

GLOBAL FORWARDING

BIGGEST, FASTEST SAVINGS FOR GLOBAL SUPPLY CHAINS

WHITE PAPER







IN BRIEF

Increasingly complex omnichannel business models are resulting in correspondingly complicated global supply chains. Maximising efficiencies for time and cost in moving freight around the world is mission critical. This paper takes a high-level look at three opportunities for optimisation: cargo consolidation, cargo risk management, and customs management.

CONTENTS

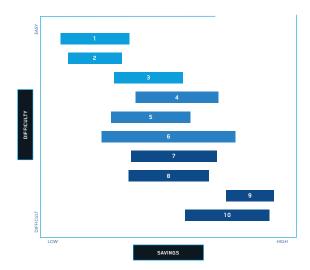
Introduction	3
10 approaches to savings in the global forwarding supply chain	4
Global forwarding supply chain savings chart	4
Cargo consolidation	5
Cargo risk management	6
Customs management	9
Global technology can tie it all together	10
5 questions to ask a potential global freight forwarder	12

The multichannel retail business model, along with increasing levels of global sourcing, have created staggering opportunities for importers and exporters around the world, whether huge multinationals or small companies shipping globally for the first time.

Global supply chains are becoming longer and more fragmented, presenting significant new issues for logistics professionals. In one survey, 104 global supply chain executives reported that visibility (21.1%), fluctuating consumer demand (19.1%) and inventory management (13.2%) were their biggest challenges. Many factors add complexity to global supply chains, including longer lead times and lead-time variability and an increasing number of suppliers, partners, carriers, customers, countries and logistics channels.

Contrary to what you might think, global freight forwarding can offer relief for these concerns and when people, processes and technology are leveraged, can even offer competitive advantages. Long global supply chains present significant new challenges for logistics professionals.

10 approaches to savings in the global forwarding supply chain



EASY

- 1. Align shipping activities to leverage benefits of consolidation services.
- 2. Minimise financial impact of cargo loss and damage by purchasing marine cargo insurance.
- **3.** Take advantage of transportation providers' TMS to create visibility and take control of the supply chain.

MODERATE

- **4.** Develop strategies to match service modes with inventory planning and sales forecasting.
- 5. Create a risk management strategy—identify and understand risk types, probabilities and potential costs.
- **6.** Integrate with a single transportation provider's TMS and connect with suppliers and carriers globally.

DIFFICULT

- 7. Effectively use Incoterms® when negotiating with suppliers to impact unit price, cash flow, inventory levels and logistics costs.
- **8.** Actively engage with a customs professional to deploy best practices in customs management.
- **9.** Leverage transportation provider's business intelligence reporting and analytics to improve supply chain performance.
- **10.** Utilise PO management to control the purchase order lifecycle; go upstream to supplier order fulfillment logistics activities.

CARGO CONSOLIDATION

What it is

Few companies can fill an entire ocean or air container with their own freight. Both ocean and air carriers require shippers to work with freight consolidation services to accommodate small volume shipping needs. These freight consolidators accept complementary freight from multiple shippers, and consolidate freight all kinds (FAK) containers for ocean shipping or unit load devices (ULD) for air. This results in better freight rates and cargo security measures.

Why it's important

One of the biggest areas for savings in a global supply chain is taking advantage of space. Companies of any size can use freight consolidation services, but it's particularly useful if you have a lean supply chain or operate in a just in time environment. Using logistics efficiencies from freight forwarders, consolidators and third party logistics providers (3PLs), you can choose to move smaller quantities of material more frequently. In doing so, you make a strategic decision to spend more on consolidation shipping services and less on inventory, storage, returns and other costs.

Ocean versus air

Whether air or ocean consolidation is the right choice for you depends on the required service level and transit time. Globally, ocean is the less expensive transportation method. That cost advantage must be carefully weighed against longer transit times, as well as potential delays caused by adverse weather conditions, port strikes or other issues.

In addition, there are faster and slower ocean options. Some ocean freight goes directly to the port of call. Other shipments can stop at multiple ports of call, which is less expensive, but takes longer and is more prone to unexpected disruption. Working with a reputable freight forwarder can help reduce unexpected supply chain failures and delays, and provide options if disruptions occur.

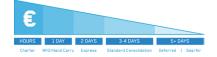
Air freight consolidation service is a faster, more expensive option than ocean, but here, too, there are faster and slower options that determine the cost. For example, if you don't need direct service (next flight out), choose a slower transit time at more favorable pricing.

Best practices for cargo consolidation

Choose a forwarder with:

- Sufficient freight volumes to effectively consolidate without delays and to aggressively negotiate rates with ocean and air carriers.
- Dedicated space allocations for capabilities when they are needed.
- Work in major markets with high flight capacity.

Know your options: Air



Generally, in any type of transportation, the more time there is between pickup and delivery, the less you pay. In air, for instance, use providers with gateways (vs. a hub and spoke approach) to get cost-efficient options that meet your deadlines. Use consolidation schedules if you can for more savings.

CARGO RISK MANAGEMENT

What it is

Global shipments are exposed to risk from a wide range of human and natural forces. Yet, global shipments are subject to a unique set of international laws and/or treaties that limit the liability of carriers. Whether you import or export, you should understand the various types of risks that cargo could face and how you can help protect the value of the goods shipped globally.

Why it's important

Even with proper packing, stowage and securing of containers on a container ship, severe weather and rough seas can cause rare but catastrophic events like ship groundings, structural failures, even collisions, any of which can result in loss of cargo. On average, the World Shipping Council estimates that there were 1,582 containers lost at sea per year between 2008 and 2016; 1,012 of these containers (64 percent) were lost due to a catastrophic event.² Theft, counterfeiting, hurricanes, floods, political unrest, labor disputes, documentation errors or mechanical problems can also delay or ruin delivery of the most perfectly planned global shipment. Protecting the value of products while they are in transit across the globe can have a significant impact in protecting the bottom line.

Air and ocean carrier liability

When events occur, companies are often dismayed to find that not all risks or damages are covered by carrier liability.

Air carriers are not liable if damage was caused by:

- An inherent defect, quality or vice of the cargo
- Defective or insufficient packing of the cargo
- □ An act of war or armed conflict
- An act of a public authority carried out in connection with the entry, exit or transit of the cargo

Even if an air carrier is held legally liable for damages, they pay the value of the goods or 19 SDRs³ per kilogram, whichever is less.

If a ship experiences an extraordinary sacrifice or expenditure at sea, ship owners may declare general average. The concept of general average hearkens back to the days when a crew tossed cargo overboard to lighten the ship in a storm. During the emergency, there wasn't time to figure out whose cargo should be jettisoned. After the fact, to avoid quarreling, merchants whose cargo landed safely would be called upon to contribute a share or percentage



€3.5 trillion (\$4 trillion)

worth of cargo annually is transported by the global liner shipping industry.⁴



1.012 containers

were lost at sea every year from 2008-2016, on average, due to catastrophic events.⁵



Average of 50% less

Amount spent to manage supplier disruptions by companies that proactively manage supply chain risk vs. companies that don't.6



What is an SDR?

SDRs, or Special
Drawing Rights,
refers to a basket of
currencies designed
to iron out currency
exchange fluctuations in
International valuations,
now used to express
the limitation under
the Hague-Visby Rules
and the MSA Limitation
Convention.

to the merchants whose goods were tossed overboard to avoid imminent peril. Today, general average declarations still mean that all the merchants with freight on the vessel are required to share in the cost of the expenditure before the goods are released.

General average is a growing risk and concern for many risk managers and insurance experts. In recent times, there has been a rise in the frequency and severity of extreme weather events that have led many vessels to become grounded, causing container loss and/or vessel damage. In addition, fires on container vessels are more common now than in the past.

Today, when these events occur and general average is declared:

1. Ship owners have a lien on the ship's cargo. At the time the voyage is completed, the level of sacrificial losses will not normally be known. Ship owners will usually call for security from cargo interests, against which the assessed contributions can be enforced. The amount of the claim is usually calculated by average adjusters, appointed by ship owners. Each cargo owner's contribution is calculated on a percentage of the cargo owner's interest or commercial invoice value, ranging from 1 to 100 percent.

Ship owners have a lien on the cargo until each cargo owner's contribution or security is satisfied. Unless a shipment is secured with all-risk marine cargo insurance, the cargo owner will be required to post their contribution or security in cash before their cargo will be released. As the frequency of general average declarations has increased, so has the amount of the required securities—from about 12% a year ago to about 50% today.

2. Ocean carriers are not automatically liable for loss or damage to your cargo. The Hague Rules and the Carriage of Goods by Sea Act (COGSA) regulate an ocean carrier's liability for loss or damage to cargo. The rules expressly remove the ocean carrier's liability for loss or damage to cargo that arises from one of the 17 stated liability exclusions. Legal liability claims are often met with resistance by carriers.

Even if the ocean carrier is found liable at the end of a legal process that can take months to settle, their limit of liability under COGSA is 666,67 SDRs per package or customary shipping unit, or the actual value of the goods, whichever is less. In other words, the onus is on you to assess and minimise your risk exposure.

Best practices for cargo risk management

- Buy the appropriate amount of marine cargo insurance for ocean or air shipments.
- □ Ensure the valuation clause for a given shipment defines the maximum amount an insurance company will pay for a loss. Most valuation clauses include the commercial invoice value and any prepaid charges associated with the shipment, such as freight, customs clearance or duty. This clause can be modified to include other charges or profit margin—if requested and approved by underwriters.
- Choose an insurance intermediary with experience or specific training in international logistics and transportation insurance.

Calculating costs to determine risk exposure

The risk of lost cargo is real. Yet, without a crisis to motivate action, most companies place risk management at the bottom of the priority scale. The most common method used to protect the value of goods from physical damage, theft or other calamity is the purchase of marine cargo insurance.

The first step you can take is to understand your risk exposure by tying euro values to varying types of risk. The challenge is quantifying the potential cost. You can brainstorm to gather that information, or can work with a logistics provider that has in-house risk management professionals to help uncover potential liabilities in the supply chain.

You can apply subjective probability to calculate possible losses. In other words, you can estimate the chances of a risk event happening and multiply it by the cost if it did happen (see below). Once the euro amount is calculated, the next step is to reduce the expected loss by reducing the probability of the occurrence, or the cost of the occurrence.

Armed with subjective probability estimates, you can effectively buy the appropriate amount of insurance. While insurance is readily available, it is your responsibility or the consignee's to ensure the coverage purchased best fits the unique exposure.

CALCULATE SUBJECTIVE PROBABILITY:

1% × €1M = €10K

probability of an event

in cargo value potential loss

CUSTOMS MANAGEMENT

What it is

Most companies choose their customs broker for the long term. That's because the customs broker must truly understand your company and products. They must also know how to navigate each country's compliance requirements with their own specific set of customs rules, governmental regulations, VAT, duty rate calculations and payment plans.

Why it's important

Even simple mistakes, such as an incorrect spelling on a declaration, can result in fines, penalties, or even cargo seizure. What's more, a customs audit could happen to any European importer–especially those classified as top 5,000 importers. If and when a company is audited, an expert in customs can help.

agreements with approximately 60 countries outside the European Union. Some of these countries are significant export and import markets for European companies. The European Union is in the process of negotiating free trade agreements with even more important markets, such as the U.S. and Japan. EU free trade agreements either completely abolish duties or significantly reduce duties on goods. However, a European company does not automatically avoid paying duties when the company exports goods or imports goods from a country with which the EU has a free trade agreement. A few conditions have to be fulfilled in order to get the duty savings which the free trade agreements entail. Fulfilling these conditions will enable you to substantially reduce your duty costs.

These four conditions must all be met in order for the importing country not to charge normal (MFN) customs duty rates:

- 1. The goods must be included in the EU free trade agreement. Normally, almost all goods are included in the EU's more recent free trade agreements.
- 2. The goods must have origin in the EU or the partner country, i.e., the main part of the goods must be produced either in the EU or in the country with which the EU has a free trade agreement (termed the partner country).

Best practices in customs management

- □ Buyers are not transportation and compliance professionals who understand Incoterms®—they choose suppliers based on favorable pricing. Firms can establish internal structures or education to help buyers understand how Incoterms® impact risk management and pricing.
- □ Rely on a customs professional to leverage international customs data. They can combine a company's unwieldy historical shipping data into usable trade reports to help organisations learn whether they are taking proper advantage of free trade agreements around the world.
- ☐ The European Union has free trade agreements with 60 countries outside Europe. Companies have to meet requirements to save on duties.

- 3. The goods must be accompanied by documentation of origin.
- **4.** The goods must be transported directly between the EU and the partner country. However, the goods can also be shipped in transit via a third country or in certain circumstances be stored in a third country under customs control.
- Incoterms®. Incoterms®, or International Commercial Terms, are published by the International Chamber of Commerce. They are the rules that define the responsibilities of sellers and buyers for the delivery of goods under sales contracts, and they establish where the transfer of risk takes place. However, they vary from situation to situation. Knowing the rules that apply to your freight can save you money if you know what to look for. For example, if a container being moved across the ocean from the United States to Europe falls overboard, who is at risk? The Incoterms® tell the story. If the European buyer purchased the product FOB (free on board), the importer took responsibility for the risk as soon as the freight was loaded on the vessel in the United States. If the same product was purchased DDP (delivered duty paid), the shipper would be responsible until the product reached the purchaser's door in the Europe. You can save money if you ensure your purchasing team understands how Incoterms® rules will be applied to freight.

GLOBAL TECHNOLOGY CAN TIE IT ALL TOGETHER

As companies large and small continue to expand internationally, they can no longer afford to single-handedly manage the countless details and nuances of global freight forwarding. Shortened lead times, the use of multiple transportation modes and carriers to deliver product efficiently across continents and an environment fraught with risk requires both worldwide and regional management of cargo flows.

Many companies rely on a transportation management system (TMS), hoping to keep their fingers on the pulse of their global supply chain providers. However, TMS products were developed initially to track domestic or regional truck shipments and to automate tedious, low-value processes performed by an enterprise's transportation staff. Today, few TMSs can enable global visibility to every shipment, or can interconnect disparate systems on multiple continents to provide the level of visibility to show where products are at any given point in time.

A case in point: purchase order management

- □ Purchase order management (POM) within a TMS delivers end to end visibility throughout the purchase order (PO) life cycle. POM enables you or your provider to manage shipment windows, work with overseas vendors to coordinate bookings, manage exceptions, collect and distribute documents and provide reporting at the shipment and PO/line item level.
- POM options include PO tracking and visibility, reporting, online booking, document management, check and verification process, vendor self-service, vendor management, exception management and PO and shipment analytics.

A truly global supply chain network has a single TMS architecture that spans all continents. Global visibility enables your organisation to clearly see the entire supply chain. Utilisation reports for multiple services and modes (air, ocean, rail and road) on all continents confers specific strategic advantages:

- Continuous improvement to supply chain logistics in real time
- Access to business intelligence, crossing all freight and spend categories to strategically understand the impact of decisions
- Access to a centralised network of multiple providers—without integrating individually with each provider

Work with a logistics provider that offers a full suite of services, manages service performance, consistently communicates performance metrics and offers strategic optimisation to gain distinct advantages in the marketplace.

5

Questions to Ask a Potential Global Freight Forwarder

IS YOUR TMS TRULY GLOBAL?

There should be one system architecture that works across regions and covers all types of transportation.

CAN YOU PROVIDE CAPACITY OPTIONS?

They should ship goods by ocean, air, rail and truck, choosing the option that best aligns with the business need. Ask about their consolidation programs to optimise spend, routings and transit time performance.

DO YOU HAVE "BOOTS ON THE GROUND" IN KEY GEOGRAPHIC REGIONS?

Your global freight forwarder should think globally, act locally. That is, they should know global transportation, but also have deep knowledge of the local population, infrastructure, languages, politics, economy, customs, currencies, tax laws and tariffs for each country your shipping routes touch.

CAN YOU HELP ASSESS CARGO RISK?

They must adequately help you assess and mitigate cargo risk to help protect your bottom line.

DO YOU OFFER CUSTOMS ADVICE?

They should be experts in leveraging customs information and programs to your company's advantage.



END NOTES

- "What is the biggest challenge you are facing in your supply chain?" eft Supply Chain & Logistics Business Intelligence, April 2018. Accessed at https://www.statista.com/ statistics/829634/biggest-challenges-supply-chain/.
- 2. "Containers Lost at Sea-2017 Update," World Shipping Council, 2017.
- 3. SDRs, or Special Drawing Rights, refers to a basket of currencies designed to iron out currency exchange fluctuations in International valuations, now used to express the limitation under the Hague-Visby Rules and the MSA Limitation Convention.
- "Global Trade, Trade Statistics," World Shipping Council, 2018. Accessed at http://www.worldshipping.org/about-theindustry/global-trade.
- 5. "Containers Lost at Sea-2017 Update," World Shipping Council, 2017.
- 6. Larry Kivett and Mark Pearson, "Understanding risk management in the supply chain: Using supply chain data analytics to drive performance," Deloitte, 2018.

ABOUT US

At C.H. Robinson, we see things differently. We believe in accelerating global trade to drive the world's economy. Using the strengths of our people, processes, and technology, we help our customers work smarter, not harder. As one of the world's largest third party logistics providers (3PL), we provide a broad portfolio of logistics services, fresh produce sourcing, and managed services through our global network. In addition, the company, our Foundation, and our employees contribute annually to a variety of organisations.

For more information, watch our video, learn about our global forwarding services, view our blogs, or visit www.chrobinson.com.



The information in this white paper has been compiled with the greatest possible care, however, no rights whatsoever can be derived from its contents. C.H. Robinson does not guarantee, warrant or represent the accuracy or completeness or fitness for a particular purpose of the information contained herein.