

***Land-Based Aquaculture:  
Equity Risk and Return Expectations***

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The Big Q: What is the return on equity that will attract capital to land-based aquaculture?

- Is land-based aquaculture more appropriate for corporate finance or project finance?
- If corporate finance, where does the technology sit on the risk spectrum?
- If project finance, what is the best analog in the infrastructure sector?
- Is Impact Finance relevant? Is it enough?
- Are there alternative financing sources/structures?

## Corporate-Project Finance Continuum

Dimension	Corporate Finance	Project Finance
<b>Financing Vehicle</b>	Multi-purpose organization	Single-purpose entity
<b>Type of Capital</b>	Permanent - an indefinite time horizon for equity	Finite - time horizon matches life of project
<b>Dividend Policy &amp; Reinvestment Decisions</b>	Corporate management makes decisions autonomous from investors and creditors	Fixed dividend policy - immediate payout; no reinvestment allowed
<b>Capital Investment Decisions</b>	Opaque to creditors	Highly transparent to creditors
<b>Financial Structures</b>	Easily duplicated; common forms	Highly-tailored structures
<b>Transaction Costs for Financing</b>	Low costs due to competition from providers, routinized mechanisms and short turnaround time	Relatively higher costs due to documentation and longer gestation period
<b>Size of Financings</b>	Flexible	Might require critical mass to cover high transaction costs
<b>Basis for Credit Evaluation</b>	Overall financial health of corporate entity; focus on balance sheet and cash flow	Technical and economic feasibility; focus on project's assets, cash flow and contractual arrangements
<b>Cost of Capital</b>	Relatively lower	Relatively higher
<b>Investor/Lender Base</b>	Typically, broader participation; deep secondary markets	Typically, smaller group; limited secondary markets

### Stages of Venture Capital Financing

<b>Financing Stage</b>	<b>Investment Horizon/Yield</b>	<b>Risk Assessment</b>	<b>Capital Application</b>
Seed Stage	5-7 30-40%	Extreme	For supporting a concept or idea or R&D for product development
Start-Up	4-6 30-40%	Very High	Initializing operations or developing prototypes
Early Stage	3-5 25%-35%	High	Start commercial production and marketing
Growth Stage	3-5 20-30%	Moderately High	Expand market & growing working capital need
Expansion Stage	1-3 20-30%	Medium	Market expansion, acquisition & product development for profit making company
Mezzanine	1-3 18-25%	Low	Facilitating public issue financing

## **Infrastructure Finance – Definition**

According to JP Morgan Asset Management...Infrastructure can be defined as the essential facilities and services upon which the economic productivity of society depends. These assets are typically involved in the movement of goods, people, water, and energy, and include:

### **Advantages of Infrastructure Investment**

Infrastructure assets have several unique characteristics that make them attractive investments. Here are some potential benefits:

- Stable cash flows and economic insensitivity
- Diversification benefits - low correlation to other major asset classes resulting in compelling diversification benefits.
- Attractive long-term returns - owners must earn fair returns in order to incentivize them to establish, maintain and expand facilities in good working order
- Inflation protection:

### **Risks of Infrastructure Investment**

- Sub-sector: Each infrastructure sub-sector has different risk factors, return drivers, and economic sensitivities.
- Political and regulatory: Varied and evolving political, regulatory and legal frameworks.
- Stage of development: Development projects face higher construction risks and demand uncertainty compared to mature assets.
- Liquidity: Limited number of potential investors and buyers.
- Emerging asset class: As a relatively new asset class, infrastructure does not have reliable return data comparable to other asset classes

Asset Segment	Risk	Average Cash Yields (5 Yr) %	Average Leveraged IRR %	Capital Appreciation
Social Infrastructure	Low	4-5%	6-9%	Low
Contracted Power Generation	Medium Low	5-7%	10-13%	Medium
Regulated Assets	Medium	6-8%	10-15%	Medium
Merchant Power Generation	High	8-12%	15-25%	High

## **Definition of Impact Investment**

The practice of impact investing is defined by the following four core characteristics:

**Intentionality:** An investor's intention to have a positive social or environmental impact through investments is essential to impact investing.

**Investment with Return Expectations:** Impact investments are expected to generate a financial return on capital or, at minimum, a return of capital.

**Range of Returns and Assets Classes:** Impact investments target financial returns that range from below market (concessionary) to risk-adjusted market rate, and can be made across asset classes, including but not limited to fixed income, venture capital, and private equity.

## **Alternative Financing Structures/Sources?**