



# Regulatory & Commercial Structures for Port & Terminal Operations

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# Introduction

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- Background
  - Regulation
  - Economics
  - Commercialization
- Regulatory and Commercial Structures
- Singapore... what more can be said
- India and the problem of TAMP
- Indonesia the opportunity of a new Port Law

# A Few Definitions

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- Government
  - Regulators
  - Landowner
  - Terminal lease
  - Terminal operator
  - Stevedore
  - Multimodal operators
  - Logistics operators
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# Regulation

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- Not the same as ownership
  - Sets the framework for operations
    - Sets the structure of the industry
    - Licensing
    - Competition
    - Safety
    - Environmental Protection
    - Social Impact
    - Planning and approval
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# Economics

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- Overall measurement of ports value to the Community
- Port Development in Asia has clear statistical link to economic development – one specific exception
- Economic benefit does not guarantee a commercial port

# Economics

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- To be commercial a port has to internalize the benefits it provides in competition with:
  - The economy
  - Cargo owners
  - Shipping lines
  - Trucking companies
  - Etc...

# Commercialization

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- Aim is to profit from ownership and operations
- Efficiency is important for profitability
- Foci of commercial port are:
  - applying capital to develop operation
  - maximizing return on investment
- Key techniques are:
  - Balance capacity and demand
  - Minimize investment and make it incremental
  - Maximize utilization

# Commercialization

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- Financing developments can impose specific requirements related to concession and ownership structures
- Regulatory structure impacts how commercial a development is

# Regulatory & Commercial Structures

Marine Approach	Full ownership	Port Owner	Port Owner	Port Owner
Quay (Depth)		Concessionaire		
Land				
Civil Infrastructure			Concessionaire	
Operations				Concessionaire

# Example Structures

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- Government owned and operated ports
  - Central, provincial or city owned?
  - Central, provincial or city regulated?
  - Regulation and operations mixed
  - Lack of accountability
- Government regulated, privately operated
  - How tight the regulation?
  - Tariff, competition

# Example Structures

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- Government regulation, landlord, private operations
- Many different structures and confusion generally reigns

# Singapore

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- Government through URA and others
  - Strategic Planning
- Maritime & Port Authority
  - Regulation and approval
- Jurong Town Corporation
  - Landlord

# Singapore

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- Port Operators
  - PSA Corporation
  - Jurong Port (sublet Stevedore services)
  - Tankstore, OOTS, Vopak etc...

# India

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- Twelve regulated Major Ports
    - Central Government
    - Landlord, sub-regulators, owners and operators
    - Capacity to invest limited
    - Inefficient, a product of history
    - **Tariff Authority of Major Ports**
  - Minor Ports
    - Regulator status complex and unclear
    - Privately owned and operated
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# TAMP is setting a ceiling tariff for a port

<b>Revenue Assessment based on TAMP Guidelines</b>	
Optimal capacity of Terminal	2,250,000
Mean Revenue Per TEU	<b>123</b>
	5,268
Total Revenue	275,625,000
<b>OPERATIONAL COSTS</b>	
<i>Power and Fuel</i>	
Energy demand, kWh	2,700,000
Energy demand, l (diesel)	18,000,000
<i>Repairs and Maintenance</i>	
Civil Maintenance	6,200,000
Equipment Maintenance	2,121,000
<i>Insurance</i>	
	7,260,500
<i>Depreciation</i>	
	37,510,000
<i>License Fee</i>	
	2,325,581
<i>Other Expenses</i>	
	72,605,000
Total gross cost	148,722,081
<b>NET REVENUE</b>	
Net Revenue	126,902,919
Net Revenue as % of Capex	<b>15.89%</b>

# TAMP is setting a ceiling tariff for a port

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- Optimal Capacity
    - TAMP norms for berth 1.9m TEU
    - TAMP norms for storage yard 1.1m TEU
    - Proposed Optimal Capacity 2.2m TEU
  - CAPEX for container cranes
    - TAMP norms Rps 2,630 lakhs
    - Actual CAPEX cost more than Rps 4,300 lakhs
  - Fuel Cost
    - Market rates
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# Requirements of TAMP Guidelines

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- JNPT Targets
  - 2,250 TEU/m
  - 22,500 TEU/Ha
  - 175,000 TEU/crane

Terminal	/ m	/ crane	/ Ha
Antwerp	1,046	122,460	20,820
Hamburg	867	100,230	20,153
Southampton	1,019	86,060	17,987
Singapore	1,755	119,600	53,392
Hong Kong (MTL)	1,785	137,020	30,062
Kaoshiung	1,091	94,510	27,494
Yokohama	406	50,830	11,535
Los Angeles	924	98,410	11,949
Long Beach	693	113,880	10,840

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# TAMP a worked example....

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- Revenue of terminal
    - Approx. Rps. 1,100 crores total annual revenue
    - Tariff cap for lift < Rps 2,900 (US\$ 58) per TEU
    - Minimal inflation adjustment
    - Effective over life of concession
  - Existing terminals tariffs
    - GTI Rps 3,068/Rps 4,602 - 20'/40'
    - GTI approx Rps. 5,200 /TEU target income
    - Others lower
  - Implied revenue share 15 to 20%
    - Current terminals over 40% revenue share
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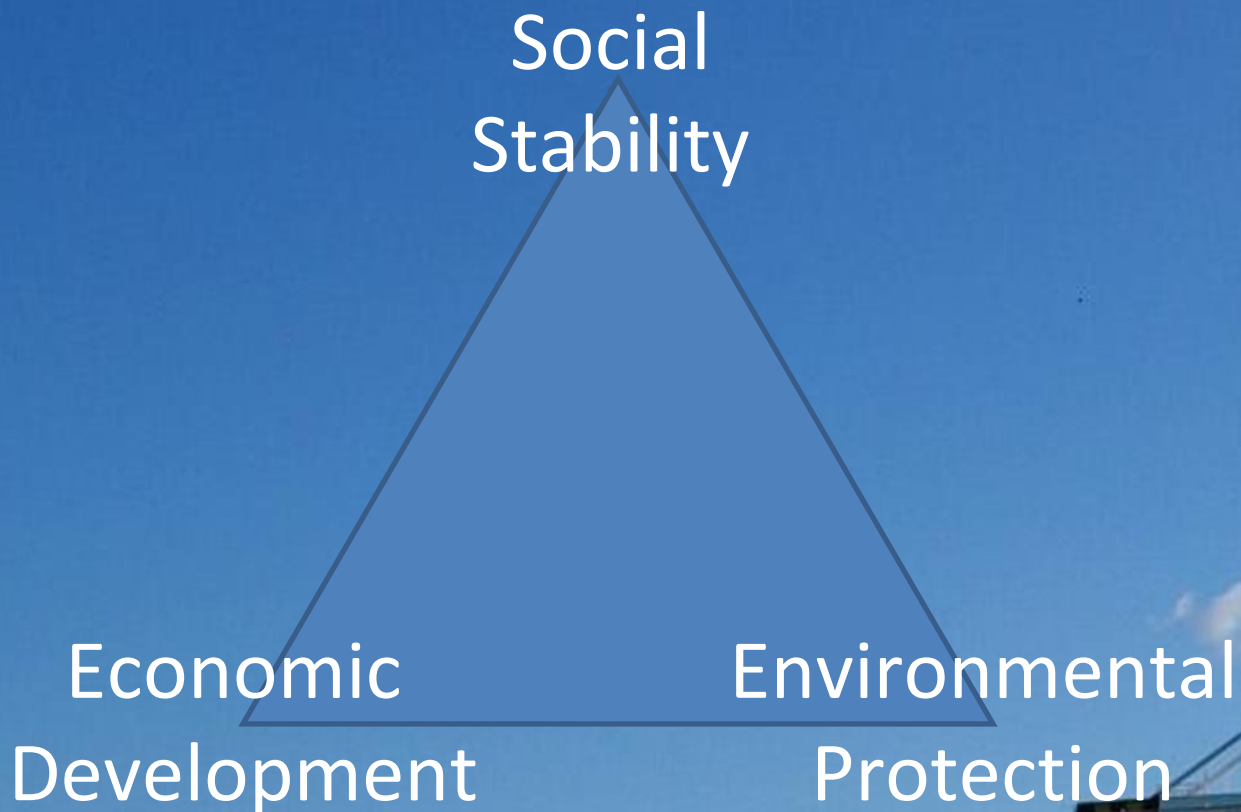
# Implications of TAMP guidelines

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- No incentive to invest
    - The higher the CAPEX the less the incentive
    - Low CAPEX no financing of future investment
  - Port will see lower revenue share offers
  - Incumbents have substantial advantage
    - Easier regulatory regime for tariff
    - Competitors who cannot charge more
  - TAMP should set a relatively high cap
    - Rely on competition to set market rate
    - Ensure supply of capacity is strong
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# “The Great Triangle”

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# Policy Objectives in Indonesian Ports

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- Facilitate economic development
  - Provide effective port facilities
    - Bulk handling facilities
    - Train pilots, provide tugs
    - New container terminals
  - Lower costs
- Encourage competition
- Create gateway ports
  - Focus cargo to achieve viable volumes

# Potential cost impacts

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- Reducing Cocoa freight costs
  - Bag to Europe US\$ 165/t, Bulk US\$ 80/t
  - Reduction in port time from 6 to 2 days
  - Potential saving 50%+ of costs
- Reducing handling charges
  - Overall TEU transport cost
    - to HK US\$ 500 to 800
    - to Japan US\$ 1,000 to 1,500
    - to US West Coast US\$ 1,500 to 2,000
  - Makassar handling charge US\$ 65-90/TEU
    - “ROI” handling charge US\$ 30-40/TEU
    - Saving in the order of 4 to 6% of costs)

# The New Port Law in Indonesia

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- National Maritime Safety Agency
- National Master Plan
- Port Authorities
  - Develop Master Plan
  - Regulate port activity
  - Provide and maintain infrastructure
  - Protect the Environment
- Pelindo and private operators
  - Develop and operate terminals, tugs etc...

# Competition?

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- Competition
  - Lower handling charges
  - Competition reduces prices
  - Scarcity of provision raises prices
  - High prices leads to new entrants...
- BUT
  - Volume required to justify investment
  - Competition splits volume
  - First mover only mover?
  - Pelindo difficult to compete against



# Thank you for your patience

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