Dry bulk shipping is a highly volatile and cyclical industry in which earnings, investment, and returns on capital appear in waves.
-Robin Greenwood-1, p.2

In 2001, a 5-year old "Panamax" ship commanded daily lease rates of $5,325 and could be purchased for $14 million
-Robin Greenwood-1, p.2

By December 2007, daily lease rates had grown more than tenfold to $61,000, and purchase prices had risen more than fivefold to $89 million.
-Robin Greenwood-1, p.2

By 2011, lease rates and secondhand prices had nearly returned to their 2001 levels
-Robin Greenwood-1, p.2

The annual returns to owning and operating a ship vary massively over time, from a low of –68% between December 2007 and December 2008 to a high of +87% between June 1978 and June 1979.
-Robin Greenwood-1, p.2

In December 2001, outstanding orders for new ships amounted to less than 10% of the active fleet. However, by August 2008, outstanding orders for new ships exceeded 75% of the active fleet.
-Robin Greenwood-1, p.2

One should not be surprised that ship charter rates—the payment that a ship owner earns for leasing out his ship—fluctuate significantly over time.
-Robin Greenwood-1, p.2

supply of bulk carriers is essentially fixed in the short-run, because building and delivering a new ship takes between one and three years.
-Robin Greenwood-1, p.2

Coupled with inelastic demand for shipping services, this time-to-build problem means that temporary imbalances between global demand for shipping services and the size of the fleet can lead to large changes in ship charter rates
-Robin Greenwood-1, p.2

Ret^n b/w Returns & investment in capacity

We show that returns to owning and operating a ship are predictable and closely related to industry-wide investment in capacity
-Robin Greenwood-1, p.2

High current ship earnings are associated with higher ship prices and higher industry investment, but predict low future returns on capital. Conversely, high levels of industry scrapping—a measure of disinvestment—forecast high returns.
-Robin Greenwood-1, p.2

What is the competitive response to an unexpected spike in shipping demand in such a setting?
-Robin Greenwood-1, p.3

Charter rates would temporarily spike, raising contemporaneous realized returns. But ship investors would respond to the jump in charter rates by building additional ships. Over time, charter rates would fall back to their steady-state level as additional ships were added to the fleet. The prices of used ships—which are long-lived capital assets—would initially jump modestly in anticipation of heightened near-term cash flows, before gradually returning to their steady-state level
-Robin Greenwood-1, p.3

As Kahneman (2011) notes, competition neglect can be particularly strong when investors receive delayed feedback about the consequences of their decisions, as one would expected in industries such as shipping that are characterized by a significant time to build.
-Robin Greenwood-1, p.4

Dry Bulk Carriers: Earnings, Prices, and Investment
-Robin Greenwood-1, p.6

Solid commodities such as grain and iron ore are transported globally in large cargo ships known as bulk carriers.
-Robin Greenwood-1, p.6

In 2011, bulk carriers made up approximately 40% of the world's shipping fleet (tankers and container ships made up most of the rest), and had a combined cargo capacity of 609 million deadweight tonnes (DWT) across 8,868 ships.
-Robin Greenwood-1, p.6

In 2011, bulker fleet capacity was split between smaller ships (Handymax and Handysize) with total capacity of 125 million DWT, medium-sized ships (Panamax) with a fleet-wide capacity of 154 million DWT, and larger ships (Capesize) with a total capacity of 244 million DWT
-Robin Greenwood-1, p.6

These ships had a combined market value of roughly $180 billion, having peaked at $549 billion in June 2008.
-Robin Greenwood-1, p.6

The market for shipping cargo is highly competitive with hundreds of firms operating bulker ships, and no single firm owning more than a few percent of the fleet
-Robin Greenwood-1, p.6

In 2011, more than half of bulk carriers were held by Greek, Japanese, or Chinese firms.
-Robin Greenwood-1, p.6