GLOBAL MARITIME INDUSTRY DYNAMICS: STRATEGIC DIMENSIONS FOR MALAYSIA

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Global Maritime Challenges

Wider political economic scenario on managing ocean resources of the world arising from evolving global trade and navigation with concerns on global sustainability:

Strategic challenges and perspectives for Malorsia

Scope of the presentation

The oceans of the world are becoming increasingly focussed upon for global interests emerging from states and wider international economic and political institutional dimensions.

Seaborne trade and navigation continue to be the main strategic perspective including the continuing and emerging of claims of states to ocean resources.

The strategic dimensions of Malaysia are critical here with the nation surrounded by seas, with global seaborne trade and navigation linked to oceans, such as the Strait of Melaka and the South China Sea. In the face of these challenges, emerging ideas on global institutional participation of states, specifically Malaysia, through international instruments such as UNCLOS 1982 and the wider navigational rules applied through the IMO, related to ship operations will be explored here.

These relate to ideas on how states in their sovereign perspective, attempt to give definition to global challenges of seaborne navigation and exploring access to marine resources, to secure their wider political institutional and economic interests.

The ideas go beyond the neo liberal traditions and reflect on the nature of states intervention at international level to define markets and their institutional political implications.

PRESENTATION FRAME

1. Macro frame

- Challenges in world seaborne navigation
 Panama Canal
- Strategic response Malaysia
 Strait of Malacca
 - II. South China Sea
- 4. Reflections and conclusions



To highlight developments in global maritime industry

To isolate critical aspects considered relevant for Malaysia

To propose a perspectives for analysis of policy strategies.

BACKGROUND

•Shipping is a global industry ; owned by few international interests; and governed by a complex array of international rules on operations ;

•Ships travel 12,000 nautical miles (nm) from Europe-Far East; 4,000 nm transatlantic; and 7,000 nm transpacific

•More than 80% world trade carried by sea and therefore the oceans are a crucial element of the global economy

Part One: Macro Frame

Industry supply side dynamics define the parameters of demand for seaborne trade strategy and not vice versa



MODEL FOR ANALYSIS

ECONOMY (GDP) GROWTH

SEABORNE TRADE: SUPPLY SIDE DYNAMICS

ECONOMIC GROWTH: GDP (2017)

Country	Growth (%) (YOY)
USA	2.3
European Union	2.3
United Kingdom	1.7
France	1.8
Germany	2.5
Malaysia	5.4
World Source: IMF cited in Cla	3.7 rkson Shipping Research

Seaborne Trade (volume)

Commodity	Volume (million tonnes) 2018(est.)			
Iron ore	1474			
Coking coal	256			
Steam coal	945			
Grains	513			
Other bulks	1911			
Total dry bulks	5098			
Crude oil	1999			
Oil products	1096			
Total oil	3096			
Containers (million TEUs)	1829			
World Total (approx)	11587	_		
Source: Clarkson Research Services				

MARITIME INDUSTRY PROFILE: SUPPLY SIDE DYNAMICS







The Suez Canal





Northern Sea Route







Tanker

Bulk Carrier

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General Cargo ship



Fully cellular container ship

LPG Carrier

LNG Carrier





The newly ordered 83,000 cu.m. LPG carrier will measure 230.0 m (LOA) x 36.6 m beam and 11.1m draft.

L: About 299.9 m; B: About 48.9 m; Draft: 11.5 m Cargo capacity : 165,000 cu.m ; Speed: 19.5 knots

SHIP TYPE	NUMBERS - 2018
Tankers (Oil & Product)	14,199
Dry bulk carriers	10,878
LPG	1,400
LNG	474
Cellular container	5,159
Multi Purpose (non-cellular)	3,236
General cargo	15,137
Roll on – Roll off	1,343
Pure car carriers	781
Refrigerated	1,479
Total (including other types)	93,249

Source: Clarkson Research Services

Capital Investments: Shipping infrastructure

Petroleum products port operations





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SHANGHAI CONTAINER PORT

LNG Loading Operations for the future: FLNG

Shell's Floating Liquefied Natural Gas (FLNG) Project



2017 ready: 600000 tonnes capacity



PORT OF THUNDER BAY IN CANADA: GRAIN PORT

Shipbuilding, ship repairing sector needs policy update

The Malaysian shipbuilding and ship repairing (SBSR) industry policies must be adjusted according to the country's digital adoption and the Industrial Revolution 4.0 (IR4.0) incentives.

There is reference on the need for the realignment of the industry which would allow the small and medium enterprises (SMEs) to benefit from the country's allocation pertaining to the acceleration of IR4.0.

SHAHEERA AZNAM SHAH - The Malaysian Reserve - November 8, 2018

GLOBAL SHIPPING DATA



LEADING SHIPPING NATIONS: (RANKING IN TERMS OF DWT)

Country of ownership	National Flag	Foreign Flag	Total	Total (dwt)
Greece	741	2409	3150	186,095,162
Japan	720	3031	3751	183,319,680
China	2024	1609	3633	104,452,389
Germany	458	3169	3627	103,895,669
ROK	775	425	1200	44,883,318
USA	920	945	1865	41,290,755
Norway	820	1148	1968	40,518,790
Hong Kong	350	330	680	34,441,871
Denmark	360	580	940	33,198,421
Singapore	598	387	985	32,609,444
Malaysia (22 nd)	380	100	480	12,439,130
World Total	17279	21133	38412	1,165,720,163
Source: UNCTAD Review of Maritime				

Transport

Leading Shipping Nations: (Ranking in terms of dwt) 2017

Rank (Deadwei	Country of	Foreign Flag	Total	Total
ght tonnage)	ownersnip	(%)		(dwt)
1	Greece	78.76	4199	308 836 933
2	Japan	85.89	3901	223 855 788
3	China	53.97	5206	165 429 859
4	Germany	90.77	3090	112 028 306
5	Singapore	39.02	2599	10 414 424
6	Hong Kong (China)	23.98	1532	93 629 750
7	Republic of Korea	81.98	1656	80 976 874
8	United States	85.73	2104	67 100 538
9	Norway	64.62	1842	51 824 489
10	United Kingdom	80.55	1360	51 150 767
23	Malaysia (23rd)	51.07	644	18 351 283
	World Total	70.01	50155	1 847 630 894

Source: UNCTAD Review of Maritime Transport

Top 20 Global Container Fleet Owners as - July 2018

1	APM-Maersk	15.9%	2,507,496	
2	Mediterrane an Shipping	13.1%	2,059,412	
3	CMA CGM Group	8.5%	1,348,284	
4	Cosco	4.1%	642,100	
5	Hapag-Lloyd	4.0%	632,863	
6	Evergreen Line	3.9%	615,688	
7	APL	3.8%	598,577	
8	China Shipping	3.3%	524,582	
9	Hanjin	3.0%	477,421	
10	MOL	2.7%	433,240	
11	OOCL	2.6%	412,412	
12	NYK Line	2.6%	412,169	
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13	CSAV Group	2.6%	408,500	
14	Hamburg Süd Group	2.6%	405,685	
15	Yang Ming	2.2%	346,981	
16	"K" Line	2.2%	342,503	
17	Zim	2.1%	327,963	
18	Hyundai	1.9%	294,381	
19	Pacific International Line	1.7%	270,392	
20	UASC	1.5%	231,533	

Source: Alphaliner August 2018

Part Two Challenges In World Seaborne Navigation

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PANAMA CANAL

EXPANSION AND IMPLICATIONS FOR INDUSTRY

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UNDERLYING DYNAMICS

- About 5% of global seaborne trade passes through the Panama Canal joining Pacific and Atlantic Oceans;
- Canal expanded to allow wider ships to cross and ready since 2016
- About 14,000 ships pass through the Canal every year and this is about 36 -40 every day: typical passage over 50 miles takes about24 hours;

Following expansion Panama is able to accommodate 12,000 TEU with volumes rising from 4 million TEU to 8 million TEU;

Regional port dynamics changing in the USA: east coast ports from NY to Miami will be in expansion mode to cater for larger ships that will call with more cargo direct from the Far East crossing the Canal; and

Changing transport sea lane dynamics.

PRIOR 2016

- Modern capsize vessels of 170,000 dwt fully laden with 45 metres beam and draft 18 meters will not be able to cross Canal;
- Require to offload and reload about 35, 000 tonnes at each end to reduce draft to 15 meters and the cost of this operation could make crossing unprofitable;

POST 2016

- Smaller current post panamaxes such as Tana Sea are able to access even with full cargo.
 Since: 95,000 dwt, 14.9 meters draft, beam 38 meters and length 230 meters.
- Panamax (75,000 dwt)and Aframax bulk carriers (115,000 dwt) are able to cross the Canal after the widening and deepening project from 2016

BULK CARGO TRANSIT FOR PANAMA CANAL



- Size of ships that can cross has expanded; and it has become a 'game changer' creating a strategic challenge for all concerned;
- Port expansion: Savannah port in east coast USA expands infrastructure to accommodate larger ships;
- Ships would also be looking to other ports in the same region; and
- Shipping companies will invest in larger ships to exploit economies of scale

- Better access to Brazil iron ore and Venezuela's oil i.e. for raw materials as key ingredients for industrialisation;
- Also access to markets in South America where there is a growing economy with a rising middle class
- Better route to the Atlantic thus with access to both east and west coast of South America.
- That, in turn, will open new routes whereby oil and mineral resources from West Africa can be taken directly to China -- deepening political bonds that China has carefully fostered in that region.

GLOBAL VARIABLES

POST 2016

•The canal navigable by tankers with capacity of a million barrels of crude oil;

•The canal able to take ships capable of holding 12,600 containers -- more than double the capacity of the "Panamax" ships that represent the canal's present size limit;

•The new canal large enough for the gas industry's existing fleet of liquefied natural gas carriers, most of which are too big to make the Panama crossing and are forced to take the longer, more hazardous route around Cape Horn;

•The largest container ships leaving Asia for the US dock need not call in the big West Coast ports, such as Los Angeles; and

•The future of land bridge will shift in the USA.

USA Land Bridge



Chile Chile will be able to move copper and wine to the eastern seaboard of the USA;

Canada

Canada's deepwater port in Halifax will be able to accommodate larger ships and thus potentially to change the dynamics of North America.

Columbia

Columbia proposes to build 'dry canal' in joint venture with China for a railway link of 790 kilometres linking the Pacific to the Atlantic



Strategic Implications: Scenario Analysis

- •Alter the role of ports along the west coast of the USA;
- •Transform trade and transport along the transatlantic trade route;
- •Port expansion along the east coast of the USA;
- •New market opportunities for countries such as China, Japan, Australia to exploit regions in Europe, South America and Africa;
- Overland rail and road links could be altered is so far as the USA is concerned; and
 Economic transformation of central America.

Part Three

STRATEGIC RESPONSE – MALAYSIA Strait of Malacca

• South China Sea perspectives

STRAIT OF MALACCA



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MACRO ECONOMIC SCENARIO

According to Fensom (2016):

"... an estimated \$5 trillion worth of goods are transported through South China Sea shipping lanes each year, including more than half the world's annual merchant fleet tonnage and a third of all maritime traffic worldwide. Oil transported through the Malacca Strait from the Indian Ocean, en route to East Asia via the South China Sea, is triple the amount that passes through the Suez Canal and fifteen times the volume that transits the Panama Canal." According to Seatrade, citing a study by the Nippon Maritime Centre, in its report:

In 2014, there were almost 79,000 transits through the Strait of Malacca.

"...the largest users of the Strait are containerships, although it is the VLCCs, bulk carriers and LNG/LPG traffic where the most growth is being seen.

Containerships account for 33% of the traffic in the strait with 25,071 in 2014, up slightly from 24,658 in the previous year. However, this number is well below the all time high for box ships of 26,359 transits in 2008.

This has been influenced by the increased size of containerships. "The container traffic reports have been affected by a growing number of ultra large containerships being brought into service, with lesser ships carrying more containers on respective trade routes," the report noted.

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STRATEGIC ISSUES

Impact on ship numbers following redrawing of trade routes arising from widening of Panama Canal;

Stakeholder analysis:

Investments in navigation facilities;

•Structure of trade route following change in commercial nature of cargo flows along the SOM;

•Container trade flow composition of ships from China/Japan/ROK to Europe and back;

SOUTH CHINA SEA STRATEGIC DIMENSIONS

The Arbitral Tribunal, constituted under Annex VII of UNCLOS, issued their Award on July 2016 on the dispute between the Philippines and China

The strategic dimensions of the Award are explored under the theme:

Revisiting the 'Tragedy of the Commons'

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The Award of the Arbitral Tribunal in July 2016, constituted under UNCLOS 1982 on the dispute in the South China Sea, have raised concerns on dimensions of managing global common ocean resources in a strategic sea-lane of the world.

Ideas on approaches to resolving such conflicts have explored the realm of political economy philosophies suggesting approaches based either on rules of international law or collaboration regionally among parties to their claims.

This research explores these dimensions through the model of risks and uncertainty on the impact on seaborne navigation in South East Asia.

The decision on the arbitration on the dispute between the Philippines and China, delivered on 12 July 2016, have raised concerns for international seaborne navigation and as a consequence for global trade. This decision was delivered by the Tribunal and followed a request in 2013,by the Philippines over a challenge to claims over rights and obligations of state Parties, to the South China Sea, within the context of the United Nations Convention of the Law of the Sea (Convention) (BBC, July 12, 2016).

Gaining an understanding of our complex human existence is a difficult task and we need to formally recognise the interdependence of social and natural phenomena.

According to Van den Berg (2017), the complexity of economic development and its interactions with our greater social and natural environments requires us to move beyond the familiar economic relationship studied by orthodox, or mainstream economics.

The holistic approach to understanding that takes a heterodox approach, which is a simultaneous focus on the parts and the systemic interactions of those parts, has been pursued in many fields.

Those who adhere to the philosophy of the New Institutional Political Economy suggest that the interest of Market participant driven endeavour should be explored in the context of intervention of formal institutions such as the state mechanisms (Ha-Joon Chang 2016).

"States are constitutive of markets and not constraints..."

Therefore neo liberal paradigm would clearly have to be overtaken by the dynamic notion of intervention of global formal institutions that may engage more effectively to the global market institutions Notion of Tragedy of the Commons :

Lloyd (1833), is regarded as one who had raised this notion earlier in relation to common resources without individual ownership and potentially likely to be destroyed by neighbours...

Hardin in 1968 in discussing the concept of "tragedy of the commons" as introduced by Lloyd, initially proposed the approach through private ownership of common resource; however later proposed state intervention Elinor Ostrom (2002) later suggested the approach to managing through common arrangement by neighbours, within a state and cited Norway; again later suggesting some form of state authority would emerge

In mid 18th century England, there was applied the "Enclosure Laws", which allowed private ownership in commons; to exclusion of "others"; these "enclosures" were to become constrained in late 19th century

Later in 1990s, Hardin proposed that there should be more direct state intervention to manage the threat of the tragedy;

Lloyd's idea was referred by Ambassador Prado of Malta on the need to preserver the "common heritage of mankind" later embodied in UNCLOS 1982

- Enclosure in the ToC provided individual landowners with land resources
 - They have a vested interest in maintaining the resource
 - But access to the resource is restricted
- China's claim on the South China Sea echoes some of the enclosure implications
 - Freedom of navigation could be constrained by China
 - But there is a vested interest for China to maintain the resource (e.g. to tackle piracy)
 - What are the risks and how can they be managed?

RISKS OF ENCLOSURE

- In the ToC negative consequences arise from the lack of responsibility for maintenance of common land
 - Nobody is obliged to maintain the resource
 - (Potentially) nobody is permitted to maintain the resource
- UNCLOS' ruling effectively creates the same situation for the South China Sea
 - Freedom of navigation exists, but nobody should be controlling or policing the waters

RISKS OF THE COMMONS

World Shipping Routes: the Market context



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Arbitral Tribunal - Decision Scenario Analysis for Trade Flows and Global Navigation

South China Sea – Zone of Strategic Interests for Seaborne Navigation – International Political Economy Dimensions

South China Sea – Zone of strategic economic interests



04 May 2017



Flag State – Coastal State – Littoral State: Entitlements and Jurisdictional Perspectives Geneva – UNCLOS – IMO

Formal Institutional Approach to Jurisdiction on global scale: UNCLOS 1982

It is important to note that , under UNCLOS, the freedom of the high seas remain relevant and applicable, including as well as for navigation.

Further the EEZ, including the territorial sea, remain zones in which maritime interests, including flag State, as opposed to coastal States, would reflect the balance of jurisdictional competence including the role of port States.

It is clear that the coastal State would not be able to adopt provisions that in enforcement impede, in any unreasonable way, innocent passage by foreign vessels even in their territorial seas.

Further, in the zone of the EEZ too, the threshold of any enforcement is contingent upon substantial damage or threatened damage to the Coastal State.

Regional Institutional Perspective

Shipping Flow Analysis: Dynamics of State and the Market – relevance of individual market participants
In this scenario, the approach by claimant states to pursue delimitation or contra delimitation through asserting sovereign jurisdiction appears to lead towards objectives of resource exploitation.

Since 2008, although neo-liberal ideas came into serious doubt, these ideas do not seem to be recognised in shipping domain; states are continuing to leaving shipping markets alone without recognising that here markets are probably seeking for state intervention There could be need to move beyond resource relevance strategies to state intervention towards strategies that would allow unimpeded navigation to merchant ships of various states to pass freely through the region.

Reclaim through Institutional Political Systems on a global scale intervention to redefine scenario to allow for freedom of navigation: **No need then to allow for risks or uncertainty!!**

Policy Response here should recognise the dimensions of the nature of marine resources within the EEZ and the extent to which appropriate strategies should be brought to bear to link their relevance to the social and economic frame of Malaysia

Part Four REFLECTIONS AND CONCLUSIONS

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REFLECTIONS: NEW ORDERS

Strategic dimensions will likely reflect domain of UN Sustainability Development Goals; in midst of global challenges for trade and the exploitations of resources of the oceans.

These would specifically refer to the marine resources within the EEZ of Malaysia and to incorporate their relevance to the macro economy of Malaysia.

The dimensions of global challenges such as the political dimensions of the South China Sea, suggest clearly that the entitlements to resources of the marine environment for Malaysia are to be regarded as paramount.

REFLECTIONS: STRATEGIC PERSPECTIVES

Are the dynamics of shipping reflected in Malaysia's macro policy strategies: as external variables?

Scenario analysis could be an approach to consider for strategic public policy in those areas that are relevant in the context of relevance of sovereign rights to the marine resources potential within the context of the sustainability of the globe. "You should do the mathematics but then burn the paper and write it down in words." Maths and models should be "aids to thinking, not substitutes for it" (Alfred Marshall; 1906)

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