# Infrastructure investment - Benefits and risks

1. **Benefits**
   - Provide diversification benefits

2. **Risks:**
   - Subjected to:
     - Regulatory risk
     - Risk of financial leverage
     - Possibility that CF will be less than expected
     - Construction risk - for construction of infrastructure assets
     - Operational risk - for assets which are owned an operated by private owner

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# Other alternative investments

Include: tangible collectibles (e.g.: rare wines, arts, rare coins and stamps, valuable jewelry and watches, sport memorabilia)

**Benefits:**
- Enjoy the use (collectible automobiles, arts, jewelry and watches)

**Risks:**
- No income generation. Gains are only from increase in price of these assets
- Storage costs may be significant (e.g.: art, wines)
- Specialised knowledge is required in order to gain profit
- Market for many collectibles are illiquid

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# Management fees / Incentive fees / Net-of-fees returns

- Total fee paid by investors in a hedge fund = management fee + incentive fee

1. **Management fee:**
   - Earned regardless of investment performance. Management fee is calculated on Beginning value / Ending value of assets under management

2. **Incentive fee:**
   - A portion of profit. Incentive fee can be calculated:
     + Net of management fees (value increased - management fees)
     + Independent of management fees
   - Profit could be:
     + Any gains in value
     + Any gains in value excess of management fee
     + Gains in excess of a hurdle rate (fixed percentage - 4% ; or rate plus premium - LIBOR + 2%)
     + High water mark: incentive fee is not paid on gains that just offset prior losses

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# Alternative investments - Summary of important risks

- Standard deviation of returns may be misleading
- Use of derivatives introduces operational, financial, counterparty and liquidity risks
- Performance for some alternative investment categories depends primarily on management expertise
- Hedge funds and PE funds are less transparent than traditional investments
- Many alternative investment are illiquid
- Indices of historical returns and standard deviations may not be good indicators of future returns and volatility
- Correlations vary across periods and are affected by events

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# Alternative investments - Key items for due diligence

1. **Organisation:** Experience, quality, compensation of management and staff; alignment of manager and investor interests; reputation and quality of 3rd-party service providers used
2. **Portfolio management:** Management of the investment process; target markets, asset types and strategies; investment sources; operating partners’ roles; underwriting; environmental and engineering review; integration of asset management and dispositions; process for dispositions
3. **Operations and controls:** Reporting and accounting methods; audited financial statements; internal controls; frequency of valuations; insurance; contingency plans
4. **Risk management:** Fund policies and limits; portfolio risk and key factors; constraints on leverage and currencies and hedging of related risks
5. **Legal review:** Legal structure; registrations; current and past litigation
6. **Fund terms:** Fees (management + incentive); expenses; contractual terms; investment period; fund term and extensions, carried interest; distributions; conflicts; rights of limited partners; termination procedures for key personnel