# Are freight derivatives markets ready for radical innovation?

Overall, global commodity derivatives markets have a long way to catch up with revolutions in other asset classes like forex, equity and money markets. Among commodities, shipping may have been stuck in decades past, but could represent the next frontier, driven by modernisation of the underlying market via technology and an increased appetite for disruption.

The 2000s commodities boom, brought about by China's massive purchasing of raw materials to feed its exploding construction and export industry, in many ways transformed the shipping industry from a service industry to an asset market in its own right. With it also came heightened interest for and activity in, derivatives trading. The period saw new investors entering freight markets, both physical and derivatives, most notably speculators who saw the potential for high returns due to the massive volatility and ability to exploit perceived arbitrages. This golden age saw increased sophistication among traders in freight swaps, and led to the development of new instruments like index baskets and an emerging options market.

In the early 2000s, freight derivatives volumes grew exponentially, prompting even more participants to join, including banks and hedge funds. The market was largely traded bilaterally, via specialist voice brokers. As the commodity supercycle peaked in 2008-2009, some well-publicised defaults rattled the market, highlighting the inherent credit risks that come with OTC instruments. This drove the adoption of clearing, which ended up becoming the biggest innovation of the decade. Despite the sustained attention to shipping, and the ability to mitigate counterparty risks, the freight derivatives market has seen little volume growth after 2008, and has largely traded the same products for close to 15 years. Also, in the face of drastic changes to trading patterns and technological evolution, there has been few changes to product designs or the organization of the marketplace.

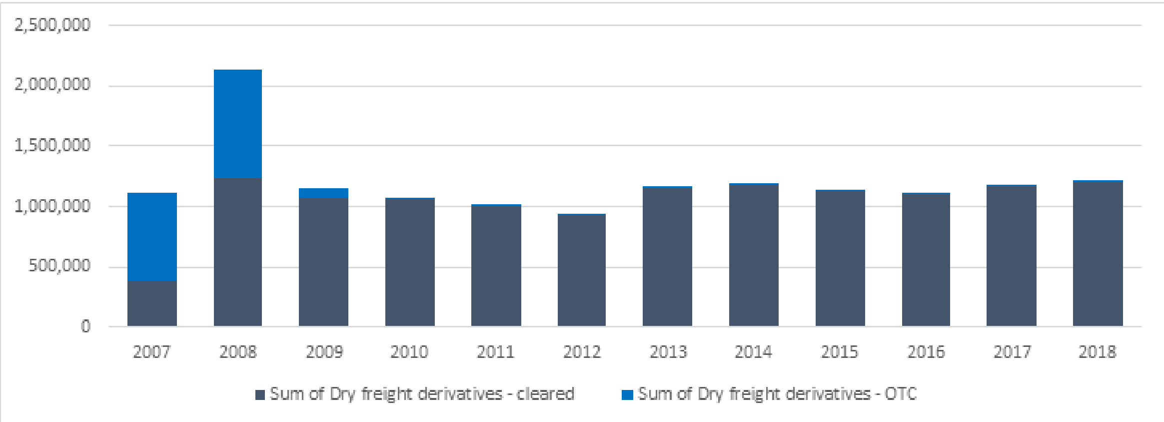


*Fig. 1: Freight Derivatives Volumes 2007-2018. Source: The Baltic Exchange.*

Shipping is one of the oldest markets around, having existed adjacent to the earliest commodities traded by sea like grains and coffee. Bespoke solutions for everything from how contracts are transacted, written and executed, and the quality and availability of information, represents friction and lowers the attractiveness of freight as an investible asset. In turn, this enables and sometimes even encourages anti-competitive behaviours, making for even higher barriers of entry, and consequently lower growth in derivatives trading.

Organisations like the Baltic Exchange, with roots back to the 1700s, has long held the key to shipping market information, surveying market prices via brokers and creating indices used by the industry for benchmarking and settlement of derivatives contract. To this day, market participants rely heavily on daily reports that collate information from market intermediaries, some of which is highly discretionary and oftentimes opaque as it cannot be easily verified or replicated. In recent years, both mainstream and niche market information providers have developed price information services that seek to better reflect market dynamics, applying new technology and innovative methodologies.

The ecosystem of freight transactions has necessarily been built on a degree of trust between counterparties. In an ever-increasing risk averse market, innovations in trade finance and contract management are being developed to safeguard the integrity of individual transactions, and the market as a whole. Blockchain, traditionally thought of as facilitating safe and anonymous transfer of money, is now being utilised to rationalise the commodity value chain, and further enable trade assurance. At the same time, standardisation of contracts and platform-based trading is further levelling the playing field, and modern CTRM technology is able to highlight risks incurred on an intra-day basis. Through vessel tracking systems, industry players and other stakeholders can now see real-time information about vessels via AIS signatures, including departure and arrivals data for all major ports worldwide. From this data, a granular view of the market can be aggregated by anyone with an internet connection. In addition, marine fuels are assessed intra-day in hundreds of ports, allowing for precise estimates of freight economics and more sophisticated hedging of requirements.

Freight derivatives markets can benefit drastically from innovations made in physical trading, as well as price assessments and trading. A more diverse marketplace for information stimulates higher participation, and would spur new liquidity in innovative instruments. In the short term, we may see freight derivatives trading fundamentally different than today, and exchanges need to provide toolboxes that align with the developments in the physical markets they support.

EEX is dedicated to improving the freight derivatives market by offering innovative solutions to our clients, driven by standardization and increasingly real-time information from the shipping markets. We focus on delivering streamlined execution and clearing services, combined with a range of value-added services that promote transparency and levelling the playing field. The Cleartech™ Portal is free to EEX clients, and provides live fuel prices, freight derivatives data and margin analytics.