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White Paper Report

USING FBX TO MANAGE FREIGHT RATE VOLATILITY

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DIGITAL VERSION 2022

FREIGHTOS

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AN INTRODUCTION

The concept of index-linked floating contracts and Forward Freight Agreements (FFAs) in the container market for freight forwarders, shippers and carriers is not new. But the ability to benchmark a contract against a robust, trustworthy index which comes under the umbrella of a UK regulated entity is a potential game-changer for the ocean freight industry.

Nadia Mirza - New Markets, Baltic Exchange

Over a 20-year career, the Baltic Exchange's lead on New Markets has worked in container and dry bulk shipping in London, Singapore and Hong Kong, in both physical and derivative markets. Nadia also worked for a couple of years in Rome for the UN World Food Programme's Shipping Department.

CONNECT VIA LINKEDIN

The daily Freightos Baltic Exchange Container Index (FBX) provides the market with a credible and fully transparent reference point. It is based on the world's largest global database of multimodal freight rates using real-time data from logistical providers and overseen by an institution whose information already underpins billions of dollars-worth of physical and forward freight contracts in the dry bulk, oil and gas transportation markets.

The FBX is now added to Baltic's suite of regulated benchmarks and is published in compliance with the BMR and ISOCO principles for Financial Benchmarks.

This paper is designed to increase the confidence in the concept of index-linked contracts amongst container market participants by introducing FBX and its methodology and discussing the concept of index-linked contracts and FFAs.

This paper explains:

- How we construct FBX and ensure accurate assessments
- Roles of the Baltic Exchange and Freightos
- Our governance and oversight framework
- How to create an index-linked contract
- How container Forward Freight Agreements can mitigate the effects of extreme rate volatility
- Why annual freight rate negotiations are inefficient

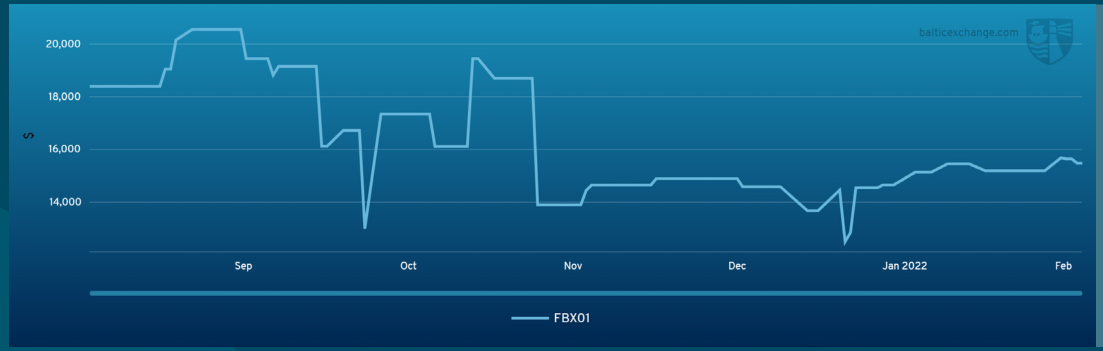
THE FBX IS NOW ADDED TO BALTIC'S SUITE OF REGULATED BENCHMARKS AND IS PUBLISHED IN COMPLIANCE WITH THE BMR AND ISOCO PRINCIPLES FOR FINANCIAL BENCHMARKS.

BALTIC EXCHANGE INFORMATION SERVICES LTD (BEISL)

BENCHMARK ADMINISTRATOR

KEY TERMINOLOGY

Terminology	Explanation
Baltic Exchange Information Services Ltd (BEISL)	A wholly owned subsidiary of the Baltic Exchange Ltd and an authorised benchmark administrator.
Benchmark Administrator	Oversees the Calculating Partner's data and processes.
Calculating Partner	The party responsible for providing spot container rates.
Forward Freight Agreement (FFA)	Cash-settled forward contract, widely traded in bulk shipping markets and settled bilaterally or clearing house. It does not commit either side to buy or sell physical container capacity and allows for a for a flexible cost-efficient way to fix and exit prices.
Freightos AcceleRate™	Software-as-a-service which automates pricing and routing for freight forwarders.
International Organisation of Securities Commissions (IOSCO)	An association of organisations that regulate the world's securities and futures markets. Members are typically primary securities and/or futures regulators in a national jurisdiction or the main financial regulator from each country.
Principles for Financial Benchmarks	A key document published by IOSCO which addresses conflicts of interest in benchmark-setting processes, as well as other matters related to benchmarks.
EU Benchmark Regulation	This aims to ensure benchmarks are robust and reliable, and to minimise conflicts of interest in benchmark-setting processes. UK BMR is the onshored EU regulation (EU BMR), which builds on the IOSCO Principles for Financial Benchmarks and adopting them at a national and European Union level. They are intended to prohibit the use by a supervised entity in the European Union of unauthorised benchmarks, including benchmarks prepared by unregistered non-EU administrators from non-equivalent jurisdictions.



FBX 01 - CHINA/ EAST ASIA TO NORTH AMERICA WEST COAST

FBX 11 - CHINA/EAST ASIA TO NORTH EUROPE

FBX 13 - CHINA/EAST ASIA TO MEDITERRANEAN

CALCULATING PARTNER

FORWARD FREIGHT AGREEMENT (FFA)

UK FCA ACCREDITED

THREE GRAPHS DISPLAYING CONTAINER FREIGHT RATE VOLATILITY FOR THE PAST SIX MONTHS...

MID-AUG 2021 - MID-FEB 2022

12 TRADE LANES COVERED DAILY BY FBX ACCOUNT FOR APPROXIMATELY 80% OF GLOBAL CONTAINER TRADE

FBX:
AN OVERVIEW

The 12 trade lanes covered daily by FBX account for approximately 80% of global container trade. The trade lanes are the median, port to port rates, for a standard forty-foot, non-refrigerated container, based on carriers' rolling tariffs and related surcharges.

The rates are based on real-time data from hundreds of logistical providers who use the Freightos AcceleRate platform to manage their bookable freight rates.

Index	Description
FBX00	FBX Global Headline Index
FBX 01	China/East Asia to North America West Coast
FBX 02	North America West Coast to China/East Asia
FBX 03	China/East Asia to North America East Coast
FBX 04	North America East Coast to China/East Asia
FBX 11	China/East Asia to North Europe
FBX 12	North Europe to China/East Asia
FBX 13	China/East Asia to Mediterranean
FBX 14	Mediterranean to China/East Asia
FBX 21	North America East Coast to Europe
FBX 22	Europe to North America East Coast
FBX 24	Europe to South America East Coast
FBX 26	Europe to South America West Coast

FBX is calculated using 'Freight All Kinds' (FAK), including commodities that are clearly translations or equivalent to FAK or rates where no commodity is specified.

FBX indices are derived from spot buy rates for relevant port pairs offered by ocean carriers to international freight forwarders, or Non-Vessel Owning Common Carriers (NVOCCs) who are using the Freightos AcceleRate platform.

The headline FBX is a weighted average of the trade lane indices with the weighting for each trade lane based on that trade lane's share of carrier volume.

THE RATES ARE BASED ON REAL-TIME DATA

From logistics providers who use the Freightos AcceleRate platform to manage their valid freight rate portfolio.

FBX IS CALCULATED USING 'FREIGHT ALL KINDS' (FAK)

FBX INDICES ARE DERIVED FROM SPOT BUY RATES FOR RELEVANT PORT PAIRS

THE HEADLINE FBX IS A WEIGHTED AVERAGE OF THE TRADE LANE INDICES

CARRIERS

Carriers provide rates to Freight Forwarders. Carriers later ranked by capacity on that trade lane

FREIGHT FORWARDERS

Freight Forwarders input rates into AcceleRate

MEDIAN VALUES

Median value calculated for each of the top five carriers on the tradelane and for a sixth group covering all other carriers on that trade lane

WEIGHTED AVERAGES

Weighted average calculated reflecting each group's volume on that trade lane

PUBLISHED INDEX

Resultant number rounded to the nearest integer in the published index

WHAT MAKES FBX SPECIAL?

There are a number of external container indices available to the market, but only FBX comes with such a high level of external audit, overview and governance.

The partnership with the Baltic Exchange, an entity regulated by the UK's Financial Conduct Authority, brings a level of transparency, longevity and trustworthiness to the index.

1. TRUSTWORTHY
2. ROBUST
3. CONFIDENTIAL
4. GOVERNANCE

The calculations instantly capture spot market movements through the Freightos AcceleRate service.

Powering digital freight rate management for some of the world's largest logistics providers, AcceleRate enables easy multi-modal rate management, valuable sales CRMs, and powerful instant, on-demand, quoting across hundreds of contracts.

FBX INDEX METHODOLOGY

A simplification of the calculation process. For a more detailed explanation please refer to the Baltic Exchange's **Guide to FBX Benchmarks** in Guides and Policies in the Documentation on our website.

ABOUT THE BALTIC EXCHANGE

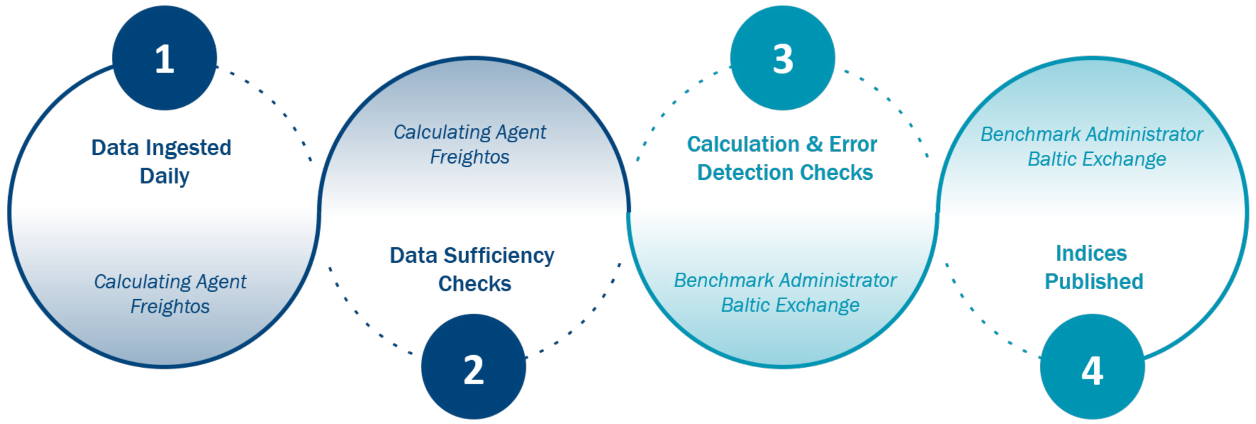
The Baltic Exchange has been administering freight market benchmarks since 1985 when we launched the Baltic Freight Index (today the Baltic Dry Index) for the dry bulk market. Today the Baltic Exchange manages a diverse range of benchmarks for the global shipping markets including dry bulk, tanker, gas spot freight rates, asset values, vessel operational costs and ship recycling prices.

The Baltic Exchange's bulk shipping market assessments are used as the settlement mechanism for forward and physical contracts. Spot bulk freight market assessments are based on independent shipbroker assessments supplied to the Baltic Exchange. In 2016 the Baltic Exchange was acquired by Singapore Exchange (SGX).

READ MORE ABOUT US

DAILY ERROR FREE RATE

A daily error free rate at four check points is reported to BEISL . The error free process is held in an environment independent from the index production system.



FOUNDED IN 1744

The Baltic Exchange is headquartered in London with regional offices in Singapore, Shanghai, Athens, Stamford and Houston.

READ THE BALTIC'S HISTORY

ABOUT FREIGHTOS

Freightos.com® makes global trade frictionless with the world's online marketplace for the trillion-dollar international shipping industry.

The Freightos Marketplace helps importers and exporters reduce logistics spend and save time with instant comparison, booking and management of air, ocean and land shipments from top logistics providers.

Freightos also provides patent-pending technology that empowers carriers and logistics providers around the world to automate freight sales.

WebCargo™ powers rate management, automated pricing, and online freight sales for over 1,600 logistics service providers and carriers, including multi-billion-dollar companies. Freightos has accumulated the world's largest global database of multimodal freight rates.

For further details on AcceleRate **here**.

FREIGHTOS

ROLE OF THE BALTIC EXCHANGE: BENCHMARK ADMINISTRATOR

THE BALTIC EXCHANGE SUBSIDIARY BALTIC EXCHANGE INFORMATION SERVICES LTD ACTS AS THE "BENCHMARK ADMINISTRATOR"

Any market benchmark overseen by the Baltic Exchange which is used to settle financial transactions is produced in accordance with strict rules which ensure their accuracy, integrity, continuity and reliability.

As an Administrator, the Baltic Exchange is responsible for maintaining the governance framework which includes core decision making functions related to the creation, management and distribution of the FBX.

The purpose is to ensure that the FBX is produced in a fashion that is in line with stated methodologies, policies and procedures. It also reviews the Calculating Partner's internal controls for the identification, disclosure, prevention and management of conflicts of interest and to mitigate general risks associated with the FBX and the FBX determination process.

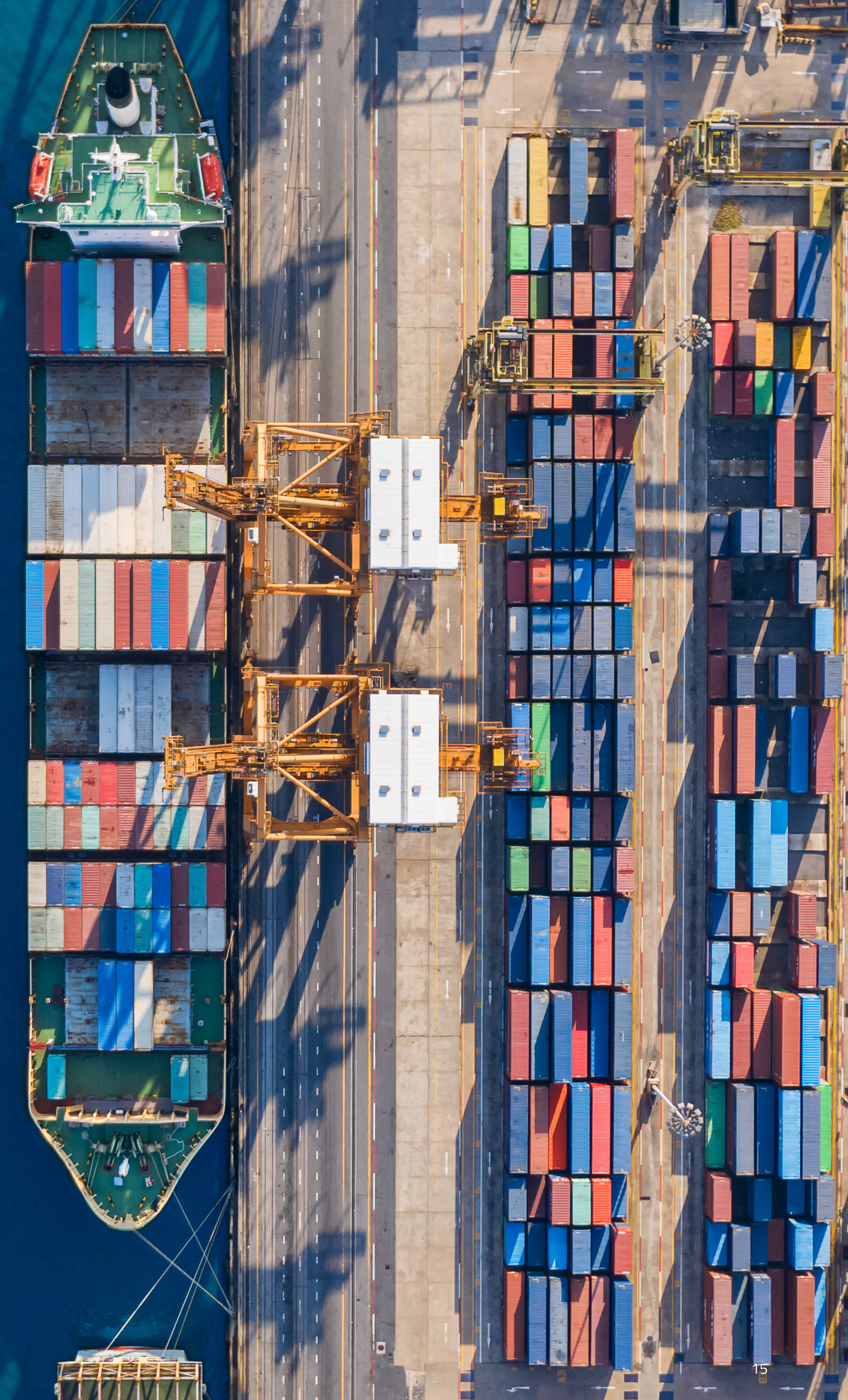
ROLE OF THE BALTIC EXCHANGE: BENCHMARK ADMINISTRATOR

BALTIC EXCHANGE INFORMATION SERVICES LTD (BEISL) IS A WHOLLY OWNED SUBSIDIARY OF THE BALTIC EXCHANGE LTD AND IS AN AUTHORISED BENCHMARK ADMINISTRATOR.

BEISL undertakes adequate steps to identify, prevent and manage conflicts of interests and to safeguard confidence in the integrity of our benchmark and benchmark related activities. BEISL has established a permanent oversight function that ensures supervision of all aspects of the provision of our benchmarks and oversees the implementation and effectiveness of our governance arrangements.

As market leaders, we provide a comprehensive benchmark administration service to include:

- Robust benchmark determination process to include monitoring checks, controls over the accuracy and validity of input data, and application of our benchmark methodology
- Control framework that is proportionate to the provision of benchmarks and nature of the benchmark input data including the management of operational risk, adequate and effective business continuity, and disaster recovery plans
- Accountability framework to include adequate record keeping, audits reports ensuring our compliance to our benchmark methodology and the EU BMR, a complaints handling mechanism to receiving, investigating and retaining records concerning complaints
- Governance and Oversight framework to manage and challenge all aspects of the administration process, conflicts of interests policy, and whistleblowing policy



WHAT IS AN INDEX-LINKED FLOATING CONTRACT?

Rather than rely on an annual rate review, an index-linked contract allows companies to sign contracts which provide an adjustment mechanism as the cost of ocean transportation rises or falls. But whilst an index-linked contract enables both parties to feel that they are paying or receiving a fairer rate, it does not completely remove their exposure to a fluctuating market.

Floating long-term contracts could be a game changer for the industry. They reduce the tension in the carrier/shipper relationship and allow for a focus on improving service. They allow for a price that correlates with an index which accurately tracks market rates. Critically, they provide for security of contract. The concept can be implemented using different mechanisms...

DAMPENERS

This provides a barrier so that the contract price is not entirely exposed to the spot market. The contract price change is smoothened relative to the movement of the spot rate.

TRIGGERS

Thresholds are agreed at which a spot rate movement means an adjustment to the contract rate.

FLOOR AND CEILING

Both parties agree to a minimum and maximum freight rate. This protects both the shipper and carrier from extreme rises and falls, while still allowing for some benefits of price differentials to accrue.

To enter into agreement, both parties agree on additional contract terms which might include:

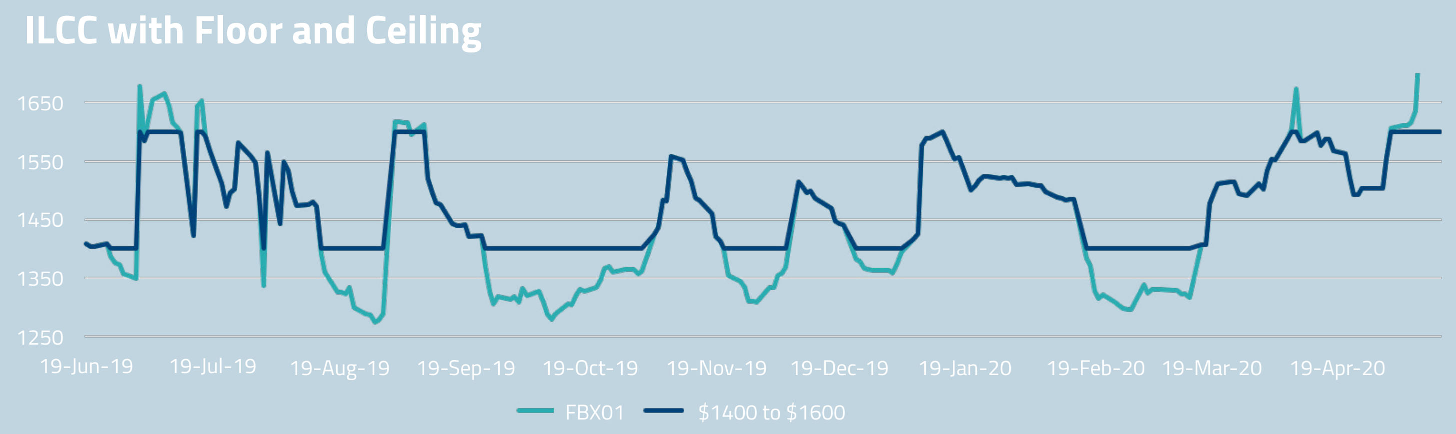
- Scope of tariff to be index-linked
- Contract period
- Choice of index
- Starting rate
- Contract rate adjustment mechanism
- Carrier service commitment
- Shipper volume commitments

WORKED EXAMPLE:

In this simple floor and ceiling case, using 1 FEU, both sides take equal risk. The seller agrees a ceiling of $1600 while the Customer agrees a floor of $1400.

No premium needs to be paid, as these are both of equal risk. In this form, the seller, takes all the benefits when prices fall below the floor: eg at $1250 they benefit by $150 per FEU, but they also bear all the risk when it rises above the celling: e.g. at $1800 they lose $200 per FEU.

However, it remains index linked between $1400 and $1600, allowing for a degree of risk pooling and certainty, while still allowing for some benefits of price differentials to accrue.



RATHER THAN RELY ON AN ANNUAL RATE REVIEW, AN INDEX-LINKED CONTRACT ALLOWS COMPANIES TO SIGN CONTRACTS WHICH PROVIDE AN ADJUSTMENT MECHANISM AS THE COST OF OCEAN TRANSPORTATION RISES OR FALLS

WHILST AN INDEX-LINKED CONTRACT ENABLES BOTH PARTIES TO FEEL THAT THEY ARE PAYING OR RECEIVING A FAIRER RATE, IT DOES NOT COMPLETELY REMOVE THEIR EXPOSURE TO A FLUCTUATING MARKET

> "The extreme COVID-19 induced volatility has put further stress on this way of conducting business."

WHAT'S WRONG WITH ANNUAL NEGOTIATIONS?

Annual negotiations are an inefficient way of managing freight risk, especially when the reality is that an agreed freight rate can, and will, be renegotiated.

In theory fixing a price once a year is a simple way of hedging your exposure to a spot market. However, the annual box freight rate negotiations will exclude key monthly fluctuating cost components, such as bunker fuel, currency and equipment repositioning fees which are subject to a surcharge.

There is nothing wrong with this approach if all parties honour their contracts. The annual round of negotiations between beneficial cargo owners and carriers relies on both parties committing to cargo volumes (Minimum Quantities of Cargo) and service levels in return for a fixed rate.

Here the FBX can be used as a starting point for negotiations: it is a fair and transparent assessment of the market. The large volume beneficial cargo owners will negotiate a confidential below spot market rate and can use the index as a reference point. But those with smaller volumes and less bargaining power will not be able to achieve the same kinds of below market discounts.

The reality is that these types of contracts, which can sometimes extend as far as three years, are rarely enforced and there are no legal penalties for non-performance. They are little more than a show of goodwill. A shipper faced with a drop in demand and a lower spot market can walk away and ship with an alternative provider. A carrier might give their space away to higher paying customers.

It cannot be an efficient use of time or human resources to enter into lengthy, opaque, costly and relationship-straining negotiations only for one party to walk away from the agreement three months later as economic conditions change. The time spent on negotiations can be significant: in 2020 it was not unusual to hear of rates being renegotiated five times.

Procurement departments expend significant resources,relationships can be strained and it can be in no-one's long-term interest to be in a state of almost constant negotiation on price.

The end-result is a market where both sides are mutually dependant on the other, but constantly frustrated at the negative impact of the other's behaviour. In essence it is a failed market. The extreme COVID-19 induced volatility has put further stress on this way of conducting business.

Index-linked floating contracts offer stability and an alternative, cost-effective solution to current industry practices.

5X IN 2020 IT WAS NOT UNUSUAL TO HEAR OF RATES BEING RENEGOTIATED FIVE TIMES

A DEFINING QUALITY OF CONTAINER FREIGHT IS ITS VOLATILITY.

VOLATILITY IN FREIGHT RATES

FBX 01 - CHINA/EAST ASIA TO NORTH AMERICA WEST COAST

The extreme swings in capacity and demand as well as volatile oil prices of recent years have given an extra impetus to the development of more sophisticated hedging strategies, including Container Forward Freight Agreements.

WHAT IS A CONTAINER FORWARD FREIGHT AGREEMENT?

A Container Forward Freight Agreement (CFFA) is a cash-settled forward contract, traded and settled bilaterally.

A Container Forward Freight Agreement (CFFA) is a cash-settled forward contract, traded and settled bilaterally. It does not commit either side to buy or sell physical container capacity and allow for a for a flexible cost-efficient way to fix and exit prices.

The parties agree on a price in US $ per container for a given number of containers on an agreed trade lane during a specified period. At the end of the contract period the parties settle the difference in cash between the predetermined contract price and the actual spot market price as determined by FBX.

IF YOU ARE "SHORT" THE MARKET, THEN YOU WOULD BUY A CFFA.

IF YOU ARE "LONG" THE MARKET, THEN YOU WOULD SELL A CFFA.

They allow a company to trade two to three years forward and beyond the limits of the physical market.

Container FFAs are brokered by shipbrokers and settled over-the-counter.

www.balticexchange.com

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