

Influential Article Review - A Strategic Approach to Managing Slow-Steaming in Deep Sea Container Shipping

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This paper examines logistics. We present insights from a highly influential paper. Here are the highlights from this paper: When container shipping lines experience over-capacity and high fuel costs, they typically respond by decreasing sailing speeds and, consequently, increasing transport time. Most of the literature on this phenomenon, often referred to as slow-steaming, takes the perspective of the shipping lines addressing technical, operational and financial effects, or a society perspective focusing on lower emissions and energy use. Few studies investigate the effects on the demand side of the market for container liner shipping. Hence, the aim of this study is to elaborate on the logistics consequences of slow-steaming, particularly the strategies that Swedish shippers purchasing deep sea container transport services employ to mitigate the effects of slow-steaming. Workshops and semi-structured interviews revealed that shippers felt they had little or no impact on sailing schedules and were more or less subject to container shipping lines' decisions. The effects of slow-steaming were obviously most severe for firms with complex supply chains, where intermediate products are sent back and forth between production stages on different continents. The shippers developed a set of strategies to cope with the low punctuality of containerised shipping, and these were categorised in the domains of transfer-the-problem, transport, sourcing and distribution, logistics and manufacturing, and product design. All firms applied changes in the transport domain, although the lack of service segmentation limited the effects of the strategy. Most measures were applied by two firms, whereas only one firm changed the product design. For our overseas readers, we then present the insights from this paper in Spanish, French, Portuguese, and German.

Keywords: Container liner shipping, Coping strategies, Slow-steaming, Shippers, Inventory

SUMMARY

- Sweden is a small country that is heavily dependent on foreign trade. About 90% of the total foreign trade volume is carried by maritime transport in some part of the transport chain Swedish Maritime Administration .
- The data collection started with a workshop aimed at selecting case firms among the customers of DB Schenker and DHL, two of the largest active ocean freight forwarders on the Swedish market. Both act globally and are among the largest worldwide. Firms were invited based on their fit to the scope of the study, and larger companies were favoured in the selection because they were assumed

to have larger flows of goods and sufficiently mature logistics operations that could deliberately handle the effects of slow-steaming. The firms were represented by senior logistics managers. In all, six firms from different trade-intensive sectors were selected for semi-structured interviews. The selection was based on representation of production strategies MTS, forecasts and MTO, customer orders, and a mix thereof as well as a representation of business-to-business and business-to-consumer sales patterns.

- The first phase of this exploratory case study aimed to understand how shippers are affected by the widespread application of slow-steaming, which is analysed and presented by Finnsgård et al. . The reduction of sailing speed since 2008–2009 has resulted in 20–50% longer transport times for the shippers in this study, depending on trade and whether transport time is considered port-to-port or door-to-door, or for single legs from A to B or for entire global supply chains. The price of the service has, as perceived by the shippers, at best decreased marginally or stagnated/increased marginally at worst. The trade-off between price and speed was uniformly considered unfavourable. Most of the studied companies were prepared to pay more for faster transits, with one company finding the trade-off more complex than just price and speed. However, even this company did not view the current trade-off as favourable. All the case companies more or less confirmed that they did not experience any increase in punctuality after the introduction of slow-steaming. Some of the companies could also confirm, based on their experience as shippers, that the shipping lines offering the highest service frequency also generally delivered a service with higher punctuality. This is not so much due to lack of deviations, e.g., missed or cancelled departures, delays etc.; rather, the impact of any disturbance was minimised due to the higher frequency of the service.
- Companies applying MTS deliver their products to final consumers off the shelf from retail locations, meaning that the lead time gap is maximally expanded.
- Although all of the case companies could claim to employ this to some extent, only two consciously employ transfer-the-problem as a strategy for managing the increasing lead times. In the case of Company F, which regards outbound flows in an MTO setting, the customers, or downstream actors, simply have to accept the lead time offered.
- All case companies identify this strategy as their primary effort for managing the increasing lead times. This is intuitively plausible, as this is the most immediate action that can be taken—in an extreme case, by changing modes to a faster one. However, in light of the spatial configuration of sources and sinks, the distances in question generally make air freight the only feasible substitute. This is beside the issue regarding capacity; it is prohibitively expensive. This is evident in the fact that only marginal flows are transported by air in all of the companies, and almost none of the volumes that are flown were planned to do so originally, i.e., air freight is only used as a «firefighting» measure.

HIGHLY INFLUENTIAL ARTICLE

We used the following article as a basis of our evaluation:

Finnsgård, C., Kalantari, J., Raza, Z., Roso, V., & Woxenius, J. (2018). Swedish shippers' strategies for coping with slow-steaming in deep sea container shipping. *Journal of Shipping and Trade*, 3(1), 1–24.

This is the link to the publisher's website:

<https://jshippingandtrade.springeropen.com/articles/10.1186/s41072-018-0033-2>

INTRODUCTION

Shipping lines have reduced sailing speeds to mitigate the effects of over-capacity and, until recently, high fuel costs since the financial crisis started in 2008. Slow-steaming is a rather straightforward issue in the tank and bulk segments, where the shipowner often negotiates terms directly with one or a few shippers. In liner shipping, however, the shipping lines face a vast array of shippers with different preferences for speed and costs; in addition, routes often include multiple port calls, and the ships are engaged in tight and complex itineraries. As a result, timetables are often single-handedly changed, and shippers are merely notified or simply have to wait for shipments to arrive.

Most of the literature on slow-steaming either takes the perspective of shipowners addressing technical, operational or cost-minimisation issues—assuming that the effect on shippers is fully captured by an increased cost of capital tied up in the transported products—or that of society with implications of lower emissions by slow-steaming. In reality, however, the effects on supply chains using container liner shipping is far more complex; consequently, this study takes the perspective of the shippers. The purpose is to briefly elaborate on the logistics consequences of slow-steaming, categorise principle mitigation strategies, and investigate and categorise the strategies Swedish shippers purchasing deep sea container transport services use to cope with the effects of slow-steaming.

The study started with a workshop aimed at selecting case firms that engage two large forwarders and a set of firms highly dependent on foreign trade. In all, six firms in retailing, steel manufacturing, and industrial systems, equipment and tools were selected for semi-structured interviews conducted by two researchers and a representative from a forwarder. A second workshop with the forwarders and case firms focused on strategies for coping with the effects of slow-steaming in the deep sea container segment.

The first part of the next section reviews literature on slow-steaming and its effects, and the second part elaborates on plausible strategies for coping with the effects of longer lead times. The section serves as literature review and conceptual framework for the empirical part that follows. It contains a brief section on the Swedish firms' slow-steaming experiences and a more extensive analysis of the mitigation strategies they employ. Finally, implications of the findings are discussed and conclusions drawn.

CONCLUSION

Slow-steaming, i.e., the practice of reducing sailing speed, is periodically adopted by trans-ocean liner shipping companies. During periods where the market is characterised by low demand, high fuel prices, low freight rates and over-capacity, they tend to unilaterally reduce the speed of the service they offer. The latest instance in which this has occurred is in the period following the 2008–2009 global financial crisis, and the speeds have not yet rebounded to pre-crisis levels. Most of the existing research regarding slow-steaming is from the fields of maritime engineering and maritime economics, meaning that the phenomenon is studied from the ship owners' perspectives in the technical, operational and economics domains.

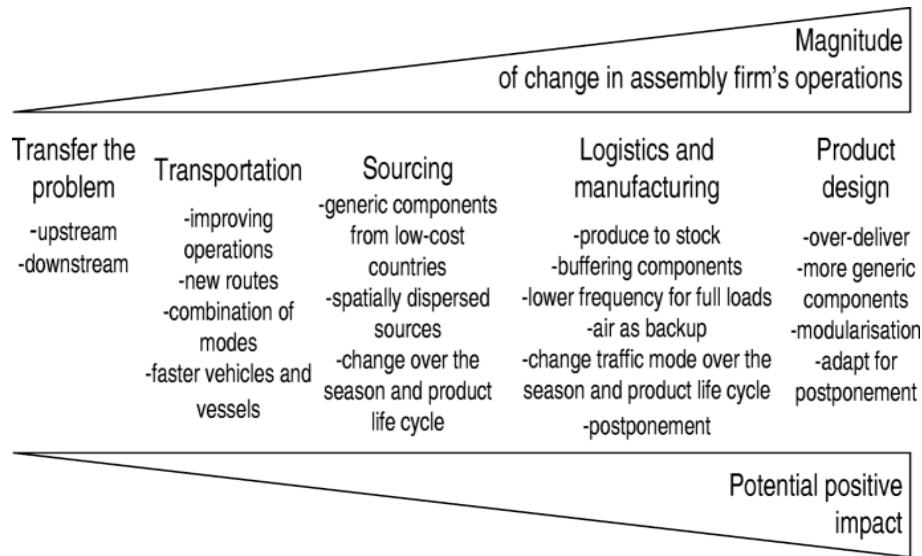
The shippers, i.e., the buyers of the maritime services, have garnered very little attention from the research community, even though their systems bear the grunt of the consequences of drastically shifting the properties of the services available. In this exploratory case study, the answers to the questions of how the shippers' systems are affected by the widespread application of slow-steaming and how shippers manage these consequences are sought. To do so, a multiple case study consisting of six Swedish multinational companies has been undertaken. The case study is based on data collected from interviews, seminars and workshops, secondary data, and literature reviews.

The case companies use a number of strategies in order to manage the increase in transport time. All try to reduce the lead time, or at least increase its punctuality, by monitoring transport service suppliers and regularly re-evaluating them by open competitive tenders. However, the lack of segmentation in the market offering from the service providers was identified as a major obstacle for the efficacy of this strategy. Even companies that are willing to pay substantially more for a higher quality liner shipping service are basically faced by a mode choice and then between modes at either end of the transport time and price scales, rather than a choice between shipping lines or forwarders.

Two of the companies also approach this challenge by transfer-the-problem up- or downstream. This means, in the case of the inbound flows of an MTS company, that the suppliers are tasked with minimising their delivery times; in the case of an MTO company's outbound flow, the customer needs to accept the longer lead times. The inbound flow of two other companies, one operating according to MTS and the other to MTO, approach this issue in the sourcing domain. By selecting suppliers that are geographically closer or sourcing generic components so as to expand the lead time gap, they try to mitigate the impact of slower sailing speeds on the lead time. The outbound flow of two other companies, both MTO, take on this challenge in the logistics and manufacturing domain. This is achieved largely by locating production facilities closer to the markets they supply in order to reduce the lead time to their customers. Finally, one of the companies also aims to reduce lead time by redesigning their product range so as to be able to assemble a large range of products from a handful of generic components. This enables the company, which delivers its products according to MTO, to expand the lead time gap by stocking production facilities closer to markets with generic components based on sales forecasts. As a final note, this paper aimed at contributing in the field of supply chain management and logistics rather than economics.

APPENDIX

**FIGURE 1
MEASURES FOR COPING WITH INCREASED DISTANCES AND LEAD TIMES IN
COMPONENT SUPPLY**



Source: Woxenius, 2006

**TABLE 1
DATA FOR THE CASE COMPANIES**

C.	Turnover, M€	Presence in	Employees	Share of Volume		Annual Flow, TEU	Through	Incoterms
	Globally (SE)	No. of Countries	Globally (SE)	MTS	MTO	Globally (SE)	Forwarder	
A	29,000 (1460)	27	147,000 (13000)	100%		500,000	Yes, partly	FCA
B	290	61	1700		100%	500 (400)	Yes	DAP
C	750	75	1700		80-100%	10,000	No	CIF
D	720	28	5000	100%		2500 (1800)	Yes	FOB, FCA
E	40,000 (3360)	100	150,000 (9000)		80-100%	30,000 (3000)	Yes	EXW, FOB, DAP, CPT
F	9250 (1860)	130	47,500 (7000)	30%	70%	6000	Yes	CPT

SE Sweden; Incoterms, CIF Cost Insurance and Freight, CPT Carriage Paid To, DAP Delivery at Place, EXW Ex Works, FCA Free Carrier, FOB Free On Board

TABLE 2
SUMMARY OF CASE COMPANY STRATEGIES FOR MANAGING INCREASING TRANSIT LEAD TIME

Case company	Transfer-the-problem	Transport	Sourcing	Logistics and manufacturing	Product design
A	X	X			
B		X		X	
C		X		X	X
D		X	X		
E		X	X		
F	X	X			

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TRANSLATED VERSION: SPANISH

Below is a rough translation of the insights presented above. This was done to give a general understanding of the ideas presented in the paper. Please excuse any grammatical mistakes and do not hold the original authors responsible for these mistakes.

VERSION TRADUCIDA: ESPAÑOL

A continuación se muestra una traducción aproximada de las ideas presentadas anteriormente. Esto se hizo para dar una comprensión general de las ideas presentadas en el documento. Por favor, disculpe cualquier error gramatical y no responsabilite a los autores originales de estos errores.

INTRODUCCIÓN

Las líneas navieras han reducido las velocidades de navegación para mitigar los efectos del exceso de capacidad y, hasta hace poco, los elevados costos de combustible desde que comenzó la crisis financiera en 2008. El vapor lento es un problema bastante sencillo en los segmentos de tanques y a granel, donde el armador a menudo negocia términos directamente con uno o unos pocos remitentes. En el transporte marítimo, sin embargo, las líneas navieras se enfrentan a una amplia gama de cargadores con diferentes preferencias de velocidad y costos; además, las rutas a menudo incluyen múltiples llamadas portuarias, y los barcos se dedican a itinerarios estrechos y complejos. Como resultado, los horarios a menudo se cambian por sí solos, y los remitentes son simplemente notificados o simplemente tienen que esperar a que lleguen los envíos.

La mayor parte de la literatura sobre el vapor lento toma la perspectiva de los armadores que abordan cuestiones técnicas, operativas o de minimización de costos, suponiendo que el efecto en los cargadores se capture plenamente por un mayor costo de capital vinculado a los productos transportados, o el de la sociedad con implicaciones de menores emisiones por el lento vapor. En realidad, sin embargo, los efectos sobre las cadenas de suministro que utilizan el transporte marítimo de contenedores son mucho más complejos; en consecuencia, este estudio toma la perspectiva de los cargadores. El objetivo es profundizar brevemente en las consecuencias logísticas de las estrategias de mitigación de principios de vapor lento, categorizar los principios, e investigar y clasificar las estrategias que utilizan los cargadores suecos que compran servicios de transporte de contenedores de aguas profundas para hacer frente a los efectos de la cámara lenta.

El estudio comenzó con un taller destinado a seleccionar empresas de casos que involucran a dos grandes transportistas y un conjunto de empresas altamente dependientes del comercio exterior. En total, seis empresas de venta al por menor, fabricación de acero y sistemas industriales, equipos y herramientas fueron seleccionadas para entrevistas semiestructuradas realizadas por dos investigadores y un representante de un transportista. Un segundo taller con los transportistas y las empresas de casos se centró en estrategias para hacer frente a los efectos de la vapor lento en el segmento de contenedores de aguas profundas.

La primera parte de la siguiente sección revisa la literatura sobre el vapor lento y sus efectos, y la segunda parte se explica en estrategias plausibles para hacer frente a los efectos de los plazos de entrega más largos. Las secciones sirven como revisión de la literatura y marco conceptual para la parte empírica que sigue. Contiene una breve sección sobre las experiencias de cámara lenta de las empresas suecas y un análisis más amplio de las estrategias de mitigación que emplean. Por último, se examinan las implicaciones de las conclusiones y se extraen conclusiones.

CONCLUSIÓN

Las compañías navieras trans-oceánicas adoptan periódicamente la práctica de reducir la velocidad de navegación. Durante los períodos en los que el mercado se caracteriza por la baja demanda, los altos precios de los combustibles, las bajas tasas de flete y el exceso de capacidad, tienden a reducir unilateralmente la velocidad del servicio que ofrecen. El último caso en el que esto se ha producido es en el período posterior a la crisis financiera mundial de 2008-2009, y las velocidades aún no han repuntado a los niveles anteriores a la crisis. La mayor parte de la investigación existente sobre la irsesión lenta proviene de los campos de la ingeniería marítima y la economía marítima, lo que significa que el fenómeno se estudia desde la perspectiva de los armadores en los ámbitos técnico, operativo y económico.

Los cargadores, es decir, los compradores de los servicios marítimos, han obtenido muy poca atención de la comunidad investigadora, a pesar de que sus sistemas tienen el gruñido de las consecuencias de cambiar drásticamente las propiedades de los servicios disponibles. En este estudio de caso exploratorio, las respuestas a las preguntas sobre cómo los sistemas de los cargadores se ven afectados por la aplicación generalizada de la cámara lenta y la forma en que se buscan los cargadores. Para ello, se ha llevado a cabo un estudio de varios casos compuesto por seis empresas multinacionales suecas. El estudio de caso se basa en datos recopilados de entrevistas, seminarios y talleres, datos secundarios y revisiones de literatura.

Las empresas de casos utilizan una serie de estrategias para gestionar el aumento del tiempo de transporte. Todos tratan de reducir el plazo, o al menos aumentar su puntualidad, supervisando a los proveedores de servicios de transporte y reevaluándolos regularmente mediante licitaciones competitivas abiertas. Sin embargo, la falta de segmentación en la oferta de mercado por parte de los proveedores de servicios se identificó como un obstáculo importante para la eficacia de esta estrategia. Incluso las empresas que están dispuestas a pagar sustancialmente más por un servicio de transporte marítimo de mayor calidad se enfrentan básicamente a una elección de modo y luego entre modos en cualquiera de los extremos del tiempo de transporte y las escalas de precios, en lugar de una elección entre líneas de envío o transportistas.

Dos de las empresas también abordan este desafío transfiriendo el problema hacia arriba o hacia abajo. Esto significa, en el caso de los flujos de entrada de una empresa MTS, que los proveedores tienen la tarea de minimizar sus plazos de entrega; en el caso del flujo de salida de una empresa MTO, el cliente debe aceptar los plazos de entrega más largos. El flujo de entrada de otras dos empresas, una que opera según MTS y otra a MTO, aborda este problema en el dominio de abastecimiento. Al seleccionar proveedores que están geográficamente más cerca o abasteciendo componentes genéricos con el fin de ampliar la brecha de tiempo de entrega, tratan de mitigar el impacto de velocidades de navegación más lentas en el tiempo de entrega. El flujo de salida de otras dos empresas, ambas MTO, asumir este reto en el ámbito de la logística y la fabricación. Esto se logra en gran medida mediante la localización de las instalaciones de producción más cerca de los mercados que suministran con el fin de reducir el tiempo de entrega a sus clientes. Por último, una de las empresas también tiene como objetivo reducir el tiempo de entrega mediante el rediseño de su gama de productos para poder ensamblar una amplia gama de productos a partir de un puñado de componentes genéricos. Esto permite a la empresa, que entrega sus productos de acuerdo con MTO, ampliar la brecha de tiempo de entrega mediante el almacenamiento de instalaciones de producción más cerca de los mercados con componentes genéricos basados en las previsiones de ventas. Como nota final, este documento tenía como objetivo contribuir en el campo de la gestión de la cadena de suministro y la logística en lugar de la economía.

TRANSLATED VERSION: FRENCH

Below is a rough translation of the insights presented above. This was done to give a general understanding of the ideas presented in the paper. Please excuse any grammatical mistakes and do not hold the original authors responsible for these mistakes.

VERSION TRADUITE: FRANÇAIS

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INTRODUCTION

Les compagnies maritimes ont réduit la vitesse de navigation pour atténuer les effets de la surcapacité et, jusqu'à récemment, des coûts élevés du carburant depuis le début de la crise financière en 2008. La cuisson lente est une question assez simple dans les segments de réservoir et de vrac, où l'armateur négocie souvent les conditions directement avec un ou quelques expéditeurs. Dans le transport maritime de paquebots, cependant, les compagnies maritimes font face à un vaste éventail d'expéditeurs ayant des préférences différentes en matière de vitesse et de coûts; en outre, les routes comprennent souvent plusieurs escales portuaires, et les navires sont engagés dans des itinéraires serrés et complexes. Par conséquent, les horaires sont souvent modifiés à eux seuls, et les expéditeurs sont simplement avisés ou doivent simplement attendre l'arrivée des expéditions.

La plupart des articles sur la lenteur de la vapeur prennent soit le point de vue des armateurs qui abordent des questions techniques, opérationnelles ou de minimisation des coûts — en supposant que l'effet sur les expéditeurs est pleinement pris en compte par un coût accru du capital lié aux produits transportés — ou celui de la société ayant des répercussions de la réduction des émissions par la lenteur de la vapeur. En réalité, cependant, les effets sur les chaînes d'approvisionnement utilisant le transport maritime de porte-conteneurs est beaucoup plus complexe; par conséquent, cette étude prend le point de vue des expéditeurs. L'objectif est d'élaborer brièvement sur les conséquences logistiques de la lenteur, de catégoriser les stratégies d'atténuation des principes et d'étudier et de catégoriser les stratégies que les expéditeurs suédois achètent des services de transport de conteneurs en haute mer utilisent pour faire face aux effets de la lenteur.

L'étude a débuté par un atelier visant à sélectionner les entreprises de cas qui engagent deux grands porteurs et un ensemble d'entreprises fortement dépendantes du commerce extérieur. En tout, six entreprises de la vente au détail, de la fabrication d'acier et des systèmes industriels, de l'équipement et des outils ont été sélectionnées pour des entrevues semi-structurées menées par deux chercheurs et un représentant d'un attaquant. Un deuxième atelier avec les entreprises de discussion et de cas s'est concentré sur les stratégies pour faire face aux effets de la cuisson lente dans le segment des conteneurs en haute mer.

La première partie de la section suivante passe en revue la littérature sur la lenteur et ses effets, et la deuxième partie développe sur les stratégies plausibles pour faire face aux effets des délais plus longs. Les sections servent d'examen de la littérature et de cadre conceptuel pour la partie empirique qui suit. Il contient une brève section sur les expériences de ralentissement des entreprises suédoises et une analyse plus approfondie des stratégies d'atténuation qu'elles emploient. Enfin, les implications des conclusions sont discutées et les conclusions tirées.

CONCLUSION

La cuisson à la vapeur lente, c'est-à-dire la pratique de la réduction de la vitesse de navigation, est adoptée périodiquement par les compagnies maritimes transocéaniques. Pendant les périodes où le marché se caractérise par une faible demande, des prix élevés du carburant, des taux de fret bas et une surcapacité, ils ont tendance à réduire unilatéralement la vitesse du service qu'ils offrent. Le dernier cas dans lequel cela s'est produit est dans la période qui a suivi la crise financière mondiale de 2008-2009, et les vitesses n'ont pas encore rebondi aux niveaux d'avant la crise. La plupart des recherches existantes sur la lenteur de la vapeur proviennent des domaines de l'ingénierie maritime et de l'économie maritime, ce qui signifie que le phénomène est étudié du point de vue des armateurs dans les domaines technique, opérationnel et économique.

Les expéditeurs, c'est-à-dire les acheteurs des services maritimes, ont reçu très peu d'attention de la part du milieu de la recherche, même si leurs systèmes supportent les conséquences d'un déplacement

radical des propriétés des services disponibles. Dans cette étude de cas exploratoire, les réponses aux questions de la façon dont les systèmes des expéditeurs sont affectés par l'application généralisée de la lenteur et de la façon dont les expéditeurs gèrent ces conséquences sont recherchées. Pour ce faire, une étude de cas multiple composée de six multinationales suédoises a été entreprise. L'étude de cas est basée sur les données recueillies à partir d'entrevues, de séminaires et d'ateliers, de données secondaires et d'examens de la littérature.

Les entreprises de cas utilisent un certain nombre de stratégies afin de gérer l'augmentation du temps de transport. Tous essaient de réduire le délai d'avance, ou du moins d'accroître sa ponctualité, en surveillant les fournisseurs de services de transport et en les réévaluant régulièrement par des appels d'offres ouverts. Toutefois, l'absence de segmentation de l'offre sur le marché de la part des fournisseurs de services a été identifiée comme un obstacle majeur à l'efficacité de cette stratégie. Même les entreprises qui sont prêtes à payer beaucoup plus pour un service d'expédition de ligne de meilleure qualité sont essentiellement confrontés à un choix de mode, puis entre les modes à chaque extrémité du temps de transport et les échelles de prix, plutôt que d'un choix entre les lignes maritimes ou les transporteurs.

Deux des entreprises abordent également ce défi en transférant le problème en aval ou en amont. Cela signifie, dans le cas des flux entrants d'une société MTS, que les fournisseurs sont chargés de minimiser leurs délais de livraison; dans le cas du flux sortant d'une entreprise MTO, le client doit accepter les délais plus longs. Le flux entrant de deux autres sociétés, l'une opérant selon MTS et l'autre au MTO, aborde cette question dans le domaine de l'approvisionnement. En sélectionnant des fournisseurs qui sont géographiquement plus proches ou en s'approvisionnant en composants génériques afin d'élargir l'écart de temps de plomb, ils essaient d'atténuer l'impact de vitesses de navigation plus lentes sur le temps de plomb. Le flux sortant de deux autres entreprises, toutes deux MTO, relève ce défi dans le domaine de la logistique et de la fabrication. Pour ce faire, il faut en grande partie localiser les installations de production plus près des marchés qu'ils approvisionnent afin de réduire le délai d'avance pour leurs clients. Enfin, l'une des entreprises vise également à réduire le délai d'avance en redessinant sa gamme de produits afin de pouvoir assembler une large gamme de produits à partir d'une poignée de composants génériques. Cela permet à l'entreprise, qui livre ses produits selon MTO, d'élargir l'écart de temps de plomb en stockant les installations de production plus près des marchés avec des composants génériques basés sur les prévisions de ventes. En fin de compte, ce document visait à contribuer dans le domaine de la gestion de la chaîne d'approvisionnement et de la logistique plutôt qu'à l'économie.

TRANSLATED VERSION: GERMAN

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ÜBERSETZTE VERSION: DEUTSCH

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EINLEITUNG

Die Reedereien haben die Segelgeschwindigkeiten reduziert, um die Auswirkungen von Überkapazitäten und bis vor kurzem hohen Treibstoffkosten seit Beginn der Finanzkrise im Jahr 2008 abzumildern. Langsames Dämpfen ist ein ziemlich einfaches Problem in den Tank- und Bulk-Segmenten, wo der Reeder oft Bedingungen direkt mit einem oder wenigen Versendern verhandelt. In der Linienschiffahrt jedoch stehen die Reedereien vor einer Vielzahl von Versendern mit unterschiedlichen Vorlieben für Geschwindigkeit und Kosten; Darüber hinaus umfassen Routen oft mehrere Hafenanrufe,

und die Schiffe sind in engen und komplexen Routen beschäftigt. Infolgedessen werden die Fahrpläne oft im Alleingang geändert, und die Versender werden lediglich benachrichtigt oder müssen einfach warten, bis die Sendungen ankommen.

Der größte Teil der Literatur über langsames Dämpfen nimmt entweder die Perspektive der Reeder, die sich mit technischen, betrieblichen oder Kostenminimierungsfragen befassen – vorausgesetzt, dass die Auswirkungen auf die Versender vollständig durch die gestiegenen Kapitalkosten erfasst werden, die in den transportierten Produkten gebunden sind – oder die der Gesellschaft mit Auswirkungen auf niedrigere Emissionen durch langsame Dämpfung. In Wirklichkeit sind die Auswirkungen auf die Lieferketten mit Containerlinienversand jedoch viel komplexer; folglich nimmt diese Studie die Perspektive der Versender. Ziel ist es, kurz auf die logistischen Folgen von langsam dämpfenden Strategien einzugehen, die Prinzipminderungsstrategien zu kategorisieren und die Strategien zu untersuchen und zu kategorisieren, die schwedische Versender beim Kauf von Tiefseecontainertransportdiensten nutzen, um mit den Auswirkungen des langsamen Dampfens fertig zu werden.

Die Studie begann mit einem Workshop zur Auswahl von Fallfirmen, die zwei große Spediteure und eine Reihe von Unternehmen, die in hohem Maße vom Außenhandel abhängig sind, beschäftigen. Insgesamt wurden sechs Unternehmen im Einzelhandel, in der Stahlindustrie und in industriell hergestellten Systemen, Ausrüstungen und Werkzeugen für halbstrukturierte Interviews ausgewählt, die von zwei Forschern und einem Vertreter eines Spediteurs durchgeführt wurden. Ein zweiter Workshop mit den Spediteuren und Fallfirmen konzentrierte sich auf Strategien zur Bewältigung der Auswirkungen des langsamen Dampfens im Tiefseecontainersegment.

Der erste Teil des nächsten Abschnitts behandelt Literatur über langsames Dämpfen und seine Auswirkungen, und der zweite Teil untersucht plausible Strategien, um mit den Auswirkungen längerer Durchlaufzeiten fertig zu werden. Die Abschnitte dienen als Literaturrezension und konzeptioneller Rahmen für den folgenden empirischen Teil. Es enthält einen kurzen Abschnitt über die langsamen Erfahrungen der schwedischen Unternehmen und eine umfassendere Analyse der von ihnen verfolgten Minderungsstrategien. Schließlich werden die Implikationen der Ergebnisse erörtert und Schlussfolgerungen gezogen.

SCHLUSSFOLGERUNG

Langsamdampfend, d.h. Die Praxis der Reduzierung der Segelgeschwindigkeit, wird regelmäßig von den Transozean-Linienreedereien übernommen. In Zeiten, in denen der Markt durch eine geringe Nachfrage, hohe Kraftstoffpreise, niedrige Frachtraten und Überkapazitäten gekennzeichnet ist, neigen sie dazu, einseitig die Geschwindigkeit der von ihnen angebotenen Dienstleistungen zu verringern. Der jüngste Fall, in dem dies geschehen ist, ist in der Zeit nach der globalen Finanzkrise 2008-2009, und die Geschwindigkeiten haben sich noch nicht auf das Vorkrisenniveau erholt. Der größte Teil der bestehenden Forschungen über Langsamdampfer stammt aus den Bereichen Seetechnik und maritime Ökonomie, was bedeutet, dass das Phänomen aus der Sicht der Schiffseigner im technischen, operativen und wirtschaftlichen Bereich untersucht wird.

Die Versender, d.h. Die Käufer der maritimen Dienste, haben von der Forschungsgemeinschaft nur sehr wenig Aufmerksamkeit erhalten, obwohl ihre Systeme die Folgen einer drastischen Verlagerung der Eigenschaften der verfügbaren Dienstleistungen tragen. In dieser sondierungsorientierten Fallstudie werden die Antworten auf die Frage gesucht, wie die Systeme der Versender von der weit verbreiteten Anwendung des langsamdämpfenden Verkehrs betroffen sind und wie Dies für die Versender mit diesen Folgen umgeht. Zu diesem Zweck wurde eine mehrfache Fallstudie durchgeführt, die sich aus sechs schwedischen multinationalen Unternehmen zusammensetzt. Die Fallstudie basiert auf Daten aus Interviews, Seminaren und Workshops, Sekundärdaten und Literaturrezensionen.

Die Fallunternehmen verwenden eine Reihe von Strategien, um die Erhöhung der Transportzeit zu steuern. Alle versuchen, die Vorlaufzeit zu verkürzen oder zumindest ihre Pünktlichkeit zu erhöhen, indem sie die Anbieter von Transportdiensten überwachen und sie regelmäßig durch offene Ausschreibungen neu bewerten. Die fehlende Segmentierung des Marktangebots der Dienstleister wurde jedoch als ein

hauptionelles Hindernis für die Wirksamkeit dieser Strategie identifiziert. Selbst Unternehmen, die bereit sind, wesentlich mehr für einen qualitativ hochwertigeren Linienversandzuschlag zu zahlen, stehen im Grunde vor einer Modewahl und dann zwischen den Verkehrsträgern an beiden Enden der Transportzeit und der Preisskala, anstatt zwischen Reedereien oder Speditionen zu wählen.

Zwei der Unternehmen gehen diese Herausforderung auch durch die Übertragung des Problems nach oben oder nachgelagert an. Dies bedeutet, dass bei den zuströmenden Strömen eines MTS-Unternehmens die Lieferanten mit der Minimierung ihrer Lieferzeiten betraut sind; Im Falle des Outbound-Flows eines MTO-Unternehmens muss der Kunde die längeren Lieferzeiten akzeptieren. Der Eingehende von zwei anderen Unternehmen, eines nach MTS und das andere nach MTO, nähert sich diesem Problem im Sourcing-Bereich. Durch die Auswahl von Lieferanten, die geografisch näher sind, oder der Beschaffung generischer Komponenten, um die Zeitlücke zu vergrößern, versuchen sie, die Auswirkungen langsamerer Segelgeschwindigkeiten auf die Vorlaufzeit zu verringern. Der Outbound-Flow von zwei weiteren Unternehmen, beide MTO, stellt sich dieser Herausforderung im Logistik- und Fertigungsbereich. Dies wird weitgehend durch die Standortbestimmung von Produktionsstätten in der Nähe der von ihnen beliefernden Märkte erreicht, um die Vorlaufzeit für ihre Kunden zu verkürzen. Schließlich will eines der Unternehmen auch die Vorlaufzeit verkürzen, indem es seine Produktpalette so umgestaltet, dass eine große Auswahl an Produkten aus einer Handvoll generischer Komponenten zusammengefügt werden kann. Dies ermöglicht es dem Unternehmen, das seine Produkte nach MTO liefert, die Zeitlücke zu vergrößern, indem es Produktionsstätten näher an Märkten mit generischen Komponenten auf der Grundlage von Umsatzprognosen lagert. Abschließend wurde mit diesem Papier ein Beitrag im Bereich Supply Chain Management und Logistik statt wirtschaften sollen.

TRANSLATED VERSION: PORTUGUESE

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VERSÃO TRADUZIDA: PORTUGUÊS

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INTRODUÇÃO

As linhas marítimas reduziram as velocidades de navegação para mitigar os efeitos da sobrecapacidade e, até recentemente, elevados custos de combustível desde o início da crise financeira em 2008. O vapor lento é uma questão bastante simples nos segmentos de tanques e graneis, onde o armador muitas vezes negocia termos diretamente com um ou alguns carregadores. No entanto, no transporte marítimo, as linhas de transporte enfrentam uma vasta gama de carregadores com diferentes preferências de velocidade e custos; além disso, as rotas incluem frequentemente múltiplas chamadas portuárias, e os navios estão envolvidos em itinerários apertados e complexos. Como resultado, os horários são muitas vezes alterados sozinhos, e os carregadores são apenas notificados ou simplesmente têm de esperar pela chegada dos envios.

A maior parte da literatura sobre o vapor lento quer toma a perspectiva dos armadores que abordam questões técnicas, operacionais ou de minimização de custos, assumindo que o efeito sobre os carregadores é totalmente capturado por um custo acrescido de capital ligado aos produtos transportados - ou o da sociedade com implicações de emissões mais baixas através do vapor lento. Na realidade, porém, os efeitos sobre as cadeias de abastecimento que utilizam o transporte de contentores são muito mais complexos; consequentemente, este estudo toma a perspectiva dos carregadores. O objetivo é elaborar brevemente as consequências logísticas do vapor lento, categorizar estratégias de mitigação dos princípios e investigar e

categorizar as estratégias que os carregadores suecos que adquirem serviços de transporte de contentores de profundidade utilizam para fazer face aos efeitos da marcha lenta.

O estudo iniciou-se com um workshop destinado a selecionar empresas de caso que contratam dois grandes avançados e um conjunto de empresas altamente dependentes do comércio externo. Ao todo, foram selecionadas seis empresas de retalho, fabrico de aço e sistemas industriais, equipamentos e ferramentas para entrevistas semi-estruturadas conduzidas por dois investigadores e um representante de um reencaminhador. Um segundo workshop com os reencaminhadores e empresas de casos focou-se em estratégias para lidar com os efeitos do vapor lento no segmento de contentores de águas profundas.

A primeira parte da secção seguinte revê a literatura sobre o vapor lento e os seus efeitos, e a segunda parte elabora estratégias plausíveis para lidar com os efeitos de tempos de avanço mais longos. As secções servem de revisão literária e enquadramento conceptual para a parte empírica que se segue. Contém uma breve secção sobre as experiências de cozedura lenta das empresas suecas e uma análise mais aprofundada das estratégias de mitigação que empregam. Por último, as implicações das conclusões são discutidas e extraem-se conclusões.

CONCLUSÃO

O vapor lento, isto é, a prática da redução da velocidade de navegação, é periodicamente adotado pelas companhias de navegação transoceis. Durante os períodos em que o mercado se caracteriza por baixa procura, elevados preços dos combustíveis, baixas taxas de frete e sobrecapacidade, tendem a reduzir unilateralmente a velocidade do serviço que oferecem. A última instância em que tal ocorreu ocorre-se no período seguinte à crise financeira global de 2008-2009, e as velocidades ainda não recuperaram para níveis pré-crise. A maior parte da investigação existente no que diz respeito ao vapor lento provém dos domínios da engenharia marítima e da economia marítima, o que significa que o fenómeno é estudado a partir das perspetivas dos armadores nos domínios técnico, operacional e económico.

Os carregadores, ou seja, os compradores dos serviços marítimos, têm atraído muito pouca atenção da comunidade de investigação, embora os seus sistemas tenham o grunhido das consequências de uma mudança drástica das propriedades dos serviços disponíveis. Neste estudo de caso exploratório, as respostas às questões de como os sistemas dos carregadores são afetados pela aplicação generalizada do vapor lento e pela forma como os carregadores gerem essas consequências são procuradas. Para tal, foi realizado um estudo de vários casos composto por seis empresas multinacionais suecas. O estudo de caso baseia-se em dados recolhidos a partir de entrevistas, seminários e workshops, dados secundários e revisões de literatura.

As empresas do caso utilizam uma série de estratégias para gerir o aumento do tempo de transporte. Todos tentam reduzir o tempo de prazo, ou pelo menos aumentar a sua pontualidade, através da monitorização dos fornecedores de serviços de transporte e da sua reavaliação regular através de concursos abertos. No entanto, a falta de segmentação da oferta de mercado por parte dos prestadores de serviços foi identificada como um dos principais obstáculos à eficácia desta estratégia. Mesmo as empresas que estão dispostas a pagar substancialmente mais por um serviço de envio de linhas de maior qualidade são basicamente confrontadas com uma escolha de modo e, em seguida, entre modos em cada extremidade do tempo de transporte e escala de preços, em vez de uma escolha entre linhas de envio ou reencaminhadores.

Duas das empresas abordam também este desafio através da transferência do problema para cima ou para baixo. Isto significa, no caso dos fluxos de entrada de uma empresa MTS, que os fornecedores são encarregados de minimizar os seus prazos de entrega; no caso do fluxo de saída de uma empresa MTO, o cliente precisa de aceitar os prazos de acesso mais longos. O fluxo de entrada de duas outras empresas, uma que opera de acordo com a MTS e a outra para a MTO, abordam esta questão no domínio de abastecimento. Ao selecionarem fornecedores que estejam geograficamente mais próximos ou a fornecer componentes genéricos de modo a expandir o intervalo de tempo de chumbo, tentam mitigar o impacto de velocidades de navegação mais lentas no tempo de espera. O fluxo de saída de duas outras empresas, ambas MTO, assume este desafio no domínio da logística e da produção. Isto é conseguido em grande parte através da localização de instalações de produção mais próximas dos mercados que fornecem, a fim de reduzir o tempo de espera para os seus clientes. Finalmente, uma das empresas também pretende reduzir o tempo de

chumbo, redesenhando a sua gama de produtos de modo a poder montar uma grande gama de produtos a partir de um punhado de componentes genéricos. Isto permite à empresa, que entrega os seus produtos de acordo com o MTO, expandir o intervalo de tempo de chumbo, armazenando instalações de produção mais próximas de mercados com componentes genéricos com base nas previsões de vendas. Como nota final, este documento visava contribuir no domínio da gestão da cadeia de abastecimento e logística e não da economia.