

**IMPACT OF TARIFF REGULATIONS ON PRIVATE TERMINALS
OPERATING IN THE MAJOR PORTS OF INDIA**

(With special reference to ISHPL, TMILL & ICTPL)

A dissertation submitted to the School of Maritime Management, Indian Maritime University in partial fulfilment of the requirements for the award of degree in
MBA- International Transportation and Logistics Management

Submitted

by

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DECLARATION

I, MANISH NATH MISHRA (**Reg. No. 1903305022**), student of School of Maritime Management, Indian Maritime University – Chennai Campus, hereby declare that this project report titled –**IMPACT OF TARIFF REGULATIONS ON PRIVATE TERMINALS OPERATORATING IN THE MAJOR PORTS OF INDIA (With special reference to ISHPL, TMILL & ICTPL)** submitted in partial fulfilment of the requirement for the degree of **Master of Business Administration in International Transportation and Logistics Management** is my original work carried under the guidance of my project guide. It has not formed the basis for the award of any Degree/Diploma of any University/Institution. The information submitted is true and original to the best of my knowledge.

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ACKNOWLEDGEMENT

I express my sincere thanks to **Dr. A. Mourougane**, Associate professor and Head, School of Maritime Management; Indian Maritime University is a person who needs to be thanked at every stage of my project.

I wish to show my gratitude to **Dr. B. Swaminathan**, Assistant Professor, School of Maritime Management, Indian Maritime University- Chennai Campus, for his enormous encouragement, help & guidance, throughout the period of my project & led this work to its successful completion.

I wish to express my profound senses of gratitude to my faculty members of School of Maritime Management, Indian Maritime University, Chennai Campus for giving me an opportunity to take this project.

Finally, I take the opportunity to show my gratitude to everyone who has contributed in this effort in numerous ways and their invaluable guidance and assistance through the entire phase of this project.

EXECUTIVE SUMMARY

The Indian port sector has long been constrained by limited capacity, traditional infrastructure and poor equipment levels. These limitations encouraged the government to take definitive steps toward increased private participation in the sector through various incentives. As the government embarks on a new era of economic resurgence, expected to be considerably bolstered by port-led development, it needs to spearhead streamlined implementation of key initiatives directed towards greater private participation.

The Public Private Partnerships (PPP) have emerged as a very feasible, viable, and growing mode of creating infrastructure for India. Though public sector will continue to play a dominant role in buildings of infrastructure, the PPPs have enabled us to channelize private sector investment in infrastructure.

This research covers the pattern of developments followed by the “Public-Private Partnership Projects”. This research contains a comprehensively evaluated PPP project with reference to three terminals naming “**ICTPL** (Indira Container Terminal Pvt. Ltd.), **ISHPL** (International Seaport Haldia Pvt. Ltd.) & **TMILL** (Tata Martrade International Logistics Limited). The evaluation of the terminal’s performance is done under “**TAMP 2005 Guidelines**”.

This report is indeed evaluating the performances of the three mentioned terminals in terms of both physical and financial terms. In Physical terms, this report mainly deals with various efficiencies that must be aligned to take a precise decision or in financial terms, this report will give a detailed study about the capital invested by the different stake-holders and in return what are the value of profit stake-holders earn.

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ABBREVIATIONS

TAMP –	Tariff Authority for Major Ports
ISHPL –	International Seaport Haldia Pvt. Ltd.
TMILL –	Tata Martrade International Logistics Ltd.
ICTPL –	Indira Container Terminal Pvt. Ltd.
IPA –	Indian Port Association
BOT –	Build Operate Transfer
BOO –	Build Own Operate
BOMST –	Build Operate Maintain Share and Transfer
DB –	Design Build
DBFO –	Design Build Finance Operate
LDO -	Lease Develop Operate
PPP –	Public Private Partnership
TEU -	Twenty Foot Equivalent Unit
MTEU –	Million Twenty Foot Equivalent Unit
ICTT –	International Container Trans-shipment Terminal
CAGR –	Compound Annual Growth Rate
CFS –	Container Freight Station
GDP –	Gross Domestic Product
SEZ –	Special Economic Zone

CHAPTER – 1

INTRODUCTION

1.1 Background

Port authorities around the world in the past have been public authorities, owned and controlled by the local or national governments. Ports were viewed as open utilities serving the need of locale/country instead of a business substance directed by the benefit rationale. Another explanation for the public possession was the essential significance of ports from public safety perspective, monetary just as actual security, and it was considered judicious to hold such design under the government control.

About two decades ago, the privatization of public utilities and state-owned enterprises (SOEs) started becoming popular and order of the day, in many countries as the very concept of governance underwent a paradigm shift. The possession and activity of public utilities were progressively being viewed as not a center capacity of the public authority and the idea of administration was contracting to cover the fundamental capacity of public safety, outer relations, peace and lawfulness and guideline of public and exclusive issues. Consequently, hitherto public assistance associations like rail routes, postal administrations, interchanges began getting privatized in various pieces of the world. The shift was proposed not exclusively to draw in private capital in these administrations but also to infuse dynamism, efficiency and market discipline related with private capital, in this manner, bringing down the expense and improving the nature of administration. The shift signifies change in policy objectives rather than a device to simply meet paucity of resources.

Consequently, privatization of ports spread too different parts of the world. Before the 1980's, the government's extensive involvement in the ports as state owned enterprise was the prevailing practice around the world. With the proliferation of concept, various models and versions of port privatization surfaced. Privatization of ports was perceived and defined by different people in different ways.

India began the interaction of private sector participation (PSP) in ports in the mid-90s notwithstanding the weighty social and political dangers related with privatization in a country

where business creation stays at the highest point of the plan of any administration. The first phase of privatization did not bring adequate response as of the policy, but learning from the past, a new revised policy was introduced in 1996, which attempted to remove the ambiguity of the past. One of the vexed issues of labor was made clear and any investor making investment in new facilities was not obliged to take existing labor. The new policy did more enthusiastic response from the private investors.

Apart from private sector participation, commercialization and corporatization of major ports are also being pursued simultaneously. The model being considered for the future is the landlord model of port management, being the most popular one. During the transitional phase from the public to private ownership, which in Indian context could stretch considerably, clashes of interest between private players, public port authority, tariff regulator, national security agencies are quite likely. There could also arise conflict of interests between state responsible for public welfare and private operators guided by the profit motive. The state will have to safeguard public interest by introducing necessary statutory regulatory mechanisms as well as by incorporating suitable clauses in concession/license agreements. It would thus be useful to chart out a long-term course by the port policy planners in order to strike a balance between public and private good and to ensure smooth transition from public ports to private ones in larger national interest.

This Project examines the achievability and the accomplishments of such public-private partnerships in major ports of India and how helpful it has been to the different stakeholders.

1.2 Indian Port Industry Overview

The Indian subcontinent has had fame in the world map, in terms of trade since the ancient times. It was through the water routes that various goods were imported and exported by the erstwhile kings and the emperors in the older days. British's, Portuguese, and many voyagers came into India, partly because they found the water routes to be easy roads to the rich country of India. With about 7,517 km long stretch of coastline, in the states of Gujarat, Maharashtra, Goa, Karnataka and Kerala in the western part and Tamil Nadu, Andhra Pradesh, Orissa and West Bengal in the eastern side, riches in India have been contributed much by the ports.

According to the Indian Constitution the Indian Government has a bureaucratic design and, in this way, the oceanic vehicle goes under the simultaneous rundown. The ports are subsequently either under the administration of the Central government or the State government. The Central Shipping Ministry controls and directs the major ports, while the minor ports and middle of the road are overseen by the State governments maritime board.

There are 12 major ports and 200 non-major ports (minor ports) in the country. All the 12 Major ports are functional. Out of the 200 non-major ports, around 65 ports are handling cargo and the others are “Port Limits” where no cargo is handled and these are used by fishing vessels and by small ferries to carry passengers across the creeks etc.

Table- 1.1: Major Ports on either Coast of India

WESTERN COAST	EASTERN COAST
Kandla (Deendayal Port Trust)	Kolkata – Haldia Port
Mumbai Port Trust	Paradip Port Trust
Jawaharlal Nehru Port Trust	Vishakhapatnam Port Trust
Marmugao Port Trust	Chennai Port Trust
Mangalore Port Trust	Ennore Port Trust
Cochin Port Turst	Tuticorin Port Trust

1.3 Public-Private Partnership

Public-Private Partnerships is such a setup that involves collaboration between a government agency and a private-sector company that can be used to finance, build, and operate projects, such as public transport network, airports, sea ports and convention centers etc.

1.4 Models of Public-Private Partnership (PPP)

- i. Build-Operate-Transfer (BOT):** It is a conventional PPP model in which private partner is responsible to design, build, operate (during the contracted period) and transfer back the facility to the public sector.
- ii. Build-Own-Operate (BOO):** In this model responsibility for recently fabricated office will rest with the private party. On commonly concurred agreements public area accomplice consents by buy the labor and products delivered by the venture.
- iii. Build-Own-Operate-Transfer (BOOT):** In this methodology, the public authority gives an admission to private element to construct an office (a possible design it as well), own the office, rent the office to the public area and afterward toward the finish of the rent time frame move the responsibility for office to the public authority.
- iv. Design-Build (DB):** In this model, the government contracts with a private partner to design and build a facility in accordance with the requirements set by the government. Which is to be transferred to government to operate and maintain.
- v. Design-Build-Finance-Operate (DBFO):** In this model, entire responsibility for the design, construction, function, and operation of the project for the period of concession lies with the private party.

- vi. **LDO:** In this type of investment model either the government or the public sector entity retains ownership of the newly created infrastructure facility and receives payments in terms of a lease agreement with the private promoter.

1.5 Public Private Partnership Role in Indian Ports

Ports in India play a significant role within the overall economic development of the country. About 95% by volume and 70 % by value of the country's international trade is carried on through maritime transport. Development of Port infrastructure is subject of both the Central and State Governments. While major ports are under the Centre's Ministry of Ports, Shipping and Waterways, non-major ports are under the respective State Governments. Maritime transport might be a basic framework for the social and monetary improvement of a country. Ministry of Ports, Shipping and Waterways is entrusted with the responsibility of formulating policies and programs for the shipping and ports sector. India encompasses a coastline of seven, 7517 km served by 12 major ports and about 200 notified non-major ports along the coastline and sea-islands. In 1996, the port sector was opened for private sector participation, following which, the govt. decided to move towards the landlord Port concept, where new ports were expected to be established as companies under the companies Act 1956 and existing port trusts were expected to be corporatized; the plan has not been implemented, with the exception of Kamaraja Port Limited. From the last one decade a number of PPP projects are awarded at an estimated cost of thousands of crores within the Major Ports comprising construction of berths, etc. additionally to the development of ports and terminals, the private sector has extensively participated in port logistics services.

This shows that how PPP helps in development in ports all told region of the country and it's also helping in increasing the trade volume of the country.

1.6 Problem Identification

India has seen a flat-out transformation in the course of the last decade. Rambling urban areas, prospering organizations, better quality of living are generally pointers of uncommon development, globalization, urbanization, extension and broadening. Foundation modernization and advancement is supposed to be the critical driver of all the development and financial action. The public sectors alone can't meet the required funds and technology for the projects and nor even the public sector has shown the required efficiencies. The Indian port area has been tormented by a few issues because of deficient limit and operational failures or inefficiencies.

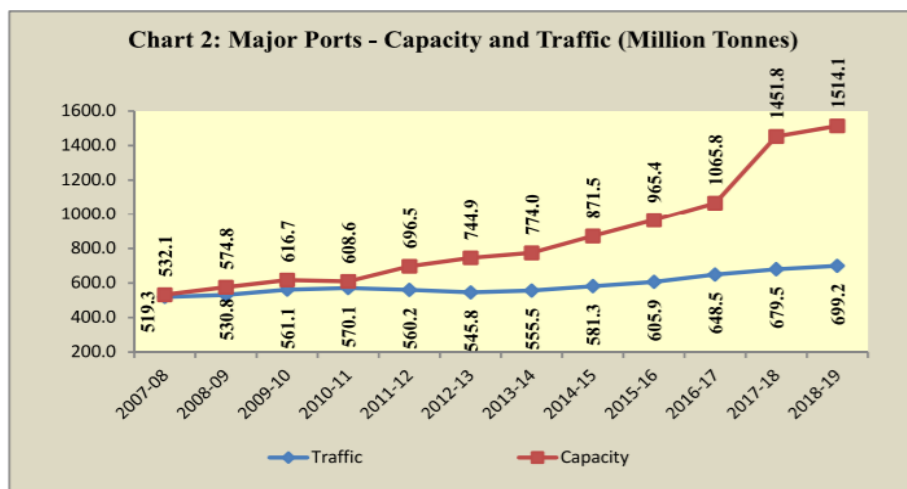


Fig - 1

Source ~ <http://shipmin.gov.in/>

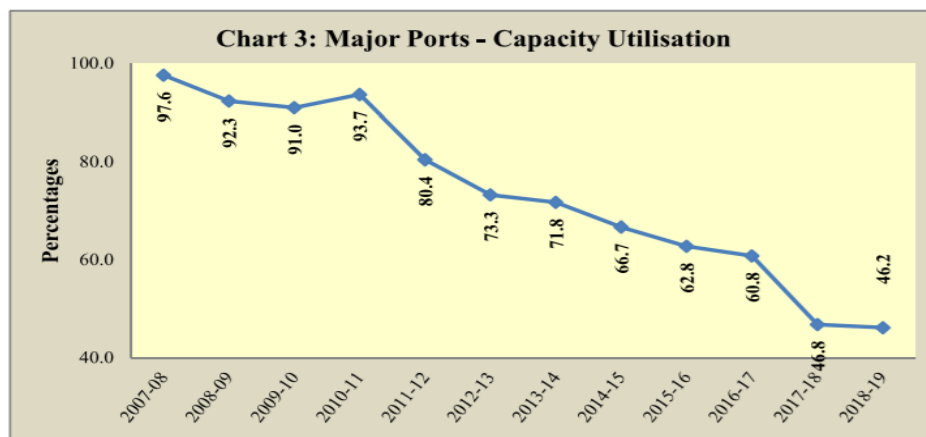


Fig - 2

Source ~ <http://shipmin.gov.in/>

The rise of PPPs in Indian Port area is viewed as a manageable financing and institutional component with the capability of spanning the port foundation gap. Port framework serves an urgent working with part in global supply chains, prompting the progression of neighborhood and public economies, the reality stays that its advancement is exorbitant. This applies both to creating, overhauling, or keeping up port-based and hinterland-situated foundation. For most property manager port specialists, the capacity to fund and foster port foundation is confined, as a rule the landowner port authority needs to contend with other government divisions and organizations for a predetermined number of budgetary assets accessible for the advancement of public framework, while additionally prevailing with regards to impacting the political dynamic cycle that oversees transport speculation choices.

This exploration center around recognizing how PPP projects and the effect of tax guidelines on administration in the ports sector is critical with regards to making Indian ports more serious and subsequently fortifying India's situation in the global store network. A move towards corporatization, privatization, liberation, and decentralization, significantly affects the methods of connection among public and private entertainers, and types of collaboration that are set up, to give adequate port foundation.

The tax guidelines in PPP financial model in development of ports makes different impact on the investments of different stakeholders and as of their returns too. Further, as a result of the intricacy of the PPP concession arrangements, it is a major assignment to fulfill every one of the partners and to guarantee that the assumption and necessities of the multitude of stake-holders are being fulfilled.

On account of PPP projects, the vulnerabilities with long haul understanding and the intricacy of venture financing game plan create extra dangers to all stakeholders. Thinking about the more significant level of dangers, their assumptions generally merge on the capacity of the undertaking to produce sufficient income over the concession time frame to draw in or to comfort the financial investors in regards to the capital speculation.

Though the “Tariff Authority of Major Ports (TAMP)” constituted by an amendment of “Port Laws Act 1997 of the Major Ports Trust Act,1963” is an independent autonomous body to direct all taxes, both related to vessel and freight or the rates for rent of properties as for the major port trusts and the private administrators situated inside those ports.

Seeking the impacts on investment of different stakeholders, the aim of the research is to study the efficiencies of private operators on different scales under the 2005 guidelines of the tariff authority of major ports in order to evaluate the performance of the private operators and to analyze the profitability of different stakeholders

1.7 Research Objective

In pursuance to the issues identified and enumerated in the above paragraph, this study would seek to focus on

- The imperatives of tariff 2005 guidelines.
- To study the impact of PPP projects at Indian Major Ports
- To examine whether the private operators have created the appropriate facilities
- To examine the growth pattern of PPP projects
- To study whether the stakeholders get benefitted by the project.

1.8 Scope of the study

The study has focused on analyzing the performance of the PPP projects running on Major Ports in India, whether they were achievements or failures, which includes:

- The government or the public sector partner is usually only a minority partner / shareholder with the private sector partner controlling the majority stake.
- Most of the funds are brought in by the private sector partner.
- The construction, management and operational risks are transferred to the private sector partner.
- The emphasis of PPP projects is usually on the end results of the PPP arrangements and not on the means to achieve them.

The scope will include a verification of the PPP arrangement to ensure that the public sector agency has effectively put in place a sound system to oversee the efficiency and competence of

the project implementation including construction, compliance with contractual conditions, and integrity of the provision of the targeted public service in terms of the established norms and contract conditions. The scope of the report will also extend the following:

- Studies to evaluate the accuracy and reliability of reporting the results.
- Economy in the cost of operations and revenue sharing arrangements.
- Actual volume of demand (viz., traffic) and revenue generation and the arrangements to monitor the trend periodically.

The most important factor that would weigh with the report of PPP projects is to ensure the value for money aspects of such transactions. The main purpose of the report on which the scope could be defined, would thus be to provide a reasonable assurance to all stakeholders including the “The Port Authorities”, “Investors”, “The Money Lenders” and the “Public” that the PPP arrangement has yielded value for money and the public interests have been adequately protected.

1.9 Dissertation Structure

- Chapter- 1: **Introduction-** This chapter presents the background of the study including the brief about PPP projects and their need.
- Chapter- 2: **Review of Literature-** The chapter is summarizing what is known about the project and a justified framework to examine the issue.
- Chapter- 3: **Research Methodology-** This chapter presents a brief introduction about the methodology used for the research along with limitations.
- Chapter- 4: **Results and Analysis-** This chapter brings out the results and analysis of the methodology carried out on different scales (With reference to: ISHPL, TMILL & ICTPL)
- Chapter- 5: **Conclusion:** This chapter contains the concluding statement of the report

CHAPTER – 2

REVIEW OF LITERATURE

2.1. INTRODUCTION

Public-Private Participation fair and square of undertaking money, and arrangement of enormous scope framework projects, is expanding on the worldwide level. Presently, to investigate the critical success factors (CSF's) for sound execution of public-private partnership in port context, and to determine the diverging assessments of stakeholders concerning the significance of these CSF's.

The fundamental basic achievement factors that demonstrate the unrivaled significance in port PPPs are: the solidness and accuracy of the concession understanding, the capacity to properly apportion and offer danger, the specialized possibility of the task, the responsibility made by accomplices, the engaging quality of the monetary bundle, a reasonable meaning of obligations, the presence of a strong private consortium and a functional cost/advantage appraisal.

2.2. LITERATURE REVIEW

1. The Economics of Public-Private Partnerships

Physical infrastructure like ports and air terminals and social framework like emergency clinics and schools are fundamental for monetary development and structure the premise of giving a superior way of life for the resident of the country. The administrations overall form foundation through budgetary arrangements, however numerous legislatures in developing nations which are not in a financial situation to meet mammoth spending necessity construct framework through organization with private accomplices and the PPP. (Ross and Bettignies, 2004)

2. Critical Success Criteria for Public-Private Partnership Projects

Public-Private Partnership (PPP) projects achievement is a definitive objective of professionals and government associations. The administrations assemble practical foundation as a team with the private designers in PPP methodology utilizing project the board aptitude of private engineers without raising government obligation or forcing charges on residents.

Notwithstanding, the need to examine the view of various partners on PPP projects accomplishment in connection with basic achievement elements or PPP projects.

(Albert P. C. Chan, 2016)

3. The Incomplete contract theory

The hypothesis recommending giving property proprietorship right to the private contributing gathering to boost then, at that point to put resources into public foundation projects and further shield the financial backer appointment from the public authority and urges advancement to decrease life cycle cost of the undertaking. (Grossman and Hart, 1986)

4. Challenges of Public-Private Partnership Implementation on Infrastructural Development

A PPP project requires an actually master and monetarily solid private designer with satisfactory specialized information, able undertaking group, compelling task association structure and past experience in executing framework activities and public specialists should choose a capable private accomplice in acquisition stage to follow fulfillment of venture on schedule and inside allocated financial plan. (Dada and Oladokun, 2012)

5. Project Management Framework

A danger is a vulnerability about future result, and hazard the executives is bundle of exercises and measures to manage dangers to control the task. The expanding acknowledgment of venture

the board demonstrates that the use of fitting information, measure, ability, devices, and procedures can altogether affect project achievement. (PMBOK, 1996)

6. Allocating and Valuing Risk in Privately Financed Infrastructure Projects

Governments needs private firms to back new foundation. The organizations, thusly, frequently need the public authority to bear a portion of the dangers. A danger distribution and the executives is fundamental for PPP the board and hazard allotment between the tasks accomplices while making most extreme worth ought to painstakingly oversee issues like unfriendly choice, moral peril and undertaking hold up emerging because of deficient nature of PPP contracts and ought to be apportioned to an accomplice who can oversee and relieve it by adjusting interests of every elaborate partner and fastidiously drafting the concession understanding contemplating that PPP is to a great extent a fragmented agreement. (Irwin, 2007)

7. The Theory and Practice of Infrastructure in Public-Private Partnership

PPPs are broadly advanced dependent on an account of improved cooperation between various partners. By aligning the interests of the multiple parties to encourage closer and more productive working relationships Likewise, it is contended that public-private associations support creative venture plans and convey an incentive for cash by better controlling task hazards. (Pickrell, 1992)

8. Driving Forces leading to the Adoption of PPP

The budgetary imperative of government, as the veery first PPP projects that selected this methodology were basically to get private venture for public administrations and offices. These administrations and offices were frequently fundamental for people in general and included immense measure of monetary venture. In the event that this load of administrations and offices were totally financed by the public authority, it would make huge monetary tension on the public authority. (Dr. P. V. Akalkotkar and S. Malek, 2016)

9. Public-Private Partnership in Indian Infrastructure Development

Foundation being the bottleneck has been a genuine worry in India in its method of vigorous speed of financial movement. There are numerous issues including dark strategies, broken danger allotment, insufficient task choice, cost and time invades. (Lakshmanan, 2008)

10. When PPP's Fail

The critical foundations for disappointment of the PPP model in growing nations are nonappearance of sound institutional system and powerful and straightforward strategies. (Akintoye and Matthias, 2009)

2.3. Conclusion

The Public-Private Partnership projects has the potential to form the most economic, reliable, safe and efficient form of port operations. However, there is an essential qualification between PPPs which are allowed to set their own duties, and those whose taxes are directed, either by a recipe inside the PPP agreement or by independent regulators or by the port authorities.

Unregulated tariffs are found in areas where there is a lot of inter-port or intra-port competition, regulated tariffs where geography, traffic volumes and/or terminal specialization creates natural monopolies. Tax guideline in ports normally appears as tax roofs which are not to be surpassed for singular shipments.

Port authorities generally support the view that PPP agreements should include enforceable performance targets, even though it is difficult to define meaningful targets which fully capture customers' requirements.

Despite the fact that the surveys recommend that PPPs ought to stress participation, correspondence, risk allocation and straightforwardness as the government assumes a basic part in deciding the achievement and disappointment of public-private partnerships (PPP's).

CHAPTER – 3

RESEARCH METHODOLOGY

3.1. Introduction

Research methodology is a systematic method to resolve a research problem through data gathering using various techniques, providing an interpretation of data gathered and drawing conclusions about the research data. Essentially, a research methodology is the blueprint of a research of study. This chapter thus discuss the research methods used for collection of data and design the methodology of the research approach through different types of research techniques.

This chapter's purpose is to design the methodology of the research approach through different types of research techniques while dealing with the general design of the research and the methods used for data collection. Where, the data collection or research is focused on collating and analyzing information from public sources such as from the website of “Tariff Authority for Major Ports (Ministry of Ports, Shipping and Waterways, Government of India)”

This chapter includes three main parts:

1. The first part gives a highlight about the research design.
2. The second part discusses about qualitative and quantitative data collection methods.
3. The third part illustrates the general research framework.

The purpose of this chapter is to indicate how the research is to be conducted throughout the period of study.

3.2. Research Design

This research is basically a “Desk research”, where the methodology involves using already existing data. Existing raw data is summarized and collated into information to increase the overall effectiveness of research.

Secondary data includes research material published in research reports and similar documents. These documents can be made available by public libraries, websites, data obtained from already filled in surveys etc. Some government and non-government agencies also store data, that can be used for research purpose and same can be retrieved from them.

The Desk research / Secondary research is to be conducted in the following steps:

- i. Identify the topic of research
- ii. Identify research sources
- iii. Collecting existing data
- iv. Combine and Compare
- v. Analyzing data

This Project work is primarily based on secondary data, which is collected from the various public sources including the website of “Tariff Authority of Major Ports (TAMP)”, websites of different port trust of concerned terminals, website of “Indian Port Association” etc.

The report focusses on evaluating the contemporary landlord role of three private terminals {International Seaport Haldia Pvt. Ltd. (ISHPL), Tata Martrade International Logistics Ltd. (TMILL), & Indira Container Terminal Pvt. Ltd. (ICTPL)}. The study focusses on various indicators of terminal operator including the performance and the financial indicators and analyze the success and profitability of various stakeholders

3.3. Methods of Data collection

Information assortment is an orderly interaction of social affair perceptions or estimations. It indeed allows to gain the first-hand knowledge and original insights of the research problem and depending on the problem “quantitative” or “qualitative” data is to be collected.

- **Quantitative data** is expressed in numbers and graphs and is analyzed through statistical methods.
- **Qualitative data** is expressed in words and analyzed through interpretations and categorizations.

Though this study aims to test a hypothesis “whether the stakeholders get benefitted or not” or to measure the performance of the private terminal precisely, statistical tools are need to be used for calculations and quantitative data is to be collected which includes:

- i. Capital Employed each year by private operators
- ii. Physical dimensions of the terminals
- iii. Volume of Cargo Traffic handled each year
- iv. Operating Cost per year
- v. Share of revenue paid to port authorities

The required yearly data is collected from the websites of “Tariff Authority for Major Ports (TAMP)”.

TAMP: The Tariff Authority for Major Ports was established in April 1997 to accommodate an autonomous Authority to direct all taxes, both vessel related and payload related, and rates for rent of properties in regard of Major Port Trusts and the private administrators found in that. The Major Ports Trust Act, 1963 was changes by Port laws (Amendment) Act 1997 to establish the TAMP. The Authority is empowered not only to notify the rates but also the conditionalities governing application of the rates.

Though the independent authority regulates and decides the tariffs that the private operator levies for port services and by its regulation under 2005 guidelines of tamp, the private operator are supposed to submit the cost and operational details to the TAMP authorities.

Thus, the data of each terminal operator is collected from the official website of TAMP.

3.4. Operators Selected for the research

1. International Seaport (Haldia) Pvt. Ltd. (ISHPL)

International Seaports Haldia Private Limited is an SPV promoted by Swapan Sadhan Group of companies, Precious Shipping Public Company Limited PSL of Thailand and L&T Infrastructure & Development Co. Ltd., which have equity stakes of 55.23%, 22.3% and 22.4%, respectively, in the company. ISHPL had set up mechanized coking coal handling facilities at berth no 4 A on Build Operate and Transfer (BOT) basis with cargo handling capacity of 3-3.2 million tones at a total cost of Rs. 127 crore and commercially commenced operations on January 15, 2004. The facilities at the berth include two grab type un-loaders, conveyor system, stackers, reclaimers and automatic wagon loading system. The company has a license to operate the berth for a period of 30 years from the date of award of license (May 14, 2002) by Haldia Dock Complex (HDC) of the Kolkata Port Trust (KPT). (Berth Length- 232m)

ISHPL committed a minimum guaranteed cargo of 1.25 million tones in its first-year operation to KPT and increased it steadily to 1.75 million tones in its fifth year of operation and further to 1.9 million tons from its 24th year of berth operation. ISHPL has also entered into a 30- year, take-or-pay agreement with SAIL for using the berth for importing coking coal with a minimum guaranteed quantity of 2.30 million tones.

2. Tata Martrade International Logistics Ltd. (TMILL)

Incorporated in 2002, TM International Logistics Limited is an international logistics provider formed as a joint venture company of Tata Steel Limited, NYK Holding (Europe) BV and IQ Martrade.

In Haldia Port, TMILL owns and operates Berth no 12, a clean cargo berth with facilities to handle clean bulk and break bulk cargo. It also handles the over dimensional and Project cargo consignments. Facilities to be provided during the concession agreement are: Berth length of 220 m capable of handling up to Panamax vessels at permissible draft of Haldia Port, Two Harbor Mobile Cranes of capacity 124 MT & 104 MT, Heavy like forklifts ranging from 3 MT – 32 MT lifting capacity, Front- end loaders up to 5 cubic meters bucket capacity, 60,000 sq. m. of open warehousing space & 3000 sq. m. of covered warehouse. The terminal management

service offers container stuffing / destuffing, handling of various types of dry bulk, break bulk and project cargo.

3. Indira Container Terminal Pvt. Ltd. (ICTPL)

Indira Container Terminal is the first and single largest container privatization project at the Mumbai Port incorporated on 13th September, 2007. The Project includes development, financing, preparing, activities and the executives of the offshore container terminal, comprising of at least two berths in the Mumbai harbor on a BOT basis. The operation has been started from Jan, 2008 for a period of 30 years from the date of award of project.

Berth Details: - **i.** Ballard Pier Station (2008-13) – 244 meters

ii. Offshore Terminal (2013-38) – 700 meters

3.5. Research Framework

It is the set of activities require to be performed. This study is an operational research which seeks to measure, iterate and optimize an existing data in order to fetch the required results. Though, this examination endeavors to a set up and decide the different presentation attributes of the private operators to contrast their exhibition with one another and with their own i.e., by means of inter-period comparison. The research primarily focusses on the efficiencies calculate on different scales or the benefits of different stakeholders as follows:

- i. **Capital Efficiency:** It is defined as the ratio of the companies spending on growing revenue and how much they are getting in return. Here, as the per the research perspective, Capital efficiency is to be calculated under two different sub headings, i.e.,
 - Financial Efficiency, defined as the volume of cargo handled / Capital

employed each year or in simple terms how much capital is being required while carrying some fixed volume of cargo.

Cargo Volume Handled / Capital Employed

- Physical Efficiency, defined as the volume of cargo handled / berth length in meters each year.

Cargo Volume Handled / berth length in Meters

- ii. **Operating Efficiency:** It is defined as the amount of operating cost incurred while handling 1 million tons of cargo.

Operating Cost / Volume of Cargo Handled

- iii. **Commercial Efficiency:** It indicates or shows whether the operator was able to attract customers, whether there is growth rate in traffic or not.

Cargo traffic handled each year – Compounded annual growth over years

- iv. **Benefits to Stake-holders:**

- User – productivity vs tariff
- Profit to investors
- Royalty or revenue share paid to port authority by operators
- Loan repayment to lenders

Here, the stakeholders are comprised of:

1. Port Authority
2. Private Operators
3. Money Lenders
4. Port Users

3.6. Limitations of the Research

- Although data is readily available, credibility evaluation must be performed to understand the authenticity of the information available.
- Not all auxiliary information assets offer the most recent reports and measurements. In any event, when the information is precise, it may not be sufficiently refreshed to oblige late timetables.
- Secondary research derives its conclusion from collective primary research data. The success of the research will depend on the quality of research already conducted by primary researchers or the collected data.

CHAPTER – 4

ANALYSIS

4.1 Introduction

Public-Private-Partnerships, in late past, have arisen as basic main thrust behind huge scope foundation projects. They incorporate strategic relationships where private sector capital and technology, coupled with favorable government regulatory mechanism and machinery work hand in hand to deliver large and complex projects. PPP projects are essential devices to empower the production of public resources for the country. Consequently, the part of partners is vital segment of the achievement of such activities. This research paper investigates the value of stakeholder engagement in PPP projects based on the investment and profit shared in order to manage stakeholders effectively.

Though PPP is a way of contracting infrastructure projects, it is usually a long-term relationship between a public sector a procurer and purchaser, and multiple private sectors companies which design, build, and keep up the framework and offer some connected types of assistance. PPP is connected with different arrangements influenced by legal traditions. The contract may take many forms like sharing benefits between the stakeholders proportionately to resources engaged, responsibilities, and risk taken. In this way, public-services and infrastructure provision lead to a win-win situation.

4.2 Research Analysis

This research is based on evaluation of performance of three different private terminals in accordance to their efficiencies and the profits allowed to stakeholders. The study is to be conducted on two parameters:

1. Inter-Period (within the terminal)
2. Inter-Firm (Comparison of growth in different terminals)

Evaluation on Different Scales.

1. Capital Employed

This section deals with the capital invested by the private operators each year to build and maintain the existing infrastructure or to build completely new infrastructure as varies with the concession agreement signed between the private operators and the port trust.

Though, the huge capital needs in huge infrastructure developments are one of the driving force of PPP projects, where weighted amount of capital is invested by operators using the best efficient mode of capital structure and thereby reducing the strain from the government bodies to manage such investments.

Inter-Period Comparison

i. ISHPL (International Seaport Haldia Pvt. Ltd.)

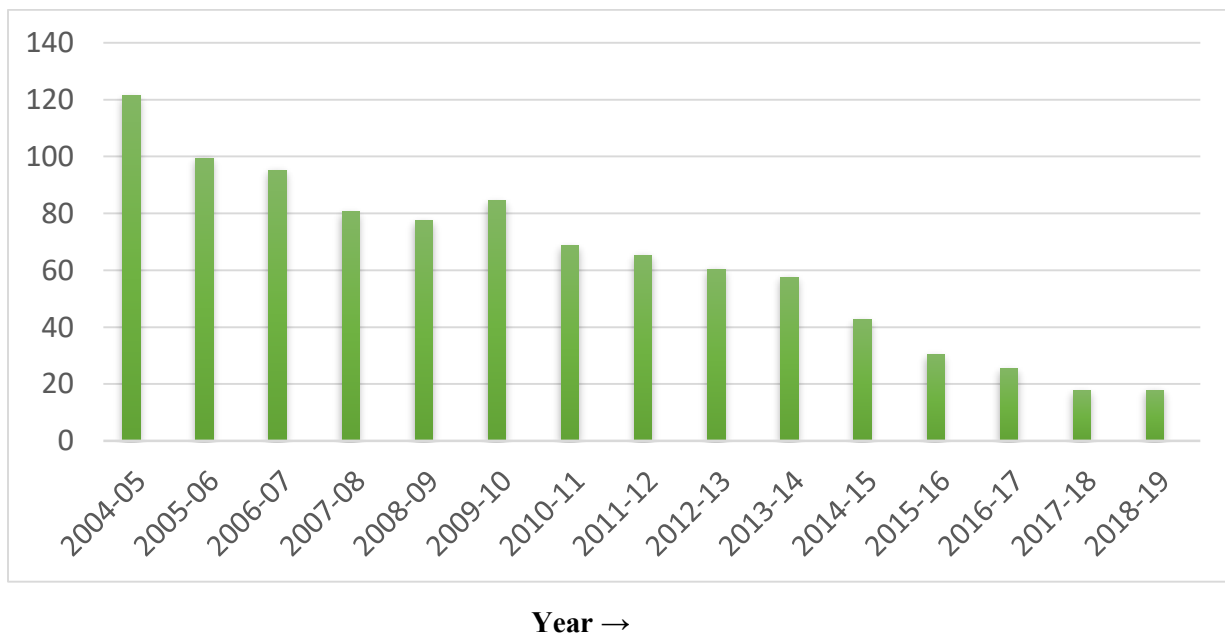


Fig 3: Inter-Period Comparison of Capital Employed for ISHPL

- The graph is itself justified, where huge investments are brought in during the starting phase of the project in order to boost the pre-acquired infrastructure.

ii. TMILL (Tata Martrade International Logistics Ltd.)

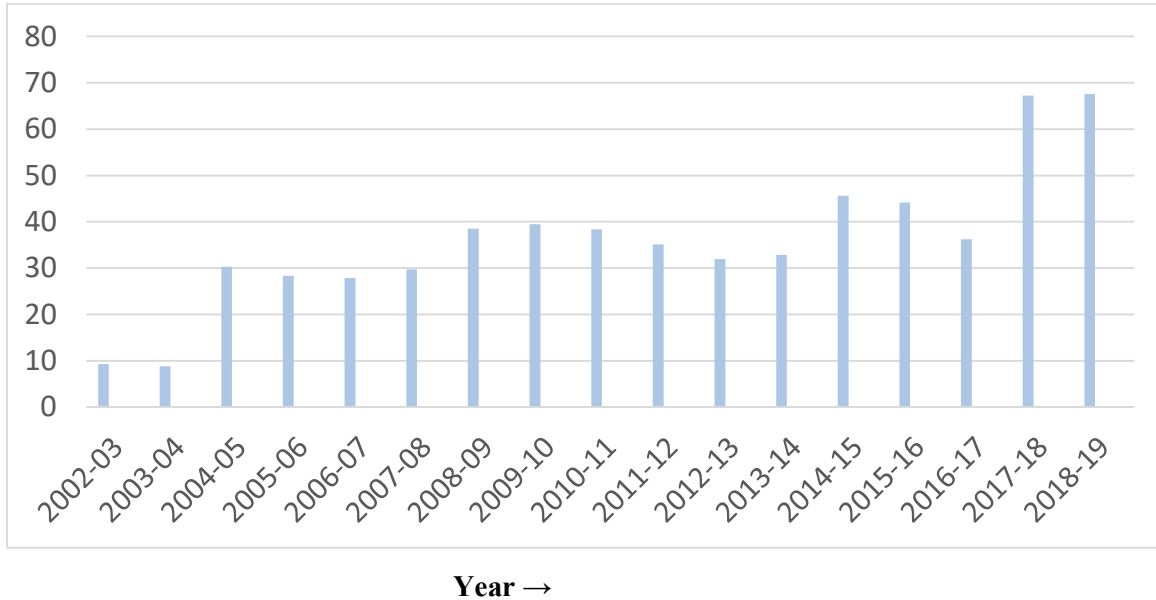


Fig 4: Inter-Period Comparison of Capita Employed for TMILL

- In case of TMILL, the pre-acquired berth is itself self-sufficient and in later periods, the company worked on acquiring more land for warehousing activities and improving the infrastructure facilities, which is being as resulted in increasing graph of Capital Employed.

iii. ICTPL (Indira Container Terminal Pvt. Ltd.)

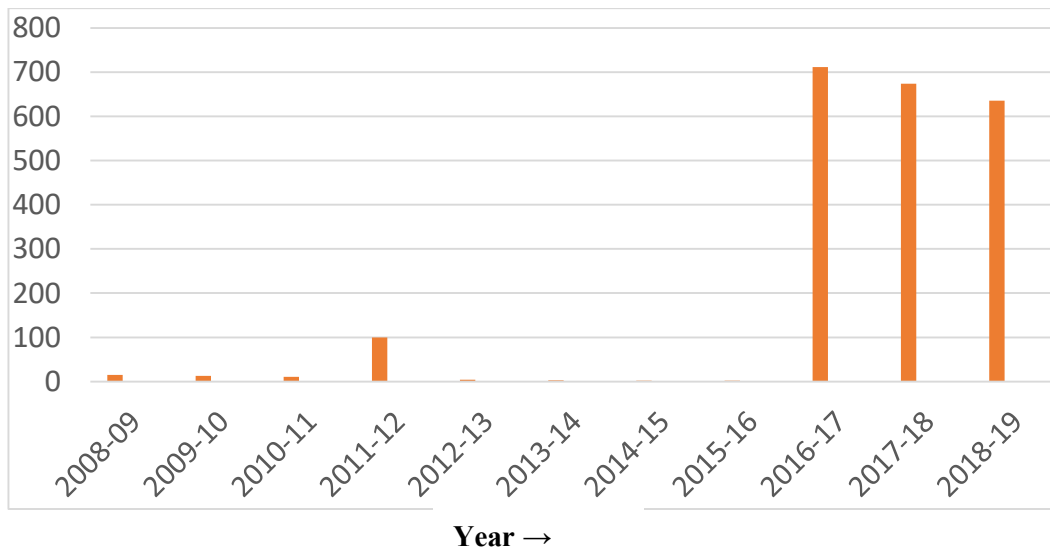


Fig 5: Inter-Period Comparison of Capita Employed for ICTPL

- Though the ICTPL had started its journey from a pre-acquired berth that is named as “Ballard Pier Station” but the authority of operating that terminal is only for 5 years and the exceptional increase in period of 2016-19 shows the expenses that were made to built the whole new “Off-Shore Terminal” by ICTPL.

Inter-Firm Comparison

Inte-firm comparison is the technique which studies the performances, efficiencies, costs and profits of various concerns in an industry with the help of exchange of information in order to have a relative comparison.

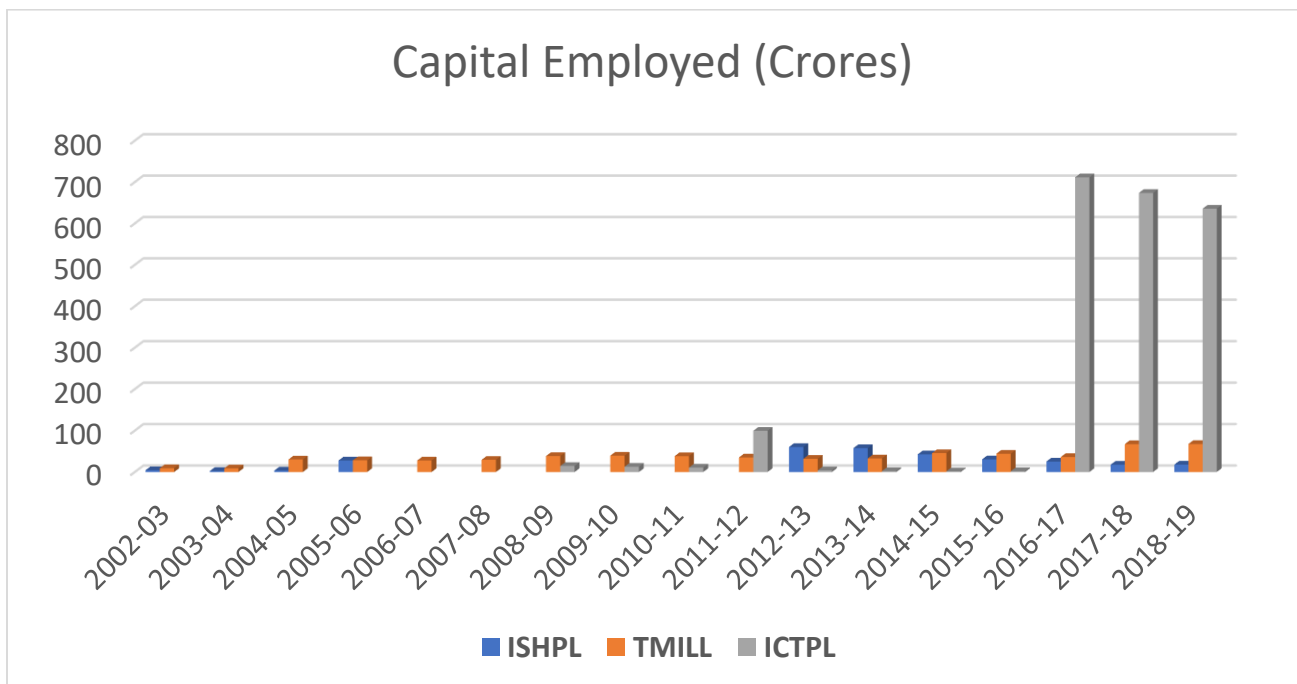


Fig 6: Inter-Firm Comparison of Capita Employed

- The above graph depicts and compare the difference of capital employed in all the three firms that are considered for the study.
- Since the Terminals named “ISHPL” & “TMILL” had acquired pre-constructed berth shows their less capital expenditure as of the third terminal “ICTPL”.
- “ICTPL” shows the exponential increase in capital expenses only as they are manufacturing a whole new berth for their operations.

2. Volume of Traffic Handled

The volume traffic handled at each terminal is indeed defines the productivity and helps in measuring the efficiencies of their performances on various parameters, either on capital terms, physical terms or on commercial terms.

Inter-Period Comparison

i. ISHPL

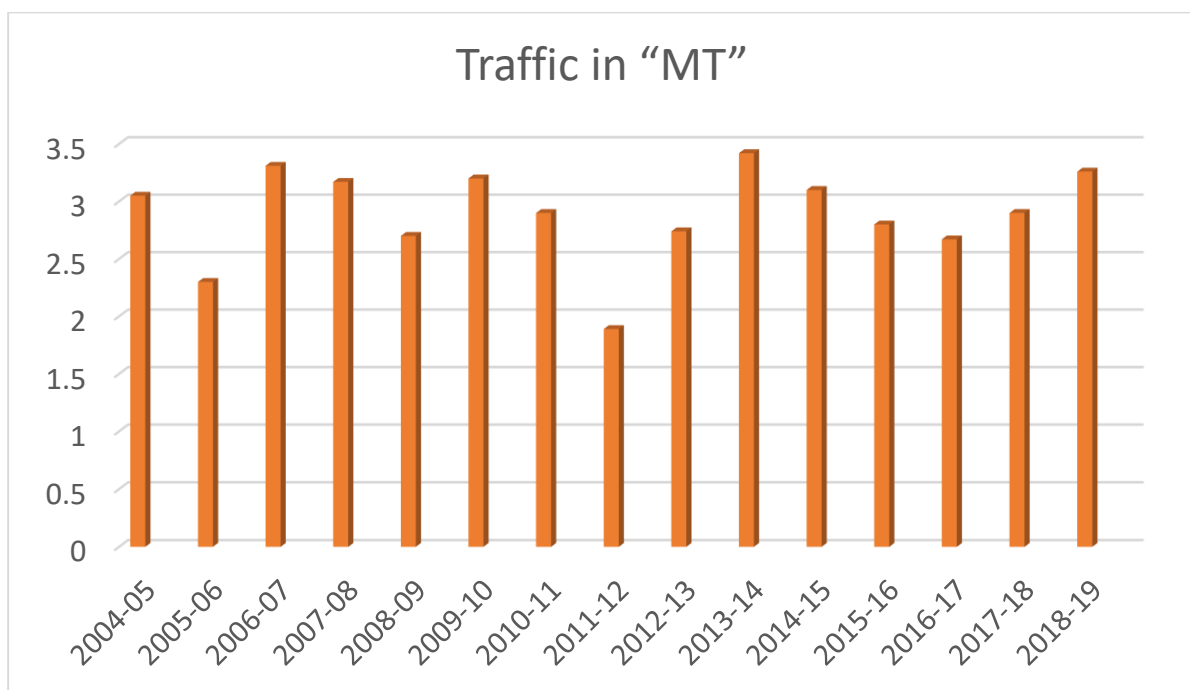


Fig 7: Inter-Period Comparison of Traffic handled (ISHPL)

- ISHPL, in their concession agreement itself has signed to maintain the traffic level above 1.5 MT for first five years and then to increase to 1.75 - 1.9 MT in upcoming years.
- Since, the results for the ISHPL from first year itself is touching a level beyond the upper mark they promised.
- The main reason or the thing they get benefitted off is to sign a contract with SAIL to operate at-least 3 MT of Coal each year.

ii. TMILL

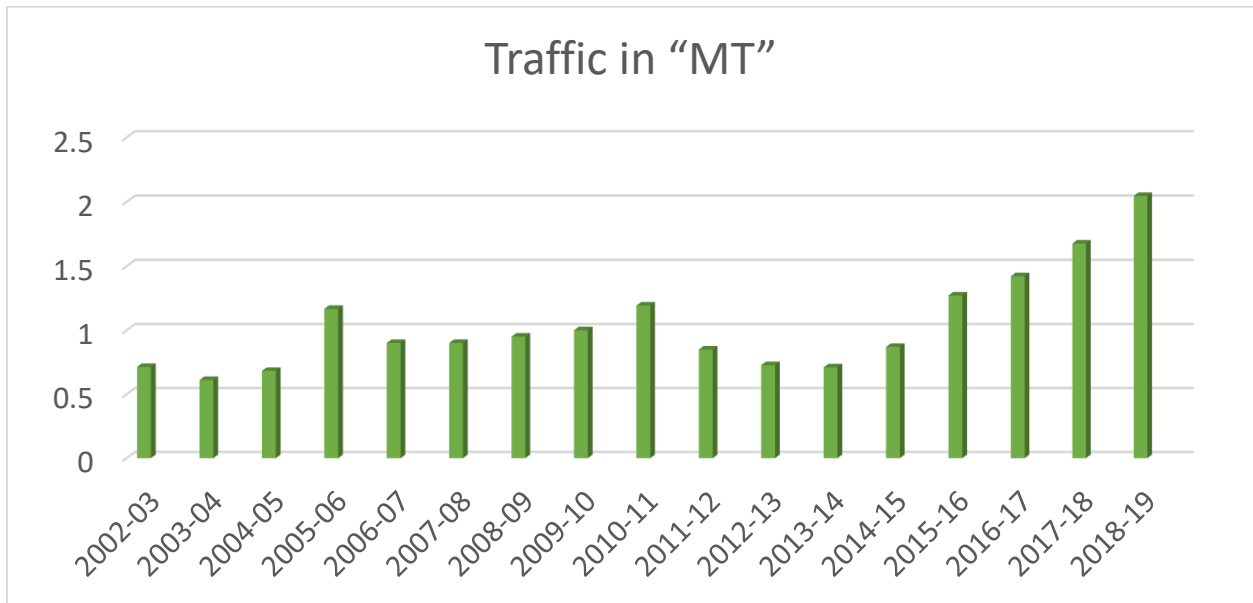


Fig 8: Inter-Period Comparison of Traffic handled (TMILL)

- The trend of the traffic is increasing which is the indirect result of acquiring more land for warehousing as did in later periods of the contract.

iii. ICTPL

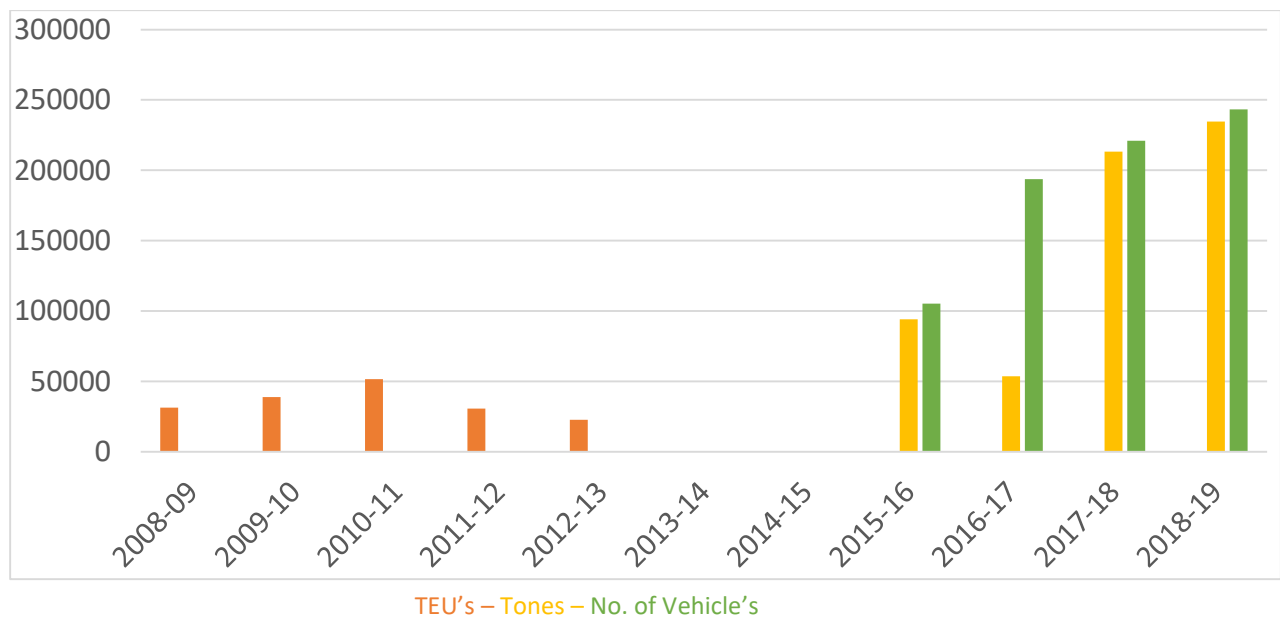


Fig 9: Inter-Period Comparison of Traffic handled for (ICTPL)

- ICTPL, in its initial phase only handled containers at Ballard Pier Station, whereby in later phase the ICTPL is handling dry bulk cargo, RORO vehicles and all.

3. Capital Efficiency (Financial)

Technically speaking, **capital efficiency** is the ratio of how much a company is spending on growing revenue and how much they're getting in return. Here, in financial terms, we are actually finding out how many million tones of cargo is handled with the expense of 1 crore of capital.

Inter-Period Analysis

i. ISHPL

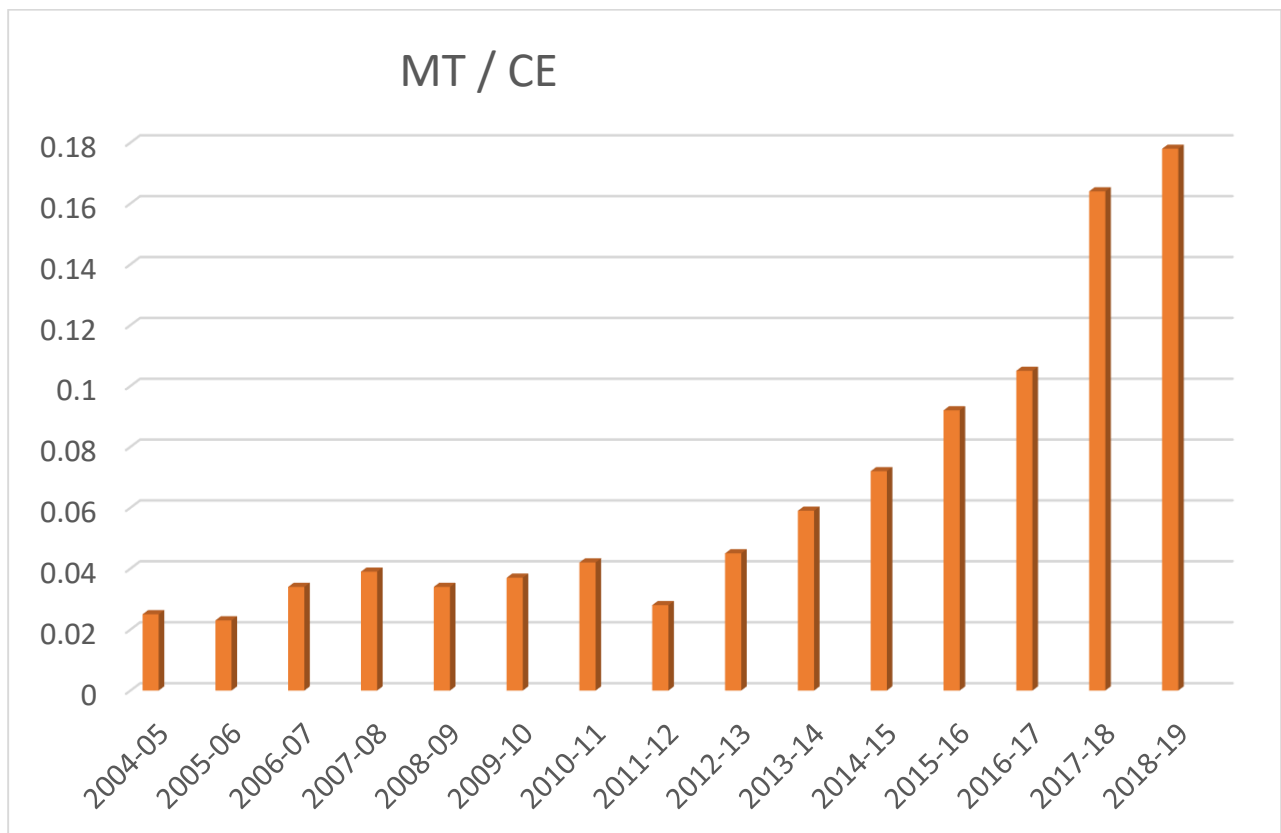


Fig 10: Inter-Period Comparison of Capita Efficiency for (ISHPL)

- Though the traffic handled as shown in graph (7) shows the traffic is constant or fluctuating on about 3 MT. Whereas, if we refer the graph (3) which shows the capital employed is having a decreasing trend which is the main factor of the above result or increasing financial efficiency

ii. TMILL

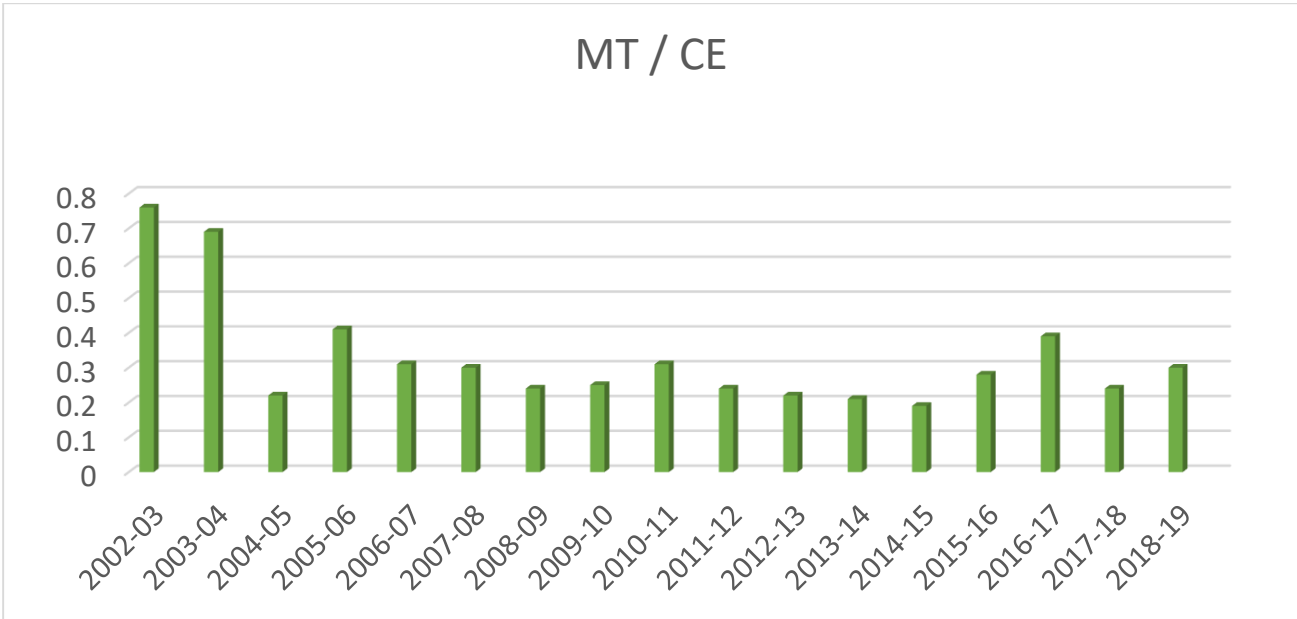
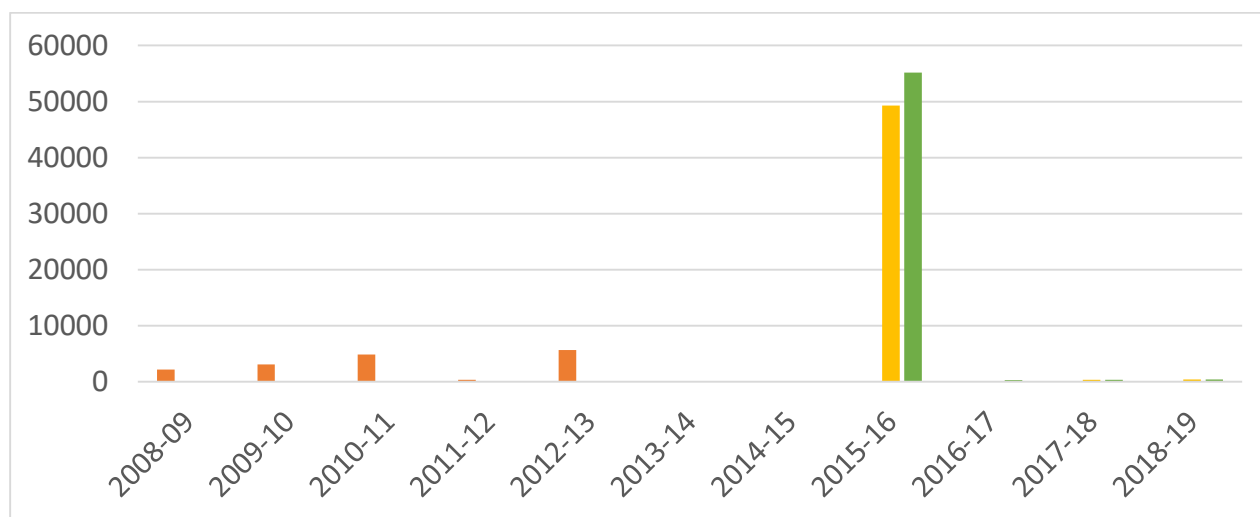


Fig 11: Inter-Period Comparison of Capita Efficiency for (TMILL)

- Since according to graph (8), the traffic handled is fluctuating near to 1 MT except of the last few years.
- Instead of increased traffic in last few years the terminal still was less efficient as of the more capital employed in those years as depicted by graph (4).
- Since the company “TMILL” got a pre-constructed terminal, which indeed was the result of less capital investment in initial phase of the terminal operations which is solely responsible for such efficiency.

iii. ICTPL



TEU's – Tones – No. of Vehicles

Fig 12: Inter-Period Comparison of Capita Efficiency for (ICTPL)

- ICTPL had signed a concession agreement with Mumbai Port Trust for a period of 30 years, whereby they have been allotted a pre-constructed berth named “Ballard Pier Station” for a period of 5 years and parallelly they supposed to build an “Off-Shore Terminal” for the rest 25 years.
- Also, the Ballard Pier Station is only handling containers, whereas the Off-Shore terminal is handling a number of types of cargo including Dry-Bulk, RORO vehicles & Containers as well.
- However, the terminal had attracted a considerable volume of traffic in terms of Dry-Bulk or RORO vehicles but was not able to attract container traffic.
- The above graph depicts that the period of 2015-16 shows an exponential increment but the rest are considerably low.
- The reason may be justified with help of graph (5) & graph (9), where is has shown that the exponential increment of Capital are being responsible for the later periods of low efficiency instead of handling significant amount of traffic.

Inter-Firm Analysis

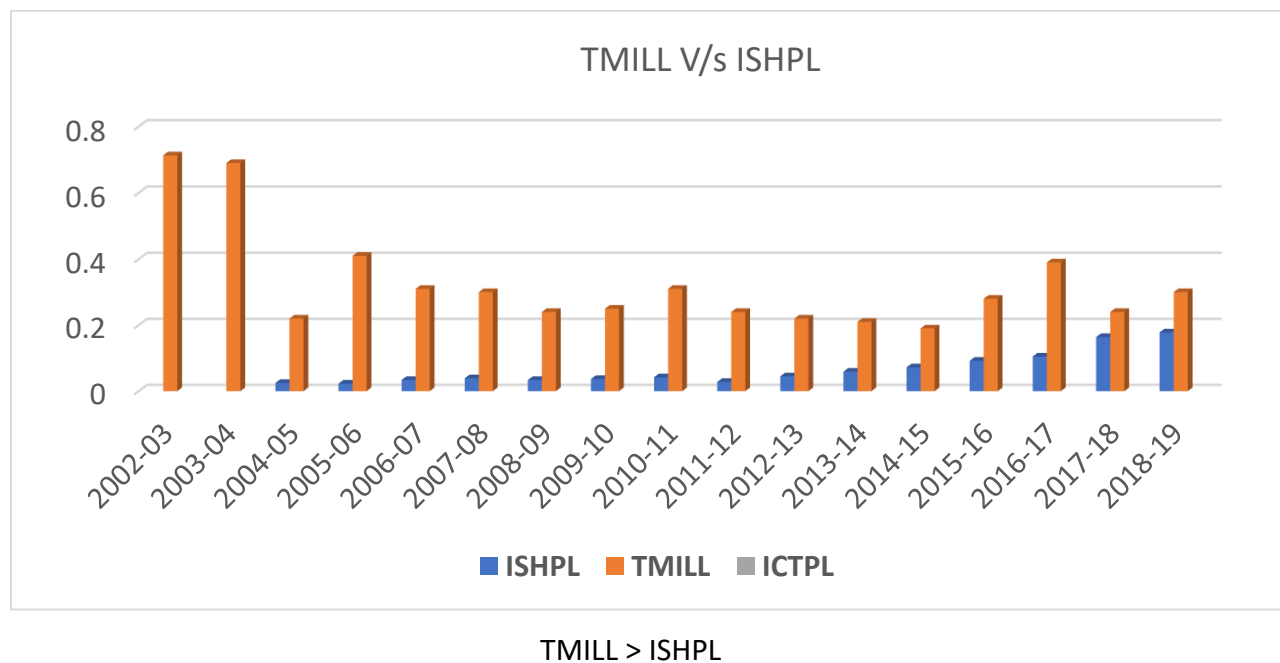


Fig 13: Inter-Firm Comparison of Capita Efficiency

- The Inter-Firm analysis is performed with reference to two terminals as the third terminal (ICTPL) is having different measurements.
- Though the terminal ISHPL is able to attract more traffic but at the same time the capital employed in such is also considerably high as compared to TMILL and as a result TMILL shows more efficiency in financial terms.

4. Capital Efficiency (Physical)

Capital efficiency in physical terms in this report is defined as the amount of traffic handled per meter of berth length each year. It indeed shows how efficiently the private operator is able to use each and every meter of berth length.

Here, the physical efficiency is calculated as volume of cargo traffic handled per meter of berth's length. Therefore, the physical efficiency is only dependent on two factors i.e., "Volume of Traffic Handled" and "Berth Length".

- Any fluctuations in any of the graphs showing the physical efficiency is thus only as the result of traffic handled during the period as there is not any changes made in terms of increasing the berth length of the given terminal i.e., “Terminal 4A of Haldia Dock Complex”.

Inter-Period Analysis

i. ISHPL

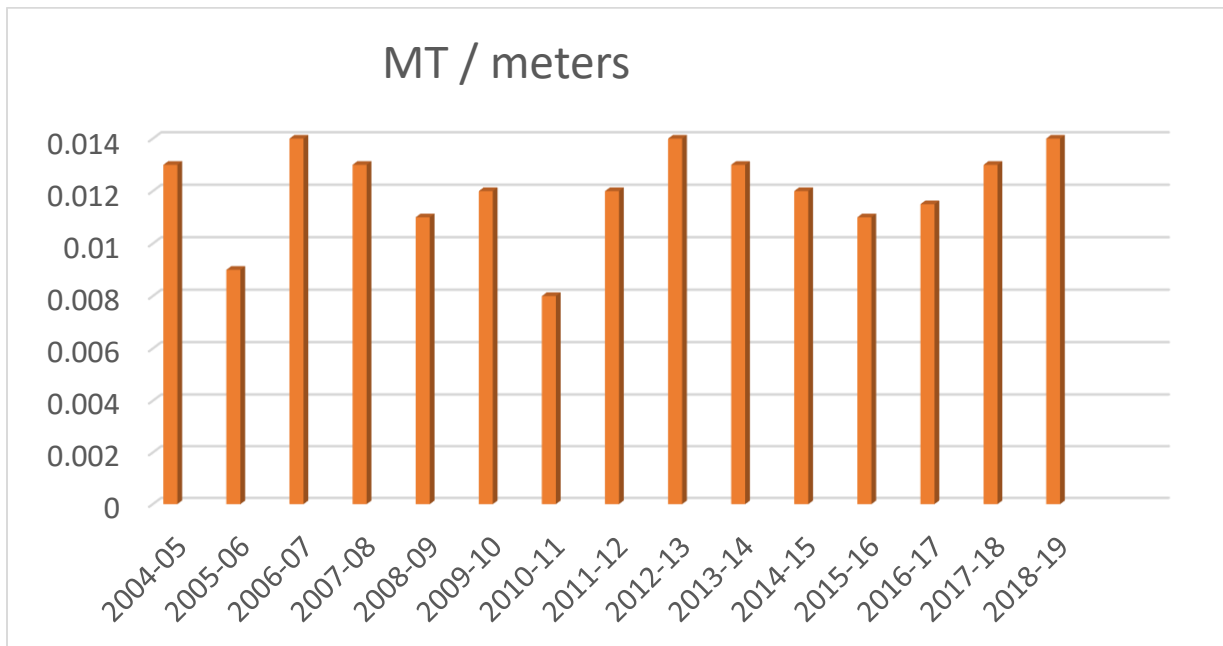


Fig 14: Inter-Period Comparison of Capita Efficiency (Physical)

- Since the operator is using the same length as provided by the port trust. So, the physical efficiency is only dependent on volume of traffic handled.

ii. TMILL

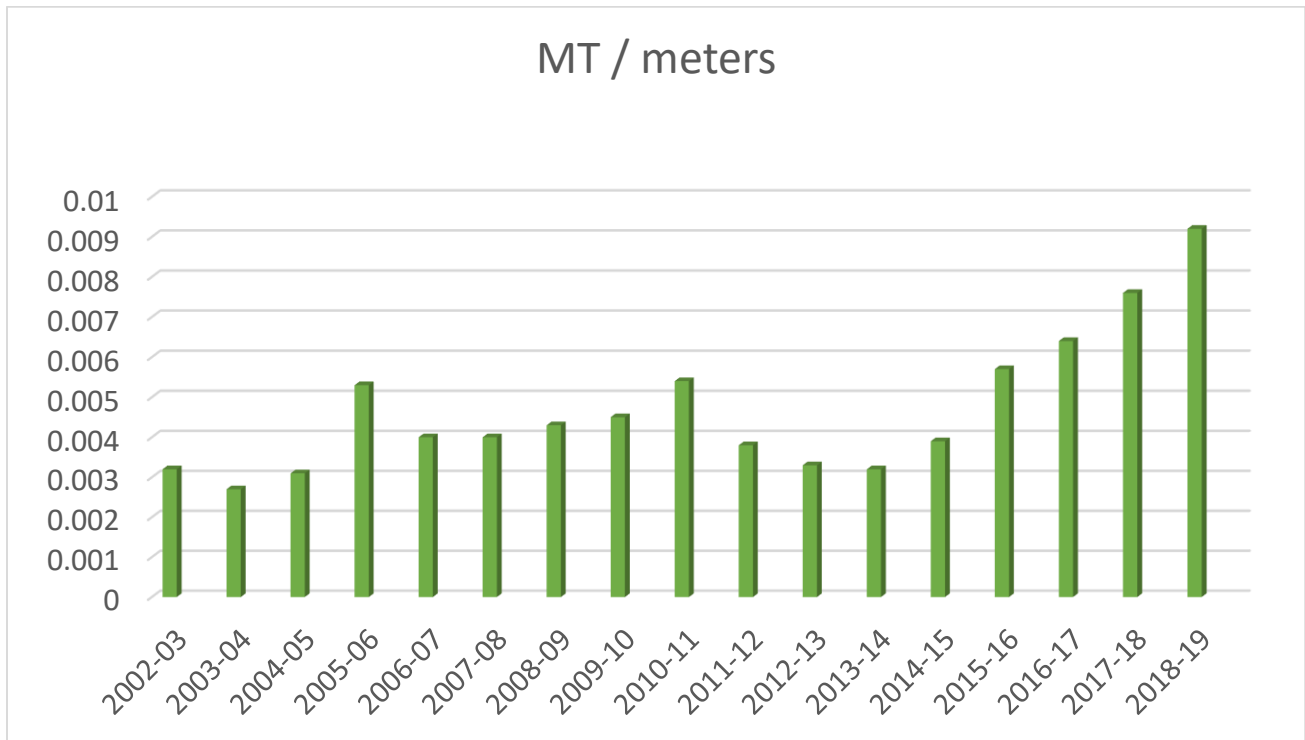


Fig 15: Inter-Period Comparison of Capita Efficiency (Physical)

- Here, volume of traffic handled is solely responsible for physical efficiency.

iii. ICTPL

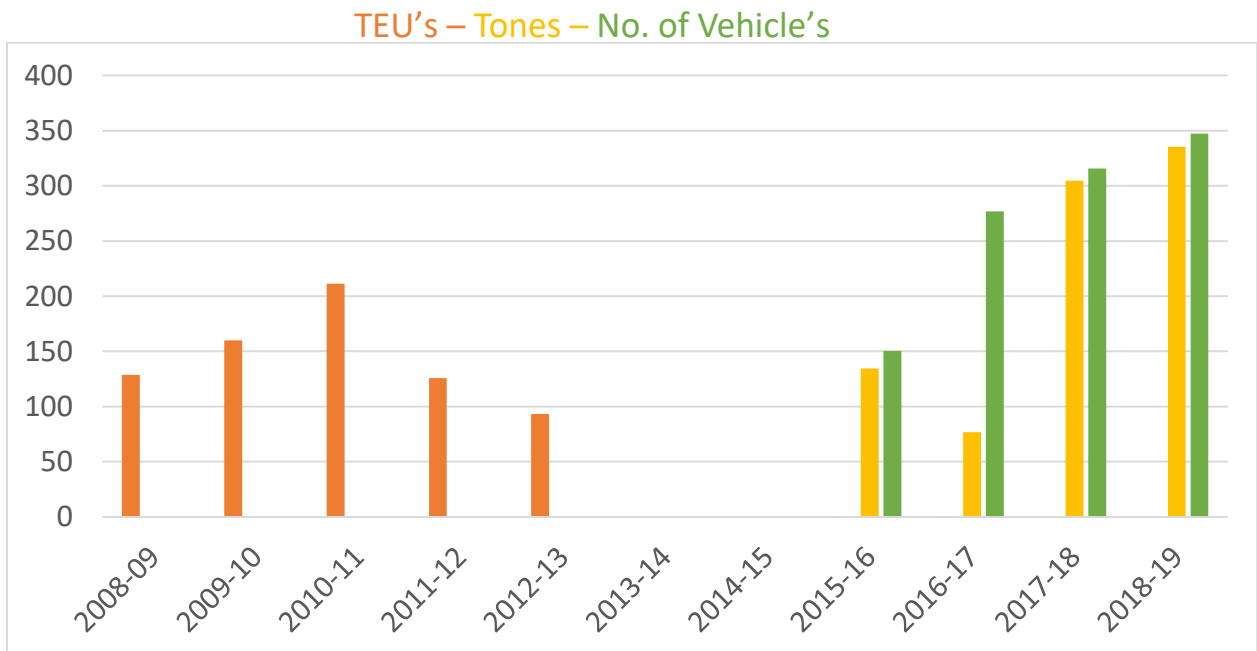


Fig 16: Inter-Period Comparison of Capita Efficiency (Physical)

- The initial five years as shown in graph is the result of traffic handled at Ballard Pier Station having berth length is 244 meters. Whereas, the period starting from 2015- onwards was being operated at the Off-Shore terminal having berth length 700 meters.

Inter- Firm Analysis

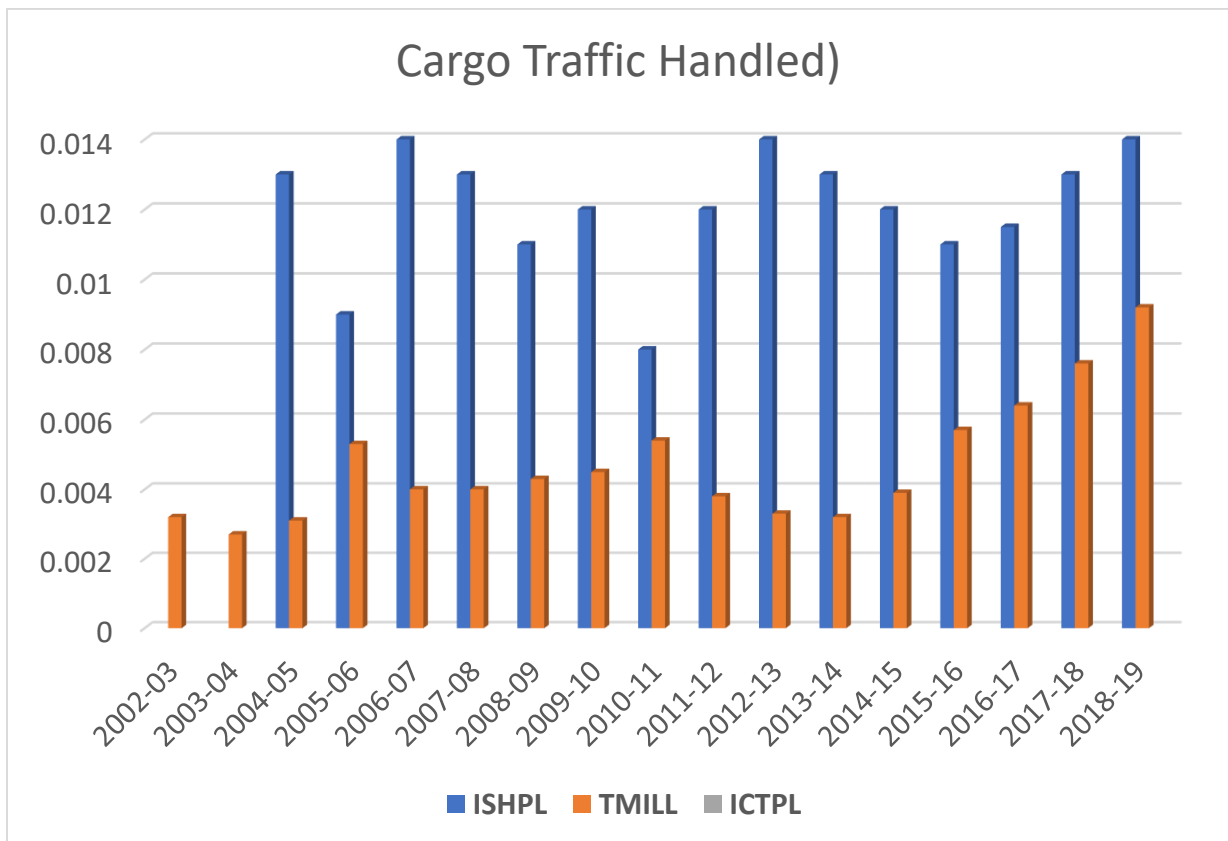


Fig 17: Inter-Firm Comparison of Capita Efficiency (Physical)

ISHPL > TMILL

5. Operating Cost

Operating costs are the ongoing expenses incurred from the normal day-to-day of running the operations.

In this research, the operating cost consist of operating and direct labor, maintenance labor, equipment running costs, equipment hires charges, lease rentals as per the concession agreement, insurance, depreciation, management & administration expenses, finance & miscellaneous expenses.

Inter-Period Comparison

i. ISHPL

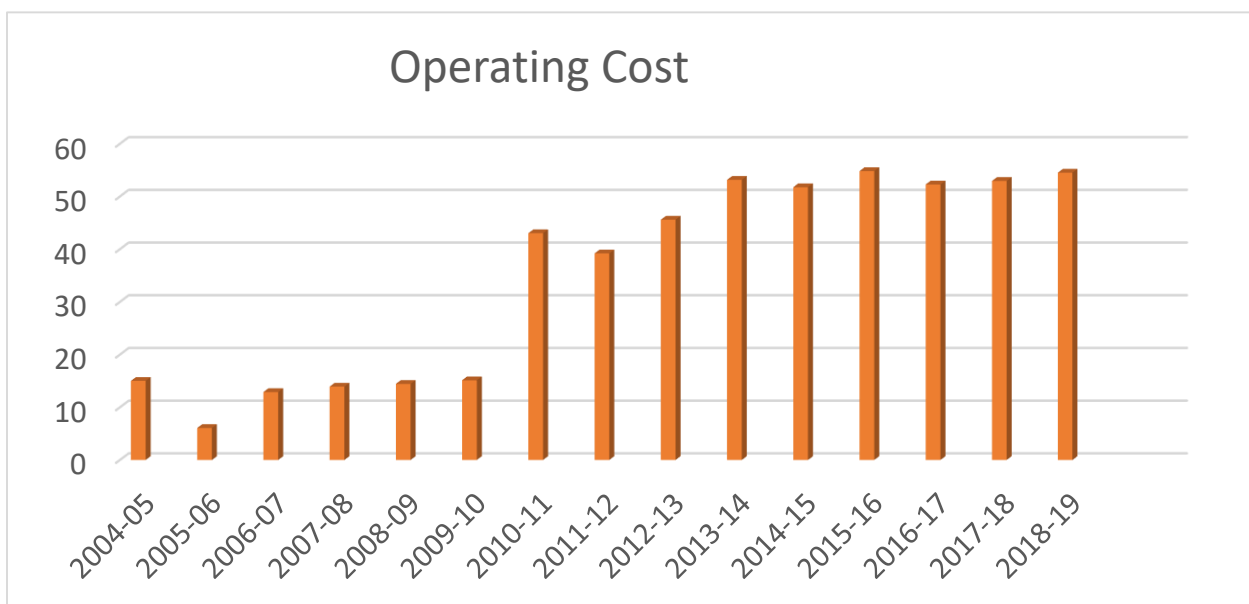


Fig 18: Inter-Period Comparison of Operating Cost for (ISHPL)

- Operating cost is directly related to the volume of traffic handled, however the uncertainties having its roots in the changed policies of tamp.

ii. TMILL

Operating Cost

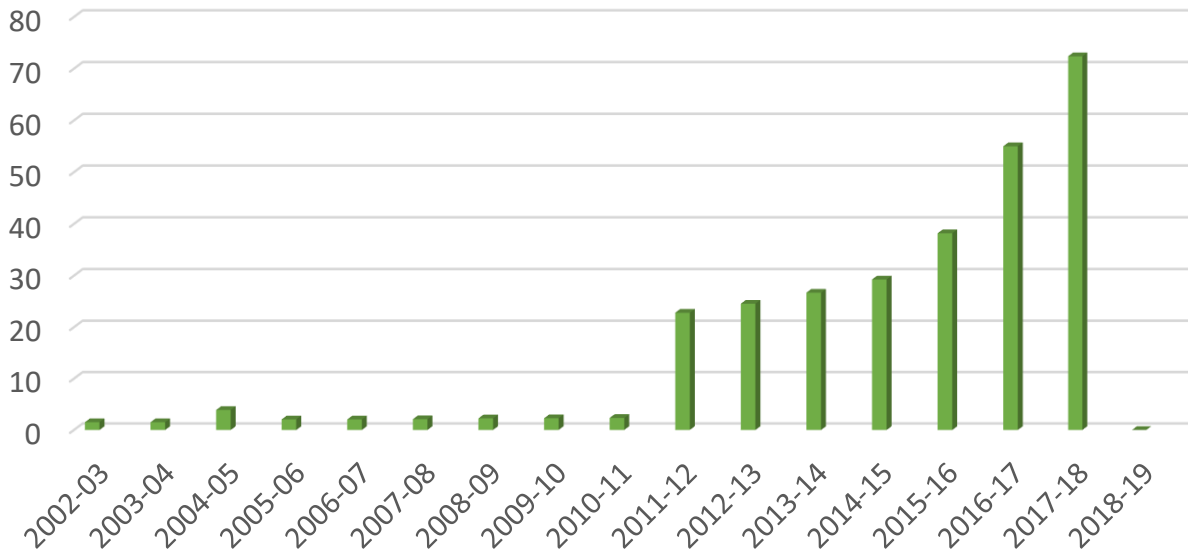


Fig 19: Inter-Period Comparison of Operating Cost for (TMILL)

- The exponential rise in the operating cost from 2011 onwards is directly related to increase in traffic as per graph (8) & the lease of extra 54000 sq m of land on rental basis with 4.5% of increment in the rent of the plot.

iii. ICTPL

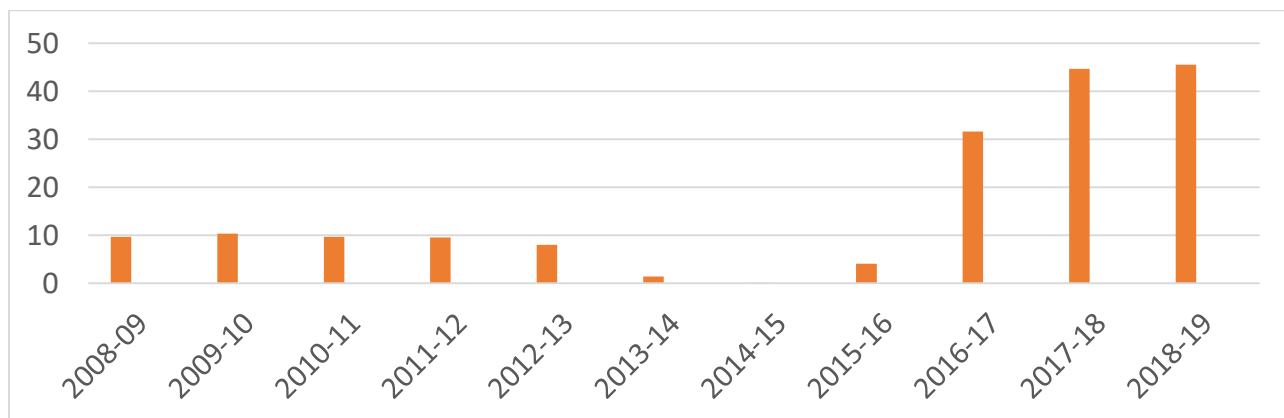


Fig 20: Inter-Period Comparison of Operating Cost for (ICTPL)

- Here, the Operating is the direct results of the volume of traffic handled. Though, the data relating to the traffic handled in the period (2013-16) has not been available on the TAMP website which describes that the cost might be spent on maintenance only for that period.

Inter-Firm

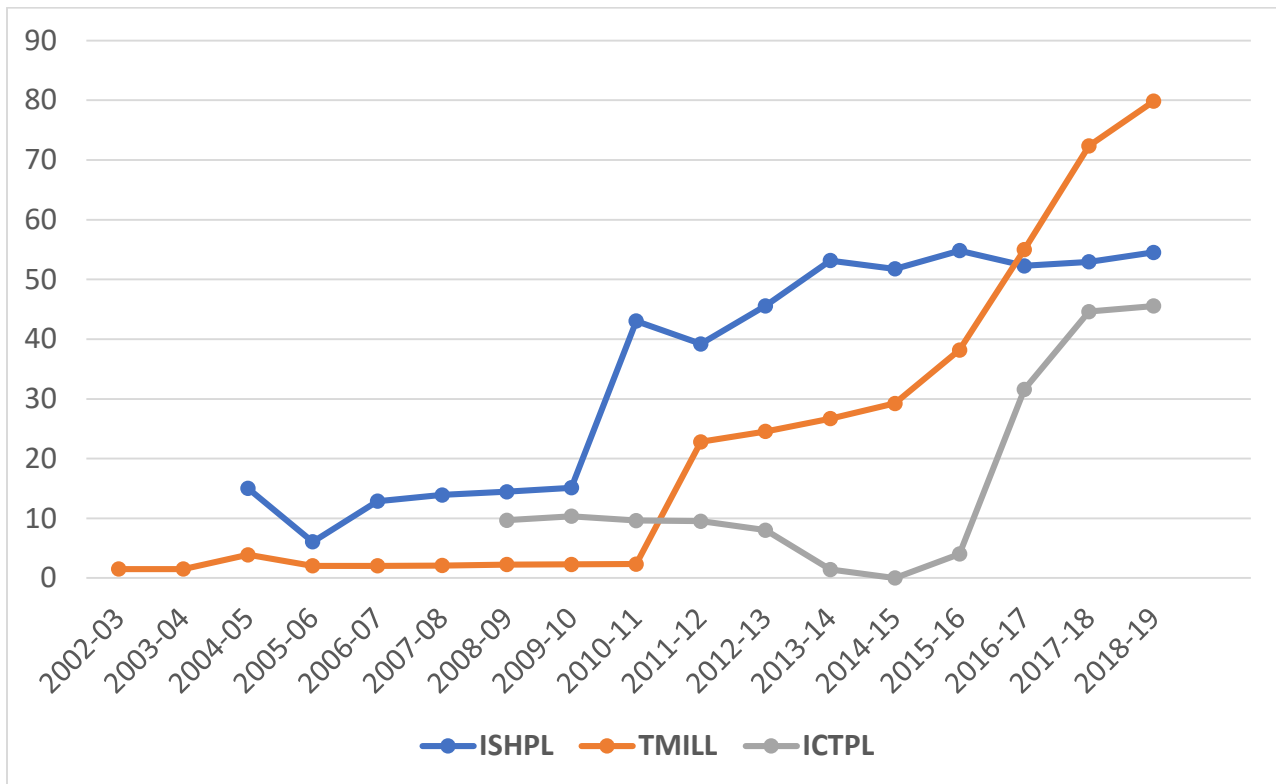


Fig 21: Inter-Firm Comparison of Operating Cost

- The Inter-Firm comparison of Operating cost shows that all the three terminals are spending as the policy changes and all three shows increments in their operating cost

6. Operating Efficiency

In this research paper, the operating efficiency is defined as the amount (in crores) spent while handling 1 MT of cargo expect for the terminal ICTPL which is having different measurement standards as of the different units.

Inter-Period Analysis

i. ISHPL

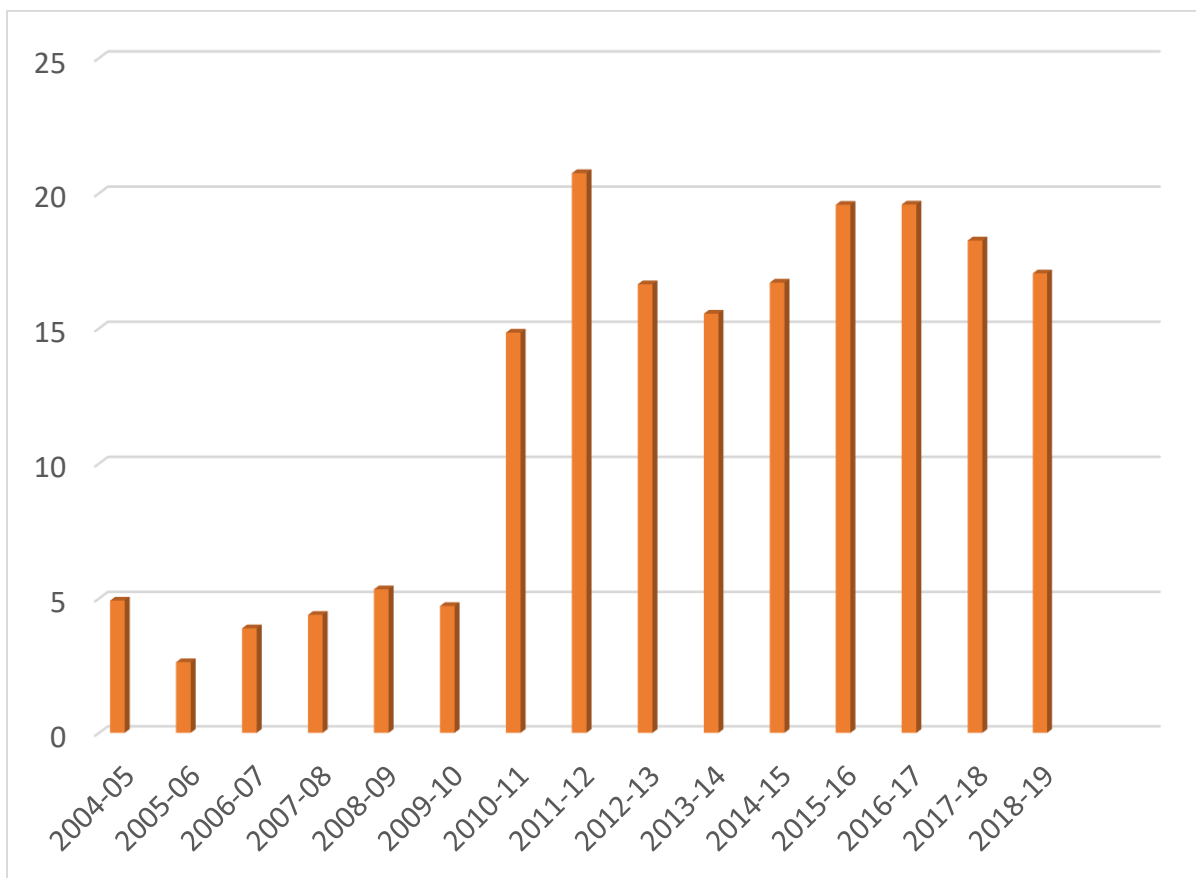


Fig 22: Inter-Period Comparison of Operating Efficiency for (ISHPL)

ii. TMILL

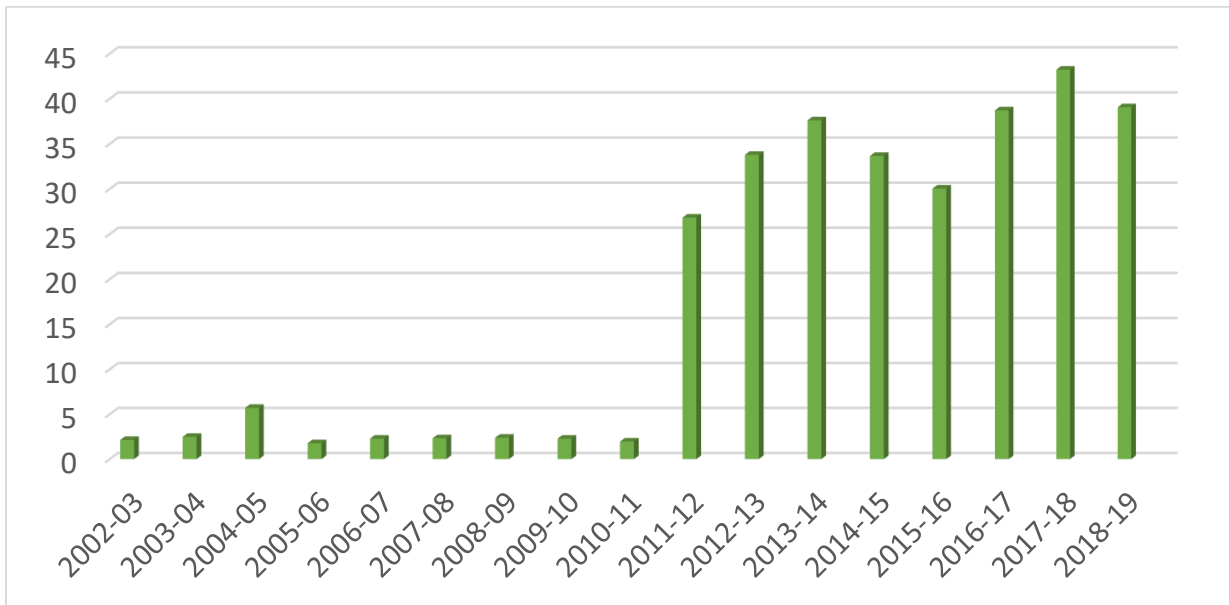


Fig 23: Inter-Period Comparison of Operating Efficiency for (TMILL)

iii. ICTPL

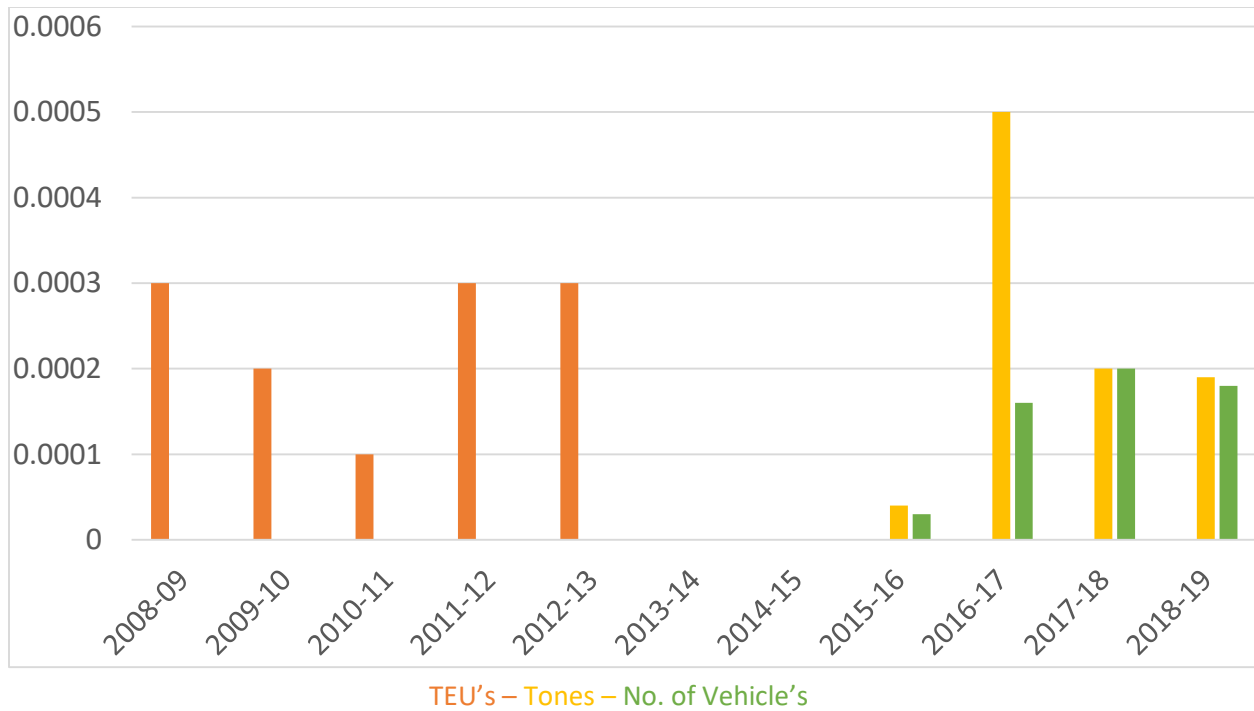


Fig 24: Inter-Period Comparison of Operating Efficiency for (ICTPL)

Inter-Firm Analysis

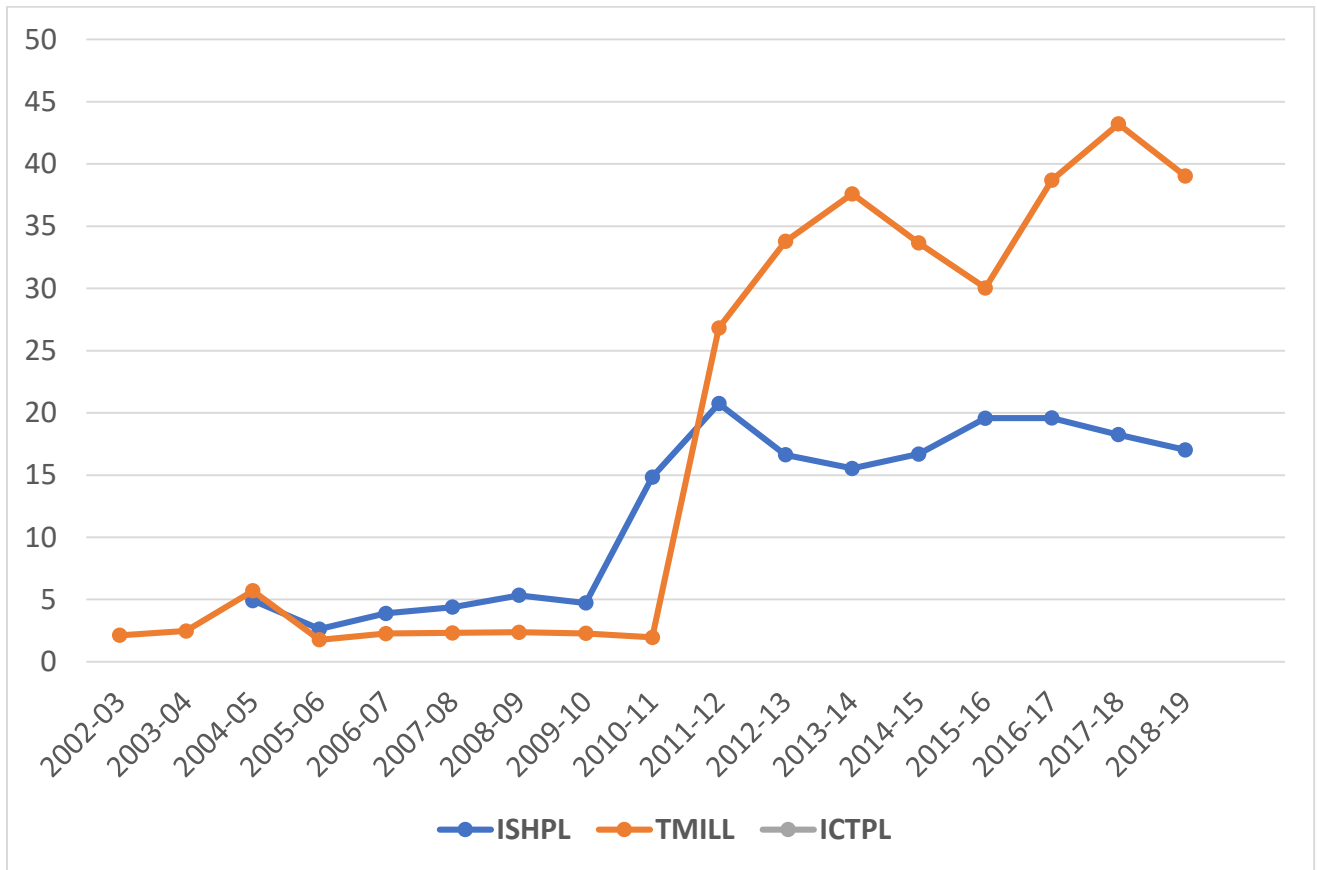


Fig 25: Inter-Firm Comparison of Operating Efficiency

- This graph Operating efficiency using formula (Operating cost / Traffic handled)
- In Initial phase TMILL is more efficient as compare to the other player (ISHPL) but later as the operating cost increased as of the rental land and parallely they are not able to attract much traffic as predicted which resulted in poor efficiency of TMILL
- The ISHPL also decreases its efficiency from the year of 2011 onwards. The poor efficiency of such type might have its roots in various policy guidelines offered by TAMP as the traffic is quiet the same as it was fluctuating previously.

7. Commercial Efficiency

In this report we use commercial efficiency to compare the year wise growth of volume of cargo traffic handled in each of the terminal.

Inter-Firm analysis

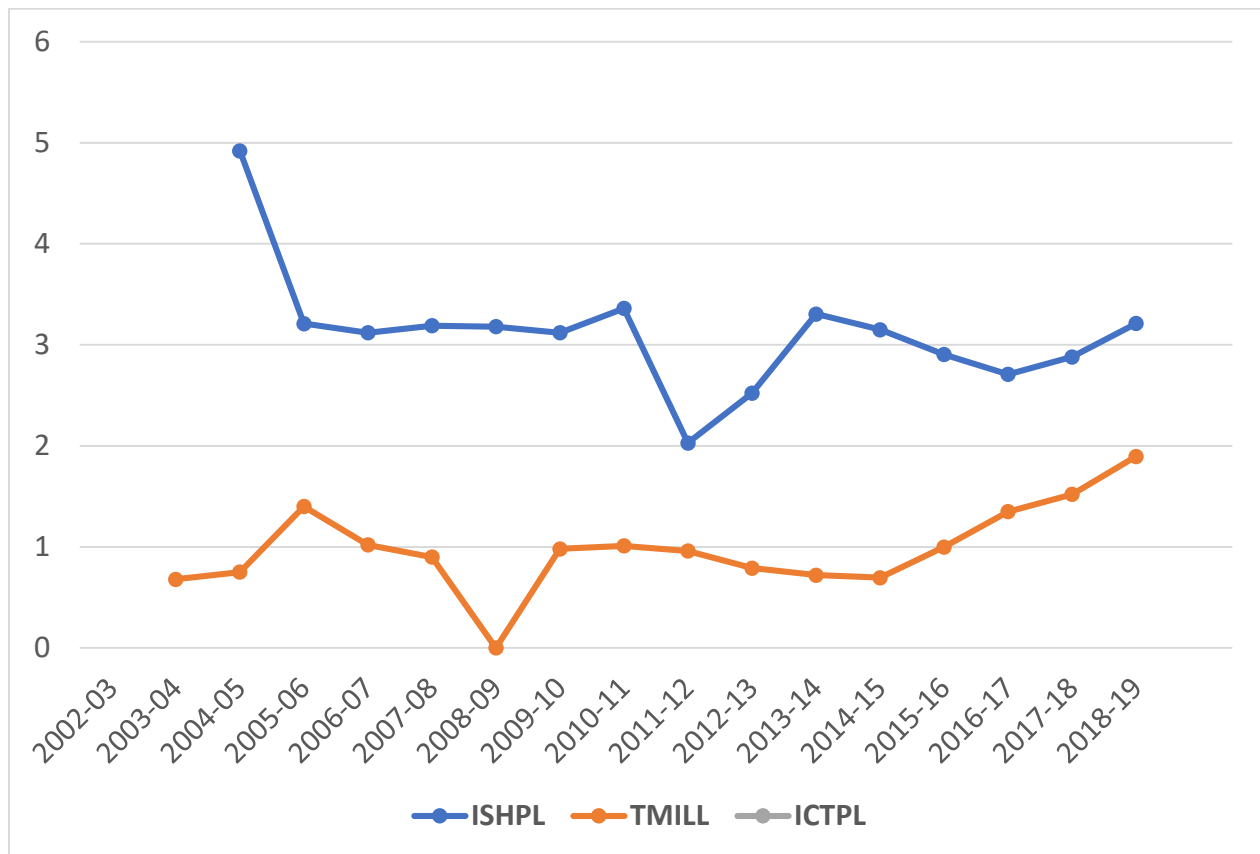


Fig 26: Inter-Firm Comparison of Commercial Efficiency

- Each point of the above graph shows the volume of handled in year after subtracting the compounded annual growth with respect to the last year.
- The Compounded annual growth rate (CAGR) is the rate of return that would be required for an investment to grow from its beginning balance to its ending one.
- This graph eventually shows the growth against the minimum required traffic as of the following year.

8. Equity Capital Invested

i. ISHPL

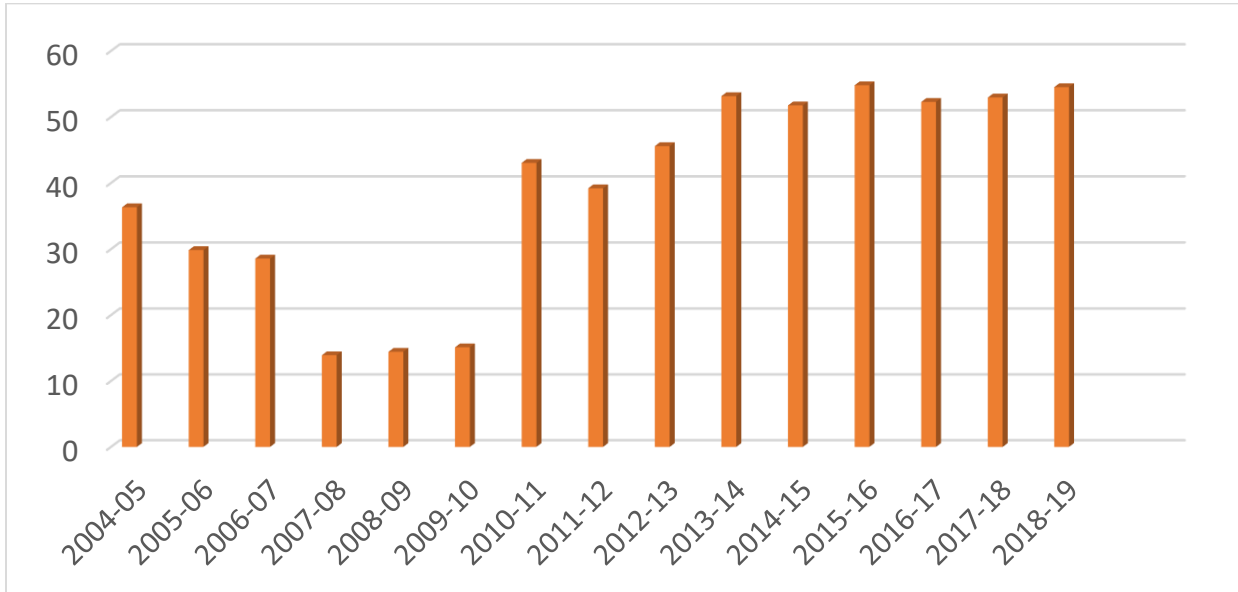


Fig 27: Inter-Period Comparison of Equity Capital invested)

ii. TMILL

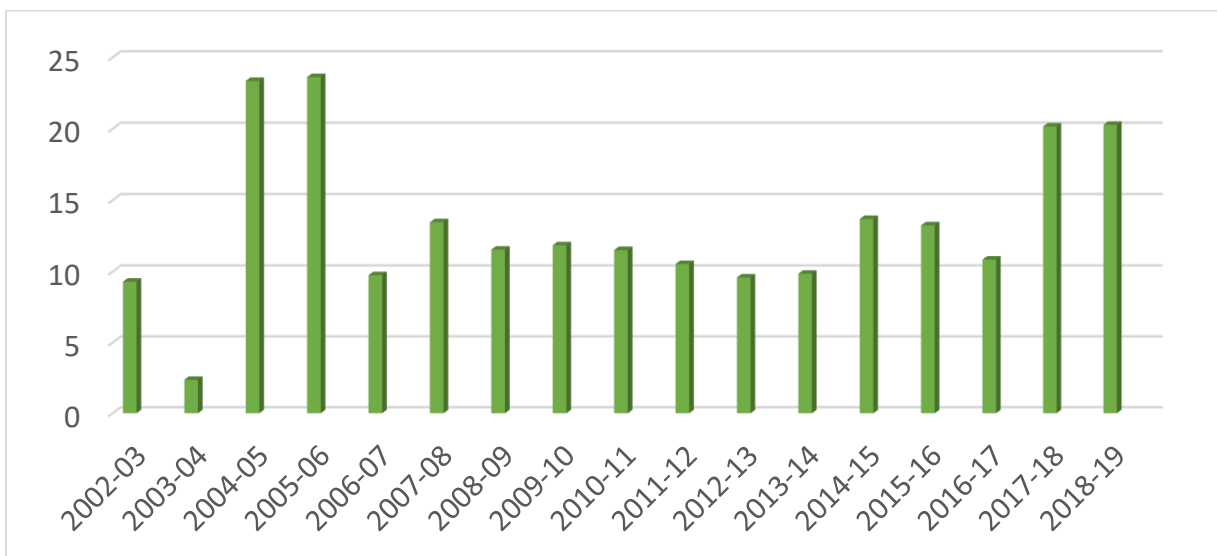


Fig 28: Inter-Period Comparison of Equity Capital invested)

iii. ICTPL

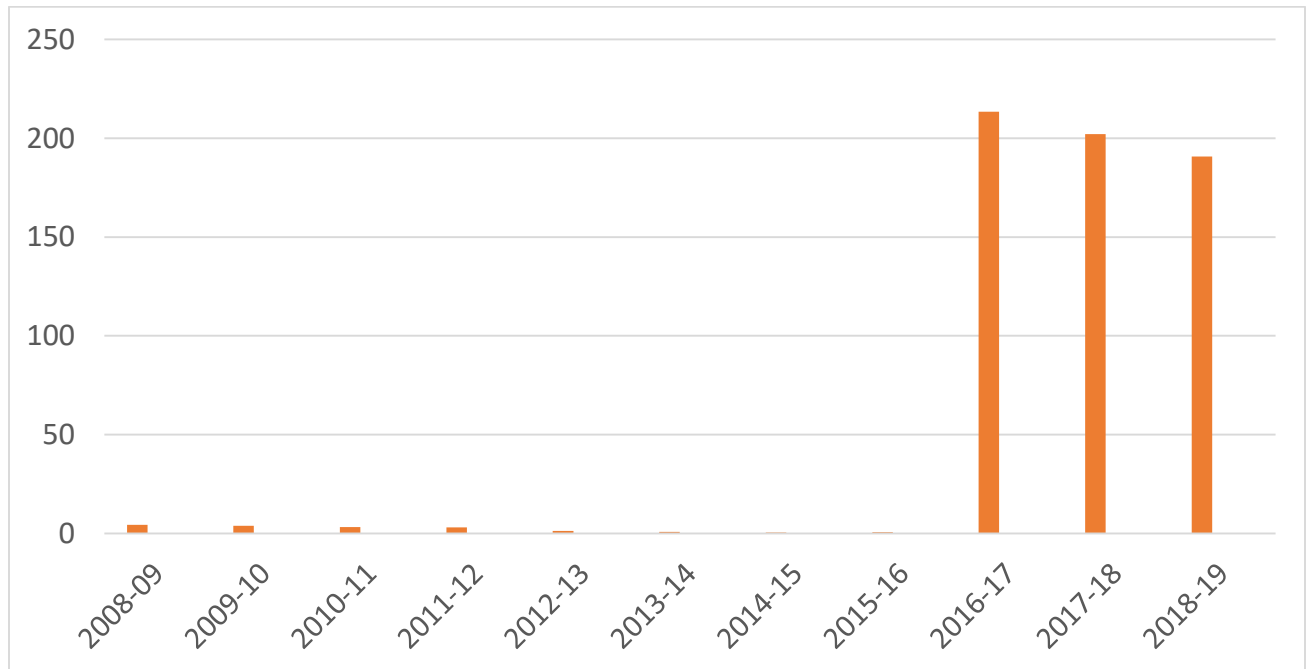


Fig 29: Inter-Period Comparison of Equity Capital invested)

9. Profit Allowed to Investor by Regulators (F)

Inter-Period Analysis –money shared from profit to equity holders

i. ISHPL

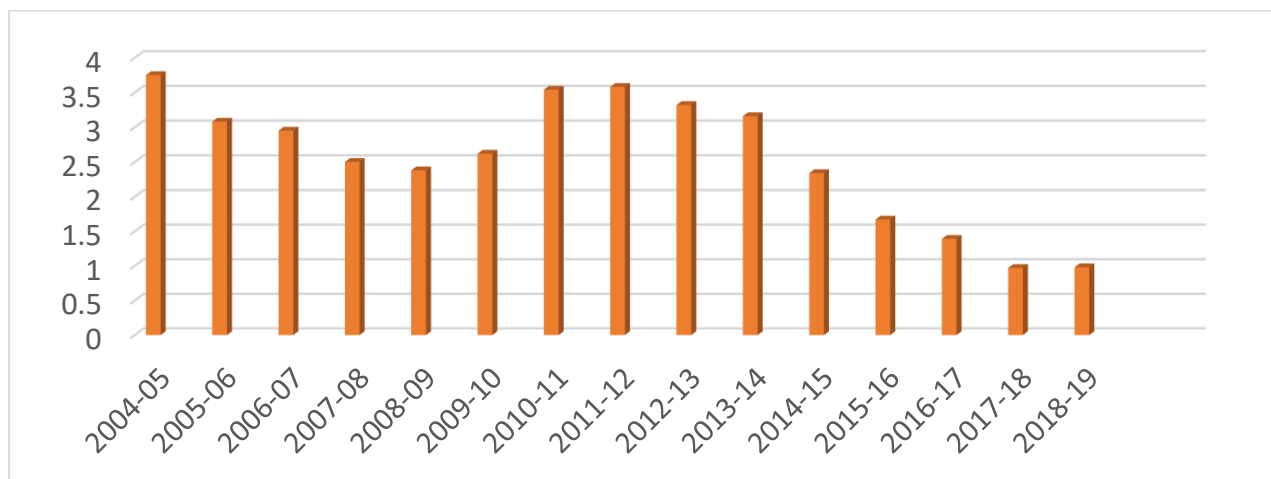


Fig 30: Inter-Period Comparison of profit earned on equity

ii. TMILL

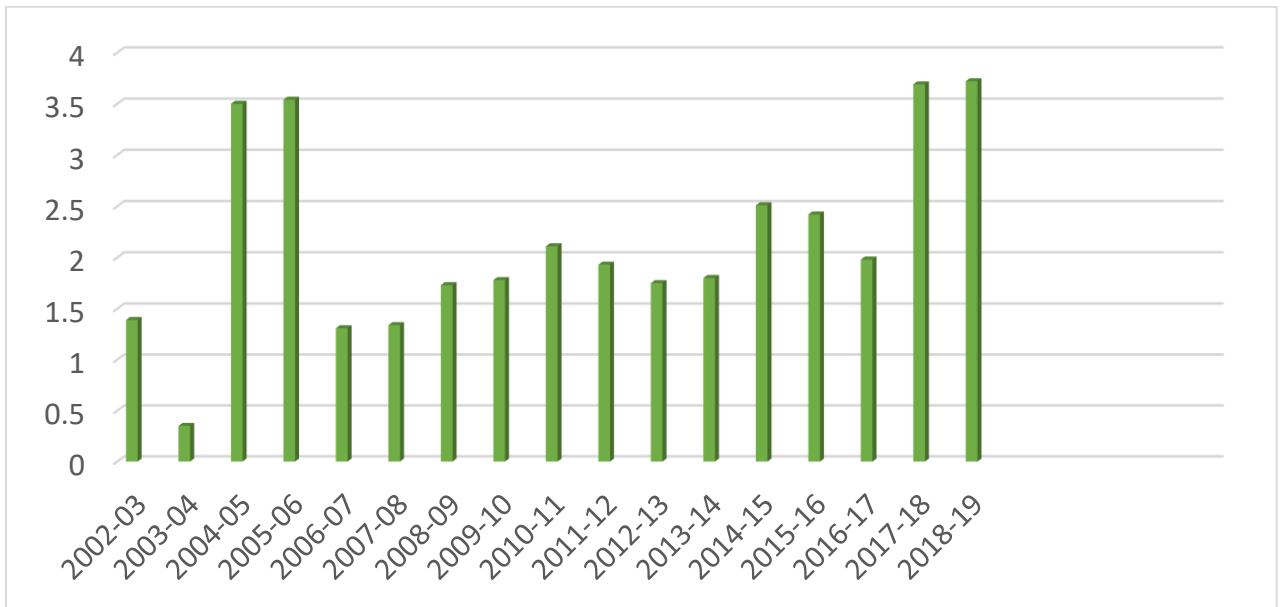


Fig 31: Inter-Period Comparison of profit earned on equity

iii. ICTPL

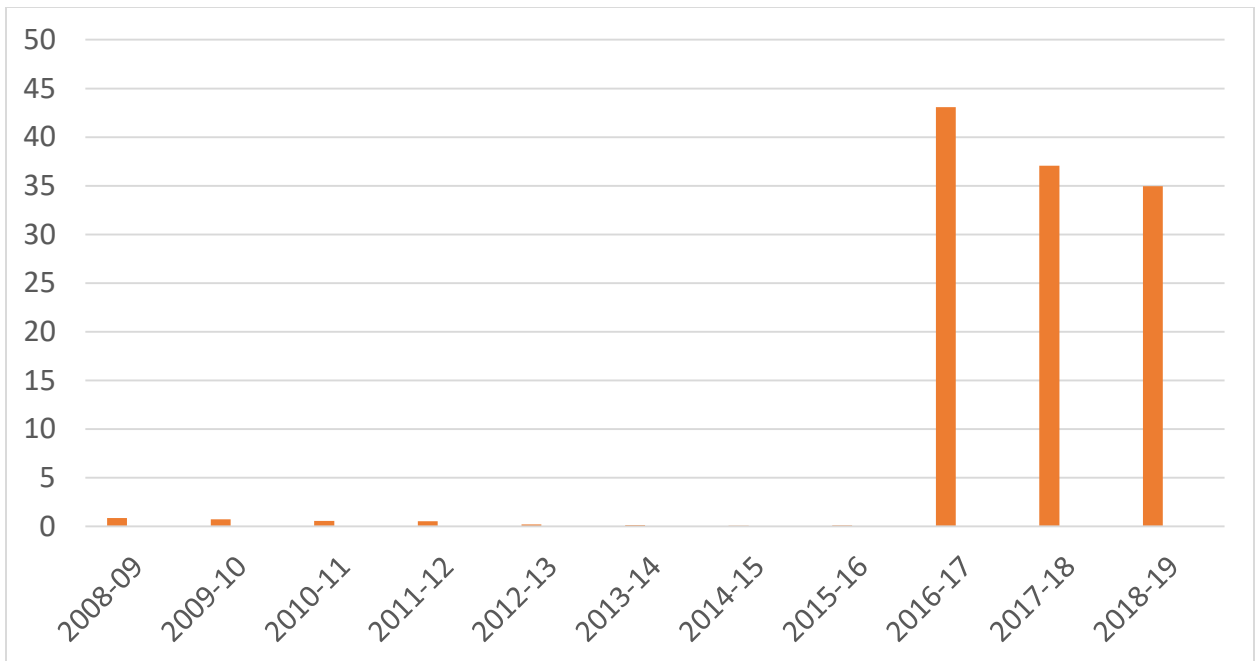


Fig 32: Inter-Period Comparison of profit earned on equity

Inter-Firm Analysis (Profit Allowed to Investor)

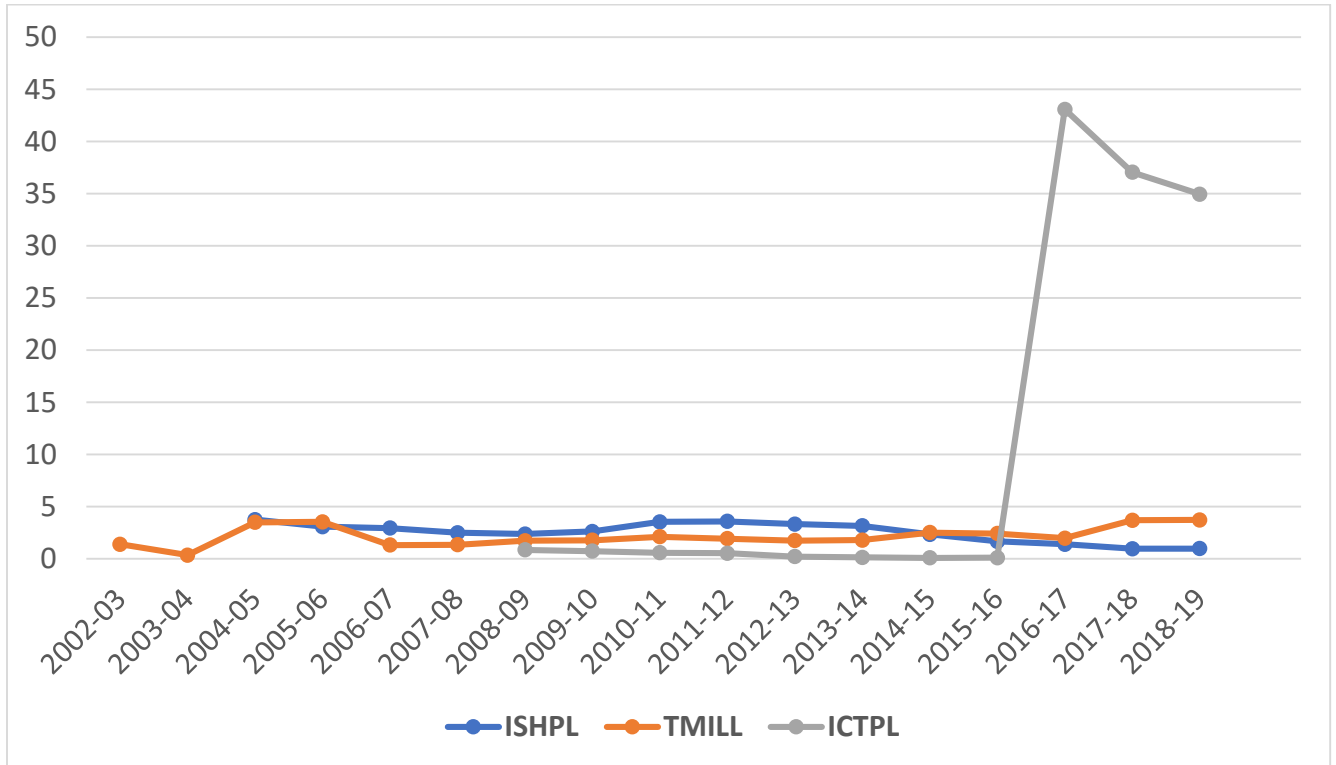


Fig 33: Inter-Period Comparison of profit earned on equity

- The above graph depicts and compare the amount of profit shared to the equity holders of the three considered terminals.
- The sudden or exponential increase in case of ICTPL is as of the result of sudden increase of traffic of handling break-bulk and RORO vehicles.
- The other reason of more traffic at ICTPL is the berth length (700 m), whereas the other two are operating with ISHPL (232 m) & TMILL (220 m).
- Also, the more traffic is directly proportional to generating more revenue and so did more profit to different stakeholders.

10. Profit on Equity Capital Invested F/C (%)

This section basically calculates the Percentage of capital employed in against of the capital invested by them.

i. ISHPL

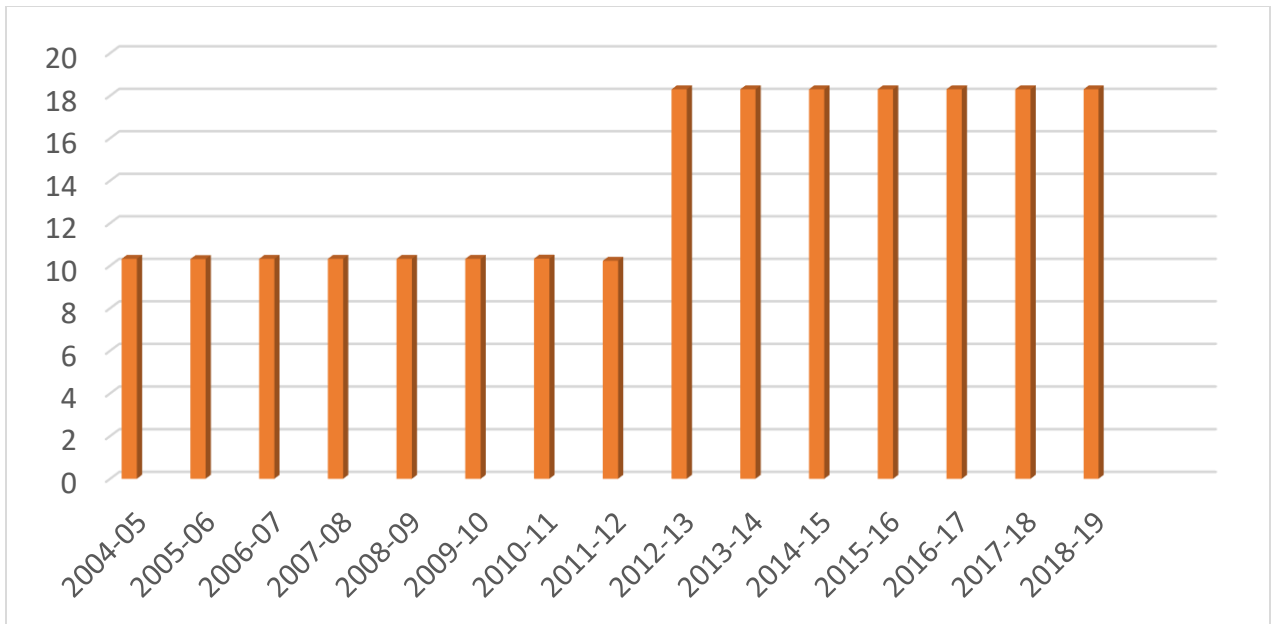


Fig 34: Inter-Period Comparison of profit percentage of equity invested

ii. TMILL

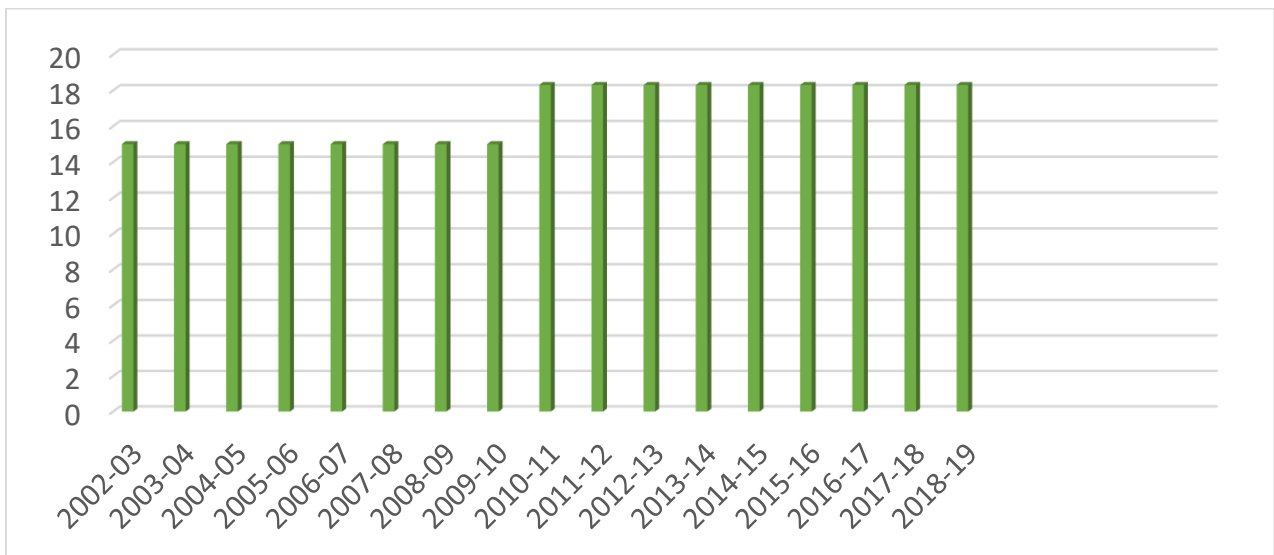


Fig 35: Inter-Period Comparison of profit percentage of equity invested

iii. ICTPL

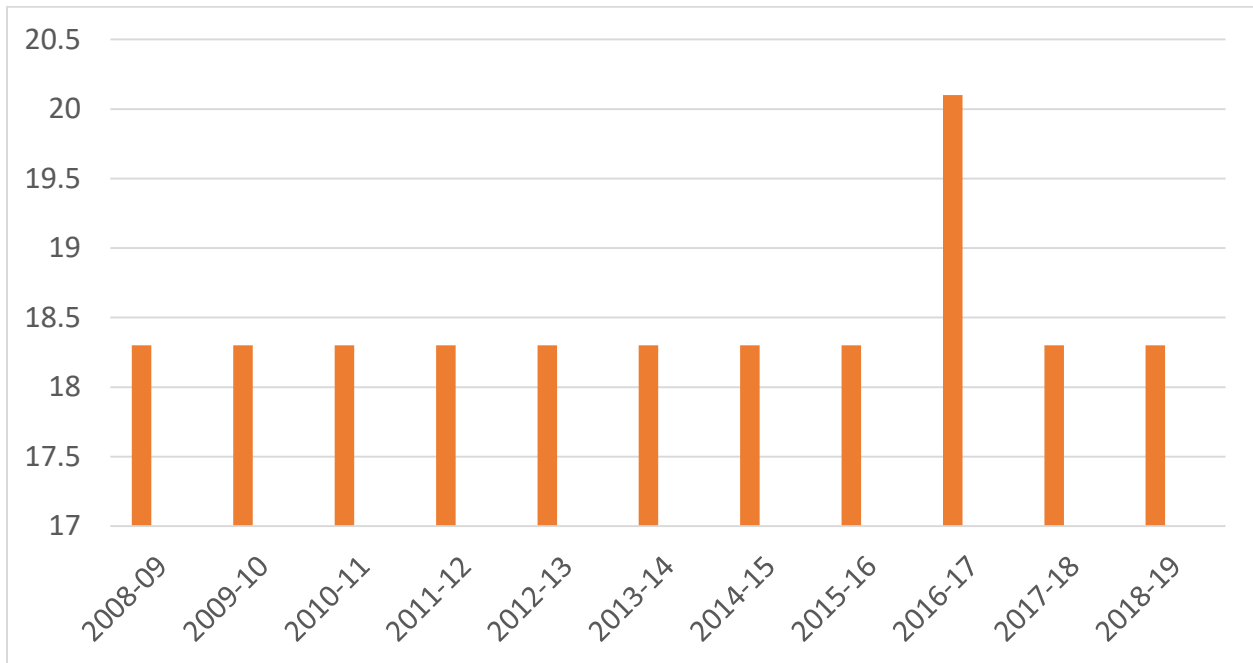


Fig 36: Inter-Period Comparison of profit percentage on equity invested

Inter-Firm

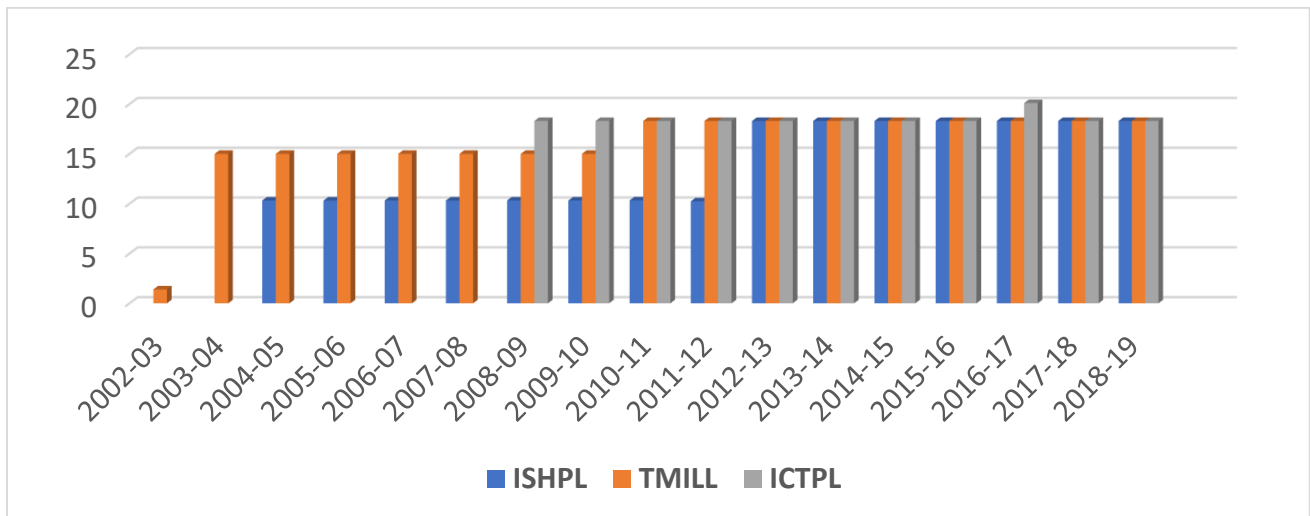


Fig 37: Inter-Firm Comparison of profit percentage of equity invested

- Though the percentage of profit is prefixed as per the capital invested, but the different values is because of the less traffic handled and so as less revenue earned. Because the other

stakeholders are quiet getting the pre-fixed amount. For e.g., the amount to be shared to port authorities and the interest payable to lenders are quite fixed.

11. Royalty or Revenue Share Paid to Port

Inter-Period Comparison:

i. ISHPL

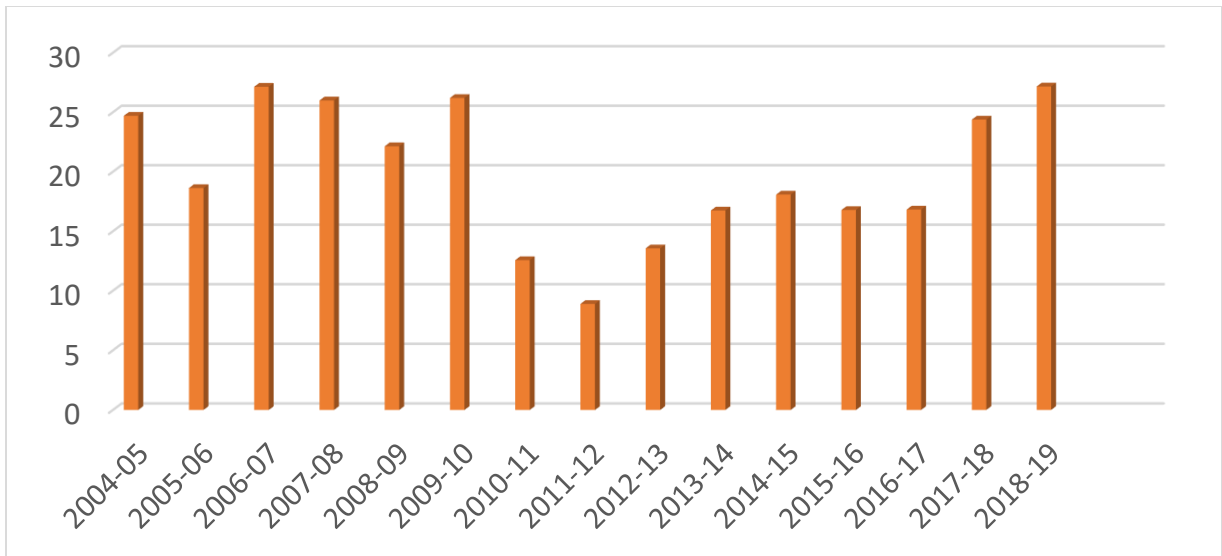


Fig 38: Inter-Period Comparison of Revenue shared to port authorities

ii. TMILL

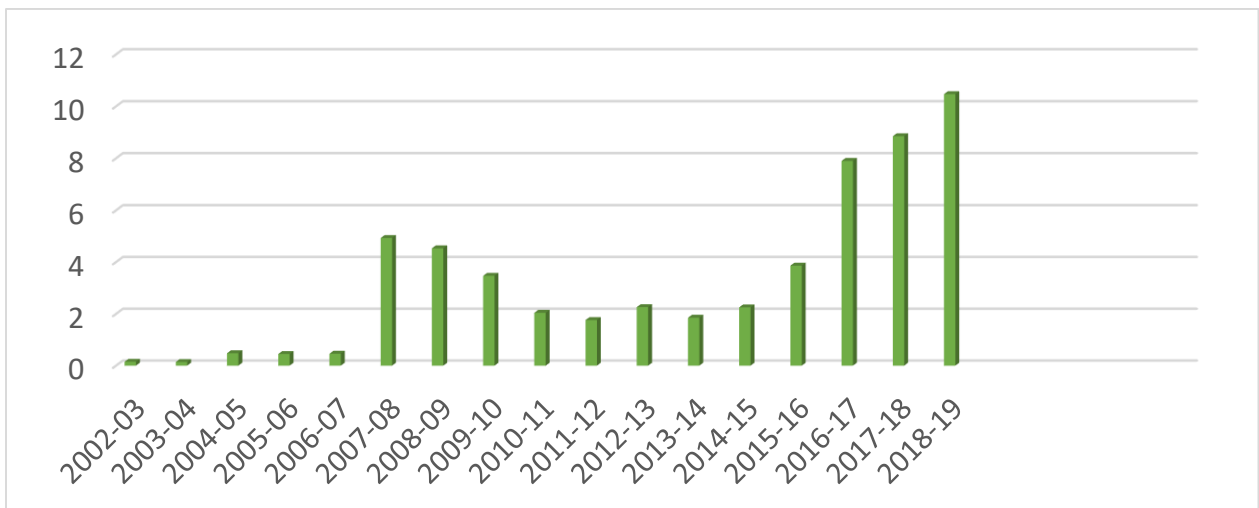


Fig 39: Inter-Period Comparison of Revenue shared to port authorities

iii. ICTPL

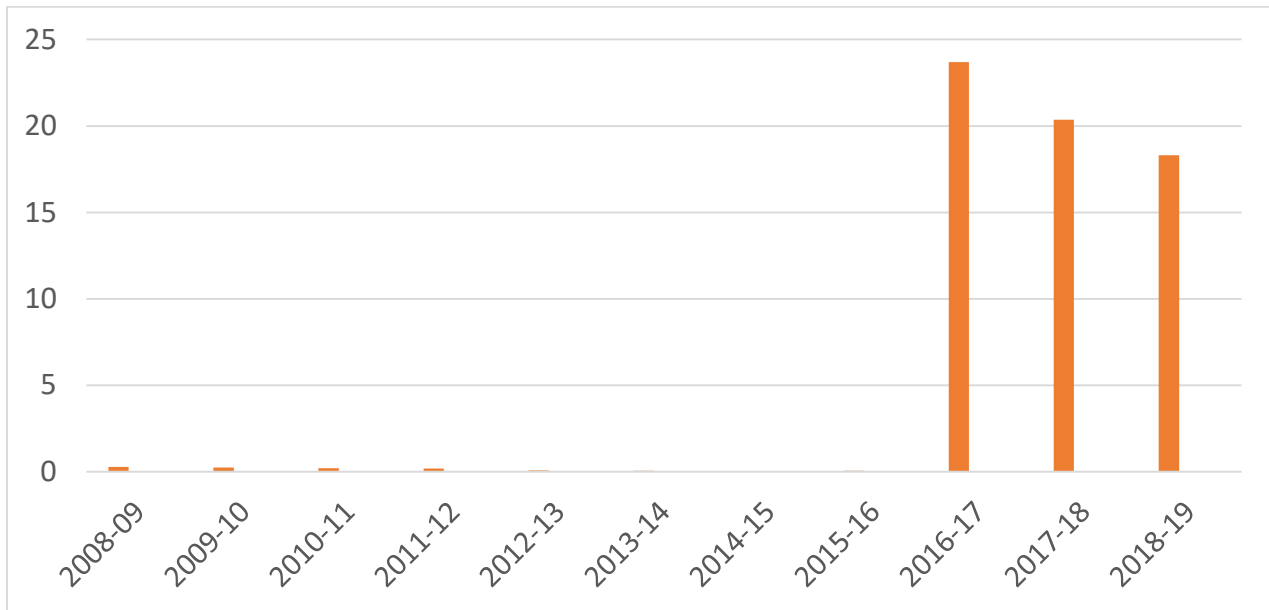


Fig 40: Inter-Period Comparison of Revenue shared to port authorities

Inter-Firm Analysis

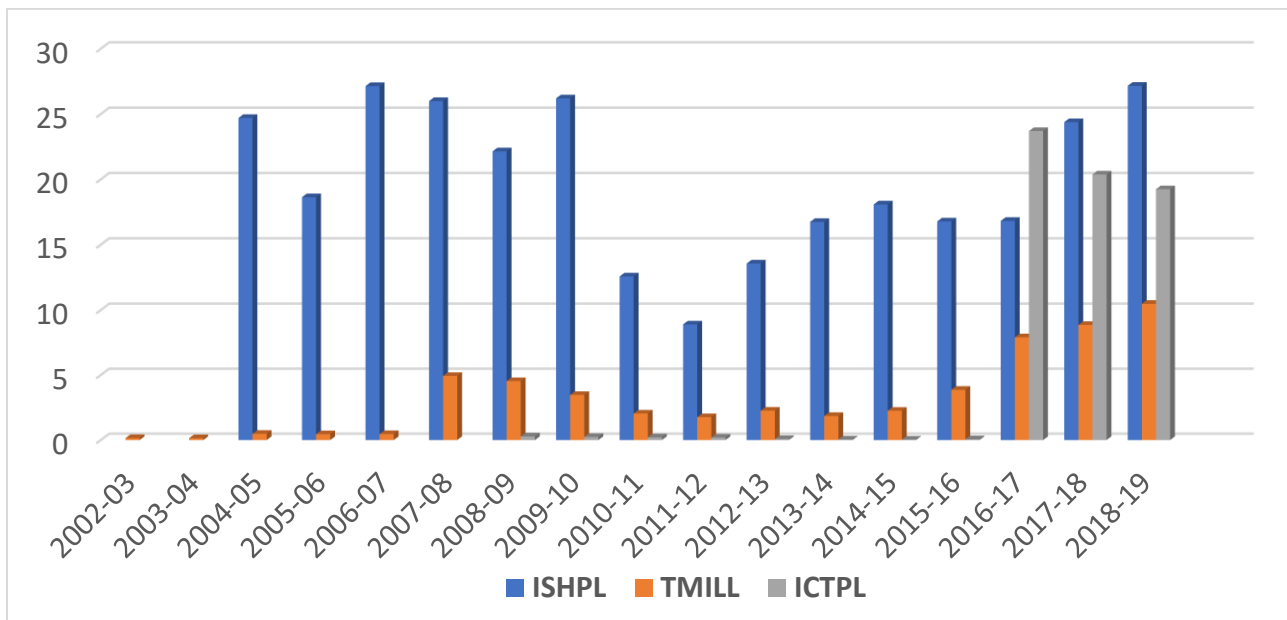


Fig 41: Inter-Firm Comparison of Revenue shared to port authorities

- As per the TAMP regulation, there is pre-fixed percentage of profit that is to be shared to port authorities but the exceptional graphs of TMILL are the result of the bidding document in which they mention the amount they are able to pay as the royalty or revenue was share on the basis of traffic handled i.e., 2 lakhs per million tons of traffic handled.

12. Loan Repayment to Lenders

The capital structure is the particular combination of debt and equity used by a company to finance its overall operations and growth. Where, debt consists of borrowed money that is due back to the lender, commonly with interest expense.

Inter-Period Comparison

i. ISHPL

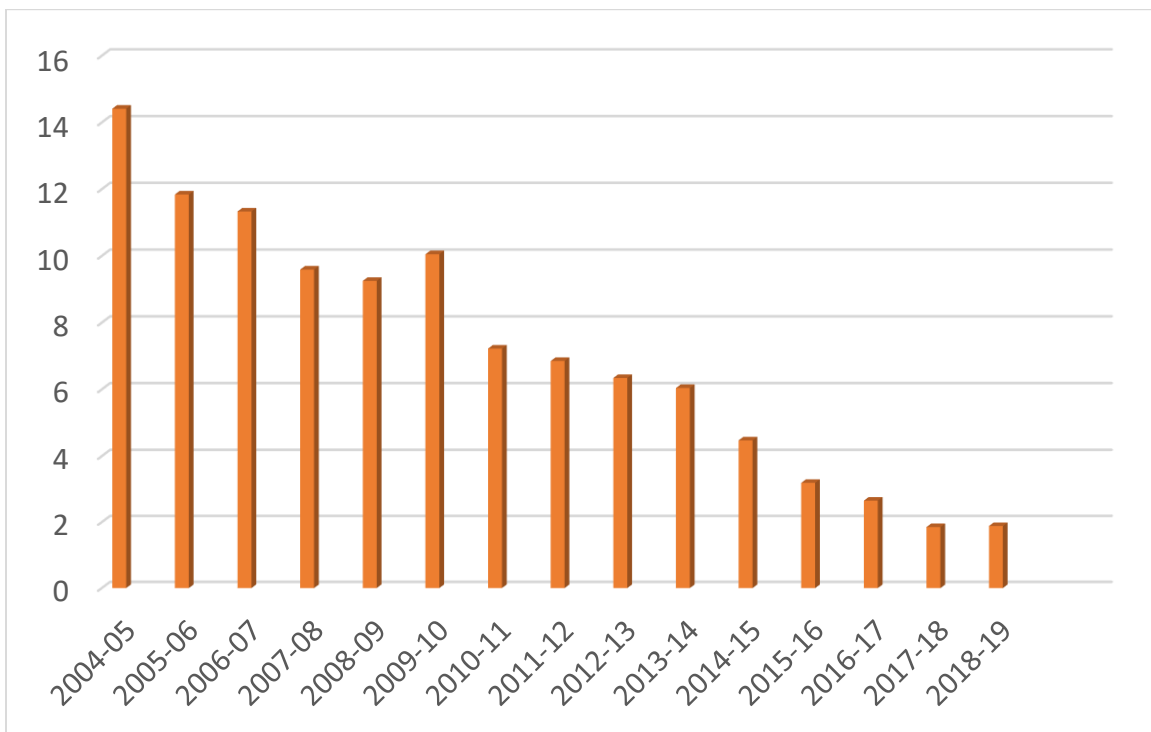


Fig 42: Inter-Period Comparison of interest on loan repayment

ii. TMILL

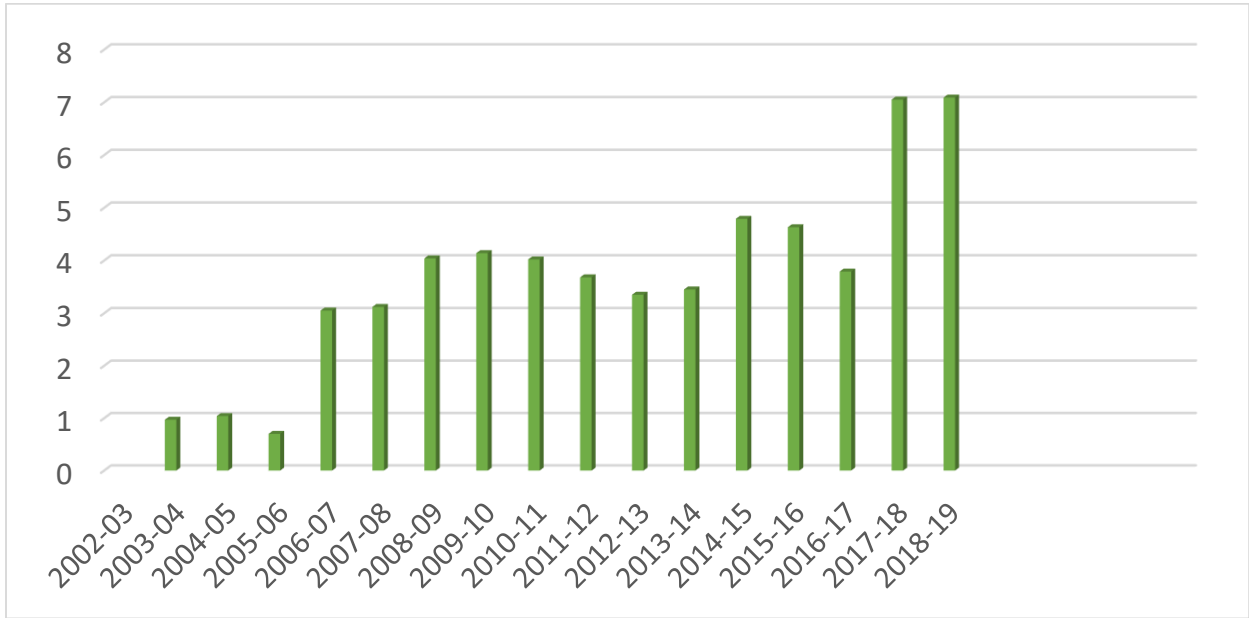


Fig 43: Inter-Period Comparison of interest on loan repayment

iii. ICTPL

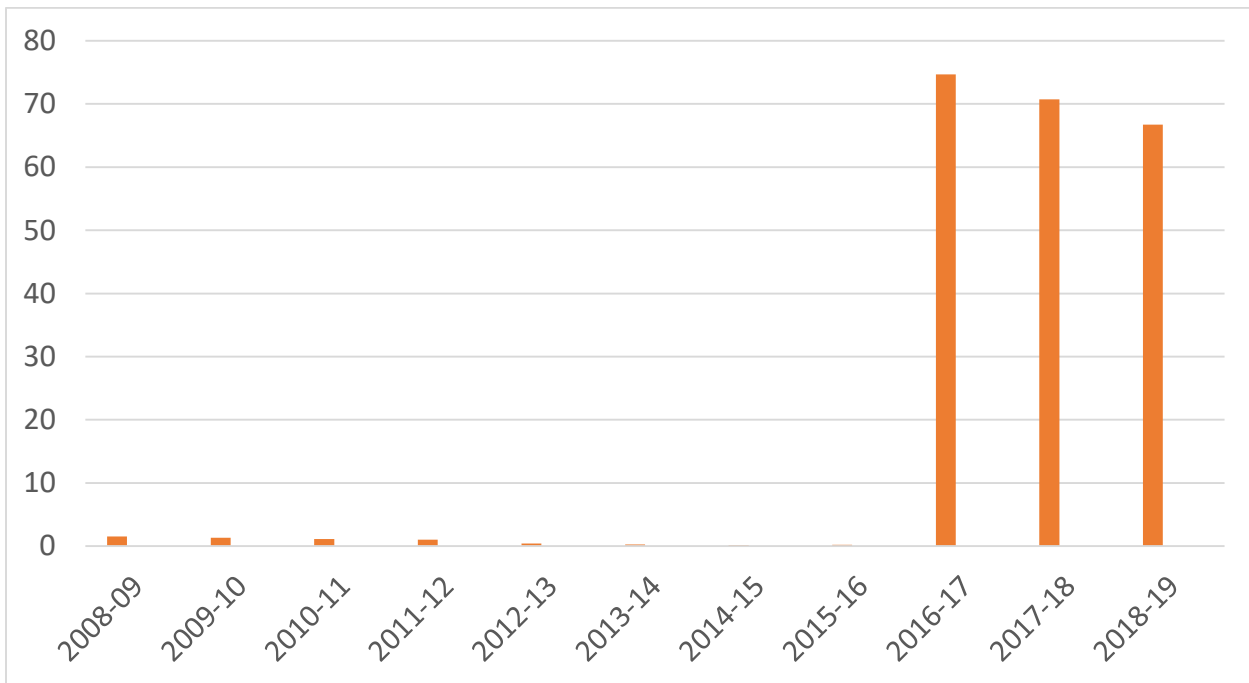


Fig 44: Inter-Period Comparison of interest on loan repayment

Inter-Firm Analysis

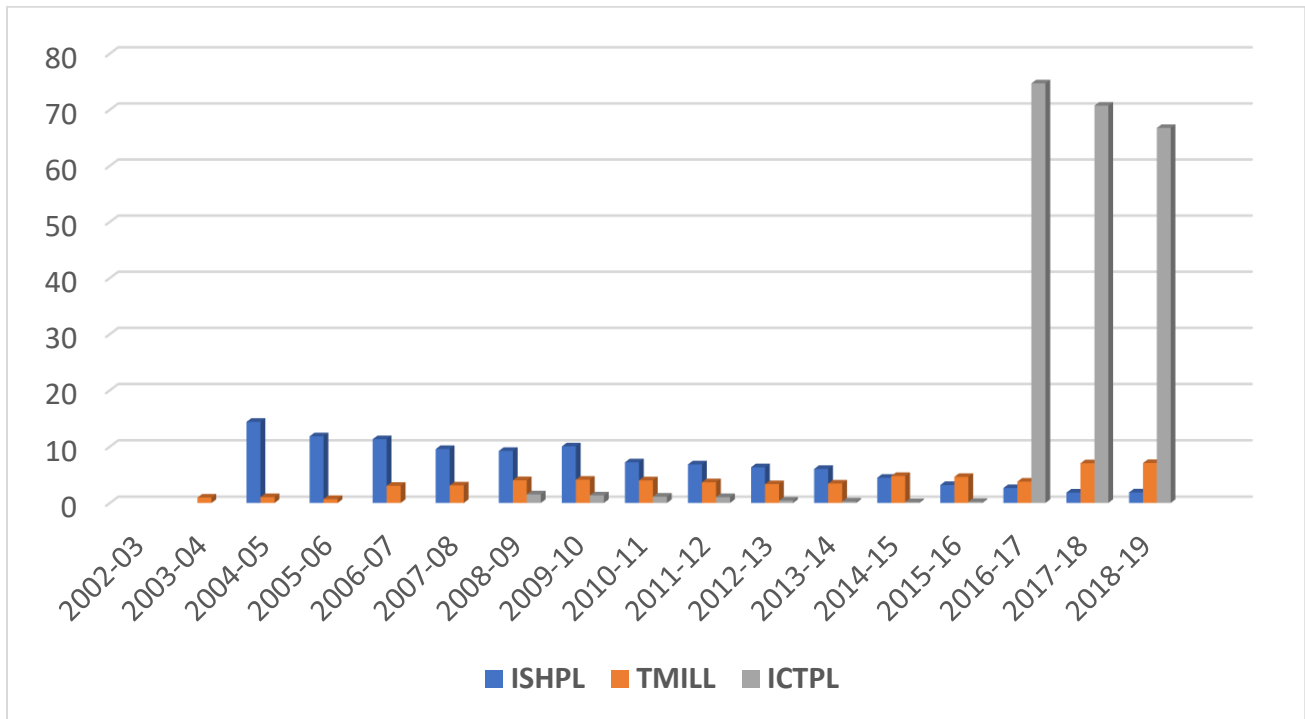


Fig 45: Inter-Firm Comparison of interest on loan repayment

- Though the TMILL had acquired and started its operations from 2002 itself, but they hadn't opted for loan in their capital structure resulted the above graph that show any interest owed by the TMILL group for the first two years
- In starting phase of ISHPL as per graph (3), they invested a huge capital following the methods of 65:35 ratio of **DEBT: EQUITY**, which results in the above graph, also the decreasing trend of loan repayment is also explained by the same capital employed graph which shows the declining trend of capital invested.
- The graph of ICTPL is same as discussed before, as they started investing more in building the new Off-Shore Terminal to operate various type of cargoes and the debt/equity is taken to be 70:30.

13. Value Shared between Stake-holders

This section shows the total amount of money that is to be shared between the various stakeholders of the PPP project i.e., the port Authority, the terminal operator, the money lenders.

Inter-Period Analysis

i. ISHPL

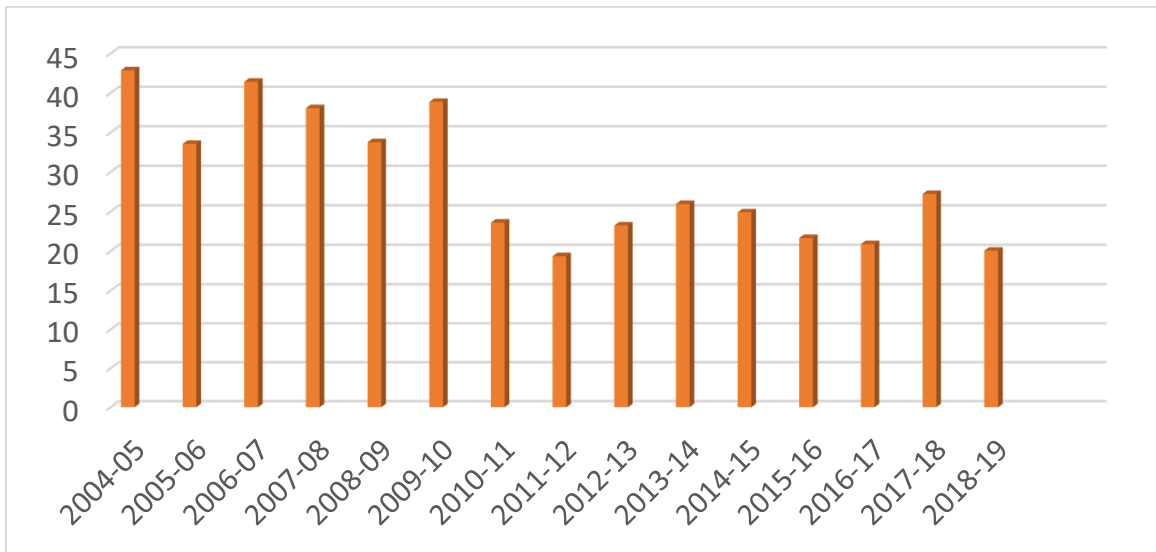


Fig 46: Inter-Period Comparison of value shared among stakeholders

ii. TMILL

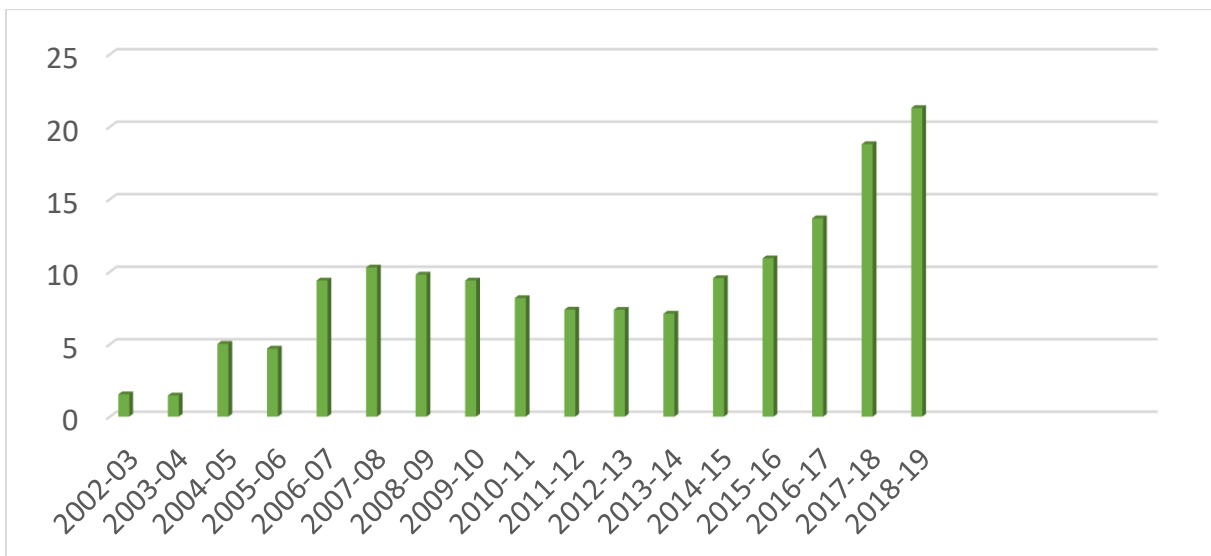


Fig 47: Inter-Period Comparison of value shared among stakeholders

iii. ICTPL

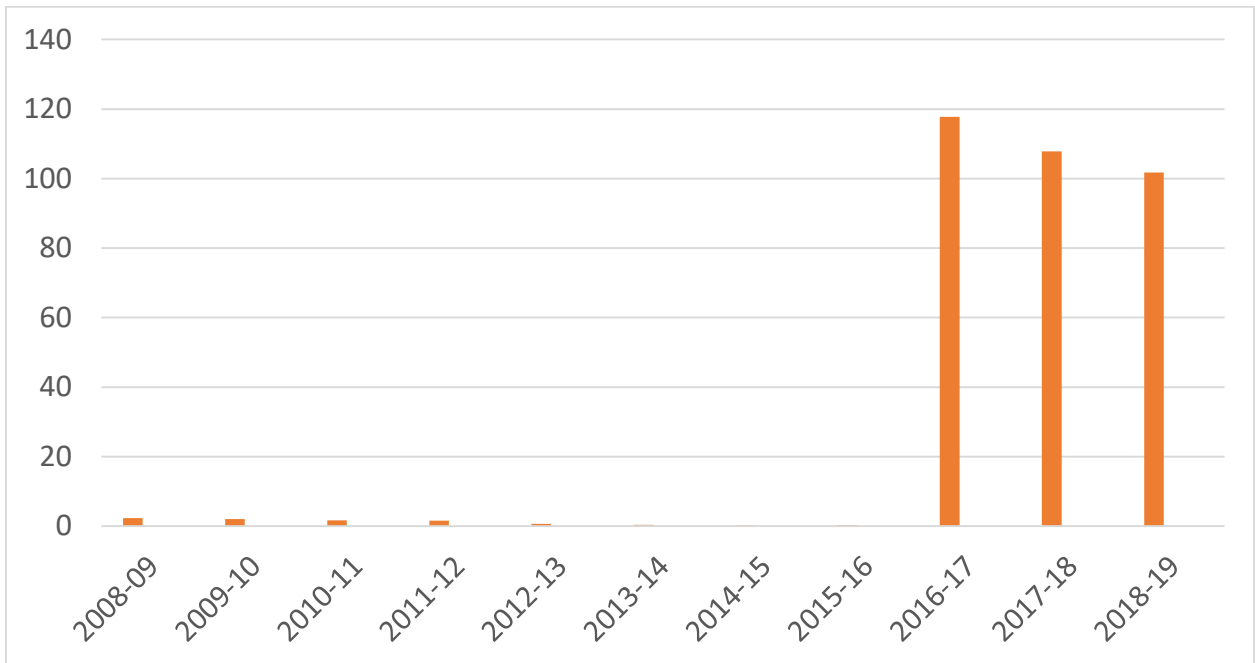


Fig 48: Inter-Period Comparison of value shared among stakeholders

Inter-Firm Analysis

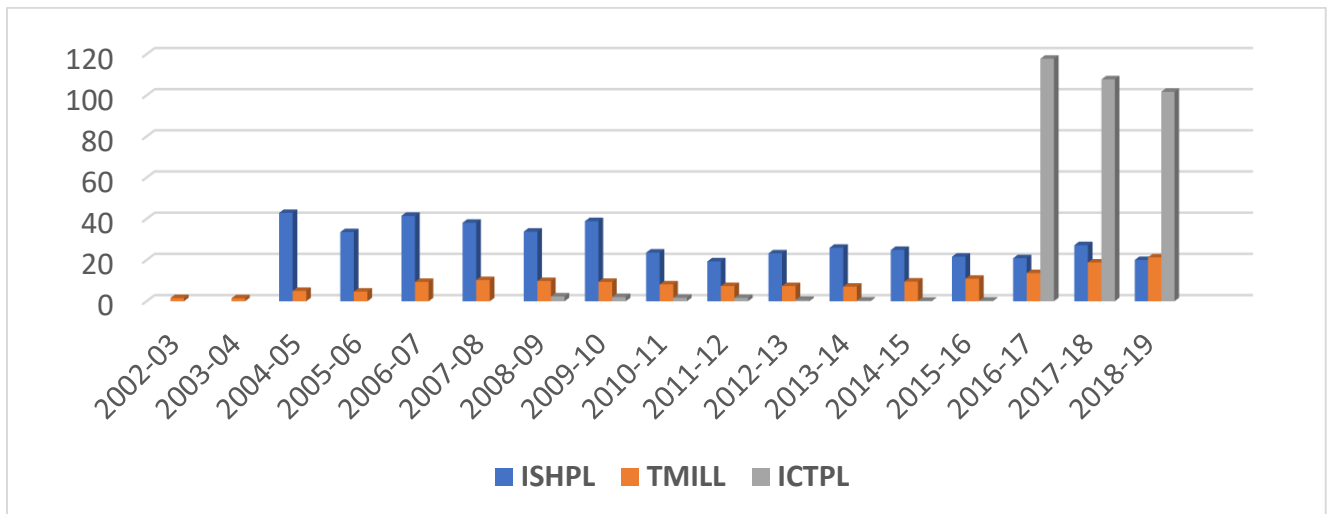


Fig 49: Inter-Firm Comparison of value shared among stakeholders

- The above graph shows the terminal (ISHPL) is able to generate more value towards its stakeholders except the exponential case of ICTPL last three years.

14. Percentage of Value Owned by Equity Holders (F / I)

This section discusses the percentage of value earned by the equity holders from the total value of profit earned from the operations.

Inter-Period Analysis

i. ISHPL

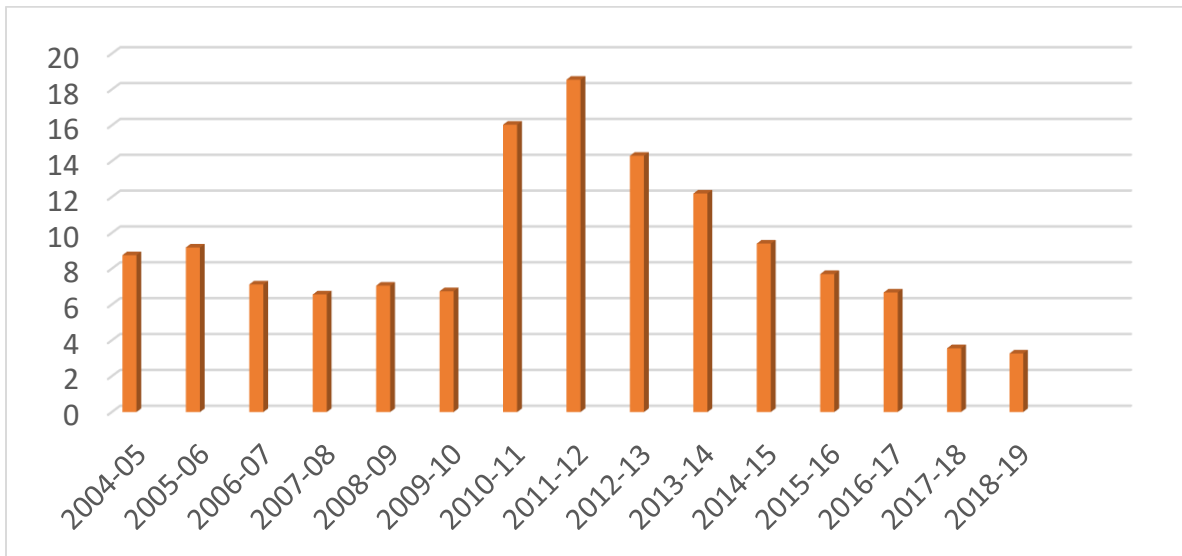


Fig 50: Inter-Period Comparison of % if value owned by equity holder

ii. TMILL

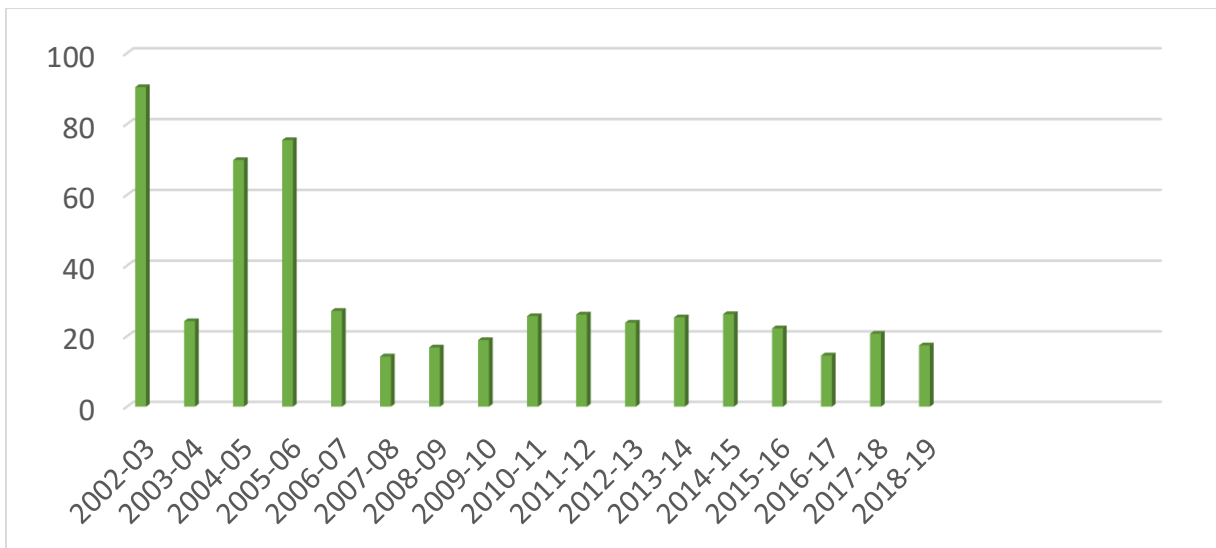


Fig 51: Inter-Period Comparison of % if value owned by equity holder

iii. ICTPL

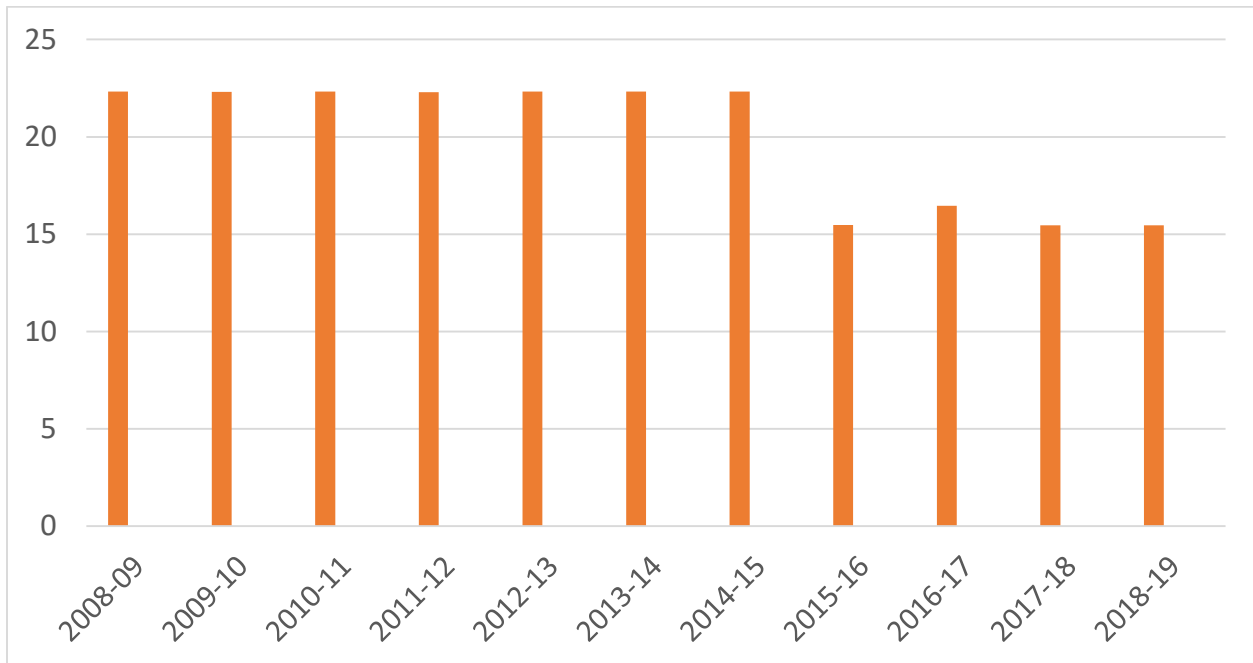


Fig 52: Inter-Period Comparison of % if value owned by equity holder

15. Percentage of Value owned by Port Authority (G / I)

This section discusses the percentage of value earned by the port authority from the total value of profit earned from the operations.

Inter-Period Comparison

i. ISHPL

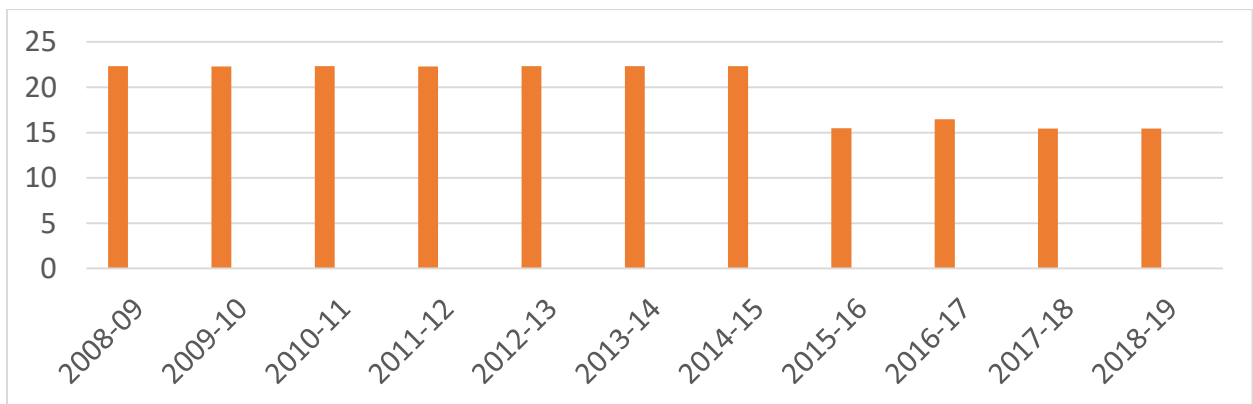


Fig 53: Inter-Period Comparison of % if value owned by port authority

ii. TMILL

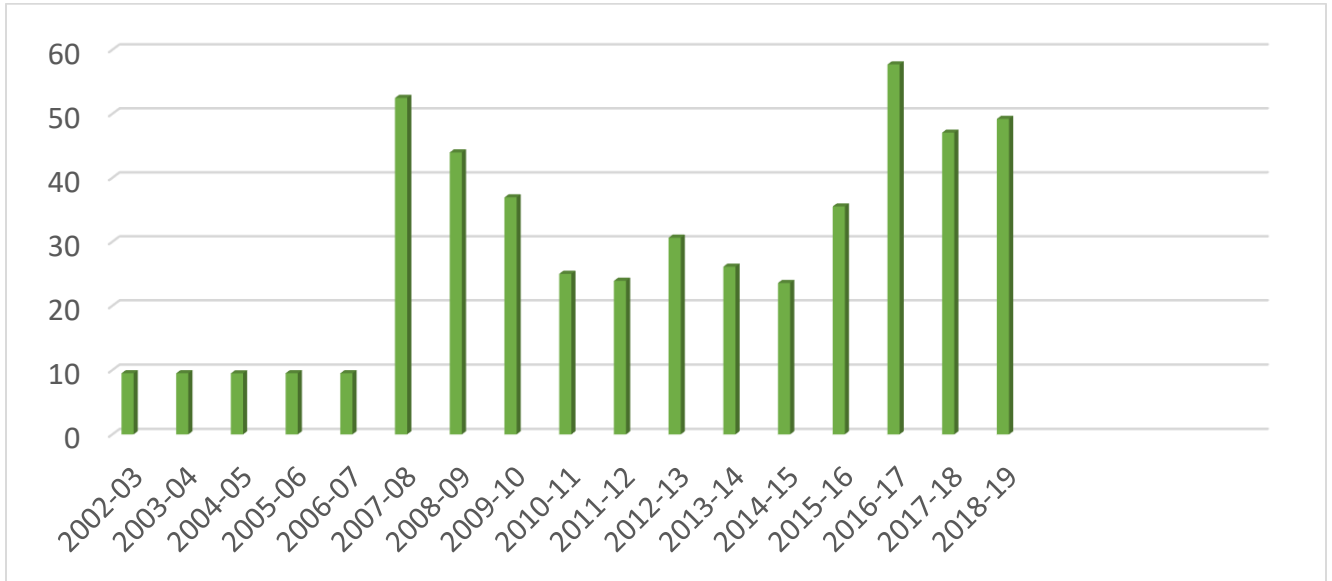


Fig 54: Inter-Period Comparison of % if value owned by port authority

iii. ICTPL

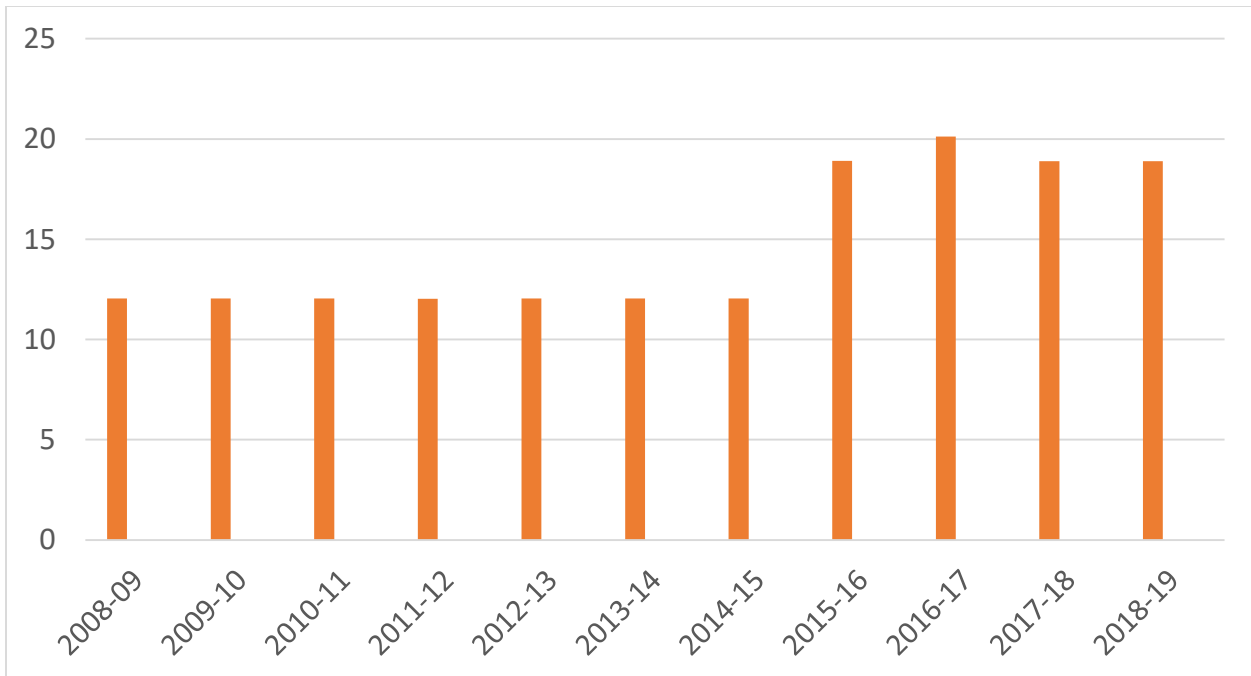


Fig 55: Inter-Period Comparison of % if value owned by port authority

16. Percentage of Value Shared to Lenders

This section discusses the percentage of value earned by the money lenders from the total value of profit earned from the operations.

Inter-Period Comparison

i. ISHPL

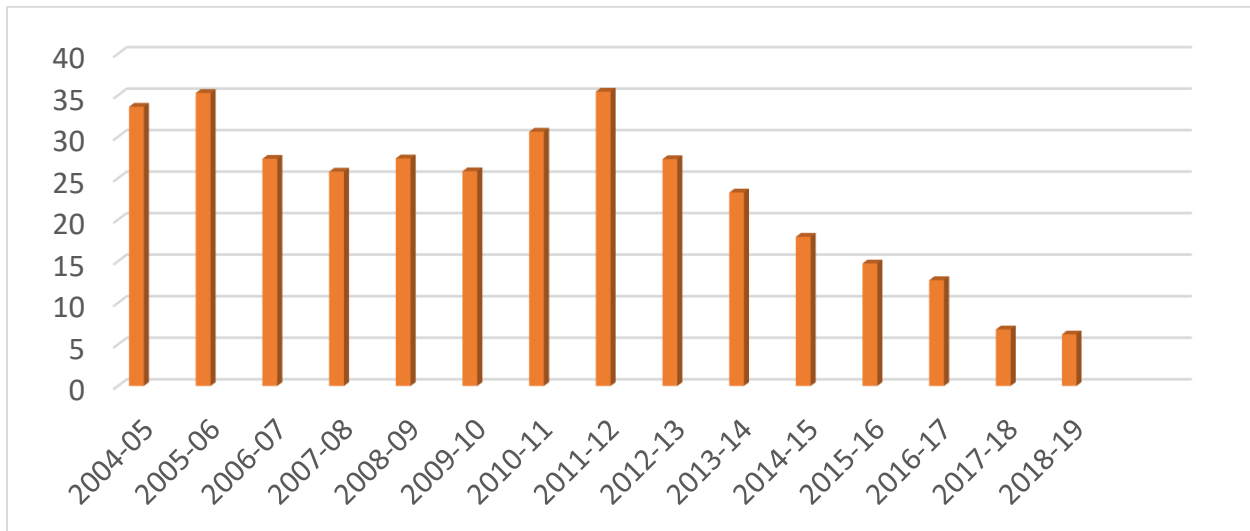


Fig 56: Inter-Period Comparison of % if value owned by lenders

ii. TMILL

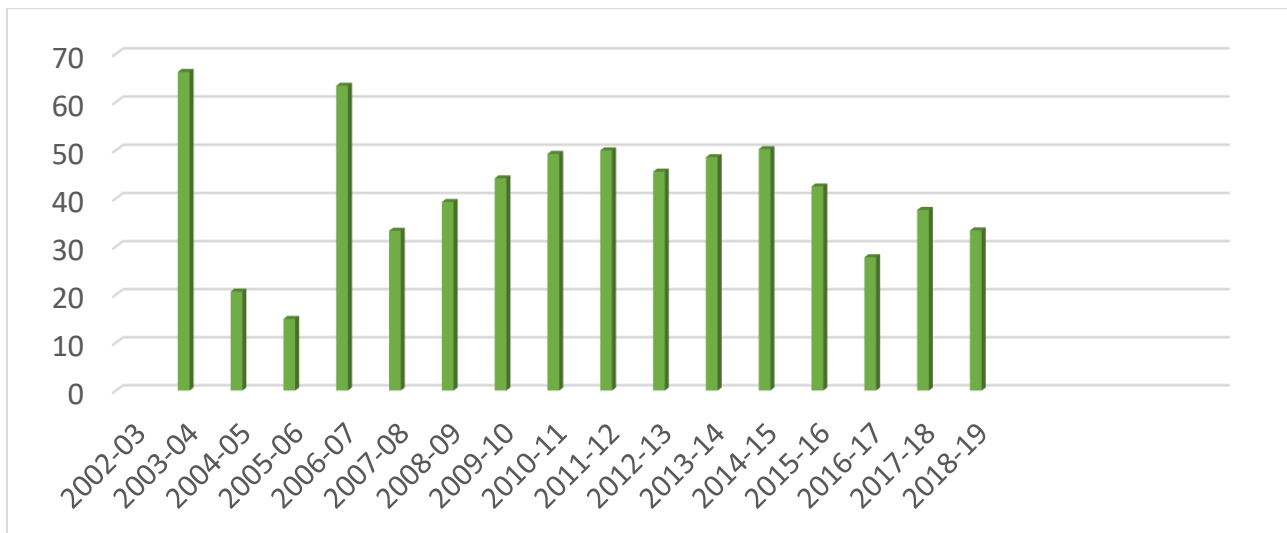


Fig 57: Inter-Period Comparison of % if value owned by lenders

iii. ICTPL

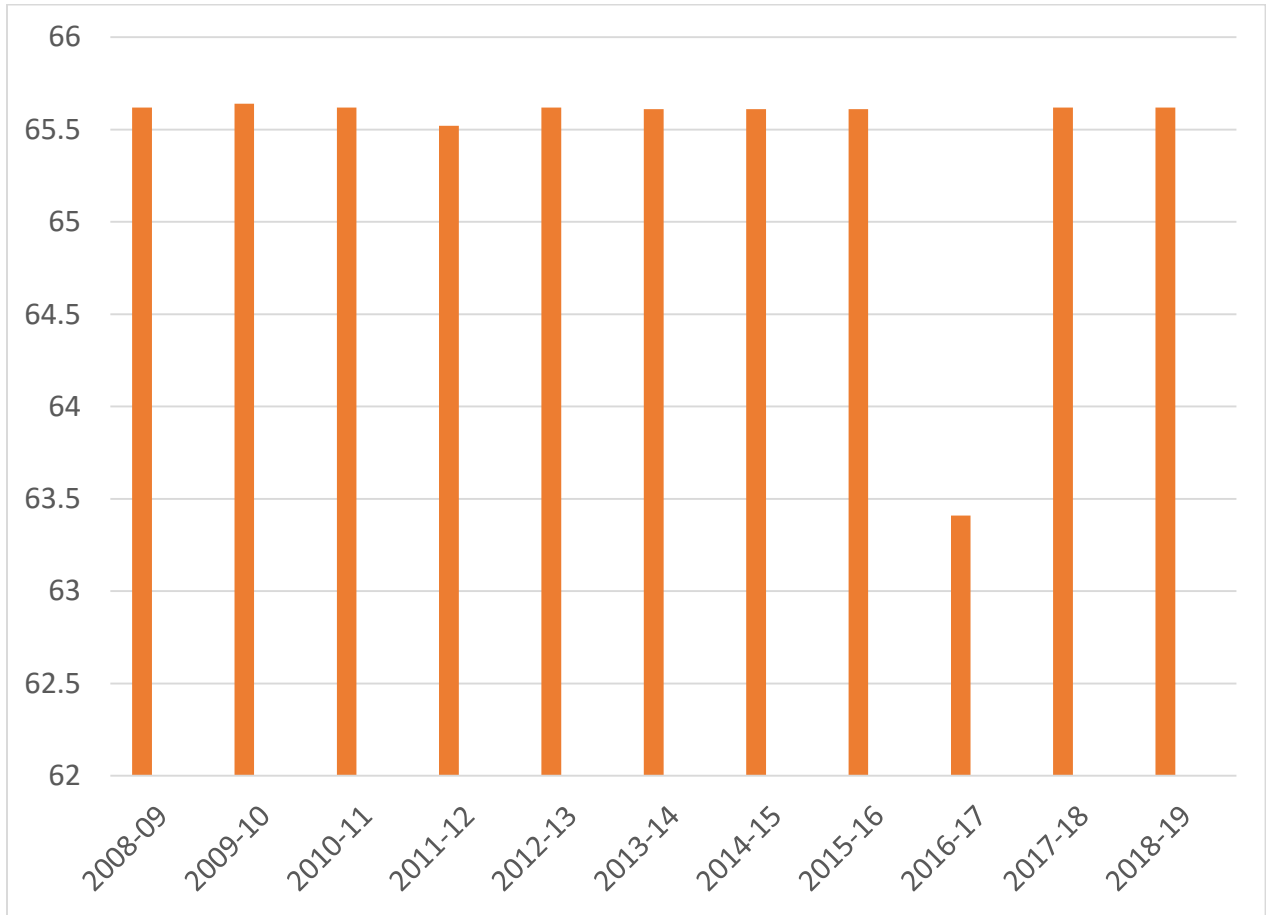


Fig 58: Inter-Period Comparison of % of value owned by lenders

17. The Winning Stake-Holder

This section covers the inter-period comparison of all the three terminals and depicts from the percentage of profit earned of each stake-holder the graph shows which of the among benefits the most

The graph evaluates the result by taking percentage of profit earned by various stake-holders in against the total value earned from the operations.

i. ISHPL

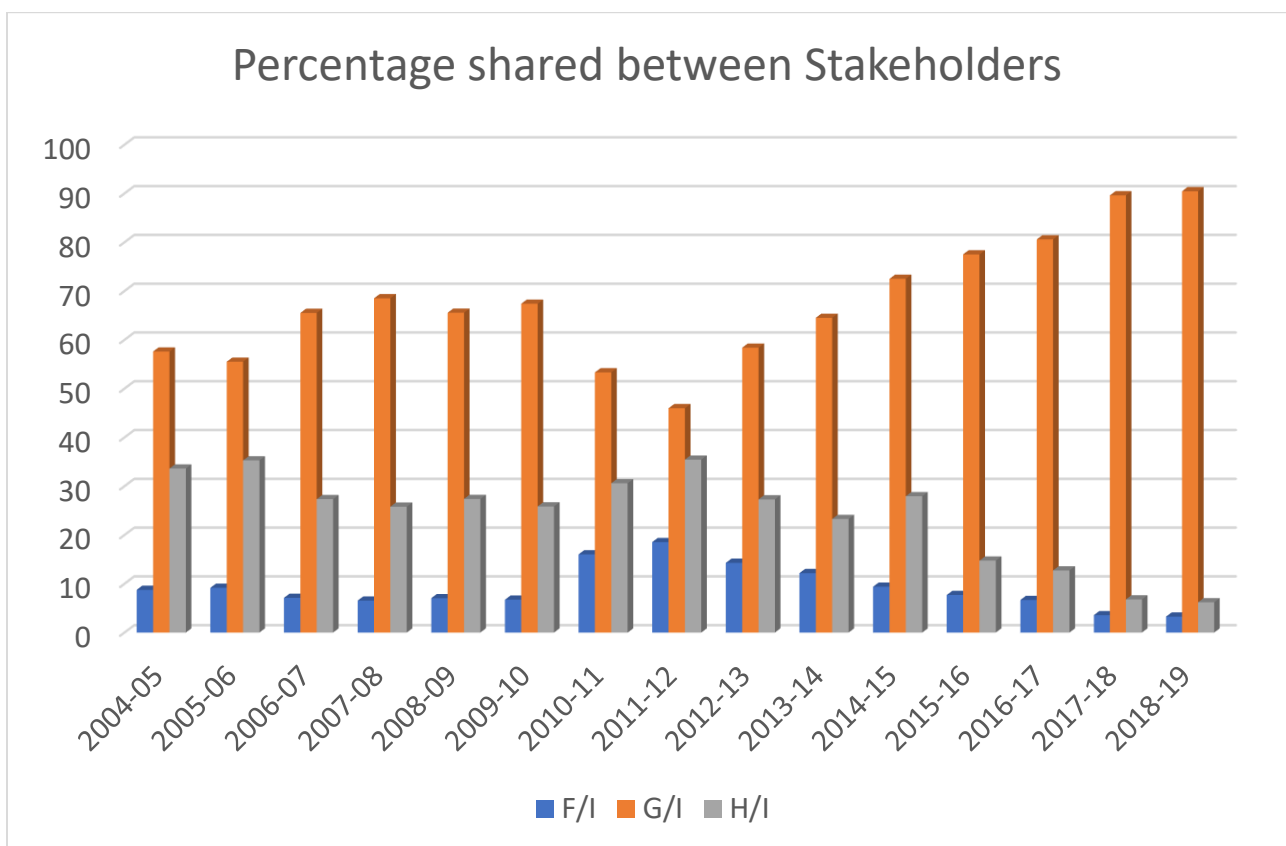


Fig 59: Inter-Period Comparison for percentage of value shared

- The above graph shows that the port authority earns the most and had seen an increasing trend of revenue payment by the private authority
- The equity holders here are not earning that much profit because of the capital structure, where they are managing 65% of capital in debt form and only 35 % by means of equity which is self-sufficient to depict the trend of interest too.

ii. TMILL

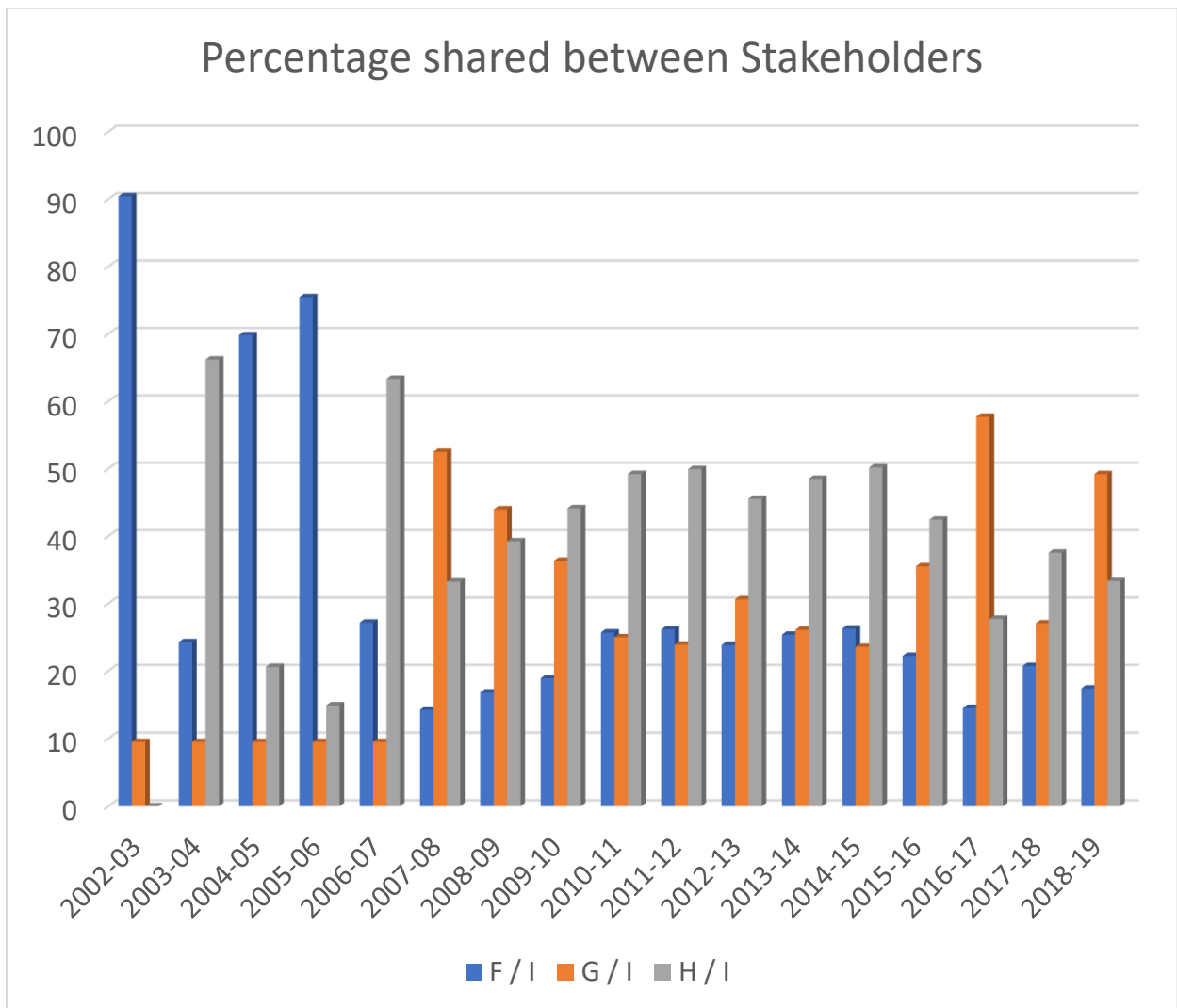


Fig 60: Inter-Period Comparison for percentage of value shared

- The above graph shows a mixed share to be earned by different stake-holders.
- The period (2002-03), is explained as there is no money is arranged from debt form in the capital structure and also, for the share that is to be shared to the port authority is limited as it was shared on the basis bidding document which states 2 lakh / million tons of cargo handled.
- The last few years as showed in the graph the port authority has earned the most.

iii. ICTPL

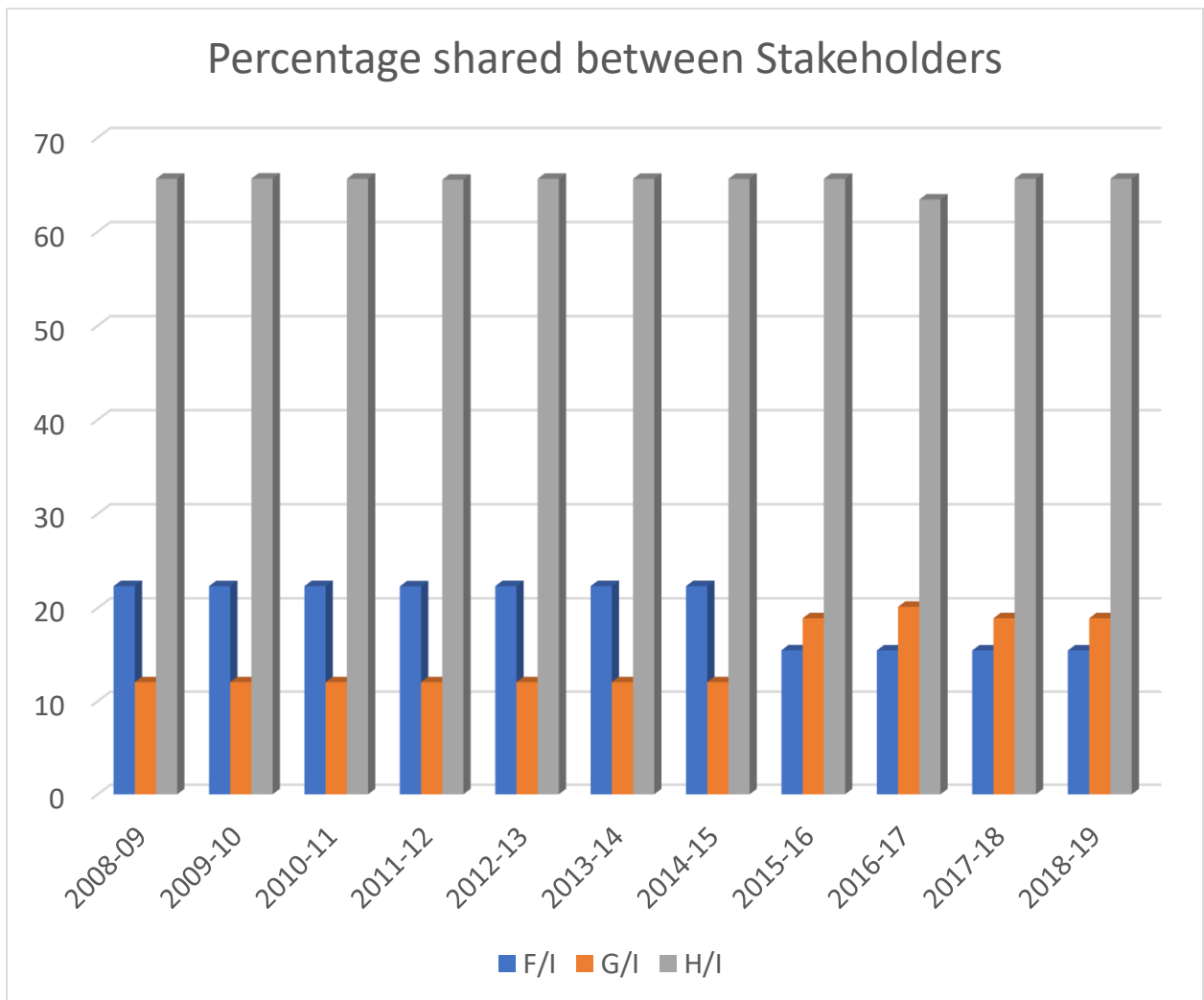


Fig 61: Inter-Period Comparison for percentage of value shared

- The above graph shows the money lenders were earning the most and at a fixed percentage of the value shared among stakeholders.
- The above graph is the result of less traffic of containers to be handled in the starting phase, which resulted in less returns and less value share among the equity holders and the port authorities.
- Whereas the capital structure of arranging the capital is in ratio of 70:30, where 70% of capital invested are coming as a form of debt for which the interest is compulsorily be paid.

CHAPTER – 5

FINDINGs, SUGGESTIONs, & CONCLUSION

5.1 Findings

With increasing specialize in public private partnerships (PPP) in infrastructure sector, the job of administrative bodies has gotten extremely critical. Duty being helpless against market restraining infrastructures and syndication/ruthless evaluating, is a basic administrative component. After private support was permitted in port sector, the Tariff Authority for Major Port (TAMP) was set up in 1997 to control duty at major ports. TAMP controlled, between alia, levy that port activities could charge from port clients.

TAMP, being the principal administrative authority of this sort, had no related knowledge. The private sector investment in India was at a beginning stage in 1990s along these lines encounters from different areas were additionally not accessible. TAMP thought of its originally set of rules in 1998 which were advances through a consultative cycle with stakeholder's numerous issues arose throughout the timeframe and rules were changed in 2005 and again in 2008, This cycle is proceeded till yet as TAMP had rolled out fundamental improvements and adjusted rules according to the necessities dependent on the encounters accumulated and worldwide accepted procedures.

ISSUES

1. Issues Affecting the Private Operators

- i. High Royalty/Revenue Share

To win projects, private administrators bid forcefully and quote income share that are frequently not reasonable. Administrators later attempt to control and discover substitute approaches to limit it. This prompts different contentions and cases. Administrators are here and there compelled to chop down the activities to keep the eminence low.

ii. Port Policy

The port approach didn't permit the occupant player to partake in the resulting bid at a similar port (independent of load) because of danger of monopoly. Because of this, numerous potential administrators who could have profited with the economies of scale were banished from offering for different terminals at a similar port.

2. Issues Affecting the Regulators

i. Limited Scope

The job of the TAMP is restricted to just duty. It's anything but vested with the forces to set and uphold execution norms and different measures for assurance of client interests. Its independence from the public authority and capacity to implement guideline is in question. Arrangement, evacuation and agreements of work of officials and individuals from TAMP are constrained by the public authority. The TAMP doesn't have any legal forces to authorize its orders. In addition, the sets of TAMP can be supplanted by the public authority.

3. Issues Affecting the End Uses

i. Lack of Competition

Port duties in India fluctuate altogether across ports and across terminals inside a port. Taxes for taking care of holders at various ports range between Rs 971 and Rs 3540 for each compartment. (TERI, 2009). In fact, it is seen that at times the private players have picked decreasing their taking care of limit when their duties were brought down by TAMP.

End clients don't have a lot of decision in exchanging ports because of limit, hinterland network and other coordination's costs. They are powers to address the cost by the port administrator given these requirements

5.2 Suggestions

The impediments of the TAMP proposes that there is a need to have a controller, which has control on levy as opposed to leaving the area simply available powers. Market influences alone are the best methods for guideline where rivalry has effectively set in, which isn't the situation in Indian port area. In any case, an administrative body like TAMP, in its present structure, has not been exceptionally successful. The controller ought to have a lot more extensive degree including valuing and ought to incorporate setting administration levels, execution, observing, and punishments if there should arise an occurrence of non-execution.

5.3 Conclusion

Taking everything into account, it very well might be said that changes in PPP projects in the port sectors is of incredible importance with regards to making ports more aggressive and in this way fortifying India's position in the international supply chain. Though, the study shows positive results towards accomplishment of the same i.e., making India's port more competitive at international stage, as the question of capacity utilizations is very much answered because the trio (all the three terminals) shows the growing trend in volume of cargo traffic handled, whereas in terms of the financial part, it is quite questionable to predict the most benefitted stake-holder. It can easily be found from figures of individual terminal operator that the stake-holder who owns the most profit is different in case of different terminal. The study shows up a mixed-up result in terms of profit sharing between different stakeholders, well that can be justified by different factors that have their impact on financial terms but the overall studies show a steady cum growing result for all the stakeholders in financial term as well.

REFERENCES

- <http://tariffauthority.gov.in/>
- <http://www.ipa.nic.in/>
- <http://sagarmala.gov.in/relatedlinks/indian-ports-association>
- <http://www.tmilltd.com/>
- <https://www.worldbank.org/en/home>
- <https://hosted.smith.queensu.ca/faculty/jdebettignies/docs/CPPPaper.pdf>
- <https://journals.vgtu.lt/index.php/IJSPM/article/download/1918/1532>
- https://scholar.harvard.edu/files/hart/files/incomplete_contracts_and_control.pdf
- <https://ijltemas.in/DigitalLibrary/Vol.9Issue3/25-31.pdf>
- https://www.works.gov.bh/English/ourstrategy/Project%20Management/Documents/Other%20PM%20Resources/PMBOKGuideFourthEdition_protected.pdf
- <https://openknowledge.worldbank.org/handle/10986/6638>
- <http://www.ub.edu/graap/Final%20Papers%20PDF/Siemiatycki%20Matti.pdf>
- <https://ijirst.org/Article.php?manuscript=IJIRSTV2I9010>
- <https://ijirst.org/Article.php?manuscript=IJIRSTV2I9010>
- <http://documents.worldbank.org/curated/en/600511468336720455/pdf/903840PPP0Ref0Box385311B000PUBLIC0.pdf>