HEALTH WEALTH CAREER

BUILDING A REAL ASSET PORTFOLIO

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EXECUTIVE SUMMARY

A defining characteristic of real assets is that they are “hard” or “tangible” assets and provide ownership of a store of value. They tend to preserve value in inflationary environments and they can also serve as a diversifier within a growth portfolio, as a result of an expected lower correlation to equity-like asset classes.

Given current valuation levels, traditional fixed income investments are less attractive to investors as incomegenerating assets, and uncertainty remains in equity markets — strengthening the case for real assets in client portfolios.

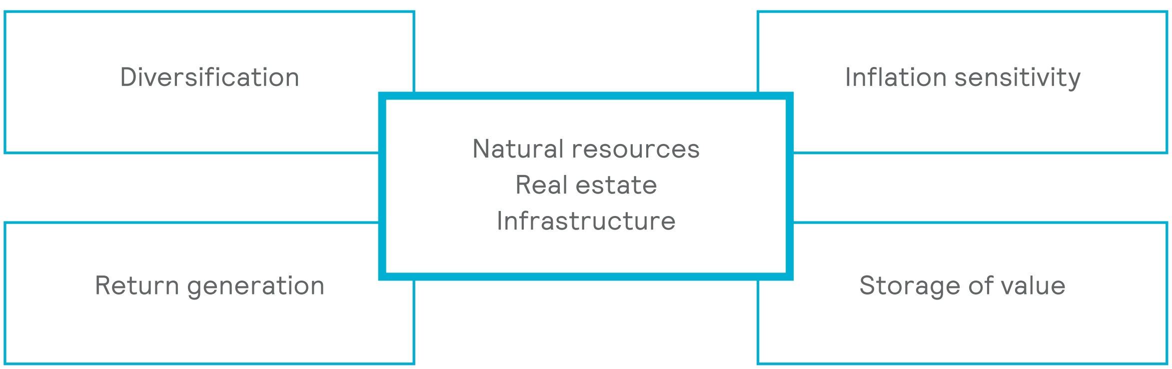
The decision to add real assets to a portfolio depends on an investor’s objectives, risk tolerance, and structural constraints. Illiquidity, performance measurement, regulatory risk, financing risk, and investment risks, among other risks, should be considered. Furthermore, within each real asset category are sub-asset classes with varying risk/return profiles. Given the characteristics of the asset class, it is important for investors to have a well-diversified portfolio customized to their objectives and constraints.

ROLE OF REAL ASSETS

Real assets provide exposure to investments linked to physical assets for which the return is expected to come largely from the yield, income or income-generating potential.[1] Real assets broadly include property, infrastructure, timberland, shipping and natural resources. In addition, assets can be held in a listed or an unlisted form.

Real assets provide **storage of value** over the long term, **inflation sensitivity** and **diversification** within a portfolio (see Figure 1). In addition, they tend to have a **cash-flow-generating focus**. These characteristics are evident at different levels for the various real asset sub-classes, but a well-constructed and diversified portfolio could exhibit all of these aspects. We believe the full potential of real assets can be achieved with direct or private commingled vehicle implementation. On the other hand, liquid investments are a valuable alternative to offset daily valuation and illiquidity issues.

FIGURE 1: REAL ASSETS CHARACTERISTICS

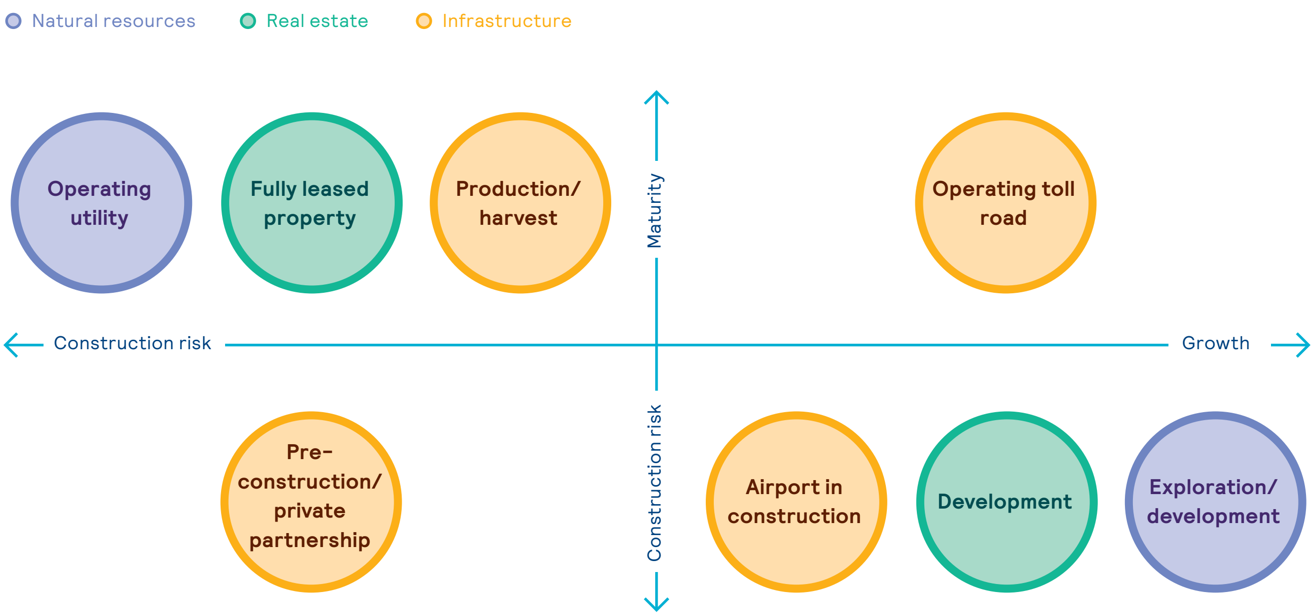


Source: Mercer

1 Mercer. *Constructing a Growth Portfolio*, 2012 (with minor amendments).

For the purpose of this paper, we will concentrate on natural resources, infrastructure, and real estate as a broad representation of real assets (see Figure 2). Each of these asset classes is characterized by a range of risk and return subcategories and varying implementation options.

FIGURE 2: REAL ASSETS CLASSIFICATIONS



Source: Mercer

For illustrative purposes only. Not to scale and not exhaustive

NATURAL RESOURCES

Natural resources ould be grouped into:

- Energy resources — focused mainly on oil and gas, with income from proven reserves; provide commodity price exposure and have modest value add potential
- Timberland — returns are mainly commodity production driven (that is, biological growth), as the asset class includes timber production and harvesting
- Agriculture — includes investments in farmland and provides commodity and land price exposure; returns are driven by rental payments and commodity production
- Mining and minerals — income-generating reservebased opportunities and more private equity-focused strategies

REAL ESTATE

Real estate investments, which are characterized by heavy building costs and long duration of life and are backed by hard assets, can be broadly divided into three investments styles:

- Core investments — usually income-focused and include fully leased existing properties with low gearing (debt as a percentage of equity capital)
- Value-added investments — focused on both income and appreciation of properties and have higher gearing than core real estate; could include renovation projects and may have lease-up requirements
- Opportunistic real estate — could include redevelopment projects and capital market deals; has the highest gearing and focuses mainly on property appreciation as a source of returns

INFRASTRUCTURE

Infrastructure investments — which are usually defined by high barriers to entry, economies of scale, inelastic demand, long life duration and inflation sensitivity — include the following:

- Core infrastructure investments — regulated assets that provide availability-type income streams
- Core plus investments — characterized by mature operations with heavier economic exposure
- Opportunistic investments — the heaviest economic exposure, usually are in their development phase, and could be exposed to emerging market risk

REAL ASSETS RISK/RETURN FACTORS

The growth or return-generating portion of a portfolio could be viewed in a factor-based approach, which represents a combination of quantitative and qualitative risk/return drivers. The same approach could be applied to real assets. As Figure 3 illustrates, a number of risk factors need to be considered, and their significance varies among sub-asset classes:

- GDP growth sensitivity — exposure to general economic growth
- Inflation sensitivity — exposure to the general price level in a given market
- Cash-yield dependence — component of total returns stemming from cash yield
- Interest rate sensitivity — specific sensitivity to a change in base rates
- Project development risk exposure — exposure to project-specific development risk
- Financing sensitivity — dependence on continued availability of finance
- Emerging market exposure — specific exposure to emerging economies
- Liquidity rating — ability to sell exposures in an orderly and timely fashion
- Regulatory exposure — dependence on regulatory support

FIGURE 3: FACTOR SENSITIVITIES

Asset class/ risk factor	Economic (GDP) growth sensitivity	Inflation linkage	Income/ yield-oriented	Interest rate (duration risk)	Project/ development risk	Financing/ leverage risk	Emerging markets/ political risk	Illiquidity risk	Regulatory exposure
Energy resource (gas and oil)	Medium	High	High	Medium	Low	Medium	Low	High	High
Timberland	Medium	Medium	Medium	Medium	Medium	Low	Medium	High	Medium
Agriculture	Medium	High	Medium	Medium	High	Medium	Medium	High	Medium
Mining and minerals	Medium	Medium	Low	Low	High	Low	High	High	High
Core real estate	Medium	Medium	High	High	Low	Medium	Low	Medium	Low
Value-added real estate	High	Low	Medium	Medium	Medium	High	Low	High	Low
Opportunistic real estate	High	Low	Low	Low	High	High	Medium	High	Low
Core infrastructure	Low	High	High	High	Low	High	Low	High	High
Core plus infrastructure	Medium	Medium	Medium	High	Medium	High	Low	High	High
Opportunistic infrastructure	High	Medium	Low	High	High	High	Medium	High	High

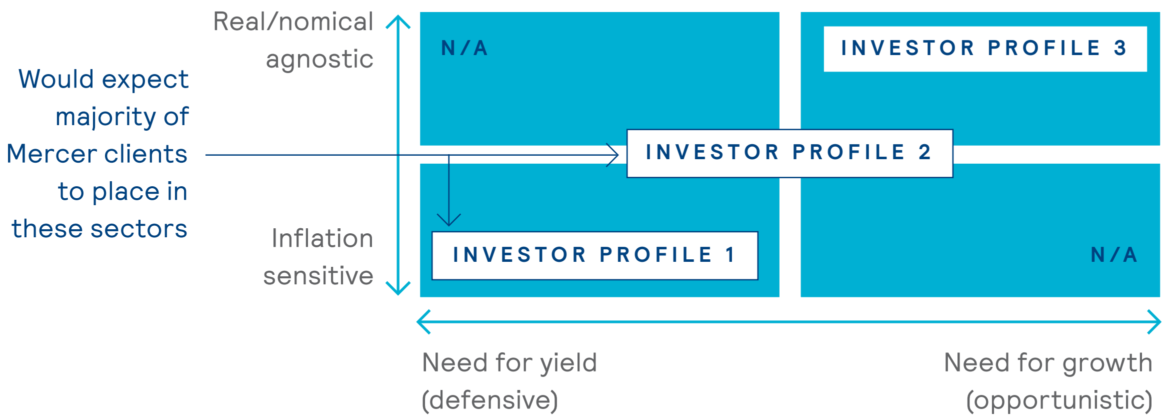
● Natural resources ● Real estate ● Infrastructure

Source: Mercer

BUILDING A PORTFOLIO OF REAL ASSETS

A number of considerations should be taken into account when building a portfolio of real assets. One approach for the initial structure is to define the investor's objectives in terms of defensive versus growth-oriented strategy, as well as inflation sensitivity (see Figure 4).

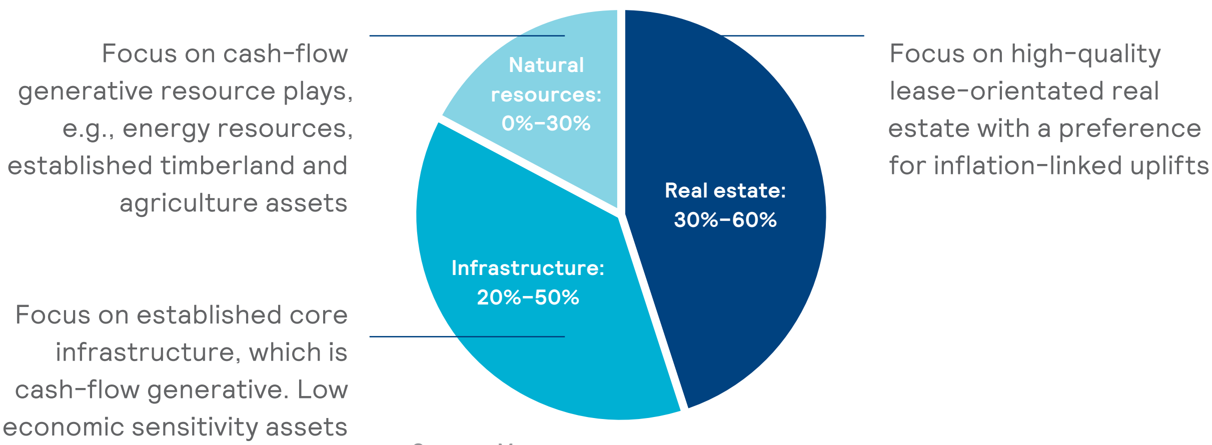
FIGURE 4: PORTFOLIO CONSTRUCTION FACTORS



Source: Mercer

For the investor under **Profile 1** in Figure 5, a strategy should emphasize more income-oriented/defensive investments that generate steady cash flows. Real assets that are defined as "Core" strategies would be the majority of investments comprising a defensive portfolio.

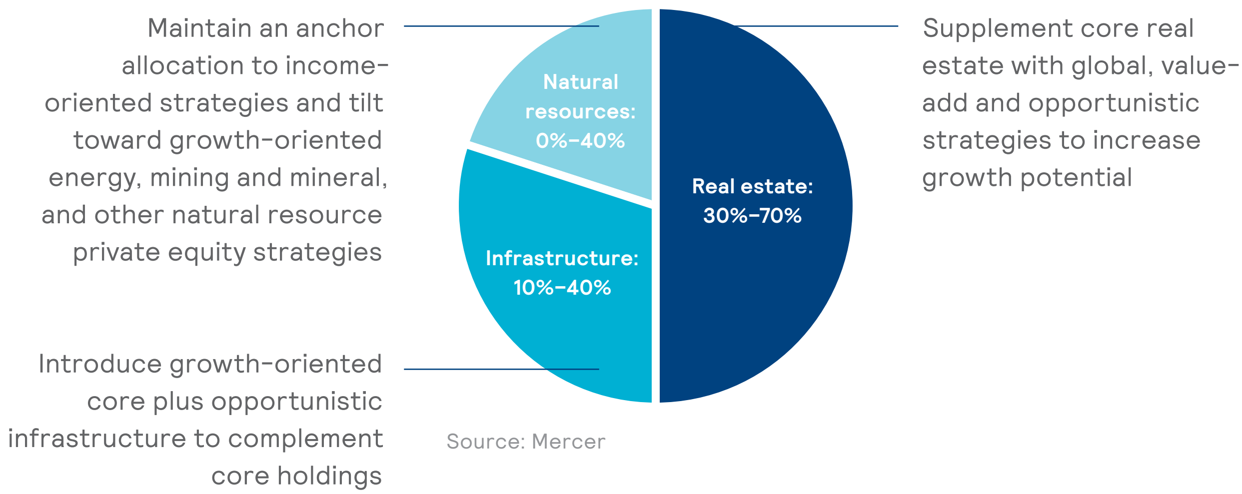
FIGURE 5: SAMPLE DEFENSIVE/INCOME-ORIENTED PORTFOLIO — PROFILE 1



Source: Mercer

For the investor under **Profile 2** (see Figure 6), a combination of Opportunistic and Core Plus (Value-Add) strategies would be the main building blocks of a real asset portfolio.

FIGURE 6: SAMPLE BALANCED INCOME AND GROWTH-ORIENTED PORTFOLIO — PROFILE 2



Source: Mercer

It is imperative for a real asset portfolio to provide a diversified strategy that will not only correspond to the investor's objectives but also mitigate volatility/risk in the overall portfolio. Therefore, another aspect to consider when building a diversified real asset portfolio is the portfolio's sensitivity to the risk factors outlined in the previous section. The individual asset classes' factor sensitivities could be used as a guide when building a portfolio to suit the investor's needs and constraints.

Figure 7 illustrates the risk factor exposures for a Defensive/Income Portfolio (Profile 1) and an Income and Growth Portfolio (Profile 2). Overall, a more income-oriented portfolio will tend to have lower sensitivity to the various factors, with a few exceptions linked to inflation, duration and cash flows.

FIGURE 7: SAMPLE BALANCED INCOME AND GROWTH-ORIENTED PORTFOLIO — PROFILE 2

Portfolio/ risk factor	Economic (GDP) growth sensitivity	Inflation linkage	Income/ yield-oriented	Interest rate (duration risk)	Project/ development risk	Financing/ leverage risk	Emerging markets/ political risk	Illiquidity risk	Regulatory exposure
Investor Profile 1 (defensive/income)	Medium	Medium/ high	Medium/ high	Medium/ high	Low	Medium	Low	Medium	Low/ medium
Investor Profile 2 (income and growth)	Medium/ high	Medium	Medium	Medium	Medium/ high	Medium	Medium	High	Medium

Source: Mercer

NEED FOR LIQUIDITY VS. TOLERANCE FOR COMPLEXITY

An important step in building a real asset portfolio is striking the right balance between tolerance for complexity and the need for liquidity. Most real asset portfolio objectives are achieved through direct investing, but liquidity should also be considered as a constraint for some investors. Factors such as availability of structures and regional, tax and regulatory constraints should also be taken into account when the liquidity structure of a real asset portfolio is determined.

Whenever possible, investors should consider the liquidity of their overall portfolio as part of the strategic asset allocation process/decision. This approach would predetermine the required liquidity of the real asset allocation, which could be implemented through both unlisted and listed fund options. The demand for real assets and the overall development of the asset class have led to the availability of more liquid alternatives for these investments (see Figure 8).

FIGURE 8: CREATING BALANCE IN A REAL ASSETS PORTFOLIO

LIQUIDITY MODELING AND ASSET ALLOCATION →

UNLISTED IMPLEMENTATION CHANNELS →

For example:
- Open-ended funds
- Debt strategies
- Direct co-invest (larger investors)

LISTED OPTIONS

For example:
- Listed natural property resources
- Listed property funds
- Listed infrastructure funds
- Commodity futures

Source: Mercer

When illiquidity is a concern, investors can take a couple of approaches to maximize the potential of their real assets program without necessarily locking access to the assets for a long period. For example, an investor can consider utilizing listed strategies as an interim step in the investment program or create a portfolio that has a combination of both listed and unlisted options. Listed strategies could also serve as placeholders and preserve the asset class exposure until a suitable long-term unlisted investment option is identified.

CONCLUSION

Building a real asset portfolio is a process that requires multiple considerations in terms of planning, strategy selection, implementation, monitoring and capitalizing on opportunities. Real assets have multiple roles in a portfolio, depending on investors' objectives and constraints. In a low-yield environment, real assets' diversification, inflation-linkage, return and store of value characteristics provide attractive portfolio-construction building blocks, and we encourage investors to consider and evaluate the risks and benefits of these asset classes in the context of their overall portfolio. The nuances and implementation options of real assets could be utilized to create a diversified portfolio that would meet the aforementioned characteristics and investors' objectives.

ABOUT MERCER

At Mercer, we make a difference in the lives of more than 115 million people every day by advancing their health, wealth, and careers. We're in the business of creating more secure and rewarding futures for our clients and their employees — whether we're designing affordable health plans, assuring income for retirement or aligning workers with workforce needs. Using analysis and insights as catalysts for change, we anticipate and understand the individual impact of business decisions, now and in the future. We see people's current and future needs through a lens of innovation, and our holistic view, specialized expertise, and deep analytical rigour underpin each and every idea and solution we offer. For more than 70 years, we've turned our insights into actions, enabling people around the globe to live, work, and retire well. At Mercer, we say Make Tomorrow, Today.

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