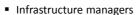




Infrastructure Investment Evolution

CFA CASE STUDY

- History
 - \rightarrow Traditionally financed by governments (New Deal)
 - \rightarrow Privatization push (Thatcher)
 - → Emergence of an asset class (Australian experience)



- → Listed funds initially
- \rightarrow Unlisted, "PE-style" funds emerged
- \rightarrow Small group of global players
- Direct investors
 - $\rightarrow \hbox{Construction companies / strategics}$
 - \rightarrow Australian Supers /Canadian pension plans
 - ightarrow Others (SWFs, Insurance companies, SOEs)







The emergence of a new asset class

Infrastructure Market Stakeholders

CFA CASE STUDY

- Developers
- Construction companies
- Investments Banks and advisors
- Government agencies (regulators)
- Direct investors
- Fund managers
- Technical diligence experts
- Debt providers

- Law firms
- Tax experts
- Labour unions
- Customers/offtakers
- Operations
- Insurance
- Environmental groups
- Media
- Politicians





Managing countless relationships can make deals very complicated

Strictly Private and Confidential – For Discussion Purposes Only

Canadian Players

CFA CASE STUDY

| Plan | FY 2013 Total AUM (\$C) | Invested | Offices | Inception of Infrastructure Program |
|---|----------------------------|----------|---|---|
| TEACHERS' PENSION PLAN | 141bn | 8% | Toronto; London; New York; Hong Kong | 2001 |
| OMERS BOREALIS | 65bn | 15% | Toronto; New York; London; Sydney | 1999 |
| CPP INVESTMENT BOARD | 202bn | 6% | Toronto; London; Hong Kong; New York; São Paulo | 2006 |
| Caisse de dépôt et placement du Québec | 200bn | 4% | Montreal; Quebec City; New York; Beijing | 1999 |
| be imc | 110bn | 5% | Victoria | 2002 |
| PSP | 114bn | 6% | Ottawa; Montreal | 2006 |
| AIMCo | 75bn | 4% | Edmonton; Toronto; London | 2004 |
| OPTrust | 16bn | 15% | Toronto; London; Sydney | 2006 |

How to Build an Infrastructure Portfolio?

CFA CASE STUDY

- Crawl, walk, run
- Funds
 - → Open-end vs. closed-end
 - \rightarrow Risk return profile (core vs. core-plus vs. value-add)
 - \rightarrow Geographic exposure
- Co-investments
 - → Alongside Fund Managers
- Direct Investments
 - → Primary vs. secondary
 - → Auctions vs. exclusive





Strictly Private and Confidential – For Discussion Purposes Only

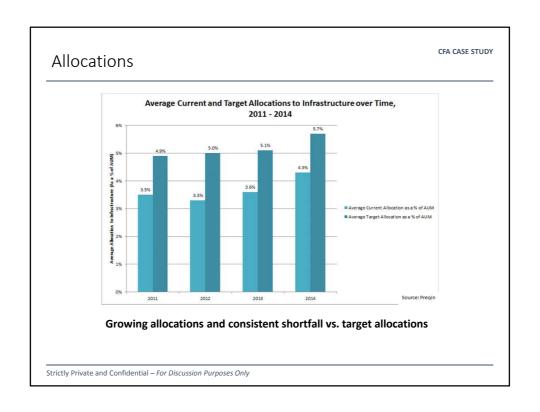
Benchmarks

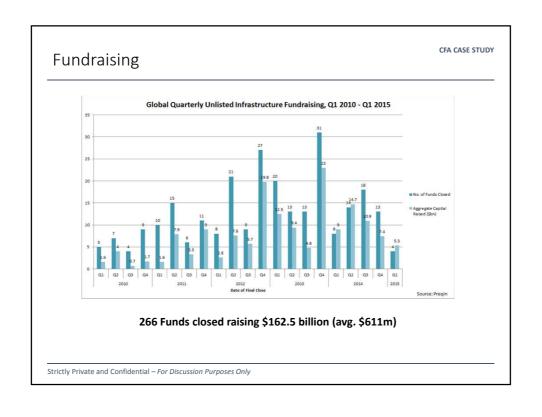
CFA CASE STUDY

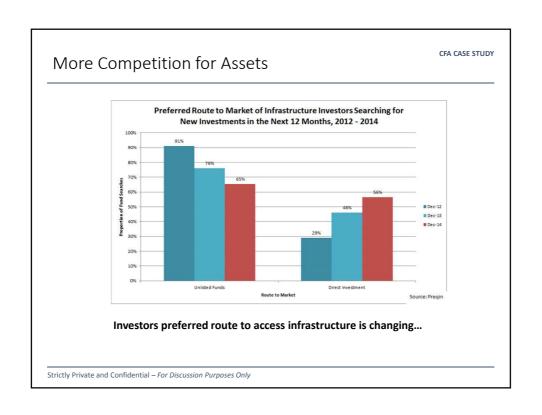
- Unique to each investor
- Potential benchmarks include:
 - $\rightarrow {\sf Listed\ Infrastructure\ Market\ Indices}$
 - → Inflation Benchmark + Margin (e.g. CPI + X%)
 - \rightarrow Inflation Linked Bond Yield + Margin
 - \rightarrow Bond Yield + Margin (e.g. Treasuries + Y%)
 - \rightarrow Absolute Return (Z%)
 - $\rightarrow \text{Peer Group of Unlisted Infrastructure Funds}$
 - → Hurdle rate (8%)

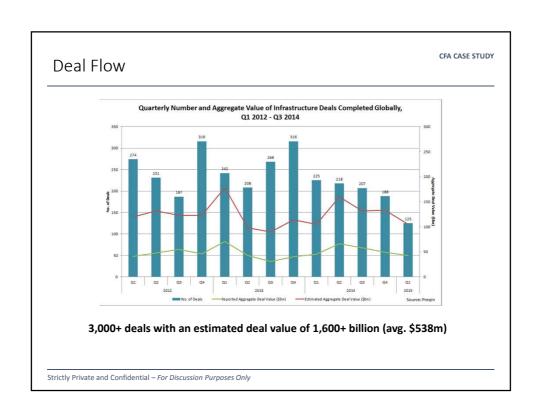


Choosing the appropriate benchmark drives strategy and target markets









Asset Management

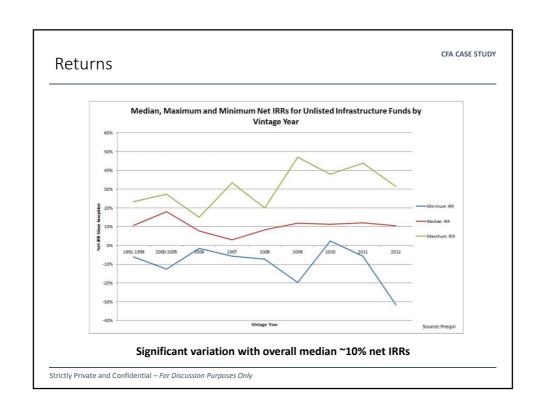
CFA CASE STUDY

- Need to consider asset management strategy as important component of direct investment platform
- Considerations that require asset management strategy include:
 - $\rightarrow \text{Customer experience}$
 - → Internal reporting
 - → Changes to strategy
 - \rightarrow Acquisitions/divestitures vs. internal growth
 - → Financing



More than just attending board meetings





Canadian Players' Returns

CFA CASE STUDY

| Plan | FY 2013 Total AUM (\$C) | Invested | FY2013 Infrastructure Return (IRR) | Inception of Infrastructure Program |
|---|----------------------------|----------|---------------------------------------|---|
| TEACHERS' PENSION PLAN | 141bn | 8% | 16.8% | 2001 |
| OMERS BOREALIS INFRATRICTURE | 65bn | 15% | 12.4% | 1999 |
| CPP INVESTMENT BOARD | 202bn | 6% | 10.1% | 2006 |
| Caisse de dépôt et placement du Québec | 200bn | 4% | 10.6% | 1999 |
| be imc | 110bn | 5% | 11.4% | 2002 |
| PSP | 114bn | 6% | 10.1% | 2006 |
| AIMCo | 75bn | 4% | 2.9% | 2004 |
| OPTrust | 16bn | 15% | 11.6% | 2006 |

Strictly Private and Confidential - For Discussion Purposes Only

Case Study 1 - Observations

CFA CASE STUDY

- Identifying long-term trend is only half the battle
- Investing alongside experienced partners makes job much easier
- Choosing appropriate structure for an investment can be complex
- Timing and resource availability is a real factor
- Be conservative in assumptions if it can go wrong, need to consider impact on returns
- Try to draw lessons from similar investments
- Risk identification and mitigation is crucial

Strictly Private and Confidential – For Discussion Purposes Only

16

Case Study 2 - Lessons Learned

CFA CASE STUDY

- Know your partner
 - → Ensure biases, beliefs and interests are aligned
- Move quickly on replacing management, implementing change
- Consider affordability for customers
 - → Can the demographic and socioeconomics support rate increases?
- Don't underestimate the challenges of implementing ERP systems (e.g., cost, time, staff, business operations/functions)
- Don't pay for growth from unidentified acquisitions or contracts
- Debt structuring at acquisition: beware of "ratcheting covenants"
- Don't underestimate the difficulty of operating and improving the profitability of nonregulated business segments
- Engage with customers and community early, and often

Strictly Private and Confidential – For Discussion Purposes Only

17

Conclusions

CFA CASE STUDY

- Infrastructure investment has progressed...but still early days
- There are a lot of considerations (and costs) that go into making direct investments in infrastructure assets
 - \rightarrow Sourcing and aligning with experienced partners is competitive advantage
 - \rightarrow Asset management approach and strategy is crucial
 - ightarrow Risk identification and mitigation requires considerable due diligence
- Possible implications for today's investors
 - $\rightarrow \text{Growing desire to deploy capital might exceed number of good opportunities available} \text{need to be selective}$
 - → Finding skilled and experienced teams with right capabilities is difficult need to know who to ask
 - → Be realistic regarding pacing and return expectations need to be patient

Infrastructure investment is here to stay

Disclaimer

CFA CASE STUDY

THIS PRESENTATION IS NOT INTENDED TO BE RELIED UPON AS THE BASIS FOR AN INVESTMENT DECISION, AND IS NOT, AND SHOULD NOT BE ASSUMED TO BE, COMPLETE. THE CONTENTS HERRIN ARE NOT TO BE CONSTRUED AS LEGAL, BUSINESS, AD TAX ADVICE, AND EACH RECIPIENT OF THIS PRESENTATION SHOULD CONSULT THEIR OWN ATTORNEY, BUSINESS, AND YOUNG IN A TO TAX ADVICE. IN CONTINIOR THAT AND ADVICE. IN CONTINIOR THAT AND TAX ADVICE. IN CONTINIOR THAN ADVICE. IN CONTINIOR THAT AND ADVICE IN CONTINIOR THAN ADVICE. IN CONTINIOR THAN ADVICE. IN CONTINIOR THAT ADVICE IN CONTINUOR THAT ADVICE IN CONTI

THERE CAN BE NO ASSURANCE THAT ANY POTENTIAL TRANSACTION DESCRIBED HEREIN WILL BE EXECUTED.

THE INFORMATION CONTAINED HEREIN IS PROVIDED TO YOU AT YOUR REQUEST FOR INFORMATION PURPOSES ONLY AND IS NOT, AND MAY NOT BE RELIED ON IN ANY MANNER AS, AN OFFER TO SELL OR A SOLICITATION OF AN OFFER TO BLY AN INTEREST IN A FUND THAT MAY RESULT FROM THE STRATEGY DISCUSSED HEREIN AND ANY RELATED STRATEGY DISCUSSED SUBSEQUENTLY, A PRIVATE OFFERING OF INTERESTS IN ANY SUBSEQUENT FUND WILL ONLY BE MADE PURSUANT TO A MEMORANDUM AND THE FUND'S SUBSCRIPTION DOCUMENTS, WHICH WILL BE FURNISHED TO QUALIFIED INVESTORS ON A CONFIDENTIAL BASIS AT THEIR REQUEST FOR THEIR CONSIDERATION IN CONNECTION WITH SUCH OFFERING.

TIMING: OPINIONS EXPRESSED ARE CURRENT OPINIONS AS OF THE DATE APPEARING IN THIS MATERIAL ONLY. NO PART OF THIS MATERIAL MAY, WITHOUT THE SPONSOR'S PRIOR WRITTEN CONSENT, BE (I) COPIED, PHOTOCOPIED OR DUPLICATED IN ANY FORM, BY ANY MEANS, OR (II) DISTRIBUTED TO ANY PERSON THAT IS NOT AN EMPLOYEE, OFFICER, DIRECTOR OR AUTHORIZED AGENT OF THE RECIPIENT.

COMMUNICATIONS: NO PERSON HAS BEEN AUTHORIZED TO GIVE ANY INFORMATION OR TO MAKE ANY REPRESENTATION, WARRANTY, STATEMENT OR ASSURANCE NOT CONTAINED IN THE COMPRISE OF THE PROPERTY OF THE PRO

Strictly Private and Confidential – For Discussion Purposes Only

19



Connect with us!

Linked in CFA Society Toronto



For more information on CFA Society Toronto, please visit:

www.cfatoronto.ca