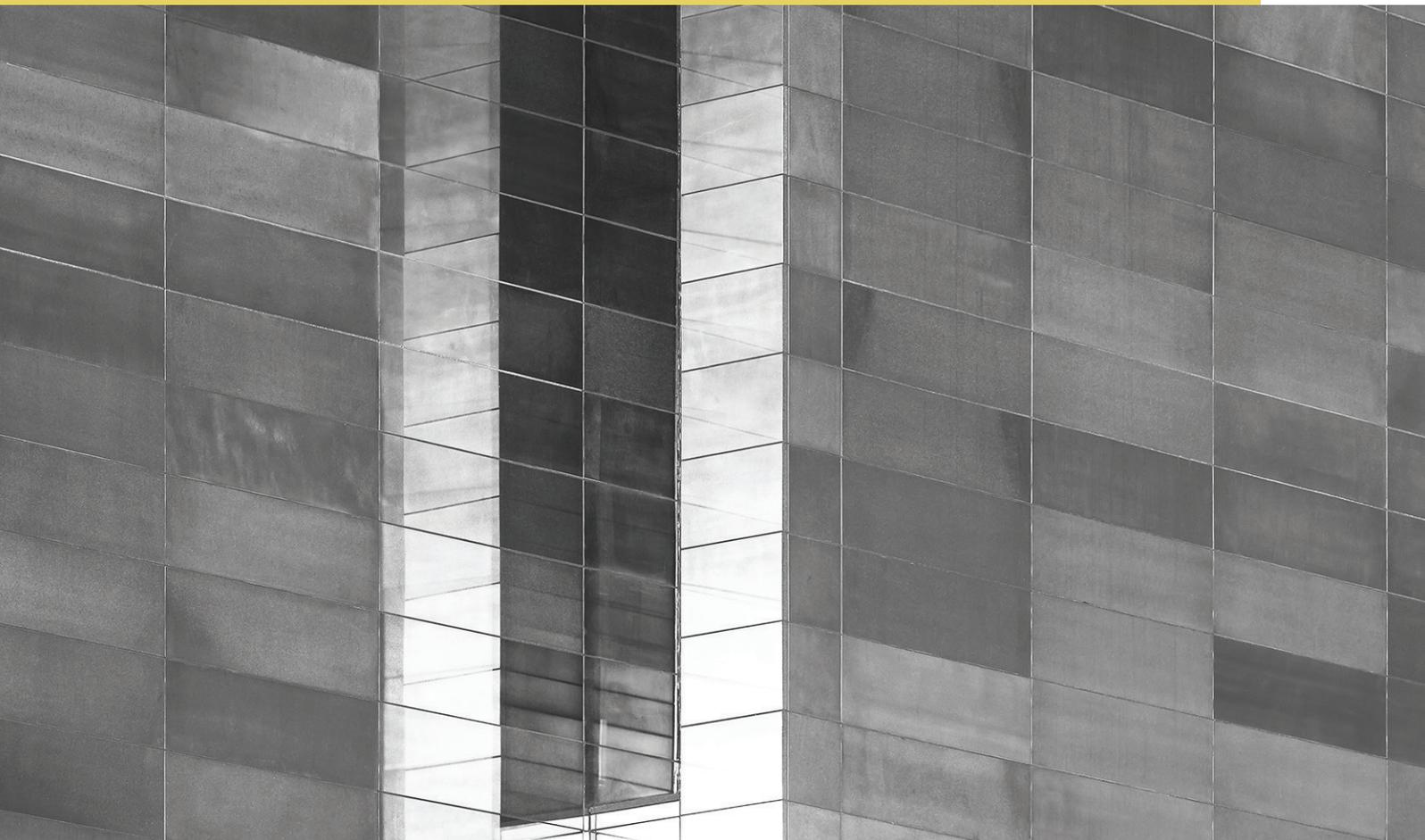


SWECO CAPITAL CONSULTANTS



Quarterly European Insights



MANAGEMENT LETTER

After a productive and successful close of 2018, I'm elated to share with you this European outlook and market insight. The award of new business and new challenge brings us tremendous opportunity, our consultants move forward into 2019 with both optimism and strategy for managing unpredictability markets.

Demonstrating value is a major point of pride and these insights shed a light into this depth and capability of advice. We are so fortunate to complement our financial expertise with the specialized technical knowledge of real assets within Sweco, this interface allows us to deliver best in class advice and commitment to a one step ahead approach.

Thank you for the opportunity to share, we hope that you find it a valuable read in stride for bettering your investment practices in real assets and a more sustainable future.

Regards,

Saskia van den Bronk

Head of Sweco Capital Consultants

Telephone direct +31 88 811 58 47

Mobile +31 6 52 82 34 22

saskia.vandenbronk@sweco.nl

CONTENTS

2019 EUROPEAN OUTLOOK	2
RISK MANAGEMENT FOR IMPACT INVESTMENTS	5
TRANSPORT REVOLUTION - THE FUTURE OF ACCESSIBLE PUBLIC TRANSPORT IN URBAN AREAS	8

2019 EUROPEAN OUTLOOK

In 2019 there is still much to choose in real assets

Last year we wrote in our New Year’s blog that investors in real assets had to take into account an average total return of 9% in 2018. This yield forecast was certainly feasible. Many investors noted a return of more than 10% on their real estate and infrastructure portfolios in 2018. Sweco Capital Consultants also expects attractive returns of an average of 8% -10% on infrastructure and 7% -9% on real estate by 2019. This is based on a well-diversified portfolio to the Netherlands, the rest of Europe and the US.



Macroeconomic instability as the biggest risk factor

In 2018, investors have benefited from the economic boom. In all regions, economic growth combined with low interest rates, the wide availability of capital and the limited supply of core investments contributed to solid returns. For 2019 Sweco expects a cooling of the economy in most countries, see Figure 1. Despite this, the economic growth figures remain attractive. The upward market cycle is not over yet and will continue in 2019. A recession is not yet under discussion. In the eyes of Sweco Capital Consultants, geopolitical developments in the coming year pose the greatest risk to the economy and the investment markets.

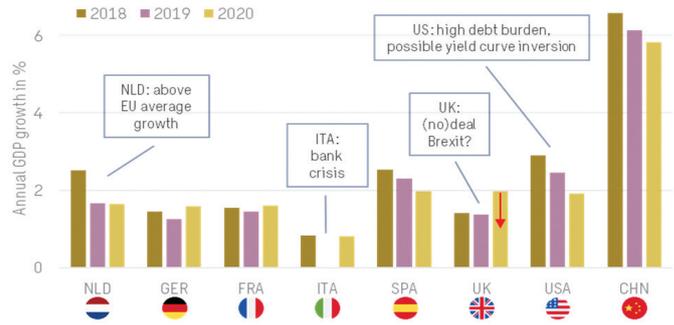


Figure 1. Economic growth forecast, GDP growth in % (sources: Oxford Economics, Sweco). The growth forecast for the UK is lowered by Sweco due to increased geopolitical uncertainty.

Interest in real estate means more selective investment policy

Despite characteristics of a late-cyclical market, investors’ interest in the property market remains high. However, a selective investment policy is advisable. Sweco Capital Consultants sees the most opportunities for rental properties in 2019, from private rental apartments to student housing and care homes, and to the logistics property market. In 2019, returns of more than 10% are real for these real estate sectors. However, the availability of core product is scarce and the queues when entering the relevant sector funds are relatively long. Due to persistent scarcity, population growth and a declining average household size, Sweco Capital Consultants expects further value development for rented housing in 2019. As a result of e-commerce and economic growth, demand for logistics property will continue, with emphasis on logistics facilities close to the consumer in or around urban areas. E-commerce leads to a further link between retail property and logistics real estate, with consequences for urban spatial planning, see also the recent Sweco report Signed, sealed, delivered.

Sectors and regions where investors need to be more cautious are the American real estate market in general, because of the late-cyclical nature of the market (see Figure 2), and the retail market worldwide. Stores have a relatively low historical return. For investors who are looking for a stable direct return, the retail market certainly offers attractive investment opportunities. The risk of retail investments is low, given



the small deviations around the average return. Especially dominant, high street shopping areas and neighborhood shopping centers in (medium) large cities retain potential. In the office market, traditionally the most liquid investment market, Sweco Capital Consultants sees the most potential in offices at multifunctional and multimodal locations. The demand for flexible office concepts with a high-quality service and provision level continues to grow in 2019.

Asia-Pacific

Then Asia-Pacific. This region is increasingly becoming an interesting market for real estate investors. Not only do Asian investors invest more and more in Europe and the United States, Sweco Capital Consultants also notes that Dutch institutional investors are orienting themselves on the Asian property markets, such as Australia, China, Japan, Hong Kong and Singapore. Sweco Capital Consultants, in collaboration with a local research partner, has access to market knowledge, which can help institutional investors with an initial analysis of investment opportunities in Asia.

Record investments in infrastructure are continuing.

After historically high returns in 2017 and 2018, Sweco Capital Consultants considers a return of 8% -10% on a broadly spread unlisted infrastructure portfolio in 2019 real. Depending on the risk profile of the assets in the portfolio, returns can vary from 4% -6% for core investments (low risk) to 15% -18% for opportunistic investments (high risk).

The infrastructure market is popular among investors. There has never been so much invested in infrastructure as in 2018. In 2018, unlisted infrastructure funds raised approximately € 75 billion in capital (\$ 85 billion, see Figure 3). In addition, funds still have a lot of money on the shelf, more than € 150 billion. That is why Sweco Capital Consultants expects again historically high investment volumes in infrastructure in 2019. In January 2019, a total of 208 funds are open for investments. These funds have a total target size of approximately € 170 billion in equity.

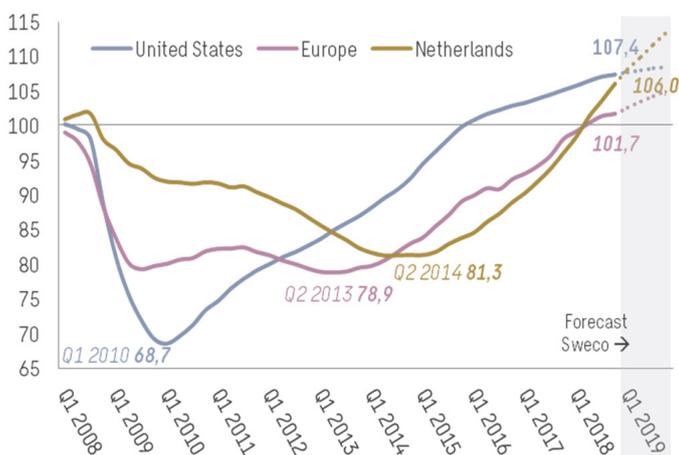


Figure 2. Capital gain index for real estate assets (sources: CBRE, MSCI, NCREIF, Sweco).

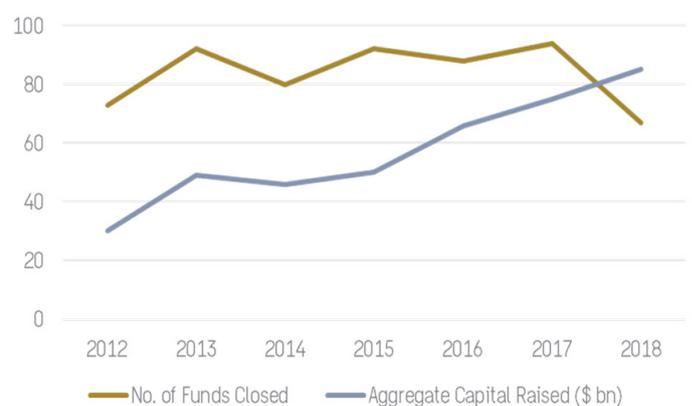


Figure 3. Global capital raise for closed end, non-listed infrastructure funds (source: Preqin).

The expected rate hikes by the US central bank (FED) will affect the growth of the economy and the value increase of infrastructure assets in the US. In Europe, the European Central Bank (ECB) is only expected to make interest rate increases from Q3 2019 onwards. Investments in the European infrastructure markets have a limited risk. Europe will remain the most dominant investment market in 2019, both in the number of transactions and the average transaction volume. However, it is recommended to continue to monitor the impact of the geopolitical situation on infrastructure portfolios, such as the increased likelihood of a 'strong Brexit' and the economic (in) stability of Italy.

Because of the price-boosting effect of the high demand for assets in core countries in Western Europe, North America and Australia, fund managers increasingly consider investment opportunities in regions such as Eastern Europe and the Baltic States. As a result, the number of investments in non-core countries will increase in the years 2019 and 2020. Investments in the renewable energy sector are in demand and are expected to make half of all transactions worldwide in 2019. For investors, investing in the renewable energy sector is interesting to meet their sustainable investment objectives. Finally, Sweco Capital Consultants notes that the demand and requirements of investors are changing, given the growth in the number of unlisted open end infrastructure funds compared to closed end strategies in 2018. Fund managers are responding to this changing need. Managers will also focus more on small to medium-sized assets and sustainable sectors.

References

- CBRE (2018), European Valuation Monitor, Q3 2018.
- Green Street (2019), Commercial Property Price Index, January 7, 2019.
- INREV (2019), Investment Intentions Survey 2019.
- MSCI Netherlands Quarterly Property Index, <https://realestateportal.ipd.com>, geraadpleegd op 2 januari 2019.
- NCREIF Property Index, www.ncreif.org, geraadpleegd op 2 januari 2019.
- Oxford Economics, www.oxfordeconomics.com, geraadpleegd op 16 januari 2019.
- Preqin, www.preqin.com, geraadpleegd op 8 januari 2019.
- Preqin (2019), Alternatives in 2019: Infrastructure Fundraising Continues to Break Records. www.preqin.com, geraadpleegd op 18 januari 2019.
- Reuters, www.reuters.com, geraadpleegd op 8 januari 2019.
- Sweco (2018), Signed, Sealed, Delivered. Analysing the Impact of E-commerce on Urban Areas.



RISK MANAGEMENT FOR IMPACT INVESTMENTS

All investible assets carry a unique balance between risk and reward, generally defined by the chance final returns will differ from expectations, unfortunately impact investments bare no exception. Although the positive capital flows to sustainability earmarked as impact investments shows a growing supply and steady demand, "Impact Risk" carries a dual degree of both social and financial expectations failing to actualize. Building a comprehensive risk management strategy for impact investing can entail both quantitative and qualitative assessments, this piece aims to share an impact risk management framework for varying applications and supportive of the trend itself to become more future proof.

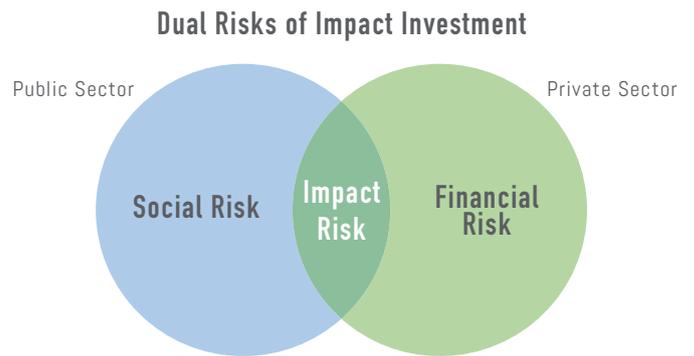
Most market professionals agree that measurement of social returns whether by ESG, KPI or SDG all relatively exists in their infancy when compared to measuring financial returns. Crafting a sustainable risk management practice entails striking a successful merger between sustainable financial theory and the ambition of return in a practical sense. In modern risk management practice, there are five essential components needed to establish a risk management framework: Identification; Measurement; Mitigation; Monitoring and Governance.

Ahead of this impact risk framework summation, the major assumption here is that any impact investment case under analysis would include a predetermined social and financial set of return expectations. Only after these targets are defined can the risk management framework be built to understand impact risks, further investor confidence and the mitigate poor impact performance.

Identification

The first component of impact risk management is to identify impact risks and furthermore to understand what makes an investment an impact investment. Impact investments can be considered a hybrid model comprising both social and

financial returns, which then carry both social and financial risks in varying degrees.



Identifying impact risks can be achieved by developing a simple series of answers to questions about each type of return expected to occur within the impact strategy. These answers which ultimately define the risks associated with impact can be general to form an understanding of what happens when targets are not achieved to the more complex series of derivative and side effects.

Measurement

Following the identification of risk is the measurement component for assigning quantitative and or qualitative scoring methods to each impact risk identified. Numerical calculations for risk measurement risk can include many different formats, yet many common adaptations of financial risk modelling can form the basis of impact risk modelling including the common proxy of volatility. Qualitative measurements can be a bit more subjective to the measurement scale but can also be numerically scaled, organized and given ranges to determine its degree of impact.

Mitigation

Finding ways to mitigate risks around investing is the continual art and science for testing models and methods in the risk management framework. Optimization of risk

mitigation for impact investing can be a circular function between measurement and monitoring in both lab and practice settings. A systematic approach to coordinate the risk mitigation function can develop its own methodology and parameters to match an investors risk appetite.

Monitoring

The monitoring of risk can be the easiest to forego when investing and commonly serves a highly problematic area of many risk management practices. The upside of mitigating these targeting risks through strategic measures are a reduction in volatility for missing unreachable targets and better impact return results. Realistically most impact investments need time to develop and the pressure of reporting success on a quarterly or half yearly basis may simply not be enough time, instead creating volatility in results and pressure investor confidence.

Governance

Throughout these five stages of impact risk management, each stage of the framework presents an opportunity to manage expectations that could be suggestible if not entirely

negotiable between the investment manager and the investor. Success in the risk management process can be shown in many ways but in the end mostly driven to achieve the results intended. Staying prudent for opportunities to improve and adapt the model in a structured way can make a great deal of difference.

Understanding the concepts behind impact value creation would be an essential first step for determining how effective the impact risk management frameworks would be to mitigate losses. Important to keep in mind however when considering any impact investment is to understand that the scope of associated risks can be quite limited and may involve other tail risks such as adding illiquidity and reputational risks. As the demand for such impact investments is on the rise, both social and financial returns by nature can become more competitive, which can put headwinds into impact returns overall and possibly setback the trend. Therefore, spending the time and effort to develop an impact investment risk management process could not only mitigate losses but improve the industry practice as a whole.







TRANSPORT REVOLUTION – THE FUTURE OF ACCESSIBLE PUBLIC TRANSPORT IN URBAN AREAS

WE NEED TO START PLANNING TODAY FOR NEW MOBILITY SOLUTIONS

New mobility solutions need to be included in the earliest stages of urban planning, since these solutions may significantly change the need for public space – for example, use for car parking and roads. New solutions may also increase possible travel range for residents of areas that are currently poorly served by traditional public transport. Combined mobility solutions are on the rise. These services are based on allowing citizens to access a variety of mobility solutions and select the vehicle that is relevant to the specific trip.

HOW PREPARED ARE COMMUNITIES FOR NEW MOBILITY SYSTEMS?

The increased interest in new mobility solutions in Europe is based on trends linked to digitalisation, changing values and lifestyles. Shared mobility and new technology can increase people's travel options. But how prepared are communities for the new mobility systems that are emerging and the sustainable infrastructure that needs to be developed? According to Eurostat, 49 per cent of residents of large European cities used public transport to get to work.¹ Although this is a relatively high percentage compared with other parts of the world, there is still great potential to increase the use

of public transport in our cities. Today, public transport is unavailable to some citizens due to poor accessibility, and some choose not to use public transport because it does not meet their needs.

Several European cities currently offer Mobility-as-a-service (MaaS) solutions, with various packages of public transport, car-sharing, car hire, cab, rent-a-bike and/or walking. Vienna, Helsinki and Hannover are examples of cities where MaaS solutions are already in use.

MaaS Solutions per City	Vienna	Helsinki	Hannover
Public Transport			
Car Sharing Service			
Cab Service			
Bike Sharing			

The illustration shows the offer of MaaS solution per city, with different transport forms that are combined in a single payable service. Asterisks indicate forms of shared mobility transport.

KEY FACTORS TO INCREASE ACCESSIBILITY

With today's transport solutions it is difficult to provide good accessibility for all travelers. By combining new mobility solutions and high capacity public transport, we can create a transport system that is accessible – and beneficial – for all. The distance from a person's home to the nearest public transport is a key factor in determining whether that person will use public transport. Access to vehicles is also vital; for example, ramps to trains and buses create accessibility for people with disabilities, parents with prams, and people unable to use the stairs.

URBAN STRUCTURES ARE A RESULT OF AVAILABLE TRANSPORT OPTIONS

Public transport is a cornerstone of sustainable urban development. The way a city is built influences the way people travel. The opposite is also true: citizen's travel patterns influence the development of cities and their attractiveness as places to live and work. An urban structure is mainly a product of the dominant transportation system in place during the city's most important period of growth. This can be illustrated by looking at the size of urban areas that make up different cities. The illustration below shows the areas of Atlanta and Barcelona. The cities have similar sized populations, but as Atlanta expanded during the era of the private car, it covers a huge urban area. Barcelona was founded and grew as a city much earlier, in an era without cars. This contributed to Barcelona's very dense city centre.

ATLANTA	BARCELONA
Population: 5.25 million	Population: 5.33 million
Urban Area: 4,280 km ²	Urban Area: 162 km ²
7.5T CO ₂ /ha/an (public + private transport)	0.7T CO ₂ /ha/an (public + private transport)

Atlanta and Barcelona have similar populations, but the size of the urban areas and emissions from the transport systems differ significantly. Newman & Kenworthy 1999².



“New transport solutions should be included in the earliest planning stages of urban development. This will give more of the city's residents access to alternative modes of travel, and reduce people's dependence on the car,” says Sara Polle, traffic expert at Sweco.

FOUR THINGS COMMUNITIES CAN DO FOR AN SUCCESSFUL PLANNING OF ACCESSIBLE PUBLIC TRANSPORT

1. Stopping and reversing urban sprawl is one of the most important measures to provide better access to public transport, given today's typical public transport solutions.
2. A transport system that is easy for users to understand is an important factor to persuade more people to use public transport. Proximity, access to vehicles, and transport system complexity are key factors to increase accessibility.
3. Mobility solutions need to be included in the earliest stages of urban planning, since these solutions can significantly alter the need for public space (e.g., use for car parking and roads).
4. Accessibility through public transport is closely linked to the time and cost. It is vital for the functioning of our cities that new technologies and services supplement, rather than replace, well-functioning public transport. Discover the ongoing transport revolution and how future public transport in urban areas needs to start planning today for new mobility solutions.

**SWECO
CAPITAL
CONSULTANTS**

**Quarterly
European
Insights**



www.sweco.nl