

Certainly, the construction and maintenance of major infrastructure investments such as highways and ports involve a long time between conception and realization and need to adapt to future shifts in population centers, trade flows, and the migration of production and freight corridors. Several factors tend to favor a long time horizon when looking at capital investments and operating costs. These include:

• High capital expenditure. Along with large capital expenditures usually come delayed revenue streams and unpredictable future cost levels.

• Long time to plan. Projects that take a long time to plan often required long forward views and extensive cost and economic estimations.

· Long time to build. If investments take a long time to build, then they require a long planning horizon, and the longer the time to build, the greater the risks that important planning assumptions will be or become wrong during the building horizon.

• High exit costs. To the extent that industries or projects are costly to exit, the planning horizon extends even further.

Transportation industries are characterized by a combination of these factors. Port and terminal operations often work on a long-term basis since more frequent changes in ownership or operation could disrupt port handling activities that are widely viewed as a public service. Ocean shipping carriers adjust their fleet sizes by buying and selling or scrapping ships. Shipowners predict the next peak or valley before investing. Railroads plan their capital expenditures 5-10 years ahead and evaluate capital-intensive decisions such as tracks, signaling, and motive power on much longer timeframes.

"In the long run, we'll all be dead," goes the famous disparaging guip about economists, those theoretical pundits who have no grasp of the day-to-day pressures of managers. While true, the economists understand something that is simply beyond the horizon that most businesspeople use to manage their portfolio of assets.

Planning for the Long Haul

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However, other industries whose supply chains involve links with transport providers also plan long in advance. Mining companies, utilities, and oil and gas companies use helpful decision-making tools that can be applied to transport and logistics environments. In fact, although transport industries have longer timeframes than most, they are far from the longest. Consider these examples:

• Mining companies buy

and exploit plots of land for mineral rights on a long-term (say, 20-year) basis, using options as part of the agreements in case the plots turn out to be unproductive. The options kick in depending on the results of the mining activity, and can extend the contracts in increments such as five years at a time.

 Power and water utilities often issue 15-20 year concession agreements in order to assure stability of operation and amortization of very large capital investments. These often involve simultaneous and overlapping operating and maintenance agreements.

• Oil and gas companies sometimes sign 10-year agreements, which reduce supply chain inefficiencies driven by oil drive volatility as it flows through the supply chain. The oil companies are increasingly using financial hedging instruments to reduce exposure to long-term risk.

 Chemical and petrochemical manufacturers often make plant investment



decisions that span at least 8-10 years, layering incremental expansions on top of base investments.

• Aerospace and defense manufacturers whose time between order receipt and order delivery is long, often develop platforms far ahead of time, using synchronous product development and rapid prototyping processes.

The lesson for transport and logistics companies is clear. The farther the planning time horizon, the closer the match between supply and demand, and consequently the fewer the inefficiencies caused by the economic feedback loop based on demand, prices, backlog, and capital investment. And this translates to higher financial returns for all supply chain partners.

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