a. in absolute terms. Among other factors, this stems from performance projections which reflect the current macro-economic environment characterized by relatively low growth. In a low growth environment, value creation tends to be a more significant driver as a percentage of total returns and thus private markets have a greater outperformance potential versus their public market counterparts. Due to the compounding effect over time, this difference in annualized returns translates into a substantial uptick in retirement capital, resulting in a monthly disposable retirement income that is more than 25% higher than that resulting from the standard glidepath.

Private markets increase the return potential in DC

In addition to increasing the return potential of a portfolio, private market investments can also benefit the overall diversification of an illustrative, traditional portfolio composed of 60% public equities and 40% bonds by broadening the set of risk premia captured. The chart below shows how a diversified allocation to private market asset classes complements a traditional portfolio in a distinct manner: while private equity predominantly provides a return-enhancing component, asset classes such as private infrastructure and private debt show relatively stronger diversification benefits.

Adding private markets to a traditional portfolio

Leaving the DC world behind and returning to the general application of Partners Group’s relative value themes across multi-asset private market portfolios, we have once again opted to provide two stylized private market portfolios. The portfolios maintain an overall diversified approach and take into account technical factors such as deal flow, breadth of asset classes and incremental risk/return factors. The ‘return’ portfolio combines investment themes and segments of private markets catered towards capital appreciation, while the ‘yield’ portfolio focuses on income-oriented opportunities.

In the return-focused portfolio, asset classes with high value creation potential such as private equity and private real estate have the largest weight. Within private equity, we focus on non-cyclical, mid-cap direct in sectors that benefit from transformative growth. Pricing for quality companies has increased but add-ons can often be purchased at attractive multiples, making platform growth a preferred investment thesis. Private equity secondaries remain pricy; often requiring leverage to bring IRR expectations into double-digit territory. In real estate, on the directs side we focus on office/residential space in areas supported by strong population and employment growth near metro and infrastructure hubs. Real estate secondaries currently have the largest overweight as we focus on mature portfolios of properties stemming from pre-crisis vintages that are looking for liquidity solutions as they approach the end of their life. Within private infrastructure, we focus our direct sourcing efforts on the renewables, communications and energy sectors, including building mid-stream natural gas processing facilities in the US or wind farms in Europe.
Yield-focused investors place greater emphasis on income-generating assets like private debt and private infrastructure. Despite some spread compression, corporate debt continues to offer compelling risk-adjusted returns given high equity contributions, reasonable use of leverage and floating rate yield. Second lien spreads have also somewhat tightened, but privately placed and pre-syndicated second lien continues to be an attractive investment opportunity. We have rebalanced corporate debt to an overweight in subordinated debt and lowered senior debt to neutral. Real estate subordinated debt carries an overweight as a financing gap provides investment opportunities. For example, European commercial real estate debt fundraising represents only about 50% of potential future financing needs, while regulatory changes (US and Europe) and balance sheet repair (Europe), are keeping banks on the sidelines. In infrastructure, we seek low-risk assets with stable cash flows, such as fiber network operators, which are often the sole operators in a certain region and also benefit from long-term concessions.

**Illustrative private market portfolios**

<table>
<thead>
<tr>
<th>Return-focused</th>
<th>Yield-focused</th>
</tr>
</thead>
<tbody>
<tr>
<td>Platform expansion (0%-15%)</td>
<td>Core (0%-15%) 6%</td>
</tr>
<tr>
<td>Private infrastructure</td>
<td>Secondaries (0%-5%) 2%</td>
</tr>
<tr>
<td>Building core (0%-15%)</td>
<td>Special situations/mezzanine (0%-10%) 5%</td>
</tr>
<tr>
<td>Secondaries (0%-15%) 13%</td>
<td>Operational value creation (5%-15%) 10%</td>
</tr>
<tr>
<td>Private real estate</td>
<td>Debt (5%-20%) 6%</td>
</tr>
<tr>
<td>Opportunistic (5%-15%)</td>
<td>Subordinated debt (5%-15%) 13%</td>
</tr>
<tr>
<td>Value added (5%-20%)</td>
<td>Privatated debt</td>
</tr>
<tr>
<td>14%</td>
<td>(0%-10%) 2%</td>
</tr>
<tr>
<td>Secondaries (5%-20%) 8%</td>
<td>Subordinated debt (5%-20%) 18%</td>
</tr>
</tbody>
</table>

Source: Partners Group, for illustrative purposes only.
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