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MARITIME EVENTS

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Are economical sanctions moral?

Hannah arendt responses!

*By: Amir Falah
Editor in Chief*

" If the man's intellect is incapable of understanding human beings, the policy or the possibility of coexistence without human violence will be impossible. "

Hannah Arendt

The 18th century is an important era in specifying human's modern life as thinkers attempted to establish a new explanation as well as an original base for ethics and phenomenon seen as good and evil right after Lisbon deadly earthquake.

Immanuel Kant, who was one of the historical thinkers to encounter the recent issue, sat human on a new foundation in the realm of moral arrangement regardless of God and metaphysics and then analyzed evil by considering that God is out of human's conception.

However, he argued the concept of human in the significant article of *"What Is Enlightenment?"* and composed: *"Enlightenment is man's emergence from his self-imposed nonage. Nonage is the inability to use one's own understanding without another's guidance. This nonage is self-imposed if its cause lies not in lack of understanding but in indecision and lack of courage to use one's own mind without another's guidance. Dare to know! «Have the courage to use your own understanding», is therefore the motto of the enlightenment."*

The foundation of modern human formed based on this predicate that means contemplating, the power of decision depending on his notion and independency in thoughtful decision are demonstrators of human in the new era. The explanation of such an idea as Kant expressed is based on self-imposed moral depending on the conscience (sociologists called it a social contract) and then good and evil have been created according to the power of human's wisdom and decision to conduct that.

As a result, from Kant's perspective *"The "evil" in question here is not the bad things that happen to people – the pain, grief and sorrow, injury, starvation, death, even their feelings of violation and humiliation. The "evil" refers to what human beings do. More precisely, it consists in actions that they should not do but choose to do. The "Evil" includes acts of violence and cruelty – war, rape, conquest, torture, terrorism, genocide – as well as lesser acts of cruelty, callousness, degradation, and disrespect for humanity"*.

As mentioned earlier, the modernity of humans is formed based on “choice” and there that a courageous human owns choice by notion, modern contemplation appears. In this regard, the behavior is a social contract that is created through humans’ choices.

The history was witness of variant occurrences and led the foundation to face another question as the modern human caused destructive world wars based on “choice”. The result was more terrible than ever as thinkers explained the natural happenings.

The modern human reached a conclusion based on a collective wisdom that in order to live in the world two accompanying elements are needed. The first one was right to life that came true within a birth of a human and the second one is right to welfare. These two rights considered the humans’ laws but the occurrence of world wars ignored them and when the Nazis established holocaust regardless of the man wisdom, the concept of “evil” totally changed.

However, the most crucial flip for the man during the post-war era emerged when Eichmann was tried as a trustee of the holocaust in Israel. Since Plato’s philosophy and thought began with wondering, Eichmann’s responses in the court were so amazing that Hannah Arendt, a political philosopher of the twentieth century and one of the prisoners of forced labor explicitly explained this terrible event.

Arendt who was admirer of Kant’s moral doctrine believed that in the case, human understanding is involved and it resulted in freedom, choices should not be based on malicious behavior. However, Arendt figured out the Eichmann’s abandonment of the power of wisdom in general and human’s authority in particular which consequently led to creation of Holocaust catastrophe.

Considering the facts and being a follower of Kant’s radical evil concept to choose a malicious behavior before act, Arendt analyzed the new phenomenon in «*Eichmann in Jerusalem: A Report on the Banality of Evil*» to demonstrate that act or malicious choice means the evil or not and the trespasser is considered mischievous.

There she realized that the modern human after democratic expansion of the societies is restricted to the wishes of powerful masters and presents a behavior of not being dependent on wisdom and thinking. Arendt reached the conclusion based on an investigation of Eichmann’s professions that the new world after enlightenment and modern civilization changed the concept of evil and formed an insignificant idea that Arendt called it «*the Banality of Evil*». It means that when human ignores his wisdom and do not listen to his conscious, he would conduct a behavior just on the basis of explanations created by some strong men which finally results in the world war exactly the same as World War II. Therefore, this method continues in the world in a way that every man has the potential capability of conducting a malicious act, as the repetition of that is possible too.

The twentieth century ended, the post-war man was so skeptical about his behavior that he was struggling to prevent the violation of his rights to life and welfare and then he signed a new contract after which those wars were suppressed and a fair distribution substituted it.

Establishment of leading organizations such as the United Nation was due to this element that replace peace with war and prevent occurrence of such crimes.

However, gaining benefits from other countries’ interest and global authority encouraged human during different eras to conduct a malicious behavior. Moreover, the companying of peace with the man continued and the war recreated in another new form. In line with this, if war and bullet were referred to as cruel concepts, sanction and economy were softer in a way that they replaced with war and economy, respectively.

As mentioned, the modern era authorized two rights of human and defined every egression and avoidance against them a representation of cruel behavior. Therefore, if in a military war the first right of human was in danger, it was right to welfare which was being attacked during the sanctions i.e. economical war.

Gaining maximum benefits and creating a global authority that have always been with various governments led the United States to become an indisputable power to end the World War II and became an economic power since it was far from devastation. As the global economic organizations were forming, the U.S. built up its economic power over the world with the domination of the dollar and through holding the Bretton Woods Conference. This time it decided to impose sanctions under different subjects by using force and globalization of its currency. In this written text our aim is not to analyze the amount of success or failure, however, the matter is communion which results in another happening.

If Lisbon's earthquake and the World War II led changes in morality, Donald Trump's behavior caused the transition in collective morality as he exited from the JCPOA and began to impose sanctions against Iran. Nevertheless, why the new sanctions differ from previous behaviors? According to the nuclear agreement, six countries of the world besides Iran accepted to terminate all the nuclear tensions of Iran through dependency on the international law which was the product of collective contract of the human during the post-war era. Therefore and on the basis of 2231 Security Council resolution, this happening altered to law.

When it comes to law, it means that a behavior is obligatory to implement and ignoring that, is regarded as a misdeed act. Moreover, the global commitment declared that the followers of such behaviors are the same as those did wrongly. However, the U.S. not only exited from the JCPOA based on a bullying behavior, but also threatened and encouraged other countries to accompany him in this lawlessness step.

The Europe, which is on the other side of the international agreement, is in a historic position today because, if it decides based on its interests, it would violate the law one of which he was a member at, and if it violates the wishes of the U.S. government, it would be sanctioned. This is precisely the focal point that Kant pointed to,

namely, *the choice!*

Although the European Union still supports the idea in terms of speech, it is still hesitant in practice, and as Arendt referred to «*the Banality of Evil*» in describing the behavior of the Nazi government, it seems to be happening again. In other words, failure to use the wisdom of human and blind execution of the U.S. government that is contrary to the universal law are the same as considering an evil-based behavior a simple thing.

Now that the world as well as the public's idea are agreed upon a social contract to have a peaceful coexistence are waiting for a challenging decision too, one which is resulted from a moral behavior meaning good or a non-moral behavior meaning the evil and history forms when consciousnesses created and being processed.

As referred to earlier, the modern human called modern when he is bravely capable of exploiting his understanding without imitating others and now the Europe's choice is a historical one when its results is of utmost significance for the human as Kant declared that "incapability in good and evil judgment is idiotism without any treatment".

If in this cycle, the Europe behave against the wishes of the U.S., it has taken a step toward human's rescue in the history.

Considering the Paul Valery's theory, if the Europe accompanies the America's government then it would ignore the approved law in a way that the mutual understanding theory faces a defeat. In this regard, «*the Banality of Evil*» as Arendt referred to will extend and this is exactly the point where the history will be created.

The sanction is like the war of evil and accompany of other states after the 2231 Resolution that came from a collective understanding will definitely results in destroying the human morality with the only consequence of «*the Banality of Evil*».

An aerial photograph of a port yard, showing numerous stacks of colorful shipping containers (red, blue, green, orange) arranged in neat rows. A few forklifts are visible moving between the stacks. The image is set against a solid red background.

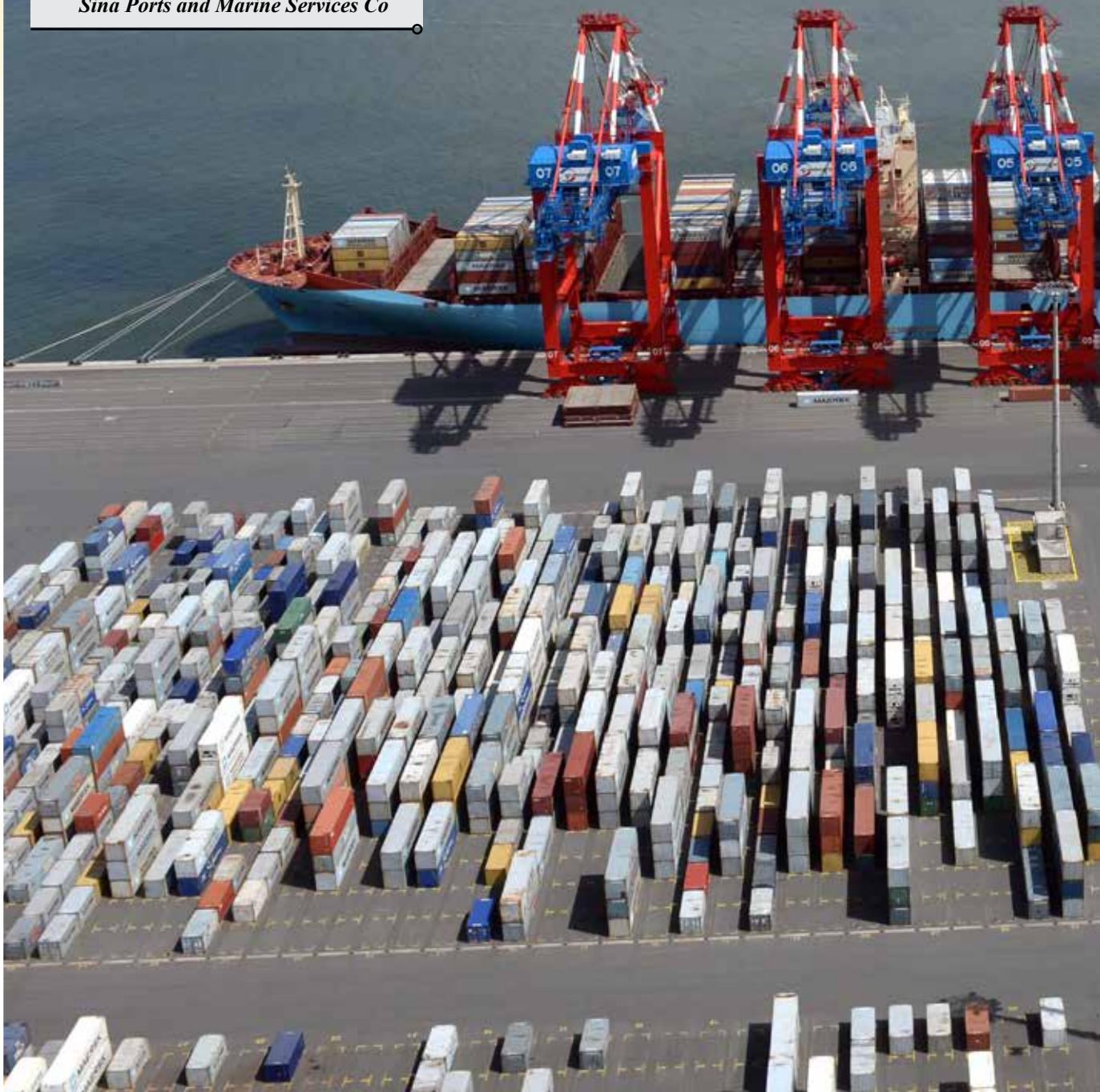
Marine

What are the determining factors of marine transport?

**Port duty, fuel
and others!**

The complicated nature of port pricing

By : Mehdi Rashtegary
Head of Research and Development
Sina Ports and Marine Services Co



By emergence of the complicated economic relations and interdependent interests and risks in markets, the marketing has become an inevitable necessity for all economic firms. Marketing is implemented by the development of the 'Marketing Mix' which encompasses of four major consistuent, i.e. product, place, promotion, and price. Among these four consistuents, the 'Price' is the most flexible and variable factor. In economy, the price form as a resultant of the interaction of the suppliers and the customers to balance the supply and demand within a market. In this context, the suppliers are always endeavoring to intervene actively in setting the prices of their products in order to pursue their purposes in terms of profit maximization, growth of the market share, product quality leadership, responding to expectations of different customers, coverage of fixed costs, maximum market skimming, etc. The active interventions of the suppliers in setting the prices of their products establishes the 'Pricing' process that is generally implemented by determining the targets of the firm, estimation of the demand size in the markets, assessment of the supply costs, assessment of the costs for the competitors and other stakeholders, selection of price setting method, and eventually setting the final price.

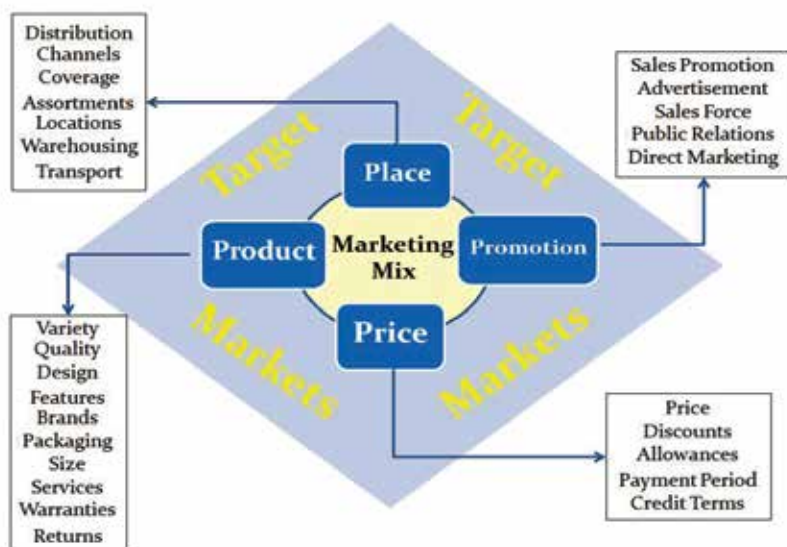


Exhibit 1 – The marketing mix of economic firms and its consistuents (Kotler,F., 2002)

Pricing is a very significant process within the maritime transport industries. These service industries embed the mainstreams of international trade in the context of global economy. The pricing is among the most fundamental processes of these industries due to the issues of resource mobilization and the need to efficiency enhancements, the cost structures and the constant concerns for cost reduction, and the need of the firms to competitiveness in the highly concentrated markets. For instance, the shipping industry has

maintained her own pricing initiatives in terms of developing consortia, conferences and alliances. Likewise, the ports and terminals have their own initiative in pricing in terms of setting port tariffs for decades.

Ports have a critical role in streamlining of nearly all supply chains throughout the globe, and the impact of their product (i.e. the port facilities and services) goes far beyond the value chains of the instant users of them. The total demand for the gateway/transshipment/transit cargoes in a port and the needed services to them stems from the demands in its connected economic markets, and thus a port can be seen as an engine to economic growth, industrial production, and international trade. In this context, port pricing for minimization of the costs in a port call is among the most significant concerns that will have determining effects on the level of competitiveness of a port in the regional port markets.

Table 1 – the cost elements of a port call

<p>Infrastructure</p> <ul style="list-style-type: none"> • Capital • Running 	<p>Transport Users</p> <ul style="list-style-type: none"> • Time • Reliability
<p>External</p> <ul style="list-style-type: none"> • Accident: <ul style="list-style-type: none"> ○ Material ○ Human • Noise: <ul style="list-style-type: none"> ○ Amenity ○ Human • Air Pollution: <ul style="list-style-type: none"> ○ Natural Environment ○ Human 	<p>Supplier/ Operator</p> <ul style="list-style-type: none"> • Vessel: <ul style="list-style-type: none"> ○ Running ○ Time ○ Reliability • Services: <ul style="list-style-type: none"> ○ Running ○ Reliability • Superstructure: <ul style="list-style-type: none"> ○ Running ○ Time ○ Reliability

TRL Ltd et al., 2001

In this perspective, the pricing mainly focuses on the roles of port (consisting of the port authority, terminal operators, and other port users), its customers (the shipping lines/firms, forwarders, carriers, etc.) and its neighbors. However, as mentioned before, the domain of stakeholders of a port is not restricted to these groups, and encompasses all of the entities that are affected by the flows of goods and services within the port. In this sense, the stakeholders of a port also includes all of consumers in the hinterland markets and all of the tax-payers and investors who participate in the development of the port. Nevertheless, the diverse interests and disparate purposes of these groups engenders different approaches to port pricing.

Table 2 – Port players and their possible objectives



Port player	Objective
Government	Efficient management of assets
Economists	Minimising the welfare losses
Port authorities	Maximising throughput Maximising value added Maximising employment
Users	Transparency of charges Prices should reflect the costs of the services
Meersman, H. , Van de Voorde, E. and Vanelslander, T. (2002)	

Accordingly, along with the the port’s planning and development philosophy, with its goals

or objectives, and the port’s investment criteria and policies, port pricing is considered as a major facet of port management. Indeed, pricing of port services and facilities is a complicated, strategic process that should be directed towards optimal accomplishment of all stakeholders’ purposes and objectives. Yet, most of scholars and experts consider one of stakeholders as the owner of the port pricing problem. This has generated various approaches to port pricing. Table 3 provides a brief review on the diverse schools of thought in port pricing.

By a review on the concepts, we can conclude that the port tariffs should assimilate the following functions:

a) *Revenue making and cost coverage* – Terminal operations and its peripheral businesses are characterized as an expensive industry that depends heavily on the availability of myriads of facilities, equipment, human resources, and liquidity. Economic activities of the terminal operator is feasible only if they can make a sound level of profit (i.e. the surplus of revenues minus costs). But a considerable portion

a) of costs in a terminal is independent of the volume of entering cargo traffic into it. Furthermore, the variable costs of a terminal and the demand to terminal resources in it grow in proportion to raises in cargo traffic. In this sense within the operational and tactical horizons, the port and its terminals are always encountered by raises and falls in their throughput volumes which impact their costs and revenue streams. Moreover, the port and its terminals shall always keep a considerable amount of their resources in redundancy to avoid congestion. In order to administer such a business, one should always pursue maximal revenues, minimal costs, and balance the costs and revenues in the various planning horizons. The port tariffs should contribute towards securing profitability, coverage of fixed costs in terms of throughput fall, and coverage of variable costs in times of throughput growth. As in the practical sense, such an extensive range of prices cannot be included in the port tariffs; the port/terminal usually appraises the total costs of its supplied services and facilities in the operational horizons and sets its prices based on such appraisals. By this measure, the port/terminal can develop its economic activities as a profitable business unit without need to subsidization from public funds.

b) *Generation of value-added* – the flow of goods in a port is a value chain that consists the services to the ships, services to cargoes, services to port users, and other port services. The port can provide more value to cargo interests, ships, and inland transport modes by providing expedited services, better coordination, and logistic facilitation to them. The level of value-added in the port services and facilities and the interest of customers in them usually establishes the ‘ceiling’ of prices in the port tariffs. Accordingly, the more value-added in the supplied services and facilities can provide a larger range of prices in the port tariffs. This is especially significant for high-value cargoes.

c) *Contribution towards Investment in port development* – Pricing of port services and facilities shall contribute towards investments for improvement (and development) of port facilities and terminal resources. Such investment can lead to generation of more value-added for customers, and involve the port in a positive cycle of improvement in competitiveness, attraction of more customers, and growth in revenues.

d) *Ensuring of efficient use of port facilities* – As mentioned, the port/terminal operations relies on the expensive facilities and resources and the profitability of port/terminal businesses depends on efficient use of them. Therefore, the efficiency of such resources shall be targeted as a main requirement in the pricing process. This requirement provides the ‘floor’ level of prices in port tariffs: if the efficiency of port/terminal resources fall under the optimal efficiency level, the prices shall be lowered; and in the opposite sense if the resources are getting over-used, the prices shall be heightened. In this sense, the port tariff can be used as an instrument to ensure the efficient utilization of port/terminal resources and preventing unhealthy behaviors in this regard.

e) *Competitiveness* – the competitiveness of the port and its terminals in the regional markets is another main concern in port pricing. The port can develop her competitiveness by adopting either ‘cost leadership’ or ‘services

differentiation' strategies. Both of these strategies heavily depend on port pricing. Indeed, the port/terminal shall be able to supply her facilities and services in competitive levels of price and quality, and attract the customers by developing meaningful preferences in comparison to other competitors in the marketplace. In terms of the cost leadership strategy, the port/terminal can focus on cost reduction, minimization of wastes and losses, and development of economies of scale to provide competitive prices in comparison to its competitors. In terms of services differentiation, the port/terminal usually focuses on the differences of its products' prices with the value of it for customers,

Author	Pricing concepts and implementation
Gardner (1977)	<ul style="list-style-type: none"> • It is illogical to base pricing on the characteristics of a ship (e.g. length, draught, etc.) • Port prices, traditionally levied partly on ships and partly on cargo, should really only be based on the goods themselves
Jansson and Rydén (1979)	<ul style="list-style-type: none"> • A plea in favour of a two-part tariff structure • The tariff is divided into: <ul style="list-style-type: none"> * a charge per tonne of cargo that would be differentiated with respect to the elasticity of demand * a charge levied on the carrier to reflect the opportunity cost of using the facility
Button (1979)	<ul style="list-style-type: none"> • The users of the port should be charged the full marginal social opportunity cost of the resources that they use • Some elements to be investigated: decreasing cost industry? What about financial deficits? How to recuperate capital expenditures (e.g. by two part tariffs)?
Bennathan and Walters (1979) Vanags (1977)	<ul style="list-style-type: none"> • A plea in favour of congestion pricing (note: intended mainly for ports in developing countries)
Arnold (1985)	<ul style="list-style-type: none"> • Port tariffs are based on a mix of pricing strategies designed to reflect the demand for port services, the competition between ports, and the cost of providing the services.
Meyrick (1989) Talley (1994)	<ul style="list-style-type: none"> • A plea in favour of a cost-axiomatic approach, defined as "a pricing mechanism which determines the prices of the outputs of multi-product firms by allocating the full cost of production to all the outputs • Further, it assumes that the demand for port services is relatively inelastic with respect to port prices
Pettersen Strandenes and Marlow (2000)	<ul style="list-style-type: none"> • Suggest a port pricing policy where price differentiation is not based on the value of the cargo • Port prices should be differentiated on the basis of the quality of port services provided; relevant quality factors are the time in port, and the punctuality of handling the vessel and its cargo.

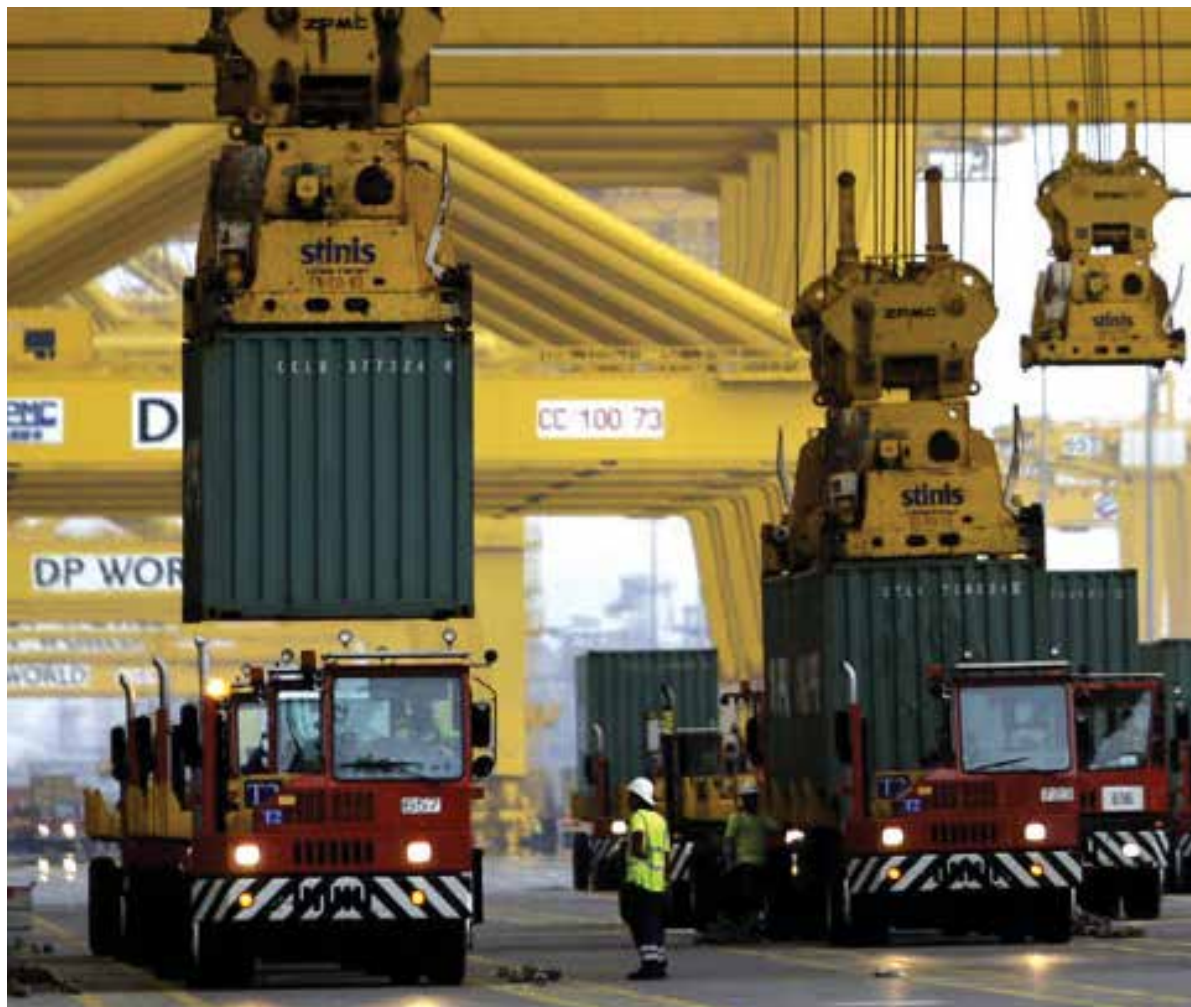
Continued in next page

Table 3 – Port pricing concepts and implementation

Author	Pricing and
UNCTAD (1995)	<ul style="list-style-type: none"> • Considers port pricing to be a strategic issue • Two basic approaches may be taken to pricing policy: one economic, the other financial. The former is grounded on marginal cost pricing, while the latter bases prices on accounting costs • The 'cost, performance, value' (or CPV) approach allows port managers through tariffs to accomplish different sets of objectives. <ul style="list-style-type: none"> * cost-based tariffs can maximise the use of port services; * performance-based tariffs can maximise throughput and reduce congestion * value-based tariffs generate sufficient revenue to cover the port's cost • CPV indicates both the threshold and the ceiling of prices: the port must not charge less than the incremental cost of serving the user; it cannot charge more than the value received by the user.

Meersman, H. , Van de Voorde, E. and Vanelslander, T. (2002)

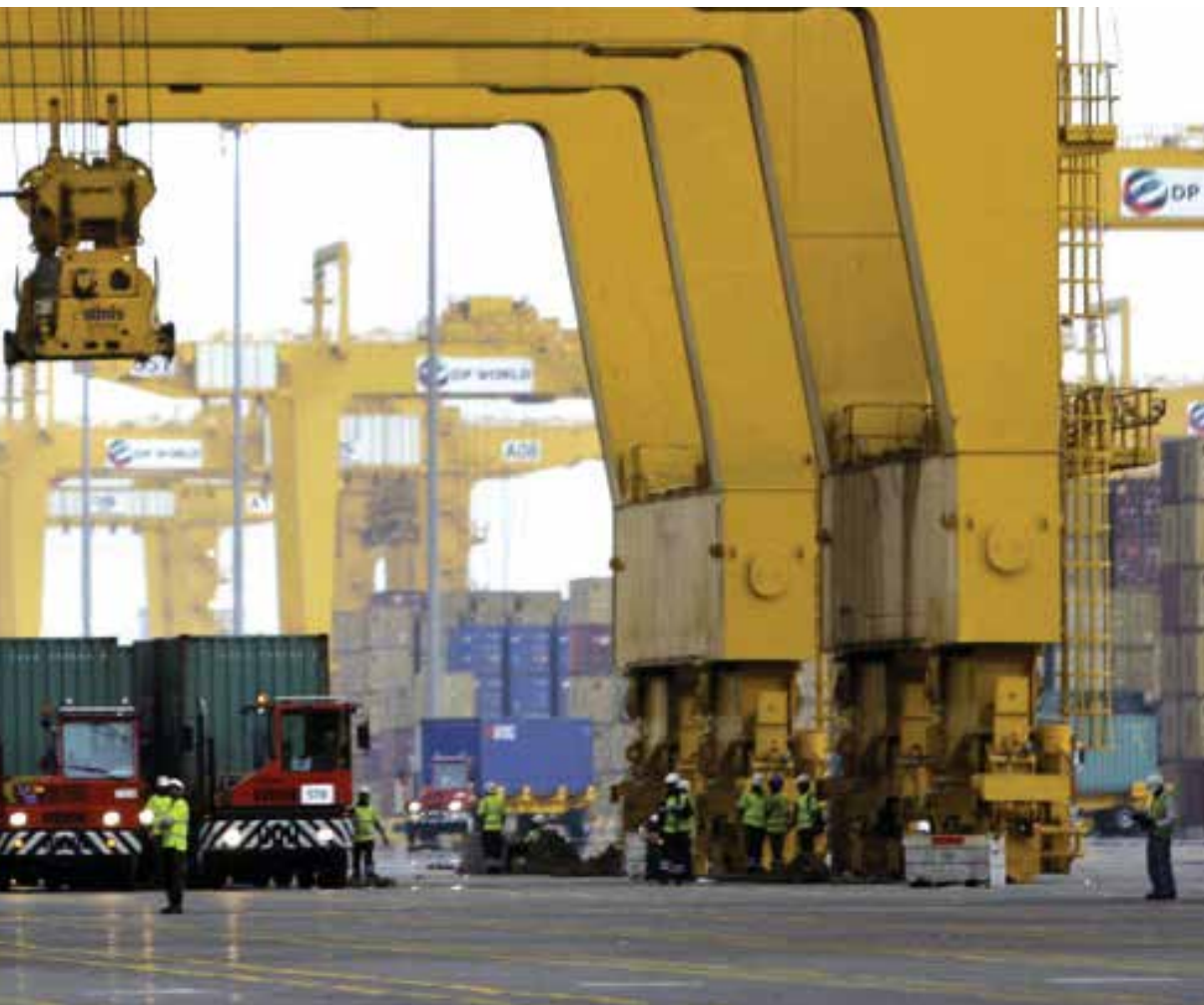
and the similar values in other competing ports. By focusing on these price-value differences, the port/terminal endeavors to provide its high-quality products to the customers at best possible prices.



As discussed, port pricing is a critical process in terms strategic management of ports. We also discussed that port pricing can be defined and implemented by different perspectives. Yet within twenty years, the emerging changes in the global economy, port technology, and the marketplaces of ports and their upstream and downstream industries may lead to dramatic changes in the definition of ‘Product’ and ‘Place’ in ports. Such fundamental changes in the port’s marketing mix can transform the current perspectives of the pricing process in ports. This critical issue shall be concerned in every strategic port plan.

References

1. Kotler, P.(2002). *Framework for Marketing Management (Tenth Edition)*. Prentice-Hall Inc. New Jersey.
2. Meersman, H. , Van de Voorde, E. and Vanelslander,T. (2002), *Pricing Issues :Considerations on Economic Principles, Competition and Wishful Thinking* . 2nd seminar of the IMPRINT-EUROPE Thematic Network: “Implementing Reform on Transport Pricing: Identifying Mode-Specific issues”, Brussels , May 2002.
3. Suykens, F. and Van de voorde, E. (1998), “Port Management in Europe”, *Maritime Policy and Management*, Vol. 25, no.3, pp. 251 – 261
4. TRL Ltd., IWW – University of Karlsruhe, NEA Transport Research and Training, PTV AG, University of Antwerp (2001). *A Study on the Cost of Transport in the European Union in order to estimate and assess the Marginal Costs of the Use of Transport*
5. UNCTAD (1995), *Strategic Port Pricing*, /SDD/PORT/2, UNCTAD, Geneva
6. UNESCAP (2002). *Comparative Analysis of Port Tariffs in the ESCAP Region* . New York.





Tariffs, a tool for marketing in ports



A general definition says: port tariffs are the fees that shipping operators and their customers pay to port authorities for the use of the port's facilities and services. Port charges can be a significant component (up to several percent) of the final price of consumer goods. There are many different port charges, although some of the most common fees are ship dues, goods dues and, in the case of mixed-use or passenger ships, passenger dues.

Mark Franklin, Operations Director, DA-Desk remarks that port costs and tariffs are not as straightforward as you may think. As your marine accountant or disbursement controller may tell you, calculating it can become a complicated exercise. Historically, it is also an area lacking in transparency, which may explain why research has been limited when one is trying to understand the underlying port pricing strategies.

Hilde Meersman from University of Antwerp believes: the complexity of current port pricing schemes is striking. When calling at a port, ship operators are commonly presented with a detailed menu of services.

Prices reflect the diversity that exists in terms of the kind of services and service standards offered, as well as the port entities or operators offering them, and whether the supplier is a private firm or a public infrastructure provider. The result is an opaque price structure that complicates ship operators and cargo owners' choice and hence softens port competition (and competition among container lines).

It is worth noting that on a global scale, the share of port tariffs from total maritime transportation cost reaches 2-3 percent.

Tariffs which mean service pricing can be considered as one of the marketing tools in the ports.

a	Tariff per calendar day or part thereof (only when making bookings)	Amsterdam: Vessel length 0-60 metres Vessel length 60-90 metres €252.00 Vessel length 90-110 metres Vessel length 110-120 metres €454.00 Vessel length of more than 120 metres €511.00 €559.00 Zaanstad: Overall length: tariff per metre €2.60	€160.00
b	Administrative fee	Per booking	€50.00
c	Tariff for taking on/discharging passengers (spending a maximum of 2 hours in Port)	Per booking, including administrative fee	€56.00

In the report of port tariffs: general structure, items, and flow of charges has emphasized: tariffs differ from port to port as they tend to be a reflection of the services offered (for example, container handling, tug assist, and pilotage), the facilities being provided (for example, gantry cranes, storage yard, or sheds), the party that incurs the tariff charge (for example, the carrier or ships agent, or the shipper), and the basis on which a tariff item is calculated (for example, pilotage charge based on the vessels gross registered tons or vessel draught). Because of these differences, tariffs may seem highly fragmented and complex, but there is a core set of essential services required for handling ships and cargoes that all ports typically offer.

Peter Sand, Chief Shipping Analyst at BIMCO defines in this way; That is a voyage related cost item. Varying with the amount of cargo as it's measured per tons handled, depends on type of cargo and port/terminal specific issues, estimated to

vary from 20 cent up to a dollar. New ports are not necessarily cheaper even though they are automated. Much still depends on the manual labour involved. The longshoremen needed to handle a ship etc.

Gothenburg Port announced that after three years without any price increases, the port tariff will also remain unchanged in full-year 2018. Moreover, the port of Amsterdam has decided to increase its port tariffs by 1.11% in full-year 2018. Port regulator of South Africa announced that all tariffs for 2018/19 are to increase as follows:

- marine services and related tariffs are to increase by 8.5%;
- coal export cargo dues are to increase by 8.5%;
- container cargo dues are to increase by 0%
- Ro-Ro tariffs are to increase by 0%;
- all other cargo dues are to increase by 5.4%; and
- All break-bulk tariffs are capped at R100/ton

Tariff Strategy for the South African Ports System report says that it is important to note the interrelationship between the tariff methodology and the tariff strategy.

The annual calculation of National Ports Authority NPA revenue and the resultant average tariff change is done in line with the multi-year tariff methodology (set to be reviewed for the 2018/19 tariff year) that sets out the application of the Required Revenue and Return on Assets methodology in the South African port system. The methodology determines the total amount of revenue the NPA may raise through port tariffs, whilst the tariff strategy only determines who is charged for what portion of the total revenue in the port system. The Regulator is aware that if all charges are passed on fully, the cargo owner (the consumer) will indirectly pay for all port related costs. Despite this, the benefit of having a more accurate cost allocation is through the resultant more accurate investment decisions (based on correct revenue flows) and the efficiency gains

there from.

The tariff strategy will not result in any significant reduction in total port costs (except for the possibility of foreign shipping lines absorbing some of the costs). Any future reduction in total port costs may only come from the impact of the tariff methodology.

The article of freight rates and maritime transportation costs referred to this fact that policymakers and shippers have an interest in understanding the determinants of international maritime transport costs. Maritime transport handles over 80 per cent of the volume of global trade (and about 90 per cent of developing countries' volume of international trade is seaborne) and knowing the reasons for differences in what a trader pays for the international transport of merchandise goods can help identify possible areas for intervention by policymakers.

It is important to highlight that technological advances have led to a continuous reduction in vessel operating costs over the decades. Improved fuel efficiency, economies of scale, and automation in port operations all help to reduce environmental and financial costs.

In the port of Rotterdam, the amount of the seaport dues is determined by the use you make of the port, the gross tonnage of the vessel and the quantity of transshipment.

According to the port authority, the port tariffs of the seaport dues are established annually

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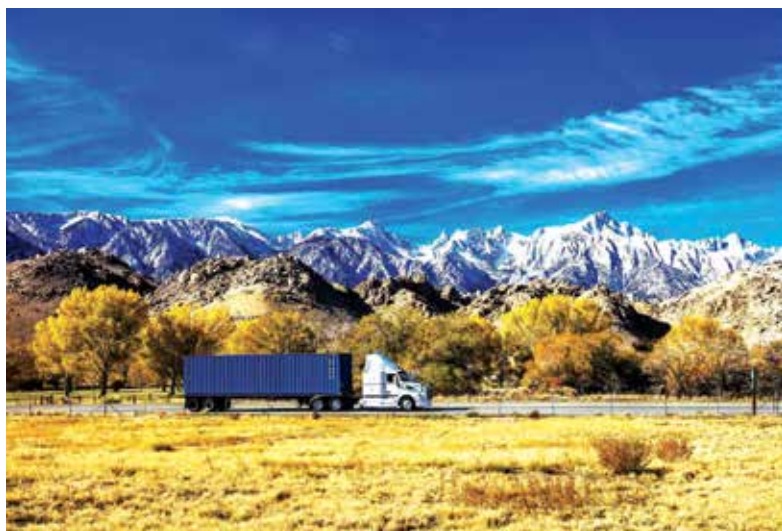
**THAT ON
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PERCENT.**

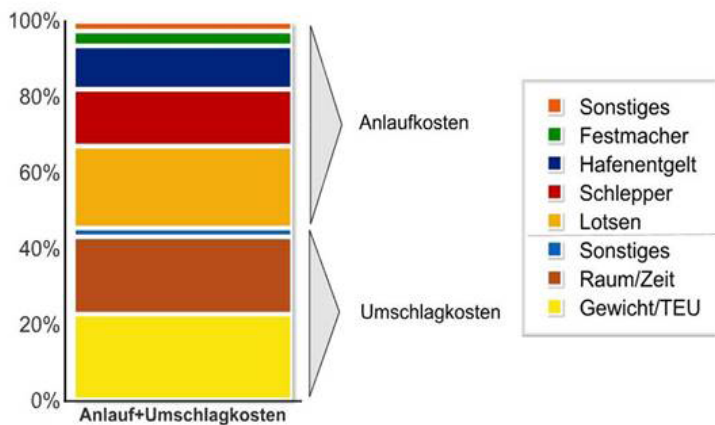
by mutual agreement between the Port of Rotterdam Authority and the parties involved. The Port tariffs and the conditions in the port of Rotterdam are listed in the General Terms and Conditions of the Port of Rotterdam Authority. Rates for maritime service providers and waste levy are also included in the General Terms and Conditions.

It is clear that comparison of port tariffs among ports accurately is a difficult task, due to diversity in their systems and regulations, the existence of pricing by long-standing agreements and the influence of the exchange rate.

Ukraine port authorities say that Ukraine's port tariffs are 2 to 3 times above those at comparable ports in the region and competing export ports, and there is a substantial scope for their reduction.

High port tariffs essentially tax Ukraine's economy and leave the country overall poorer. On the other hand, port tariffs are an important source of revenues for the Government of Ukraine, as 75% of net profits





generated by the Ukrainian Sea Port Authority (USPA) port charges are transferred to the State Budget in the form of dividends, along with the profit tax. Here, we can offer a basic information regarding transport cost and share of ocean freight cost, port cost and hinterland transport cost in Hamburg port. This first picture shows: startup

costs which means cost for shipping lines when calling a port. They have to pay for towing service (Festmacher/Green), port tariff (Hafentgelt(Blue), tug boat service (Schlepper/ Red), pilot services (Lotsen/dark yellow). Then you see the second part oft he picture showing cargo handling cost

(Umschlagkosten).fee for cargo handling at a seaport terminal (Raum/Zeit/Brwon) and fee concerning weight of handled cargo or per TEU handled at the terminal (Gewicht/TEU/ Yellow).

At the end you can say that Port tariff/Port dues are per call around 20% of all port cost and around 10% of all cost including loading/unloading of cargo. Here come 2 examples of freight cost:
 Shanghai Containerized Freight Index Europe Base Port seafreight Current Index 2018-11-09 750 USD/TEU
 Hinterland transport by railway Hamburg – Muni HHR MUC, 2018-11-13 650Euro/TEU





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Shipping; A golden key to global economy's growth

By: Sarah Zeinalzadeh

FOCUSECONOMICS writes: Gross Domestic Product GDP, is defined as the total market value of all final goods and services produced within a country in a given period. It is the most commonly used measure of economic activity and serves as a good indicator to track the economic health of a country. Economic growth (GDP growth) refers to the percent change in real GDP, which corrects the nominal GDP figure for inflation.





A CHANGE IN GLOBAL DEMAND IS STRONGLY RELATES TO BALANCING GDP AND THE TRADE CONNECTORS.

Considering the economical cycle from production to delivering the products to the customers, three vertexes of an equilateral triangle is drawn which is changeable to an isosceles triangle. Three sides of a triangle include investment (raw material and factories), time and the products' price. The relation between delivery times or the product's distribution along with its price with the initial investment would be a direct one as in the case of improving two sides, the consuming world will definitely manage to supply its required investment. Given the strong tie between trade and transport, shipping as one of the branches of transport is known to be the leading mediator between the producer and consumer as it is capable of transiting high volume of cargoes in a least time and the most appropriate price. In other words, marine transport is of utmost importance due to its extensive advantages and the

fact that it is the first choice of producers to service globally to their customers. Moreover, the producers could deliver plenty of cargoes through exploiting ocean-going vessels with the least price compared with truck and planes and be witness of the impact of this trend on economy in a small scale at present and finally in the industry. Therefore, when it comes to transport including rail, road and air transport, shipping is one of the international trade connectors in an extensive level as it accounts for 90 and 94 percent of the global trade and developing countries' trade, respectively. Shipping would be a cheap method to carry cargo and optimization of that for improving developing countries' economy is of high importance as it has a direct relation with growth of foreign countries' trade, domestic productions and the amount of consumption. To summarize the advantages of shipping in global economy's growth, some

key factors such as cheap prices, the capability of transferring high volume of cargo, its safety and environmentally friendly procedures should be taken into account. At the meantime, shipping enjoys the highest competitive freight rates as one of the most efficient ways of cargo movement especially in long distances. Besides, ships are built to move raw materials in a large extent compared with the capacity of tracks or planes. In this regard, shipping is capable of carrying gases, liquids and hazardous materials. It is worth mentioning that marine industry compared with road transport, carries lower disturbances for the environment and it is just 12 percent of the global pollutions which are resulted from ships. Finally, shipping is the necessary facilitator of the world trade.

In a growing global economy, the need to carry cargo in the shortest time is of utmost

importance and the construction of mega size ships with the highest amount of capacity becomes a priority. In such context, this dynamicity is beneficiary to the economy of scale and foreign trade as well as exporting variety of commercial goods and raw materials.

Without shipping, imports and exports are out of reach in the world and the modern world deeply needs it. In other words, shipping is the blood to make the global economy alive. Additionally, without shipping it is impossible to be witness of intra-continental transport of bulk, raw materials and food exports and imports. Seaborne trade is developing as it carries out lots of benefits for its customers around the world through applying competitive freight rates. Ships are technically complicated and about \$200 billion are paid for one to be constructed. However, it seems that the majority of the world's population are not aware of the benefits of shipping and its crucial role in their routine lives.

Incredible growth of GDP during the two past decades reached 73 percent and at the same time, seaborne trade experienced a growth of 112 percent in its performance. In general and during the last four decades, seaborne trade has been quadrupled and passed 8.000--billion-tonne mile last year and reached 32.000--billion-tonne mile during the current year.

Cargo trade of the world gained a significant profit in 2016

International Growth of Seaborne Trade

Year	Oil and Gas	Major Bulks	Dry cargo	Total All cargos
1970	1 440	448	717	2 605
1980	1 871	608	1 225	3 704
1990	1 755	988	1 265	4 008
2000	2 163	1 295	2 526	5 984
2005	2 422	1 709	2 978	7 109
2006	2 698	1 814	3 188	7 700
2007	2 747	1 953	3 334	8 034
2008	2 742	2 065	3 422	8 229
2009	2 642	2 085	3 131	7 858
2010	2 772	2 335	3 302	8 409
2011	2 794	2 486	3 505	8 785
2012	2 841	2 742	3 614	9 197
2013	2 829	2 923	3 762	9 514
2014	2 825	2 985	4 033	9 843
2015	2 932	3 121	3 971	10 023
2016	3 055	3 172	4 059	10 287

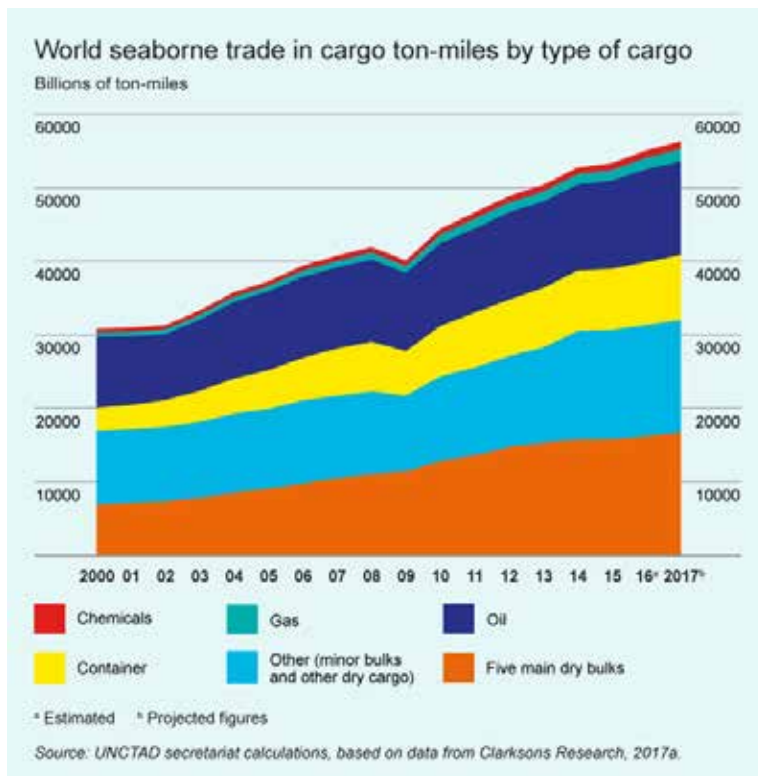
as it handled high volumes and presented a growth of 1.9 percent in imports and exports compared with the average growth of 1.7 percent in 2015. Weaken trade happened when a gap between growth and investment in major level occurred because of the slow speed in the global economy's improvement.

It seems that a change in global demand is strongly relates to balancing GDP and the trade connectors. Investments during the last years is declining and at the meantime slow trend of advances in making the trade under the control of WTO's free trade especially in marine transport of transpacific route, lead some challenges in the way of economy.

On the other side of the coin and concordance with development in the global economy, the

amount of demands in shipping services improved significantly in 2016. Moreover, world's seaborne trade recorded a growth of 2.6 percent in 2016 compared with 1.8 percent in 2015 shows a significant increase. Besides, the volume of seaborne trade reached 10.3 billion tons which is the highest since 260 million tons in 2015. In line with this, high level of china's imports demand would be a strong support to improve the seaborne trade.

In 2016, dry cargo accounted for the highest volume of trade and then dry and wet bulks stood in the second and third steps, respectively. Oil and gas were the next trade volumes. Totally, the seaborne trade of dry bulk reached 7.23 billion tons in 2016 which presented two percent increase compared with



the last year. At the meantime, major bulks were the highest in seaborne trade during 2015.

The world shipping is now in operation with a value of \$500 billion. The number of ocean going and mega-sized ships as 10 months passes from 2018 reaches 52.000 worth \$829 billion. The activity of new ships in the international waters brought about a high profitability equals with \$436.600 billion for the industry.

As mentioned earlier, shipping has a significant impact on the world's economies which can be divided in two categories. The first one is a direct impact which covers transport services, passenger services, dredging and towing services, offshore services and chartering. The second one is a indirect effect in the economy that includes

ship building, ship repair, port services, insurance and legal and financial services.

Economic recession like other industries may happen

in shipping as well. In fact, shipping is innately in service of economy and after that, the 2008 economic recession dominated the world, sudden decline of demand was not a desirable occurrence for the shipping industry.

Currently, the long-term perspective of shipping industry is positive. The world population is increasing and the emerging economies are developing their requirements for cargoes and raw materials for which the shipping transfers them efficiently and safely. As the below graph demonstrates, the volume of seaborne trade is located in an upward trend which is expected to be continued. More importantly, the fact that shipping owns the most efficient fuel which is environmentally friendly, would definitely assign a large share to the world's seaborne trade.



Fuel share is 20 percent in marine transport cost



Marine transport can be known as the most crucial section of transferring cargo in the world in a way that 80 percent of imports and exports are carried out through sea. However, the number is even higher than the global average and marine transport accounts for about 90 percent of Iran's seaborne trade as the country has access to free waters in the southern borders and it exports oil through VLCCs.

Although marine transport is considered as the most economical way of transferring cargo at an extensive scale, one cannot ignore the impact of variant factors in the goods cost by the sea. Referring to the year of built, type of ship, route, type of cargo and operating costs, commercial manager at The National Iranian oil products Distribution Company (NIOPDC) declared that fuel share in marine transport cost is about 20 percent.



22% of GHG emission resulted ships' engine room

Despite the numerous advantages the marine transport carries, environmental pollution created by the ships caused the global society to take some severe measurements. For instance, 22% of global GHG are produced in marine transport. The significance of the issue appeared as GHG production has caused changes in the world climate. Following this, all the countries should attempt to lessen the amount of GHG production.

Targeting to reduce sulphur from ships' fuel

Although strict measures have been taken to reduce the amount of sulphure in the ships' fuel, the International Maritime Organization (IMO) attempts to decrease ample of that by considering environmental issues of sea pollution and the world seas' pollutants up to 2020.

However, achieving to the goal requires some fundamental transitions in the ships' fuel

and even more important in the engine rooms. It seems that while a change in a fuel combination would result in excess expenses among the world refineries, it provides a more practical mechanism because the fuel type is possible when the total system changes.

Advantage of fuel oil for ships

In this field, an important point should be taken into consideration that fuel oil owns the largest share among other ships' fuel and other types such as LNG or nuclear fuel that account for a small share.

Fuel oil is accepted by the majority of ships due to its higher temperature and cheaper price compared with other fuels but the sulphur contents in high level in that cause more pollution. In fact, refining process of oil is conducted in a way that fuel oil as one of the heaviest combinations is separated in lower layers from distillation and then distributed among costumers with more economical prices.



AN IMPORTANT POINT SHOULD BE TAKEN INTO CONSIDERATION THAT FUEL OIL OWNS THE LARGEST SHARE AMONG OTHER SHIPS' FUEL

Adjustment in refinery structure

in this regard, Alireza Rajabpour, commercial manager at The National Iranian oil products Distribution Company (NIOPDC) referred to the highest share of fuel which is devoted to fuel oil and said: according to IMO the amount of sulphur in marine fuels should be reduced to 0.5 from 3.5 percent by 2020 which is in hand of adjustment in refinery structure.

Considering alternative fuels aiming at reducing the amount of sulphur in marine transport, he added that at the time, light fuel oil has the highest utilization and output and its alternative should be natural gases and nuclear fuel which are applicable in the perspective of 2050.

Marine transport is still cheap

He further continued that share of the mentioned fuels on the final cost of marine transport

differs. Nevertheless, marine transport is still one of the cheapest ways of transporting goods in the world and it has been able to preserve its position among other types of transportation with a long division.

It is necessary to have an advanced accounting system that is able to extract all the effective factors in determining goods cost by considering the role of consuming fuel.

However in a larger context, it can be said that fuel share in marine transport cost by considering various factors such as year of the ship's construction, its type, route, type of cargo and operational costs is about 20%, and it is approximately 12% for land routes.

Reduction in fuel consumption by changing ships' technologies

Referring to the high subsidies that is paid for the fuel in Iran,

Rajabpour emphasized that profit rate of marine transport is not comparable with other countries based on pricing. It happens when the condition of pricing is being determined without allocating any subsidy according to the regulations and international laws like other countries of the world.

He in response to the question that says considering refining complexes and distribution of incentives to develop marine transport, is there any discount in fuel price declared that reduction in fuel consumption or changing it requires a transition in technology. Therefore, NIOPDC as a producing and distributor company has been capable of improving the condition by allocating subsidy to the fuel.



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Economic stimulus: monitoring the GDP

Gross Domestic Production (GDP) of one country is the monetary value of all final products and services provided (total market value) within the boundaries of the country at a given period of time. In general, GDP is a general index for measuring the economic activity and, indeed, the economic size of a nation. The calculation of GDP is like this: the sum of public and private consumptions, gross investment, government investments, government expenditures, and the difference between exports and imports.



This indicator is important because it provides a good perspective on the economic performance of each country. If the growth of this indicator accelerates, it could be a positive sign of a series of events in the economy, such as more jobs, higher salaries, or more investment of business sectors.

The general use of GDP as an economic indicator is partly rooted in the calculation of value added through economic processes. For example, when a vessel is built, GDP does not include the total ship value, but the difference in the value of the completed vessel with the materials used in the construction of it. The calculation of total value instead of value added reduces the function of GDP as an indicator for improvement or slump, especially in industries and private sectors.

One of the characteristics of the GDP index as an economic measure is its ability to measure the success or failure of economic policies. When it is said that the size of an economy is larger than the other, or if an economy is declining or thriving, in fact GDP figures are considered. The GDP growth rate is appropriate when it is stable, which mean its growth rate is steady. Experts consider the ideal rate of GDP to be between 2% and 3%. In a healthy economy, inflation and unemployment are in balance. Thus, experts consider the balanced unemployment rate to be 4.7 – 5.8 percent, and the ideal inflation rate is about 2%.

In this way, it is the functions of central banks to control liquidity and apply monetary and fiscal policies to protect the health of the economy. For example, the Federal Reserve, which is the United States Central Bank, maintains its economy in an ideal range by applying its monetary policies. If the economy grows very fast, the bank will raise interest rates in order to prevent excessive growth, and if the economy has dramatically decline, it will reduce interest rates. With these policies, central banks will boost the business cycle in their own country.

In this way, it should be noted that although the formula for calculating GDP is the same in all countries, the growth pattern and possible variables involved in GDP vary slightly between countries. In the final decade of the 20th century, the main factors affecting economic growth in the OECD countries were increasingly considered, as some leading countries in technology, such as the United States, had a significant increase in GDP per capita, but other major economies were not so well. So, this question was raised: what is the role of technological advancement and organized policies in the growth of the economy?

A report released in 2001 in the Economic Studies Department of the Organization for Economic Co-operation and Development examined the likely effects of human capital, research and development activities, trade policies and financial market conditions on





ONE OF THE CHARACTERISTICS OF THE GDP INDEX AS AN ECONOMIC MEASURE IS ITS ABILITY TO MEASURE THE SUCCESS OR FAILURE OF ECONOMIC POLICIES.

the economy. The result of this study was that the accumulation of physical capital, as well as human capital, is the main driver of economic growth. In addition, research and development activities, the existence of favorable macroeconomic conditions, the freedom in business environment and well-developed financial markets help to improve living standards in member countries, and indirectly improve economic indicators and, most importantly, have profound effect on GDP growth.

Although the accumulation of physical capital is one of the determinants of real production per capita, its sustained impact on GDP growth depends on the extent to which innovative technology is used in these funds. This can ultimately lead to a difference in per capita production between countries. Generally, in the long term, the average impact of business investment in GDP is 10% to 20%, which can be less and more than that among different countries.

General and expertise skills of human resources are considered as capital in the economy, and they are also essential. On the one hand, it is argued that human capital obtains higher wages and salaries in the long run, thus leading to lower earnings, while there is no guarantee that more income will flow to the country. On the other hand, by investing in the human capital sector (for example, spending in the education sector) if skilled and trained people are properly led to research and development, or to help the technology grow faster, or even Facilitate the utilization of new technologies, they can have a more sustainable effect on the economic growth process.

In addition, the costs of research and development can be considered as investing in the knowledge sector, leading to new technologies as well as finding more efficient ways to use existing physical resources and human capital. In fact, in the R&D sector, there is a consensus that spending on R&D will lead to a steady better growth rate.

Research and development is one of the sectors that can be strongly influenced by state intervention. Governments can help improve economic conditions and transform ideas and new knowledge into develop physical and human capital by intervening directly in this sector or by helping to establish a sound and sustainable relationship between private sectors and new ideas and support for ideologues.

In the field of macroeconomic policies, governments must also consider factors that keep GDP growth within normal range. In the following paragraphs these factors are described.

1. The main point of lower and more stable **inflation rate** is that uncertainty in the economy is reduced and the effectiveness of the pricing mechanism will increase. In this way, the reduction of the inflation rate will have a general effect on the levels of aggregate capital, as tax volatility is reduced and investment decisions are made with a longer term vision.

In addition, the uncertainty associated with the high volatility of inflation can be a barrier to corporate investment in projects that, despite high earnings, have a higher risk profile. In general, the relationship between inflation and economic growth is somewhat complex. Although in case of high inflation, investment declines, but in the case of low and average inflation, this relationship is not specified. In addition, the relationship between the amount of investment and economic growth depends on the degree of uncertainty, and the uncertainty itself depends on the volatility of inflation. As a result, both inflation level and its volatility affect both economic growth and GDP.

2. **Financial policies** can affect production and economic growth in the midterm. Especially when the government budget faces a deficit, a prudent policy can reduce the external impact on private sector investment. Furthermore, if financial policies were in contradiction with monetary policies, the validity of monetary policies would be ignored, and this would lead to an increase in the risk of interest rates and pressure on the exchange rate and, finally, its effects on aggregate capital in the economy will be observed.

One belief is that governments depend on taxes to finance. This can have a detrimental effect on the optimal allocation of resources and lead to a decline in production growth. Nevertheless, government

expenditures and tax can be set at levels that minimize the negative effects on production growth and productivity. These negative effects are more pronounced when governments hired direct taxes to supply their budgets, or the state budget is spent on non-productive activities.

In order to improve and control GDP, the size of the public sector should be such that the share of the total government expenditure directly affecting GDP, such as the costs of education, the construction and development of infrastructure and research and development projects in the basket of governmental spending are maximized. By considering direct and indirect taxes and examining the various components of government expenditure separately, the potential role of the financial structure and government expenditures can be examined in the growth or recession and in GDP.

Financial systems also contribute to economic growth by providing funding to raise capital and helping to expand new technologies. A well-developed financial system can integrate small financial deposits of individual sectors for large-scale investments, while providing micro depositors with a high level of liquidity. In such a system, depositors are insured against the risk of individual investment and do not pay for the collection and evaluation of information about future projects. All these services provided by such a system can

contribute to economic growth.

3. By developing economies of scale, becoming competitive and expanding knowledge, in addition to the competitive advantages that creates for each country, **international trade** leads to economic growth. International trade can lead to both productivity improvements and increase the amount of capital and infrastructure within the economy by investing in higher levels due to the integration of foreign technologies. Countries are trying to expand their trade by reducing tariff restrictions, so that they can grow faster. In fact, the rate and the way of trade in each country indicate its economic growth pattern.

In the end, we can conclude that although the formula for calculating GDP is very simple, the interference and influence on it is related to many direct and indirect factors. The governments can control and influence in those factors, and by this way, they are trying to control the amount of GDP growth which is the main indicator of the economy and is a symbol of the economic conditions of any society. So, the governments can take the right policies and make their political and economic decisions in order to improve the situation of their societies.

References:

1. <https://www.investopedia.com/>
2. <http://statisticstimes.com/economy/>
3. <https://www.vox.com/>
4. <https://www.thebalance.com/>
5. <https://www.statista.com/>

Sea accounts for lion's share of GDP

FOCUSECONOMICS writes: Gross Domestic Product GDP, is defined as the total market value of all final goods and services produced within a country in a given period. It is the most commonly used measure of economic activity and serves as a good indicator to track the economic health of a country. Economic growth (GDP growth) refers to the percent change in real GDP, which corrects the nominal GDP figure for inflation.

GDP



INNOVATION AND GROWTH IN THE COASTAL, MARINE AND MARITIME SECTOR COULD DELIVER FOOD, ENERGY, TRANSPORT, AMONG OTHER PRODUCTS AND SERVICES.

Maritime industry has a prominent position in the economy of nations all over the world. As a mode of transport, shipping provides the cheapest and most effectual modes of import and export as well as creates jobs and adds value to the economy.

It is worth noting that over the last fifty years the shipping industry has changed the shape of the world economy. Adam Smith, often saw shipping as one of the stepping stones to economic growth.

The Sea has a colorful role in promoting the growth of GDP. Sea border provides trade opportunities for nations and enables them to participate in the world markets as well as makes a big contribution to the economic growth.

It provides fishery resource and generates many economic activities such as port operations, marine tourism,

shipbuilding / ship repairing, ship management, logistics, financing, trade facilitation and many others that will result in high income, employment and investment opportunities. Looking at the employment rates of the populations in the coastal regions, it appears that the trend is completely positive. Peter sand, Chief Shipping Analyst at BIMCO says: trade in any form is prosperous for the involved parties. If a nation can enjoy free access to the sea, this is likely to be an added benefit when compared to landlocked nations – as the advantage of not only direct benefit of trading but also the related industries involved in facilitating the trade.

Tourism industry also constitutes a vital fragment of the economy of every country and plays a key role in the overall economic development

of many countries. It creates jobs, drives exports, and generates prosperity across the world. The total contribution of travel & tourism to GDP is forecast to rise by 4.0% in 2018. It is important to highlight that coastal and maritime tourism makes up a large share of total tourism. It can be a major source of growth and jobs, especially for the young.

According to data released by Institute of the Greek Tourism Confederation ([INSETE](#)), sea tourism including sea cruises, yachting, and shipping accounted for around 3.5 percent of Greece's GDP in recent years.

Iran enjoys hundreds of kilometers of coastline; the Caspian Sea in the north and the Persian Gulf and Sea of Oman in the south. Therefore, this country could benefit greatly from the income of maritime tourism.

The coastal tourism sector in Europe is getting increasingly competitive, with tourists expecting more quality for the lowest possible price. Mediterranean is one of the world's tourist destinations, representing a high percentage of its GDP. Better put, maritime and coastal tourism can be considered as a driving force for the economic and blue growth in this region.

In Indonesia, the fishery sector contributed about eight percent of \$930 billion gross domestic product last year and it was also one of the fastest growing sectors in the economy. This country is supposed to double GDP contribution from maritime sector in next decade. We can categorize the ocean-based industries into two groups, the first group is established ocean-based industries including; industrial capture fisheries, industrial seafood processing, shipping, port activities, shipbuilding, offshore oil and gas, maritime and coastal tourism, marine business service, marine R&D and education, dredging. The second group is emerging ocean-based industries including; industrial marine aquaculture, deep and ultra-deep water oil and gas, offshore wind energy, ocean renewable, marine and sea based mining, maritime safety and surveillance, marine biotechnology, high-tech marine products and services. It has been predicted that ocean industry value-added will be doubled (from USD 1.5 to 3

trillion) by 2030, moreover, ocean industries likely to provide more than 40 million Full-time Equivalent FTE jobs by 2030.

According to the OECD, oceans contribute \$1.5 trillion annually in value-added to the overall economy. The FAO estimates that around 60 million people are employed in fisheries and aquaculture, with the majority of those employed by capture fisheries working in small-scale operations in developing countries.

The World Bank Group assists countries to promote strong governance of marine and coastal resources so as they improve sustainable and inclusive economies by supporting fisheries and aquaculture.

The Asia-Pacific region also possesses rich coastal and marine resources, the total value of fisheries and aquaculture production is two billion USD/year and that of tourism is 700 billion USD or 3% of GDP.

Moreover, in Singapore, new plan has been mapped out to set the course for Singapore's maritime industry over the next decade. Senior Minister of State for Transport Lam Pin Min announced that Sea Transport Industry Transformation Map aims to grow the industry's real value-add by S\$4.5 billion and creates over 5,000 good jobs by 2025. It will have a remarkable impact on promoting GDP.

Being a country surrounded by seas, Malaysia is also depends

heavily on the sea to facilitate much of its trade and economic growth. 95% of its trade (by volume) is carried through seaborne means.

In addition, the Ocean economy has a considerable potential to make a contribution to higher and faster GDP growth in Kenya. Innovation and growth in the coastal, marine and maritime sector could deliver food, energy, transport, among other products and services.

The article of Policy Brief pointed out that diversifying the country's economy beyond land-based activities and along its coastal, marine and maritime sector is critical to achieving the Sustainable Development Goals (SDGs) and delivering smart, sustainable and inclusive growth.

The Maritime sector in Scotland directly and indirectly creates job opportunities, majority of this sourced from the Marine Offshore Oil and Gas industry and other Marine industries. Shipping industry has a great influence on Bangladesh's economy as well.

In a nutshell, sea is seen as a strong determinant of the economic growth, it makes a considerable contribution to the development of economic sectors and to the generation of economic benefits.

Economy

How much is the share of transport in goods cost?

**A little bit less
than low!**



Deputy Head of IRISL for technical, commercial affairs in an interview with PD:

Marine transport share is insignificant in goods cost

Carrying cost experienced a reduction of 50 percent since the middle of 70s that is resulted from investments in infrastructure and utilization of capacities as well as technological advances. The most affected section that suffered from reductions was road, air and marine transport. Considering the fall in carrying costs, marine transport has concentrated on containerization. Road transport costs underwent a 40 percent decrease in three consecutive decades although energy costs and wages rose. Moreover, the same thing happened in rail transport while it was somehow lower than the road one. Technical progresses in all secondary markets of rail transport have not been set equally and great monopolists especially the governments made the fall in cost to move slowly. Cap. Amir Saman Torabizadeh, Deputy Head of IRISL for technical, commercial affairs in an interview with PD explained the effective factors in goods carrying cost, bunker expanses and ports' role in the final goods cost and emphasized on the fact that marine transport share is insignificant in this section.



If we are to categorize the effective factors in goods cost, what determining factors are to be achieved?

Cargo's volume and type have a direct relation with carrying costs. Cargo's volume is of utmost importance in terms of economy of scale. However, great volume of the cargos sometimes could lead to density and instability of scale in the ports. Moreover, increases in prices imposed by cargo operator are transferred to the customers which is dependable on the market's structure and trade equilibration. For instance, marine routes especially in the dry bulk market experience

full capacity of the ships in the front haul while in a backhaul voyage the ships are usually empty. In this regard, operators have to admit lower freight rates to attract cargo and then this is the reason that freight rates for carrying container imports to Africa is higher than the exports. Therefore, one of the influential factors of goods cost is the trade route.

Type of cargo depending on the produced product or raw material is also effective in determining the proportion of goods cost to its value. In other words the proportion of goods cost to its value in the produced products is lower than the raw

material.

Besides, as a country's negative trade equilibration means imports is higher than exports, to encounter the increasing unbalancing, freight rate for exporting will be lower than the importing rates. Therefore, trade equilibration is still another determining factor in goods cost.

Possibilities and transportation facilities in each country can be taken into consideration as another determining factor as old fleet and repair and maintenance expenses will directly move the goods cost to an upward trend. In addition, geographical situation of countries is also



affective. Some countries are covered by land while others enjoy a desirable condition to exploit marine transport. On the other hand, transit condition of the neighboring countries should be noticed in determining commercial carrying costs of that nation. Operational costs of a fleet include repair and maintenance expenses, insurance and fuel cost such a way that in marine transport age and type of a ship is important because operational cost and its

following freight rates will be lower if the vessels be equipped with high tech and be newer. Industrial structure and regulations of a country could be taken into account as another factor in setting carrying costs and its share in goods cost. Some markets and governed industries are exclusive or in other words activities in them and carrying costs are not competitive. In general and on the basis of analytic data from UNCTAD, the proportion of carrying

cost to imports value in the developing countries is higher when it comes to comparison with developed countries. The main reasons behind this fact are the lack of trade equilibrium, unfinished revisions regarding ports and trade facilitations, lower trade volume and limited carrying communications in these countries. Then, it is expected that the current situation to be improved through investment and revisions in transit and customs regulations



system.

To sum up, factors such as volume and cargo's type, trade route, trade equilibrium of the countries, infrastructures, possibilities and carrying facilities, fleet age and its exhaustion, geographical situation of countries and their neighbors, operational costs of a fleet and fuel costs, industrial structure and regulation in the countries and customs tariffs affect freight rate.

Considering all the mentioned items, what role the international freight rate could play in the goods cost?

International freight rate is a major element in commercial costs and economic development. Researches in Asia and Pacific demonstrated that tariffs form only 0 to 10% of the extensive bilateral commercial costs while those related to the politics (that have a non-tariff nature) develop 60 to 90% of the international trade costs. As whole, issues such as freight rate, marine ties and determined procedures in comparison to customs costs have more impact on the commercial costs.

According to statistics released in 2015, international carrying cost in a country with an average level of development include about 9% of the value of imports. This number announced to be 11.4% averagely for the African countries and 6.8% for the developed ones.

In such a condition, to what extend the insurance share is evaluated in carrying costs?

Considering the estimated statistics announced by UNCTAD, world countries paid 15% of their importing values on the average in international carrying and insurance in 2016. Certainly, smaller and structurally fragile economies pay more in this field. The share for the smaller developing island states, countries covered by land and undeveloped countries is about 22, 19 and 21 percent, respectively. Lower port efficiencies, insufficient

infrastructures, none-economy of scale, and uncompetitive carrying markets are some key factors which result in chronic pressure of costs in many developing countries.

Given the high share of carrying costs in comparison to importing value in many countries and regions, analyzing and identifying those factors leading to creation or increase in costs share in comparison to the final trade value are of utmost importance.

Economies with low level of income or weak geographical situation as well as small island states encounter higher carrying costs and goods cost when it comes to comparison with other economical groups of the world. Some considerations (political) arrange the amount of countries' cooperation in the world value chain. Moreover, production costs, legal frameworks, production methods and geographical distance between commercial partners are significant in determining the margin of carrying costs in the regional; and global transportation networks.

Are the distance and the amount of connection to the global transportation networks effective in a/n decrease or increase of carrying costs?

Distance and the level of connections are determining factors. Studies conducted earlier present that inter-continental trade increases the carrying and insurance costs between 2 to 4 percent compared

with intra-continental one.

Another analysis shows that in the realm of electric machines the price difference of CIF and FOB for importing cargos of china from Vietnam and Hong Kong is lower than the same one imported from Asian economies, Brazil and South Africa. Similarly, the U.S imports from Mexico and Canada experience a lower CIF and FOB different prices compared with the countries imports from other commercial partners. However, the economic distance which means the level of connection to the world shipping network and the situation of a country in the network, may play more pivotal role in increasing international carrying costs in comparison to geographical distance.

What position the fuel has in the combined factors of carrying costs?

This is of course another key factor in the carrying costs. Rise in the world oil price from \$25 to 75\$ bpd in an equal circumstance will lead to a 1.4 percent increase in the margin difference of CIF and FOB. Besides, fall in the oil price from \$100 to \$50 bpd make the difference between CIF and FOB to experience a one percent decrease. However, it should be discussed that the dominant atmosphere of the low price of oil and fuel since 2014 toward now did not reflect a significant difference between CIF and FOB. This comes to truth about the countries covered by land and small developing island states. This fact can move us toward the existence or non-

existence of some carrying costs factors such as combining trade and economy of scale in the lack of trade which may have a double effect on freight rate. Moreover, lower fuel costs may have a returnable impact on the transportation through an increase in demand and expenses.

It seems that in an unequal trade situation, port tariffs are imposed in a different and heterogeneous form on the freight rate. What is your logic and reasoning?

Generally, it is confirmed that developing countries in the field of producing low level and less variant commodities experience more freight rates. This trend in other regions with weaker infrastructures and more carrying challenges as well as having more difficulties in accessing the markets will be intensified.

For instance, port operation tariffs in small developing island states in the Caribbean are determined to be \$200/400 per container while it reached about \$150 in Argentinean ports per TEU. Similarly, carrying and insurance costs in small island states are 30 percent higher than the global average. To clearly demonstrate that consider carrying a container between Shanghai and Los Angeles Ports with a distance more than 19.000 knots in 2014 which attracted the freight rate on \$700 while carrying the same container from Kingston port in Jamaica to Oranjestad in Aruba with a distance of 513 miles recorded the freight rate

on 2800\$. These factors are striking barriers of trade which affect growth and perspective of constant development. Researches present that the fall in carrying costs and development of infrastructures could lead the improvement in trade and lessen the impact of restricted factors such as distance.

One cannot ignore the developing countries covered by land when it comes to marine transport. To what extend inaccessibility of these countries to seaborne trade would raise the carrying costs?

In these countries, carrying costs account for about 77 percent of exports value. Moreover, weak road infrastructures covered by land comprises 60 percent of share in carrying costs (this is 40 percent in the coastal countries). Besides, revenue's fall due to inappropriateness of border procedures that attracts more than 5 percent of the country's GDP is one of the important challenges for the countries covered by land.

These factors increase total carrying costs and their share in importing commodities to the mentioned countries. Mainly, goods cost in the developing countries is not a limitation against imports to these countries and instead they are restrictions across developing exports from the countries to the neighboring ones which can be referred to through an increase of 8-25 percent in cost of container transportation.

How is the carrying cost in Iran compared with

other countries? Is there an expertise review and well-known factors in this regard?

Recently, the General Manager of extensive transportation plan at the Ministry of Roads & Urban Development referring to non-optimism of cargo transportation in the country has announced that the share of transportation costs in the goods cost (including all shipping areas) is 6% and 12% in the world and in Iran, respectively. At present, the amount paid by owners is not significant, which seems the main reason behind that would be the payment of state subsidies to the road and rail transport. However, in terms of fuel subsidizing, the share of transportation costs in goods cost is higher than the global average. Of course, in this context, I must add that the share of marine transport is insignificant in goods cost.

One of the reasons of non-optimism of transportation in Iran is the low share of rail transport. According to the investigations, 19% of cargo transportation (ton kilometer) is achieved by rail in Germany and the average of carrying cargo in the Europe is announced to be 18%. Moreover, the share is 88% and 38% in the Russia and the U.S., respectively while only 11% of cargo transportation is conducted through rail in Iran. Another basis of non-optimism of cargo transportation in Iran is that road transport accounts for the 90% of carrying cargoes and this is the reason behind a decrease in incidents if cargo volume falls. In accord with the global norms, the 90% of



PRODUCTION COSTS, LEGAL FRAMEWORKS, PRODUCTION METHODS AND GEOGRAPHICAL DISTANCE BETWEEN COMMERCIAL PARTNERS ARE SIGNIFICANT IN DETERMINING THE MARGIN OF CARRYING COSTS IN THE REGIONAL; AND GLOBAL TRANSPORTATION NETWORKS.

U.S. cargo transportation for distances below 300 miles is carried through road while 40% of rail transport is specified for distances higher than 700 miles. This fact demonstrates that desirable condition of carrying cargo in long distances shall be dependable on the rail transport according to the global norms. Totally, low favor toward rail transport by the side of cargo owners, lack of attention and emphasis on developing infrastructures and possibilities leading to multimodal transport in the countries and more

relative utility of road transport are three involved factors.

In the economy of scale, cargo carrying by truck is expected to be more expensive but government subsidies make it not be a challenge. Moreover, door-to-door carrying of cargoes is not known in our country and cargo owners prefer one-way transportation. At the meantime, the focus has been on developing road networks and availability of delivering time is higher in road transport compared with the rail.

In this field, Ms. Moghimi, the member of board of directors at chamber of commerce referred to the high share of carrying costs in comparison to cargo value and added that Iran owns the cheapest fuel of the region. If the prices reach the Persian Gulf FOB, the value and position of some issues which are directly related to fuel such as flight prices and freights will be changed.

The share of carrying cost in Iran is about 12% of the goods cost while the standard of it is approximately 6%. Therefore, it is natural that transport will be changed to one of the severe challenges in exports section. Some facilities should be taken to account to purchase a utilized fleet that needs lower repair and maintenance expenses as desirable price enters the goods cost by the introduction of a fleet with global standards. Transport system especially in the international section is being old and renovation has to be conducted urgently because updating it will narrow goods cost to a more logic rate.

Analyzing shipping costs in merchandise value;

Marine transportation is the vital component of the global economy

Elnaz Miyandoabchi
Institute for Trade Studies and Research

Transportation and logistics can be considered as the backbone of global trade. In fact, the sustainability of the life and activities of global trade networks heavily depend on international transportation, since international transport networks are key and critical elements linking business partners around the world through commodity flow and even services in global supply chains. Transportation plays its role in global trade through creation of value in providing access to the goods and services needed at the exact time and right place at a proper cost and acceptable quality. From another point of view, transportation can be considered as one of the factors influencing the competitiveness of economic enterprises in world trade and as a result it can be effective in economic development of countries. In current competitive world, any inefficiency in transportation networks can lead to an increase in the final price of produced goods and disability of meeting the needs of customers, so it affects the ability of firms to compete in international markets. In the following paragraphs, the role of transportation in the global trade will be analyzed from a variety of dimensions.



Transportation costs in global trade

Transportation costs are one of the most important factors affecting the scale and direction of global trade. Indeed, the declining costs of transportation over the past decades, along with the reduction in commercial costs following the liberalization of global trade, have been a motivator of globalization. Between 1840 and the Second World War, as a result of technological advances, the transportation costs were reduced to a large extent, so large-scale transportations were possible all over the world. Therefore, trade between different and distance countries grew rapidly. After the 1950s, with more decline in transportation costs, trade between the countries turned to exploiting expertise and scale savings in each other's products. One of the most comprehensive studies on the share of transportation costs of the value of goods traded globally has been done by the UNCTAD. In the past years, this organization has estimated the share of transportation costs¹ (including all modes of transportation) of the value of imported goods in each region of the world. According to the results of these surveys in 2005-2014, the share of transportation costs varies across diverse regions of the world. According to it, the smallest share of the transportation cost is related to developed countries (6.8%), which are attributed to the vast investment of these countries in the transportation and logistics sector. It is the logic reason that international institutions consider logistics and

transportation as one of the main factors affecting the economic development of countries.

The first rank of developed countries, and the second rank of economies in transition, is evidence of this fact. It is interesting that transitional economies have seen a significant reduction in the share of transportation cost (from 10.4% in the 1995-2004 to 7.1% in the 2005-2014). Third place is also allocated to the developing countries of the Americas with average 8% share of transportation costs. Asia's developing countries, with an average share of about 9% rank fourth in this regard.

Transport developments and its impact on global trade

An overview of the historical trend of trade in the world shows that transportation has always played a key role in the development and strengthening of commercial flows. From the scientists' point of view, the occurrence of three revolutionary waves of transportation in recent centuries has gradually laid to the emergence of a new concept in global trade. The first transport revolution was a series of developments in ship design in the period of sixteenth and eighteenth centuries, which, despite the high cost, made it possible to transport goods across the oceans. As a result, ships could transfer valuable items such as coffee, cocoa, spices and precious metals to the continental coasts of the world. The second revolutionary revolution occurred with the invention of steam engine in the middle of the nineteenth century, which resulted in land and sea

transportation of less-valuable goods over long distances could be done with affordable prices. With the replacement of traditional transportation modes such as cattle, lodges, trains and steamboats, in different parts of the world the access to industrial and agricultural centers in transportation networks improved, resulting in the acceleration of international trade and industrial development. The third wave of the revolution in transportation dates back to the second half of the twentieth century, during which prominent advances were made in the construction of ships with high carrying capacity and jet airplanes, and more importantly the invention of containers. The series of these developments have led to the strengthening of global trade networks over the past decades by facilitating the flow of goods on economies of scale and, more importantly, the integration of various transport modes.

The position of transportation modes in global trade

Each mode of transportation has different advantages based on the type of goods and distances, but maritime and aeronautical transportation have played an especial role in the global trade. The root of this advantage lies in the ability of these two methods to facilitate communication between the continents and the outlying regions of the world, while road and rail transportations are exclusively restricted to land. Of course, in recent decades the prevalence of multimodal transportation in the world has increased the integrity of transport modes, especially along the international freight

corridors.

More than 80 percent of the global trade volume and 70 percent of the global trade value are seaborne. In fact, shipping can be considered as the vital component of the global economy, because without it, Intercontinental trade and the transportation of large-scale merchandise and other types of non-bulk goods at distances of several thousand kilometers would not have been possible. Bulk commodities such as oil, gas, iron ore, coal, grain, alumina and phosphate account for about 60 percent of the world's seaborne trade, according to the annual report of UNCTAD. Also, the major container shipping in the world is between the three regions: Eastern Asia, Europe and North America. It should be noted that the share of our country (Iran) in container shipping is so little, and the ports of Iran account for only about 5% of the container transportation in the region.

Air transportation is another form of transportation used in international trade that, given the advantage of its speed and the ability to fly in Intercontinental intervals, is mainly used for transporting of valuable but low-value goods and some perishable goods such as medicines and food. According to IATA, the value of air transported goods is about \$ 6.4 trillion, accounting for more than one-third of global trade².

Road transportation is one of the most widely used transportation methods in the interior and between countries due to its high flexibility and complementary role in the chain of other transportation methods such as sea, air and



THE OCCURRENCE OF THREE REVOLUTIONARY WAVES OF TRANSPORTATION IN RECENT CENTURIES HAS GRADUALLY LAID TO THE EMERGENCE OF A NEW CONCEPT IN GLOBAL TRADE

rail. According to the World Trade Organization (WTO), it is often claimed that the share of road transportation is about 90 percent of global trade, either directly or indirectly (through interconnection with other modes). It can be said that road transportation plays an important role in intra-regional and intercontinental trade.

The advantages of rail as a low-cost and secure way of transportation have made it as an economic way to carry bulk and massive goods as well as containers over long distances in the world, especially in the Eurasia region in recent years. So the volume of rail transportation from East to West between Asia and Europe is growing steadily. According to the International Union of Railways, about 90% of trade between these two regions is carried out by sea and the share of rail transportation is only about one percent, but the growth of rail transportation of containers in this rout is significant and from 25,000 TEU in 2014, it reached to 145,000 TEU in 2016. Of course, introducing the “One Belt, One Road” or the New Silk Road project by the Chinese government in 2013 has played a significant role in developing rail transportation along the routes from China, Russia, Europe, and parts of the continent of Asia.

Foot Note:

- 1- Insurance is not considered as one of these costs.
- 2- Given the prevalence of multimodal transportation, some of the world's maritime and aeronautical trade statistics are overlapping.



Two sides of the coin; trade and transportation

By: Narges Ehsandar

The role and impact of transportation on production, job opportunities and the national economy of countries cannot be overlooked. Transportation, particularly maritime transportation can be considered as mainline and the strategic point of imports, exports and income of countries. Based on this, in many developed and developing, transportation accounts for 6-12 percent share of Gross domestic product (GDP).



Trade and transportation are regarded as two axes of countries' growth and development. These two main axes are interdependent. Since proposing this theory

that countries which enjoy comparative advantage in producing some goods, they must focus on producing those specific goods, the relationship between trade and transportation was highlighted more than ever. So that, nowadays the transportation of goods will be impossible without trade and on the other hand, the trade will be impossible without transportation.

In a nutshell, it must be affirmed that transportation and trade are two parallel processes which prefer one over the other does not seem to be logical. In this regard, contribution and effective interaction of all players and beneficiaries of trade and transportation area is very critical issue.

The Outstanding share of maritime transportation in global trade

The effective transportation will be associated with an increase in the international trade. In better put, transportation is a main tool for expanding international trade as well as meeting the various needs of economy activists. Currently, we have different kinds of transportation including; road, railway, maritime and air transportation. In the old days, traders themselves were responsible for transporting goods from one country to another, but with an increase in the speed of communications, transportation and movement, they have found a need to increase the speed of trade.

However, among different

methods of transportation, maritime transportation accounts for the highest share in the international transportation. In a way that in different countries, this share is between 80-90 percent. But it also depends on that to what extent countries are surrounded by land or sea.

Nowadays, container vessels with a carrying capacity of more than 20,000TEU, transport goods from one point to the other point. These kinds of vessels have changed the concept, nature and trend of transportation market, as a result, trade has undergone a complete change. As matter of fact, joining these vessels to the global fleet caused a decrease in trade costs and an increase in speed of transportation. Simultaneously, services are increasingly developing. In light of these developments, we are able to easily monitoring the condition of vessel and goods in every moment.

It can be asserted that in terms of scale, cost, time and security in transporting goods, maritime transportation occupies the first position among other methods of goods transportation. Because the goods will be transported from one corner of the world to the other corner, in a limited time and with very low cost. It should be added that this trend will be influential on final production cost.

In other words, maritime transportation has the highest share in the global trade. Joining ultra-large container vessels

(ULCVs) to the global fleet had led many shipping lines to record an unprofitable business. In hinterlands, railway and road transportations are responsible for Capillary distribution. In this regard, the share of road transportation in Gross domestic product GDP is mainly the largest share in most countries of the world. But with regards to mass distribution and transportation from one continent to another, maritime transportation stands in the first place.

Less expensive transportation, more production

While on a global scale, the share of transportation in final production cost is between 6 -7 percent, however in Iran, this share reaches 12 percent. The reason for this obvious difference is subsidy payment to the transportation section by Iranian government.

Transportation experts believe that reducing the cost of transportation will result in an upward trend in trade. It is worth noting that during the recent decades, the issue of transportation is not just the issue which has been proposed and discussed, but the issue of logistic and supply chain like warehouse, products maintenance, designing for warehouse expansion, the speed of goods flow and inventory management have also received attention.

Based on global trade system, goods inventory including agricultural and industrial goods should be consumed

quickly, so that a next wave of production can reach to the consumer as early as possible.

In better put, the longer shelf life of the products in warehouse, the higher cost will be imposed on consumer. Currently, the global production system will be regulated based on the predicted demand.

With the advancement of Information technology IT industry, it has found a strong position in the transportation industry, in a way that now, it is possible to observe vehicle through electronic systems and technology management. Therefore, the information will be available for producer on time. Then in accordance with market demand, the producer will deliver its productions to the market through quick and fast methods of transportation. Overall, a set of factors such as applying IT, technique and method of pricing are very effective.

The Share of transportation methods in GDP

The amount of impact of transportation in various countries is different and also influenced by macroeconomic policies. For instance, 80 percent of transportation in some countries is done through road. In Iran, around 85 percent of domestic transportation is related to road transportation and around 12 percent is related to railway transportation.

However, in some countries we can observe contrary figures. In European countries, the issue of sustainable development

and environment has resulted in more focus on railway transportation.

For example, In Germany, 19 percent of goods transportation is done through railway, on the other hand, the average percentage of railway transportation in Europe is 18 percent. This share in Russia and US reaches 88 and 38 percent, respectively.

In Iran's economy, about 80 percent of transportation is related to domestic road transportation, the share of maritime transportation and railway transportation reaches 16 and 4 percent, respectively.

In the world, air transportation is responsible for transporting 25 to 30 percent of goods which are significant in terms of value. Maritime transportation with more than four century history in the world is very older than other transportation methods. Moreover, given that the risks of this type of transportation is more than other methods of transportations, the type of legislation and regulations are in a way that consider specific conditions for operators and carriers.

Fortunately, international maritime transportation fleet in Iran has experienced a remarkable growth and is very modern in comparison with other methods of transportation. There is no shred of doubt that the performance of maritime transportation is notably higher than other methods. It is important to highlight that the performance of maritime



transportation in Iran has been better than even countries such as UK. It seems that in Iran, other sectors of transportation should make use of maritime transportation model as a pattern.

The development of transportation is equal to job growth and production. Transportation as an economic activity has a direct influence on economic growth and creating job opportunities. It like other economy activities creates added value and makes a big contribution to economic growth. It also provides ample job opportunities.

One of the main purposes of production for produces



IN TERMS OF SCALE, COST, TIME AND SECURITY IN TRANSPORTING GOODS, MARITIME TRANSPORTATION OCCUPIES THE FIRST POSITION AMONG OTHER METHODS OF GOODS TRANSPORTATION.

is exports. Therefore, transportation and its prices will be very effective on production. The majority of raw materials, intermediate goods necessary for domestic manufactures are dependent on maritime transportation.

The active network of maritime transportation through on time delivery of raw materials will make a considerable contribution to the productivity of industries and manufacturers. As a result, the goods will be delivered to the customers with suitable final production cost and desirable quality.



Why production is dependent on transportation?

*Mojtaba Soleimani Sedehi
Consultant of Industry, Mine & Trade Minister
at logistics and supply chain department*

Conceivably most people are fond of recognizing why production is dependant on transportation. It is more effective to ask it in this way: why production and transportation are dependent on each other.



Transportation is a major component of logistics services which is inseparable element of production. Put in other words, no goods can reach the consumers unless depending on the logistics services. Moreover, there is not any production site which can provide the initial tools and the required components without logistics services. The World Bank declares that logistics has a crucial impact on the economical activities of countries to the extent that among countries with a same per capita income annually, those countries having a better logistic performance experienced one and two percent of more growth in their GDP and trade, respectively. On the other hand, transportation demand is created through

production and trade and they are actually considered the locomotive of transportation. Role of transportation in determining cost of a product In a general categorization and on the basis of studies in a variety of countries, logistics costs include transportation expenses, inventory and its control charges as well as logistics management expenditure that carry out a share of 62, 33 and 4 percent by average in setting the final cost. As logistics charges are permanently a part of goods cost, calculation and an attempt to reduce them is of utmost importance. Given the fact that exact measuring and indexes have not been conducted yet in the country, presenting a mathematical evaluation of the

indexes is a significant step to be taken in considering logistics charges as one of the main determiner of goods cost.


Differently, another investigation on different industries in the Europe demonstrated that 22 percent of the cost is specified to the logistics services which is definitely higher in Iran. Considering the mentioned statistics and the fact that about 62 percent of the total logistics charged is derived from transportation, it can be concluded that transportation share averagely in goods cost is approximately 14 percent which is more related to the developed European countries.

Share of transportation fields in global trade

Seaborne trade can be named as one of the most economical branches of transportation since it is capable of moving commercial cargoes with mega size ships between countries. It is estimated that more than 90 percent of commercial commodities are transported through sea in the international era and more than 80 percent of the total volume which include the movement of cargo in the country. Moreover, the speed in this type is low and is suitable for heavy and cheap goods. The average speed of a ship in the ocean is about 15 knots (26kmh).

Although air transportation has only a share of 1-percent in international cargo volume, it include only 35 percent of the internationally moved cargos in terms of goods value that reach \$60 billion annually.

The remaining 9 percent of the global trade is carried out through land (road and rail) transportation. In conclusion, about 10 billion tons of cargo is transported annually in the international era.



Multimodal transport; the fuel in the furnace of trade



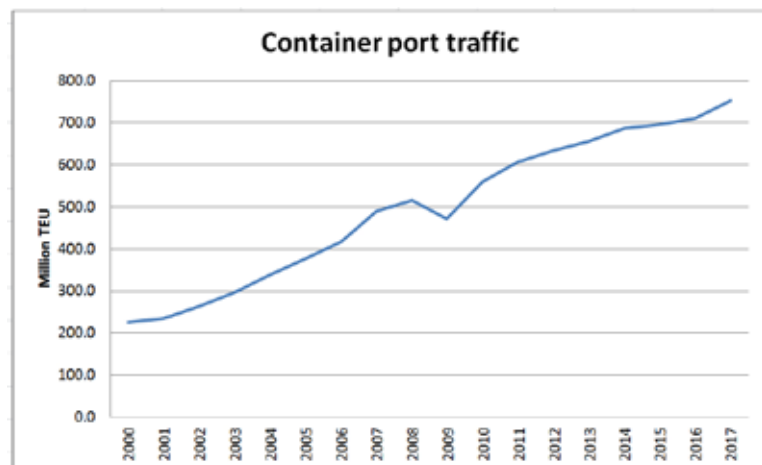
IT IS SO IMPORTANT AND NECESSARY THAT THE TRANSPORT NETWORKS ARE FORMED AND DEVELOPED IN SUCH PRODUCTIVE AND COMPREHENSIVE WAY, WHICH WOULD BE CAPABLE OF PARTNERSHIP AND INTEGRATION,

With the extension of the transportation network, the expansion of trade, and the formation of a series of developments, multimodal transportation and its related logistics services have gained increasing value. According to the definition of UNCTAD in 1981: “International multimodal transport means the carriage of goods by at least two different modes of transport on the basis of a multimodal transport contract from a place in one country at which the goods are taken in charge by the multimodal transport operator to a place designated for delivery situated in a different country.” In the strategic business environment, the word “communication” plays a pivotal role in transport and, the multimodal transport is concerned about managing this communication. Now shipments are moving longer distances in land, have shorter waiting times and more accurate delivery times, as well as new distribution networks based on reducing the size and weight of shipments and continuous tracking of shipments.

Multimodal transport has been formed since the container was created, thus the main source of this network is marine transportation. Maritime transport is really important because of its cheaper shipping cost. By expanding the capacity of the container ships and reducing shipping costs, this area has become more attractive to the shippers and has strengthened the growth of

global markets in this field. As shown in Figure 1, container traffic in the global ports increased from 224.8 m TEU in 2000 to 752.7 m TEU in 2017, equal to 235 percent increase. Consequently, by considering the development process of the global container fleet, the need for efficient logistics and transportation management becomes a critical necessity.

Figure 1. Container traffic trends in the global ports 2000 - 2017



Now with this volume of global trade growth, there is a need for more efficient multimodal transport that can work integrated with all types of transport operations in the world. But, despite the fact that multimodal transport and related services play a major role in the global economy, three major developments in this industry, which have been created in recent years, has brought some challenges in this field.

First of all, changes in industrial processes have changed the patterns of production processes. In order to gain economic advantage, the transformation of expertise and integration is needed, leading to the diversification, flexibility and customization of logistics and transportation services. In addition, economic coherence and the dependency of production on global resources have significantly increased the importance of transporting and providing integrated services.

Secondly, the changes in the World Trade Organization (WTO) have made challenges for manufacturing industries and transport service providers. Large industrial and commercial companies often have more competitive advantages over smaller companies due to their distribution sectors and transport infrastructure within their region. On the other hand, smaller companies, especially in developing countries, are often dependent on other companies to provide logistics services and let them to take advantage of multimodal transport.



**MARITIME
TRANSPORT
IS REALLY
IMPORTANT
BECAUSE OF
ITS CHEAPER
SHIPPING
COST.**

And the third is the change in the pattern of international trade that has created geographic commercial blocks and has led global trade to regional trade (for example, South East Asia, Europe and North America). These conditions have made the

demand for shipping different from the past.

Given the development of the global economy, rapid product delivery to the market, agile production and business, and integrated supply chain management; a transportation system is needed which be able to keep pace with the speed and precision of customer demand, and in addition it should be agile to not disrupt the supply chain of the goods. Even if we do not pay attention to the development of trade, the expansion of an integrated transport network seems critical to continue the growth of the global economy. Altogether, the transportation of all goods needs to provide proper logistic services, and as long as the logistics services are not in line with the needs of customers, globalization cannot be achieved.

Looking at the global export concentration index in 2016, in Figure 2, we find that the diversification of export products from countries and regions requires different mode of transportation. In this picture, if an economy is based on exports of only one product, then the index is one and if the country's export includes a group of products that have the same share in the export basket, then this index will be zero. As a result, the difference in the value of this indicator across the globe and different geographical areas shows the need for a multimodal transportation network in a way that can improve productivity in all aspects.

Figure 2. The global export concentration index in 2016



Therefore it is so important and necessary that the transport networks are formed and developed in such productive and comprehensive way, which would be capable of partnership and integration, and in addition the agility should be its priority. However, in the context of multimodal transport, the operation of each mode of transportation (road, rail, aviation and maritime), it is not important how much it is perfect, since it is ultimately dependent on the logistic services provided by at least one of other transport mode. One of the factors behind the failure to launch efficient multimodal transport in most parts of the world can be this same weakness that different transportation methods have not been developed to the same extent, or at least the logistic services provided by them are not individually effective and efficient. This fact in the transport network reveals bottlenecks. Unless these bottlenecks have not

been resolved, the efficient multimodal transportation network could not be developed.

Thus, despite the importance of the transport sector in the economic development and prosperity of each country, and given the fact that the nature of the multimodal transport is integrated management of various modes of transportation, unfortunately, the complexity and ambiguity in measuring the extent of its role and its impact on economic indicators is very complex, and there is no precise estimate of the extent of the impact of this sector on the economy. But to measure the impact of each transportation method in economic growth, including GDP, the following indicators can be considered:

- **Transport cost:** This index covers the cost of providing services during carriage and is divided according to the type of transportation or type of goods.
- **Transport efficiency:** labor productivity or other factors

involved in transportation are used to measure this indicator.

- **Value added of transport:** In this section, the value added generated by each of the transportation methods and its contribution to the GDP index is measured.

- **Logistics Services:** Developing appropriate distribution and storage networks that are contributing to GDP growth as the infrastructure created in each country.

In general, by analyzing the operation of multimodal transport, it can be concluded that the existence of a multimodal transport network within a country and even ideally the existence of such a network in several countries has a significant impact on GDP growth. It directly contributes to improving productivity, developing infrastructure and expanding technology, and also indirectly contributes to boosting business prosperity and agile distribution of



commodities across the country. For example, an unofficial research conducted in China estimates that the providing integrated logistics services under multimodal transport networks accounts for average 15% annual growth of GDP. Of course, the use of such numbers with regard to the indirect effects is not very accurate and it is possible to expect more contribution.

Although all transport players agree on improving the efficiency of various transportation sectors globally, in developing countries there are some weaknesses that cannot be resolved. So, the development of a multimodal transport network remains only a slogan. Perhaps the first weakness in this section is in the decision-making sector. Unfortunately, in the majority of cases, decision-makers are not experts and do not have enough knowledge in this regard, and on the other hand, experts in this field are not in the position of decision-making. This weakness leads to the fact that from the beginning what

should happen is postponed, or a decision would be made that is not rational from different perspectives. For example, in the creation and development of dry ports, as one of the essential elements in the transportation network, they should be properly located, and feasibility study should be done for them, otherwise they will only end up without anything and they will be useless. The second problem is the lack of commitment and responsibility in the implementation and expansion of multimodal transport related projects resulting from severe weaknesses in team work. In short, the work, which requires continuous follow up of various groups, begins but due to the absence of a road map or the lack of clarity of the relationship and the role of team members, it will eventually be abandoned unfinished.

Of course, the cooperative relationship between the owner and the operators will attract more attention to the efficiency of multimodal transport. If governments have the right strategic planning and by

different plans and projects facilitate partnerships of private, semi-private and public sectors, it would be hoped that an integrated transport network will be developed that would use all transportation modes as needed, in order to create an agile supply chain in the country and region.

In conclusion, the direct and indirect effects of such a network cannot be ignored in economic indicators such as GDP, and also due to the agility and integration of the distribution network, the three dimensions of customer service pyramid (cost, time and security) are also efficient. This type of multimodal transport network will play a significant role in expanding the prosperity of any economy.

References:

1. UNCTAD Handbook of Statistics 2017 – International merchandise trade
2. <https://data.worldbank.org/>
3. The Economic Impact of Enhanced Multimodal Connectivity in the APEC Region, APEC Policy Support Unit, June 2010.
4. <https://transportgeography.org/>

Close Up

Sanctions

What are the effects of economical sanctions on the global economy?

The West!

Global rotation from military confrontation to economic warfare

By: *Houri Ghasemi*

In the pre-industrialized world, the military power and the number of soldiers formed the political relationship between two or more countries. So, this led to the creation of the military superpower for the management of war and peace in different periods of time.

But with the development of machine life and the emergence of an economic advantage in the world, instead of trying to vast the geographical boundaries governments found another solution that would subdue other countries at the lowest cost. That solution was precisely the attention to the economy and the gaining of the market of countries that could redefine the influence of superpower in the world by creating dependencies at different angles of production and consumption.



The end of war; the beginning of development

This was more marked in the interval of the two world wars, when American power in the economy was rise because it was far from the war. In fact, after the end of the Second World War, the issue of war and peace was largely abandoned in political relations, and the most fundamental issue of the second half of the twentieth century and the 21st century was the issue of development for many countries.

But the willingness of countries to maintain power in global relations has not changed. In this time, the larger powers, instead of trying for changing the political behavior of other countries, take advantage of the economic tools, and by changing the restrictive economic rules they try to persuade the target country to change its behavior. However, this new weapon

-economic sanctions- has a long history, in the 20th century, and especially after the end of the Second World War, the sanctions option was considered by policymakers as an alternative to the war that could give power to the country which has placed sanctions.

The important point is that although sanctions have already been placed between two or more countries, but with the collapse of the Soviet Union and the end of the Cold War, the use of sanctions against states at the UN Security Council became more serious, so that during the entire Cold War, There were only two UN sanctions against Rhodesia (1965) and South Africa (1961). On the other hand, since the end of the Cold War, the UN has used sanctions more than 20 times.

What are sanctions targeting?

However, the effect of

sanctions on targeted countries and achieving the considered purpose by countries which placed these sanctions has been the subject to many discussions. In general, there are two kinds of sanctions: comprehensive and targeted. Comprehensive sanctions are broader in scope, and consider no difference between targeted individuals and entities. On comparison, targeted sanctions, which were first introduced in the early 1990s, are different from comprehensive sanctions. Targeted sanctions focus on leaders, decision-makers and their main advocates, instead of the entire economy. By targeting a single sector, this category of sanctions can have a negative impact on the civilian population.

Yet, there are a series of sanctions that, although they are intended to be targeted, can affect the entire population of a





THE ISSUE OF WAR AND PEACE WAS LARGELY ABANDONED IN POLITICAL RELATIONS, AND THE MOST FUNDAMENTAL ISSUE OF THE SECOND HALF OF THE TWENTIETH CENTURY AND THE 21ST CENTURY WAS THE ISSUE OF DEVELOPMENT FOR MANY COUNTRIES.

Sanctions targeting some of the economic activities, such as the oil industry or the financial sector, directly or indirectly target the entire population of a country. Although they are not considered as comprehensive sanctions, without differentiating between the members of a nation, they practically affect all people in the community.

Increasing costs with economic sanctions

Sanctions can be divided into two categories. In the first, sanction or boycott in political science is a protest activity in the form of refusing to do a task and a kind of fine that aims to force a sanctioned one to obey a law. These days, this type is used more in-country, and it is on the other side of economic sanctions.

Economic sanctions are mainly applied in two ways: commercial and financial sanctions. The commercial

sanctions are associated with limiting or cutting off all kinds of import and export relationships. The financial sanctions limit, restrict and put pressure on the country's financial affairs. In other words, investment, finance and financial transactions are under pressure in sanctioned country. In a study on the effectiveness of economic sanctions, the result was that 176 economic sanctions took place between 1914 and 1990, of which 66% were unsuccessful and 34% were only relatively successful.

USA is the largest consumer of the economic sanctions system

These statistics show that economic sanctions have not been successful in whole. Since 1973, 24 percent of the economic sanctions have been relatively successful. The only successful cases mentioned in the history of economic sanctions are sanctions against South Africa, the South African

racist regime and Rhodesia's racist regime in Zimbabwe.

Between the First World War and 1990, approximately 75 years term, a total of 115 economic sanctions against various countries were passed and implemented, in other words, there were an average of 1.5 sanctions per year. But since 1990, the number of economic sanctions has increased sharply. Meanwhile, the US government has had the largest share in the use of economic sanctions policy. In total, two-thirds of the world's economic sanctions have been imposed by the US government.

During the period from 1918 to 1990, USA accounted for 77 cases of the total 115 global economic sanctions, 67 percent of total sanctions. During the 1990-1999 period, the US share of total economic sanctions rose to 92%. Only during Clinton's first term, the US government implemented 61 economic sanctions against 35 countries

with a population of 2.3 billion, representing 42% of the world's total population and \$790 billion of exports, representing 19% of world exports.

Why economic sanctions?

In today's world, no country rely solely on its internal resources as a source of production, but it relies on international sources to increase production power and tries to multiply its consume of external sources in comparison to internal resources utilization. In this case, the first major effect of sanctions is the reduction of international and non-domestic sources. By this way, the resources from other countries do not enter the domestic economy of a country. As a result, the economy cannot rely solely on domestic resources on the path to growth. Given the sanctions, foreign exchange earnings of exports have fallen far short, and this has led to a recession in production for exports, so the country would lag from competition in foreign markets and remain in a kind of economic trap.

The most important of these international sources is oil. Oil is a political factor more than an economy commodity, and it is even one of the most important pillars of political power in countries like Saudi Arabia. Therefore, whenever there was a sanction, it should wait for its consequences in the global oil market and black gold producers and consumers. But the problem that separates oil from other sanctions items is that it is a removable weapon in the hands of consumers and manufacturers. In the other word, sometimes oil producers

have defeated big economic powers and have made them to retreat, and at the other times consumers have pushed back the producing country by putting pressure on oil production and sales.

In fact, due to the political neglect of the producers, the oil that was once in the hands of its producers is now in the hands of its consumers who once suffered from major sanctions.

Three oil sanctions; western war with oil

By the 1990s, oil weapon was largely used by producers to put pressure on consumers. The three major oil sanctions of 20th-century, namely 1956, 1967, and 1973, all of which arose from tensions between the Arabs and the West, could reveal the fact that, due to the relative convergence of producers, oil has been the most strategic weapon in facing the West, because oil is like blood for the modern era economy. Due to the experience of these three oil sanctions, in particular the 1973 sanction, the West decided to establish bilateral agreement with Arab producers. By this way, the oil weapon was taken out of the hands of the producers.

The first sanction in 1956 was imposed because of Suez Canal nationalization by the government of Gamal Abdel Nasser, which took place on October 29, 1956, with the retaliatory attack of Britain, France and Israel to Egypt. This war began with the attack of Israel to Sinai Peninsula and less than a week after that the intervention of France and

Britain made the Egyptian army to retreat. However, the Suez Canal was closed and the pressure of Soviet and America caused the three aggressor government to accept a ceasefire on November 7.

In response to the eight-day aggression of the three countries, Saudi Arabia, which signed a security agreement with Egypt a year ago, imposed a ban on oil exports to Britain and France.

On the other hand, a Syrian national group blew up the Kirkuk-Baniyas pipeline. This pipeline allowed Iraq to transfer its oil to the Mediterranean Sea. This was both a punishment against the king of Iraq, Faisal II, and his ally, the UK. Although this sanction was the start of using oil in international conflicts, experts believe that its economic impact has been minimal.

Oil sanction in the Six-Day War

The Six-Day War occurred in 1967 between Israel and the countries of Egypt, Jordan and Syria. Following the spread of rumors that US, UK and West German aircraft bombed Egyptian military planes at the beginning of the 1967 war, oil sanctions were announced by some Arab countries against the West.

The purpose of the sanction was to prevent Western countries from giving military aid to Israel in the war against Arab countries. The sanction began on June 4, 1967, and officially ended on August 29, 1967. Among Arab countries, Saudi Arabia and Kuwait argued that

if sanctions were to continue, they would lose the oil revenues they needed to rebuild their economy and army.

They also believe that lifting the sanctions will encourage the West to act as a counterweight to the influence of Communism in the Middle East. The 1967 sanction failed to achieve its goals. Among the reasons for the failure of the sanction in this period, there was the use of the Arabs to neutralize domestic political problems included civil disobedience and public anger. The sanction in this period should be considered as an advertising measure to show solidarity with Arab agents, not a real economic war.

The sanction led to a recession and high inflation in the west, which continued until the early 1980. In order to cope with the crisis, the United States had to make decisions such as fixing prices and rationing gasoline. In the USA, according to vehicle number plates, people were allowed to refuel in the odd or even days of the month.

The most important result of the 1967 sanction was the establishment of the Organization of Arab Petroleum Exporting Countries (OAPEC) along with OPEC. The failure to coordinate the 1967 sanction and the idea that Arab oil could be used for political purposes encouraged Arab oil producing countries to establish OAPEC in 1968.

OPEC is an organization with non-political goals that not all of its members are Arabs, and not all the Arab producing countries, have joined it. Therefore, from the perspective of the Arabs, an

all-Arab oil organization should be established to pursue the political goals in necessary cases.

Sanctions on oil sales; Boost prices

The Yom Kippur War (Yom Kippur is the holiest day in Judaism) began October 6 to 25, 1973, by an association of Arab countries which led by Egypt and Syria against Israel with the aim of taking back the lost lands in the Six-Day War. The Sinai Peninsula, the Golan Heights and the northern part of Israel were among the areas attacked by the Arabs.

This war became a Soviet-American proxy war. On October 17, 1973, the Organization of Arab Petroleum Exporting Countries, composed of OPEC Arab Members, plus Egypt and Syria, announced that they will stop selling oil to Israel supporter countries. The United States and the Netherlands were among sanctioned countries because of their logistical support.

The Arabs hoped that the international community would put pressure on Israel to enforce UN Security Council Resolution 242 by persuading US to take neutral stance. Resolution 242 was proposed by the United Kingdom on November 22, 1967, and it was adopted on the sixth chapter of the United Nations Charter. This resolution required the Israeli side to retreat to the pre-war borders of 1967.

At the same time as the Yom Kippur War, by using their influence on the price adjustment mechanism, OPEC members tried to increase oil

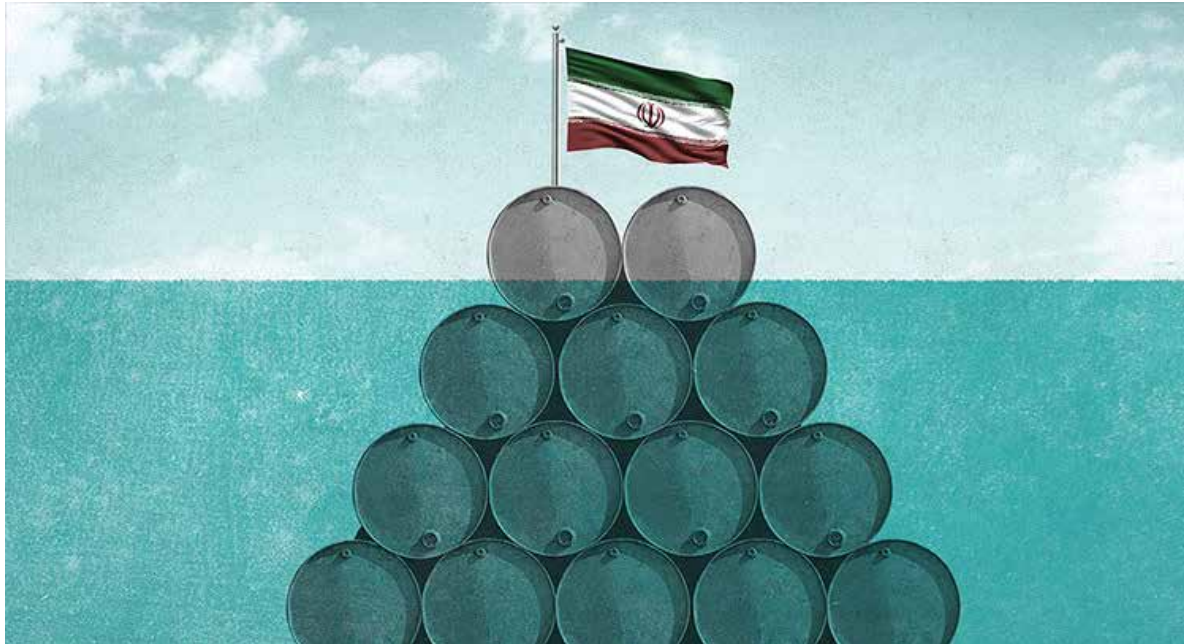
prices to four times more than before. By this way, OPEC crude oil prices rose from \$ 3 to \$ 12 per barrel. This approach came when the “Seven Sisters” negotiation with OPEC earlier that month finished without any conclusion.

The 1973 oil sanction led to rising fuel prices, rationing petrol and shortage of it. The impact of the 1973 sanctions was such that it led to significant changes in US foreign policy. In the period of rising oil prices, not only the Arabs played a direct role, but regional west allies such as Mohammad Reza Pahlavi also emphasized the importance of this increase.

The beginning of turn oil power towards consumers

The sanction led to a recession and high inflation in the western countries, and it continued until the early 1980’s. This issue became so widespread that Alexandre de Marenches, the former director of the SDECE French external intelligence services, in his book “The Fourth World War”, considered the October 1973 oil sanction, not the Cold War, as the most dangerous era of the West in the 20th century. In the term of the oil sanction against the West and the rise of prices, Richard Nixon began a series of efforts to change the global financial balance in favor of oil-consuming countries. The United States was forced to address its foreign policy challenges due to its long-term dependence on foreign oil, in order to resolve the issue of sanctions.

The British government’s



documentation on January 2004 has been stated that during the crisis, the United States has been trying to attack Saudi Arabia and Kuwait. This plan was designed to capture oil fields in those countries.

There were other plans, such as the replacement of Arab governors with the biddable leaders, which were left by US officials because of the concerns about public's protests. By abandon such plans, changed Nixon's trend toward diplomacy. Henry Kissinger, United States Secretary of State in that time, went to Saudi Arabia and offered a security offer to the Saudi rulers. Their goal was to ensure that sanctions like this would never be imposed against the United States.

Saudi Arabia's betrayal of oil alliance

Despite the abundance of Saudi oil, one of the most important reasons they agreed to this proposal was the lack of an

army that could protect them from the enemies around them. At that time, these enemies were included Iran, Iraq, and Israel. The Arab oil sanction ended in March 1974, with the improvement of relations between the United States and Saudi Arabia and the emergence of a prospect of negotiations between the Arabs and Israel. With the same reason in the 1990s, the United States imposed a sanction on food against Saddam Hussein. In recent years, imposing oil sanctions against Iran is the second use of the oil option as a source of pressure against the producer country. Oil sanctions against Iraq led to the death of 500,000 Iraqi children in the 1990s. The effects of oil sanctions on Iran 1990 - 93, although it was not similar to Iraq, imposed a great bad effect on the Iranian economy.

After that, the conditions have also progressed as the same. Except for a few cases, such as the North Korean case where

the United States has imposed sanctions to disarm the country and confront the communists, in other cases it has been the economic advantage that has created reasons for sanctions.

In the last cases, it can be revealed in increasing tariff on import from China as the main competitor of the United States in the global economy. Or, even in the case of Venezuela, although the purpose of the sanction was announced the government's withdrawal from communist measures, a look at the US oil market and increased production of unconventional oil shows that the main goal is to remove Venezuelan oil from the market and replace it by American oil.

In fact, the sanction, described as a political weapon for punishing and controlling governments, is the tool that has done most of the service in the economy to provide maximum benefits to the imposer of it.

Which right?

Why war and sanction are two sides of the same coin?

«CATHERINE: LET'S DROP THE WAR.
HENRY: IT'S VERY HARD. THERE'S
NO PLACE TO DROP IT.»

A Farewell to Arms
Ernest Hemingway

The story began from the France Revolution when a concept for the first time had been introduced far from the ideas of thinkers and that was Human Right to demonstrate both the preference of human and his innate right to life particularly a better one!

Both of these predicates have been taken into consideration since the first one came true within a birth of a human and the second one was a new step according to which more emphasis on it have been seen in the history but this time it varied. Considering the human as the interpreter of nature and not only its subject, that was totally changed to the object and the borders of cognition in retrieving "things are as they are" had not been conceptualized. That was the time Francis Bacon said: "We cannot command Nature except by obeying her".

This view of conquest of the nature and the world aiming at welfare occurred after the Industrial Revolution and brought about some changes in the France Revolution in terms of epistemology. The perspective entered the human into a modern era which was called *Age of Enlightenment* as the appetite to capture welfare and the maximum utilization caused him to present any acts and that was finally led to a norm that has its justifications named “*welfare right*”.

Achieving the welfare which evoked the

of slaughter equipment led humans to contest for their rights and ignore the innate rights of others.

Growing development through industrial production and urgent need for basic requirements forced the human to extend war equipment with the purpose of conquest more than ever. On other words, these two can be defined as wings of a bird i.e. economical development along with war equipment extension. As human needs increased for prosperity and welfare, the devices also improved in a new shape, and this trend continued until an

a global plan to determine the extent of this conquest. The “*Community of Nations*” was the plan in which the rights of each nation were supposed to be respected. However, *Treaty of Versailles* put an end to this plan right at the beginning because it ruined the ideas formed in the mind of defeated countries who believed that the treaty aims to benefit the victors and then the world entered to bipolar era.

At the meantime, thinkers referred to the necessity of return to self and the priority of the nature once again in a way they had to exploit weapons to gain the lost “right”!

The Word War II was so destroying that changed the innate of the world

human since the establishment of local governments of the Greece, encouraged the man during the post revolution era to create tools to gain the second right in response to putting an end to the others’ first right. Therefore, increasing production of weapon with the purpose of conquest motivated human beings to fight against each other and make the nature the war zones to obtain welfare. The war have accompanied human from the beginning of his creation. However, this significant reform in the ideas of thinkers along with the increasing development

extensive war formed to seize the interests.

The World War I was the first product of the “convergence” of economic interests and the development of war weapons which made the world undergo a radical change. Meanwhile, countries that had historical monopolies had been destroyed and ideas emerged as a product of wartime. When it comes to war, we talk about blood, life, and death at the same time which is not the purpose of the following piece of writing.

The impact of the World War I was so deadly that provoked the political thinkers to create

comprehensively and the human lived in the middle of the fourth decade of the 20th century grasped the bitterness of conquest the world. The nightmare accomplished when the last achievement of the human in producing military equipment landed in Hiroshima. The human realized that the last point is a disaster and misery life not prosperity and welfare. Therefore, after centuries, the human has come to the absolute conclusion that defeat and death might happen as the world attempt to join the war for economical



GROWING DEVELOPMENT THROUGH INDUSTRIAL PRODUCTION AND URGENT NEED FOR BASIC REQUIREMENTS FORCED THE HUMAN TO EXTEND WAR EQUIPMENT WITH THE PURPOSE OF CONQUEST MORE THAN EVER.

development and as logic replaced by the force. So this time, with more determined decision they established the United Nations, to both defend the public interests and step toward a fair and balanced (not equal) development.

Creation of the United Nations along with organizations such as Global Bank Corporation, International Monetary Fund, and World Trade Organization demonstrated that the bad memory of war to gain interests faded away and forced the modern human to make a fundamental decision to both provide the interests of countries and prevent worldwide wars.

The economy was the success key of the human and its achievement could be defined as economical convergence in a way that countries benefit from the large interests cake of the world to the extent of their capability. However, the developed- oriented human misused this tool, redefined the occurrences of the 20th century and started a modern war based on economy which was not the

bullet but *Sanction!*

Sanction in its nature is not a new phenomena and existed since the human lived but after the World War II and the economic stress it changed totally and became a tool to confirm ideas.

As the East and the West encountered a dangerous contrast against each other during the cold war, the human chose the *Soft War* which was the product of the United Nations through the sanctions instead of the hard one and then as the interests have been divided between countries that was the belligerent country who imposed the sanctions.

Disruptions in the economical trend of a country were the same right that the human ignored it during the war i.e. "*welfare right*". Meanwhile, countries with more economical power could exactly pave the wave to achieve their goals against human rights.

Considering the economical sanction's history which is not the sign of an absolute victory of the countries it comes from,

it clearly brings about a major disturbance in the human's life. This occurrence which is the product of the new era is the war with a modern tool as it agitates the life of a human and endangers the human right in general and his right to life in particular.

What gathered the public to lead a better life together was called "the United Nations" to prevent the war, while only the concept has changed, and as long as it exists for biodiversity, the war is taking place.

As it has been argued at the beginning, there is no way to escape the war for the human unless we return to the thoughts; it must be accepted that man's "existential" is not in the production and work as Marx declared; it is in the ethics and rationality. This is the point that always is neglected, and this is a historic neglect that does not end with constant wars!



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European Commission's Deputy Director-General for Mobility and Transport:

IRISL, significant partner for european industries



Ms. Maja Bakran Marcich held various positions in the Croatian Ministry of Foreign and European Affairs between 1996 and 2016. Based in Brussels from 1999 until 2011, she was responsible for horizontal coordination of the Croatian accession negotiations. In 2011, she moved back to Zagreb and was responsible for setting up and management of the system of national coordination of European Affairs. In 2015 she became Assistant Minister for Europe in the Ministry of Foreign and European Affairs.

On 1 December 2016, she became Deputy Director-General in the Directorate-General for Mobility and Transport, responsible for coordinating the activities related to investment, innovative and sustainable transport, in support of President Juncker's political priorities.

Payam Darya magazine has managed to conduct an exclusive interview with Ms. Maja Bakran Marcich, you will browse the transcript of this interview in the upcoming section.

Given US unilateral withdrawal from the JCPOA, what plans and strategies do you have for keeping maritime cooperation with Iran?

As you may well know, the numerous statements have come out from EU Foreign ministers and the high representatives in this regard so far, the European Union has regretted the re-imposition of sanctions by US. On the European side, we firmly support JCPOA and now we are engaged with member of states to see that in this situation, what kind of technical means can be found, so that we can work together and continue our cooperation with Iran. We need to exchange information and know about each other's methods and legislations to prepare the necessary grounds for cooperation, and we do hope to see further improvement in our relationship with Iran in the near future.

Do you think that considering the new conditions, it would be possible for Iranian ships to

commute to European ports?

At this moment we are closely studying the current situation and the relevant legal documents. The next step is to discuss with the Member States and to decide on our future positions.

What do you think about the role of IRISL in expanding cooperation?

Iran is very important country and has a very strategic position. Looking through history highlights that certainly, Iran has the potential to be a very important logistic part in the near future, based on this, Islamic Republic of Iran shipping line as a national company can be remain as a very significant partner for European industries.

Recently, one of the most important issues in the shipping industry is the implementation of IMO low-sulphur law from January 2020, what plans does EU have in this regard?

EU has been very active in

negotiations on this issue. We fully support the IMO decision. In the EU we already have experience with introduction of low-sulphur standards, and they are very useful. It is critical for all in the business to prepare, and to start preparing on time. EU plays a leading role in accepting and implementing new standards, as you may know, in the north we have sulphur-free zone for quite some years. Therefore, we enjoy very good and constructive experience. From January 2020, our ship owners will have to adapt to them and we are sure that this will be possible.

Do you think that the shipping industry is ready to accept this new strict law?

Shipping industry needs to wake up, and to start with very serious preparations. We had a big debate in Europe as well, there is certainly sufficient time, and we are calling on all to start working.

Secretary-General of PIANC:

Iran has very skilled coastal and port engineering experts





By: *Fatemeh Moonesan*

As of June 2017, Geert P.M. Van Cappellen was appointed as Secretary-General of PIANC, the World Association for Waterborne Transport Infrastructure. PIANC is the forum where professionals around the world join forces to provide expert advice on infrastructures to facilitate the growth of waterborne transport. Established in 1885, PIANC continues to be the leading partner for government and private sector in the design, development and maintenance of ports, waterways and coastal areas.

As a non-political and non-profit organisation, PIANC brings together the best international experts pertaining to waterborne transport infrastructures. Members include national governments and public authorities, corporations and interested individuals.

Payam Darya magazine has conducted an exclusive interview with him, you will browse the transcript of this interview in the upcoming section.





Considering that Iran is the most qualified member of PIANC in the Middle East, in what ways you are going to promote your cooperation with Iran?

Indeed, we have a very active and well performing national section of PIANC in Iran, because in this country, we have found very fruitful sources to exchange information and innovations. In Iran, there are a lot of qualified and very skilled people involved in coastal and port engineering as well as in the study and management of coastal systems. It is truly a benefit that we have what we

call the triple helix. When you combine the academic world, the government and private sector, we notice this reinforces the exchange of ideas, innovations and experiences. One of the main objectives of PIANC worldwide is to facilitate the exchange of expertise and the other one is to connect people together.

It is an interesting idea to look at how to assist the further expansion of PIANC's presence in Iran. Basically we should try to be a bit more visible. In the sense that we are a technical association, relatively well known within the sector, but

not really outside the sector. I am very pleased to see continuous efforts of Iranian section of PIANC to get more people to participate at the big international PIANC-events and in our working groups.

Given the US unilateral withdrawal of JCPOA and re-imposing sanctions against Iran, what do you think about the outlook of mutual cooperation?

In a certain way, if you look at the core business of PIANC which is focusing on exchanging expertise, innovation, information and practical experiences and Connecting people, I do not think that we are subjected to these sanctions, but of course sanctions have an impact on maritime transportation and as such on the demand for maritime infrastructure and ports. You have to remember that PIANC is an international non-profit organization focused on sharing and coming together, this is a very peaceful and very friendly ambition. Of course there will be some practical difficulties that will arise, but I don't see big problems for us.

As one of the main concerns of your association is marine environment protection and we are approaching the deadline for implementation of low-sulphur fuel law, what plans do you have in this regard?



IN IRAN, THERE ARE A LOT OF QUALIFIED AND VERY SKILLED PEOPLE INVOLVED IN COASTAL AND PORT ENGINEERING AS WELL AS IN THE STUDY AND MANAGEMENT OF COASTAL SYSTEMS.

IMO is looking at the vessels and PIANC is an organization which is looking at the infrastructure side, from that perspective, PIANC is very strong proponent of working with nature. This concept uses an approach that natural effects are a friend of the engineer and you let nature do part of the work. This is a very sustainable and in several cases a cheaper solution. As we are infrastructure focused, the low Sulphur law has no direct effect on our plans. In the coming months PIANC will publish Workgroup Report Marcom 159 titled Renewals and Energy Efficiency for Maritime Ports, dealing with renewable energy and energy management in ports. Obviously to reduce emissions within the port area, shore connection or cold ironing is part of the solution. Further attention of PIANC

goes to the environmental risks and benefits of the concept of slow steaming as it can limit the steering capability of vessels and as such impacts the design of harbor approach channels. An update of this report of PIANC is also underway.

What is the role of your organization in developing intelligent ports?

At PIANC, we are indeed getting more and more topics and proposals and establishing working groups for reports dealing with advanced automation, smart shipping and intelligent terminals. The downside is the cyber security and the protection which needs to be increased. In this field a paper will be published within a month or so, in order to create more awareness for the weaknesses of all the kinds of IT-systems that are used

onboard and onshore which impact safety. Quite often infrastructure administrators tend to underestimate their vulnerability.

What is the impact of automatization and technological advances on work force?

They will reduce the workforce, we can decrease the number of people who are working in loading and uploading sectors due to the automated process, but on the other hand we need more people for supervision and controlling, cyber security officers and so on, therefore I do not think it will lead to extreme reductions of the workforce but the nature of jobs available will be changed forever.

Dethroning of the dollar



US' misuse from sanctions has prompted many sanctioned countries which account for about 25 percent of world population to omit gradually dollar from their economy and seek to replace it, an issue that has sounded the alarm over the Survival of the US dollar.

Due to Geographical distance from the major battlefields of Second World War, US was least affected by war in terms of the infrastructure destruction. Alongside it, the immigration of European elites during first and second world wars caused that US could grow its economy faster than its European rivals. This matter increased the power of US dollar in the world. The most important reason of US power in that period was that this country controlled two third of world gold reserves and could convert dollar to gold. Therefore, other countries fixed their currencies to the U.S. dollar, since US dollar became the reserve currency and was tied to gold at a fixed exchange rate.

In this agreement which was called Bretton Woods Agreement, the role of dollar in stabilization of US hegemony was more colorful than military power or political alliances. The reason was that all dollar transactions throughout the world were done according to the US domestic regulations.



What is the origin of dollar homogeny?

In the final months of Second World War, 730 agents from 44 countries in Bretton-Woods were gathered to make a decision about an international financial system. During 21-days negotiations, the agents from different countries finally signed Bretton Woods Agreement.

Based on this agreement, a financial system including regulations and institutions for regulate global financial system was created. The creation of International monetary fund (IMF) and International Bank for Reconstruction and Development (IBRD) which nowadays are part of Global Bank Group were part of written warranties in the agreement.

Giving a dominant position to US currency in the world economy was the most important element of the agreement. In order to convert currency, the countries settled their international balances in dollars, while U.S. dollars were fully convertible to gold. Bretton Woods Agreement could provide an opportunity for establishment of a new international financial system which has not the disadvantages of gold standard system and would not repeat the experiences of the Great Depression of 1929.

Based on Bretton Woods Agreement, member countries committed to maintain fixed exchange rate



between their currencies and dollar. If the currency value of a country became so weak relative to dollar, the central bank of that country would buy up its currencies in the foreign currencies markets, this matter would lower the currency's supply and raise its price.

Moreover, if the currency value of a country became very strong relative to dollar, the central bank of that country would increase the supply and decrease the price through printing more money. Based on this agreement, nations accepted to redeem its currency for U.S. dollars, not gold.

But this preeminent position was resulted from US largest gold reserves. In a nutshell, the value of dollar was increasing relative to other currencies. Even though, the value of dollar relative to gold was fixed during the implementation of Bretton Woods Financial System, but the demand for dollar was increasing every

day. The strong value of the U.S. dollar eventually led to the collapse of this system after more than 20 years.

Under the Bretton Woods system, the US politicians have assured the world that US dollar is a trusted currency, while the link between gold and international value of US would remain. However, Throughout the 1960s, the excessive supply of U.S. dollars on Forex markets in exchange for other currencies, military expenditure and foreign investments seriously threatened this system.

An attempt to maintain the new structure of dollar

The significant point was that gold-dollar parity indicated that amount of dollar bills and coins in circulation were more than the country's reserves. Based on the agreement, US had to decline the value of dollar. The bubble of dollar price was a

main concern when the U.S. trade deficit widened due to giving loans to foreigners and raising the cost of Vietnam War. For solving this problem, US government decided to cancel the right to redeem dollars for gold which was committed in Bretton Woods Agreement by this country. This action was meant to the collapse of the Bretton Woods system.

In that time, there was a need to a new structure, finally, Smithsonian Agreement announced in December 1971 and created a new dollar standard. Based on this, US committed to maintain the link between dollar and gold, also at the same time, it agreed on a devaluation of the dollar (8,5%) against gold. however, the pressure of financial markets was resulted in further weakness of dollar value. In this time, no attempt was made to maintain Bretton Woods System and finally in 1980, all industrial countries joined to the system

of floating exchange rates.
Saudi Arabia to trade oil in U.S. dollars,

The US did not want to lose the dollar homogeneity which has been maintained for around four decades. For this purpose, an agreement between US and Saudi Arabia was obtained. Based on this, US committed to protect the security of Saudi Arabia against the enemies, instead, Saudi Arabia committed to only trade oil in U.S. dollars.

This decision was critical for keeping the position of US dollar in the international trade, in a way that nowadays, the circulation of 1.6 trillion USD oil trade in the world is one of the main challenges of financial systems which are independent of the dollar. The term of petrodollar was a result of the oil crisis in the mid-1970.

Petrodollar gave US a great power and lifted its economy to new heights and it elevated the U.S. dollar to the world's reserve. Based on this structure, oil was traded in dollar and surplus of dollar revenues of oil-producing countries was reinvested in securities of US Department of the Treasury. Through this circle, US financial markets made use of the liquidity source and the flow of foreign investments. Because dollar surplus which returned from oil-producing countries to US financial markets did not consume for goods and commodities, therefore, Petrodollar did not lead to inflation.

Petrodollar system made a big contribution to keeping the

position of dollar in the period of post-Bretton Woods. The role of agreement between US and Saudi Arabia in the mid-1970 was very critical for maintaining Petrodollar system. Under the framework of cooperation between US and Saudi Arabia, all oil-exporting countries decided to use dollar in their oil trade.

World statistics also suggest that dollar is a dominant currency in the international transactions. According to Bank for International Settlements (BIS), in April 2016, at least one party in 88 percent of international transactions traded in US dollar.



**GIVING A
DOMINANT
POSITION TO
US CURRENCY
IN THE WORLD
ECONOMY
WAS THE MOST
IMPORTANT
ELEMENT OF THE
AGREEMENT.**

However, largest economies such as China and Russia have taken measures to omit dollar. For instance, now, China uses yuan for purchasing oil from Angola, gas from Russia, coal from Mongolia and soya from Brazil.

On the other hand, the attempt of BRICS members for omitting dollar from international transactions is the best organized action. Trump's foreign policy has put the dollar at risk and efforts have been accelerated to omit this currency from international transactions, US has always shown that for protecting its economic interests would resort to everything even the option of war. Now, here, this question is raised that if the attempts to decline the value of dollar will result in a new world war?

Nowadays, the US has started an economic war against 20 countries with a population of over two Billion people and GDP value of 15000 Billion dollar. This economic war against countries is separated from imposing sanctions against individuals and various nations, sanctions which unfairly deprive those of accessing to financial resources. These sanctions by the U.S. are pushing other countries to find alternative for dollar. There is no shred of doubt that destructive financial policies will lead to a collapse in the dollar.

The Rise of Chinese Yuan against US Dollar

“Kirill Dmitriev” CEO of Russian Direct Investment Fund (RDIF) has announced



IF THE CURRENCY VALUE OF A COUNTRY BECAME VERY STRONG RELATIVE TO DOLLAR, THE CENTRAL BANK OF THAT COUNTRY WOULD INCREASE THE SUPPLY AND DECREASE THE PRICE THROUGH PRINTING MORE MONEY.

beginning of national currency exchange in the international transactions between China and Russia.

Moreover, in the forum of BRICS members (Brazil, Russia, India, China and South Africa) which was held in July, this decision has been made that with the invitation of countries such as Turkey, Jamaica, Argentina, Indonesia and Egypt and in order to trade independent from dollar, the union of BRICS Plus be established. All of these events and decisions suggest beginning of a new generation international financial trade.

In order to support JCOPA, EU is trying to set up a financial system independent from dollar. On the other hand, despite the pressure from some members of US congress, but white house is concerned that if trump targets swift, it will persuade other world powers to establish an international financial system with their own currencies. Consequently, dollar will lose its dominance and its value.

Based on this analysis,

European diplomats believe that intensifying financial limitations against Iran by US will increase the risk of establishing an alternative financial system which in this case, dollar's dominance in global market will be broken.

But the most important warn to US with regards to depreciation of the dollar was given from Saudi Arabia. Although during the recent decades and following close tie between dollar and oil, Saudi Arabia has acted as a safe ally for US, but during the US presidential election, this country understood a major risk.

In the presidential campaign, trump proposed a slogan which made Saudi Arabia worried as long as this country is seeking a new economic structure for facing financial crises. Even though there is a long way until the desirable point and Saudi Arabia has not made a considerable progress until now. There is uncertainty over even selling shares of oil company Aramco which was supposed as the first step in this regard.

What was an alarming for Saudi Arabia?

In that period, Trump announced that US is seeking to halt oil imports from the Middle East and it does not want to tie its Energy security to another country.

Based on this, although Saudi Arabia is a strong ally for US, but has tried to not consider dollar in all transactions, this matter caused that ongoing negotiations for selling Saudi Arabia oil to China is based on Yuan.

Provided that Saudi Arabia accepts to trade oil in Yuan, other oil markets will support this action.

In a nutshell, it can be asserted that China is turning into the biggest player of oil market and Saudi Arabia has to consider this issue, because the demand for Chinese oil will overtake from US in the future.

Bulletin

**Asia; the future of
world's energy**



Major box carriers unite to drive digital harmonisation

Maersk Line, CMA CGM, Hapag-Lloyd, Mediterranean Shipping Co and Ocean Network Express converge to form a new carrier association that aims to bring an industry standard to core IT practices. The non-profit body aims to be up and running by early next year.

The carrier association is inviting other lines to join the initiative, which will be openly available and free of charge to all stakeholders

LEADING box carriers plan to unite behind a new association to promote common information technology standards across the container shipping industry.

The new body is being set up by Maersk Line, CMA CGM, Hapag-Lloyd, Mediterranean Shipping Co and Ocean Network Express.

They say the association will look to pave the way for digitalisation, standardisation and interoperability.

“Whilst the shipping industry already has multiple organisations and associations, the members of the group identified a need for a neutral and non-profit body for ocean carriers that is driven by delivering benefits for the industry and its stakeholders,” the founders said in a joint statement.

Other lines will be invited to join the association once it is operational early in the new year.

The founding members are confident that all the major carriers will sign up to the initiative.

Information technology executives from each of the five carriers are currently discussing the proposed standards that will be openly available and free of charge to all industry stakeholders.

Group spokesperson André Simha said that the timing of the directive was right, as emerging technologies created new customer-friendly opportunities.

“Together, we gain traction in delivering technological breakthroughs and services to our customers compared to working in our own closed silos,” said Mr Simha, who is chief information officer at MSC.

The association does not intend to develop or operate a digital platform as part of the group.



Commercial and operational matters will not be discussed.

“We are looking purely at how we can standardise and harmonise message exchanges between carriers, customers and third parties,” Mr Simha told Lloyd’s List.

Such exchanges will be vital if separate digitalisation initiatives being undertaken will prove successful, he said.

For example, in the case of blockchain, whether Maersk’s partnership with IBM or the Global Shipping Business Network alongside logistics software vendor CargoSmart, it will only work if information is shared in a uniform fashion, explained Mr Simha.

“This is where we would fit in. Carriers can build their own software but we would be able to provide some underlying standards and governance,” he said.

The carrier association was being announced after a [survey](#) of more than 200 senior shipping and technology executives by INTTRA, operator of the world’s largest container freight network, revealed that 91% considered the creation of agreed data standards between carriers as essential

The new five-carrier association is subject to regulatory approval.

Asia to dominate energy demand by 2040, forecasts IEA

Forecasts from the International Energy Agency conclude that the dominant players in the sector, especially the United States and China, will need to find ways to work together in spite of trade disputes. Meanwhile, the transformation of the electricity sector will drive economic growth and enable emission reduction strategies, especially in developing economies. 13 Nov 2018

Geopolitics will play an increasing role in the energy business in the period to 2040, as US production and Asian demand rise in prominence, according to the latest analysis from the International Energy Agency **THE SHALE GAS BOOM IN THE US IS GOING TO GROW ITS ROLE AN EXPORTER OF COMMODITIES SUCH AS ETHANE GAS TO OTHER PARTS OF THE WORLD IN THE FUTURE.** WITH more than 70% of future global energy investments expected to be government-driven, it means politicians will have to draft the right policies and incentives to clean up energy supplies.

“The links between energy and geopolitics are strengthening; this is a major factor in the outlook for energy security,” according to Fatih Birol, executive director of the International Energy Agency.

Speaking at the launch of the IEA’s World Energy Outlook, Dr Birol said that more than 70% of the \$42trn in investment forecast as part of the agency’s New Policies Scenario “is either conducted by state-directed entities or responds to a full or partial revenue guarantee put in place by governments”.

Little more than one-quarter of investment comes from private enterprises responding to prices set on competitive markets.

Energy market trends over the past 20 years and out towards 2040 reveal a profound shift in energy consumption to Asia, which is felt across all fuels and technologies, as well as in energy investment. Asia makes up half the growth in natural gas, 80% of the increase in oil, more than 100% of the growth in coal and nuclear.

In 2000, European companies dominated the list of top power producers, measured by installed capacity; now six of the top 10 are Chinese.

Meanwhile, the shale revolution has enabled the US to pull away from the rest of the field as the world’s largest oil and gas producer. IEA forecasts suggest that by 2025 nearly one in five barrels of oil and one in four cubic metres of gas will come from the US.

This is creating an increasingly complex network of trade flows because Asia’s share of the oil and gas trade rises from about half today to more than two-thirds in 2040.

Among other observations made in the World Energy Outlook is the dramatic transformation of the electricity sector, especially in developing economies, where a doubling of demand puts cleaner, universally available and affordable electricity at the centre of strategies for economic development and emissions reduction.

Shipping will need to reflect on the forecast that natural gas will overtake coal in 2030 to become the second-largest fuel in the global energy mix. Trade in LNG is expected to double in response to rising demand from developing economies, led by China.

“By 2040, LNG will become the predominant way of moving gas, over pipelines,” Dr Birol said, underlining China’s strategic choice of this fuel as a way to reduce air emissions at a time of rapid urbanisation.

India also rises in significance as global energy demand changes. In 2017, China overtook the US as the biggest source of demand. China is predicted to dominate demand by 2040.

However, it is the increasing demand from India that looks likely to create a major market in the 2030s. India is pushing strongly to expand the role of renewables in the energy mix, but robust growth in electricity demand still means a near-doubling in coal-fired power output to 2040.

In conclusion, the IEA warns that the greatest risk of an energy supply crunch comes in the oil sector, where the average level of new conventional crude oil project approvals over 2015-2018 is only half the amount necessary to balance the market out to 2025.

US shale oil will not be enough on its own.

“The US would need to add another Russia [in terms of oil production] by 2025 if this gap is to be filled,” Dr Birol said. By contrast, the risk of an abrupt tightening in LNG markets in the mid-2020s has been eased by major new project announcements, notably in Qatar and Canada.

In answer to a question about sanctions on Russia and Iran and trade disputes between the US and China, Dr Birol commented: “Trade disputes are here today and will be here tomorrow, but LNG exporters and importers will find a way to do business.”

IMO secretary general set for second four-year term

The International Maritime Organization Council meeting next week is expected to endorse IMO secretary general for another four-year term at the helm. With no other candidates so far, a proposal to extend Mr Lim's tenure beginning in 2020 will likely pass without opposition.

The IMO Council will discuss next week granting Kitack Lim a second term as secretary general beginning in 2020

INTERNATIONAL Maritime Organization secretary general Kitack Lim will likely receive the organisation's official blessing next week to carry on for a second four-year term starting in 2020, Lloyd's List understands.

The IMO secretariat has proposed to the IMO Council, the 40-member state governing body convening in London next week, to endorse Mr Lim for a second term, all but ensuring four more years for the secretary general.

His first term ends on December 31, 2019 and he is eligible to serve for one more.

There are no other candidates that have been put forward to the Council ahead of the meeting, Lloyd's List understands.

Mr Lim's tenure is under consideration over a year before his first term ends to allow for any other nominations and a potential election during the next Council meeting, in the summer of 2019. Next week's Council meeting will decide whether there will be an election in the summer of 2019 and will subsequently call for nominations of potential secretary generals until March 2019.

But given the lack of candidates at the moment, elections appear to be highly unlikely scenarios and Mr Lim should be officially endorsed next week.

IMO delegates have privately noted that attempting to unseat a secretary general is a



politically contentious move that would probably receive insufficient backing and undermine that member state's standing among other countries.

The IMO Assembly, consisting of all member states and meeting following the summer of 2019 Council session, would be asked to confirm the Council's decisions. Assembly has traditionally endorsed the Council's choice.

Discussion over Mr Lim's tenure next week will coincide with consequential debate on what reforms the IMO will undertake over the next few years to strengthen its governance and levels of transparency.

Public access to IMO meetings, media coverage, the role of organisations in the IMO, as well as the Council's power in policy making are all under consideration and a cause of disagreement among member states.

Hapag-Lloyd sets out Strategy 2023 vision

After being one of the main drivers behind the latest wave of consolidation, German carrier Hapag-Lloyd now wants to focus on customer service instead of growing larger.

Digitalisation, customer service and cost control are the key concerns as Hapag-Lloyd sets its sights on the next five years.

HAPAG-Lloyd, the Hamburg-based container line, has set out a five-year plan that will see it focus on customer service rather than further acquisitions.

“We do not see any further consolidation among the big six [carriers], only among the smaller players,” chief executive Rolf Habben Jansen told analysts at the company’s first capital markets day. He added that the marginal returns achieved from growing scale diminished after a certain point.

“Despite adding a lot of capacity after merging with CSAV and United Arab Shipping Co, and more with UASC than with CSAV, the amount of cost reduction was less with UASC than we achieved with CSAV,” said Mr Habben Jansen. “If we were twice the size, there would only be a 2% to 4% reduction in unit costs. There are better ways other than mega mergers.”

Hapag-Lloyd was confident it now had sufficient scale, despite being only the sixth-largest carrier by capacity.

“Our results illustrate we have a scale where we can compete,” he said. “Scale is only relevant in markets where you compete. Therefore, it is more important that we have a 20% market share on the trans-Atlantic than a 1% share on intra-Asia.”

After years of driving consolidation and more than doubling in size, the German carrier would now focus on improving the quality of its services.

“We want to be number one for quality,” said Mr Habben Jansen. “The industry has not invested in delivering value for customers. It means fundamental changes to the way we do business.” Hapag-Lloyd would remain a global operator, aiming for a market share of around 10%,

compared with its current 9%.

On the cargo side, Hapag-Lloyd will be seeking to attract the 50% of customers that put quality of service and value above simple least-cost pricing.

“There is an argument that container shipping is a commodity, but if that were the case there would not be a 10% to 20% difference between the lowest and highest prices paid for a container on the same voyage.”

But on the operator’s side, it would require strict discipline with costs.

“You need cost management to earn the right to continue to play,” said Mr Habben Jansen.

To achieve this, the company plans to focus on selected, high-value markets and segments, and to boost its inland capacities.

“A third of the 12m teu we handle a year have an inland element so if we can improve that we can provide better service for customers,” he said. Digitisation and automation would underline this.

“As an organisation we have become a lot more agile,” said Mr Habben Jansen. “We are not the biggest, so we have to become smarter and faster.” He pointed to the success of Hapag-Lloyd’s recently launched instant booking system, which was already taking 13,000 teu of bookings a week. The company aims to have 15% of overall volumes booked online by 2023.

Other elements of cost control would include optimising and rationalising its network, which had grown unwieldy following the mergers.

“We will optimise our feeder service, improve the vessel and fleet composition and optimise transshipment and equipment flows,” said Mr Habben Jansen. “No one pays us a dime for repositioning empties.”

Combined cost cutting efforts should realise \$350 to \$400m in the next three years alone, at a time when the market should grow at a conservative estimate of 3% to 4%, giving a reasonably positive outlook, Mr Habben Jansen added.

BIMCO aims for cyber security contract clause in 2019



Cyber security remains a tricky risk to handle particularly when it comes to delegating responsibilities and contractual obligations. BIMCO will offer a solution next year with a new cyber security clause that is being developed with input from several industry sectors.

Klaveness is leading the clause drafting, while Navig8, UK P&I Club and HFW are also participating

BIMCO is looking to publish a contract clause that addresses cyber security risks in spring 2019.

“The BIMCO cyber security clause requires the parties to have plans and procedures in place to protect its computer systems and data, and to be

able to respond quickly and efficiently to a cyber incident,” it said in a [statement](#).

The international shipping association’s clauses are used during transactions and contract agreements a pre-established set of rules to which parties involved agree.

The purpose of the cyber security clause that is being developed is to raise awareness of cyber security risks and to offer procedures and system that prevent an incident from occurring, or the very least mitigate its effects.

Under the clause, a party that has suffered a cyber security breach must quickly notify the other party, so they can set up any necessary counter measures.

China, Panama meeting to discuss future cooperation

The two countries are looking towards future cooperation after establishing diplomatic ties in 2017. The US is wary of China's inroads into the region, especially after El Salvador and the Dominican Republic this year followed Panama's example in recognizing Beijing's "one China" policy and ended diplomatic relations with Taiwan.

CHINESE President Xi Jinping will make his first state visit to Panama on December 2-3, aiming to further develop relations with the Central American country which established diplomatic ties with China and ended its connections with Taiwan a year ago. Mr Xi and Panamanian President Juan Carlos Varela are expected to sign about 20 agreements concerning cooperation in a number of areas such as commerce, technology and infrastructure during the visit. The two presidents may also pursue free trade talks, initiated in July, that could see the Central American country becoming a distribution hub for Chinese goods across Latin America via the Colón Free Zone, also known as la Zona Libre de Colón or ZLC. Situated on the Atlantic side of the Panama Canal, the ZLC is a leading free-trade zone. Established in 1948, the ZLC is allowed absolute freedom in the movement of goods, with no duties on imports or exports. In 2017, the value of ZLC exports stood at \$10.4bn. The Chinese visit will come after a key meeting between Mr Xi and US President Donald Trump at the G20 summit on Nov 30-Dec 1 in Buenos Aires as China and the US, currently locked in an escalating tariff war, seek to calm tensions that have spilled over from their contest for geopolitical influence. The US is wary of China's inroads into the Central American region, especially after El Salvador and the Dominican Republic this year followed Panama's example in recognizing Beijing's "one China" policy and ended diplomatic relations with Taiwan. As a result of this perceived diplomatic setback, the US State Department recalled US Ambassador to the Dominican Republic Robin Bernstein, US Ambassador to El Salvador Jean Manes and US Charge d'Affaires in Panama Roxanne Cabral "for consultations related to recent decisions to no longer recognize Taiwan". The State Department said the diplomats would meet with US government leaders "to discuss ways in which the United States can support strong, independent, democratic institutions and economies throughout Central America and the Caribbean." Located in Central America, with borders adjoining Costa Rica and Colombia, Panama

is crucial to the regional and global economy, primarily due to the recently widened Panama Canal, bisecting the country to link the major trade lanes of the Pacific and Atlantic Oceans. "The Panama Canal continues to exceed our expectations, reinforcing every day the importance of the waterway's expansion and its impact on global maritime trade," Panama Canal administrator Jorge Quijano said in October when announcing record-breaking figures. The Panama Canal is also crucial to the economy of the US, the waterway's main user in 2018, with 67.7% of the total cargo throughput. The US was followed by China, 16.3%; Chile, 11.9%; Mexico, 11.8%; and Japan, 11.8%, as the top users of the Panama Canal in 2018. In terms of cargo tonnage, the main routes using the Panama Canal in 2018 were between Asia and the US East Coast, the West Coast of South America and the US East Coast, the West Coast of South America and Europe, the West Coast of Central America and the US East Coast, and inter-coastal South America. Mr Xi's visit to Panama has already provoked high-level push-back from the United States, including recent jibes against China's "predatory economic activity" by US Secretary of State Mike Pompeo on a visit with President Varela in mid-October. After the meeting, Mr Pompeo spoke with local media, expressing concerns that Panama could become a beachhead for growing Chinese economic influence in the Western Hemisphere and urging Panamanians to exert caution when considering business ties with China. Mr Pompeo said he intended to tell the entire region that "when China comes calling, it's not always to the good of your citizens," and that countries had to watch out for Chinese companies that "show up with deals that seem too good to be true." Following his meeting with the Panamanian president, Mr Pompeo said the US had no concerns about Chinese economic competition. "We welcome that," he said. "It's when state-owned enterprises show up in a way that is clearly not transparent, clearly not market-driven and designed not to benefit the people of Panama, but rather to benefit the Chinese government." "Those are the kind of things we think are both inappropriate and not good for the people of Panama or any other country where China is engaged in this kind of predatory economic activity," Mr Pompeo said.

Rising costs dent bottom line at CMA CGM



Net income fell by two-thirds to \$103.1m. But core earnings before interest, tax, depreciation and amortisation margin recorded a significant increase compared with the second quarter of 2018, at 4%. French carrier saw revenues and liftings increase, but higher fuel costs took their toll. Meanwhile, the company intends to make a full takeover bid for logistics operator CEVA

REVENUES at French container line CMA CGM rose by 6.3% year on year in the third quarter of 2018 to reach \$6.1bn as the carrier increased volumes by 5.5%.

Net income, however, fell by two-thirds to \$103.1m as rising fuel prices led to a sharp increase in unit costs.

“In a context of sharply rising fuel prices, CMA CGM core earnings before interest, tax, depreciation and amortisation margin recorded a significant increase compared with the second quarter of 2018,

at 4%,” said chief executive Rodolphe Saadé.

But while the ebit margin should be expected to be higher during the busier third quarter of the year than the second, it was down from more than 10% on the corresponding period of 2017.

CMA CGM also confirmed that it had raised its equity share in CEVA Logistics to 33% and would be announcing a SFr30 per share bid, before the end of November, to CEVA shareholders who wished to dispose of their stakes in the Switzerland-listed logistics operator.

“By strengthening the partnership with CEVA, CMA CGM is actively engaging its logistics strategy,” Mr Saadé said. “Subject to approval from the regulatory authorities, this project will accelerate CEVA’s transformation, making it a more efficient logistics leader, to the benefit of its customers, employees and shareholders. Via a takeover bid, we hope to obtain the majority of CEVA’s share capital and unleash its full potential.”

Weak fundamentals cloud tanker market

Martin Stopford was downbeat about oil tanker markets on market fundamentals, but his fellow panellists from the shipowner and operating side argued there is still plenty of upside in VLCC and suezmax markets.

Supply is expected to exceed demand in the oil tanker sector next year, according to Clarkson Research president Martin Stopford

SHIPPING EXPERTS AT A SHIPPING FORUM AT THE ASIAN LOGISTICS AND MARITIME CONFERENCE IN HONG KONG.

THERE were divided views on the outlook for the tanker market expressed during a shipping forum at the Asian Logistics and Maritime Conference being held in Hong Kong.

Clarkson Research president Martin Stopford was downbeat about oil tanker markets in general against a backdrop of weak fundamentals.

The shipping economics expert predicts a surplus in ship capacity next year, with a total fleet growth to reach 3.2% versus a 2% increase in tonne-mile demand.

That was a result of a hefty delivery — 30.4m dwt — in 2019 in the sector, coupled with a perceived slowdown in ship scrapping as well as world oil demand.

“Really, there’s not a lot of underlying strength in the market,” Mr Stopford told the audience.

He did concede that the current speculative pump prices and active contango trades might create a shortage in vessel supply and lead to good rates for a few months.

“But it’s hard to get the sort of really high level of asset appreciation that you’d like to see,” he added. William Fairclough, chief commercial officer at Wah Kwong Maritime Transport, suggested the bird’s-eye view might have overlooked some upside potential in certain segments, especially the very large crude carrier market.

“VLCC is very often driven by political issues, not supply and demand pictures,” he said.

Two key events that Wah Kwong is focusing at the moment are the US sanctions on Iran and the



capacity-slimming plan of the Organisation of Petroleum Exporting Countries.

Washington’s latest bans against Iran’s oil exports were viewed as a positive factor because the move had helped remove Teheran’s large state-owned tanker fleet from the global markets, hence reducing overall tonnage supply.

Saudi Arabia’s recent signal to cut oil production, on the other hand, affected the outlook in a negative way, although the issue remained very dynamic, according to Mr Fairclough.

And the tanker sector had some reasons for optimism, he further argued.

The 2020 sulphur regulations were driving the demolition of old tonnage, in particular the first-generation, double-hull tankers built about 2000, while the increasing crude exports from the US to Asia were creating more tonne-mile demand.

“I endorse William’s optimism at least for the next couple of years,” said Penfield Marine managing director Giovanni Gavarone, adding that large vessels, such as VLCC and suezmax will benefit the most from the increase in trade distance.

In the long term, however, Mr Stopford thought the seemingly unstoppable growth in global oil demand would likely come to an end in the next 10 years because most of the world is moving towards a low-carbon society.

“The tankers industry needs to start think about changes that are going to happen in the long term and how they are going to deal with them in terms of their investment and relationship with energy customers.”

Scrubber retrofits could rein in boxship capacity

With vessels pulled from service for upwards of a month to be scrubber-retrofitted, analyst Drewry says the impact on capacity could spur a temporary spot market boost. The short-term spike is greater enhanced, as the emphasis for exhaust technology is towards larger ships. Although only 5% of the fleet is expected to be retrofitted, this ratio is doubled in teu terms.

Drewry says that 266 boxships, representing an aggregate 2.2m teu of capacity, will be scrubber-retrofitted before emission regulation is enforced

THERE IS THE POTENTIAL FOR SOME SUPPLY-SIDE DISRUPTION THAT COULD PROVE BENEFICIAL TO CARRIERS, DREWRY SAYS.

SCRUBBER retrofits ahead of the 2020 sulphur cap could give freight rates a temporary boost by restricting capacity next year, according to Drewry. The London-based analyst firm says that although containerships fitted with exhaust scrubbing technology will be in the minority, numbers are on the rise. This is despite the technology coming under fire, particularly so-called open loop scrubbers, which have been banned in some regions, including in [Singapore](#).

If, however, the rising trend of scrubbers continues there is the potential for some supply-side disruption that could prove beneficial to carriers, Drewry says. Depending on the size and type of vessel, a scrubber retrofit can take up to six weeks to undertake. Time enough to impact slot availability, according to Drewry.

“New regulation is expected to reignite the demolitions market after a down year in 2018 by weeding out more of the older, more heavily polluting ships that will no longer be economic post-2020, but at a more macro-level a number of trades could see deployment numbers temporarily reduced next year as more ships are taken out of service for retrofitting,” says Drewry.

Following a slow start, scrubber adoption to

comply with low-sulphur regulation has picked up gradually.

Mediterranean Shipping Co leads the way in vessel numbers with those earmarked for retrofits representing nearly half of the overall total, but Hyundai Merchant Marine, CMA CGM and Maersk Line too have announced plans to adopt the technology on at least some of its fleet.

The latest count shows 266 retrofitted containerships, representing an aggregate capacity of 2.2m teu, according to Drewry.

“While the scrubber fleet only represents 5% of the fleet in number, it accounts for twice that ratio in teu capacity due to the emphasis towards larger ships being retrofitted,” it says. “Moreover, scrubber penetration is much more significant in the orderbook, which combined with more anticipated retrofits in time will lift the ratio higher still.”

On the major east-west trades, the penetration of scrubber-fitted ships is, as it stands, fairly low.

Drewry noted that on the Asia-Mediterranean trade only 17% of ships ran with scrubbers in November. Meanwhile, on the transpacific this number was around 10% on the Asia-North America east coast trade and 9% on Asia-North America west coast services.

Scrubber-retrofitted vessels on the Asia-northern Europe trade were even lower, representing 5% of the overall fleet.

“This means there is plenty of scope for those ships to be pulled from active duty next year to get retrofitted, which unless replaced will reduce overall utilisation and aid spot market freight rate inflation,” Drewry says.

The impact on the spot market will however depend on the extent of the retrofit wave, and how lines manage the process alongside void sailing programmes or if it will effectively replace it altogether, according to Drewry.

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