Global Port Pricing Comparator Study (GPPCS)

Tariff sample date: 1 April 2013

1. Abstract

This, the second iteration of the Global Port Pricing Comparator Study (GPPCS) looking at 2013 tariffs, which was published previously for 2012, serves to confirm the overall results from the previous version of the GPPCS. The overall structure of the South African port pricing system has not changed significantly on a relative level, despite large decreases in container cargo dues as well as export automotives announced in the 2013/14 Record of Decision. The results show that significant cross-subsidisation from cargo owners towards primary exporters and vessel owners persist. Although this has improved over the previous study, cargo owners still face a 542% premium in 2013/14 compared to a premium of 874% to the global average in the previous year. While vessel owners face costs below the global average (-26% in 2012/13 and -32.21% in 2013/14), the total NPA costs to users in container ports comes at a still high premium of 166% above the global average (similar results for the automotive sector applies) whilst the report shows that bulk commodities are charged much lower total port costs than the global averages.

2. Terminology and methodology

No single port charge can be accurately compared across the world purely by its tariff, name or category. Port pricing structures differ in the various jurisdictions and even sometimes within the same port or port system. Within each port jurisdiction, a particular tariff structure is used, largely based on the history of that port system, the country's development, its transport and economic policy. The only meaningful comparisons in such an environment is one which looks at the total costs that are faced by a particular activity which is unitary enough, comprehensive enough and consistent enough across all the port jurisdictions.

The most appropriate comparator base for port pricing comparisons in our opinion is a standardised vessel call. This vessel call has a standard vessel, standard port stay duration and a standard cargo profile. This in itself is fraught with inconsistencies such as the differences in efficiency that would ordinarily either lengthen or shorten a port stay depending on the port, which in turn has ramifications for the time related port charges.

To prevent too convoluted an approach that requires too many assumptions and adjustments that are in themselves tainted by arbitrariness, the vessel calls have been standardised in the study. This would make some foreign ports slightly more expensive than they otherwise would be. It is however important to note that some aspects of what contributes to the total makeup of the port cost structure was not included. These include the charges between cargo owners and their service providers (document fees etc.) and taxes on activity other than the specific port related activity, amongst others.

This methodology was again followed in the 2013/14 iteration of the study to retain consistency in the results. It is important to note that while corrections to the data and improvements to the methodology are applied retrospectively, they did however not have a meaningful impact on the results of the previous study and the outcomes remain. Further, it is important that the magnitude of the deviation from a global average must be considered together with the relevant change experienced from year to year. In addition, currency fluctuations also impact on the results and as such using a standard US dollar price in the methodology will capture any exchange rate benefit or loss on the side of the user.

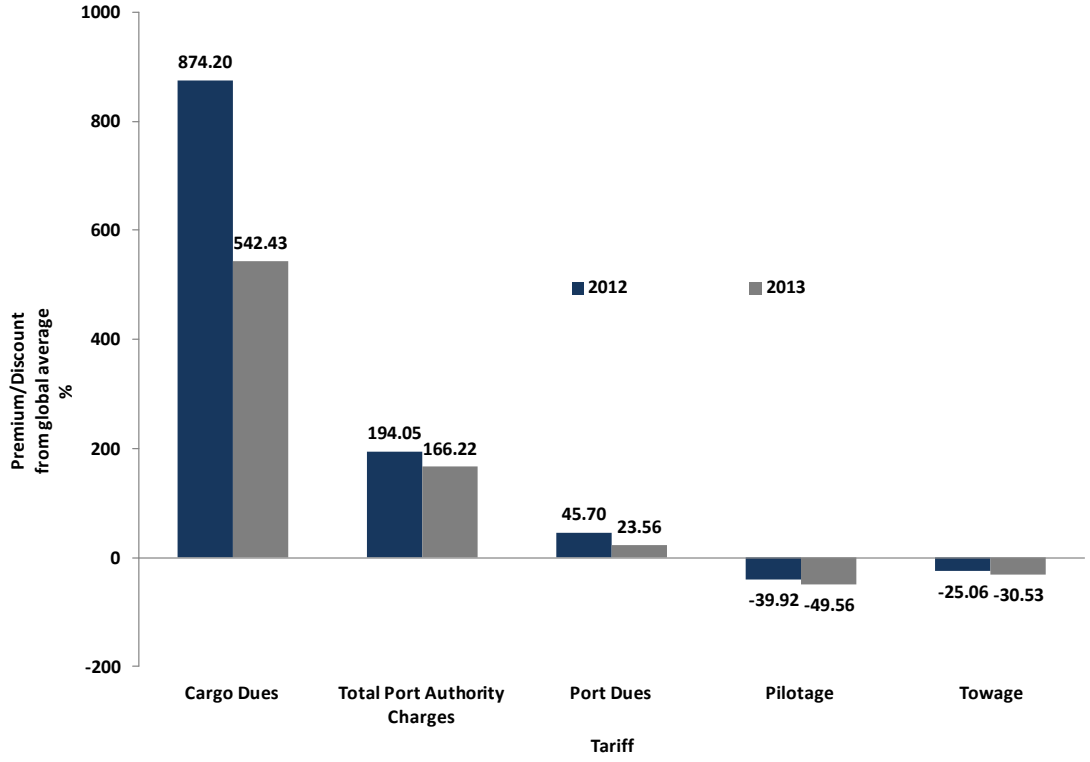
The Ports Regulator GPPCS for 1 April 2013 represents an assessment of the global pricing context for ports with respect to a defined list of commodities, and contextualises South African port pricing in this global context and compares it to the results of the 1 April 2012 study. The study is based only on publicly available information and only focuses on the level of charges that are faced by third party service users without “special” pricing arrangements.

Annexure A highlights the risks associated with the interpretation of the data and the underlying assumptions in the study related to the unitary vessels used for the different cargo types are outlined in annexure B.

3. Containers remain relatively expensive

The study confirmed the results of the 2012/13 study that showed containers are still significantly more expensive than the global average, unless you are a foreign cargo owner transhipping through a South African port with cargo dues at a 25% discount to the global average.

Figure 1: Container costs

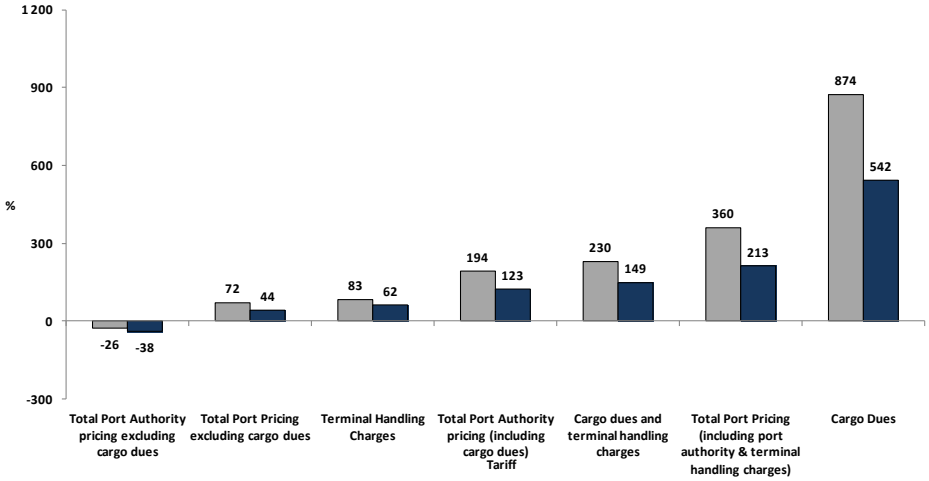


The figure above reflects that cargo owners through the cargo dues payable are faced by a 542% premium in 2013/14 compared to a premium of 874% to the global average in the previous year. While vessel owners face costs below the global average (-26% in 2012/13 and -37.75% in 2013/14), the total NPA costs in container ports comes at a still high premium of 166% above the global average (in effect 2.6 times the global average if terminal handling charges are excluded).

Total port costs (including terminal handling charges for container owners went down from 360% above the global average to 245% in 2013/14vessels

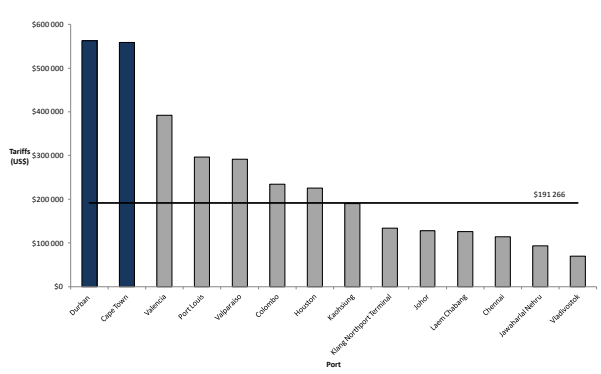
If Terminal handling charges are taken into account (see figure 2), total port costs (including terminal handling charges for container owners) went down from 360% above the global average to 213% in 2013/14. These remain significant and the cross-subsidisation between "manufactured goods (containers and automotives) and bulk commodity exports remain evident in these results.

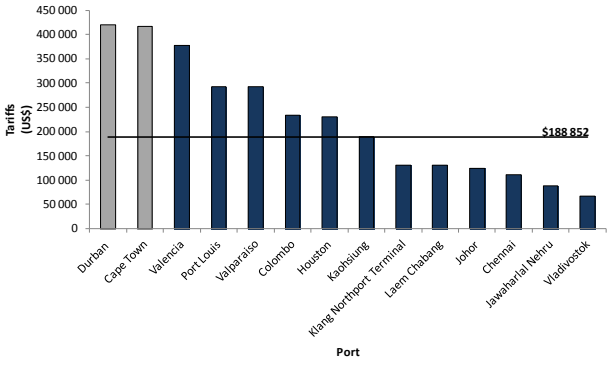
Figure 2: Container Costs including Terminal Handling Charges



The impact of the reduction of 43.3% and 14% in export and import container cargo dues has moved the South African tariff closer to the global norm (despite global sample average edging slightly lower) as evident in figures 3 and 4 below, it remain however still excessive as the two figures below indicates the South African ports (Durban and Cape Town) remain the most expensive in the sample despite the sizable reduction in container cargo dues in 2013/14.

Figure 3: 2012/13 total port costs: containers & Figure 4: 2013/14 total port costs: containers

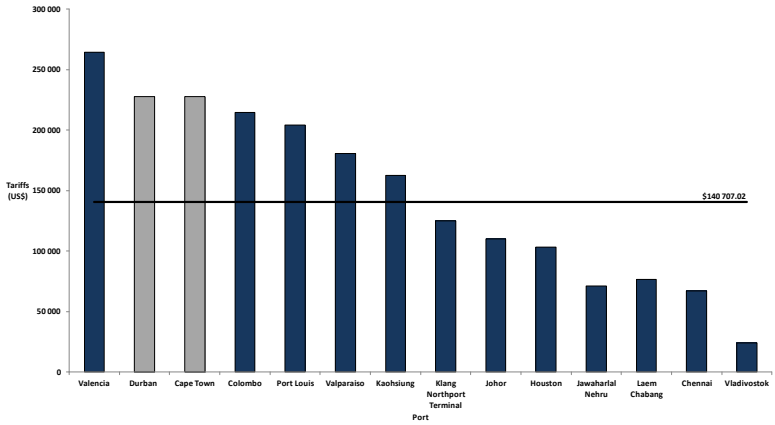




4. Terminal handling Charges (container terminals)[1]

The depreciation of the South African rand, as well as most developing country currencies over the last year has significantly lowered the US dollar cost of most tariffs, including terminal handling charges. However, at an average in excess of $227 000 container handling charges (per unitary vessel) in South Africa remain more expensive than the global sample average. On a Twenty foot equivalent unit (TEU) basis South African terminal handling charges for containers are about 61% above the global sample average. Continued low levels of efficiency in container handling remain a concern, but are an area of focus for the current implementation of the NPA's Terminal Operator Performance plan.

Figure 5: Terminal Handling Charges

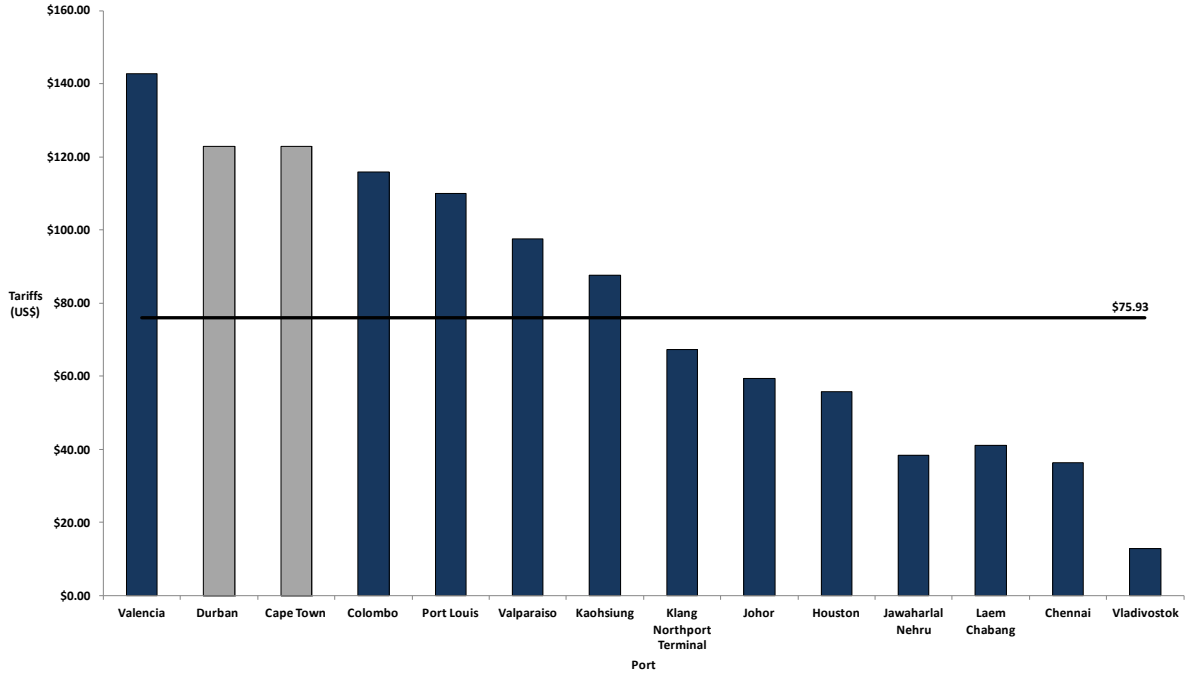


It is clear from the data that South African cargo owners and operators face significantly higher costs than the sample average. With the bulk of South Africa's manufactured goods arguably exported through containers this is clearly contradictory to current industrial policy aiming to incentivise value addition, broadening of the manufacturing base and increasing manufactured exports. As such, the regulator amended export containers as well as imported container cargo dues downwards by 43.3 and 14% respectively. In addition, a 21.1% reduction in export automotive cargo dues also seeks to address the cross-subsidisation in the port system.

> The Regulator amended export containers as well as imported container cargo dues downwards by 43.3 and 14% respectively

[1] The definition of handling charges in this study includes all costs from vessel to stack, from stack to vessel, from stack to truck or railcar as the case may be. No provision was made for overstay or other penalties or charges related to the duration that the container remained in the terminal.

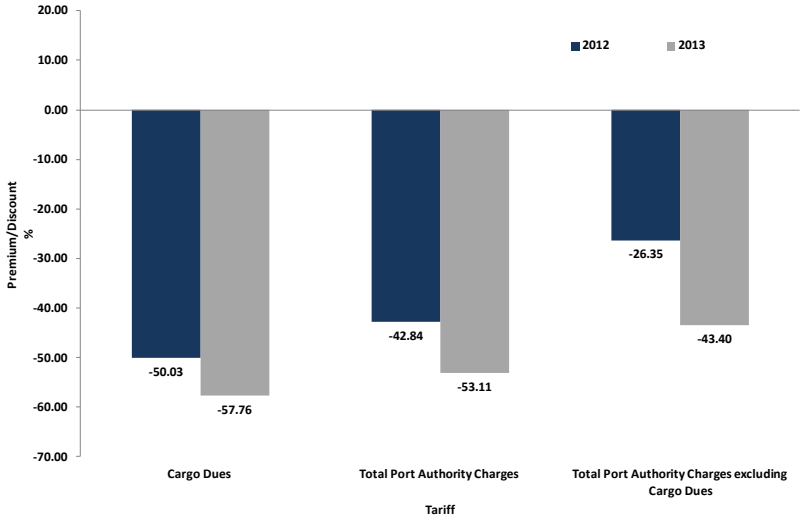
Figure 6: Terminal Handling Charges per TEU



5. Bulk commodities (Iron Ore and Coal) remain lower than the sample averages

Bulk commodities are charged much lower total port costs than the global averages. Coal (Richards Bay) and iron ore (Saldanha Bay) were found to face costs 53% (43% in 2012/13) and 19% below the global average respectively. The cargo dues faced by cargo owners are 57% and 37% below the global norm for coal and iron ore respectively.

Figure 7: Coal Total Port Costs



The zero tariff change on coal cargo dues and marine services resulted in a real decline in coal port prices. Cargo dues moved lower relatively to the sample global average to -57% from -50.03% in 2012/13. A similar pattern emerged in the iron ore sector (see figure 9) with iron ore cargo dues moving to –34.04% below the sample global average and total port costs for iron ore from –31.85% in 2012/13 to –49.33 in 2013/14.

Figure 8: Coal Cargo dues

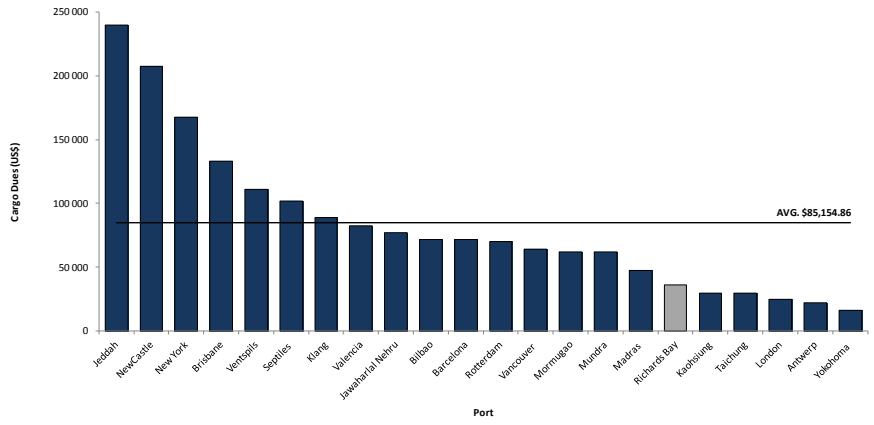


Figure 9: Iron Ore Cargo Dues

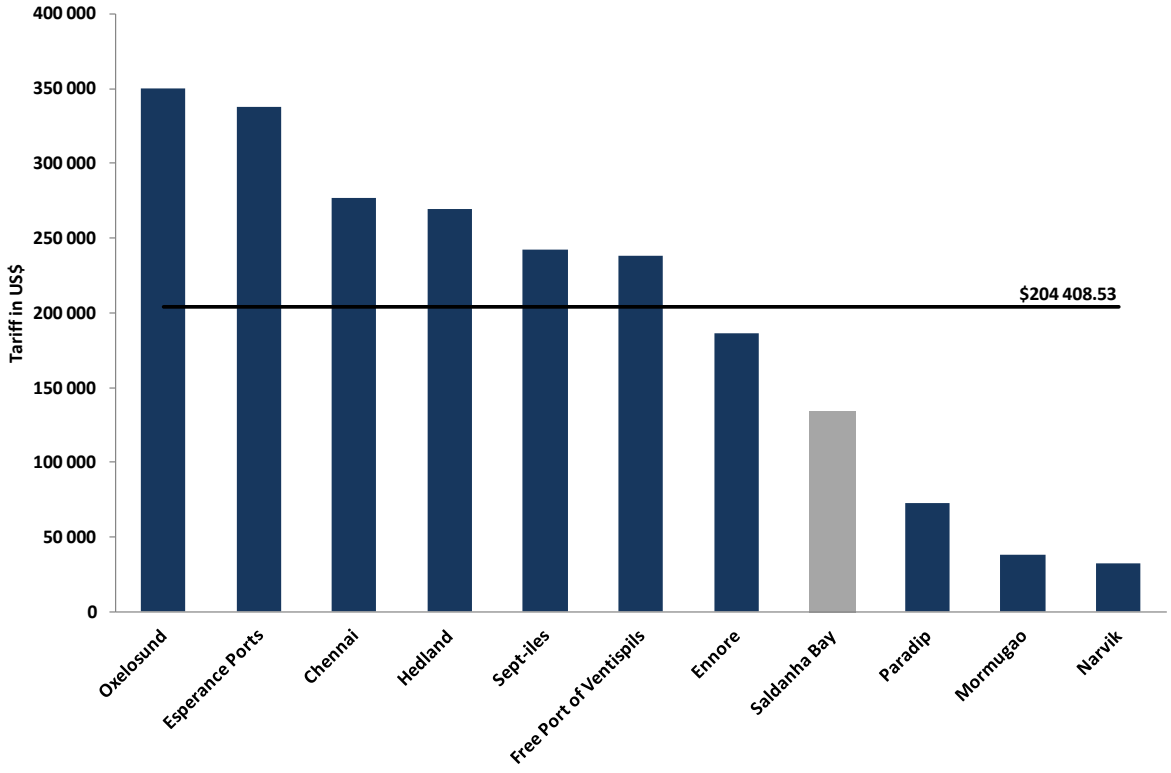


Figure 10: Iron Ore Total Port Costs

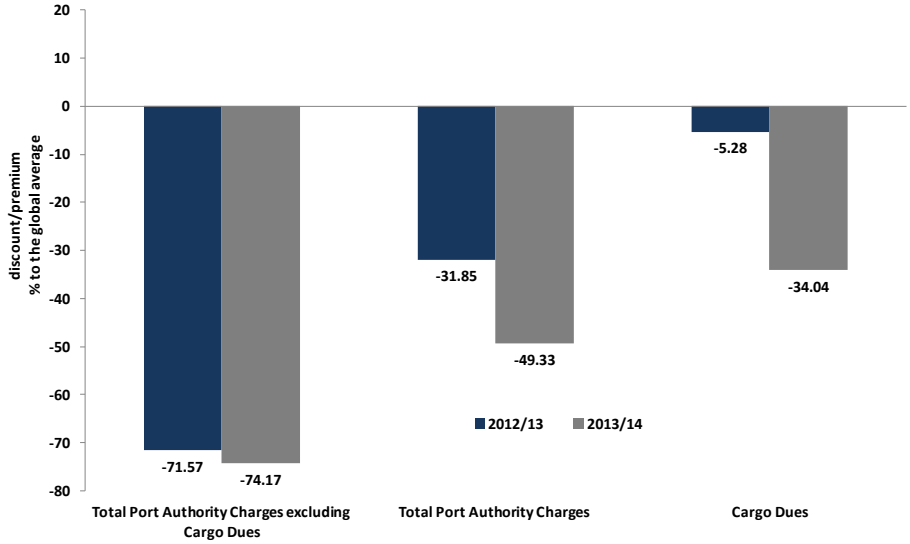
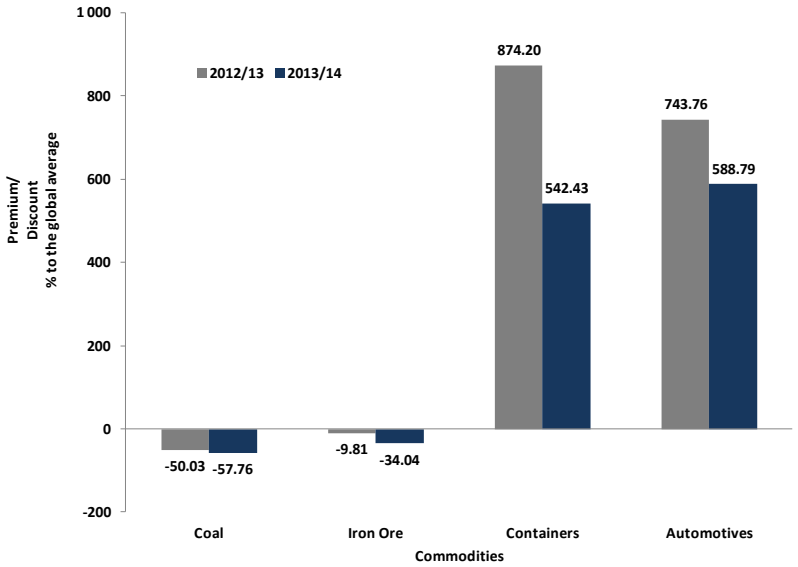
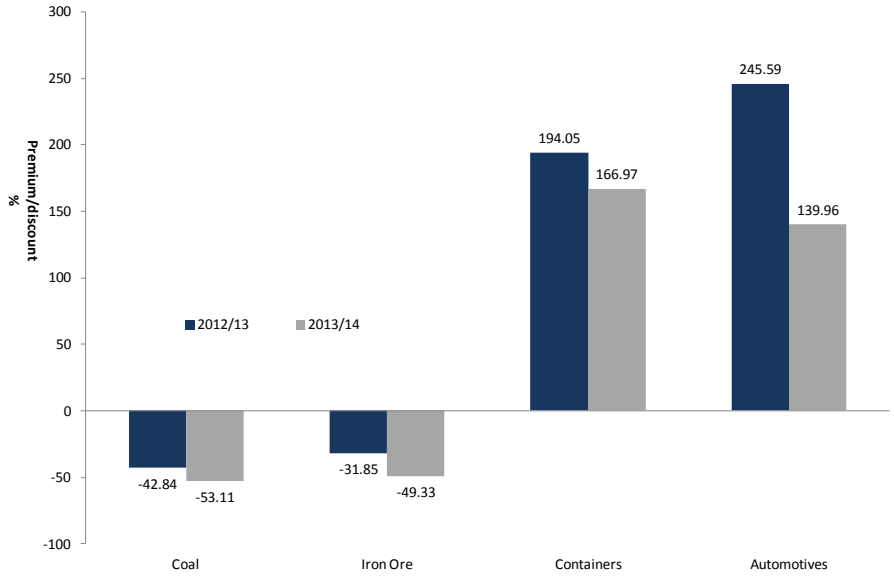


Figure 11: Cargo Owner Costs across all four commodities



As bulk commodities are charged much lower rates than the norm and containers and automotives are charged much higher than the norm, containers (export and import) and automotives are arguably still subsidising bulk exports, even more so if only cargo dues are taken into account with container and automotive cargo owners facing costs at premiums of between 542% and 732% of the global norm respectively and the bulk cargo types below the global sample average.

Figure 12: Total Port Costs across all Commodities

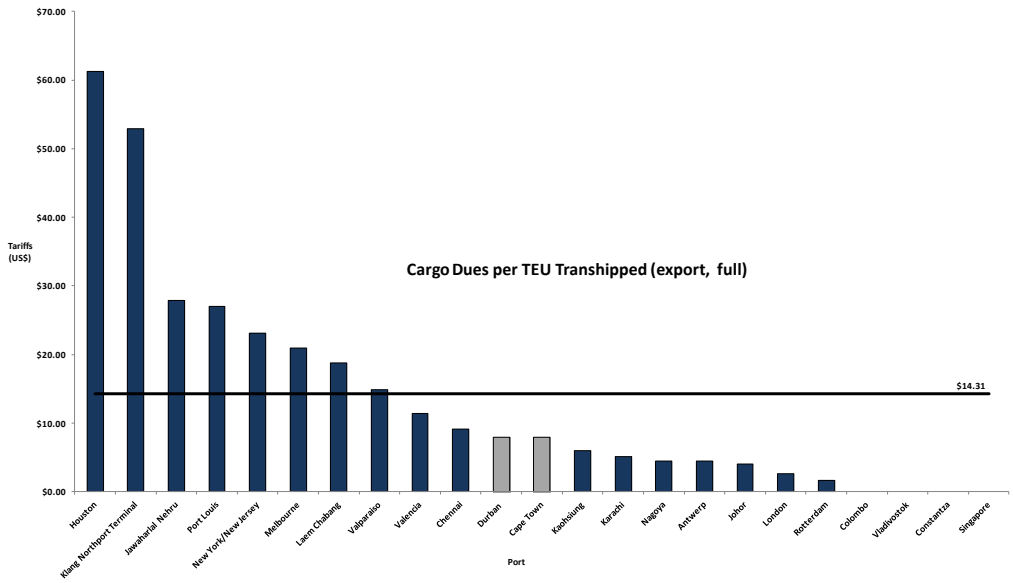


6. Transhipment

South African cargo owners are continuing to subsidize foreign cargo owners and liners transhipping through our ports with cargo dues faced by a full transhipped container below the global average. There is not as yet sufficient research on the network benefits of these transhipments to South African logistics costs to indicate the incidence of the value that is extracted in this process and how this value is appropriated to the different parties.

The Ports Regulator stated in 2013 that "*Little statistical evidence could be found of a relationship between the tariff level and the recent transhipment volumes in the South African ports system". The Regulator's analysis indicated that global growth and subsequent trade volumes and the cost of freight only explain a portion of the change in the transhipment volumes in the Port of Durban between 2005 and 2012 with the bulk of the decision depending on the inherent market and infrastructural advantages of one port over another. This can only be addressed over the longer term, thus leaving tariffs as the only available instrument to attempt to impact the transhipment volume distributions in the port system."* (Record of decision, 2013). In addition, Current research is targeted at a better understanding of whether the network benefits that are gained from transhipment are translated into lower system costs for South Africa, where and to whom that value accrues and what would be an appropriate articulation of pricing to better manage system behaviour and tariff incidence.

Figure 13: Transhipment



Whilst transhipment cargo dues remain below global averages, the Regulator recently considered a proposed adjustment to transhipment costs by the NPA that is an attempt to shift transhipment traffic towards Ngqura in order to free up space in Durban. The regulator said that based on the current review of the Tariff Strategy as well as the little impact a tariff change in cargo dues might have on container volume shifts, *no change* in the transhipment cargo dues was applied. However, the regulator did allow for bilateral agreements where "the NPA applies a reduction in transhipment tariffs for shipping lines on a bilateral basis on condition that all contracts of this nature will be submitted to the Regulator in accordance with Directive 24, and all criteria on which any bilateral price agreement is based on (i.e. volumes, frequency etc.) be submitted to the Regulator to ensure that in the event a complaint is lodged or an enquiry made the Regulator can make a fair decision in regard to whether to disclose such criteria or not. This is to ensure transparency and guard against unreasonable preferential pricing agreements."

The conclusion of the tariff strategy will provide a more nuanced platform for the re-pricing of transhipment tariffs as well as port specific tariff adjustments.

7. Automotives

Similar to the charges in the container sector, vehicles also face significant premiums to the global average. Without taking volume discounts into account, total NPA tariffs for the vehicle sector is 245% higher than the global average. The 21.1% decrease in export cargo dues is a move in the right direction, with the relative movement of total port Authority charges decreasing to 139% above the global average from 245% in the previous year. This was mainly due to the zero tariff increase in marine services in 2013/14 and relative movements in sample ports resulting in a higher global sample average.

Figure 14: Automotive Costs

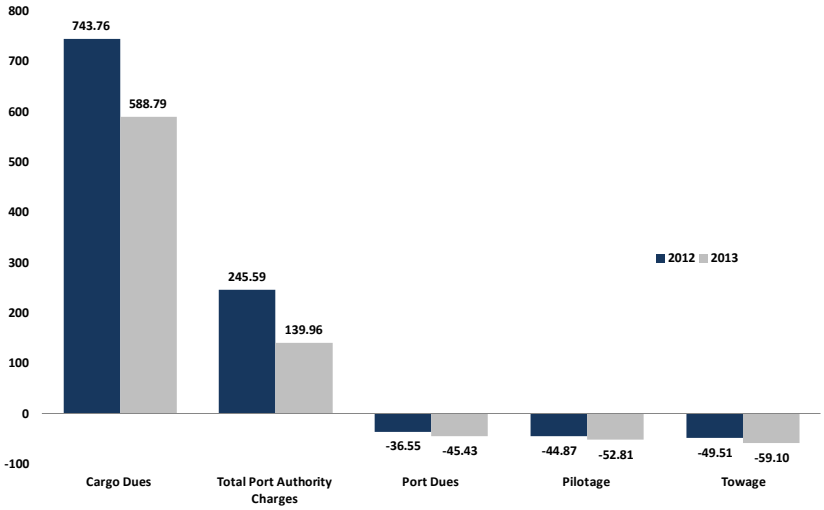
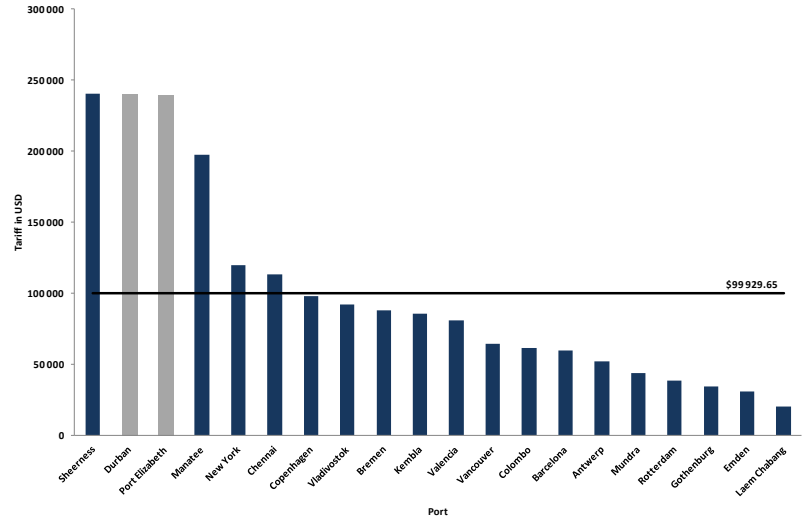


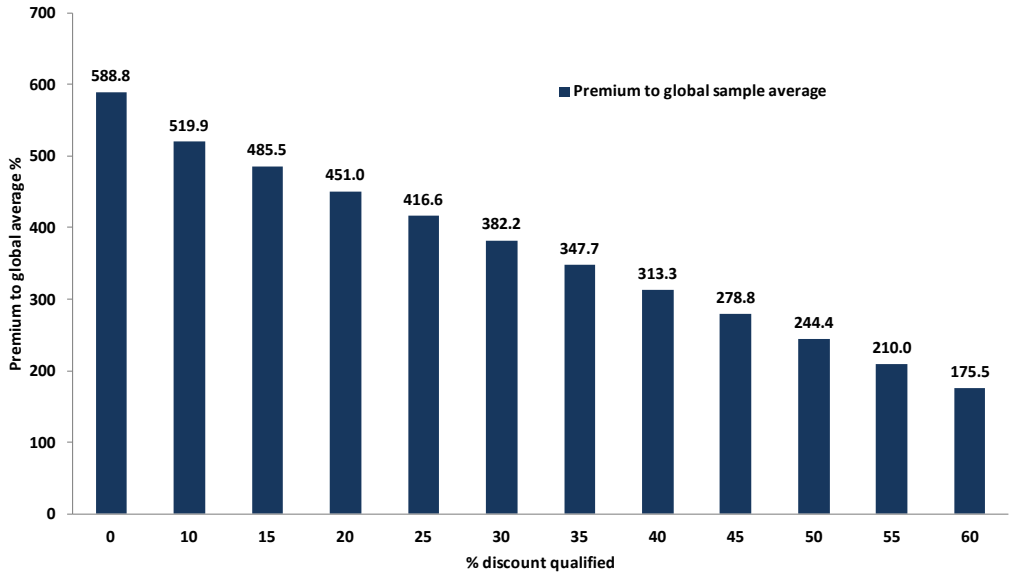
Figure 15: Total Port Pricing 2013



Again, similar to containers, cargo dues on automotives is significantly higher than the global average with total cargo dues on vehicles at a 588% (743% 2012/13) premium to the global average.

However, the NPA implemented an Automotive Industry Volume Discount (AIVD) which applies to importers and exporters of vehicles.

Figure 16: Impact of Automotive volume discount on cargo dues



The figure above isolates the effect of both the AIVD on the overall cargo dues faced by vehicle importers and exporters.[2] The AIVD has volume discounts available at different levels depending on the total number of vehicles imported or exported, ranging from a minimum discount of 0% for 0-10 000 and a maximum discount for 60% for 80 001+ vehicles. In the figure above the impact of the AIVD and rebate on small manufacturers who received a smaller discount because they imported or exported fewer vehicles; and large manufacturers who received larger discounts with an extreme of 60% because they imported/exported more vehicles is apparent. An important note is that the rebate's effect is introduced after the AIVD has been calculated.

The data shows that even after the AIVD at the 60% level and the rebate, the cargo dues faced by South African exporters ($85 131) are still above the global average cargo due tariffs ($ 30 898, lower than the $31 724 average recorded in 2012/13). It is clear that AIVD and rebate programs provide

[2] Special assumption: The costs reflect the cargo dues on a unitary car carrier vessel visiting Durban on the 01/04/2012 and the full cargo belongs to a single company.

more benefit to larger manufacturers of vehicles, and arguably those who need the discount more i.e. small manufacturers face even higher than the sample average global costs.

The tariff premium to the global average paid by vehicle manufactures after receiving discounts are significant. The lower extreme where there is 0% AVID as a result of the manufacturer being too small shows a premium of 588% to the global average, down from 740% in 2012/13 due to the impact of the lower global average, while the opposite extreme where there is an AVID of 60% which is received by the largest manufacturers shows a premium of approximately 175% to the global average.

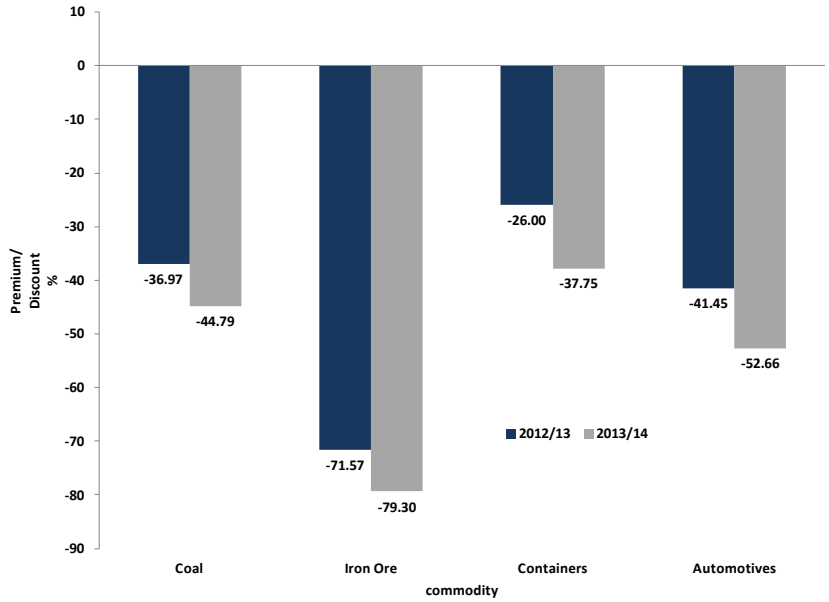
A concerning conclusion is that while South African cargo dues are significantly above the global average, even at the largest discount level, it is smaller manufacturers who are the worst affected by this anomaly. The study also indicated that a certain amount of bracket creep exists in the program as the volume brackets are not adjusted from year to year. This further reduces the actual tariffs paid by expanding manufacturers. Whilst the cross-subsidisation of automotives to other commodities as well as smaller to larger manufacturers remain, the current review of the tariff strategy may bring a more equitable dispensation, without disregarding South Africa's industrial policy objectives.

8. Vessel costs remain relatively cheaper

The study confirmed that all vessels face much lower overall vessel costs in South African ports than the averages in the study, ranging from 32% below the global norm in the case of containers and 74% for iron ore vessels. In all cases, except Automotives, where the sample saw decreases in costs for a number of ports the discount to the global average increased from the 2012/13 tariff year to 2013/14. This must be seen in a context where all vessels are foreign owned and operated. The zero tariff change allowed by the Regulator in 2013/14 resulted in a relative increase of the discount to the global average. In addition to the real price decrease in the 2013/14 tariff year, the depreciation of the South African Rand by 16.7% for the period also contributes to the decrease in the dollar price. The incidence of the tariff clearly indicates that foreign users of the ports are not contributing to the overall infrastructure costs in a similar manner than they do in the sample global average.

All vessels face much lower overall vessel costs in RSA ports than the averages in the study, ranging from 38% below the global norm in the case of containers and 74% for iron ore vessels

Figure 17: Vessel Costs



What was not considered in this research and is part of current research (including the NPA's Terminal Operators performance Standards (TOPS) as well as Marine operators Performance Standards (MOPS) processes) is the confluence of various costs. These include vessel delays (faced by vessel owners and operators), cost of ocean legs of transport (faced by cargo owners or logistics integrators), costs of delays into and out of port(inventory, temporary local cargo storage and truck standing time costs etc.) faced by cargo owners and logistics providers and other such costs that are occasioned by specific issues such as the market structure of marine transport providers and the port system, as well as operational and infrastructure issues in certain ports.

9. Conclusion

1. Although the average tariff levels has improved over the previous study, cargo owners still face a 542% premium in 2013/14 compared to a premium of 874% to the global average in the previous year. While vessel owners face costs below the global average (-26% in 2012/13 and -37% in 2013/14) for containers, the total NPA costs to users in container ports comes at a still high premium of 166% above the global average (similar results for the automotive sector applies) whilst the report shows that bulk commodities are charged much lower total port costs than the global averages. Vessel owners not only face costs below the global average in dollar terms these discounts increased as a result of the depreciation of the South African currency and will arguably support the dollar price of South African port prices for the foreseeable future.
2. The high levels of cross-subsidisation due to the imbalances in the tariff structure in the port system remain a concern. The Regulator has started to adjust the tariff book within the parameters of the Revenue Required Methodology applied in the tariff setting process. This has started to bring about some normalisation, however much more is required. To this end, the Ports Regulator is refining a tariff strategy that seeks to address these concerns.
3. Due to the South African "Free on Board" (FOB) export and "Cost, Insurance and Freight" (CIF) import predominance in concluding international trade contracts ensuring that the bulk of the port charges liability lies with the South African party, South African container cargo owners continue to carry the greatest burden of the transaction. In addition, through their significant contribution to tariff book revenue (46% of all tariff book revenue comes from container cargo dues) they also carry the bulk of the infrastructure costs, while also paying greater premiums over global averages than foreign cargo owners transhipping through South African ports (see figure 8).[3] This remains a concern.

[3] FOB: The price of a traded good excluding transport cost, i.e. the transport costs, including port charges is the responsibility of the exporter. CIF: The price of a traded good including transport cost. I.e. the importer is responsible for transport costs including port charges.

Annexure A: Interpreting the results

The process and outcomes of benchmarking port pricing is not an exact science. The global averages that we have defined in our studies do not represent what we should be charging in RSA ports, rather it give us some indication of the direction that our pricing should be moving in, rather than the exact absolute level of pricing. It also provides us with a reasonable indication that would allow assessment of the alignment between port policy, port pricing and economic policy. The identification of pricing differentials that exist does not automatically suggest that certain industries should be charged at a globally comparable rate. It does not suggest that certain cargoes may not be charged lower or higher rates than the global averages. It arguably does identify the size of the divergence between what is the stated overarching economic and development policy of the country and what port pricing reflects. It provides a reason to assess and shift port pricing in a direction that better reflects the global reality and actually aligns with South African economic structure, economic policy, industrial policy and economic development policy. It also requires that any differentials that we allow to exist in the future must result from an open engagement that includes all affected parties and is justifiable in the public interest.

That a change in indices such as either the weighted dollar price over the year(rather than fixing it at the date of the study) or some other selection of ports as a population would no doubt influence the findings to a greater or lesser extent, this influence is not so significant that it changes the outcome. A 20% differential in the dollar price will not remove a 700% price premium over a global average; it would merely make it less of a premium. As is evident in this report.

Amending an index or changing a population will not remove the internal difference between the significant premiums on cargo owners of manufactured goods and the significant discounts to un-beneficiated bulk commodities. The amendment of parameters of the research will not change the fact that South African cargo owners carry the majority of the burden of infrastructure costs while foreign cargo owners and vessels receive globally competitive rates or discounts. In addition, carefully selecting ports that support a particular argument in response to these numbers does not remove the reality, as an equally careful selection, can make the numbers even worse. In some cases, our pricing is too low, and in other cases too high. What they also show is that different stakeholders in the logistics system inappropriately bear the incidence of tariffs, in comparison to global practice.

As example: The trend in port pricing in South Africa, from an internal coherence(using global averages) perspective, appears to subsidise the industries that have lower levels of job creation and value addition in RSA. The higher job creation industries tend to be penalised. An example is the

differential of cargo dues that existed between stainless steel and mild steel prior to the Regulator's decision (although this element was one of the issues considered in that matter, it was not the basis of the decision). An industry that stopped at one level in the value addition process and then exported its product to have further value added in another country, paid roughly one quarter of the price paid by the producer that took that product and added further value inside of the country, for the same use of infrastructure. This is clearly not in line with South Africa's economic development policies, and the need for stronger alignment between different policies and regulatory regimes is critical in advancing a coherent and sustainable industrial policy. As such the current tariff structure where bulk trades also tended to be less than or close to the global averages, while the value added trades were significantly above the global averages, unless you were a foreign cargo owner merely transhipping your cargo through South African ports, is clearly not aligned with the country's industrial objectives.

This research is not intended to automatically define the levels of pricing that are appropriate and the targets that need to be set for pricing incidence, it is designed to add to the debate in reviewing and setting appropriate pricing and price incidence in the port system.

Sample selection

The researchers compiled the port samples based on a number of criteria, with tariffs not considered until the very end and played no role in the sample construction process. The criteria included throughput, capacity, commodity and cargo handling characteristics, availability of public tariff information (in English as far as possible) and the ability of the port to handle the unitary vessel size.

Comment

The research is therefore published and any correction, criticism and comment is welcomed. We do however ask that where parties wish to submit such, they please provide the following:

- An explanation as to why the information in the study is incorrect or inappropriately used.
- The correct information, if the information in the study is claimed to be incorrect, or a more appropriate use or exposition of information if the appropriateness or exposition of the information is questioned.
- The original public documents and or information that the "corrected" information is based on.

- The reason why an alternate view, if it is opinion-based such as the selection of different populations or indices, is more appropriate.

Annex B: Assumptions

1. **Container Study**

Vessel Dimensions:		
Length	221	meters
Breadth	32	meters
Height	25.91	meters
Draft	12.2	meters
DWT	41 800	tons
GT	35 800	tons
NT	14 444	tons
Power Output	26 270	KW

Standardised Ship Call:				
	Landed		**Shipped**	
	Deepsea		***Deepsea***	
	Full	686	Full	427
	Empty	71	Empty	288
Total TEU Parcel Size = 1,853	***Coastwise***		***Coastwise***	
	Full	2	Full	9
	Empty	4	Empty	8
	Transhipped		***Transhipped***	
	Full	148	Full	148
	Empty	30	Empty	32

Additional assumptions

- The vessel utilises the port services within normal working hours of the port, and abides by all rules and regulations of the port.
- Assume the vessel enters the berth on weekdays, except on public holidays, at 08h00 and exits the berth at 08h00. (i.e. number of hours in berth= 48hours)
- No additional surcharges, waiting fees, penalities or cancellation fees are applicable within the vessel call.
- There is no use of miscellaneous services, such as Fire & Emergency services, Fire Protection, etc.
- Port charges such as Security service fees, fresh water fees, electricity and removal of refuse, etc, where a minimum fee is not stipulated, will be excluded from the Port charges.
- Assume the Vessel is a Liner Trade which operates on a scheduled basis.
- Assume away all reductions (based on the number of calls)in the port charges offered to vessels.

- Assume the following weights of TEUs: Full= 21 Tons Empty= 2.5 Tons
- Unless otherwise specified, assume a vessel of this size will always require the assistance of two tugs for one hour.
- Unless otherwise specified, assume a vessel of this size will always require the assistance of a pilot for one hour. Shifting tariffs are excluded.
- Where no tariffs are allocated to Coastwise & Transshipped Cargoes, the Deepsea rates will be used.
- Assume one vessel call per port per month.
- Assume vessel call at non-concessionary terminals and berths.
- Where there is more than one service provider, an average of the tariffs was taken.
- sume all information about the vessel & cargo is provided in advance in accordance with requirements of each port prior to the arrival/departure of the vessel & cargo to/from the port.
- Assume vessel needs to use the port's mooring or unmooring ropes.
- Vessel always makes use of the port's equipment.
- Assume all imported transhippment containers are transhipped within 14 days of arrival at the port.
- Assume all transhipment containers landed/shipped are foreign-going transhipment containers
- Assume all transhipment containers are shipped from the same port terminal it landed in.
- Assume one container move to load or off load containers for terminal handling charges.
- Klang Northport and Jawaharlal Nehru cargo dues and terminal handling charges are consolidated into a single charge.
- Container loading and unloading operations begins within 2hours after the vessel enters the berth and ends 2hours before the vessel exits the berth. i.e. cargo operations are completed in the 44 hours the vessel is at berth.
- No amendments have been made to reduce total handling and port authority charges of non South African ports for efficiency differentials.
- Terminal Handling Charges includes vessel to stack, vessel to truck, vessel to rail wagon, rail wagon to vessel, truck to vessel, stack to vessel as appropriate.

2. Automotive study

Standardised Ship Call:	
Commodity Moved	Cars
Parcel Size (tons)	3715.64+8085.32
Import (tons)	8085.32
Export (tons)	3715.64
Parcel Size (Units)	890+409
Import (Units)	890
Export (Units)	409

Vessel Dimensions:	
LOA	198m
Breadth	32m
Draft	8.6m
DWT	19 893
GT	56 439
NT	17959

Additional Assumptions:

- Number of Days in Port: 1 Day & 8hours (32hours)
- Assume that there are no penalities, additional surcharges or waiting fees applicable within the vessel call.
- Assume the vessel utilises the port within normal working hours of that port.
- Assume the vessel will use two tugs
- Assume the vessel will always need pilotage assistance in the port
- This study is based on new automotive vehicles imported/exported at the selected ports
- Assume all vehicles imported/exported are for one vehicle manufacturing company
- The vessel is a Car Carrier vessel

3. **Iron Ore Study**

Vessel Dimensions:	
Length	280m
Breadth	44m
Draft	12m
DWT	180,000t
GT	95,000t
NT	n/a
Cubic dimension	147.840cu.m

Additional assumptions

- Iron Ore Parcel Size: 170,000tons
- Number of days in port: 1 day & 23 hours (47hrs)
- The vessel utilises the port within normal working hours of the port, and abides by all rules and regulations of the port.
- No additional surcharges, waiting fees, penalties or cancellation fees are applicable within the vessel call.
- There is no use of miscellaneous services, such as Fire & Emergency services, Fire Protection, etc.
- Port charges such as Security service fees, fresh water fees, electricity and removal of refuse, etc, where a minimum fee is not stipulated, will be excluded from the Port charges.
- Assume away all reductions (based on the number of calls)in the port charges offered to vessels..
- Assume a Vessel of this size will always require the assistance of two tugs for one hour.
- Pilotage is always required. Shifting tariffs are excluded.
- Assume one vessel call per port per month.
- Assume vessel call at non-concessionary terminals and berths.
- Where there is more than one service provider, an average of the tariffs was taken.
- Assume all information about the vessel & cargo is provided in advance in accordance with requirements of each port prior to the arrival/departure of the vessel & cargo to/from the port.
- Assume vessel needs to use the port's mooring or unmooring ropes, two mooring ropes are used.
- Vessel always makes use of the port's equipment.
- Assume the vessel enters the berth at 10h00 and leaves at 09h00 (47hours later)

- Assume cargo operations commences within one hour of entering the berth and stops one hour prior to vessel exit from berth.

4. Coal Study

Standardised Ship Call:	
Commodity Moved	Coal
Parcel Size (tons)	112 586

Vessel Dimensions:	
LOA	225m
Breadth	32m
Draft	13.54m
DWT	75 122
GT	39 763
NT	25 329

Additional Assumptions

- Number of Days in Port: 1 Day & 8hours (32hours)
- Assume that there are no penalties, additional surcharges or waiting fees applicable within the vessel call.
- Assume the vessel utilises the port within normal working hours of that port.
- Assume the vessel will use two tugs.
- Assume the vessel will always need pilotage assistance in the port.