The Economics of Shipping Costs

with particular reference to

Tasmanian Exporting Industries

A

THESIS

PRESENTED
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by

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P R E F A C E

The following study is a revised version of the report of an examination of shipping costs[1] and their relation to the cost structure of specific industries conducted for the Department of Economics and Commerce of the University of Tasmania in 1945[2]

It was decided to conduct this examination for two main reasons. First, the financial history of Tasmania since Federation has emphasised the cost of Bass Strait to the community (Vide Chapters I and II). Secondly, the survey I conducted for the University, in 1944[2] of the gross and net labor absorptive capacity of Tasmanian secondary industries suggested that the level of shipping costs was a determining factor so far as the location choice and the planning of output policies were concerned[3] The analysis in Chapters VII and VIII seems to throw considerable doubt on the applicability of theories currently held regarding the factor of transportation cost.

Grateful recognition is made of the co-operation and assistance in the collection of data received from both business men and public servants. I desire to mention particularly the Deputy Commonwealth Statistician (Mr. H.J. Exley), the Chairman of the State Finance Committee (Mr. R. G. Osborne), the Director of Industrial Development (Col. H. B. Bennett), the Commonwealth Actuary (Mr. W. C. Balmford), the Secretary of the Commonwealth Department of Supply and Shipping (Mr. G. T. Chippindall), and, finally, Miss E. S. Lewis for undertaking the preparation of the typescript.

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C.P. H-C.

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(1) Defined as the freight rate plus all other incidental charges incurred by the necessity to ship.

(2) Financed from the Commonwealth Social Science Research Grant to Universities until recently known as the Reconstruction Research Grant.

(3) "The Location of Industry and Distribution of Employment (Tasmania)", Research Monograph 1944, (The University of Tasmania).

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Chapter ONE

The Coasting Trade Provisions of The Navigation Act 1912–43.

CHAPTER I

THE COASTING TRADE PROVISIONS OF THE NAVIGATION ACT, 1912-43

1. The Navigation Bill was originally drafted by the late Hon. C. C. Kingston in 1902, and was first introduced into the Senate in 1904, by the first Deakin administration. It was withdrawn for further consideration and redrafted by a Royal Commission, and resubmitted in 1906, but was again withdrawn pending the Navigation Conference in London in 1907. This conference concerned the United Kingdom, Australia and New Zealand and was held in London on the subject of "Merchant Shipping Legislation". The main principles of the Royal Commission's draft bill were considered. The conference recommended, inter alia :-

> "That the coastal trade of the Commonwealth be reserved for ships on the Australian register, i.e. ships conforming to Australian conditions, and licensed to trade on the Australian coast".

2. This resolution was embodied in the draft bill, which, after being submitted year by year to the Federal Parliament, was eventually passed in 1912 and proclaimed in 1913. In 1914 the operation of the Act was postponed at the request of the British Government, and it did not actually come into force until 1st July, 1921, nineteen years after its original drafting.

3. The first group of sections - the Coasting Trade provisions - came into effect on 1st July, 1921. Shortly after this portion of the Act became operative the owners of a number of interstate ships tested the validity of the application of the manning and accommodation provisions of the Act to their ships, and the High Court decided that these provisions did not apply to vessels solely engaged in the domestic trade of a State. In consequence of this judgement, the Commonwealth Government decided not to enforce the provisions of the Act then in force on any intra-state ships. Other sections of the Act came into operation in the following years.

4. <u>The Navigation Act - Reasons for Enactment</u>.

The Commonwealth having adopted a policy of protection for its industries through the Customs Tariff in order to maintain reasonable labour conditions and standards of living, it was obvious that, unless some form of protection was provided for the Australian industry of shipping, such industry could not be operated under the same standards of hours and wages as were imposed on the protected industries for it would be in competition with overseas vessels operating under lower standards. Again, the Commonwealth legislature realised the desirability of building up an Australian Mercantile Marine. The Act requires, as a condition precedent to the issue of the three-yearly licences to engage in the Australian coastal trade, compliance with certain specified conditions as to manning and accommodation and also as to the payment of wages in accordance with Australian standards.

5. (a) The problem of protecting coastal shipping is not peculiar to Australia, other countries having adopted similar measures. In America the coastwise laws wholly exclude foreign vessels from coastwise commerce. The term "coastwise" as used in relation to these laws includes not only the coasts of continental America, but also Porto Rico and Hawaii. Under the Merchant Marine Act 1920 (Section 21), the President, when he is satisfied that adequate service is furnished by American vessels, may extend the operation of the "coastwise" laws to cover the trade between the United States and the Philippines. The coastal trade of Canada is reserved exclusively to British ships. In order to participate in the coastal trade, vessels must not only be British-owned, but also British built. Vessels British-owned, but foreign-built, can obtain a licence to trade on the coast only by paying a fee equal to 25 per cent of the value of the ship. Section 75(1) of the Shipping and Seamen Act, 1908, of <u>New Zealand</u> reads, inter alia, as follows :-

> "Notwithstanding anything in this Act, it is hereby declared that where the Master, Owner, or Agent of any ship -
>
> (a) engages seamen in New Zealand,
> (b) having engaged them abroad, employs them in New Zealand,
>
> these seamen while so employed shall be paid and may recover the current rate of wages for the time being ruling in New Zealand."

(b) Other nations that reserve their coastal trade to national ships include France, Spain, Belgium, Japan, Russia, Portugal, Brazil and Argentine. It is interesting to note that the following types of shipping are reserved for French ships according to French law, viz :-

(i) Coastal fishing in territorial waters.
(ii) Coastal trading (decree of 21st September, 1793).
(iii) Navigation between France and Algeria (law of 2nd April, 1885).
(iv) Towing in French harbours.

(c) Except in the case of New Zealand, where the restrictions on coastal shipping are along the same lines as those existing in Australia, the conditions governing the coastal trade of Australia are less discriminating than those of other countries. On the Australian coast all nations are treated alike, and the conditions laid down apply to all.

6. Inquiries have been made from time to time as to the operation and effect of the Navigation Act and the matter was made the subject of an exhaustive investigation by a Royal Commission of seven members appointed on 7th September, 1923. The result of the Commissioners' investigations is set out in three minority reports dated 7th August, 1924 -

(a) Two members recommended that Part VI (the Coastal Trade) of the Navigation Act be repealed.

(b) Three other members recommended that the Navigation Act remain as it stood, that the official administration be changed and that the officer responsible for administration be placed directly under a Minister.

(c) Finally, two members recommended -

(i) That the Coastal Trading provisions of the Navigation Act be repealed;
(ii) That there be substituted adequate duties under the Customs Tariff Act upon all foreign shipping with a lesser preferential rate upon British shipping, calculated in the case of cargoes upon the rates of freight charged per ton; and in the case of passengers, upon the fares charged;
(iii) All other sections of the Navigation Act to stand.

7. The first two Commissioners referred to above declared that an Australian-owned Mercantile Marine did not exist and, furthermore, that it was not likely to come into operation by reason of the Navigation Act. They were particularly impressed with the fact that the greater the distance from the industrial centres of New South Wales and Victoria the greater the outcry against the effects of the Navigation Act. The farther the population was removed from railway facilities and hence dependent on sea carriage (1), the stronger the demand for removal of restrictions placed on shipping services by the Act.

8. It was found that New South Wales and Victoria are not affected by the operation of the Navigation Act to the same degree that trade and industry in other states are affected by it, for the following reasons :-

(a) New South Wales and Victoria are well served by railways.
(b) New South Wales and Victoria have extensive local markets which absorb the greater proportion of primary and secondary output.(2) The high freight question, therefore, is not so urgent.
(c) The Navigation Act has tended to centralize shipping, trade and industry near the large centres of population. Hence the difficulties of the outlying States are aggravated.

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(1) Tasmania, of course, represents the extreme case.
(2) This is the essence of the freight rate problem for the outlying states of Tasmania and Western Australia. The main markets for the products are not located in the home state. Vide detailed discussion in Chapter VII.

9. (a) With regard to Tasmania, the Commissioners pointed out that this state is in an entirely different position from any of the other states, in that it is solely dependent on sea carriage for the transportation of cargo to the mainland, and the island is off the route of ordinary coastal shipping.

(b) The Commissioners found that "of the Tasmanian ports Strahan has no service, the North-West coast ports of Stanley, Devonport, Burnie and Ulverstone have a good service, Launceston has a direct cargo and passenger service with Melbourne, whilst Hobart's one regular interstate service is with Sydney".

(c) Before the Great War of 1914-18 Hobart had a direct weekly service with Melbourne, provided by large vessels of about 6,000 tons, which did the round trip - New Zealand, Melbourne, Hobart and then Melbourne, back to New Zealand. This was a regular passenger and cargo service. There was also,

(i) a regular passenger and cargo service from Hobart to Melbourne, via Strahan, which provided direct communication to enable Hobart to trade with the mining districts of the West Coast;

(ii) a weekly passenger and cargo service between Hobart, Sydney - Hobart, and Hobart - Sydney - New Zealand;

(iii) a direct fortnightly service from England to Hobart provided by vessels of the New Zealand Shipping Company and the Shaw Savill and Albion Steamship Company. (Hence, Hobart was the transhipping port for a number of passengers for the other states.)

(d) The Commissioners investigated the question of interstate and oversea services to Hobart, and whether the curtailment was due to the operation of the Navigation Act. In regard to the P. & O. vessels, there was considerable evidence submitted that the Navigation Act prevented them from calling, unless under contract to lift cargoes of fruit. Again, the evidence seemed to indicate that the service between Hobart and New Zealand, via Sydney and Melbourne, ceased because calling at Hobart constituted "coastal trading" and the vessels calling would have to "license" under the Navigation Act, and incur all the conditions and expenses attendant thereto. The same applied to the discontinuance of the Hobart - Strahan - Melbourne service.

(e) The question then arose as to the effect on Tasmania of the cessation of the above services. Particular reference was made to the tourist traffic and it was noted that Tasmania caters for tourists to a greater extent than most of the other States and the value of the tourist traffic is considerable. It was claimed that the fact that the mail boats were no longer permitted to carry passengers interstate prevented wealthy tourists visiting Tasmania. Prior to the Great War 1914-1918

the number of tourists who travelled via the "apple trip" was increasing, and this branch of the tourist traffic was being built up, when the war stopped it, and the Navigation Act prevented its revival.

(f) It was claimed during the hearing of evidence that many avenues of trade had been blocked as a result of the Navigation Act, that the pre-war trade routes had changed, and that Hobart was no longer a port of call on the new routes. For example, a regular trade was from Hobart to Adelaide, and thence to Western Australia; since all the vessels on that route were overseas vessels the Act now prevented them carrying passengers and/or cargo between interstate ports.

(g) Prior to the Navigation Act there was an increasing trade between Tasmania and New Zealand, particularly in timber, jam, and dessert fruits. Under the Act transhipment (3) in Sydney became necessary, involving extra handling charges and hence trade ceased. Direct shipments to New Zealand, Western Australia or North Queensland ports were possible only by chartering special boats, which would usually have to travel to Hobart in ballast.

10. (a) The three Commissioners who recommended that the Navigation Act remain as it stood, but that the official administration be changed and the officer responsible for administration be placed directly under a Minister, pointed out that the subject matter of the Commission was originally entrusted to a Select Committee of the House of Representatives. The Committee was appointed to investigate statements made against the Navigation Act - statements set forth and endorsed by the Tariff Board in its Annual Report dated 28th June, 1923. The Chairman of the Tariff Board placed a memorandum before the Committee and gave evidence in support of the Board's claim that "... the Navigation Act is working very detrimentally against the best interests of the primary and secondary producers." In regard to competitive marketing the Board stated the Act placed producers in Queensland, Western Australia and Tasmania at a disadvantage when endeavouring to compete with imported goods shipped to other states.

(b) The three Commissioners found no evidence that the development of the states of New South Wales, Victoria and South Australia had been in any way retarded by the Act. These states "contain three-fourths of Australia's population, produce three-fourths of total primary and secondary output, and between their ports are interchanged four-fifths of Australia's interstate cargoes".(4) The Commissioners were of the opinion that there had been no additional centralization in those States since the Navigation Act came into operation.

(c) It was alleged in evidence that Tasmania had been placed "at a serious disadvantage" due to the working of the Navigation Act. Against this the Commissioners maintained that Tasmanian exports, measured in actual tonnage, doubled from 1913 to 1923; again, that the export of fruit overseas in 1923 was a record of 1,562,000 cases; and that more boats went into Hobart in 1923 to ship fruit

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(3) Transhipment charges will be discussed in detail in Chapter IV.

(4) Report of the Royal Commission on the Navigation Act (Printed 20th August, 1924). Report by Three Commissioners p.37.

than ever before; that although only half the numbers of fast mail boats visited the capital port, this fact applied to every capital port in Australia because the oversea mail service was 50 per cent below pre-war. Again, "the rates on fruit and the products of fruit between interstate ports on ships under the Commonwealth Navigation Act and the arbitration laws are 30 per cent above pre-war rates. On oversea ships not affected by these laws the rates on fruit and the products of fruitare 60 to 250 per cent above pre war rates." (5) (It should also be noted that 1923 was Tasmania's record year in tourist traffic and that 98 per cent of those who visited the state travelled on vessels manned by Australian seamen).

(d) As a result of their investigations the three Commissioners concluded that, there was a 30 per cent increase in Australian coastal rates between the outbreak of war (August, 1914) and the advent of the Navigation Act (July 1st, 1921), but that coastal rates had not risen after the Act. On the other hand the increased freight rates imposed by the overseas companies upon the majority of Australian products for Europe, Asia, Africa and America were considerably higher than this 30 per cent. Again, the Commissioners contended that Australian coastal rates were not in excess of rates charged between ports of territories with similar geographical circumstances. For example, Australian coastal rates were below the rates on the coasts of the United States, South America, and South Africa, although ships on such coasts have the advantage of lower running costs so far as wages are concerned.

11. In the third minority report the remaining two Commissioners, in a preliminary note, pointed out that the whole investigation involved more than ordinary difficulty because conditions were not normal, and further that the shipping of the British Empire had been under government control for some time during and after the war. Moreover, after the war services were necessarily curtailed, freight rates increased, and, in 1921, shortly after the cessation of shipping control, the Navigation Act became operative. The shipping industry was confronted with many difficulties due to the sudden change over from war to peace, with all the attendant alteration of conditions, and this fact "made" the task of determining the actual effect of the Act on Australian trade, industry and development a very difficult one". (The difficulty lay, of course, in separating the effects of the war from the effects of the Navigation Act, on shipping services and freight rates, and upon industrial development).

12. In 1928 the Prime Minister announced in his policy speech his Ministry's determination to repeal the coastal clauses of the Navigation Act. After referring to the "decreased facilities, notwithstanding the increased population and trade", Mr. Bruce said :-

> "It is shown that these decreased facilities, combined with high fares and freights, have operated to the detriment of Australian industry as a whole. The Government feels that this condition of things cannot be allowed to continue. The coastal clauses have failed to achieve the objects for which they were

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(5) Ibid. page 47.

introduced, but the Government does not consider that it follows that all endeavours to establish an Australian mercantile marine should be abandoned.

"It is, however, imperative that new methods should be adopted. The Government therefore proposes that the coastal clauses should be repealed and that, in lieu thereof, protection should be given through the tariff provisions to vessels complying with Australian standards of wages and living conditions.

"The Government believes that, if a rate of duty were imposed on passengers and cargo carried by oversea ships in competition with Australian shipping around our coast, sufficient to give protection to our shipping industry, we would secure fair competition, which would result in a more efficient service and in reduced fares and freights. From the revenue which would be received from such duties, subsidies could be paid to Australian shipping services.

"This," Mr. Bruce further declared, "whilst assisting Australian shipping, would also serve to assist the development of the outlying or backward portions of the Commonwealth."

Following these declarations, the Bruce-Page Government was again returned to power by the Australian electorate. Hence under date 4th January, 1929, the Minister for Trade and Customs referred to the Tariff Board the question of the practicability and desirability of encouraging the primary and secondary industries of the Commonwealth (including the industry of shipping) by substituting for the protection to Australian shipping against competition from overseas shipping in the Australian coastal trade, (afforded by the Coasting Trade provisions of the Navigation Act), protection by other means, for example :-

(a) By the imposition of taxation on cargo and/or passengers carried interstate by overseas vessels; or
(b) By the payment of subsidy or bounty to Australian shipping; or
(c) By the licensing of overseas vessels to engage in the Australian coastal trade subject to the payment of licence fees on a basis to be prescribed; or
(d) By a combination of any of the above means.

The Board's investigation involved a comprehensive review of the financial position of the various shipping companies and organizations concerned.

13. The terms of reference of the Minister for Trade and Customs to the Tariff Board clearly indicated an intention that protection to Australian shipping against competition from overseas vessels should continue, the question referred to the Board being that of the substitution of some form of protection in lieu of that provided by the Navigation Act.

14. It has often been pointed out by the Board in annual reports and in reports om applications for tariff revision that those industries enjoying protection under the customs tariff are under an obligation to the community to provide satisfactory products at reasonable prices, having in view costs of production and other factors. (6)

(6) Compare the announcement on September 12,1945, by the Prime Minister (Mr. Chifley) that the Tariff Board, in association with the Secondary Industries Commission,

This naturally applies, in no less degree, to industries protected or assisted by means other than the Customs Tariff and the Board has not been unmindful of this fact in dealing with the shipping industry.

15. This being so, although the Minister's reference called for inquiry only into the question of substituting some other form of protection, the Board endeavoured to ascertain to what extent those shipping companies which operate under the protection of the Navigation Act had succeeded or failed in fulfilling their obligations to the community by :-

(a) Providing reasonably satisfactory services,
(b) Maintaining a reasonable standard of freight rates (and passenger fares) having regard to ship operating costs, the services called for, and the rates (and fares) obtaining in other parts of the world.

16. The services rendered by the Australian shipping companies were, for the inquiry, divided into two main headings, namely, passengers and cargo, and these were further subdivided into -

(a) Passengers (i) Accommodation.
(ii) Fares.

(b) Cargo - (i) Freight rates.
(ii) Freight space.

Our concern in this study is with "b" above only.

17. Various evidence tendered to the Board indicated that, whether justified or not, there was a general feeling that high freight rates were a burden on manufacturer and primary producer alike, and the conviction was widespread that the conditions imposed by the Navigation Act constituted one of the main reasons for the reputedly high freight rates. This general opinion was apparently held by the members of the British Economic Mission, who stated in their report to the following effect :-

"These states (Western Australia, South Australia, Tasmania), and Tasmania probably most of all, are further handicapped by the high cost of freights in interstate trade, which result from the operation of the Navigation Act".

Two questions then arose, namely :-

(a) Were the Australian coastal freights excessive?
(b) Would the repeal of the coastal clauses of the Navigation Act tend materially to a reduction in these freight rates?

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(6) (Cont'd).
would, in future, investigate regularly the cost structure of protected industries.

18. Section (a) above was considered by the Tariff Board under the two headings, viz :-

(a) The movements in overseas and Australian coastal freight rates from 1913-1929.
(b) A comparison between the rates ruling on the Australian coast and those on the coasts of other countries.

Such comparisons are difficult to draw; the Board's conclusions are summarised in paragraph 42(b).

19. During the course of the Board's inquiry reference was repeatedly made to the fact that the freight rates on the Australian coast had increased since the Navigation Act came into operation, from which it might be inferred that the Australian shipowners had taken advantage of the protection afforded by the legislation to charge unduly high rates. The figures quoted in the report and the comparisons made show that although there had been an increase in the Australian interstate freight rates since the Navigation Act was proclaimed, there had been a greater relative increase in the freight rates charged by overseas vessels. For example, the interstate rates current in 1929 represented an average increase of 59 per cent over those of 1913, whereas in the case of the overseas trades the rates for 1929 represented an increase of 79 per cent over those of 1913. During the 1914-19 war period the rates from Australia to the United Kingdom increased by 492 per cent whilst over the same period the Australian coastal rates, which were under governmental control, remained stable.

20. Although Australian coastal rates in 1929 appeared to be high in relation to overseas rates, they were comparable to the coastal rates of other countries. The Tariff Board was satisfied that Australian coastal rates were warranted under the circumstances.

21. With regard to freight space the evidence tendered to the Board indicated that, with the exception of refrigerated space and deck spacefor fish, the facilities offered by the Australian companies for the carriage of dargo were regarded by those concerned as sufficient to meet requirements. In regard to refrigerated space and space for fish, complaints were made of disabilities in certain directions. Complaints regarding lack of facilities for the shipment of fish were made by representatives of the industry in Tasmania. In 1929 the fish industry to Tasmania was worth about £37,000 p.a. Fish for Melbourne had to be shipped via Launceston from Hobart.

22. It was contended that the conditions imposed by the Navigation Act had been a heavy burden on industry and that the shelter from competition provided by the Act had resulted in a lack of incentive and efficiency on the part of the Australian shipping companies. It was claimed that this being so, the Navigation Act had failed in its object, namely, that of building up a mercantile marine. The whole matter was complicated by reason of the fact that the Navigation Act had come into operation before the recovery to normal after the unsettling effects of the war period. Hence, in considering the question the following dates were noted by the Board, viz :-

1914-18: The war period.
1917: The completion of the Trans-Australian Railway.
1918-21: The period of extreme shortage of tonnage in the world's shipping and the peak price in overseas freight rates.
1920: The release from Governmental control of the Australian interstate ships.
1921: The Navigation Act came into operation.
1921-24: The extension of the Queensland coastal railways.

23. The effect of the war in reducing the Australian coastal fleet was very material. During that period the Australian mercantile marine was under Governmental control, its services, fares, and freight rates being regulated. Ocean transport became of vital importance to Great Britain, many boats were lost through submarine attacks, and, as a result, freight rates rose sharply. A large number of Australian vessels were requisitioned for war service, and, in 1921 the total tonnage of passenger vessels was 93,037 tons. In 1929 the tonnage of the fleet had declined to 75,000 tons. The extremely high freight rates which ruled overseas during the post war period created an extraordinary demand for tonnage. Moreover, fluctuations in the cost of ship building were very violent.

24. The Navigation Act was brought into force in 1921. The coastal fleet had been under control until 1920, and there was a shortage of cargo tonnage at the end of the control period. It was generally considered that the securing of boats to handle the cargo was more imperative and would prove more remunerative than the addition of boats for the passenger services, and, for that reason, all purchases to replace the older ships that were sold were cargo boats. Contemporaneously with the serious reduction of the services on the Australian coast by the withdrawal of oversea boats came the added facility for travel on land, both by railway and by road. This competition would have had a marked effect under normal conditions, but the effect was more serious by reason of the fact that it partially coincided with the reduction in efficiency of the shipping facilities.

25. The Tariff Board was convinced that this reduction in tonnage of the Australian coastal fleet did not indicate neglect or indifference on the part of the Australian shipping companies. Nor was the reduction mainly due to the Navigation Act. To substantiate this view, the Board listed the more important factors which had contributed to the reduction in the Australian coastal fleet and the decreased number of persons travelling interstate by sea, viz :-

(a) The exigencies of the war period.
(b) The shortage of tonnage following on the war.
(c) The extreme costliness of shipbuilding.
(d) The growing competition of means of transport other than shipping.
(e) The hold up of vessels due to industrial disputes.

26. Throughout its inquiry, the Board endeavoured to obtain data which would enable it to assess the likely result on the Australian interstate passenger and cargo services that would ensue if the coastal clauses were rescinded. The Board directed its attention to answering two questions. First, what proportion of the present trade of interstate shipping companies would be lost if the overseas vessels were permitted to enter the coastal trade? Secondly, what trades did overseas shipping companies ply on the Australian coast before the coastal clauses of the Navigation Act came into operation, and what trades would they operate if the Australian coast were again open to them?

The Tariff Board concluded that,

(a) The volume of coastal cargoes lifted by overseas vessels prior to the 1st July, 1921 was very small, being approximately 2 per cent of the total trade.

(b) Overseas vessels plying regularly around the Australian coast anticipated handling very little cargo even if the restrictions were removed, and this despite the fact that considerable space would often be available in these vessels.

Representatives of the interstate shipping companies expressed the fear that, if the coastal provisions of the Navigation Act were withdrawn, spasmodic competition would arise from tramp vessels(7) and other overseas vessels which would seek tonnage on the Australian coast when there was a shortage of tonnage elsewhere.

27. As pointed out above, the Navigation Act imposes upon shipping engaged in the Australian coastal trade other than those specially exempted by permit, certain conditions, compliance with which has added considerably to the cost of the services. Part VI (Sections 284-293A) of the Act makes provision for the licensing of ships to engage in the coasting trade, and no ship, whether registered in Australia or otherwise, is permitted to engage in that trade without a licence.

28. The Tariff Board sought to ascertain the cost to the Australian shipping companies of complying with the conditions imposed by the Act. The position was (and, of course, still is) complicated in that the Navigation Act and the Arbitration Court each have an influence and hence it was difficult to determine to what extent the added cost was due to each of the causes named.

29. The Navigation Act sets out the conditions of accommodation, manning and victualling. The Arbitration Court requires local shipowners to pay certain wages and observe certain hours. The whole aim is to bring the conditions of employment of the Australian seamen into line with the accepted Australian standard of living. There can be little doubt that the maintenance of these conditions has been very costly and has placed a heavy burden on those who engage in local shipping as compared with overseas shipping.

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(7) It is the business of tramp vessels to wander over the seven seas searching cargo in any port where it may be awaiting shipment. The tramp operator secures cargoes for his vessels through shipbrokers throughout the world who specialise in securing such cargoes. Tramp competition

30. (a) The Tariff Board grouped these additional costs under two headings :-

(A) The cost of altering vessels constructed prior to the Navigation Act in order to make them comply with the conditions of that Act.

(B) The extra costs due to wages and conditions including,

(i) number of crew.
(ii) rate of wages.
(iii) victualling.
(iv) sick leave.
(v) overtime.
(vi) industrial troubles.

(b) With respect to (i) and (ii), not only did the Tariff Board find that the Australian wage showed a substantial increase over those of other countries, but the number of officers and crew employed in manning a vessel on the Australian register was also in excess of the requirements of other nations, averaging about ten more than either the American or the British, and representing an increase in the manning of from 25 to 30 per cent.

(c) With respect to (iii), the cost of victualling was greater per head on the Australian coast than in any other part of the world, and the aggregate cost, was, of course, further increased by reason of the hands employed.

(d) With respect to (iv), section 132 of the Navigation Act requires that a seaman or apprentice left on shore at any place in Australia by reason of illness or accident in the service of the ship incapacitating him from duty, shall be entitled to the continuance of full wages up to a certain stated limit during such incapacity. The Tariff Board calculated that the probable cost of this provision to the industry equalled £25,000 per annum.

(e) With respect to (v), the most serious additional charge borne by the Australian shipping companies is that incurred for overtime. (8) Evidence submitted to the Tariff Board indicated increasing costs except for stores and water, and docking and repairs, and showed that the most serious increase was in relation to overtime, the 1926-7 figures for which were approximately 500 per cent higher than those of 1913-14.

(f) The Board drew attention to the very serious cumulative effect of the charges reviewed. "It is of vital importance that the cost of running vessels should be reduced wherever possible, particularly in view of the fact that investigation has shown that under existing conditions the profits made by the shipping companies engaged in the Australian coastal trade have been negligible" (page 32). In this connection the Board pointed out that the Australian manning conditions call for a larger

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(7) (contd)
is on the basis of price. The rate quoted is the determining factor.

(8) The effect of overtime rates on the cost of ship operation should be noted, especially insofar as operational costs determine the ruling freight rates.

crew for vessels than is employed on vessels trading on the coasts of other countries, while at the same time the costs on Australian vessels for overtime and other similar items is much greater than elsewhere. (Of course it is only reasonable that Australian seamen should receive wages and be subject to conditions consistent with those applying to other industries in Australia. As regards overtime, however, the men employed on a vessel are in a different position from those working on shore. The former live right on their job, while the latter have frequently to travel some distance to their work). While it did not suggest that the longer hours which were worked at one time on Australian vessels should be reverted to, the Board felt that the existing conditions governing the payment of overtime should be capable of revision with a view to assisting the Australian shipping companies to reduce the cost of running their vessels. "It would seem reasonable to expect that, where the manning conditions are on a more liberal scale and the rates of wages higher, the overtime charge should not be greater to such an extent as the figures quoted herein show them to be" (page 33).

(f) Another difficulty with which the local shipping companies have had to contend is the serious number of industrial disputes that have occurred with regard to either crews or waterside workers. (9) In this respect, the Board reported as follows :

> "The conditions of employment on the ships trading on the Australian coast are superior to those obtaining in most other countries, and the maintenance of such conditions calls for the co-operation of all parties concerned in an effort to make the cost of running vessels under such conditions as low as possible consistent with reasonable standards of living."

31. Reference will be made later to the several joint working arrangements under which the interstate shipping companies operate, but here it should be noted that the Board found no evidence that the arrangements had been devised for the purpose of enabling the shipping companies to take undue advantage of shippers or that they had been operated to the latter's detriment.

32. The financial results of the Australian shipping companies from their interstate services were examined by the Board, for, obviously, if it could be shown that the companies protected by the coastal clauses of the Navigation Act had taken advantage of the protection by charging unduly high freight rates and fares, that might be regarded as a justification for substituting some other form of protection and taking the consequent risk of reducing the existing protection.

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(9) Maritime industrial disputes have a twofold result in that they,

(a) increase the cost of trip operation,

(b) dislocate the regularity of services.

This second factor is, perhaps, more important. Vide Chapter VII.

33. The greater proportion of the interstate cargo and passenger services (over 90 per cent) which would be affected by the opening of the coast to overseas shipping is owned and controlled by the Australian Steamship Owners' Federation. There is a considerable tonnage on the Australian coast owned by concerns outside the Federation, but it is engaged for the greater part in intra-state trade or in services unlikely to be effected to any appreciable extent by competition of overseas vessels. For this reason, the Board restricted its investigation into the financial position of the companies within the Federation.

34. Each of the companies has trading operations and/or investments outside interstate shipping, and, as the main concern of the Tariff Board in the investigation was to ascertain the financial results from interstate trading the figures relating to interstate shipping were separated out from those relating to the other interests. For the purpose of arriving at the position of interstate trading, the average capital employed in that side of the business was calculated, not on the basis of original valuation of the assets of the respective companies, less allowance for depreciation, but on the Federal Taxation Commissioners' written down value. The Board considered this to be the most equitable basis to work upon as the value of the vessels had been written down in the books of the companies to figures much below their market value.

35. For the years 1926, 1927 and 1928, to which the investigation referred, total net profit from all services decreased progressively, and in the case of some of the companies, there was some inflation of capital in earlier years. These were investigated by the Board's accountant, the investigation going back as far as sixteen years. So far as the shipping business of the companies was concerned, the inflations were the result of charter monies earned during the war period and immediately afterwards, when rates were abnormally high, and of the sale of vessels during the same period when ships were at a premium and extraordinarily high selling prices ruled. The Board found that, "the dividends paid in recent years out of the profits other than from interstate shipping have to a large extent been the result of monies earned by chartering and the sale of ships together with the income derived from profits wisely invested". (page 36).

36. As regards the financial operations of the companies in interstate shipping, the Board found that on the basis of capital employed the result of trading for the years 1926, 1927 and 1928 was as under :-

Year	Per cent
1926	2.4 profit
1927	1.6 profit
1928	0.8 less

These figures clearly indicate that the companies were dependent upon the return from their business interests outside interstate shipping for such profits as they earned. (10)

(10) The 1924 Royal Commission also examined the financial results of the shipping companies. The inquiry covered one year before the 1914-18 war, one year just prior to the coming into force of the coastal provisions of the Navigation Act and one year under the Act. The years 1913, 1920-21, and 1922 were selected. The percentage increase of the earnings and expenses on those of 1913 for the years 1920-1 and 1922 respectively were as follows :-

37. Evidence indicated that the decline in the earnings from interstate shipping during these years was to a large extent, caused by industrial disputes between the companies and their employees, by interruption to services caused by labour troubles on the waterfront, and by dislocation of services due to disputes in industries on which shipping depends for a considerable proportion of its business (e.g. disputes on the coal fields resulting in diminution of output).

38. However, the Board could see no reason why the Australian interstate shipping companies "should not, in the future, be able to show a reasonable profit on capital invested provided there is a return to normal conditions and reasonable freedom from labour troubles" (p. 37).

39. Although the Board as a result of its investigation did not favour any alteration of the existing law relating to navigation, it gave consideration to the question of the practicability of substituting some other form of protection to Australian shipping other than that afforded by the coastal clauses of the Navigation Act. One such scheme considered was that passengers and/or cargo be carried between ports in Australia by all ships, British or foreign, on compliance, at the option of the ship owner, with one or other of two conditions, namely :-

(a) Full compliance with Australian conditions as to manning, wages and crew accommodation; or

(b) Payment of a tax, at a prescribed rate, on the business done. In other words, the existing provisions of the Navigation Act as to the granting of licenses to engage in the coasting trade to ships complying with Australian conditions should be retained as a simple and effective means of identifying ships that comply with Australian conditions, but on an optional basis. No tax would be payable by licensed ships.

(i) Passenger Tax:- A fixed charge of so much per passenger, per 100 miles of distance covered, carried by an unlicensed ship between the ports of the Commonwealth.

(ii) Cargo Tax:- A fixed charge of so much per ton of cargo (by measurement of weight, according to basis on which freight is charged) per 100 miles of distance covered carried by an unlicensed ship between ports in the Commonwealth.

(iii) Passenger Bounty:- The proceeds of the above cargo tax (less a percentage deduction for administration) to be divided periodically among owners of general cargo or cargo and passenger steamers, over 1,000 tons gross register, licensed to engage in the coasting trade, in proportion to the cargo space vacant (computed on the basis of shipping ton of 40 cubic ft) on those ships per 100 miles travelled on voyages between ports in the Commonwealth during the period covered.

The scheme provided that the bounty should be payable, in respect of any voyage between Commonwealth ports of call, only on that amount of passenger accommodation or space provided. The percentage was to be fixed, as nearly as could be arrived at, on the average normal space over a year, on all ships then trading on the coast.

40. The following comments on the above scheme were submitted to the Board by the Australian Steamship Owners' Federation, viz :-

(a) The complexity of the scheme would throw much work on shipping companies and the navigation authorities.

(b) Fares and freight rates are not based on distance only. The making of rates is a very complicated and highly technical matter and, as will be seen later, involves questions of volume of traffic, handling charges, ports of call, harbour dues, etc. The fixation of a duty on distance would not, therefore, be equitable.

(c) No differentiation was made to compensate for subsidies, etc. granted by various nationalities to their shipping services. These vary enormously, and a flat rate of duty would, therefore, operate unfairly as between vessels of different nationalities.

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(10) (contd.)

1920-1 Earnings - 95.58% : Expenses - 93.82%
1922 Earnings - 83.27% : Expenses - 90.88%

It will be seen from the foregoing that, whereas earnings decreased by 12.31% in 1922 expenditure only decreased

(d) The running costs on the coast fluctuate from week to week with the rise and fall in the cost of living, arbitration awards, new legislation and regulations. Any tax would, therefore, need to be continuously revised.

(e) Owing to the demand for frequent services even for small ports, the enormous variations in the volume of traffic, it would be impossible to arrive at the "normal" amount of vacant space for the purposes of the payment of the proposed bounty to the interstate shipping companies.

(f) As regards passengers, the only cost to the over-sea vessel would be the victualling and laundry of the passengers as all other expenses would be incurred whether the passengers were carried or not.

(g) At times, owing to low freight and charter rates overseas, the Australian coast might be flooded with overseas tonnage, whilst at others, when overseas freight and charter rates were high, competition from overseas vessels might be negligible. The interstate companies would not be able to determine what cargo or passenger tonnage they could profitably employ all the year round. Should a large tonnage, including tramps, be on the coast, vessels would have to be laid up and these, under the suggested scheme would not only be entitled to the bounty, but would at the same time be incurring heavy port dues and suffer serious deterioration.

(h) It would be impossible to fix a scheme of taxation to meet competition from tramp vessels.

(i) The scheme contained no provisions for preventing outside competition from engaging in the payable trades and leaving the unpayable trades uncatered for, or to be catered for by local shipping. (Cf. Chapter VIII).

41. The report of the Tariff Board concludes with a general review of the Minister's terms of reference, which suggested the existence of disabilities to Australian industries, primary and secondary, due to the operation of the coastal clauses of the Navigation Act, and indicated a desire on the part of the Commonwealth Government to remove or reduce such disabilities. The wording of the reference also conceded the necessity for continuing the protection of Australian interstate shipping. Hence, the Board's inquiry narrowed itself down to the question whether there were any disabilities and whether, if they do exist, the repeal of the coastal clauses of the Navigation Act and the substitution of another form of protection to interstate shipping would remove such disabilities without creating other equal or greater disabilities.

42. The scope of the Tariff Board's inquiry resolved inself into investigating the following :-

(a) <u>The Efficiency and Adequacy of Existing Services.</u>

(i) As to this question a number of complaints of a general nature were made against the existing services. They included statements

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(10) (contd)

by 2.94% and this notwithstanding that the gross tonnage increased by 18.12% as compared with that of 1920-1, and that the fleet ran 15,822 days in 1922, as compared with 12,826 in 1920-1.

(i) - contd.
that the Navigation Act had failed in its purpose in that, whereas an increase in the interstate fleet should have been expected, the number of vessels and the aggregate tonnage had decreased. It was claimed by some witnesses that, since overseas vessels were debarred from entering the coastal trade, certain shipping routes that previously were well catered for were inadequately served.

(ii) The defence of the shipping companies was that the fleet engaged in the coastal trade was reasonably sufficient for the business offering and that the difficulties of providing adequate services under the conditions obtaining in the Australian interstate trades had not been appreciated by those by whom the complaints were made. Regarding the reduction in the fleet, it was advanced that the altered methods of transportation which have come into use (for example, motor vehicles and air services), together with railway extensions, had had the effect of seriously curtailing the passenger and freight traffic interstate by sea.

(iii) Evidence was tendered as to the proportion of vacant space - both cargo and passenger - over long periods in vessels trading on the main interstate routes. This evidence indicated that, except on rare occasions and in special circumstances, the vessels employed in the coastal services were more than adequate.

(iv) Apart from evidence of a general nature, statements of a more or less specific character were made regarding the existence of disabilities to Australian primary and secondary industries arising from the incidence of the Navigation Act. It was evident that at times disabilities had been experienced by shippers owing to lack of freight space, but these were in the main due to special circumstances or abnormal conditions rather than to any lack of enterprise or efficiency on the part of the Australian shipping companies.

(v) Taking all the facts and circumstances into consideration, and having regard to the financial results of the trading operations of the principal companies, the Tariff Board concluded that the existing interstate cargo and passenger services were all that could reasonably be called for from any concern expecting to run such services on a commercial basis. As a matter of fact, as regards cargo, the Board was of the opinion that, on the evidence, the Australian shipping companies had no case to answer. Respecting individual complaints the Board considered that they were capable of rectification without any alteration in the existing system of protection.

(b) Have the Australian Shipping Companies Taken Undue Advantage of the Protection Afforded Them?

(i) With a view to determining this question, the Board made special efforts to obtain information as to freight rates and fares obtaining in comparable services on the coasts of other countries. Steps were also taken to ascertain how the increase, which took place in the overseas freight rates as between 1913 (the last normal year before the war) and 1929, compared with the increase in the Australian coastal freight rates over the same period.

(ii) The comparisons were wholly favourable to the Australian companies. This, coupled with the financial results obtained by the Australian companies from interstate shipping on the basis of existing freight rates and fares, as disclosed by the investigation made by the Board, led the Board to the conclusion that the comparatively high rates and fares obtaining on the Australian coast were not due to overcharging or inefficiency on the part of the shipping companies, but rather to the immense distances between the ports and, in the case of many of the interstate routes, the small volume of business offering.

(iii) The standard of wages and working conditions generally in the Australian shipping industry are high, and the fact that the industry had been able to carry on under such conditions was, in the opinion of the Board, due entirely to the rationalisation of the services, made possible by the agreement under which seven of the principal Australian companies operate their vessels.

(iv) In view of statements made before the Board from time to time as to the effect of freight rates on Australian industries it was fully anticipated that representatives of the industries would appear at the inquiry in order to present evidence of any disabilities in this connexion. A possible explanation of the absence of any representations on behalf of the chambers is that it was realised that the rates on the Australian coast are not unduly high considering the circumstances under which the services are carried on, or that if there were causes for complaint, the position was not remediable by any action which might have resulted from the Board's inquiry.

(c) What Would be the Effect on the Existing Services if Overseas Vessels were Permitted to enter the Australian Coastal Trades?

(i) There appeared little doubt that if overseas shipping were enabled to engage in the Australian coastal trades, the result at the outset would be improved services. The question arose, however, as to whether any action taken in the direction indicated would not so prejudicially affect the existing interstate services that they would of necessity be reduced with consequent financial loss to some or all of those engaged, with the ultimate result that the services would be no more efficient or even less efficient, than those at present provided.

(ii) The Board realised that any reply to this question involves consideration of the following :-

(1) The volume of traffic that would be lost to the interstate shipping if competition from overseas vessels were permitted;

(2) The likely effect of the loss of such trade by interstate companies; and

(3) The financial results of the principal interstate shipping companies.

(iii) In regard to (1), the Tariff Board considered that the effect on the volume of business done by interstate companies would, of course, depend on the terms under which overseas vessels were permitted to engage in the coastal trade. If a heavy tax were imposed on the overseas shipping, in order to equalise competition, or if some compensation were made to interstate companies, then the losses of such companies might not be material. On the other hand, if the tax imposed on the overseas ships were not sufficient to prevent competion, the added facilities at the outset would be considerable, but the losses sustained by the interstate companies would certainly be material. The Tariff Board found it virtually impossible to estimate the amount of cargo which would be carried by overseas vessels on the Australian coast. Witnesses representing overseas mail boats services said that their ships would not be likely to engage in cargo carrying interstate as the picking up and discharge of cargo would interfere with their time schedules. As to other than mail services the Board endeavoured to obtain evidence on which to base an estimate, but without success. The representatives of the Associated Interstate Services put forward the view that overseas ships would naturally select the more profitable cargo, that is, they would "pick the eyes" out of the cargo offering.

(iv) In regard to (2), the likely effect of loss of trade on interstate services would also depend upon the conditions under which overseas vessels were permitted to trade interstate. As to cargo, the interstate ships would lose considerable tonnage and the Board concluded that the companies would have to adopt either one of the following courses :-

(1) To maintain existing services with reduced revenue owing to increased vacant space and with little or no reduction in expenditure. This would, naturally, prejudicially affect the companies' financial results.

(2) To reduce services.

(v) Respecting (3), in order to inform itself as to the financial results of recent interstate trading, the Board obtained from all the shipping companies who appeared in defence of existing conditions, balance sheets, and trading profit and loss accounts, for the years 1926, 1927 and 1928. These statements were closely examined, and, in addition, an exhaustive investigation was made on behalf of the Board by its accountant. Five of

the seven principal companies were visited by the accountant, who made a close study of the financial results of each company's business over the previous three years and a general review of the position for earlier years. (The results of the investigation have been referred to.)

43. Summing up the position generally, the Board was convinced that the opening of the Australian coastal trade to overseas ships under any system of protection that would not be virtually prohibitivewould necessarily result in considerable reduction in the earning capacity of the interstate companies, even to a degree that would seriously affect their ability to continue operations. Hence, in view of all the circumstances, the Board was convinced that it would not be desirable to substitute for the coastal clauses of the Navigation Act any other form of protection.

44. Having dealt with the question of the desirability of substituting for the protection then afforded by the Navigation Act some other form of protection to interstate shipping, there remained the question of the practicability of such substitution. It is obvious there would be considerable difficulties in any attempt to fix an adequate tax on the carriage of cargo and passengers. The degree of protection necessary to enable Australian manufacturers to produce goods in competition with imported goods is capable of reasonably accurate calculation. In such cases, the Board is always in a position to obtain on the one hand the cost of production of the Australian goods, and, on the other the landed duty paid costs of similar imported goods. With this information, it is possible to determine the margin of protection necessary to equalise the prices at which the Australian and imported goods can be delivered at a given point.

45. In regard to shipping, however, the Board found it practically impossible to determine for taxation purposes the difference between the costs of carrying interstate cargo and passengers on overseas vessels and the costs on Australian vessels. Assuming that the coastal clauses of the Navigation Act were repealed, there would then be two competing services, with standards of accommodation for crews, rates of pay, hours of labour and running costs generally different from the other. The overseas ships - more particularly in the case of "tramp" vessels - would arrive in Australia, discharge the whole or part of their cargo at one port, and, if calling at another Australian port, would, in order to avoid taking in ballast, pick up the available cargo for the Australian port to which it was proceeding.

46. The question of subsidies also arises. Many overseas shipping services are subsidized and the extent of the subsidy varies considerably. Other vessels are not subsidized at all. Clearly a rate of tax which would meet the case of a vessel that was not subsidized would not meet the case of a subsidized vessel. Similarly, a tax fixed for a ship receiving a low subsidy would not be sufficient for one receiving a higher subsidy. There is, too, the possibility that the overseas companies, or some of them, might elect to pay the tax themselves, that is, they might not add it on to freight rates or passenger fares which would otherwise obtain.

47. It was obvious to the Tariff Board that if overseas shipping were to engage in the coastal trade, the position of Australian shipping would become increasingly

difficult, in that the overseas vessels would naturally take the trade that was most profitable and the Australian companies would be left with the less profitable. The Australian companies would then probably find it necessary to curtail their services and increase freight rates and fares. The entry of "tramp" vessels into the Australian trade would result in unstable rates, which are undesirable from the viewpoint of shippers. (A difficulty might also arise in connexion with the entry of the overseas vessels into the intrastate trade, the regulation of which is in the hands of the State Governments).

48. The objectives, namely, on the one hand to extend shipping facilities on the Australian coast by permitting overseas vessels to enter the coastal trade, and, on the other hand, to effectively protect the existing coastal services, are incompatible. The Board, therefore, reported that, in its opinion, "it is not practicable or desirable to substitute for the existing protection provided by the coastal clauses of the Navigation Act any other scheme of protection for the Australian interstate shipping industry". (page 44).

49. The Board further found that, "with the exception of the disabilities suffered by Tasmania, no complaint lodged was of sufficient national importance to justify the repeal of the coastal clauses with the consequent risks of the extinction, or at any rate the serious reduction, of the existing interstate services". So far as Tasmania was concerned, the evidence tendered indicated that, "apart from one or two comparatively minor complaints regarding cargo, the burden of complaint is in regard to passenger services". (page 44) (11).

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(11) It is evident that the repeal of the coastal clauses would only assist Tasmania to the extent of permitting the carriage of passengers between this State and the mainland by overseas vessels calling at Tasmanian ports and continuing their voyage to mainland ports, or which include Tasmanian ports in their voyage from mainland ports overseas.

Chapter TWO

Interstate Shipping Freight Rates & Services & Financial Relations between the Commonwealth and the State of Tasmania.

CHAPTER II

INTERSTATE SHIPPING FREIGHT RATES AND SERVICES AND FINANCIAL RELATIONS BETWEEN THE COMMONWEALTH AND THE STATE OF TASMANIA.

50. "When States enter into a federation a new central government is created to perform specific functions held to be common to the combined communities, while the original States retain all other powers of government and are constitutionally independent so far as these powers are concerned." (1) In general "where communities federate they have in view certain national purposes which the central authority is intended to serve. These functions must be allocated to that authority regardless of cost". (2) During the period before the Financial Agreement of 1927 the provisions of Section 86 of the Constitution of the Commonwealth of Australia to grant assistance to States assumed great importance. Tasmania and Western Australia, indeed, had been beneficiaries under Section 86 for many years. (3)

51. In the period before the Financial Agreement, the Commonwealth Government made repeated efforts to terminate the system of contributions to States. The main features of these proposals were that the Commonwealth should vacate an area of direct taxation which the States would then occupy, and that the per capita payments should cease. All proposals made by the Commonwealth were considered inequitable by the States and were rejected by them. For as long as the Commonwealth did not entirely vacate the field of direct taxation and did not undertake to stay out, the States had no security whatever against a re-imposition of direct taxation; but the Commonwealth was not bound to continue the per capita payments, and it repealed the Surplus Revenue Act. The States were then faced with the total loss of per capita payments and this led to the conclusion of the Financial Agreement 1927.

52. Up to 1936 the claimant States, in submitting their claim to the various authorities appointed by the Commonwealth Government to recommend the necessary grant under Section 86, continued to assert that their disabilities could be attributed to Commonwealth policy.

53. The claims for financial assistance were made by three outlying states with little industrial development, and with areas of very sparsely settled country. These difficulties arise, in some measure at any rate, from the physical characteristics of these States and constitute an essential phase in the problem of Australian development. The claimant States are what may be called marginal states. Each contains a relatively large area on the fringe of that part of the continent which can be cultivated. This fringe presents peculiar difficulties from the point of view of development.

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(1) Commonwealth Grants Commission, 3rd Report (1936), para 19.
(2) Ibid. para. 22
(3) The first grant paid to Tasmania in 1911-13.

54. The states contended that the main cause of their disabilities was the policy of protection. The demand for a substantial tariff to ensure the manufacture of a considerable proportion of the requirements of the people was practically certain to be accepted by a progressive community. The Tariff Committee of 1928 came to the conclusion that this policy had enabled an increase of population to take place. This method of development involved costs for other production and the main burden settled upon export industry. It follows that, insofar as the establishment of secondary industry involves a subsidy from the community, which falls with especial severity on the export industry (wheat and wool in particular) there is a clash of interest between secondary industry and the interests which depend upon primary industry. Moreover, the secondary industries tend to be established in the eastern states. These are nearer the coal fields, and have the larger populations, and, as they had an early start, the modern tendency towards concentration tends to make these industries even larger. The more sparsely settled outer States could never establish these industries except at great cost to themselves. As a result, the clash between the interests of primary and secondary industries tends to grow into a conflict between the more closely populated Eastern States of Victoria and New South Wales and the sparsely settled marginal States of South Australia and Western Australia and Tasmania.

55. All early Tasmanian claims for grants from the Commonwealth were based on (1) defective working of the Constitution, (2) effects of Commonwealth policy, (3) poverty of resources and economic inequalities and (4) financial needs.

56. In 1925 the Hon. J. A. Lyons, then Premier of Tasmania, appointed a Committee to inquire into and report on the disabilities of Tasmania under Federation. So far as "direct" financial relations were concerned the Committee concluded that Tasmania received more from the Commonwealth than was paid in taxes. "It is therefore, in the direction of the effects of Federation on Tasmanian production that disabilities are to be sought". (4). The Navigation Act was subjected to some criticism. (5)

57. The Committee pointed out that Tasmania is dependent on shipping facilities very much more than any other State. But "there are two circumstances in particular which enforce strongly Tasmania's peculiar dependence on shipping", viz :-

(a) <u>Importance of Interstate Trade.</u>

Interstate trade is relatively much more important to Tasmania than to any other State, because climate leads to specialisation in the production of certain commodities. (Queensland, with the virtual monopoly of sugar-production is to a lesser degree in the same position).

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(4) Report of the Committee to inquire into Tasmanian Disabilities (1925), p.9.
(5) As well as the activities of the Arbitration Court the Tariff and interstate free trade.
(6) It is obvious from the mere fact of being an island, which confines all traffic to sea transport, whereas passenger traffic at least between other states is generally by rail.

(b) The Tourist Traffic.

The second circumstance which makes Tasmania peculiarly dependent on communication with other States is the importance of the tourist traffic. Even before the war the tourist trade was claimed to be an "invisible export" equal in value to the state's visible exports, such as fruit or potatoes. "The continued prosperity and steady expansion of this traffic is as essential to the economic welfare of the State as any branch of material production". (page 11)

58. The Committee presented certain data relative to the post-war decline in shipping services available. The table below would appear to substantiate the view that "practically every service gave fewer facilities in 1925 than it did twelve yearsearlier", through less frequent sailings or the use of smaller boats, or both, while some services had been discontinued altogether.

TABLE I.

TASMANIAN SHIPPING SERVICES 1913 AND 1925.

	Route	1913 service	1925 service
1.	Hobart-Sydney	Weekly	7-14 days: inferior boats.
2.	Hobart-Melbourne	Weekly: large passenger boat	Small cargo boats; irregular.
3.	Hobart-Bluff-Dunedin-Lyttleton-Wellington	Weekly	Nil.
4.	Hobart-Auckland, etc. via Sydney	Weekly	7-14 days.
5.	Hobart-West Coast-Melbourne	10-12 days	Nil.
6.	Hobart from London & South Africa (N.Z.S.S. Co. & S.S. & A. Co.)	14 days	28 days : cargo only.
7.	Hobart-British ports (all over-sea companies calling)	Every few days from Feb. to May.	No interstate passengers or cargo
8.	Hobart-Continental port (N.D.L. Co. and German-Australian Line).	Monthly	Nil.
9.	Launceston-Sydney	Passenger and cargo	Cargo only.

59. Moreover, the Committee maintained that even when a shipping service continued, the rise in freight rates had put a severe handicap on Tasmanian trade. It was denied that the rise in freight rates was world wide, and therefore not a special hardship on Tasmania, for the rise in overseas rates since 1913 was a comparatively modest one. "It is in respect of interstate rates that the greatest rise has occurred, and, Tasmania's interest in interstate trade is so much greater than that of any other State that the burden falls on her in a very special degree."

TABLE II

TASMANIAN SHIPPING FREIGHT RATES

1913 and 1925

Service	Cargo	Rate pre-war	Rate 1925	Per Cent Increase
INTERSTATE -				
Melbourne and all Tasmanian ports.	General cargo	13. 6	20. 0	47
	Apples	0. 7½	0.11	47
Sydney and all Tasmanian ports	General cargo	13. 6	20. 0	47
	Apples.	0. 7½	0.11	47
Brisbane and Tasmanian ports	General cargo	31. 6	40. 0	27
	Apples.	1. 7½	2. 6	54
Adelaide and Tasmanian ports	General cargo.	28. 0	46. 0	64
Fremantle and Tasmanian ports	General cargo.	38. 0	61. 0	60
OVERSEA -				
United Kingdom and Hobart & Launceston	General cargo.	60s. to 65s.	70. 0	12
United Kingdom and Australian Ports	Wheat charter (Apl,May June)	31.3 to 32.6 (1913)	30s.to 36s. (1925)	4

It was admitted that some oversea rates had risen considerably more than those for wheat and general cargo. In particular, refrigerated space for fruit was 50 per cent higher than 1913 rates. Unfortunately, "this is the oversea rate which most vitally affects Tasmanian interests, as the high rates jeopardise the whole apple-growing industry and are an effective bar to its expansion. There has been no increase in the acreage of Tasmanian orchards for the last three years" (p.12).

60. The Committee referred to the conclusion of the Navigation Commissioners that there had been no increase in freight rates between Australian ports since the Navigation Act came into force. But, "they have not come down while in oversea freight rates there has been a great reduction".(7)

(7) Freight rates were abnormally high in 1921.

61. The Committee found that Tasmania was suffering from serious loss of shipping facilities both for cargo and passengers, from an excessive rise in interstate freight rates, and that her geographical position and trade (including the tourist traffic) made her susceptible to injury on these accounts to a very much greater degree than any other State. It was not suggested that all these disabilities were due directly or indirectly to the Navigation Act. But, "the Navigation Act and the policy which it embodies are undoubtedly a serious aggravation of the trouble". Services had been cut down or discontinued, and interstate charges had been greatly increased in most cases as the direct consequence of the increase in shipping costs - an increase very much greater than in the case of oversea shipping. The Committee pointed out that the Navigation Act was accepted as Commonwealth policy to protect and encourage Australian shipping. Hence, such protection and encouragement "should be at the expense of Australia generally, but as the only shipping that it is possible to encourage is shipping within Commonwealth waters, and as Tasmania is in proportion to population much more interested in such shipping than any other State, it follows that the cost falls very much more heavily on Tasmania and offers the most serious threat to her present and future solvency" (page 13).

62. In 1925 the Commonwealth Government appointed Sir Nicholas Lockyer as its special representative to inquire into the financial position of Tasmania. "The Case" was prepared by the Hon. A. G. Ogilvie and the Hon. Tasman Shields. After explaining the position of the State as a separate unit, the main causes (said to be external to Tasmania) of her financial disabilities were discussed under two headings, namely :-

(a) Direct financial disabilities;
(b) General economic disabilities which had "reduced the State's capacity to maintain itself".

63. Of course, it is inevitable that any Federation covering so wide an area as Australia, and including States so very different in geographical circumstances, should have different affects within different States. "When Federal policy becomes directed to the fostering of special forms of production and services, an unequal incidence of cost and benefit is also to be expected. When geographical conditions are markedly unequal, such inequalities are bound to be accentuated". (8)

64. So far as the general economic causes external to Tasmania as a State were concerned, the case concentrated upon one aspect of national policy only, that of protection, and proceeded to show how its application through the tariff and the Navigation Act operated against Tasmania. However, the "Case" stated little that was new and less that was specific and documented. It was contended that the several "costs" of isolation could not be passed on, the reasons being the relative bargaining power of Tasmanian producers with mainland competitors. Hence, all freight charges remain with the exporter. (9)

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(8) "The Case for Tasmania" presented to Sir Nicholas Lockyer on behalf of the Government of Tasmania (Govt. Printer) 1926, p. 4.

(9) In the case of most Tasmanian products sold on Mainland markets competition is on the basis of price components and not on the basis of a changing price, due to price fixing agreements among producers (Vide Chapter VII).

65. Sir Nicholas Lockyer presented his report to the Prime Minister on 25th March 1926. (10) He referred to the importance to Tasmania of adequate and economical sea transport services. In Chapter VII of this survey we shall be concerned with an analysis of the cost structures of Tasmanian exporting industries, with particular reference to the proportion which shipping costs bear to total costs of production. Since a section is to be devoted to the textile industry it is interesting to note the observations of three Launceston manufacturers who, inter alia, stated to the Commissioner as follows: - (11)

> "Increased freight: the bulk of the raw wool has to be purchased on the mainland, and heavy freight paid on it to Tasmania. Prior to the Navigation Act, freight was 2/6d. and is now 7/6d. per bale, and as the main market for the finished product is also on the mainland, the manufactures goods are also subject to freight back to the mainland. The city of Launceston, and the existing woollen manufacturers in Launceston, have been endeavouring to attract other woollen manufacturers to Launceston, with the idea of making a woollen manufacturing centre, and so getting the advantage of the increased labour market, and as far as the city is concerned, an increased population, and the natural advantage of climate, water and the hydro-electric power scheme have been boomed, but the advantages of these are so slight compared with the disadvantages enumerated above that there is no inducement for any company to start a new woollen mill in Tasmania at the present time".

66. The Lockyer Report admits the difficulty of computing the cost to Tasmania of the Navigation Act and declined to comment on the generalisations made by the Tasmanian Committee responsible for preparing the "Case". (12) Sir Nicholas conveniently shelved the question by concluding that,

> "In practice, Tasmania, by reason of her isolated position, her dependence upon interstate trade and interstate tourist traffic, and the fact that her interstate trade is more than double that of any other State, undoubtedly carries more than a fair and proper share of the national burden."

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(9) In the case of most Tasmanian products sold on Mainland markets competition is on the basis of price components and not on the basis of a changing price, due to price fixing agreements among producers. (Vide Chapter VII).

(10) Report on the Financial Position of Tasmania as affected by Federation, by Sir Nicholas Lockyer. Presented to the Prime Minister (The Right Hon. S. M. Bruce) on 25th March, 1926.

(11) The three firms concerned were :-
Paton's and Baldwin's Ltd. owners of the largest spinning mills in the British Empire.
Kelsall and Kemp (Tas) Ltd. company formed by Kelsall & Kemp Ltd. of Rochdale, England, and the largest flannel manufacturers in the British Islands.
Robert Hogarth and Sons Pty. Ltd. the oldest firm of woollen manufacturers in Tasmania.

(12) The difficulty in this and all other official investigations has arisen, in the opinion of the candidate, from the particular approach adopted. The "cost" to Tasmania of Bass Strait should be considered in terms of cost of production, defined as all costs incurred in the manufacturing process plus all transport and other charges of marketing.

67. The Commonwealth Joint Committee on Public Accounts (appointed on 22nd January, 1926) was instructed to inquire into and report upon communications between Tasmania and the Mainland, and the subsequent report was ordered to be printed on 9th November, 1927. With regard to the amendment of the Navigation Act it was indicated in evidence that, when the coasting trade provisions of the Navigation Act came into operation on 1st July 1921, oversea ships, with the exception of the Commonwealth Government line, while continuing to call at Tasmania ceased to carry passengers or cargo between Australian ports. Under Section 286 of the Navigation Act however, permits could be issued for oversea vessels to engage in interstate trade if it could be shown that no licensed ship was available or that the services were inadequate. An amendment of that section of the Act provides that, during certain periods of the year, British ships of 10,000 tons gross and over, having a speed of at least 15 knots, may be permitted to carry passengers between Hobart and the ports of Brisbane, Sydney and Melbourne, without having to be licensed under the coasting trade provisions of the Act. Although these facilities were granted in 1926 and 1927 during the apple export season, no advantage of the exemptions was taken by the shipping companies in either year. Yet, other evidence placed before the Committee was emphatic and unanimous that the Navigation Act had had a detrimental effect on Tasmania by imposing restraint on the free movement of passengers and cargo.

68. Only brief reference was made to the question of fares and freight rates. The opinion of the 1920 Select Committee on Sea Carriage and the 1923 Royal Commission on the Navigation Act that the freight rates charged were justified was quoted. It was claimed that, as Tasmania has to bear its share of any losses incurred by the Commonwealth Line, the vessels under that flag should call regularly at Hobart throughout the year, instead of only during the apple season.

69. Tasmania, as well as other States of the Commonwealth though perhaps to a greater degree, had, in the opinion of the Committee, suffered as a result of the Navigation Act; its industries had been handicapped; the establishment of new enterprises had been prevented, and, generally, the development of the State had been hindered. Not only had the Act failed in its purpose to create an Australian Mercantile Marine and to improve transport facilities, but "it has, in effect, created two monopolies" - the interstate companies on the one hand, and the seamen on the other. The Committee, therefore, recommended that the coasting trade sections of the Navigation Act be repealed. (13)

70. A minority report stated that "the repeal of the coasting trade sections of the Navigation Act would not prove a remedy for Tasmania's disabilities or lead to the improved services desired by the State". According to this report the unsatisfactory nature of the Bass Strait service was due in no small measure to the absence of

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(13) The British Economic Mission, in its Report of 1929, recommended that effect be given to the Committee's suggestions.

competition, as the interstate companies "have divided the Australian coastal trade among themselves and will not invade each other's domain." The difficulty, it was maintained, could be overcome by the extension of the shipping activities of the Commonwealth to provide a direct service between Tasmanian and the Mainland. (14)

71. Under date the 6th December, 1929, the Right Honourable the Prime Minister (J. H. Scullin) asked the Parliamentary Joint Committee of Public Accounts to inquire into and report on the general question of Tasmania's disabilities. The main points of the evidence placed before this Committee concerning the disabilities suffered by Tasmania in consequence of inadequate shipping services and high freight rates may be stated thus :-

(a) Owing to severance from the Mainland the State is almost entirely dependent on shipping facilities for the prosecution of her trade.
(b) Interstate trade was relatively more important to Tasmania than to any other State. For the year 1928-29, the interstate tonnage of cargo from Tasmania was 4.54 tons per head of population compared with 1.67 tons per head of population for all other States. Thus the interstate trade of Tasmania was over two and a half times as great as the average of the other States.
(c) While the encouragement of an Australian Mercantile Marine through the protection of the Navigation Act was considered a worthy object, it was contended that Tasmania, owing to her geggraphical position, her predominant interest in interstate trade and her partial dependence on the tourist traffic, had to bear a disproportionate share of the increased costs and curtailment of services involved.

72. As the Commonwealth Government had spent millions of pounds on the provision of railways in other States, it was contended that the obligation rested on the Commonwealth to find adequate means of communication by sea for Tasmania. To overcome existing difficulties it was suggested in evidence that :-

(a) Passenger communication between Melbourne and Hobart be restored;
(b) Provision be made for the continuity of the Sydney-Hobart passenger service throughout the year with lower fares. (15)
(c) Consideration be given to a policy designed to give Tasmania lower rates of freight and passenger fares generally;
(d) A condition be inserted in the mail contract with the Orient Company that its steamers should carry interstate passengers when voyaging between capital ports in pursuit of overseas trade.

73. It was further stated in evidence that unless adequate, regular and continuous means of communication were provided to enable Tasmanian products to be readily and cheaply marketed, the efforts of the Commonwealth to assist

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(14) Vide Chapter III.
(15) Prior to the recent war the Zealandia ran a weekly service during the summer months and fortnightly during the winter season.

the State financially to overcome its difficulties, to retain its population, and to increase production, would be largely wasted. There was a difference of opinion as to the best method of improving shipping services for Tasmania. Some witnesses favoured increased subsidies to the shipping companies; others favoured the establishment of a Commonwealth line. The majority of witnesses however, favoured a subsidized service.

74. In connection with the application made in 1933 by Tasmania for financial assistance from the Commonwealth, under Section 96 of the Constitution, a special memorandum was submitted to the Grants Commission dated 26th January, 1934, and it was strongly urged that Tasmania suffered definite disabilities through the operations of the Navigation Act, which resulted in :-

(i) Curtailment of services.
(ii) Increased fares and freight rates.
(iii) Unequal opportunities for competitive trade.
(iv) Hindered development of the tourist and other industries.
(v) Losses through maritime disputes, which, in all probability, would not have occurred but for the ban on British ships.
(vi) The aftermath of such disputes - the fear of again being marooned whilst travel by British ships was prohibited.
(vii) The stagnating effect upon Tasmanian trade generally through diminishing tourist traffic occasioned by the Act.
(viii) Repercussions on overseas trade.

75. (a) The Committee was first concerned to show that the increases in freight charges, so far as Tasmania was concerned, were not imposed to meet a falling volume of trade. The data presented showed that Tasmania's total trade increased from 641,383 tons in 1919-20 to 1,088,965 tons in 1923-24, an advance of 447,582 tons, equal to 69.8 per cent. In the next two years (1924-5 and 1925-6), the totals were 991,931 tons and 936,281 tons respectively, increasing in 1926-27 to 1,088,582 tons, with a fluctuation to 1,045,393 tons in 1927-28 and to 979,999 tons in 1928-29.

(b) Comparing the figures for the commencement of ten-year period (641,383 tons) with the year 1926-28 (1,085,582 tons) the increase was 444,199 tons, or 69.2 per cent; and compared with the last year quoted by the Public Accounts Committee, 1928-29, the increase was 338,616 tons, or 52.8 per cent; so that "the increase in freight rates could not be supported by an argument of falling trade".

76. In computing the annual loss to the Tasmanian national income due to increased sea freight rates the Committee maintained that, in the case of the State's export products the freight cost was not paid by the consuming country or state. In general, of course, the final consumer does pay imposts such as customs duty, freight costs etc. (16)

(16) Principal products exported are potatoes, jam and apples and as these have to compete on the open market in the area of consumption, the incidence of the freight rate is on the home producers. Again, the inward freight on most manufactured goods, against which there is no similar competition, falls on the consumer of this State also. In this connection the Tariff Board reported in 1929 as follows: "Experience has shown that the manufacturer in, say,

77. The disability suffered by the State due to the Navigation Act was expressed by the Committee in money terms as follows :

Freight rates, above the cost of mainland states	£276,689
Passenger rates above the cost of mainland states	54,636
Total annual extra costs imposed	£331,325
Loss on tourist traffic	84,600
Transit Traffic	5,000
Minimum annual extra costs and losses imposed by Navigation Act	£420,925

78. The following method was adopted in the calculation of the annual loss to Tasmania arising from the differential freight rates compared with those charged between mainland ports. The figure of .130d. per ton mile was obtained by taking the difference between -

(a) The average rate paid on Tasmanian cargo according to the nearest obtainable direction and extent of the traffic; and
(b) The average of rates between mainland ports.

79. The figure for (a) above was obtained as follows:

(a) Direction and Extent.

Total value of Tasmanian interstate import and export trade in 1931-32 was £10,959,089 made up as follows :

To and from N.S.W. -	£3,949,624	(36%)
" " " Victoria -	£5,757,201	(53%)
" " " Other States	£1,252,264	(11%)
	£10,959,089	100%

More than half of the freight, therefore, was carried the shorter distance of 470 miles (Hobart to Melbourne); a little over one-third was carried 638 miles (Hobart to Sydney); and practically all the balance of 11% was carried between Hobart and Adelaide (771 miles).
To be more exact:-
53% of the freight was carried 470 miles.
36% of the freight was carried 638 miles.
11% of the freight was carried 771 miles.
That is :

$$\frac{53 \times 470}{100} = 249.10 \text{ miles.}$$

$$\frac{36 \times 638}{100} = 228.68 \text{ miles.}$$

$$\frac{11 \times 771}{100} = 84.81 \text{ miles}$$

563.59 miles.

The average distance the Tasmanian freight was carried, therefore, was 563.59 miles.

(b) Average Ton Rate on Tasmanian Cargo.

53 per cent of the Tasmanian cargo was carried between Hobart and Melbourne at the rate of .551d. per ton per mile. 36 per cent of it was carried between Hobart and Sydney at the rate of .444d. per ton mile.

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(16) (contd.)
Melbourne can produce many articles for his local market at prices that can compete successfully with imported goods. However, when it comes to competition in other States, W.A. for example, it has been found that the addition of freight and handling charged had frequently made the local products non-competitive with those from overseas."

That is :-

$\frac{53 \times .511d.}{100}$ = .27083d.

$\frac{36 \times .376d.}{100}$ = .13536d.

$\frac{11 \times .444d.}{100}$ = .0488d.

.45503d.

The average rate paid on Tasmanian cargo was, therefore, .455d. per ton per mile. Average rate per ton mile on cargo carried between mainland ports :-

Melbourne to Adelaide	...	.466d.
" Sydney	...	.348
" Brisbane	...	.283
" Fremantle	...	.245
Sydney to Melbourne	...	.347
" Adelaide	...	.307
" Brisbane	...	.416
" Fremantle	...	.222
Brisbane to Melbourne	...	.283
" Adelaide	...	.314
" Sydney	...	.416
" Fremantle	...	.257
		3.904 ÷ 12

= .325d. per ton per mile.

(c) Now, the average rate on Tasmanian cargo according to the nearest obtainable direction and extent of the traffic = .455d. per ton per mile. The average of all the rates between mainland ports = .325d. per ton per mile. Therefore difference = .130d. per ton per mile.

The average number of tons carried to and from Tasmania during the five years ended 1931-32 was 905,693 tons.

Hence, 905,693 tons x 564 @ .130d. = £276,689.

80. The last report prepared by the Economic Case for Tasmanian Committee dealt with the cost of protecting and assisting Australian industries. (17) In the report on "The Effects upon Tasmania of the Navigation Act, 1912 and its Amendments" (11th October 1933) just dealt with it was stated that a great deal of additional research would be required to enable the Committee to set out in detail the full effects of the Act upon Tasmania as a result of :-

(a) Curtailment of services
(b) Increased fares and freight rates.
(c) Unequal opportunities for competitive trade.
(d) Hindered development of the tourist and other industries..
(e) Losses through maritime disputes which, in all probability, would not have occurred but for the ban on British ships.
(f) The aftermath of such disputes - the fear of being marooned.
(g) The stagnating effect upon Tasmanian trade, generally, through diminishing tourist expenditure.

(17) "Report on the Cost of Protecting and Assisting Australian Industries" (7th December, 1935).

(h) Repercussions on overseas trade.

81. In Section 19 (page 21) of "The Case for Tasmania, 1935", the following paragraphs occur :

> "The Committee is convinced that among the disabilities suffered by Tasmania as the result of Federal policy and enactments the effects of the Tariff cannot be ignored ... It has been recognised by previous investigators that the price paid by Tasmania for the protective policy of the Commonwealth by far outweighs any benefits derived by the State from that policy. It is likely that the subsidy to protected production in Tasmania is £2 per head of population less than the Australian average. (18)

> "The cost to Tasmania of the Navigation Act is shown in the Committee's report, published on 26th January, 1934, to be £420,000 per annum (not including certain unascertainable costs). The disabilities suffered by Tasmania under the policy of protection and the Navigation Act are thus costing not less than £800,000 per annum."

82. The Report referred to above aimed to show that the burden imposed upon Tasmania in protecting Australian industries by tariffs and bounties is higher than that estimated in Appendix W of "The Australian Tariff". The table below summarises the conclusions of the report and shows that the cost of the Navigation Act was alleged to represent about 36 per cent of the total burden due to the protective policy of the Commonwealth:-

TABLE III.

Net Burdens upon Tasmania during 1931-32 of Bounties Paid from Commonwealth Revenue, the Butter Stabilisation Scheme, the Sugar Embargo and Agreement (after allowing for Sugar Concessions) and Tariff Protection of Primary and Manufactured Products, together with the Adverse Effect of the Navigation Act.

Act of Policy	Total Adverse Effect	Per Head of Population.
	£	s. d
(a) Bounties, the Butter Stabilisation Scheme, the Sugar Embargo & Agreement, & Tariff Protection of Primary and Manufactured Products.	798,000	69. 11
(b) The Navigation Act	421,000	37. 3
	1,210,000	107. 2
(c) Less Sugar Concessions.	39,000	3. 5
Total Minimum Tasmanian Burden:	£1,171,000	103. 9

83. The Report in question was issued by the Economic Case for Tasmania Committee on 7th December, 1935, and was one of the documents submitted by the Treasurer to the Grants Commission along with the Statement,

(18) This is the estimate made in Appendix W of "The Australian Tariff". (Prepared by a panel of economists in 1929 for the Prime Minister).

prepared by the State Finance Committee of Tasmania's claim for a Special Grant in 1936-37. At the public sitting of the Commission in Hobart on 30th and 31st January 1936, certain of the methods used and the conclusions reached in the Report were the subject of criticism by members of the Commission. Most of the criticism was voiced by Professor L. F. Giblin. He pointed out that the non-acceptibility of the conclusions in the Report arose from difficulty over matters of assumption. He did not attempt to traverse the Report in all its details, but confined himself to the summaries, more particularly to that on page 35 giving estimates of the cost of protecting and assisting industries in Australia as a whole. The total cost of the five items included in this summary is shown as £41,977,000. Doubts were thrown by the Professor on the correctness of the figures for four out of the five items. He summarises his criticism on page 42 of the transcript of evidence. "Putting these things together, you will see why we do not feel able to accept your total of practically £42 million for the year 1931-32, but would cut it down by about £9 million or £10 million, so that the figure of 69/11d. per head would be reduced to 54/- approx." That is, Professor Giblin assumed that the per capita net burden for Tasmania (69/11d.) worked out by the Economic Case Committee should be reduced by 9/4d. or 10/4d. He did not attempt any examination of the method employed by the Committee in arriving at the distribution of net burdens among the States as set out in Table 15, page 35.

84. In addition, the figure of £421,000 shown in the summary of Community Burdens on page vii of the Report, with respect to the Navigation Act was rejected by the Commission on the ground that they were not satisfied that the data (from which the estimate was made) were correct. The cross-examination of Tasmanian witnesses in this connection indicated also the Commission's unwillingness to accept assumptions, methods and inferences in the Economic Case Committee's Special Report for measuring the Incidence of Exchange upon Tasmania for 1932-33.

85. Accordingly, the State Treasurer instructed Professor F.R.E. Mauldon and Mr. D. L. Anderson to prepare a memorandum on the Commission's criticisms. Regarding the attempted measurement of the burdens upon Tasmania imposed by the Navigation Act the memorandum discussed the method used and the criticisms levelled at some length.

86. The Mauldon-Anderson memorandum first concerned itself with the methods used by the Economic Case Committee, which may be briefly recapitulated here, viz :-

> Burden due to increased Freight Charges. Average figures for ton-mile charges on general cargo moving between Tasmania and the three principal states with which she trades were weighted according to the value of trade on the three freight routes, but not according to the different mileages, and the resultant average figures referred to were the "average ton rate on Tasmanian cargo". From this was subtracted a simple average of a set of twelve ton-mile charges between pairs of Mainland ports, and the difference was multiplied by the average length of carriage between Hobart and the three ports of Melbourne, Sydney and Adelaide. The latter average was weighted according to the relative value of trade between Hobart and the three ports. The resultant product was multiplied by the average number of tons carried to and from Tasmania during the five years ended 1931-32, which was stated to be 905,693 tons. This gives a figure of £276,689 which was used as the

extra expense or amount of freight rates due to the Navigation Act (for computations, above).

87. The Commission's Objections.

(a) The Chairman of the Commission had questioned the soundness of the assumption that if the rate from Tasmania was greater than between a (presumably equal) given distance on the mainland that was an "injury" due to the Navigation Act. The Secretary of the Economic Case Committee (Mr. L. R. Norman) attributed the higher Tasmanian rate to the lack of competition in comparison with the mainland states where shipping was subject to rail competition. It does seem probable that rail competition on the mainland would have some effect upon marine freight rates along the coast. (It is certain that several State railways particularly Queensland (19) have established freighting systems particularly designed to meet port to port competition (20).

(b) The next point raised by the Commission was the question of the heavier freight burdens carried between Mainland ports, the suggestion being that this would allow freights to be lower. Mr. Norman admitted that no account had been taken of this fact, but thought that the many sources of loss to Tasmania for which no allowance had been made would make up for any over-statement here. Regarding this point it was stated in the Memorandum under review that it was probable that "the smaller and less regular demand for transport from Tasmanian ports compared with that between Mainland ports would definitely make the cost of carriage higher when a Tasmanian port was involved".(21). (Note also the fact that Tasmania is right off the regular traffic routes). It would be a matter of policy for the shipping companies whether this higher cost was passed on in higher rates, but as the rates are higher than those between Mainland ports, a small volume of cargo must be considered as part of the reason.

(c) The next objection raised by the Commission was connected with the effect of the length of journey. Owing to the central position of Tasmania in relation to the other state capitals, and the fact that figures were only taken for rates from Hobart to Melbourne, Sydney and Adelaide, "the average distance of carriage applying to the Tasmanian figures must be considerably less than that for the journeys between other Australian ports for which figures are taken". To gauge the effects of length of journey upon ton-mile rates, it is only necessary to glance at some of the tables produced by the Committee, which show clearly that goods are carried for long distances at a much lower figure per mile than for short distances. According to Mauldon and Anderson this should supply part of the reason for the excess of Tasmanian freight rates over those applying exclusively to the rest of Australia.

(d) The Chairman then suggested that regularity and security of service as under the present arrangement might be preferable to the results of casual and irregular competition from outside. Mr. Norman thought that the earnings of the regular trading companies would be protected by the development of a new class of traffic. He instanced the results of the relaxation of the Act, when the regular traders were doing even better than before. Professor Giblin thought that this was due to a general increase in the habit of travelling which would have happened anyway. The Mauldon-Anderson memorandum found it rather difficult to be sure about this question.

(19) See Report upon the Enquiry into Railway Competition with Portsby J.B. Brigden, 31st August, 1931. (Govt.Printer)
(20) Whether the degree of freight reduction caused by this competition is commensurate with a possible reduction in Tasmania due to the withdrawal of the Navigation Act is

88. Other Objections.

(i) Measurement of the Average Ton Rate on Tasmanian Cargo.

Considering the principal objections to the various measures besides those which the Commission voiced, the Memorandum commenced with the measure of freight loss. The measure of the "average ton rate on Tasmanian cargo" was made by weighting the ton mile rates for general cargo moved between Hobart and Melbourne, Adelaide and Sydney with the relative importance of these three runs. One small objection made applied to the method of weighting which was in proportion to value of cargo shipped to and from the three ports, although presumably there were no better figures available.

A more serious objection lay in the fact that the weighted average of the three charges was taken without reference to the various mileages. Naturally, a low ton-mile rate on a very long run would tend to reduce the real average rate paid more than a similarly low rate on a short run. The figures produced for ton mile rates in the three cases were weighted according to the lengths of carriage, and the figure of .45503d. per ton mile for the average of the three was slightly modified as shown below.

The requisite addition to the Navigation Act Report was applied by calculating the average distance of carriage and multiplying each of the components of the apparent average ton mile rate (see "The Case for Tasmania 1935", p.24) by the ratio of the appropriate length of carriage to this average distance. The following calculations were made in the Memorandum :-

$$\text{Average distance of carriage in miles} = \frac{(470 \times 53) + (636 \times 36) + (771 \times 11)}{100}$$

$$= \frac{56359}{100} = 563.59$$

$$\therefore \text{Average ton mile rate} = \frac{(.271 \times 470) + (.135 \times 638) + (.049 \times 771)\text{d.}}{563.6}$$

$$= \frac{251.28\text{d.}}{536.6} = .446\text{d.}$$

It will be seen that this alteration changes the difference between the average Tasmanian freight charge and the figure produced for the average Mainland charge from .130d. to .121d. reducing the former by about 7 per cent.

Other minor objections raised by Mauldon and Anderson relating to the method used in the computation of the average Tasmanian freight cost includes the doubtful assumption that all Tasmanian interstate trade was between Hobart and Sydney, Melbourne or Adelaide. This assumption is open to doubt from two sources - a good deal of trade must take place through the ports on the North Tasmanian coast, and there may well be an appreciable traffic with other Mainland ports apart from those given. It may be reasonable to accept the trade with these three ports as typical of the whole, but this assumption should have been stated, and, if possible, justified.

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(20) (contd.)
another question.

(21) Tonnage available is, of course, an important factor to be considered in rate making.

(ii) Measurement of the Average Rate per tom per Mile on Cargo carried between Mainland Ports. The objections to this process, were, firstly, the fact that there was no allowance for the various lengths of journey. This omission might have caused the figure for the average rate to be inflated above the real figure, and hence have cancelled out in part the corresponding error in the measurement of the Tasmanian rate. With the second measure, however, there are several more items of inaccuracy. There was no allowance for differences in volume of freight on the various journeys. The presumption here should have been that, as in the Tasmanian case, the shorter journeys, i.e. Melbourne - Sydney, Sydney - Brisbane etc. were more important than the longer journeys, i.e. Brisbane - Fremantle, Sydney - Fremantle, etc. The inclusion of weights here would certainly have increased the figure probably substantially.

For an unexplained reason some of the journeys were duplicated. Thus, Melbourne - Sydney appears as well as Sydney - Melbourne. This may have been a crude device for attaching the extra weight referred to above to the more important journeys, but, if so, the obvious inaccuracy is too great for a reasonable measure.

(iii) General. Figures for ton mile charges were based on rates obtaining in 1933-34 and the value of Tasmanian trade on 1932-33 figures. The total tonnage of Tasmanian trade by which the freight rate difference was multiplied was for the five years ended 1931-32. Mauldon and Anderson describe this mixing of years as a "bad fault", particularly in view of the fact that "the selection of the average figure for tonnage of trade (905,693) makes the burden appear much bigger than if the 1931-32 figure)804,032 tons) had been applied."

The assumption inherent in the use of this figure of extra freight rates paid as a definite burden upon Tasmania was that these rates increased on both imports and exports and, therefore, were paid entirely by Tasmanians. The Memorandum considered first the effects of an imposition of a higher rate, assuming for the moment that it is due to the Navigation Act. This imposition will, first of all, tend either to increase the price of Tasmanian commodities such as wool in the countries to which the State exports or to decrease the return to the local grower, or both. Since Tasmanian production forms such a low proportion of the supply in importing countries overseas, it is unlikely that much of the burden could be passed on to the overseas buyer in the form of higher prices, and to this extent the assumption seems substantially justified. At the same time, most of the State's interstate exports would not be of these staple commodities but of certain metals and foodstuffs. There are many cases in which the Tasmanian production provides a large enough proportion of the supply to enable the exporter to gain a higher price on account of higher freight charges. With regard to imports, most of the extra freight cost is probably passed on to Tasmanian buyers, but there are many cases in which the seller chooses to offer goods at a slightly lower net price in order to avoid a shrinkage in the market which is, again, an offsetting advantage to Tasmanian consumers as a whole. Arguing along these lines the Memorandum concluded that the inclusion of all the extra freight rate as a burden upon the Tasmanian community involved some exaggeration.

(iv) Measurement of Annual Loss Due to Increased Passenger Fare. The method used was similar to that applied to increased freight rates. The Economic Case Committee found that the extra rate this State had to pay, over and above that paid between the principal Mainland ports, is .4d per mile. This figure multiplied by the total number of miles travelled in an "average" year, gave a total cost of £54,636.

No details were given of these calculations and Mauldon and Anderson thought it probable that the method was as open to criticism as the method applied to freight rate increases. The assumption that the entire increase in fares to and from Tasmania is a charge on this State is much more unwarranted than the similar assumption in the case of freight rates. The majority of persons travelling to and from Tasmania are almost certainly Mainland residents. They may sometimes make up for extra fares by spending less in Tasmania, but far the greatest loss caused this State through the Mainland visitors must be the decrease in number of visits. This is allowed for elsewhere. There must be many cases in which Tasmanians travelling to the Mainland on holiday spend less there owing to fares being higher. Hence, "it would appear that half the extra fares would be a much more likely figure as a burden on this State".

(v) Measurement of the Loss on Tourist Traffic. The Committee here arrived at a decrease of 20 per cent in tourist traffic to Tasmania, based on the increase due to the recent relaxation. No further data were given. The number of tourists visiting the State as a yearly average for the five years 1927-31 was derived from the total number of arrivals and departures by assuming that one-third of the travellers were tourists. Twenty per cent of the number of tourists was taken as a measure of the resultant increase were the Navigation Act removed, and the loss to Tasmania was worked out by assuming that each tourist would spend £30 while staying in the State. (The £30 came from "evidence" submitted to the Committee). The product of this £30 and the total number of tourists "lost" namely, £84,600, was taken as the loss to Tasmania.

So much of the data used in this calculation were completely unbacked that the Memorandum found it hard to take the measure as a definite piece of evidence and also hard to select specific faults. Something, however, was said about the general validity of the process. "Even assuming that the amount arrived at is a measure of the reduction in tourist spendings due to the Navigation Act, the use of the figure as a net loss to Tasmania is doubtful. Such a method should not be confused with the type of measurement used for the benefit of the protective tariff, by which producers in various States are allowed to charge so much extra for the same production". The effect of the spending of an extra £84,600 here would be partly (1) to give Tasmanians a greater monetary return for the same services (e.g. that portion of the increased return of a hotel keeper which is not covered by extra services supplied by him and his staff), and partly (2) to give Tasmanians a greater return for an increased quantity of services (e.g. that portion of the increased return of the hotel keeper which is covered by extra services supplied), partly (3) to give Tasmanians a greater return for the sale of extra commodities imported from other States and from abroad (e.g. that portion of the hotel keeper's increased return which is covered by foods, etc., purchased outside the State, and wear and tear on appliances, etc., similarly purchased).

It is obvious that "every unit of commodities sold to extra tourists which was produced with imported machinery, raw material, or capital would mean that a portion of the money spent upon it would be a benefit to those outside the State". (as in the third alternative above). Obviously that portion of the £84,000 which had effect (1) above would be a net benefit to Tasmanians. It would probably be allowable to count that portion having effect (2) as a net benefit as well, but that portion having effect (3) would direcly benefit only those outside the State.

(vi) Measurement of Loss on Transit Traffic Passengers. The only other items included was one of £5,000 for the loss of expenditure in Tasmania by tourists passing through upon overseas liners. Calculations were based on a number of "apple trips",during the 1933 season but the details were not given.

89. The defects in the method by which the measurement of loss from increased freight rates and fares was made, are obvious. As will be seen in Chapter V, so many factors affect fares and freight rates such as scale of operation, size of ship, length of journey, regularity and type of cargo, that is obviously unwarranted to attribute the entire difference between Tasmanian and Mainland freight rates and fares to one cause, particularly as so many of the other differentiating factors also appear to suggest a difference in the same direction (22). The method has one advantage over any method which would have taken the increase in freight rates and fares over the period of application of the Act, namely, that the effects of general changes in costs and methods due to time are eliminated. Also, since a measure of the extra effect of the Act upon Tasmania was sought, the method involved the assumption of responsibility by this State for her fair share of the costs of the Act. In this respect the method could have been made sounder still if the average charges for Tasmanian journeys had been compared, not with the averages for journeys in the rest of Australia, but with the average for all Australia, that is, including Tasmania. Yet another correction is suggested by the fact that, even if the effect of the Act was to inflate charges equally in all States, Tasmania would still bear more than her per capita burden owing to the larger per capita use of sea transport.

90. As a conclusion, it appears that the Committee was greatly handicapped by the lack of data. Had the Committee had access to, and made use of, figures for the fluctuations in freight rates and fares, both to and from Tasmania, between the other States, and overseas, before and after the application of the Act, a much more reliable figure might have been arrived at. Such a comparison between points in time is a sine qua non of any measurement. Moreover, the conclusions in the Report were bound to be unconvincing in the absence of the data referred to as "evidence" but not submitted for actual check and appraisal. As a piece of evidence, the Report indicates, rather than proves, that Tasmania would benefit considerably if the Navigation Act were removed. The figures given do no more than give an impression of the possible scale of the benefit. As a quantitative measure they are unconvincing and may be highly misleading.

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(22) We have here a clear example of the extreme difficulty of using the logical method of difference in tracing net effects to a single cause.

91. In its report the Grants Commission admits the dependence of Tasmania upon sea traffic and that in this respect "her position as an island is very different from that of any other State" (23). As we have just seen, the Economic Case Committee based its report on the Navigation Act on the assumption that because the freight rates to a Tasmanian port from a given port on the mainland were greater than for voyages of the same distance along the main coast, the difference must be ascribed to the Navigation Act. The Commission deniedthe validity of this assumption and pointed out that the freight rates for a voyage are dependent mainly on the quantity of traffic offering, and not merely on distance. Tasmania having a small population and small quantity of goods could not expect the same rate to a given point as could be secured on a voyage from, say, Melbourne to Sydney or Adelaide to Melbourne, though in fact, there is very little difference. Tasmania cannot afford its own shipping. It must use the shipping doing the bulk of the Australian trade. Their main traffic routes are between the larger capitals, and hence the voyage to Tasmania is an expensive diversion and rates must be higher. If the business is as a whole profitable the diversions can be carried out at a lower cost than an entirely independent service to Tasmania. (24). In other words, high freight rates to Tasmania are a consequence of its geographical position, and are on the same plane as the natural inferiority of the State's resources. This conclusion is the basic assumption underlying the remaining chapters of this study. (26)

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(23) Third Report, Commonwealth Grants Commission, para 148
(24) A case of "positive" discriminatory monopoly.
(25) An assumption which seems to be suggested by the inconclusiveness of every one of the documents herein reviewed.

Chapter THREE

Some Aspects of the Australian Shipping Industry 1914–46.

CHAPTER III

SOME ASPECTS OF THE AUSTRALIAN SHIPPING INDUSTRY, 1914-1946

92. The First World War, 1914-1918.

The position of the shipping industry during the years immediately following the Great War of 1914-18 can only be adequately described by referring to the history of shipping control during the war period. When war broke out and the demand for the despatch of Australian troops arose, the duty of finding transports and equipping them for the conveyance of troops devolved upon the Department of the Navy, in accordance with the past practice of the British Government. As the transports had also to lift Australian primary products and manufactured goods for overseas markets, the Navy Department had to provide and make the necessary arrangements for the utilization of transports for this purpose. Arrangements also had to be made for the employment of ex-enemy ships, which had been interned in Australian waters, and eventually about 75 percent of the overseas trade was controlled by the Naval authorities.

93. In 1917 the Commonwealth Shipping Board, under the Chairmanship of Rear-Admiral Sir William Clarkson, was formed to deal with difficulties which had arisen regarding the quantities of primary produce and manufactured goods which were to be despatched overseas in the respective steamers. This Board sat until January, 1919, and acted in an advisory capacity to the Government in all matters relating to shipping, both oversea and interstate.

94. Early in 1918 the British Government pressed the Australian Government as "an extremely urgent matter" to release more ships from the Australian coastal fleet in order to engage in war service. In April, 1918, the interstate vessels belonging to the principal Australian steamship companies were requisitioned and the Interstate Central Committee was formed with the primary object of running the vessels as one fleet, and by regulating their employment in the most efficient manner, to make available the largest number possible to the Allied war effort. The requisitioned vessels were taken over by the Commonwealth Government on a standard charter party, as provided by the regulations, the owners receiving the Blue Book charter rates.(1) The Interstate Central Committee was purely an advisory body, comprising the managers of the principal interstate shipping companies of Australia under the Chairmanship of Rear-Admiral Sir William Clarkson, in whom was reserved full power to veto any decisions of the Committee.

95. As a direct result of their work a number of the largest passenger and cargo vessels were released for war service, in addition to other interstate vessels which had already been sent overseas under Imperial and Australian requisition. Interstate vessels were also despatched by the Controller of Shipping to India for wool packs; to America with Australian jams for military purposes; and to Canada for paper. During the war approximately 45 percent of the interstate tonnage was withdrawn from the coast for oversea purposes. At the same time, the Australian coastal trade, which had doubled since the pre-war period owing to the growth of local secondary industry, was more or less satisfactorily catered for, until the influenza restrictions and industrial disputes with seamen and engineers interrupted the services, caused delays and resulted in large accumulations of cargoes at the various ports.

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(1) Which had been adopted by the British Admiralty after careful consideration.

96. The interstate vessels were kept under requisition until April 1920 when they were released by the Government on the condition that they would be operated on the Australian coast and that freight rates and fares were not to be increased beyond a mean of 20 percent above the rates then ruling. The principal interstate shipowners agreed to abide by these conditions up to the end of 1920. The interstate steamship owners agreed to continue running their steamers as one fleet in order to obtain the greatest efficiency.

97. On the 15th April, 1920, the Federal Parliament appointed a Select Committee (2) to inquire into and report upon :

(a) The organization and control of interstate shipping;

(b) Overseas shipping in relation to Australian products for overseas markets and imports generally;

(c) Methods to improve mail, cargo and passenger services with overseas countries.

98. The Committee, at the outset, investigated the insufficiency of shipping facilities on the Australian coast to cope with the cargo offering. As a result of its recommendations eight Commonwealth vessels were temporarily placed in the coastal trade and others carried coastal cargoes while proceeding from one port to another in the course of their oversea voyages, and the post-war congestion of general cargo was relieved. The Committee further submitted that adequate tonnage had not been available for some time past for the carriage of the constantly increasing quantities of bulk cargoes such as coal, coke, ore, timber, sugar and fruit.

99. Admiral Sir William Clarkson stated, in his evidence, that the two increases in freight rates allowed (3) were imperative in order to make the revenue of the ships balance the increased expenses. The Controller showed that the total yearly revenue of the steamers was £3,600,000 whilst the estimated expenses of running the ships for the twelve months ended 31st March, 1921, was £4,752,000. In order to defray the latter increased expenditure the sum of £1,155,000 was required and after investigation the 10 percent and 20 percent increases were authorised in order to yield this amount. The total cost of running interstate vessels during the six months ended 30th April, 1920, compared with the six months ended 31st December, 1918, showed an increase in the latter period computed at 26.7 percent.

100. The Controller of Shipping later in his evidence stated that efforts by him to charter additional tonnage for the coastal trade during the war had elicited the information that British shipowners required a charter rate of 35/- per ton deadweight per month, as compared with the rate of 12/6 per ton deadweight which was paid for the interstate companies' requisitioned vessels of the same type. Again, British requisitioned ships on completing an outward voyage on Government account were often released from requisitions for the homeward voyage and were allowed to take cargoes at market rates on the owner's account.

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(2) Known as "The Select Committee on Sea Carriage". Interim Reports were tabled in the House of Representatives on 13th May 1920, 19th August 1920 and 1st October 1920. The final report was presented 29th October 1920.

(3) One of 10 percent in October 1919, and one of 20 percent in April 1920.

101. The Committee recommended that the coasting clauses of the Navigation Act (with an exception in the case of the North-West of Western Australia) should be put into operation as early as possible. (4) The Committee also recommended that the Commonwealth Government should "confer with interstate shipping companies with a view to a comprehensive arrangement being arrived at to ensure the provision by the interstate companies of a fleet that would be capable of carrying out all requirements".

102. The Second World War, 1939-45.

On 30th January 1941, sixteen months after the outbreak of war, a Commonwealth Shipping Control Board was established under National Security (Shipping Control) Regulations. (5) The Board was the instrument by which the Commonwealth Government exercised a control of Australian coastal merchant shipping with a view to "the more effectual use thereof in connection with the prosecution of total war".

103. In view of the limitations of the Australian merchant marine it was necessary as the war developed to organise shipping more rigidly so that tonnage could be used most effectively and, at the same time, cater for urgent and fluctuating demands by the defence services. Accordingly, regulations were drafted giving authority to the Minister for Supply and Shipping to requisition, on the recommendation of the Shipping Control Board, any Australian vessel and the charter arrangements placed the vessel so requisitioned at the disposal of the Board. The Board was empowered to decide how and where the vessels were to be employed. The Board could require the owner of any ship requisitioned to act as agent for that ship and in practice shipowners concerned acted as agents of the Board for their own vessels. Agents are/were paid fair remuneration for their services.

103. Heavy services demands and shipping losses compelled, during the war, rigid rationalisation, and interstate cargoes were limited to essential goods. However, the Australian merchant fleet was supplemented by overseas vessels which operated on the coast. These include vessels sub-chartered from the British Ministry of War Transport on time charter basis, and British and American ships used for coastal traffic whilst temporarily in Australian waters, and also vessels under the control of the Commonwealth Ships Chartering Committee. (6) Generally, the overseas vessels were used to carry bulk cargoes. (7)

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(4) Compare the discussion in Chapter I.

(5) National Security (Shipping Control) Regulations were embodied in National Security (Shipping Coordination) Regulations (2/6/1944). As from the 1st January 1946, these latter regulations have been further amended, and the present Australian Shipping Board was constituted to replace the Shipping Control Board and given wide powers in respect of the movements of shipping, the handling of cargoes and the turn-round of ships in port. In addition, the Board exercises the power to charter and sub-charter vessels. Part IV of the original Shipping Coordination Regulations, relating to the Ships Chartering Committee, is now replaced by a new Part IV relating to the salvage of vessels and equipment. In addition, Part VI (Central Cargo Control Committee) has been repealed.

(6) Vide paras. 108 et seq.

(7) Chiefly coal, coke and ironstone.

104. The Board was composed of the following members, viz :

F. Bridgman	-	Chairman.
J.F. Brame	-	Deputy Chairman.
J.L. Webb	-	Huddart Parker Limited.
A.H. Gaze	-	Commonwealth Ships Chartering Committee.
E.A. Cole	-	Secretary, Aust. Inst. of Marine and Power Engineers.
A.E.Warburton	-	Commonwealth Treasury.
H. Sullivan	-	Secretary.

105. The Shipping Control Board determined the appropriate use of ships for the carriage of coal and ironstone. The competing claims of cargo required constant attention which had to be determined upon main lines of policy, and many questions arising from the requisitioning and operation of vessels were referred to the Board for decision. The Board maintained continuous contact with the Director of Shipping on all shipping problems and through him kept in touch with other organisations associated with shipping matters, including British and American shipping authorities. In spite of the requisition of vessels by the Allied Services, shipping losses and the handicap of war conditions in respect of the movement of vessels, the cargo position in Australia remained reasonably satisfactory. However, it was found difficult to increase reserve stocks.

106. For the purpose of advising in the management of the shipping services, a Shipping Management Committee, composed of representatives of principal shipping companies whose ships were requisitioned, met periodically to deal with questions arising in the conduct of the shipping services. Decisions of the Shipping Management Committee were subject to confirmation by the Shipping Control Board. The Chairman of the Board was Chairman of the Shipping Management Committee.

107. The Board also worked through a Central Traffic Committee. This Committee consisted of traffic officers of the Board and considered tonnage fixtures and reported to the Central Tonnage Committee. Branch Committees were set up at the main ports and small sub-committees at various State ports. These committees worked in close association with the Central Traffic Committee.

108. The functions of the Commonwealth Ships Chartering Committee as defined in Part IV of the National Security (Shipping Co-ordination) Regulations were :

> "To charter or arrange for the chartering of ships on behalf of the Commonwealth and to manage and operate or arrange for the management or operation of ships so chartered and ships placed under the control of the Committee".

The activities of the Ships Chartering Committee actually arose out of the chartering activities of the Australian Wheat Board. Under war conditions there was great difficulty in linking up sales of wheat with ships for the destination and shipment date required and it was suggested to the Australian Wheat Board that ships should be time chartered. Time chartered vessels had a twofold advantage, viz :

(a) Sales could be covered immediately with the knowledge that before the wheat had to be loaded there would be a possibility of securing another vessel on ordinary charter leaving the time chartered vessel free for other business.

(b) To carry wheat and flour sold by the Board for which no ordinary charter could be obtained.

109. As a result the vessels not only carried large quantities of wheat and flour overseas but enabled a much greater sale of wheat and flour to be negotiated and subsequently lifted by other vessels. The Wheat Board also agreed to carry any essential goods for the Government when space was available in the Board's ships. The Board further agreed that the ships should be used for the transport of essential goods on their return voyages to Australia. In February, 1940, prior to the formation of the Ships Chartering Committee, a Cabinet Sub-Committee authorised the Department of Commerce and the Australian Wheat Board to charter up to six vessels on behalf of the Commonwealth Government. It was soon found that this number was inadequate for the work to be done, and permission was obtained to secure all the vessels possible. As the charter of ships was assuming considerable magnitude, it was suggested that a formal Committee should be set up to control these shipping activities; this was in July, 1941, when the Committee was under the control of the Department of Commerce. In November, 1942, the Committee came under the control of the newly formed Department of Supply and Shipping and in June, 1944, regulations defining the powers and functions of the Committee were included in the National Security (Shipping Co-ordination) Regulations.

110. The original object of the Ships Chartering Committee was to deal purely with overseas trade and it was not expected that the ships would be used for more than occasional assistance on the coast. With the entry of Japan into the war, however, the increased demands of the defence authorities occasioned greater assistance from the overseas vessels to meet essential coastal needs, particularly for coal and ironstone. The time chartered fleet was therefore gradually built up and at the end of December, 1944, the Committee controlled 28 vessels with a total deadweight tonnage of approximately 235,000 tons. In addition to these vessels, the Committee also controlled all tonnage built to the order of the Commonwealth Government. Up to April 1946, thirteen (River class) vessels of 9,000 tons deadweight had been built to Commonwealth account and were in commission.(8)

111. It became apparent during the early months of the war that one of the most important factors in increasing shipping costs on the Australian coast was the cost of insuring hulls against war risks. This type of insurance was placed with overseas underwriters and thus Australian interests had no control over the rate of premium charged. Furthermore, there was every possibility of rates for the insurance of Australian vessels fluctuating geographically

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(8) At a meeting of Full Cabinet on 2nd April 1946 a programme was approved for the construction of thirtyseven merchant vessels to be built in Australian shipyards before the end of 1947. The programme included 13 "A" class 9000 ton freighters, 4 "B" class 6000 ton freighters, 10 "D" class 2,500 ton freighters(the Minister for Supply & Shipping announced on 13/5/46 that some of these freighters will be used in the cargo service Tasmania/Mainland), and 10 "E" class 550 ton freighters.

Cabinet also decided on an additional programme spread over a five year period for the construction of 9 single-deck "C" class 4000 ton freighters, 11 between-deck "C" class freighters, and 5 single deck "C" class 3,500 ton freighters, at a total cost of £8,360,000.

Twenty of these will be needed to replace vessels of a similar size which will be more than 25 years old by the end of the five years. This is in accordance with the

according to the varying conditions in the different waters around Australia. By February, 1941, it was evident that some action was necessary because by that time existing premium rates were considered to be excessive and there seemed to be every possibility that they would soon increase further. It was, moreover, considered desirable that freight rates already loaded with the cost of war insurance should be stabilised. A further consideration was the payment of considerable sums to overseas insurance companies, involving a serious drain on sterling funds.

112. On the 27th February, 1941, the National Security (Marine War Risk Insurance) Regulations were gazetted. They provided for the insurance against war risk of ships registered in Australia and trading solely between ports in Australia. Insurance was not made compulsory, but insurance except through the Board was forbidden. The Board was empowered to consent to the insurance of vessels with outside interests but, in general, this consent was not granted. Numerous changes were made to the regulations applicable to the insurance of vessels. There is no need to list in detail the various changes, but by 1943 the main conditions regarding the insurance of hulls applied to :

(a) Any Australian ship,

(b) Any unregistered ship the owner of which resided or carried on business in Australia,

(c) Any British or Allied ship trading in Australian waters or from an Australian port.

A definition of the war risks covered is given in Appendix "A" of this Chapter. The list comprises the whole of the war risks against which the Board was empowered to insure, but it always reserved the right, sometimes on the request of the insured, for some of the risks to be excluded with corresponding adjustments in premiums.

113. Membership of the Commonwealth Marine War Risks Insurance Board comprised the following :

Chairman: Mr. Justice Clyne.

Members : Professor D.B. Copland, Commonwealth Prices Commissioner
W.C. Balmford, Commonwealth Actuary.
T. S. Douglas, President of the Council of the Marine Underwriters Association of Australia.

114. As the Commonwealth Government had no insurance office of its own and in order to avoid setting up a new organisation, it was agreed between the Commonwealth Government and the State Government of New South Wales that the business of insuring vessels under the Commonwealth scheme should be carried out by the Government Insurance Office of New South Wales. This arrangement continued in operation for about 20 months until the establishment by the Commonwealth of its own office to handle the extra volume of work involved by the subsequent introduction of the cargo insurance scheme.

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(8) - contd.

Cabinet's decision of 28th August 1945 relating to merchant ship construction in Australia and the rate of replacement of obsolete ships in the coastal fleet. Vide paras. 151-161.

115. The hull insurance scheme was operated on much the same lines as those adopted by private insurance, and special policy forms were issued in respect of each of the insured vessels. At the outset all the larger vessels trading around the Australian coast became insured with the Board, and with a gradual worsening of the war situation many of the smaller vessels took the opportunity for the first time to insure against war risks.

116. In February,1941, however, the Shipping Control Board had not requisitioned any ships and when this action eventually took place in September, 1941, the requisitioned vessels were taken outside the scheme and special arrangements covering the owners against losses for war risk were made by the Shipping Control Board itself. This arrangement did not, however, remain in force for more than twelve months because, with the clarification of the Government's own attitude towards insurance of property for which the Commonwealth was temporarily liable, the vessels were subsequently brought back into the insurance scheme. At the commencement, the number of vessels insured was as follows :-

	No. of Vessels	Approximate value
£100,000-£200,000	138	£5,100,000
£200,000-£300,000	5	1,300,000
£300,000-£350,000		
£350,000-£400,000	7	2,600,000
	150	9,000,000

117. At the time of the introduction of the scheme the majority of the policies held by the shipowners were due to expire, and in order to remove any doubts which might exist in the minds of the owners they were given the assurance that for the ensuing three months the Commonwealth scheme would insure their vessels at the same premium and for the same risks as those contained in the existing policies. This enabled the Board to overcome the initial difficulties involved in the introduction of the scheme at short notice, and allowed sufficient time for the conditions attaching to existing policies to be examined. As might be expected these were subject to numerous variations and although the gross premiums payable were generally the same, they were subject to varying amounts of discount. As a result of these initial investigations of the Board, it was able to prepare its own standard form of policy and to determine the basis on which premiums should be charged. Because of the uncertainties attending war risk insurance, the Board for some six months after its inception issued policies for one month only.

118. With further experience in the field, the Board decided that,

(a) its premiums should be stabilised at the figure of 12/6% per month, which premium corresponded with those previously paid by the owners, apart from discounts,

(b) policies should be effected for 3 months, and

(c) further increases of premium should be as far as possible avoided.

This decision in effect meant that the Board, by virtue of the guarantee given by the Commonwealth Government, was prepared to suffer losses to a limited extent without requiring immediate recoupment from the owners by way of extra premiums. As events turned out this decision proved to be justified because although the fund carried a deficiency for some time on the hull account, the position was rectified during the last few months of the war. The premium rate of 12/6 % per month was in fact considerably reduced during the later years of the war, and before the initial deficiency was extinguished. Particulars of the various changes are given in Appendix B.

119. Another question of some interest was the power given to the Board to enter into contracts of re-insurance in respect of the insurances which it effected. This question of re-insurance arose because,

(a) An early sinking of one of the large vessels worth £300,000 might be a source of temporary, if not permanent, embarrassment to the insurance fund.

(b) The whole of the difference between premium and outgo for losses was a Commonwealth liability.

(c) A private insurer would necessarily effect re-insurance under a scheme involving such a small number of ships having in certain cases such high individual values.

120. The following were the many considerations which it was found necessary to bear in mind :

(a) There appeared to be a fair chance that the Commonwealth would not make a loss without re-insurance, assuming the risks to remain unaltered.

(b) Re-insurance premiums would be probably greater than the insurance premiums which the Board fixed in the initial months.

(c) Re-insurance might become unduly expensive if the risks became very heavy, with profit to private enterprise at the Government's expense.

(d) The Commonwealth had instituted the scheme in order to stabilise freight rates as far as possible and should therefore be prepared to face possible loss.

(e) The maintenance of coastal shipping is a Commonwealth responsibility in war time.

(f) The Commonwealth's liability in the insurance scheme was not large in relation to its war time commitments.

(g) Since many of the companies that would be interested in re-insurance were off-shoots of overseas companies, re-insurance would involve the transmission of overseas monies. This was one of the features which the insurance scheme was designed to avoid.

121. With the gradual worsening of the war situation in the early months of 1942, it was decided that some form of insurance for cargoes against war risks should be introduced. In the first instance this scheme was confined to essential imports for which difficulty in effecting insurance had been experienced. The regulations were amended enabling the Treasurer to prescribe certain specific essential cargoes, which included cotton, hemp, jute, rubber, sisal, tea, coffee, coir yarn, tinplate, cork, nitrate.

122. Many difficult problems arose in connection with the insurance of imported cargoes, particularly as the Board had no effective supervision over these contracts. Goods in India frequently had to be insured in a warehouse in India and covered for the whole time until they reached an Australian port. By July, 1942, there was every indication that the premiums charged by the private insurers would have to be increased and concern had been continually expressed about the differential rates applied to various parts of the Australian coast. It was essential that, as far as possible, any increases, which by raising the level of freight rates would react on the price structure, should be avoided.

123. In examining the proposals it was agreed that the Commonwealth scheme should not be designed to embarrass shippers outside Australian waters. The reasons for this view were :-

(a) Imports to Australia would, in many instances, be insured in London from the country of export. Some would be under open policies in London covering the particular country's activities in different parts of the world.

(b) The Australian insurance market could not expect to take away from the London market the insurance of cargoes shipped from Australia to the United Kingdom, as these were principally the primary products in which the British Government was interested.

For these reasons the scheme was confined to cargoes shipped between ports in Australia including the territories of the Commonwealth, and applied whether the goods were carried in Australian or overseas ships. Other matters which were taken into consideration before the scheme was introduced were as follows :

(a) Under a system of price control, insurance companies entered into an arrangement not to increase rates for marine underwriting on the Australian coast without first consulting the Prices Commissioner. Furthermore, the services of marine insurance could always be "declared" at any time, thus ensuring that rates would not rise above existing levels without justification.

(b) If the Prices Commissioner considered that rates were too high and should be revised, he could negotiate with the Insurance Companies and Lloyd's Brokers to ascertain whether current rates were justifiable on the basis of experience.

(c) There thus seemed to be adequate means of controlling war risk insurance premiums under the existing machinery without going to the extent of setting up a new scheme involving considerable organisation, which would be bound to cause a certain amount of disturbance in the marine insurance field.

124. Subsequent discussions took place between the Insurance Board and the Council of Marine Underwriters and the two main alternatives discussed were :-

(a) A scheme under which rates would be controlled by the Prices Commissioner on a uniform basis and which might include some Government re-insurance scheme if the Companies so wishes, or

(b) An arrangement under which insurance of cargoes against war risk would be taken over by the Commonwealth Marine War Risks Insurance Board. The Board would appoint insurance companies as agents to carry out the detailed work of insurance on a commission basis. The Marine Underwriters chose the second alternative.

125. When the Government opened its own office to carry out the cargo insurance scheme the various insurance companies were appointed as agents. They issued the Board's policies (both "open" policies and policies for specific risks) and collected premiums. Some of the principles decided upon were :-

(a) The premium rates should be uniform for the whole Australian trade and the rates previously charged by the Companies should be retained, unless there was a marked change in the war situation. They were also kept as low as possible in order not to impose too heavy a burden on Australian cargoes.

(b) The premiums should remain fixed notwithstanding variations in the amount of risk involved on account of the fluctuating fortunes of war until there was some marked change in the war situation.

(c) Insurance of cargoes against war risk should not be allowed unless the goods had been insured against ordinary marine risks (this was of particular importance if the insurance companies were to act as the Board's agents). The rate of commission payable to the agents should be 5 percent of premiums, subject to revision.

126. One matter which concerned the Board during the early period of its operations was the need for an effective system of receiving information regarding marine war risks. This was considered most important since experience had shown that the London insurance market obtained information much more readily than was done in Australia. Again, it was necessary to clarify the Commonwealth's own position in regard to insurance. It has been the established practice of the Commonwealth Government not to insure its own property, but it found that during the war time it was often the temporary owner of goods which were bought for subsequent re-sale to distributors. This applied particularly to tea and coffee and other essential imports. It was obviously

necessary for the Commonwealth to pass on the cost of this insurance cover and hence arrangements were made for the various Commonwealth authorities concerned to insure those goods for which they were responsible with the Commonwealth Marine War Risks Insurance Board. This was found to be more satisfactory than allowing each individual authority to deal with the matter entirely by bookkeeping arrangements.

127. The values for which ships should be insured presented some difficulty. For the most part the Board insured vessels for the same values for which they had been insured before the war. Some owners pressed strongly for the right to insure on the basis of "increased values" but this was resisted. Some consideration was given to the setting up of a valuation authority but no such action was taken.

128. This present review of the shipping industry in wartime would be incomplete without some reference to the factors leading to the establishment of the Stevedoring Industry Commission. Prior to the introduction of the Commission in April, 1942, the method of engaging labour at practically all ports throughout the Commonwealth was on a free selection basis.(9) Hence, was reserved to employers the right to select their own labour and the right to men to select their own jobs.(9) This method frequently resulted in ships, which were urgently required for operational purposes, being unable to obtain labour as more attractive jobs were offering to the men. Again, with free selection it was not known how many men were following the industry or claiming to follow the industry, nor how many men would be required to work the port. In the early days of the war far more men were periodically offering for work on the various waterfronts than were actually required, and the manpower authorities were anxious to tap this surplus labour supply.

129. Early in 1942 the waterfront position was such that those in authority realised that if the maximum use was to be made of ships by giving them the speediest possible turn-round, some system of regulating employment and control of waterside labour would have to be introduced. A Conference was convened in Canberra by the Prime Minister for the purpose of meeting representatives of the shipping companies. Arising out of this Conferenc the Prime Minister convened a further conference at which Sir Owen Dixon, Sir Thomas Gordon, Mr. Charles E. Brown (W.S.A.), and Mr. J. Healy, Secretary, Waterside Workers' Federation attended. At this Conference the Prime Minister outlined the war position and stressed the serious situation the country was facing, particularly in regard to shipping, and asked for the co-operation of all parties to ensure that ships were given the quickest possible turn-round.

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(9) There is a long record of turbulence in the industry, though wages and conditions have steadily been improved. Until April, 1942, stevedoring was conducted by -

(1) the Interstate Steamship Owners, as part of their shipping business;
(2) stevedoring companies, more or less closely connected with the shipowners;
(3) some companies, like Broken Hill Pty. Ltd. at Whyalla, which did their own stevedoring.

The relations between these groups and their employees have been regulated mainly by the Commonwealth Arbitration Court. In 1940 a new log of demands by the Waterside Workers Federation and counter-claims by the employers were filed, but they had not been dealt with by April 1942, and their position before the Court is not clear.

130. Arising out of this Conference, a Sub-Committee consisting of Sir Owen Dixon, Sir Thomas Gordon and Mr. J. Healy was appointed to examine the various problems and report to the Government as to what method should be adopted to deal with the unsatisfactory state of affairs that existed and to make recommendations to ensure the expeditious moving of ships. This Sub-Committee met in Melbourne on March 5th and 6th, 1942, and subsequently submitted a report to the Prime Minister in which it recommended that a Board be established for the supervision of waterside labour and to ensure maximum working efficiency. Regulations were brought out (10) to give effect to the Sub-Committee's recommendations and the Stevedoring Industry Commission was appointed on the 2nd April, 1942, to give effect to the provisions of the regulations.

131. The functions of the Commission as provided for in the regulations were :-

" (a) to co-ordinate labour in stevedoring operations;

" (b) generally to control and regulate waterside work and stevedoring operations; and

" (c) to ensure that adequate provision is made for the protection of waterside workers against injury, and wharves against damage from, or in connection with attacks by an enemy, with a view to expediting the loading and unloading of ships."

The Commission comprised representatives of oversea, interstate shipping and stevedoring interests together with representatives of the Waterside Workers' Federation, operating under the Chairmanship of the Chief Judge of the Commonwealth Court of Conciliation and Arbitration. A senior officer of the Public Service was also a member of the Commission, without the right to vote.

132. As a first step towards carrying out the provisions of the regulations the Commission set up Waterside Employment Committees at all ports. These Committees comprised representatives of employers and employees and were presided over by an independent Chairman. The next step was to determine the number of men (port quota) required to work each port and, at the same time, to compile a register of such waterside workers at each port as were required to make up the quota. As a result, all surplus labour at the various ports was redrafted to other occupations by the manpower authorities. It should here be noted that throughout close co-operation was maintained as between the Commission and the Manpower Directorate, the latter having agreed that, whilst waterside work was not a protected occupation, it would be regarded as such, provided that the Commission ensured that only the minimum number of men consistent with the need for expeditious handling of cargo was retained in the industry. The foregoing steps did not, in themselves, entirely remove the disabilities under which work was being carried out, inasmuch as men retained the right to withhold their services from any particular job

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(10) Vide Statutory Rules 159.

urgently requiring labour. At this particular time vessels were sailing in convoys and it became absolutely essential that vessels be worked in some order of priority which would ensure their departure and arrival according to schedule. This position was met by the Commission making Orders in respect of all main ports. These Orders provided, amongst other things, for the allocation of labour by an officer of the Commission and further provided that a refusal on the part of any man to go to work for which he had been allocated, would expose him to disciplinary action by the Waterside Employment Committee. Conversely, the obligation was placed on employers to accept any labour allocated to them. These orders resulted in a revolutionary change in the waterfront industry, for, whereas men had previously been free to decide when and where they would work, they were now obliged to present themselves for employment each day and undertake whatever work was required of them. By this means, the best possible use of labour was obtained and, whereas, immediately prior to the introduction of the Commission it is estimated that some 26,000 men were claiming to follow the waterfront industry at all ports throughout the Commonwealth, that number has now been reduced to approximately 19,000.

133. Much could be written concerning the waste of manpower and abuses existing before the war, but it is sufficient to say that prior to the introduction of the Stevedoring Industry Commission only a very blurred picture of the industrial situation at each port could be obtained. Even after registering all waterside workers at the various ports, it was found that some were using the waterfront as a 'blind' and steps were taken to eliminate such men.

134. In furtherance of its obligation to keep the numbers of men in the industry to the barest possible minimum, the Commission has, in a number of cases, been faced with the problem of keeping the average weekly hours worked by waterside workers below fifty-six. However, in a number of cases these hours have had to be exceeded and when it is realised that the average age of waterside workers in some ports exceeds fifty years we may appraise more accurately the complaints regarding poor work in some instances.

135. By gradual stages, the Commission evolved to a position where ships are worked in an order of priority and, where "round-the-clock" working was required to give a ship urgent despatch, labour was forthcoming. There are, of course, exceptions at certain ports where the labour supply is insufficient to meet peak requirements and a scheme of registering reserve waterside workers was introduced, which proved of great assistance in meeting sudden rushes of shipping.

136. From time to time, the Commission has transferred labour from one port, where there was temporary inactivity, to another port where the local labour supply was insufficient. In addition to legislating for the greatest use and mobility of labour, the Commission has prescribed conditions of employment to meet the needs brought about by the war situation and, by the exercise of strict discipline, has ensured that work proceeded with the minimum amount of friction. (11)

137. An inquiry into the stevedoring industry was conducted by Judge A.W. Foster of the Commonwealth Court of Arbitration and Conciliation, the report of which was completed on 22nd February, 1946. According to the Report the Commonwealth Steamship Owners' Association have denounced the commission as a failure. Mr. Reynolds (of the Independent Steamship Owners' Association) and Mr. Shell (of Broken Hill Pty. Ltd.) made this general charge and also specific attacks; first, against the loss of the disciplinary powers of employers and foremen; which they claim the Commission did nothing to replace; and secondly, against the fall in output and the rise in costs.

138. Judge Foster, however, seems to be convinced that the Commission should be adapted and continued. He believes that it achieved "a substantial measure of discipline" and also, although it did not prevent disputes, a greater measure of co-operation from the employees than before; and that, though costs did in fact rise and output fall, this was not necessarily as a result of the Commission's maladministration. The statistics of these movements which were given him were confused and contradictory. In view of the overriding necessity to prosecute the war, he considered that the Commission was successful, even though at a high cost.

139. The chief complaint made against the commission was that it lost disciplinary control. Judge Foster pointed out that although the "hire-and-fire" power, when exercised by such a small number of employers as there is in this industry, is an effective weapon in time of depression, it is valueless in time of boom. In the wartime boom, then, discipline and output would naturally fall; but the Stevedoring Industry Commission had other means of discipline than dismissal, since it could suspend, compel, and (for a time) fine offenders. The remedies for the decline in output, then, would appear to be the improvement of discipline; the raising of the traditionally low status of the industry; courses of training; better wharves and facilities and better management; and, perhaps, incentives and rewards.

140. All parties to the inquiry adhered to the principle of arbitration for the settlement of disputes in the industry, but differed about its mechanism. The alternatives are to continue the Stevedoring Industry Commission or to return the industry to the jurisdiction of the Arbitration Court. Judge Foster's own preference was for the continuance of the Stevedoring Industry Commission. In this connection he pointed out that it is acceptable to employees and to an important section of employers; it was devised by experts representing both sides in the industry, and it represents both sides. Now it has had four years of experience, and has succeeded in gaining prestige, training staff, and setting up an organisation. Further, it can supervise the industry closely, and can deal with the problems of the allocation of labour and the provision of amenities, both of which are otherwise difficult of approach.

141. Mr. Reynolds and Mr. Sholl preferred the restoration of the Arbitration Court, though they conceded that its powers would have to be widened. Their proposals would mean that the wider powers of the Court

would affect its dealings with other industries, with unpredictable results; and would involve the running of the employment bureaux by the Court. This task, though vital to such a casual industry, is not a suitable one for the Court, which also possesses no adequate machinery. Between the new Commission and the Arbitration Court, the powers of each must be carefully delimited. Mr. W. P. Foster, of the Commonwealth Steamship Owners' Association, objected to the new tribunal on the following grounds: that it was unnecessary, a departure from principle, and detached from the main structure of arbitration; that it combined administrative with judicial functions and could become judge in its own cause; that it would be subject to industrial and political pressure; that, unlike the Arbitration Court, it could not demarcate disputes; and that the failure of the present body indicated a similar 'failure' for its successor.

142. State Enterprise in the Shipping Industry.
The Commonwealth Government Line of Steamers was inaugurated by the Hughes Government in June, 1916 (12) the head office being established in London and at the outset the business was conducted on an agency basis. Subsequently, branches were opened in the principal ports in Australia and also in London. Soon after the cessation of hostilities the initial fleet of fifteen vessels was increased by the addition of twenty six new ships.

143. At first, as the result of its operations the Line showed a substantial profit. This was due in some measure to the high freight rates then ruling. However, the subsequent decline in these rates due to the postwar world surplus of tonnage soon converted the Line's profits into substantial losses. The history of the Canadian Government Mercantile Marine Limited and the South African Government shipping service is very similar. When the exceptional circumstances arising out of the war, and immediate post-war, period ceased to be profits faded into deficits. The following table shows the financial results of the Australian venture up to August 31, 1923, viz :-

To June 30, 1917	profit . . .	£426,394
To June 30, 1918	profit . . .	905,879
To June 30, 1919	profit . . .	£ 1,284,598
To June 30, 1920	profit . . .	365,385
To June 30, 1921	profit . . .	530,930
To June 30, 1922	loss . . .	521,037
To August 31,1923	loss . . .	1,051,997

The above figures, it should be noted, do not take into account an allowance for depreciation.

144. As early as 1921, there had been considerable criticism throughout the country in respect of the operation of the Line; and in November of that year the Government's shipping and shipbuilding programmes were subject to debate in the House of Representatives. In closing the debate the Government announced -

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(11) Note that the functions of the Maritime Industry Commission (as set out in Statutory Rules 1942, No. 2 as amended) are largely of an industrial character and include among other matters, the application to the maritime industry of the 44-hour week, accommodation and catering for employees on ships, manning of ships, war risk bonus, maintenance of discipline and similar matters.

(12) For an account of the circumstances in which the first fifteen vessels of the Commonwealth Shipping Fleet were purchased in the London market, see O. de R.

(a) that it would retain the Line but that it would re-cast the whole system of management and control; and

(b) that when its commitments for shipbuilding were exhausted no more keels would be laid down.

The House had voiced a clear opinion that after the completion of the ships then in the course of construction shipbuilding should be left to private enterprise.(13)

145. It was not until July, 1923, that the Government introduced into Parliament legislation to re-organise the scheme of management of the Line. The Commonwealth Shipping Board, as passed, provided for the establishment of the shipping line itself and vested control in a Board of Directors, entitled the Australian Commonwealth Shipping Board. The Board adopted the broad policy as outlined below, viz :-

(a) To administer the affairs of the Line with the greatest possible economy.

(b) To take all possible steps to grade down the level of fares and freight rates.

(c) When fares and freight rates had been reduced, to use all possible means to maintain them below the level ruling in the open market.

146. To carry out (a) above the Board aimed to reduce the total tonnage of the fleet despite the difficulty of selling at a time when the shipping industry throughout the world was experiencing a surplus of tonnage. The Board, on its constitution, took over from the Government fifty four vessels with a transfer value of £4,718,150; for this sum the Board gave the Commonwealth Treasury debentures bearing interest at the rate of £5 per centum per annum. The Board disposed of all its vessels except the modern ships known as the "Dales" and the "Bays". However, the operation of the Line under the Shipping Board regime showed a loss for each year as follows :-

Sept 1,	1923 to March 31, 1924,	loss . .	£245,474
April 1,	1924, to March 31 1925,	loss . .	£593,879
April 1,	1925 to March 31, 1926,	loss . .	£503,076
April 1,	1926 to March 31, 1927,	loss . .	£595,833
April 1,	1927 to March 31, 1928,	loss . .	£593,075

It should be noted that the above figures make allowance for administrative expenses, depreciation costs and interest charges.

147. The Joint Committee of Parliament of Public Accounts was deputed to examine the activities of the Shipping Board and presented its report on September 28th 1927, in which it recorded its recommendation that "having regard to all the circumstances . . . the Australian Commonwealth Line of Steamers should not be retained as a direct Governmental activity." Accordingly, the Government announced its willingness to dispose of the ships with certain reservations with respect to services and freight rates.

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(12) (contd) Foenander, "The Shipping Enterprise of the Australian Commonwealth Government", American Economic Review, Vol. XIX, No. 4, pp. 606-606.

(13) Compare the proposed post-war shipping and shipbuilding policy of the Chifley Government. Vide paras 151-161.

148. With regard to (b) and (c), the Board recognised that as its only source ofrevenue was from fares and freight rates, the expectation of Parliament that profits would be earned could be met only by a material increase in fares and freight rates. But the very purposes for which the Line existed precluded any increases being made. Turning now to the reasons for the financial failure of the "Bays" and the "Dales", they may be summarised as follows :-

(a) Operating costs. Under Australian articles Australian vessels were more expensive to operate than those of overseas competitors. It was estimated late in 1927 that on the basis of Australian wages of £100 in respect of a vessel of 6,000 tons gross British wages would be £32. 41,", American £42.41, Swedish £24.51, and Danish £15.44.

(b) Administrative expenses. Including rent, these totalled, for the year 1926-27, the sum of £90,145.

(c) Dissension and disagreement in the management. There appears to be little doubt (and the candidate has consulted all available sources) that the several members of the Board held varying views on matters of policy. Such a lack of a sympathetic relationship would tend to be both expensive and inefficient.

(d) Difficulties in obtaining cargo. Because of the number of vessels plying the United Kingdom/ Australia trades the Board's ships often ran in ballast with a consequent increase in overhead costs per sea mile run.

(e) Industrial unrest on the waterfront. The Line was singularly unfortunate in its experiences with the maritime unions which greatly accentuated the Line's difficulties.

149. The advantages which accrued to the Australian economy as a whole as a result of the Line's operations may be considered from three distinct angles, viz :-

(a) As a national safeguard and as an aid to the Mercantile Marine.

(b) As a commercial proposition. The data presented in paragraph 146 above show that the losses of the Line steadily increased from the time of the establishment of the Shipping Board. But during this period the shipping industry was passing through a phase of depression and hence these figures cannot entirely justify the subsequent sale of the ships.

(c) As a safeguard against increased fares and freight rates, and the fostering of the Australian shipping industry. It may be maintained that the financial losses were partly offset by the advantages which accrued to the Australian exporter of primary products. As will be pointed out in Chapter VIII of this study, financial losses incurred by any of the various sections of the transport industry through the

maintenance of low rates and frequent services may be regarded as a convenient and flexible method of Government subsidization of specific industries. On the other hand, the cost of the venture as expressed in the huge losses incurred appears to be exorbitant if interpreted as a tariff duty to protect the shipping industry.

150. It would appear that the losses incurred in running the Line could have been reduced in one or more of the following ways :-

(a) By assigning to it the contract for the carriage of Australian mails outward. (This contract is now held by the Orient Royal Mail Company, and is worth £150,000 per annum).

(b) By [illegible]e entering the interstate coastal trades.

But the fleet was too small in numbers to conduct a regular mail service to Great Britain, and the Shipping Board, upon investigation, found it inadvisable to participate in the interstate traffic because it would have seriously interfered with the overseas itineraries of the vessels.

151. It is both relevant and convenient to make reference here to the policy decisions in respect of the post-war control of the shipping and shipbuilding industries announced by the Prime Minister (Mr. Chifley) after a meeting of Full Cabinet on 28th August, 1945. Cabinet decided that the Australian interstate coastal trade will be reserved to Australian built ships(14) and that the wartime Australian Shipbuilding Board(15) should be reconstituted by statute to control the rate of merchant ship construction at a figure of 32,000 tons gross annually. This controlled programme is designed to ensure the maintenance of the Australian merchant shipbuilding industry in peacetime and will provide for replacements and the additional vessels which will be required as the volume of the coastal trades expands. In respect of replacements, no ships will be licensed for the interstate coastal trades after reaching the age of 25 years. A planned naval production programme will be entered upon so that the merchant shipbuilding programme will not be jeppardised and to ensure stability in the industry.

152. Shipbuilding throughout the world is an industry particularly subject to violent fluctuations in activity, the demand for new ships, of course, being closely linked with the prevailing state of world trade. The effects of the fluctuations in demand will be accentuated by the enormous increases which have been made in world shipbuilding capacity in wartime, and the very large deferred demand for many classes of merchant ships which will characterise the immediate post-war period. Apparently the Commonwealth Government plans to regulate the post-war demand for replacements according to some system of priorities over a period, in order to prevent the subsequent demand for renewals for the coastal fleet falling to a low level.

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(14) Presumably through an amendment to the relevant section of the Navigation Act.

(15) The Chairman of which was directly responsible to the Minister for Munitions.

In this latter case, the local shipyards would not be in continuous production, even if they were also building ships for an overseas line. It should be noted that the history of the Australian shipbuilding industry after the last war indicates the impossibility of establishing the industry in Australia without positive Government action. The industry started to build ships during the period of high costs overseas, but was unable to obtain orders when the overseas cost structure fell. It completely collapsed after the cessation of Government contracts in 1924. Reference has previously been made to the current shipbuilding programme authorised by Cabinet on 22nd May 1946.(16)

153. The age limit of twenty-five years for interstate vessels has been criticised as being "far too rigid" by Mr. T. Hytten(17) since there are "many ships which still have a useful life at that age". Such a criticism completely overlooks the intimate relation between the age limit and the plans to maintain the shipbuilding industry. Moreover, the candidate is informed that most authorities overseas consider that most vessels are obsolete by the time they reach the age of twenty-five years. Since many are obsolete before they reach this age, it is difficult to understand how the fixation of an age limit of twenty-five years on coastal vessels will impose undue burdens on shipowners.(18)

154. Mr. Hytten also made a few indiscriminate remarks on "the controversy over shipbuilding costs in recent months". He assumed, and doubtless with some justification, that shipbuilding costs in Australia are very much higher than in the United Kingdom, possibly twice as high. He then proceeds to conclude that this factor, and the proposal to scrap vessels at the age of twenty-five years, will "add considerably to the cost of running ships on the Australian coast". Although the Prime Minister has stated in the House of Representatives (19) that Australian shipbuilding costs are £64 per ton and that this figure compared favourably with American costs, but is much higher than on the Clyde, it seems impossible at this stage to say by how much local costs may exceed overseas costs, or what proportion the capital charges (i.e. the allowances for interest and depreciation) will bear to the total costs of shipping operations. At present, interstate freight rates are about 35 percent in excess of pre-war rates, and it is still not possible for earnings to cover disbursements. Interest on the capital value of the ships used is, however, not one of the principal

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(17) "Some Problems of Australian Transport Development". Paper read before Section G of the Australian and New Zealand Association for the Advancement of Science, Adelaide, 1946.

(18) In Chapter V, Table IV, the year of construction of vessels plying Tasmanian trades is given. Obsolescence must result, of course, in higher operating costs and slower services.

(19) Hansard, May 1, 1946, page 1439.

factors, as it represents no more than about 5 percent of the total cost of ship operation. The elements of cost which offer the greatest scope for reduction and which mainly determine ship operating costs, and hence ruling freight rates, are stevedoring costs (which are at least double pre-war costs), the turn round of vessels (at present very slow and, therefore, costly), the very high cost of repairs and the "wartime" surcharge originally imposed to meet the payment of a war risk bonus to seamen.(20) Only if these expenses can be reduced will a reduction in freight rates be possible.

155. The Cabinet decision of 28th August 1945 relating specifically to shipping was to the effect that "freight and charter rates, fares, routes and sailings for interstate traffic will be subject to Governmental approval. In deciding rates, cost of ship operations will be taken into account". Also, "the purchase price of ships built in Australia will be subsidised to the extent considered necessary".(21) No indication was given by Mr. Chifley regarding the means to be adopted for the exercise of these controls, but it will be useful to consider briefly the implications of the decision.(22)

156. Constitutional Difficulties.

(a) Since the shipping companies are not operating in competition with each other, the Commonwealth Government can probably exercise its monopoly power for the purpose of controlling freight and charter rates, fares, routes and sailings, in the interstate shipping trade. Alternatively, it may be able to use the powers conferred on it by reason of its responsibilities to preserve freedom of trade between the States. As a third alternative, although to a more limited extent, it may be able to use its defence powers, by reason of the direct effect of shipping services and rates on distribution of population and the development of resources.

(b) Whatever power is invoked for the purpose of controlling freight and charter rates, fares, routes and sailings in inter-state shipping, there appear to be constitutional limitations on Commonwealth action in this sphere. First, control of all freight and charter rates, etc. under the defence power would probably not be upheld by the High Court. The Court probably would, however, uphold the fixing of certain rates and the control of certain services for the development of strategical areas or for the exploitation of strategically important resources. Under the defence powers, action by the Commonwealth might be limited to the provision of subsidies for strategical purposes, contingent on the charging of rates fixed by the Commonwealth or on the provision of certain defined services or both. If this defence power is not invoked, any action by the Commonwealth to fix freight and charter rates, fares, routes and sailings may be challemged on the ground of discrimination between States. The chief difficulty is that the application of the normal principles of transport rate fixation tend to involve discrimination between States. For

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(20) Vide Chapter V (para.239)

(21) "The Mercury" (Hobart) 29/8/1945.

(22) Particularly in regard to the discussion in Chapter VIII.

example, a pattern of rates which is based on a lower rate per unit for long journeys, might be challenged on the grounds that it discriminates in favour of outlying States. Similarly, a rate designed to foster traffic on a particular route might be challenged on the ground of discrimination in favour of part of a State or States. In fact, it would be impossible to fix freight and charter rates, fares, routes and sailings in inter-state shipping without some discrimination. Such discrimination could not possibly be upheld on defence grounds in every case.

(c) However, the Commonwealth can probably control freight and charter rates, fares, routes and sailings without reference to any of the above powers. If the Navigation Act limits the interstate trade to vessels constructed in Australia as is proposed, the control of freight and charter rates, etc., will arise out of the necessity either to subsidise the purchase price of the vessels(23) or, if the Commonwealth retains the ownership of ships built to its account(24), to lease the vessels to ship operating companies. It seems probable that the constitutional objection to Commonwealth fixation of rates involving discrimination between States would still apply even where this was done in connection with the granting of a subsidy. The objection may have less force, if the control is exercised by means of conditions inserted in a charter party.

157. Administrative Machinery.

As Mr. Chifley announced, the proposal to control freight and charter rates, etc. in interstate shipping involves the exercise of the administrative function either by the Department of Supply and Shipping, or by a Board consisting mainly of representatives of that Department. This authority should be given power to make regulations covering freight and charter rates, fares, routes and sailings, since the necessary flexibility cannot be obtained if they are to be fixed by an Act of Parliament. If these matters are to be controlled by regulation, it is necessary to provide a right of appeal from the decisions of the shipping authority. The judicial functions involved can be exercised constitutionally only by a Court whose members receive life appointments. Although this matter does not appear to be appropriate for the jurisdiction of the High Court, it is the only suitable authority now existing which has the power to exercise the functions involved. The number of appeals likely to be made would not be sufficient to justify the setting up of a special court.

158. Profits.

(a) Where a company is operating Australian built ships, provision is made for the payment of a subsidy. The Cabinet decision implies that this subsidy, taken in conjunction with the services to be provided and the freight and charter rates, etc. fixed, shall cover all the costs of ship operation including a reasonable profit. It is, however, impossible to compute costs, revenue and subsidy on the basis of the operation of a single vessel, or even of a number of vessels forming part of a company's Fleet. Not only is more than one vessel generally required to maintain a given service, but it is a reasonable principle that part of the revenue obtained from one route where traffic is heavy should be used to subsidise other less profitable routes. It would, in fact, be most undesirable to prevent the operation of such a principle. Subsidies will need to be

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(23) Provided for in the Cabinet decision. Vide para.155.

(24) The question of ownership was not referred to in the press report.

determined, therefore, in relation to all the shipping activities of each qualifying company, while freight and charter rates, etc. must be determined in relation to the costs of operation of all shipping companies participating in interstate trade.

(c) The first difficulty raised by this method of computing subsidies and fixing freight rates is that shipping companies will qualify for subsidies in relation only to vessels built in Australian shipyards. Since revenues, costs and profits on all the shipping activities of such companies must be taken into account, the profits or losses made with vessels other than those built in Australia will influence the amount of subsidy. The subsidy will, therefore, really be paid in respect of all vessels operated by qualifying companies whether built in Australia or not. This will impose hardships on companies operating only vessels built outside Australia.

(d) The second difficulty encountered is that Australian shipping companies are engaged in many activities besides shipping and have made investments in many other fields of activity. It is probable that, over many years, they have not been making a reasonable profit on purely shipping activities(25) and yet have been making more than adequate profits over the whole of their activities. If this is the case, any proposal to fix freight and charter rates etc. and provide subsidies on the basis of the cost of ship operation, may either impose an unreasonable burden on the Federal budget, or lead to considerable increases in freight rates. At the same time, the companies concerned might receive an unreasonably high profit rate on their activities as a whole.

(e) Thirdly, again on account of the diverse interests of the interstate shipping companies, the exact costs of and revenue obtained from ship operation, may be very difficult to compute. Shipping companies which have been discriminating in favour of related companies, would show the difference between the actual rate and the rate which should rule as a charge on ship operation. The difficulties of tracing and assessing all such arrangements are likely to be enormous, but to do so will be essential if the actual real costs of ship operations are to be arrived at. It is possible that arrangements of this kind, which operate to decrease the revenue from shipping activity, may have been an important factor in keeping profits on ship operation at a low level.

Fourthly, there is the problem of the determination of reasonable profit rates. This problem may, however, be expected to arise in relation to other industries, and particularly in relation to industries or firms to be subsidised. It appears, therefore, that the Government must make a decision on the matter at an early date irrespective of the proposal to control the shipping industry.

159. <u>The Constituents of Freight Rates.</u>

In addition to actual carriage, freight rates cover insurance, loading and unloading charges, and port and harbour dues.(26) The control of freight and charter rates, etc. will throw on the shipping authority the responsibility of obtaining uniformity in port and harbour dues, and of eliminating such differences as tend to favour one port over another.(27) In addition, the

(25) Very difficult to ascertain. Vide paras. 227-29 Chap.V
(26) For a full discussion of the economics of freight rates Vide Chapter V.
(27) Cf. Chapter IV.

Commonwealth Government will have a direct interest in increasing the efficiency of cargo handling on the various wharves. This might have important results if it can be made the means of increasing mechanisation forcing the provision of amenities and improving industrial relations. Any danger that the responsibility for industrial strife on the waterside would be thrown on the Government could be eliminated by a firm pronouncement that the Government will not, and can not, interfere with the decisions of the Arbitration Court.(28)

160. By the fixation of freight and charter rates, fares, routes and sailings, the Commonwealth will make itself responsible for the provision of interstate shipping services, and for any defects in those services. The provision of cheap and efficient services to all ports which require them, will not always be possible without an excessive burden being imposed on the budget. This is, however, a difficulty which must be faced with every extension of Government activity, but is of particular importance in relation to shipping because of the peculiar difficulties of ship operation on the Australian coast.

161. Finally, the Prime Minister announced that the desirability of establishing an overseas shipping line owned in and operated from Australia would be examined by an interdepartmental committee which will "watch developments and recommend to Cabinet as soon as the position enables it to do so". The setting up of this Committee obviously arises out of the uncertainty felt by Ministers as to whether the Commonwealth should again own and manage a shipping line.(29)

162. Before concluding this chapter, brief reference, at least, should be made to the experiment in shipping enterprise made by the Tasmanian Government with somewhat disastrous results. Few Governments could have resisted the pressure of public opinion in this State shortly after the Great War 1914-1918, to test by actual experiment whether the high freight rates then ruling(30) were justifiable or not. Between June 1920 and December 1921, four steamships were purchased at a total capital cost, including alterations, of £170,330 (value as at 30/6/1925). By June 30, 1925, the total annual losses incurred by the Government as a result of the shipping services (1921-22 - 1024-25) amounted to £231,902. This sum represented £61,389 in excess of the total capital cost. It is not possible to say whether the vessels purchased were suitable for the purpose and/or whether the management was efficient. Two of the vessels were sold in April, 1925, for £26,000; the amount to the credit of the depreciation fund on account of the two vessels sold was £30,546; the cost of these vessels was £127,648; hence, the net loss on realisation was £71,102. The two remaining vessels, although they called at the port of Melbourne, were kept in commission to maintain regular communication with King and Flinders Islands, which are, of course, politically attached to the State of Tasmania.(31)

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(28) This would be in line with the Chifley policy of "constitutionalism" in the conduct of industrial negotiations.

(29) See, for example, two conflicting reports in the "Daily Telegraph" (Sydney) of 12/5/1945, and 24/8/1945. In May "any move for the revival of Government-owned line of ships would have strong support in Cabinet." In August, "Senior Ministers at present oppose proposals made recently that the Commonwealth should again own and manage a shipping line". However, the Commonwealth will have to decide

163. Notwithstanding this previous experience, the present Government is prepared, at least, to assist financially in the sponsoring of a Tasmanian line of ships of between 2,000 and 3,000 tons. This was announced by the Premier (Mr. Cosgrove) earlier in the year (32) when he promised financial support for any move by shippers to form their own company to engage in the North-West Coast - Mainland trades. Mr. Cosgrove went on to say that "the Government was looking to the time when it would not have to rely on the present shipping services". On the other hand, the Premier in July rejected the request made by a public meeting in Launceston representative of Northern and North-western shippers, producers and waterside workers for a Royal Commission to inquire into the "efficiency and irregularity of ship movements" and to "recommend to the State and/or Federal Government reforms necessary to achieve the establishment of conditions which will enable the Tasmanian import and export trade to function economically and efficiently".(33) Instead, the Premier undertook to meet the Federal Minister for Supply and Shipping (Sen. Ashley) and to endeavour to arrange for more ships to be placed on the service between Sydney (main market for Tasmanian vegetables and dairy produce) and northern ports.

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(29) (contd.)

soon the fate of, for example, the 9,000 ton "River" class vessels which would appear to be, on the one hand, too large for the coastal trades, and on the other hand, too slow for overseas trade.

(30) Vide Table VII, Chapter V.

(31) This service was subsequently taken over by the Shipping Company of William Holyman & Sons Pty. Ltd.

(32) Vide "The Mercury", April 4, 1946.

(33) Vide Burnie "Advocate", July 23, 1946.

APPENDIX A.

COMMONWEALTH MARINE WAR RISKS INSURANCE REGULATION

DEFINITION OF "WAR RISKS".

"war risks" means -

(a) the risks excluded from the Standard Form of English Marine Policy by the following clause :-

"Warranted free of capture, seizure, arrest, restraint or detainment, and the consequences thereof or of any attempt thereat; also from the consequences of hostilities or warlike operations, whether there be a declaration of war or not; but this warranty shall not exclude collision, contact with any fixed or floating object (other than a mine or torpedo), stranding, heavy weather or fire unless caused directly (and independently of the nature of the voyage or service which the vessel involved therein, is performing) by a hostile act by or against a belligerent power; and for the purpose of this warranty 'power' includes any Authority maintaining Naval, Military or Air Forces in association with a power. Further warranted free from the consequences of civil war, revolution, rebellion, insurrection, or civil strife arising therefrom, or piracy.";

(b) loss or damage caused by -

(i) hostilities, warlike operations, civil war, revolution, rebellion or insurrection, or by civil strife arising therefrom; or

(ii) mines, torpedoes, bombs or other engines of war;

(c) loss or damage caused by strikers, locked-out workmen or persons taking part in labour disturbances, riots or civil commotions;

(d) destruction of, or damage to, property caused by persons acting maliciously;

(e) liabilities of shipowners in respect of ships for -

(i) loss of life or personal injury to masters, officers, crew and pilots, and hospital, medical and funeral expenses resulting therefrom;

(ii) repatriating masters, officers and crew;

(iii) loss or damage to the clothes or effects of masters, officers and crew;

(iv) wages of masters, officers and crew during unemployment consequent on shipwreck; and

(v) the cost of removal of wreck,

when any such liability arises from any of the risks specified in the preceding paragraphs of this definition.

(f) liabilities of shipowners arising out of the capture or detention by the enemy of masters, officers and crew; and

(g) expenses incurred by shipowners during the detention of ships in consequence of the existence of a State of war between His Majesty and any other power, or under the instructions or advice of any Commonwealth Department or Commonwealth Authority issued or given in expectation or in consequence of any such event,

and includes such other risks as the Treasurer, by order published in the Gazette, declares to be war risks for the purposes of these Regulations.

APPENDIX "B"

COMMONWEALTH MARINE WAR RISKS INSURANCE.

PREMIUM RATES.

AUSTRALIAN COASTAL CARGOES

Date	Rate %
Up to 30/11/43	15/-d.
From 1/12/43	12/6d.
" 1/ 6/44	10/-d.
" 30/ 9/44	4/-d.
" 31/ 3/45	2/6d.

HULLS ACCOUNT - AUSTRALIAN COAST AND MANDATED TERRITORIES

Date	Rate %
Up to 14/3/44	12/6d. per month
From 15/3/44	10/-d. "
" 30/6/44	7/6d. "
" 30/9/44	3/-d. "
" 31/3/45	1/8d. "

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Chapter FOUR

The Economics of Port Terminals.

THE ECONOMICS OF PORT TERMINALS

164. Ports are the media of clearing houses between sea and land transport and on their proper location and efficiency the success of the transport system as a whole depends. Often ports are established at great cost in unsuitable localities (because land settlement first took place in that neighbourhood) regardless of the fact that perhaps a few miles away there existed a fine natural harbour. It must be borne in mind that the shipowner, with vessels in which he has invested his capital and with constant current expenses for running and maintenance, desires above all things speedy despatch[1]; and further, in considering the requirements of competitive ports, it must be realised that the element of greatest influence in the competition for shipping between ports is the so-called load factor or possibility of a ship bringing cargo to a port, and at the same time taking another cargo out.

165. From the shipowners' point of view a number of small ports is undesirable. The ideal would be an adequate number of well-equipped and well laid out large ports, each possessing a natural harbour, a natural hinterland, and adequate railway facilities. At this "ideal" port it should be possible to discharge whole cargoes, and to take in whole cargoes, without removing a vessel from her berth. It would be in the interests of "liner" owners to limit the number of ports as far as possible. "Tramp" owners would prefer to have one ship in six ports rather than six ships at one port, provided the above facilities exist. It is a fact that as the distribution of cargo amongst a number of small ports increases, especially where centralization at a few large ports is practicable, freight rates tend to rise in proportion. A railway manager also prefers a limited number of outlets, and it is a common practice to give tapering rates for long distance haulage, and, whether haulage is short or long, terminal charges at each end remain the same.

166. In 1925, the Wellington Harbour Board adopted and published a Report made by a Special Committee set up to investigate the practice of charging a flat rate of freight on the exports of the Dominion of New Zealand shipped from the various ports.[2] They pointed out that the flat rate and "call-at-your-farm" policy was encouraging large capital expenditures and overhead cost, to make provision for oversea shipping at numerous ports round the coast far in excess of the possible requirements and trade of the country. The solution obviously lay in a concentration at the main ports, allowing them to provide better facilities for cargo handling and quick despatch of vessels, assuring regular shipments of goods. Regular shipments in their turn would help to stabilise market prices ruling overseas.

167. In Australia there are 40 ports which are used for the overseas trade, but approximately 75 per cent leaves from the following eleven ports :

> Sydney; Melbourne; Pirie; Adelaide; Fremantle; Newcastle; Wallaroo; Bunbury; Brisbane; Geelong; Hobart (17 per cent of total of the eleven ports, and 12 per cent of all ports).

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(1) Vide paras. 245-251 , Chapter V.
(2) The matter was reviewed again in 1926 and 1928 by Special Committees, the resolution passed in 1925 being re-affirmed on both occasions.

168. That Australia does not suffer from a shortage of ports is clear. The coastline of the continent is 12,210 miles long, giving 244 square miles of territory for each mile of coast. The overseas trade, however, is confined to a coast line of about 5,000 miles in length. Insofar as this State is concerned, port development is beset with few difficulties. There are ten ports serving the island with a coastline of less than 1,000 miles.

169. Since a port is a community undertaking, certain broad principles in respect of administration should be noted, viz :-

(a) Whatever form of administration is adopted, the whole of the foreshores within the port area should be under the absolute control of the State, either directly or by delegation of powers to a public corporation or trust.
(b) The administration of the port should be free from political influence of any kind.
(c) The administration should include representatives of the various bodies interested in the port's welfare.
(d) The port should be self-contained financially, and revenue should be expended solely on its maintenance and development, any surpluses being used for the building up of ample reserve funds, reducing port charges and extinguishing capital debt.
(e) Rates, dues and charges should not be complicated, should be capable of easy collection, and levied so that there is an even distribution of taxation.
(f) Capital charges should be so adjusted as not to be a burden on the community and adequate arrangements should be made for the ultimate amortisation of debt.
(g) Port developments should be kept ahead of actual trade requirements. This is very difficult to realise in practice for a growth in the volume of trade may need to decide port development.

170. The forms of port administration generally adopted in the British Empire are through the medium either of a port trust, a municipality, a railway corporation, or the State itself. Autonomous control through port trusts has, on the whole, proved successful. The trust is created by an act of the legislature and is given definite powers for the development and administration of the port. The trustees are usually partly nominated by the Government, and partly elected from the payers of port rates and dues. Port trusts with full autonomy have complete control over finances and float their own loans, subject to certain limits prescribed by Parliament. Loans frequently take the form of debentures repayable in 30, 44 or 60 years, according to the estimated life of the works. In the case of wharves, sheds, warehouses, floating plant and machinery, 30 years is the generally recognised period, whereas in the case of solid masonry docks and capital utilized in the purchase of land, 60 years is considered justifiable.

171. Control by a municipality is not usual, although the practice is common in Europe and the United States of America. State control and aid, as opposed to State management, has much to be said in its favour. Whatever form of port control is adopted, the advantages of a close relationship between the ports and the transporting media behind the ports, both railways and roads, are so great that co-ordination by some controlling authority is essential. In the United Kingdom, power is given to the Minister of Transport to co-ordinate the working between railways and independent ports, and while at some ports, which are not railway ports, a railway company operates the traffic

within the port estate under an agreement with the port authority, at most of the large ports there are exchange sidings where control is transferred from the railway company to the port authority, and the locomotives of the latter do the haulage inside the port estate. In the United States and in Canada this practice has been extended to what is known as the Belt Line System, whereby the port authority exercises complete control not only over the railway in the vicinity of the wharves, but also over the zones encircling the city and suburbs.

172. Tasmania was the first of the states to depute the management of ports to harbour boards. The first act creating a marine board dates as far back as 1857 when the board was given the control and management of ports, harbours, docks, wharves, pilots, lighthouses and other matters relating to navigation and shipping from the Henty River on the West Coast to Cape Portland at the north-eastern extremity of the island.

173. A Board began to function in Launceston in January 1858, and since that date a series of acts were passed continually up to 1920. These acts authorised various harbour improvement schemes, altered the jurisdiction of certain authorities, brought new ones into existence and improved the constitutions of existing boards. After 1889, members of the harbour boards were elected instead of nominated.

174. The present administration of ports is governed by the Marine Act of 1921, and subsequent amendments under the provisions of which there are ten port authorities. The Act contains clauses not usually to be found in an Act providing for port administration; there are no less than 51 sections governing matters such as provisions for safety on board vessels, load and deck lines, unseaworthy ships, casualties, and collisions, survey of vessels, certificates for ships and ships' officers, certificates of competency for masters and engineers, courts of enquiry and survey, and the conduct of passengers.

175. The general duties of Boards are set out as follows: "Every board shall, within its own jurisdiction,

(i) Maintain and repair the wharves within its jurisdiction not vested in any other authority or belonging to any private person;
(ii) Make such new wharves as may be found necessary.
(iii) Construct and maintain all such works and do all such things as may be found desirable for the improvement of navigation and the accommodation or convenience of shipping and of all persons resorting to any port or using any works belonging to the board."

176. The Boards have general powers to construct works with the approval of the Governor, to acquire land, erect offices, carry out repairs, to let any wharf, to set up and maintain signal stations and so on.(3) In the United Kingdom such matters would be dealt with by the Board of Trade. In other Australian States, and also in India, they are dealt with by the Governments of the particular territories within which the ports are included. The Tasmanian system has the advantage of economy through centralisation.

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(3) For the 22 clauses relating to general powers see Part VII of the Marine Act 1921, under "General Duties and Powers".

177. Of the ten port authorities constituted, seven are marine boards, and three are harbour trusts. Table I below details certain information relative to each board, viz:

TABLE I

	Composition of Board	Term of Office	Method of Election
Marine Boards			
1. Hobart	9 wardens	3 years	Wardens elected by shipowners of the port and importers and exporters.
2. Launceston	5 wardens	3 years	Wardens to be male citizens qualified to vote at elections of aldermen. Electors require similar qualifications.
3. Devonport	9 wardens	3 years)	Wardens to be British subjects over 21 years of age, and qualified voters. Electors to be persons qualified to vote at elections of councillors in their respective voting districts.
4. Burnie	7 wardens	2 or 3)	
5. Circular Head	5 wardens	3 years)	
6. King Island	5 wardens	3 years)	
7. Strahan	1 master warden & 2 wardens	During) pleasure)	
Harbour Trusts			
8. Leven 9. N.E.Harbour 10. Smithton	(each 5 trustees)	3 years	Trustees to have qualifications as laid down for wardens(nos. 1-7 above) and electors required to posses qualifications specified in same place.

178. The jurisdiction of the Marine Boards is not confined to actual harbour limits, but is as follows :

Hobart - From South West Cape round the Southern and Eastern coasts to Cape Portland.

Launceston- From Cape Portland along the North coast to Badger Head.

Mersey - From Badger Head to the Western side of the mouth of the River Leven.

Burnie - From the Western side of the mouth of the River Leven to the eastern side of the mouth of Sister's Creek.

Circular Head - From the eastern side of the mouth of Sister's Creek to the parallel of 41½°S. Latitude on the West Coast.

King Island - The coast of King Island.

Thus the whole coast of Tasmania is placed under jurisdiction with the authority of the harbour trusts confined to their own harbour.

179. From an examination of the clauses of the Marine Act 1921-44, there would appear to be two omissions. First, no provision is made for vesting in the marine boards or harbour trusts foreshore and other properties necessary for the conduc of operations. Secondly, no power is taken to prohibit the construction of wharves, jetties and other structures below high water mark by persons other than the marine boards or harbour trusts.

180. As to the first: it is usual, when providing in an act for control by a port authority, to vest in such authority not only the land needed for its immediate operations but also all Crown land falling within its jurisdiction situated within a stated distance from high water mark. The object of this, naturally, is to allow of expansion, as need arises, without expensive acquisitions of private properties, the cost of which might necessitate the raising of port dues.

181. As to the second; it is important that no structure that does not conform to conditions laid down by the engineering advisers of the harbour authorities should be permitted, and it is even more important that no such structure should be permitted unless it is needed solely for the furtherance of a private industry. Thus, a sawmilling firm might be permitted, on conditions laid down by the authority, to build a slipway to launch timber into the water, but such firm would not be permitted to build a wharf or jetty at which dues would be levied. In other words, private persons must not be permitted to compete with a port authority in offering landing, shipping and storing facilities.

182. No harbour authority is permitted to expend loan money exceeding £500 in the case of a marine board or £200 in the case of a trust, on any new work or alteration without the approval of the Governor, and the act provides that no more than half of the ordinary wharfage rates are payable on Government cargoes. On the other hand, the harbour authorities have full control over their revenues which are made up of wharfage charges on inward and outward cargoes, and cargoes conveyed from one place to another within the same port; charges against vessels, that is, port and harbour dues, quayage, pilotage, etc.; rates collected under any statute; rents, interest, fees and fines. As is usual the objects upon which revenue may be expended are defined. One object is the creation of reserve funds for repairing or renewing properties destroyed or damaged by fire, storm or accident.

183. Four methods of borrowing are permitted, viz :

(i) By temporary overdrafts from a bank of £5,000 in the case of a board, and £1,500 in the case of a trust.
(ii) Under the provisions of the State Loans to Local Bodies Act, 1921.
(iii) With the approval of the Governor where interest on the amount to be borrowed does not exceed one-third of ordinary net revenue. In this case borrowing may be by issuing debentures, or any other manner approved by the Governor.
(iv) With the sanction of both Houses of Parliament, and in accordance with the terms of a resolution agreed to by both Houses.

184. A further method of borrowing is reserved to the Marine Board of Launceston. Under "The Tamar Improvement Act, 1912" the Board is empowered to carry out various works of improvements, to borrow for this purpose (subject to an affirmative vote in the municipalities concerned) a sum not exceeding £400,000 and for the purposes of founding a sinking fund and paying interest on the loan, impose a rate called "The Tamar Rate".(14) This rate is leviable in the city of Launceston on property subject to municipal rates, and in other municipalities within the Tamar district. Provision is made for the incidence of the rate to be declared from year to year, the maximum being 8d. in the £. Collections are to be made on behalf of the Marine Board by the municipalities within which the rate is levied.

(14) For the financial year ending 1944-45 net Tamar Rate the receipts were £8,416.10. 0.

185. Tasmania has been experimenting with port administration for 90 years and has ports with constitutions older than any in Australia. To obtain the best administration possible it is requisite that all concerned in it, that is, electors and elected, should have a special interest in port problems and management. Where municipal interests are involved, there should be direct municipal representation. Government interests could be cared for by Government nominees but the main body of wardens or trustees should represent an electorate having a direct interest in the port by virtue of paying port rates and dues. There should be no voting from a municipal or political register.

186. If these principles were applied in Tasmania, the constitution of all the ports, Hobart excepted, would be changed. In Launceston it may be objected that the use of the Tamar rate justifies the use of the municipal register. If the River Tamar, already a difficult means of approach, were allowed to deteriorate, Launceston and certain other municipal areas would suffer, or would even become extinct. Means have been adopted to avoid this and funds are being provided by what virtually is a municipal rate. The municipalities finding the money are, therefore, entitled to representation, and should be given power to nominate their representatives. After allowing for direct municipal and Government representation, measures should be taken to ensure that the rest of the wardens or trustees are elected by port rate payers.

187. The plan of conferring powers on the various marine boards and trusts by means of one general act is well suited to Tasmanian conditions, but it does appear that the Marine Boards of Hobart and Launceston are unduly restricted in respect of the construction of new works. The two major ports of the State might well be permitted to embark on new works, and to alter or add to an existing work up to a limit of £10,000. Such new works, alterations or additions would naturally be debited to capital account, and adequate supervising powers would be secured to the Government if a provision were inserted in the act that no new work, and no alteration or addition to an existing work is to be debited to capital account without the approval of the Governor. Such a provision would be an adequate guard against unsound finance.

188. As will be seen from the data in Appendix "A" to this chapter Tasmanian ports operate on a narrow financial margin and port finance in Tasmania generally is in need of reorganisation. It is a generally accepted principle that the revenue of a port should not substantially exceed the total expenditure, that is, interest and sinking fund charges on debt, depreciation fund revenues, reserve and insurance funds and working and all maintenance charges. Moreover, the execution of planned post-war development schemes will result in heavy financial commitments. The provision that Government stores are to pay half charges only should be removed from the act. The principle, recognised by port administrators in the United Kingdom that all traders, private or official, making use of port facilities, should pay for them should be observed. Again, the ports should be enabled to build up reserve funds.

189. It should be noted that Hobart, Launceston and Burnie can now afford an engineer possessing expert marine and harbour experience, and such officers are needed, not only to design and execute works, but to secure a continuous policy of development.(5) There can be no steady progress if engineering schemes for improvement, development and expansion, devised by competent engineers, are subject to alteration by less competent authorities after they have been commenced. However, in order to secure an overall policy of port development it seems desirable that the State Government should appoint a whole time engineer for ports and rivers. The salary offered should be sufficient to attract a fully qualified marine and harbour engineer. The officer appointed should be in independent charge of his department, responsible directly to the Tasmanian Government; his salary and that of his staff could be debited pro rata to the various ports, and he should be responsible for all new works, including design, and hence would secure for all ports a continuity and uniformity of policy in matters of development. Under him there should be subordinate engineer officers stationed at, and paid direct by the ports. Port authorities are jealous of their independence and would, undoubtedly, view such a scheme with disfavour.

190. The revenues of the port authorities are obtained for the most part from dues levied on goods and shipping.(6) On the average, 60-65 per cent of the total revenue is derived from taxes on goods, 27-30 per cent on vessels, and 10-12 per cent from miscellaneous services.

(a) Port dues are paid by the shipowner for the use of water channels, artificial aids to navigation and protection works generally; they covered also the cost of maintaining the coastal lighthouses until they passed under Commonwealth control. When the Commonwealth Lighthouse Service in 1915 took over from the States the work of maintaining the coastal lighthouses, the Hobart Marine Board abolished its rate altogether, and a reduction was made in Western Australia. Hence, to a certain extent shipowners are still paying double dues for one service rendered, but while operating costs remain at their present level the amount now contributed by shipping towards the upkeep of the Commonwealth and State lights and State ports and waterways does not appear to be much larger than it would have been had the states retained the control of the coastal lights and increased their port rates in proportion to the increased cost of working.

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(5) The appointment by the Launceston Marine Board was made as recently as June, 1945. The Burnie Marine Board appointed a resident engineer in 1940 but so far he has not taken up his duties owing to service with the Commonwealth Government. The Hobart Marine Board has engaged a consulting engineer for the past 40 years but in 1945 appointed a full time Engineer-in-Charge.

(6) Some reference is necessary to the method of measuring the size of ships and cargo, viz :-

(a) Gross tonnage is determined by dividing by 100 the contents in cubic feet of the vessel's closed in spaces, comprising that part below weather deck or upper deck, and additional erections built thereon.

(b) Dead weight tonnage is the tonnage of 2,240 lbs. per ton of cargo, fuel and stores that will sink the ship from the light waterline to the plimsoll mark.

(c) Net tonnage is the figure remaining after deduction from the gross tonnage of an arbitrary amount for machinery space, crew space and other spaces required for navigation. Net tonnage represents the space available for the carrying of cargo or passengers and, therefore, the earning capacity of the ship.

(b) Tonnage dues or wharfage rates on ships which are known by various names in those ports where they are levied (e.g. quayage and berthing dues) are a payment by ships for the use of a wharf for loading and/or discharging their cargo. The more general practice is for an overall port due to be levied as a consolidated charge for the use of water channels, navigational aids and wharves.

(c) Wharfage rate per ton on cargo landed or shipped is paid to the port authority by the consignor or consignee of goods. At all Australian ports, except Hobart, and the ports of Victoria, wharfage is paid on exports and imports, while in Western Australia locally produced goods are free from payment of export wharfage rates. In the ports of Victoria and the port of Hobart wharfage is levied on imports only. Wharfage rates vary according to the value of the specific goods. Special concessional rates are often granted by a port authority to subsidise a local industry, e.g machinery and materials for the Burnie paper mills.

191. Port assessment in British ports is generally on the lines indicated above. At Liverpool all goods brought to the port, whether to the river or to the docks, are liable to pay tonnage dues, and goods brought into the docks pay an additional dock rate. Precisely the same dues are levied on overside cargo as on cargo landed on a wharf, water space being considered as valuable as wharf space. At Bristol there is a due on every article brought into the port, whether landed on the wharf or not, and, in addition, a licence fee is charged on every barge according to its carrying capacity. At Glasgow all goods conveyed upon, or shipped or unshipped in, the river or at the harbour are liable for dues. On the Tyne, which is the great coal export port, the Tyne Commissioners are authorised to levy an export due on all coal exported; in addition they levy a river due on all goods shipped in or unshipped from any vessel, and a deck rate on goods discharged from vessels in the docks. At Belfast and Leith all goods using the port, whether imported or exported, pay dues.

192. So far as Tasmania is concerned a general port due is levied, together with a pilotage rate, and if there is no full time pilot, this service is usually performed by the harbour master of the particular port. Table II below shows the port and pilotage charges for the seven Tasmanian ports. The data for both Tables II and III have been extracted from the latest editions of the handbooks of rules and regulations of the several ports.

CONTD.

Port	PORT DUES - per gross registered tonnage		Pilotage Dues(7) per gross ton			
			Sail	Steam	Minimum	Maximum
Circular Head	2d. on arrival, with specified exceptions	Inwards	4d.	3d.	£2	£10
		Outwards	4d.	3d.	£2	£10
King Island	3d. per net ton registered on arrival	1d. per net ton for every service performed by Harbour Master				
Leven	2d. per net ton registered on arrival	Inwards	2d.	2d.	-	-
		Outwards	-	-	-	-
Smithton	1d. per ton per every steam vessel on arrival. 2d. per ton per every sailing vessel on arrival. (If visited twice between 2 terminal ports, not more than 1½d. for steamers and 3d. for sailing vessel unless cargo is taken in more than once.)	Inwards	-	-	-	-
		Outwards	-	-	-	-

(7) The rules governing the payment of pilotage rates vary from port to port. Unless the master of the vessel holds an exemption certificate, the following vessels are liable to pay pilotage rates whether a pilot is employed or not :-

Hobart: Vessels over 75 tons gross
Launceston: All vessels pay.
Devonport : Vessels over 50 tons gross.
Burnie : Vessels over 150 tons gross
Circular Head : - Vessels over 50 tons net.

193. Each port has its own schedule of wharfage charges which are levied on all goods imported or exported, so that every ton of goods contributes, in some measure, to general port funds. The official lists of wharfage charges give the rate for each particular commodity with a general charge for goods not enumerated. Table III shows a list of goods which commonly appear in the schedule of wharfage charges of each of the several ports. Some marked variations in the rates charged are revealed. In Appendix "B" to this Chapter more complete data are presented in respect of wharfage rates on goods, the import or export trade of which is mainly concentrated in one port. Apart from the fact that the commodity pattern of trade is different as between ports, there is a lack of uniformity in the method of levying wharfage rates, a good having a special rate under some schedules of rates, but covered by the general rate in others. It is difficult, therefore, to prepare a comprehensive table of comparable rates ruling on a wide range of goods.

194. In addition to the eight main ports around the coast already referred to, there are a number of smaller centres, such as Wynyard and St. Helens, at which there are port facilities and limited interstate traffic. So far as the ports of Hobart and Launceston are concerned, a much greater proportion of the population and volume of production is served than is the case with the other ports which serve localities close to the ports only. On the north-west coast the hinterland extends for a maximum distance of 30 miles inland except in the case of Burnie, the approach to the mining areas of Roseberry and Zeehan. The port of Strahan serves the mining district of Queenstown and a fairly extensive area of timber production. The distribution of the import and export trade among the nine Tasmanian ports (including King Island) for six selected years in the period 1923-24 - 1944-45 is presented in Tables IV, (a) and (b). The following should be noted in respect of the years selected, viz :-

1923-24 : By this year the initial post-war boom had spent itself and the pattern of production and trade was being stabilised.
1928-29 : Pre-depression boom year.
1931-32 : Through year of depression.
1935-36 : Recovery setting in.
1939-39 : Immediate pre-war year.
1944-45 : Last year for which data are available.

195. From Tables IV (a) and (b) it will be observed that the concentration of trade in the two main ports of Hobart and Launceston is more marked in the case of imports. However, apart from the increasing trade of the North-western ports of Burnie and Devonport, and the heavy decline in the case of Ulverstone it is difficult to abstract any particular trend in the volume of trade passing through the several ports over the twenty year period under review. As to the effects of wartime shipping controls on the distribution of trade among the ports it should be noted that in 1944-45, 47.8 percent (1938-39, 46.0 per cent) of total imports were landed at Hobart, whilst only 39.8 percent (1938-39, 45.14 per cent) of goods exported were shipped from Hobart. On the other hand, the Northern ports handled a proportionately greater amount of exports during the war period than was the custom in pre-war years. Goods produced in Southern Tasmania have, in many instances, had to be railed to Launceston, Devonport or Burnie for shipment involving a considerable increase in marketing costs(11).

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(11) Vide Chapter VII.

TABLE III

WHARFAGE CHARGES ON SELECTED GOODS LEVIED AT TASMANIAN PORTS

GOOD	Hobart		Launceston		Burnie		Devonport		Strahan		Stanley		Smithton		Ulverstone		King Island	
	In	Out	I.	O.	I.	O.	I.	O.	I.	O.	I.	O.	I.	O.	I.	O.	I.	O.
Bricks, per 1,000	2/11	-	6/-	1/-	6/-	2/-	5/-	2/6	4d	-	4/-	1/-	6d	10/-	5/-	-	5/-	6d
Calcium Carbide per net drum	-	-	-	-	6d	-	6d	-	-	-	6d	-	6d	-	6/8 per ton	-	1/-	-
Cement, per ton	2/6	-	2/6	-	-	6d	-	6d	-	6d	-	-	-	-	-	-	5/-	-
Coal, per ton	6d	-	1/3	-	1/6	-	-	1/6	1/-	-	1/-	-	1/-	-	1/-	-	5/-	-
* landed into hulk	*																	
Timber Log, per 100 super ft	3d	-	3d	3d	1/6	5d	1/6	6d	-	4d	-	1/-	-	1/-	-	6d	-	6d
Timber Sawn " " " "	3d	-	3d	3d	1/6	5d	1/6	6d	-	4d	-	4d	-	4d	-	3d	-	6d
Wool, per bale	-	-	9d	6d	1/-	6d	-	6d	-	-	1/-	2/-	1/-	2/-	-	3/4	-	-
Wool, per bag or fadge	-	-	6d	3d	6d	6d	-	3d	-	-	6d	6d	6d	6d	-	perton	-	-
Goods not specified in by-laws & regulations of the Marine Board or Trust (per ton)	5/-	-	2/- 5/10 (heavy goods)	1/8	6/8	3/4	5/10	3/4	-	2/6	5/-	3/4	5/-	3/4	5/-	3/4	5/-	3/4

TABLE IV(a)[8]

Recorded Value of Imports into Tasmanian Ports, 1923-24 - 1944-45.

Port	1923-24		1928-29		1931-32		1935-36		1938-39		1944-45	
	Value £A	% of Total	Value £A	% of Total	Value £A	% of Total	Value £A	% of Total	Value £A	% of Total	Value £A	% of Total
Hobart	5,007,915	51.1	4,400,192	47.65	3,259,067	50.0	4,726,146	49.4	5,153,858	46.0	7,069,291	47.8
Launceston	3,311,969	33.8	3,534,140	38.3	2,284,153	35.01	3,370,138	35.2	3,950,644	35.21	4,982,128	33.6
Burnie	549,423	5.6	549,462	5.95	346,305	5.3	558,996	5.8	949,626	8.5	988,117	6.7
Devonport	560,486	5.7	442,976	4.8	317,720	4.9	429,240	4.4	615,737	5.5	1,072,080	7.2
Ulverstone	139,820	1.4	90,272	1.0	66,282	1.0	91,026	1.0	115,657	1.0	(9)49,409	0.3
Strahan	90,905	0.9	96,705	1.1	165,863	4.6	238,000	2.5	245,467	2.2	342,926	2.3
Stanley	72,573	0.7	45,260	0.5	29,466	0.45	47,991	0.5	56,881	0.5	67,242	0.5
Smithton	45,205	0.5	45,847	0.5	35,212	0.5	59,047	0.6	69,900	0.6	83,336	0.6
King Island	30,357	0.3	30,392	0.3	30,284	0.45	43,561	0.5	57,708	0.5	158,083	1.0
Total	9,808,653	100.0	9,235,246	100.0	6,533,902	100.0	9,564,145	100.0	11,215,478	100.0	14,812,612	100.0

(8) Data for this and the following table have been extracted from Statistics of Tasmania, Part IV, Trade and Shipping - Interstate and Oversea (Govt. Printer)

(9) Figure for 1943-44 : 84,563tons, or 0.6 per cent of total imports for that year. The unusually low tonnage for 1944-45 was due to a temporary cessation of the King Island - Melbourne run. The service was resumed in June of this year.

TABLE IV(b)

Recorded Value of Exports from Tasmanian Ports
1923-24 - 1944-45

Port	1923-24		1928-29		1931-32		1935-36		1938-39		1944-45	
	Value £A	% of Total	Value £A	% of Total	Value £A	% of Total	Value £A	% of Total	Value £A	% of Total	Value £A	% of Total
Hobart	4,759,854	53.8	5,024,809	51.5	3,679,139	52.25	4,629,322	49.7	5,523,241	45.1	8,349,544	39.8
Launceston	1,970,795	22.3	2,593,888	25.7	1,931,331	27.4	2,588,870	26.95	3,070,424	25.1	6,230,950	29.7
Burnie	680,916	9.1	661,370	6.8	461,387	6.55	667,283	7.7	1,376,749	11.25	2,697,427	12.9
Devonport	576,895	6.5	532,307	5.45	322,538	4.6	488,460	5.25	878,136	7.2	2,020,572	9.6
Ulverstone	200,897	2.3	108,131	1.1	40,264	0.6	75,202	0.8	124,966	1.0	(10)6,054	-
Strahan	391,050	4.4	541,506	5.55	405,078	5.75	543,456	5.8	725,209	5.9	851,002	4.05
Stanley	123,748	1.4	179,823	1.8	108,378	1.5	175,684	1.9	283,182	2.3	483,056	2.3
Smithton	88,251	0.9	48,851	0.5	31,621	0.45	59,322	0.6	84,273	0.7	54,230	0.25
King Island	51,127	0.6	68,471	0.7	63,228	0.9	81,041	0.9	168,972	1.35	192,264	0.9
Total	8,843,533	100.0	9,759,156	100.0	7,042,964	100.0	9,308,650	100.0	12,233,152	100.0	20,884,999	100.0

(10) Figure for 1943-44 : 16,904 tons, or 0.09 per cent of total exports for that year.

It should be noted that in the case of Devonport, the export figures are inflated by limestone shipments to Newcastle which totalled 202,047 tons in 1938-39, but only 122,153 and 69,738 tons in 1943-44 and 1944-45 respectively.

196. Reference was made in paragrap h 166 to the economies resulting from a few large well equipped ports as compared with a number of small ports. It is important to consider for a moment the possibility of concentrating Tasmanian shipping at Hobart, Launceston, Burnie (except, perhaps, for limestone) and Strahan. Some economy in time would be effected and the quicker turnover of space would probably enable the same traffic to be carried in fewer vessels, although the saving in this respect may not be more than one vessel, at the most two, per month. The ports eliminated under such a scheme would be Devonport, Ulverstone, Wynyard, Smithton and Stanley. Except for Devonport, the tonnage handled at these ports is not substantial. In the case of vessels carrying limestone, it should be noted that, although they carry full cargoes of limestone outwards, they carry very little inwards cargo. The road and rail distances to the various north-western ports from Burnie are as follows :

	Road	Rail
Devonport	30 miles	26 miles
Ulverstone	10 "	15 "
Wynyard	12 "	12 "
Smithton	53 "	66 "
Stanley	51 "	55 "

The principal effect of a diversion of traffic from the smaller ports would be the increased cost of transport to the port of shipment. Moreover, there is no guarantee that there would be any equivalent reduction in the shipping freight rate.

197. Railway facilities in the State have been developed along lines dictated by the short hauls to the many ports in view of the fact that most of the freight hauled is for export. The secondary industries have also, for obvious reasons, grown up around the main ports and, except for the recently introduced Boyer newsprint industry the longest haul of any secondary production from factory to post is 13 miles. The mining industry is an exception but except for the transport of calcines from Roseberry to Hobart and coal from the north-east fields to Railton and Hobart, there is very little long distance haulage involved. Even so, when long distance haulage is mentioned the term is merely relative, the longest haul from Queenstown to Hobart being only 342 miles, less than the direct distance from Sydney to Armidale in New South Wales. The average haul in Tasmania is only 50 miles. As a result, both locomotive power and rolling stock are inadequate to meet the demands which would arise from the concentration of shipping at one or two ports. Extensive reconstruction and modernisation to the main ports would need to be carried out also, although some schemes are already being planned or actually executed. It would, therefore, appear that the present decentralisation of traffic to and from the State is suited to Tasmanian conditions.

198. Before concluding this review of Tasmanian port terminals, reference should be made to the main physical characteristics and available ship and cargo handling facilities.

(a) Hobart is situated on the right bank of the River Derwent, some 11 miles from its mouth. The river up to the town averages 2½ miles in width, and is free from navigational dangers. The minimum depth in the channel is 36 feet, and there is no bar. Within a mile from the banks depths are generally from 10 to 12 fathoms; within a quarter of a mile there are at least 3 fathoms. Sullivan Cove, in which most of the shipping accommodation is concentrated, has a depth of 4 fathoms 100 yards north east of Battery Point, and depths increase to 9 or 10 fathoms in the middle of the Cove. Spring tides rise 4½ feet; neap(12) 3½ ft. Vessels berth at the piers and move away without tugs.

The Marine Board has commenced its post-war development scheme which will include an estimated total expenditure of at least £300,000 (£197,500 will be spent in the complete renewal of Ocean pier alone). The Board was authorised to borrow up to £100,000 during the financial year 1945-46.

(b) Launceston is situated at the head of the River Tamar, a tidal stream, about 41 miles from the sea. The river entrance between Low Head and West Head is about 2½ cables in width. The depths of water range from 11 to 27 fathoms. There is no bar and the largest vessels can enter in any weather and at any time of the tide, in safety. There are, however, certain obstructions to navigation that must be removed before Launceston can be classed as a port without risks, and between Rosevears and Launceston there is a succession of shoals, and the channel is narrowmand tortuous. Vessels of about 300 feet in length with 20 feet draught can berth in the basin off the town, but owing to the narrowness of the channel, passing vessels set up a considerable scend(13) so that a careful lookout on hawsers is necessary on board the vessel berthed. The rise of tide at Launceston is 13 feet at springs and 9 feet at neaps. Oversea vessels with a draught of more than 19 feet and tonnage of more than 3,000 tons are berthed at Beauty Point or Bell Bay, about 8 miles inside the heads on the western bank. The wharves are 500 and 350 feet long respectively, with mooring beacons ahead and astern. The minimum depth of water alongside at low water is 40 feet. The disadvantages of Launceston having these sub-ports separated by more than 30 miles from the parent port are obvious and the port of Burnie conveniently situated, has therefore been developed.(14)

The wharf space at Launceston is 3,000 square feet and shed space is 54,000 square feet. Nearly 500 square feet of wharf space, namely, Town Pier, was condemned in 1945, and there is an urgent need for the present concentration of traffic at King's Pier to be removed. The Launceston Marine Board should also follow the example set by the

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(12) The tide soon after the moon's first and third quarters in which high water level is lowest.

(13) Upon the relation of the entrance width to the internal width and area of the harbour largely depends the reduction of 'range'. Range, applied to waves, denotes the vertical rise and fall of sea waves; the amplitude of the vertical motion of a ship due to the range of waves is known as 'scend'.

(14) Road freight costs Bell Bay, or Beauty Point, to Launceston amount at present to 15/- per ton.

Hobart Marine Board and purchase a 25-ton electric crane. The current expenditure on developmental works recently authorised by the Launceston Marine Board was £100,000. The Joint Committee of both Houses of Parliament (appointed 30/10/1945), which investigated the River Tamar deep water port facilities and the possibility of constructing a bridge across the Tamar(15) recognised the need for additional wharf frontage, cranes and mechanical equipment generally.

(c) Burnie. The length of the Burnie breakwater is 1,250 feet with a depth up to 42 feet at low water and a wharf alongside, 736 feet in length by 9 feet wide, with a depth at low water of from 30 to 40 feet. There are three other berths in addition of 500, 420 and 415 feet in length respectively. The Board plans a harbour extension scheme including the decking of existing piers in concrete and the erection of new storage facilities. As soon as a 40-ton crane can be secured, the task of extending the breakwater by 1000 feet will be commenced.

(d) Devonport. Devonport is a tidal port situated on the River Mersey about 1 mile from the mouth of the river. A new wharf of 1600 feet frontage is to be constructed south of the existing limestone bins and intensive dredging operations to the extent of 1½ million cubic tons of material are planned with a newly acquired electric bucket dredge. In conjunction with the Railways Branch of the Transport Commission, plans for the improvement of the railway system serving the port are being prepared.

199. So far we have been concerned solely with charges and dues payable at Tasmanian ports, but no study of shipping cost problems can legitimately consider inward or outward charges only. In the case of this particular study relating to the trade between Tasmania and the mainland reference needs also to be made to the charges and dues of the ports of Melbourne, Sydney, Brisbane(16) Adelaide and Fremantle. A comparative survey is difficult by virtue of the fact that the schedules of charges on ships and goods vary widely and very often refer to different services. Since each main port exists as a separate entity, it is not possible, owing to varying working costs, for uniform rates of port charges to be made, although uniform rates as well as uniform systems of rating would undoubtedly be an advantage.

200. Melbourne.

(a) Under the regulations of the Melbourne Harbour Trust Commissioners tonnage rates are payable by every vessel berthed at the rate of 3/4d. per gross registered ton per day, provided that ¼, ½ or ¾ of the rates shall be paid for those parts of a day equal to, or less than, 6, 12, or 18 hours respectively. In all cases the minimum charge is equal to the charge for one day. Vessels trading solely between ports in the Commonwealth only pay 50 per cent with a minimum in all cases of 2/6d.

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(16) Unfortunately, only very limited were available for the port of Brisbane, which is controlled by the Marine Department, with all maintenance and other work being carried out by the Harbours and Rivers Department. With the exception of two wharves all the wharves are privately owned. Hence the port charges levied by the Government at Brisbane are relatively light, yielding just sufficient to meet working expenses. The port rate is fixed at 6d. per ton net for a period of 30 days. The general wharfage rate - 2/6 per ton.

(15) In order to assist in the development of the North-east area of the State, an alternative to the bridging of the Tamar would be the construction of port facilities at Bridport on the North-east coast. Yet another port, but if interstate vessels would call the freight cost would be lower than the total cost incurred by railing to Launceston for shipment.

(d) Wharfage rates for selected commodities are set out in Table V below(19) viz :

TABLE V.

WHARFAGE RATES ON GOODS PAYABLE AT PORT OF SYDNEY

Articles	Inward Wharfage Rate	Outward Wharfage Rate
Shipped at and Arriving from any port within the Commonwealth.		
Bacon bark, bones, butter, cheese, cream, eggs, fish (fresh or frozen), hams, oysters, poultry, rabbits, tinned milk (per ton)	2/6	-
Fruit (green) (per package)	1½	-
Iron and steel, pig iron, galvanised iron and fencing wire, wire netting, single-stranded drawn copper wire, bar copper, drawn copper and brass tubes and copper ingots (per ton)	2/6	1/6
Timber (sawn or rough) per 630 ft. super	2/6	-
Road metal and gravel(per ton)	3d.	-
General articles		
Bricks (per 500)	2/6	-
Coal (per ton)	1/-	6d
Iron and Steel(scrap) (per ton)	2/6	-
Ore (per ton)	1/3	4½d
Wheat (per ton)	-	9d
Petroleum, crude (per ton)	2/-	-
Flour Bran, Pollard, Sharps and Mill Offals (per ton)	-	9d.
Timber(sawn or rough) per 630 super feet	3/6	1/6
Vegetables (per case)	1½d.	-
Wool (per butt. or bale)	9d	9d
Goods not enumerated (per ton, by weight or per ton at 40 cubic feet measurement)	4/-	1/6

202. Adelaide (a) Under the State Harbors Act 1913-1927 port dues are payable on all ships arriving in any port in South Australia or in the waters of the State, according to the following scale, viz :-

(19) Source: Schedule of Wharfage, Harbour and Transhipment Rates payable under the Port of Sydney Regulations 1925-40.

(b) There is a special berth charge for the actual use of a wharf at the rate of 3/- per 100 feet of the length of the vessel for every six hours with a minimum charge equal to the charge for one day.

(c) In addition, there are charges for storage, sheds, equipment, lighting and conveniences at certain specified rates. The charges for the rent(17) of sheds vary with the size of the shed. In the case of vessels trading solely between ports within the Commonwealth the charges payable are only 50 per cent of those specified. If the charges exceed a sum equal to 1/- per ton on the cargo shipped from a vessel trading beyond the Commonwealth, or 6d. a ton for a vessel trading between ports in the Commonwealth the Trust refunds the excess amount paid.

(d) Wharfage rates are payable only on imports. Goods which have been produced or manufactured within the Commonwealth and which arrive at Melbourne from any port in the Commonwealth are only 50 per cent of the general rate specified, namely, 5/- per ton gross. Goods arriving from any port within the Commonwealth, but which are not produced or manufactured within the Commonwealth, pay the same rate as imported foreign goods.

201. Sydney. Under the New South Wales Harbour and Tonnage Rates Act of 1920 the following charges are levied on ships and cargo by the Maritime Services Board of New South Wales, viz :-

(a) Tonnage charges per gross registered tonnage on vessels under 240 tons are payable in respect of each day, or part of a day, as follows :-

Vessels not exceeding 60 tons - 2/6
Vessels over 60 tons and not exceeding 120 tons - 5/-
Vessels over 120 tons and not exceeding 180 tons - 7/6
Vessels over 180 tons and under 240 tons - 10/-

(b) Tonnage rates on vessels of 240 tons and over are payable as follows. For each complete period of 24 hours the rate is ¾d. per ton; and for periods of less than 24 hours at the rate of 3/16d. per ton in respect of each six hours.

(c) Storage charges. All goods imported or landed upon any wharf or shed have to be removed within 48 hours after the discharge of the vessel at any one berth otherwise storage charges must be paid according to the following scale :

Timber - for the first 4 days, 1d. per ton per day, thereafter, 2d. per ton per day(18)
All other goods - 2d. per ton per day for the 1st week.
3d. " " " " " " 2nd "
4d. " " " " " " 3rd "
6d. " " " " " " 4th and subsequent weeks.

(17) Rent and storage fees are important items of cost to the Tasmanian exporter especially when goods have to be transshipped. Storage charges are at the rate of 1/- per ton for the first three days and an additional 6d per ton for every subsequent three days. The rent for sheds averages £3. per day for a shed 40-60 ft. wide.

(18) In accordance with normal practice, 630 feet of rough timber or 620 super feet of sawn timber is taken to be the equivalent of 1 ton.

From or to any port or place beyond the Australasian states 4½d. per ton (both in and out), provided that 2½d. per ton only is paid, (a) on any ship calling for orders and neither discharging or loading any cargo and, (b) any ship en route to or from any Australasian State and discharging or loading cargo in South Australia.

The tonnage of a ship on which port dues are to be paid is the net registered tonnage and no vessel pays more than 9d. per ton for port dues in any six months.

(b) Any ship sailing beyond the State via Port Adelaide or out ports is in addition charged coasting dues at the rate of 3/4 per ton.

(c) Tonnage rates are payable on the gross registered tonnage of vessels which have no exemption and which berth directly or indirectly at any wharf under the control of the South Australian Harbors Board. The schedule is as follows :-

For each G.R.T. of the vessel 3/4d. per ton for the first period of 24 hours or part thereof, 3/16d. for each additional period of 6 hours or part thereof. Vessels trading interstate pay 90 per cent of the above rates.

203. Fremantle

(a) The regulations for the Port of Fremantle are framed under the Fremantle Harbour Trust Act 1902-13. The tonnage rates payable are assessed at 1/24d. per registered ton of a vessel for each complete hour during which the vessel occupies a berth. The minimum charge for each entry into the port is that payable for 12 hours.

(b) Generally, goods landed from a vessel must be removed within sixteen working hours. Transhipment cargo is allowed a free storage period of 24 working hours. If goods are not removed within the specified time, storage charges are payable at the rate of 1/- per gross ton for the first week and, for every subsequent week, the sum of 3d. per ton additional to the amount payable for each preceding week. No goods are allowed to remain in any shed or upon any wharf for a period longer than four weeks. The storage rate on transhipment cargo and cargo landed and reshipped is 6d. per ton per week.

(c) All goods are subject to wharfage charges, the general rate being 5/- per ton. The following table is illustrative of some of the special rates ruling and has been compiled from the schedule published in the Handbook of Harbour Trust Regulations, viz :-

TABLE VI.

WHARFAGE RATES ON GOODS PAYABLE AT PORT OF FREMANTLE.

Description of goods	Inward Cargo	Outward Cargo
All goods without specific rates	5/-	5/-
Chaff in bags	5/-	5/-
Iron & Steel (per ton)	5/-	-
Hay and straw in bales not compressed	5/-	5/-
Coal (in bags) per ton	2/8	-
Timber - per ton	2/6	1/6
Wool (per single bale)	Nil	9d
Minimum charges per consignment	6d	6d

204. The Tasmanian exported when consigning goods to South Australia and Western Australia on the one hand and Queensland on the other frequently finds it necessary to ship via Melbourne and Sydney. Transhipment charges and their relation to the costs of distribution of specific exports will be discussed in Chapter VII and here we shall be concerned only with the actual rates payable.

(a) Sydney. The charge levied on most goods transhipped within the port is 6d. per ton but there are a number of special rates, viz :-

TABLE VII(20)

TRANSHIPMENT CHARGES AT THE PORT OF SYDNEY.

Article	Transhipment Rate
Fruit (green) per ton	6d
Timber (sawn or rough) per 630 ft.super	6d
Timber (in shooks) 40 ft. cubic	6d
Palings (for fencing) per 630 ft super	6d
Road metal and gravel per ton	1d
Fruit (green) permpackage per ton	6d
Bacon, butter, cheese, eggs, fish, poultry, Hams, tinned milk per ton	6d
Bricks, per 500	6d
Kerosene, per case	3d
Wool, per butt, fudge or bale	3d
Goods not specified, per ton by weight or per ton of 40 cubic feet measurement (at the oprtion of the Commissioners)	6d
Minimum Charge(per ton)	3d

(b) Melbourne. Goods transhipped within this port not later than ten days after such goods have been discharged are exempt from rates. Thereafter, the transhipment charge is equal to a wharfage rate of 1/- per ton.

205. Insofar as dues on ships(21) are concerned, it will be seen from the above review that, although the aggregate sum payable by shipowners may be substantial the effect

(20) Compiled from the Wharf, Harbour and Transhipment Rates payable under the Port of Sydney Regulations, 1925-40.

(21) Including income tax and duty on ships' stores, as well as port and tonnage dues, pilotage and light dues.

on shipping freight rates is relatively small. It is computed as a rough estimate, on the basis of the inadequate data available, that such charges represent only 3 per cent of total ship operating costs. Hence it is not expected, nor is it practicable, that a reduction in these charges would have any corresponding effect on the ruling freight rates. On the other hand, if the facilities available to the shipowners for the dues levied are either inadequate or inefficient resulting in, for example, a slow turn-round of vessels, then freight rates must invariably rise to cover the increased cost of ship operation. Insofar as shipping services are less efficient and/or regular the shipper of goods suffers.(22) The importance of efficient port terminals will be more fully emphasised in the discussion in Chapter V. In this chapter we have merely reviewed some basic data.

(22) Vide Chapters VII and VIII. The shipper is always more concerned with the efficiency and regularity of services than with the actual cost, for without the former production for export would be, to say the least, hazardous. The wharfage charges payable by shippers are, as such, insignificant, although they do represent additional costs incurred by, say, the Tasmanian exporter and not by his Victorian rival.

APPENDIX "A".

REVENUE ACCOUNTS OF TASMANIAN MARINE BOARDS AND HARBOUR TRUSTS, 1938-39 AND 1944-45.

(Source: Statistics of Tasmania, Part VI, Section II (Govt. Printer).)

Board or Trust		RECEIPTS			EXPENDITURE					BALANCE	
		Taxes, Dues, etc.	Other Sources	TOTAL	Works and Services	Interest on loans, etc.	Administration	Other	TOTAL	From last year	To next year
		£	£	£	£	£	£	£	£	£	£
Marine Boards--											
Hobart :	1938-39	51,394	3,691	55,085	38,989	8,164	2,734	995	50,882	32,152	36,355
	1944-45	39,109	4,073	43,182	41,489	1,074	2,426	608	45,597	19,495	17,080
Launceston:	1938-39	57,985	5,371	63,356	15,169	15,620	3,159	29,408	63,356	-	-
	1944-45	46,009	21,080	67,089	53,978	11,024	4,061	136	69,199	2,110	-
Burnie :	1938-39	29,686	4,090	33,776	2,456	15,943	2,275	3,362	24,336	17,653	27,093
	1944-45	25,007	8,748	33,755	4,444	18,128	2,212	5,508	30,292	40,437	43,900
Devonport :	1938-39	29,351	4,496	33,847	15,128	8,696	2,289	535	26,648	35,577	42,776
	1944-45	34,049	5,579	39,628	15,831	9,093	2,644	1,113	28,681	43,552	54,499
Strahan :	1938-39	6,397	-	6,397	4,443	995	401	-	5,839	3,379	3,937
	1944-45	4,661	404	5,065	970	2,720	525	637	4,852	12,472	12,685
Circular Head:	1938-39	4,193	-	4,193	536	1,982	442	-	2,960	3,896	5,129
	1944-45	4,422	-	4,422	1,389	1,999	475	-	3,863	5,001	5,560
King Is. :	1938-39	2,096	153	2,249	367	-	367	1,603	2,337	505	417
	1944-45	2,543	458	3,001	812	-	574	1,585	2,971	3,619	3,649

Appendix "A" (Cont'd).

Board or Trust		RECEIPTS			EXPENDITURE					BALANCE	
		Taxes, Dues, etc.	Other Sources	TOTAL	Works and Services	Interest on loans, etc.	Administration	Other	TOTAL	From last year	To next year
		£	£	£	£	£	£	£	£	£	£
Harbour Trusts --											
Smithton :	1938-39	1,529	-	1,529	-	308	297	-	605	498	1,422
	1944-45	1,475	-	1,475	731	363	217	-	1,311	1,542	1,706
Leven :	1938-39	2,681	2,991	5,672	1,916	3,000	785	-	5,701	1,670	1,641
	1944-45	2,608	1,179	3,787	1,428	1,724	826	-	3,978	568	377
TOTAL :	1938-39	185,312	20,792	206,104	79,004	54,708	12,749	36,203	182,664	95,330	118,770
	1944-45	159,883	41,521	201,404	121,072	46,125	13,960	9,587	190,744	128,796	139,456

APPENDIX "B".

WHARFAGE CHARGES ON GOODS LEVIED AT TASMANIAN PORTS.

Port	Good	Rate Inward s. d.	Outward s. d.	Inward s. d.
1. Hobart. (No outward charges made.)	Bricks, per 100	3½		
	Cement, per cwt.	1½		
	Coal, per ton	6		
	Coke, per ton	6		
	Iron, per cwt.	1½		
	Lead, per cwt.	1½		
	Limesand, per ton	3		
	Machinery, per cwt.	3		
	Metallic ore, per ton	3		
	Metal sheathing, per cwt.	3		
	Metal, loose, nei, per cwt.	3		
	Steel, per cwt.	1½		
	Timber, per 100 super feet	3		
	Tin plates, per cwt.	1½		
	Wine, per cwt.	1 0		
	Goods, not elsewhere specified in case, cask or other package, per foot measurement	1		
	Goods, heavy, not elsewhere specified, per cwt.	3		
2. Launceston.	Agricultural Implements, per cwt.		1	3½
	Bark, per ¼ ton		3	-
	Wattle bark, per ton		-	1. 3
	Bricks, per 500		6	-
	Bricks, per 1000		-	6. 0
	Butter, per box		1	-
	Coal, per ¼ ton		3	-
	Coal, per ton		-	1. 3
	Coke, per ¼ ton		3	-
	Coke, per ton		-	1. 0
	Fish, fresh, per cwt.		1	-
	Hides, per ¼ ton		6	-
	Skins, per bale		6	-
	Hides and skins, per bale		-	1. 0
	Hops, per foot		6½	-
	Iron (pig and cast scrap) per ton		-	3. 0
	Iron (wrought-iron) per ton		-	1. 0
	Lime, per ¼ ton		3	-
	Brass (ingots or scrap) per ton		-	1. 0
	Metals, minerals and ores, nei, per cwt.		1	-
	Machinery (not packed) per cwt		-	3½
	Palings, per 100		2	-
	Cement, per cwt.		-	1½
	Steel per cwt.		-	3½
	Tiles, per 500		6	-
	Tiles, per 1000		-	6
	Tallow, per ½ ton		6	-
	Tallow, per ton		-	3½
	Timber (log, sawn) per 100 super ft.		3	3

Port	Good	Rate Outward	Rate Inward
		s. d.	s. d.
	Wool, per bale	6	9
	Wool, per bale	3	6
	Wool, per double dump bale	1. 0	-
	Goods, n.e.i., ½ per cubic foot, or per cwt.	1	1¼
	Heavy goods, n.e.i., per cwt.	-	3½
3. Burnie.	All goods not enumerated, per ton	3. 4	6. 8
	Bricks, per 1000	2. 0	-
	Slates, bricks, roofing tiles, per 1000	-	6. 0
	Cement, per ton weight	6	-
	Iron ores and other ores and minerals :		
	(a) under 40/- value at Burnie, per ton	6	-
	(b) over 40/- and 80/- at Burnie, per ton	1. 0	-
	Iron scrap, per cwt.	1	-
	Ores and minerals in bags except otherwise enumerated, per ton	2. 0	-
	Ores, lead in bags		
	(a) when current price of lead £17 or less per ton, per ton	1. 0	-
	(b) when current price of lead exceeds £17 per ton, per ton	2. 0	-
	Hides, per cwt	3	-
	Timber (sawn) per 100 super ft.	5	1. 6
	Wood-pulp and paper manuf'd in Tasmania, per ton	9	-
	Newsprint, per ton weight	-	3. 4
	Wool, per bale	6	1. 0
	Wool, per bag	6	6
	Agricultural implements, per ton	-	5. 0
	Materials and machinery for use in erection and operation of wood pulp paper mills, per ton	-	2. 6
	Materials for use in manufacture of wood pulp and paper mills, per ton	-	2. 0
	Calcium carbide, per drum or case	-	6
	Coal and coke, per ton	-	1. 6
4. Devonport.	Goods, not elsewhere enumerated, per cwt.	2	3½
	Timber, per 50 super ft.	3	9
	Palings and staves, per 50	3	-
	Ores and minerals, per ¼ ton	6	-
	Iron ores and other ores and minerals (under 40/- per ton in value) per ¼ ton	1½	-
	Scrap iron, per cwt.	-	2
	Gypsum, per 5 cwt.	-	3½
	Cement, per ton	6	-
	Bricks, roofing tiles, per 500	1. 3	3 per 50
	Wool, per bale	6	-
	Wool, per fadge	3	-
	Wool, per double dump	1. 0	-
	Hides and skins, per cwt.	3	-

Port	Good	Rate	
		Outward	Inward
		s. d.	s. d.
	Coal, coke, per 10 cwt.	9	-
	Machinery per cwt.	2	3½
	Calcium carbide, per drum or case	-	6
	Butter box material, per ft.	-	2
5. Strahan.	Goods, not elsewhere specified, per ton	2. 6	-
	Goods, not elsewhere specified, in case, cask, drum or package, per ft.	-	1½
	Goods, heavy, not elsewhere specified, per cwt.	-	3
	Coal, per ton	-	1. 0
	Barytes	1. 0	-
	Blister copper, or matte or copper cathodes or slimes per ton	8	-
	Bluestone, per ton	1. 0	-
	Calcines, per ton	6	-
	Concentrates, fluxes or pyrites, per ton	4	-
	Ores in bags or loose, per ton	1. 0	-
	Pig iron, per ton	-	2. 0
	Silver lead bullion, per ton	8	-
	Metal, scrap only, per ton	4	-
	Bricks, per 100	6	-
	Bricks, per 100	-	4
	Slates and Tiles, per 100	-	4
	Cement, per ton	6	-
	Timber (log or sawn) per 100 super ft.	4	-
	Sawn timber(dressed) per 100 super ft.	-	5
	Sawn timber(undressed)per 100 super ft.	-	3
	Polings, staves, laths, per 100	3	3
	Woodwool (undumped) per 40 ft.	1. 0	-
	Machinery, per cwt.	-	3
6. Stanley.	All goods, not elsewhere enumerated, per ton	3. 4	5. 0
	Timber, sawn, per 100 super ft. or part	4	-
	Timber, log, per 100 super ft. or part	1. 0	-
	Timber, imported, per100 super ft.	-	1. 0
	Timber, Tasmanian, per 100 super ft.	-	4
	Iron ores and other ores and minerals (under 40s. value per ton), per ton	6	-
	Scrap iron, per ton or part	1. 8	-
	Sand and clay, per ton or part	6	-
	Bricks, minimum, per 1000	1. 0	4. 0
	Wool, per bale	2. 0	1. 0
	Wool, per bag or fadge	6	6
	Coal and coke, per ton	-	1. 0
	Calcium carbide, per drum		6
7. Smithton.	All goods, not enumerated, per ton(weight or measurement)	3. 4	5. 0
	Timber, sawn, per 100 super ft. or part	4	-
	Timber, log, per 100 super ft. or part	1. 0	-

Port	Good	Rate	
		Outward	Inward
		s. d.	s. d.
	Imported timber, per 100 super ft.	-	1. 0
	Tasmanian timber, per 100 super ft.	-	4
	Slates, bricks, and roofing tiles (minimum charge 4s.), per 1000	-	4. 0
	Bullion, ores, minerals, per ton	1. 6	-
	Iron ores and other ores and minerals under 40s. value per ton, per ton	6	-
	Bricks (minimum 1s.), per 100	1. 0	-
	Wool, per bale	2. 0	1. 0
	Wool, per bag or fadge	6	6
	Scrap iron, ton or part	1. 8	-
	Sand and clay, ton or part	6	-
	Coal and coke, per ton	-	1. 0
	Calcium carbide, per drum	-	6
8. Ulverstone.	All goods, not enumerated, per ton	3. 4	5. 0
	Timber, in log, per 100 super ft.	6	6
	Timber, sawn, per 100 super feet	3	-
	Ores and minerals, per ton or part	9	-
	Wool, per ton	3. 4	-
	Wattle bark per ton	3. 4	-
	Coal or coke per ton	-	1. 0
	Bricks, slates or roofing tiles, per 100	-	6
	Calcium carbide, per ton	-	6. 8
9. King Is.	Bricks, slates, per 1000	-	5. 0
	Cement, per cask	-	6
	Cement, in bags, per cwt.	-	3
	Carbide, per drum	-	1. 0
	Lime, per cwt	-	3
	Machinery, per ton	-	5. 0
	Goods, not otherwise enumerated, per ton	3. 4	5. 0
	Minerals, per ton	3. 0	-
	Timber, log, per 100 super feet	6	-
	Timber, sawn, per 100 super feet	6	-

Chapter FIVE

The Economics of Shipping Freight Rates and Services.

CHAPTER V.

THE ECONOMICS OF SHIPPING FREIGHT RATES AND SERVICES

205. The present chapter will be concerned with various aspects of the economics of shipping freight rates and services with special reference to the following :

(a) Schedules of shipping services to Tasmania.
(b) Organisation of the interstate shipping companies.
(c) Trends in ruling freight rates 1913-1946.
(d) Factors determining the level of freight rates for any particular route.
(e) Distribution of shipping as between Tasmanian ports.

206. In reviewing the shipping services and freight rates available to Tasmanian importers and exporters since the pre 1914-18 war period, our main concern will be the interstate trades since Mainland markets absorb on the average over 70 per cent of Tasmanian exports(1). Again, although freight and charter rates, fares, routes and sailings in the coastal trades may be capable of control by the Commonwealth Government(2) there can be no such control exercised over vessels plying overseas trades.

207. Three ships operating companies are engaged in the Tasmanian trades, namely :-

Huddart Parker Limited.
Union Steamship Company of New Zealand Limited.
William Holyman and Sons Pty. Ltd.

(a) The firm of Huddart Parker Limited dates from the arrival in Australia of Captain Peter Huddart in 1852, and T.J. Parker in the following year. By 1870 Huddart Parker and Company had a fleet of sailing craft regularly plying the coal trade between New South Wales and Victoria. In 1880 the first steamer was purchased and in 1889 the firms entered the Tasmanian trade having been requested by the Tasmanian Woolgrowers Agency Company to carry stud sheep from Launceston to Melbourne.

(b) The Union Steamship Company of New Zealand Limited commenced operations in Dunedin in 1875 with a fleet of five steamers aggregating 2,126 tons. The Company entered the inter-colonial trade between Australia and New Zealand in 1877. In 1904 the Loongana was especially built for the Tasmanian service. These two companies later merged for specific purposes and formed Tasmanian Steamers Pty. Ltd. which owns the steamships Nairana and Taroona, serving Bass Strait.

(c) William Holyman and Sons Pty. Ltd., is engaged in both the inter and intra-state trades. This company is not a member of the Australian Steamship Owners' Federation but it has never been challenged on this ground by other ship operators owing to the small volume of cargo offering in

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(1) Vide Chapter VI.
(2) Vide the discussion in Chapter III, para. 151-161. Alternatively, State Governments may (with the help of the Commonwealth) subsidise specific industries.

the minor coastal ports. In any case Holymans' have built up firm business contacts and competition on the basis of rate cutting would be not only costly but long and hazardous. In any case the Union Steamship Co. and Huddart Parker have large stocks of shares in the company.

208. The shipping services to Tasmania will first be classified on the basis of the years 1913, 1920 and 1927,(3) viz :-

TABLE I

SHIPPING SERVICES BETWEEN TASMANIA, THE MAINLAND AND NEW ZEALAND

Route	1913	1920	1927	Remarks
Melbourne - Launceston	Passenger and cargo twice weekly	Passenger and cargo thrice weekly	Twice weekly, 1st April - 15th Sept. Thrice weekly rest of year & additional sailings 18-26 December.	Large percentage of unoccupied berths and space except at holiday time
Melbourne - Devonport, Burnie	Passenger and cargo twice weekly	Passenger and cargo twice weekly	Passenger and cargo twice weekly. Additional sailings 10-26 December	Ditto
Melbourne - Hobart	Passenger and cargo once a week. Service en route to and from N.Z.	Jan. to Feb. weekly cargo service. Fortnightly, March to December	Cargo service weekly.	The passenger service was discontinued in 1916 with the abandonment of Melbourne New Zealand connection.
Melbourne - Strahan, Hobart	Passenger and cargo service every 10 days	Passenger and cargo service at regular intervals	Monthly cargo service, Melb to Strahan & vice versa. Cargo service between Hobart & Strahan weekly.	The 1927 service was quite adequate owing to decline in trade.
Sydney - Launceston	Passenger and cargo service Fortnightly.	Passenger and cargo service fortnightly.	Cargo service fortnightly.	The passenger service was discontinued in 1921, in view of the poor support. In 1920 vessels averaged only 32 per trip from Sydney. The 1927 service was able to cope with far more cargo than was offering and the steamer frequently had to proceed to Burnie or Devonport to obtain a full cargo.

(3) Note in respect of the years selected:
1913: Pre 1914-18 war period.
1920: Year of proclamation of coasting trade provisions of the Navigation Act.
1927: Post Navigation Act era.

Route	1913	1920	1927	Remarks
Sydney - Hobart	Passenger and cargo service every 5 days Jan to Feb. weekly, March to Nov. Every 4 days in December.	Passenger and cargo service weekly.	Passenger & cargo services weekly. Passenger services fortnightly during winter months.	The steamers were running with a very large number of berths each way unoccupied, also high percentage of cargo space unoccupied. A large number of overseas vessels now call for wool, zinc and other cargo which previously was shipped to the Mainland for transhipment.
Sydney - N.W.Coast	Weekly cargo service	Weekly cargo service	Weekly cargo service (mostly 2 & sometimes 3 steamers)	No change. The service was not utilised to full extent.
Hobart - N.Z(direct service)	Passenger and cargo service weekly	Periodical sailings as required; but little or no general offering, shipments consisting mostly of timber.	Same	Passenger and cargo service discontinued 1916. In 1915 taking the year as a whole the total number of persons averaged to N.Z. 8 saloon, 11 steerage, and from N.Z. 13 saloon, 8 steerage. The cargo position was equally unsatisfactory.
Hobart - Fremantle	-	-	A boat every 3 months.	-
Low Head - Strahan	-	One cargo boat monthly.	Same	-
Strahan - Hobart	-	Average of 1 cargo boat a week.	Average of 1 cargo boat weekly.	-
Risdon - Port Pirie	-	-	Fortnightly to 3-weekly cargo service.	-
Maria Is.- Sydney	-	-	As required about monthly cargo service.	-
Maria Is.- Melbourne	-	-	Weekly cargo service	-

Route	1913	1920	1927	Remarks
Hobart - Huon - Brisbane and vice versa	-	-	Fortnightly during fruit season March to September	Besides the above services there are mostly 2 cargo vessels weekly between Melb and Launceston, and a passenger and cargo service weekly between Melbourne and Hobart.

209. As from July 7th, 1921, overseas ships, while continuing to call at Tasmanian ports ceased to carry passengers or cargo between Australian ports. The only line that did so was the Commonwealth Government Line which catered for cargo in special circumstances. Table II below compares schedules of overseas shipping services in 1913 and 1929, viz. :-

TABLE II

OVERSEAS SHIPPING SERVICES CALLING AT TASMANIAN PORTS

Route	1913 Service	1929 Service
Hobart from London and South Africa (N.Z. S.S. Co. and S.S. & A. Co.)	14 days	Nil
Hobart-New Zealand - Monte Video - Rio - London (N.Z.S.S. Co. & S.S. and A. Co.)	14 days	Nil
Hobart - British Ports (all overseas companies calling for fuit etc.)	Every few days from February to May.	Every few days during fruit season (February-May) No interstate passengers or cargo.
Hobart-Continental Ports (N.D.L. Co. and German Australian Line	Monthly	Nil

210. Table III below presents data relating to these regular shipping services operating between Tasmanian ports and the Mainland in any immediate pre-war year. Several additional services operated in the peak apple and potato seasons. Also, there are usually a number of vessels which carry limestone between Devonport and Newcastle and several vessels under charter running regular trips between Hobart and Mainland ports with timber.

TABLE III.

REGULAR PRE-WAR SHIPPING SERVICES OPERATING BETWEEN TASMANIA AND THE MAINLAND

Port	Service	Vessel	Frequency	Other ports served by the same vessel on the same trip.
Hobart	Melbourne	Koranui	Fortnightly	Burnie(on return trip as available)
	"	Lanena	"	
	Sydney	Talune	Fortnightly	
	"	Lowana	"	
	"	Zealandia	Weekly(Summer) Fortnightly (Winter)	
	Adelaide	Lorinna	Monthly	
	Brisbane	Ngatoro	Fortnightly	
Risdon	Newcastle	Ngakuta	Monthly	
"	Adelaide	Kekerangu (Calcines)	Fortnightly	
Launces-ton	Melbourne	Taroona	3 trips per fortnight	
	"	Lutana	Weekly	Stanley
	"	Laranah	Weekly	
	Sydney, N'castle	Wanaka	Fortnightly	Burnie,Devonport, Stanley
	Adelaide	Lorinna	Monthly	Burnie,Devonport, Stanley.
Burnie	Melbourne	Nairana	3 trips fortnightly	
	"	Koranui	Fortnightly	If available on return trip from Hobart.
	"	Wareatea	Weekly	Devonport,Stanley
	"	Wannon	"	Devonport, Ulverstone
	Sydney, N'castle	Ngakuta	Monthly	Inwards Devonport
			Fortnightly	Outwards Risdon
		Wanaka	"	L'ceston,Devon-port, Stanley.
	Adelaide	Lorinna	Monthly	L'ton,D'port, Stanley.
Devon-port	Melbourne	Nairana	3 trips fortnightly	
	"	Warearea or Woniora	Weekly	Burnie, Stanley
	"	Wannon	Weekly	Ulverstone,Burnie
	Sydney, N'castle	Wanaka	Fortnightly	L'ton, Stanley
		Ngakuta	Monthly	Burnie. Inwards
			Fortnightly	Burnie,Outwards Risdon.
	S. Aust.	Lorinna	Monthly	Stanley,L'ston, Burnie.
Ulver-stone	Melbourne	Wannon	Weekly	Devonport, Burnie

Port	Service	Vessel	Frequency	Other ports served by same vessel on the same trip.
Strahan	Melbourne & Yarraville	Kowhai	Weekly	
	Melbourne, Pt.Kembla, Yarraville, Sydney, Newcastle.	Kini	Monthly	
Stanley	Melbourne	Woniora) Lutana) Wareatea)	Weekly service maintained by either of these vessels	Devonport, Launceston, Burnie.
	Sydney, N'castle	Wanaka	Monthly	Launceston, Devonport, Burnie.
	S.Aust.	Lorinna	Monthly	Launceston, Hobart, Burnie and Devonport.
Smithton	Melbourne	Leeta-May	Fortnightly.	
		Coomonderry	"	

211. It should be noted that the monthly Hobart/Brisbane (direct) service, the weekly Hobart/Sydney cargo and passenger service and the fortnightly Hobart/Melbourne service are run conjointly by Huddart Parker Ltd. and the Union Steamship Co. Ltd. In respect of the last named route, Holymans' run a service on alternative fortnights by arrangement with the Huddart Parker - Union Steamship combination, and hence a weekly service is available. Of course, all the vessels operating the Tasmanian trades in 1939 are still under requisition, the companies acting as agents for the Shipping Board.

212. In Table IV a list is presented of those vessels serving more than one Tasmanian port on the same trip, viz :

TABLE IV.

VESSELS SERVING MORE THAN ONE TASMANIAN PORT ON THE SAME TRIP.

Vessel	Tasmanian Ports	Mainland Port	Frequency
Koranui	Hobart	Melbourne	
	Burnie(outwards)	"	Fortnightly
Lorinna	Launceston Devonport Burnie Stanley	Adelaide	Monthly
Lutana	Launceston Stanley	Melbourne	Weekly

Vessel	Tasmanian Ports	Mainland Port	Frequency
Wanaka	Launceston Burnie Devonport Stanley	Sydney and Newcastle	Fortnightly
Ngakuta	Devonport) Burnie) Risdon	Sydney Newcastle	Monthly Inwards Fortnightly outwards Monthly
Wareatea	Burnie Devonport Stanley	Melbourne	Weekly
Wannon	Burnie Devonport Ulverstone	Melbourne	Weekly

213. Since 1929 Wm. Holyman and Sons have maintained the connection between King Island and Melbourne. This service was previously maintained by the State Government. Under the Straits Islands Shipping Services Agreement Act, 1934(4) the company now receives an annual subsidy of £4,000. Under the agreement a regular fortnightly service is maintained to and from Melbourne, the vessel calling at either Currie or Narracoopa, (also known as Fraser River) on each of such trips. Alternatively, the Agreement provides for runs from Melbourne to King Island and return, and from Launceston to King Island and return. In addition to these trips the company is required to make special tonnage available, when required, for the carriage of livestock between King Island, Melbourne and Launceston. Exceptions are made in all cases where weather conditions render it impossible to fulfil the terms of the Agreement. The rate of freight Currie - Melbourne and vice versa, as fixed in the Agreement, for general cargo was 28/6d. per ton in 1938-39. This rate is now subject to a war risk surcharge of 10 per cent, a wartime increase which is comparable to an advance of 30-35 per cent in other Australian trades. It is not intended to pursue further the question of Tasmanian intrastate trades although the fact of water transport in south-eastern waters should be noted. During the past 25 years water transport has suffered from road competition, except to isolated ports on the Tasman Peninsular, Bruni Island, Port Esperance and Southport. Only a very small percentage of products are dependent now on river and coastal craft for carriage to market(5). Services range from one or two trips per week and rates of freight between 9/- and 15/- per ton. Statistical records of cargo lifted, much of which is carried at package rates, are not compiled by the Deputy Commonwealth Statistician or any other Government authority and the companies plying these trades advise that estimates would be subject to a high margin of error.

214. Table V presents data relating to the age, type and size of the various vessels operated in the several Tasmanian trades. It will be observed that a number of the vessels

(4) Following on protests from shippers in the islands (King Is., Flinders Is. and the Furneaux Group) regarding the inadequacy of existing services, the State Parliament appointed a Select Committee on 22/5/1945 to consider the provisions of the Agreement of 1934. The Committee tabled its report on 27/9/1945(Government Printer). Vide Para. 237(b).

(5) With the exception of timber.

are well over the proposed age limit of 25 years. As will be emphasised later, obsolescence can rarely lend itself to efficiency in ship operation. As a result, costs are inflated and prices, the freight rates, inevitably tend to rise.

TABLE V.

AGE, TYPE AND SIZE OF VESSELS PLYING TASMANIAN TRADES(6)

Ship Operating Company	Vessel	Type	Year Built	Tons Gross
William Holyman & Sons Pty. Ltd	Wareatea	Freighter s.s.	1883	475
	Woniora	Freighter s.s.	1913	823
	Lannah	Freighter s.s.	1914	701
	Wannon	Freighter s.s.	1917	567
	Larena	Freighter s.s.	1925	1018
	Lutana	Freighter s.s.	1922	918
	Lorinna	Freighter m.v.	1937	1185
Tasmanian Steamers Pty. Ltd.	Nairana	Passenger s.s.	1917	3042
	Taroona	Passenger m.v.	1935	4286
Huddart Parker Ltd.	Zealandia	Passenger s.s.	1910	6683
Union Steamship Co. of New Zealand Ltd.	Koranui	Freighter s.s.	1914	1266
	Kowhai	Freighter s.s.	1910	792
	Kini	Freighter s.s.	1930	1388
	Talune	Freighter s.s.	1930	2742
	Wanaka	Freighter m.v.	1938	2259
	Kekerangu	Freighter s.s.	1919	3146

215. It is difficult to obtain a clear picture of the services operated between Tasmania and the Mainland during the war period since they have varied with prevailing conditions. However, nineteen vessels have been allotted regularly, and, whenever other interstate ships are available they are used for the carriage of bulk cargoes such as primary produce, timber, cement and other goods. The "Zealandia" (2,500 tons carrying capacity) was withdrawn for naval purposes in June, 1940, and was replaced by no other vessel. The "Ngatoro" (1,100 tons carrying capacity) lifted inwards cargo from Sydney. Whilst the "Ngatoro" was satisfactory for some cargoes, it had very inadequate cargo handling facilities. The lifting gear was capable only of lifting loads not in excess of one ton, and consequently single items weighing more than that could not be carried on this vessel. However, the main causes for the serious shipping disabilities suffered by Tasmania over the last six years are to be found not so much in the withdrawal of ships (e.g. Nairana, Zealandia) and the curtailment of specific services, e.g. passenger service to Sydney, East Coast service) but in the decline in the efficiency of the services that remained.

(6) The data are incomplete as unavailable for all vessels.

216. An absence of regular overseas shipping was, of course, fully expected, but some complaints have been heard in respect of inward cargoes which were often transhipped at mainland ports, mainly Melbourne. Moreover, the shipping companies ceased to issue through bills of lading and importers, consequently, had to bear any losses that may have occurred during delays in port and in transhipment. So far as the several Tasmania/Mainland trades are concerned, there have been many complaints made by importers and exporters to the Shipping Board and many more of a public nature. The candidate has examined all the evidence available to a private investigator and conducted limited field investigations, and is of the opinion that, not only have ships from time to time left port only partially loaded, although full cargoes have been offering, but also that important cargoes (e.g. machinery urgently required for defence projects) have been left on the Melbourne wharf since there has been insufficient time to place them on board. Further, cargoes have been frequently carried to and from Melbourne and remained in the ship's hold because there has been insufficient time spent in port to discharge. Delays resulting in short loading and over-carrying of cargo have been due to labour difficulties at Melbourne. Wharf handling generally has been a difficult problem throughout, and the controversy as to the best means of achieving a satisfactory solution extremely verbal. We shall return to the question of stevedoring costs and efficiency in paragraphs 245-251 , when discussing the determinants of freight rates.

217. Before presenting data relating to the volume of inward and outward shipping for selected years, it is necessary to refer to the method of collection of shipping statistics. Special provisions in the Customs Act 1901-1936 require the master of any vessel arriving from any country outside Australia or from any other State of the Commonwealth to enter "inward" at the port of entry and similarly on departure the ship must be entered outward. Among the documents which must be lodged by the master of the ship is a form for statistical purposes setting out the following particulars :-

Name of ship (details of ship, cargo, ports, crew, passengers).
Nationality of ship.
Steam or motor driven.
Sail or auxiliary.
Net tonnage of ship.
Whether carrying cargo or in ballast.
The original port of departure on the voyage to Australia.
The terminal port of voyage on departure from Australia.
Number of crew.

218. These forms are lodged at each port and, in addition to the particulars regarding the ship, particulars are furnished of the passengers and the tonnage of cargo loaded or discharged. The quantity of cargo is stated either according to weight or bulk according as freight is charged and the bulk cargo is converted to tons avoirdupois on the basis of 40 cubic feet to the ton. A point of some significance in the statistics of shipping is their limitation in indicating the trading relations or shipping

connections between different countries or states since it is practicable in a statistical presentation of the direction of shipping to associate only the terminal ports to the exclusion of intermediate ports of call. For instance a liner leaving Sydney for London via Hobart, Melbourne, Adelaide, Fremantle, Durban, Cape Town, Canary Islands will appear in the statistics for the Commonwealth as a vessel from Australia to the United Kingdom. In the records of the different Australian ports of this ship for State and port statistics, the statistical treatment will vary. On leaving Sydney, Melbourne and Adelaide the outward movement of the vessel will be recorded as an oversea vessel departing for the United Kingdom via States; from Fremantle the final port of departure, the record will be (oversea) ships departing direct to United Kingdom. Entering from Sydney (which is the point of commencement of the voyage) into Melbourne, the record will be arrival oversea ship from New South Wales. At Adelaide and Fremantle the records will be oversea ship arriving from N.S.W. via States. It will be noticed, too, that at Melbourne, Adelaide and Fremantle this vessel on its coastal itinerary is recorded twice inward and twice outward, whereas Sydney, the terminal port, records one movement inward and one outward - the entrance into Sydney of this ship represents the termination of one voyage; and the departure from Sydney represents the commencement of another voyage.

219. Similar differences occur in the records of Australian ships in the interstate trade where the intrastate movement becomes a feature. A vessel arriving at Burnie from Melbourne is interstate direct; leaving Burnie for Devonport is an outward local movement from Burnie. Arriving at Devonport it is interstate via ports; departing from Devonport on the return trip to Melbourne is interstate via ports; arriving at Burnie from Devonport is local; departing from Burnie for Melbourne via King Island is interstate via ports; arrival at King Island is local; and departure from King Island is interstate direct. These records apply to the statistics of the several ports; in compiling the results for the State as a whole, however, the arrival and the departure can each be recorded once only, and in the case quoted above the arrival will be credited to Burnie and the departure to King Island; so that if such voyages are frequent, and they are, there will be many more arrivals (interstate) than departures shown at Burnie; and many more departures than arrivals at King Island. The explanation is that the results are for Tasmania as a whole and that for the voyages concerned Burnie is the port of arrival in Tasmania and King Island is the port or place of departure from Tasmania.

220. Table VI below presents data for selected years relating to the total inward and outward tonnage of shipping classified according to the first and last port of call in Tasmania. It will be observed that outward shipping is somewhat more evenly distributed among the ports than inward shipping. Although the figures recorded for Hobart still lead the field in both cases, by 1944-45, apart from the overall absolute decline in tonnage, there had been a definite shift in favour of the Northern ports - a shift due almost entirely to wartime control of shipping since 1939.

TABLE VI(6)

SHIPPING - OVERSEAS AND INTERSTATE

PORT RETURNS OF INWARD AND OUTWARD SHIPPING, TASMANIA 1923-24 - 1944-45.

Port	(+)	1923-24		1928-29		1931-32		1935-36		1938-39		1944-45	
		Tons	%	Tons	%	Tons	%	Tons	%	Tons	%	Tons	%
Hobart	I	682,528	49.3	688,586	55.8	747,260	57.2	945,762	47.8	1,058.979	47.5	232,884	31.8
	O	632,430	46.1	615,378	49.15	749,962	57.3	901,562	44.9	994,548	43.9	220,793	30.0
Launceston	I	313,727	22.7	250,646	20.3	282,130	21.6	368,286	18.6	405,434	18.2	131,012	17.8
	O	287,166	20.9	282,345	22.5	272,638	20.8	402,979	20.1	413,949	18.2	138,483	18.8
Burnie	I	181,543	13.2	150,191	12.2	129,585	9.9	376,752	19.0	465,141	20.85	156,741	21.4
	O	198,825	14.5	163,339	13.0	148,605	11.35	431,551	21.5	496,436	21.8	90,534	12.3
Devonport	I	134,272	9.7	81,129	6.6	71,066	5.4	172,215	8.7	173,021	7.75	152,896	20.9
	O	196,134	14.3	133,570	10.7	88,395	6.75	182,904	9.1	257,727	11.3	216,198	29.4
King Isl.	I	21,740	1.5	21,500	1.7	25,466	1.95	6,200	0.3	11,446	0.5	7,117	1.0
	O	22,400	1.6	21,920	1.75	22,740	1.7	6,377	0.4	11,592	0.5	6,369	0.9
Smithton	I	7,597	0.5	5,542	0.45	4,288	0,3	8,038	0.4	10,257	0.5	3,512	0.5
	O	8,727	0.6	5,688	0.45	4,573	0.35	9,632	0.5	10,498	0.5	3,419	0.4
Stanley	I	24,832	1.8	26,576	2.15	28,669	2.2	66,128	3.35	48,673	2.2	18,002	2.5
	O	12,138	0.9	21,255	1.7	7,831	0.6	35,080	1.75	31,874	1.8	24,237	3.3
Strahan	I	14,202	1.0	9,264	0,75	15,012	1.6	31,092	1.6	46,663	2.1	27,116	3.7
	O	10,065	0.7	6,980	0.6	13,344	1.1	32,699	1.6	46.120	2.0	32,935	4.5
Ulverstone	I	2,538	0.2	-	-	2,110	0.2	1,413	0.1	10,973	0.5	2,992	0.4
	O	4,147	0.3	586	0.05	507	0.1	2,762	0.1	3,042	0.1	2,992	0.4
Total	I	1,383,987	100.0	1,234, 589	100.0	1,306,625	100.0	1,976,896	100.0	2,230,587	100.0	732,270	100.0
	O	1,373,199	100.0	1,252,153	100.0	1,309,400	100.0	2,006,239	100.0	2,276,766	100.0	735,960	100.0

NOTE: The figures tabled above for each port do not take into account coastal movements of shipping. Ships are recorded as arrivals at the first Tasmanian port of call only, and as departures only at the last port of call in Tasmania.

(+) I = Inward. O = Outward.

(6) Data extracted from Statistics of Tasmania, Part IV, Trade and Shipping (Govt. Printer)

221. Before proceeding to analyse trends in the ruling level of freight rates and factors determining same, some reference needs to be made to the organisation of the interstate shipping companies. The following are members of an association registered under the name of "The Australian Steamship Owners' Federation", viz :-

Adelaide Steamship Company.
Australian Steamships Pty. Ltd.,
A.U.S.N. Co. Ltd.
Huddart Parker Ltd.
Melbourne Steamship Co. Ltd.
McIlwraith, McEachern, Pty. Ltd.
James Paterson and Co. Ltd.

These companies operate under a working agreement which came into effect in the following circumstances.

222. As noted in Chapter III, at the outset of the 1914-18 war the fleets of the interstate shipping companies were requisitioned by the Commonwealth Government and the services were carried out under the direction of a Controller of Shipping appointed by the Government. This control operated throughout the war period and for a time afterwards. In the early part of 1920 the Controller of Shipping intimated that the Commonwealth Government was prepared to release the vessels from control provided that the shipping companies continued a joint system of working the vessels similar to the system operating under Government control. The Controller pointed out that with the depleted tonnage available on the coast at the time a better service could be maintained by this means.

223. The shipping companies agreed to comply with the desire of the Government and a tentative agreement was made in May 1920. An agreement was formally executed in May 1921. This agreement provided that the total tonnage of the seven companies should be jointly controlled. Under the arrangement a permanent Traffic Committee, appointed by the companies party to the agreement, meets regularly and allocates the services. In the event of a disagreement arising between the members of the Committee, the principals of the companies are called upon to determine the matter at issue.

224. The financial side of the arrangement was put in the hands of an independent firm of chartered accountants appointed by the Federation, who were given absolute control of the adjustment of accounts as between the respective parties to the agreement. The agreement provides for the payment of prescribed charter rates to the owners of the vessels operating under it. An account of each voyage is to be rendered by the owners to the accountants, by whom periodical adjustments are made. Under these adjustments the profits or losses made by the companies over the period covered by the adjustment are shared on the basis determined by the accountants. At the outset the scale of charter rates paid to the owners resulted in losses by the Federation, notwithstanding that the rates were the normal charter rates ruling before the war. This fact, however, did not necessarily mean that the actual trading resulted in losses, the position being that the charter rates were too high to permit of the Federation showing profits. In order to facilitate the adjustments the rates were reduced.

225. Naturally, the candidate has not been able to peruse the full text of the document and/or later additions to it, but it can fairly safely be said that the agreement has been a decided benefit to both the interstate shipping

industry and the community, in that rationalisation of services has resulted. Without such rationalisation it is doubtful whether the services could have been maintained under the same conditions of efficiency and at the same ruling freight rates. Moreover, certain overseas shipping interests later moved in a similar direction with a view to bringing about a more economic running of their vessels.

226. Apart from the Australasian Steamship Owners' Federation other agreements between interstate shipping companies are in existence. One such has already been noted, namely, the arrangement between the three companies engaged in the North-West Tasmania-Sydney-Melbourne trades. Again, Tasmanian Steamers Pty. Ltd. connecting Melbourne with Launceston, Devonport and Burnie, is under the joint management of the Union Steamship Co. and Huddart Parker Ltd.

227. There seems to be little doubt that the Australian Steamship Owners' Federation is but one section of the English shipping combine known as the Inchcape Group. The combine is openly defended in the United Kingdom for it is claimed that the monopolistic methods adopted eliminates waste, and that the English companies combined are enabled to compete with foreign shipping. With the same motive, namely to avoid costly competition with the Australian companies, the English combine has chosen the easier way and acquired the controlling interests in every Australian company. Thus the A.U.S.N. Company is a subsidiary company of the British India S.N. Company, a member of the Inchcape Group. The McIlraith, McEacharn Line is also an English company, the majority of the shares being held in England. Burns, Philp and Company is an Inchcape Company. The Union Steamship Company is also an Inchcape Company, and with Huddart Parker Ltd. has a large interest in the Melbourne Steamship Company. The firm of W. Holyman and Sons Ltd. is controlled by the Union Steamship Company and Huddart Parker and Company. The firm of McDonald, Hamilton and Co. is also owned by British interests, and the largest shareholders have large interests in Burns, Philp and Co. and the P. & O. Company, both Inchcape companies.

228. If the Navigation Act does, in effect, protect part of the English shipping combine, what is the scope of its monopoly power so far as Australian shipping is concerned? It is difficult to assess the extent of the operations of the shipping companies of Australia for they have many other interests, apart from shipping. In some cases they are interlinked with each other, and also have cross relationships in other industries. The extent of these relationships and co-partnerships are very difficult to determine. Official records of lists of shareholders are incomplete and misleading. For example, a trustee agency or a bank may be found to hold a large parcel of shares in a company. There is nothing to show for whom these shares are held. Other "dummies" are used, consisting of officials of companies and relatives of directors.

229. Some indication of the complex interlocking of Australian secondary industry in general is revealed by the following examples(7), viz :-

(a) The Adelaide Steamship Company holds about half the shares of the Abermain-Seaham Collieries Ltd., and about 35 per cent of the North Bulli Colliery Ltd.

(b) Howard Smith Ltd., which originally had coal and shipping interests, separated its interests, and gave its shipping branch the title of the Australian Steamships Pty. Ltd. This company, in addition, holds controlling interests in Caledonian Collieries Ltd., Invincible Collieries Ltd., Australian Sugar Co. Ltd., Commonwealth Steel Products Ltd. and Brisbane Wharves Ltd.

(c) Several large shareholders in the North Coast Steam Navigation Company are also large holders in Burns, Philp and Coy.

(d) Burns, Philp and Coy. have controlling interests in the Solomon Islands Development Coy. Ltd., Burns Philp (South Sea) Coy. Ltd., Choiseul Plantations Ltd., Shortland Islands Plantations Ltd.

(e) Huddart Parker Ltd. are large shareholders in the Abermain-Seaham Collieries Ltd., in Hebburn Ltd. (colliery), Australian National Airways, Tasmanian Steamers, and also holds 88 per cent of the stock of the Metropolitan Coal Coy. Ltd.

(f) McIlraith, McEacharn Ltd., holds 45 per cent of shares issued by Bellambi Coal Coy. Ltd.

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(7) Extracted from the Report of the Royal Commission on the Navigation Act, 1924. The research project commenced in 1946 by the candidate for the University of Tasmania "The Structure of Australian Secondary Industry", aimed to measure the degree of control exercised by the largest corporations in the economy. The project was planned to fall into the following broad sections, viz :-

(a) Trends in the Scale of Manufacturing Operations, 1914-1944; and 1931-1944.
(b) The Integration of Manufacturing Operations. (Mainly concerned with the extent and significance of central office operations).
(c) The Concentration of Production in Manufacturing. (That is, to what extent do a few firms control the supply of a number of separate products?)
(d) The Product Structures of the Largest Companies (including the causes and economic significance of multi-product production).
(e) The History of Concentration in Selected Industries by selecting a normal trade cycle period so that the movements in concentration and/or deconcentration - together with their various causes - could then be related to the general conclusions arising from my article "Trends in the Concentration of Operations in Australian Secondary Industry 1923-43". ("The Economic Record", Vol. XXI, No. 40). In tracing the history of concentration in selected industries, recourse must be made to causal analysis wherever possible.
The candidate resigned from the University staff early in September 1946 in order to accept an appointment in the Department of Post-war Reconstruction, and hence the project is not yet completed.

230. When the control of seaborne commerce is concentrated in the hands of a relatively few large concerns, as in Australia, the several groups act in "conference"(8). This method of price and product determination(9) may be interpreted as a method of monopolistic control, tending towards higher costs for shipping services, but it is merely the same type of producer agreement as is prominent in all major industries(10). The Australian Shipping Conference is mainly concerned with the allocation of routes and the making of certain rate agreements. By agreeing to despatch ships on days when other conference lines are not booking cargo, each line is enabled to avoid the weak bargaining position which results when shippers have alternative transportation services at their disposal(11). Again, particular lines may confine their services to a specified port. Conference rate agreements usually define the minimum rates at which specific commodities will be transported. The resultant stability in the rates enables the shipper to conduct business on the basis of a constant transport factor. Such is preferable to a fluctuating rate even though it may fall to an exceedingly low level when the companies are engaged in rate wars.

231. Granted, (a) that the interstate shipping companies exercise monopoly power through the Federation and, (b), that they hold shares in a number of industries other than shipping, is it possible to ascertain the extent to which the companies may, or do, engage in monopolistic practices?(12) A few specific examples will serve to illustrate the type of discriminatory monopoly that may be exercised by the shipping companies.

232. Evidence was submitted to the Royal Commission on the Navigation Act 1924 that while the timber freight rate from Cairns to Brisbane was 6/- per 100 feet super, the rate from Mourilyan to Brisbane (a shorter distance on the same route), was 16/4d; from Townsville to Sydney the rate was 7/3d. and from Mourilyan to Sydney (a shorter distance on the same route) 17/7d. The reason given for this remarkable difference in freight rates was that the demands made by the waterside workers at Mourilyan were so great that extra freight had to be charged. The waterside workers were taken from Innisfail)12 miles from Mourilyan) to Mourilyan by special train when required, and returned home by similar means. Their working day commenced from the boarding of the train at Innisfail and ceased on their return

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(8) A "conference" is not a meeting of the representatives of competing lines but the name given to the groups of lines which agree to hold such meetings at intervals and agree to abide by the agreements reached - vide paras. 224-228.

(9) For, after all, the freight rate charged and service rendered is comparable to a price quotation for any particular commodity sold on the market.

(10) Many examples may be quoted such as the Australian Associations of Textile Manufacturers, Cement Manufacturers, etc. Vide Chapter VII.

(11) Compare the conjointly run services, each company operating alternative trips, Hobart/Brisbane, Hobart/Sydneym Hobart/Melbourne.

(12) The effect of the absence of conditions of free entry dueto the Navigation Act should be noted.

from Mourilyan. The higher rate resulted in the Cairns mills ousting the Innisfail and Mourilyan products from the markets. The reasons given by the representatives of the shipping companies for the high rates from Mourilyan were not satisfactory. Handling charges at Mourilyan were undoubtedly heavier than at Cairns but not to the extent of the penalty rates charged. The Commissioners concluded that as the Adelaide Steamship Company, which has vessels on the North Queensland Coast, had financial interests in the Cairns timber industry, preferential treatment was given to timber cargo from the port of Cairns. That is, the industry at Cairns was assisted by a low rate being quoted, while the rival company operating at Innisfail was penalised by a high rate.

233. Our second example of monopolistic action is drawn from the West Australian timber industry(13). Freight rates on timber from Western Australia to the Eastern States in the early 1920's was found to be prohibitive and mills began to close. Representations were made to the shipping companies that a reduction of 20 per cent was necessary. The shipping companies offered a reduction of 10 per cent and refused to reduce any lower. Representations were then made to Scott Fell and Company, a company outside the Federation, which agreed to carry timber from Western Australia to the Eastern States at a rate equal to a 20 per cent reduction on ruling rates. Thereupon, the Federation reduced their rate by 20 per cent and negotiations between the timber industry and Scott Fell were dropped. When it was evident that the latter company was not going to compete the Federation raised the rate quoted by 10 per cent. The timber industry again opened negotiations with Scott Fell and Co., the Federation retaliated by threatening the sawmilling companies with practically a "boycott" if they patronised Scott Fell and Company's vessels. Negotiations again fell through on account of the coal strike.

234. In the middle of 1919, in which year there were heavy crops, the shipping facilities at the ports of Burnie, Devonport and Stanley were so inadequate that producers were unable to place their produce on the mainland markets. Public demand forced the State Government to enter the North-West Coast trades (vide Chapter III) but immediately the interstate companies entered into keen competition. (The chief market for the primary products of the North-west Coast is Sydney and the interstate companies synchronised their sailing dates with those of the State vessels). This attempt to drive the States shipping service out of business gave the North-west coast ports a very frequent service. The amount of cargo lifted increased and Ulverstone rose to the status of an interstate port. Not only does this example draw attention to the functional relationship between shipping facilities and the level of production but also refutes the shipping companies' old contention that they are the sole judges of the service required.

235. (a) In the course of investigating some aspects of the Tasmanian timber industry, the candidate heard a number of complaints from firms regarding the present allocation of shipping space by Wm. Holyman & Sons Pty. Ltd. which has shares in at least two large timber exporting firms, namely

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(13) Note that both examples are drawn from industries situated at a long distance from the market (c/- Tasmania). North Queensland, Western Australia and Tasmania may be considered in terms of the three angular points of a triangle which is the Commonwealth.

Kilndried Hardwoods and K.D. Atkins Pty. Ltd. of Launceston. Thesefirms are members of the Tasmanian Timber Association, and it is alleged that members of the Association have been receiving preferential treatment in respect of available shipping space. One firm, at least, Chesterman & Co. Pty. Ltd., which has refused to join the Association, has lodged an official complaint with the Commonwealth Controller of Timber Supplies, and it is understood that the position is being investigated.

(b) Another recent complaint against Holymans was made during the hearing of evidence by the Select Committee referred to in footnote (4) of this chapter. The Committee received many protests about the accumulation of livestock and cheese on King Island and that, in a number of instances, the Naracoopa (the vessel serving the Island) had left King Island with space reserved for Holymans' general cargo on Robbins' Island and stock from lessees on Hunter Island. Holymans claimed that often the cause of the trouble was that producers would not ship their cattle when space was available because they were waiting for prices to rise. It was stated by witnesses on King Island that the accumulation of cheese was due to the fact that regular weekly shipments had not been lifted, resulting in up to 1,500 cheeses being loaded on the trip with, consequently, poor carriage. Holymans claimed that, had the local company made arrangements to crate the cheese there would not have been any cause for complaint. However, the report, inter alia, recommended that "provision be made for appointment of a Transport Commission representative on the Island, nominated by shippers, to work in conjunction with representatives of Wm.Holyman and Sons Pty. Ltd. to regulate sailings to meet requirements of markets".

236. We must now pass to a consideration of those factors which determine the ruling level of shipping freight rates at any particular time and, in this connection, data are presented in respect of freight rate quotations on general cargo per ton weight or measurement for selected years within the period 1913-1946. (For rates ruling elsewhere on the Australian coast vide Appendix 'A' to this chapter). The years selected roughly correspond to those used earlier in previous tables. Shipping freight rates in some cases do vary with the value of the commodity, but not to the extent that railway freight rates vary. Space is an important consideration and the rates are, therefore, based on tons weight or measured tons, whichever is the greater. Certain commodities of low value are carried at lower rates than the general rates, mainly because handling costs can be reduced. For example, cement is shipped by Holymans for 11/- per ton from Devonport, and chaff is carried on a weight basis Launceston/Melbourne per 20 cwt. Neither of these rates ~~are~~ proportional to the general cargo rate Devonport/Melbourne and Launceston/Melbourne. Some commodities pay more than the general rates, generally either because the cost of handling is higher or space is wasted in stowing (e.g. rolls of newsprint).

TABLE VII.

Interstate Shipping Freight Rates for General Cargo 1913-46.

(Tasmania/Mainland)[14]

Rates are quoted per ton weight or measurement. One ton meas. = 40 cubic feet.)

To	From - Brisbane	Sydney	Melbourne	Adelaide	Fremantle
1913	(50/6T[15]				
Hobart	(31/6D[16]	13/6	13/6	28/-	38/-
Launceston	31/6	13/6	13/6	28/-	38/-
Devonport	31/6	13/6	13/6	28/-	38/-
Burnie	31/6	13/6	13/6	28/-	38/-
1921 (Aug)					
Hobart	45/6	20/-	20/-	46/-	61/-
Launceston	45/6	20/-	20/-	46/-	61/-
Devonport	45/6	20/-	20/-	46/-	61/-
Burnie	45/6	20/-	20/-	46/-	61/-
1925					
Hobart	42/-	20/-	20/-	46/-	61/-
Launceston	40/6	17/6	17/6	46/-	61/-
Devonport	40/-	20/-	17/6	46/-	61/-
Burnie	40/-	20/-	17/6	46/-	61/-
1929					
Hobart	45/-	22/-	22/-	33/-	55/-
Launceston	43/6	22/-	19/6	33/-	55/-
Devonport	43/-	22/-	19/6	33/-	55/-
Burnie	43/-	22/-	19/6	33/-	55/-
1933,34,35.					
Hobart	44/-T 43/-D	20/-	20/-	28/6	63/-
Launceston	44/-T 43/-D	20/-	18/-	28/6	63/-
Devonport	44/-T 43/-D	20/-	18/-	28/6	63/-
Burnie	44/-T 43/-D	20/-	18/-	28/6	63/-
1936 & 1937					
Hobart	44/6T 39/-D	20/-	20/-	28/6	52/6
Launceston	44/6T 34/-D	20/-	18/-	28/6	52/6
Devonport	44/6T 34/-D	20/-	18/-	28/6	52/6
Burnie	44/6T 34/-D	20/-	18/-	28/6	52/6

(14) Source: Quarterly Summary of Australian Statistics. The rate quoted for each year was that ruling at the 30th June. Since the main purpose of this study is to examine trading relations between Tasmania and the Mainland no specific reference to freight rates between Australia and oversea ports will be made in this Chapter. In any case, the proportion of Tasmania's interstate & total trade averaged 80 per cent in prewar years. It has been over 90 per cent during the last six years. However, account will be taken of them, where necessary, when dealing with the cost structure of particular industries. Except in a few cases, where special contracts have been struck and in the case of timber, all interstate rates are quoted on a general cargo basis only.

To	From - Brisbane	Sydney	Melbourne	Adelaide	Fremantle
1938/39(to 22/10/39)					
Hobart	44/6T 39/-D	20/-	20/-	28/6	52/6
Launceston	40/6T 34/-D	20/-	18/-	28/6	52/6
Devonport	40/6T 34/-D	20/-	18/-	28/6	52/6
Burnie	40/6T 34/-D	20/-	18/-	28/6	52/6
23/10/39-1/10/40 (17)					
Hobart	48/6T 42/11D	22/-	22/-	31/4	57/6
Launceston	44/6T 37/5D	22/-	19/9	31/4	57/6
Devonport	44/6T 37/5D	22/-	19/9	31/4	57/6
Burnie	44/6T 37/5D	22/-	19/9	31/4	57/6
2/10/40-15/2/42 (18)					
Hobart	51/2T 44/10D	23/-	23/-	32/9	60/5
Launceston	46/7T 39/1D	23/-	20/7	32/9	60/5
Devonport	46/7T 39/1D	23/-	20/7	32/9	60/5
Burnie	46/7T 39/1D	23/-	20/7	32/9	60/5
16/2/42-30/6/46 (19)					
Hobart	65/7T 50/9D	28/7	28/7	37/1	68/3
Launceston	51/2T 44/2D	28/7	26/-	37/1	68/3
Devonport	51/2T 44/2D	28/7	26/-	37/1	68/3
Burnie	51/2T 44/2D	28/7	26/-	37/1	68/3

237. In respect of the data above three points in particular should be noted, viz :

(a) the sharp rise in level of freight rates 1913-21.
(b) the stability of the rates in the inter-war period. (20)
(c) the wartime inflation of rates as a result of the surcharge first imposed in October, 1939.
(d) the differential between the cost of transhipped and direct cargoes.

(15) T = including transhipment.
(16) D = direct shipment.
(17) 1938-39 rates plus 10 per cent wartime surcharge.
(18) 1939-39 rates plus 15 per cent wartime surcharge.
(19) Some of the 1939-39 rates were advanced at the beginning of this period, viz-
Hobart-Brisbane (transhipped), rise of 6d.
Tasmanian Ports - Sydney, rise of 2/-
Tasmanian Ports - Melbourne, rise of 2/-.
In addition, the surcharge was increased by 15 per cent to 30 per cent.
(20) Of course, stable rates do not necessarily represent a constant proportion of total costs or of selling prices.

238. So far as the movements in the rates between 1913 and 1921 are concerned it must be remembered that while world freight rates fell after reaching a record high level in the post war period of 1918-21, in Australian coastal waters there was no such tendency for there was no compensating decrease in the cost of ship operation. The sharp rise in rates was brought about by the increases in wages, coal, victualling and overhead expenses. The average increases in these costs were as follows :(21)

TABLE VIII

Item	% increase in 1922 on 1913
Labour	63
Deck & Stewards' Stores	161
Engineers' Stores	99
Victualling	83
Wages	123
Coal	155

The above increases do not include those directly brought about by the Navigation Act, namely

(a) cost of alterations to vessels to comply with the provisions of the Act;
(b) cost of wireless services; and
(c) cost of extra manning.

239. Table IX below presents figures for the percentage increase in rates over the period 30/6/1939 to 30/6/1946. It will be observed that apart from the Hobart/Brisbane (transhipped) route the greatest increase in freight costs since 1939 has been on the shortest and most frequently used routes of Hobart/Melbourne and Northern ports/Melbourne.

TABLE IX

Route	Percentage Increase in Freight Rates 1946 compared with 1939.
Hobart/Brisbane	Transhipped- 47.2
	Direct - 30.8
Hobart/Sydney & Melb.	42.9
Hobart/Adelaide	29.8
Hobart/Fremantle	30.0
Launceston)	Transhipped- 26.3
Devonport) to Brisbane	Direct - 29.9
Burnie)	

(21) Data in Table VIII have been extracted from the Report of the Royal Commission on the Navigation Act, 1924. The Commissioners after examining the increased percentage of earnings and costs of certain vessels in the interstate trade concluded that the post war increase in rates was justified. Ofcourse, the Navigation Act was not solely responsible for the increased cost of ship operation. Other factors should be included such as the determination of the Arbitration Court and the Customs Tariff.

TABLE IX (Contd.)

Launceston) Devonport) Burnie	to Sydney	42.9
Launceston) Devonport) Burnie)	to Melbourne	44.4
Launceston) Devonport) Burnie)	to Adelaide	29.8
Launceston) Devonport) Burnie)	to Fremantle	30.0

240. The table above does not allow for the additional costs resulting from the wartime shortage of shipping. Very few direct boats have been available for the carriage of goods exported to Brisbane, Adelaide and Fremantle. Hence, shippers often have had no option but to tranship at Sydney or Melbourne at the following additional costs per shipping ton :-

TABLE X.

Route	Direct Rate 1939 (A)	Direct Rate 1945 (B)	Trans. Costs 1945 (C)	Total of B & C	Percentage increase (over pre-war direct shipments
Hobart/Brisbane	39/-	50/9	14/10	65/7	66.7
Launceston) Burnie)Brisbane Devonport)	34/-	44/2	7/-	51/2	50.0
Tasmanian Ports/ Adelaide	28/6	37/1	25/4	62/5	117.9
Tasmanian Ports/ Fremantle	52/6	68/3	15/6	83/9	59.5

In addition to these extra costs exporters in the south of the State who normally ship through Hobart, frequently have had to rail goods to Northern ports. Further expenses have been incurred in the form of storage charges on the Mainland whilst waiting for boats to Adelaide, Fremantle and Brisbane.

241. As noted earlier shipping freight rates on the Australian coast are quoted on a general cargo basis only with the exception of a few special contract rates (e.g. for cement) and rates for timber. Timber rates for the more important Tasmanian trades before the imposition of the wartime surcharge were as follows :

TABLE XI

Timber Rates,1939

Route	Rate per 100 super ft.
Launceston/Melbourne	5/-
N.W. Coast Ports/Melbourne	5/- (Devonport, Burnie Stanley)
Ulverstone/Melbourne	6/-
Launceston & N.W. Coast ports/ Adelaide	7/-
Hobart/Melbourne	5/-

242. Having surveyed the shipping freight rates ruling in those Australian coastal trades relevant to this study, it is now necessary to refer to the problem of rate making. Contrary to two widely accepted notions the rates are rarely determined solely on the basis of either (a) the number of sea miles travelled or, (b) the cost of ship operation. On the Australian coast the lowest rate per mile is that ruling between the most important ports. For example, between Melbourne and Sydney a distance of 564 miles the rate in, say, 1936 was 20/- per ton and it is the same for Hobart to Melbourne yet the distance is only 470 miles. On a pence per ton per mile basis Melbourne/Sydney cost .348d., whilst Hobart/Melbourne cost .511d., despite a difference of 94 miles. It may be urged that the lower rate between Melbourne and Sydney is due to road and rail competition but even if such is the case, the competition itself may be attributed to the greater volume of business offering between the two ports. Regarding (b) above, the ship operator recognises that the tonnage available on some routes served will be insufficient to cover running costs and hence a certain degree of discriminatory monopoly has to be exercised in determining rates for the several routes(22). Assuming correct judgment on the part of the entrepreneur, the ship operator, the overall result will be an adequate return on total capital invested. Again, the very fact that small vessels only are suitable for the Tasmanian trades results in higher rates than would apply on runs operated by larger vessels. For the difference between the working expenses of a large and small vessel is less than the difference between their respective earning capacities.

243. The costs of ship operation are difficult to determine, and it can fairly be said that little effort has ever been made to analyse the cost of transporting any particular commodity over a certain route. However, it is desirable that some attempt should be made to determine the proportion which each item bears to the total cost of ship operation in order that those items which offer the greatest scope for reduction may be isolated. On the basis of the inadequate data available(23) and by interpolation, the following rough cost analysis is submitted, viz :-

TABLE XII

Percentage Distribution of Ship Operating Costs.

Item	Percent of total operating costs
Fuel	5 - 6
Wages of crew, incl. overtime	7 -10
Interest and amortisation charges	5 - 6
Insurance	2 - 3
Repairs and overhaul	15 -20
Stores and provisions (incl. hire of gear)	7 -10
Commission(24)	4 - 5
Claims	2 - 3
Wharf labour(25)	35 -40
Port dues, wharf rents, etc.	3 - 4
Miscellaneous	15-20

(22) Examples in relation to Tasmania are the Bass Strait Islands and the Ulverstone/Melbourne and Stanley/Melbourne services. A good example of the real determinants of freight rates is obtained from the King Island/Melbourne service. Pre-war the rate ruling for Northern ports/Melbourne was 18/-; that for King Island/Melbourne was 28/6. The margin was to cover the relatively higher cost of running small vessels, the small volume of cargo, the delays caused by weather conditions, lack of cargo handling facilities and the consequent slow turn-round of vessels. A ship is only

244. It should be noted that operating costs probably set a lower limit in rate making disallowing special considerations involving discriminatory rates. The upper limit to be observed is what-the-traffic-will-bear. The rate, in practice, will be determined somewhere between these two (shadowy) limits. The accuracy of the data in Table XII is made even more doubtful by the wide drifts which have undoubtedly occurred during the last six years in the relative significance of each of the items. The wartime surcharge to cover increased operating costs, at present varying between 30 and 35 per cent, has not been increased since Prices Regulation Order 1015 (April, 1943) which stabilised the prices of all goods and services. Rates of wages for crews have risen by more than 30 per cent compared with pre-war and, in addition, there are extra overtime payments due to the introduction of a 44-hour week. Mr. Hytten stated, in the paper previously referred to, that the price of coal has increased by 30 per cent and diesel and fuel oil by 90 per cent. No figures are available to show the relative proportions of these fuels used, but coal burning ships would substantially outnumber oil burners and motor ships, so that the average increase in fuel costs may not be more than 40 to 50 per cent. There has been a direct increase of about 33 per cent in the wages of wharf labour, but this does not nearly measure the total increase. The rate of cargo handling has decreased substantially, and the time spent in port has at least doubled. As a consequence, operating costs are further advanced since wages bills, capital charges and a number of other costs continue during the idle periods. The whole question of cargo handling and the turn-round of vessels in port merits detailed investigation; only brief reference can be made here.

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(22) (contd.) earning revenue, of course, when the function of transportation is actually being performed.

(23) Shipping companies were very guarded when interviewed by the candidate.

(24) Since the main business of a ship is to carry cargo many specialised ways have been devised by shipowners to obtain cargo. It is obvious that a cargo of assorted commodities sufficient to fill all available space is more profitable than a part cargo. Overhead expenses of working the ship must be met whether it is fully or partly loaded. The profits of a voyage depend usually on the last, say, third or quarter of a full cargo. A freight <u>forwarder</u> is an expert in the transportation details of export shipments, especially in respect of the export declaration, consular invoice, bill of lading, marine insurance certificate and so on. Furthermore, an inland exporter can consign goods to the freight forwarder at the port, who will be responsible for booking space on a ship and attending to the requisite papers. The forwarder receives a fee from the shipper and also brokerage from the shipowner for service rendered in the form of assembling many small packages for shipment in bulk.

(25) The freight rate quoted includes the cost of both loading and unloading, as well as sea carriage.

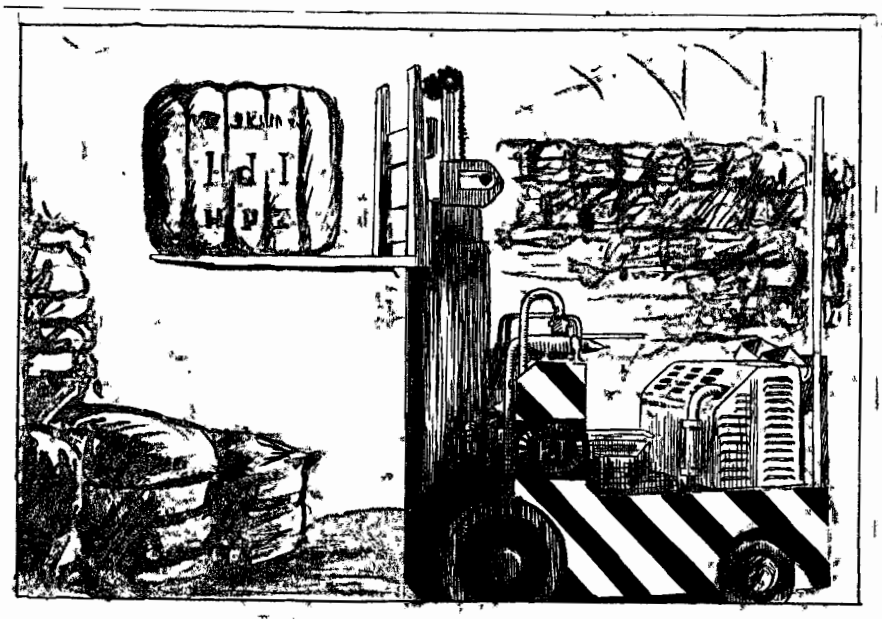
245. Cargo handling approximates over one third of total operating costs; and if the capital charges of a vessel for the time spent in port are added, the cargo handling factor assumes an even larger proportion of total costs. Any analysis of cargo handling on interstate vessels and of mechanical handling equipment available at the various ports would disclose many opportunities for reductions. Still further economies are possible in new ships designed in accordance with the latest plans for economical cargo handling and stowage.

246. Efficient cargo handling on the vessel include the arrangement of masts, booms, decks, hatches, hatch covers and sideports, etc. For example, four masts one at each end of each well deck, are preferable to two masts to facilitate the carrying of deck loads of timber. Long booms to handle timber and steel are also desirable. Short booms of, say, 40 feet in length, results in higher charges for handling and ~~it~~ also increases the period in port. Deck arrangements should permit carrying deck loads; and winches should be placed on raised platforms to facilitate the handling of deck cargo. Side ports are essential to provide sufficient cargo openings to discharge or load a ship in comparatively short time.

247. The principal reason for high cargo handling costs is that packages and other non-bulk cargo have been, and generally still are, loaded by the shipper on to a truck or train, brought to the pier, unloaded, probably stored for a period, then taken from the shed and placed near the ship; then conveyed to the hold by slings, and finally stowed within the holds. With the ship's arrival at the port of destination, the operation is repeated in reverse. The result is that the goods may often be moved by hand as many as twelve times. It is this multiplicity of handling which is mainly responsible for inflating costs. In order to (1) reduce the number of times cargo is handled and (2) increase the speed of handling, the installation of mechanical devices is necessary. Often, a reduction in the number of handlings could be effected, by the use of some standard container into which goods were packed immediately on arrival at the pier.

248. For the loading and unloading of vessels in Tasmanian ports, particularly, the ships' own slings are used, which is not only a time consuming method but also requires at least two winchmen and two hatchmen. By the installation of portal cranes the stowing and discharging rate could be speeded up and the four operators used in the first method above could be reduced to one crane driver. Such cranes are, of course, mobile and can be moved from pier to pier.

249. The fork-lift truck pallet system of shifting cargo on wharves has been proved highly efficient during the war. The fork-lift truck is an American development and was originally used in factories.



At right angles to an upright post, a fork with two prongs about three feet long goes up and down the post canting slightly to the rear when lifting. It can lift a package weighing up to two tons from crane dump to stack. It is driven by a petrol motor and on suitable cargo can do the work of from 10 - 15 men, only one being required to operate it.

It should be noted that fork-lifts are not very satisfactory with bags. Adequate shed space, preferably with inside cranes, is the necessary corollary to adequate unloading and trucking facilities. It will be realised that the movement of goods from the factory to the ship's hold, or vice versa, is but one single handling problem even though separate agencies may be responsible for various links in the total chain of operations. It is, therefore, essential that there be, at each port, complete co-ordination of mechanical handling policy, method and equipment. In this connection, it is desirable that some standardisation be reached in respect of sizes and types of ships. Some have long booms and some have short. The same diversity is true of hatches, hatch covers, stanchions, and other features.

250. Some opposition from unions is bound to arise since improved methods of cargo handling would reduce the number of wharf labourers employed. The situation may be eased by the expected growth in cargo movements around the Australian coast. Even so, it may be necessary for the ship operators to provide some compensating benefits for wharf labourers. An attempt might be made, for example, to provide more regular employment for wharf labourers subject as they have been to daily fluctuations in the amount of work available. An improved method of arranging schedules would help to reduce fluctuations in employment, and this in turn should be more practicable with faster ships and improved methods of cargo handling.

251. In paragraphs 128 - 141 (Chapter III) the experiment carried out in order to improve the organisation of waterside labour forces have been reviewed, and while much could be written on the alleged lack of discipline and efficiency in the industry, it is not intended to do so here.

However, it is interesting to compare the tonnage handled per man hour at, say, the ports of Hobart, Sydney and Melbourne. The latter port is the most highly mechanised in the Commonwealth, but the average tonnage at present being handled per gang per hatch per hour is only sixteen. On the other hand, the comparable Sydney rate is fourteen, whilst the Hobart rate is somewhere between nine and twelve tons per hour. Pre-war, the rates for similar type cargo at each port varied between eighteen and twenty-five tons per hour.

APPENDIX "A"

AUSTRALIAN INTERSTATE SHIPPING FREIGHT RATES ON GENERAL CARGO, 1939. (PER 20 CWT. OR 40 CUBIC FEET).

From	Adelaide	Melbourne	Sydney	d Newcastle	g Brisbane	g Maryborough	Bundaberg	Gladstone	Rockhampton	Mackay	Bowen	Townsville Jetty	b Luc.Pt. & Palm Island	Innisfail	b Brammo Dunk Is. Clump Pt.	b Cardwell	Cairns	Pt. Douglas	a Goondi	Cooktown
Fremantle	33/-	38/-	43/-	45/6	48/-	71/6	74/-	74/-	75/6	80/6	101/6	102/6	107/6	105/6	90/6	103/-f	110/-	105/6a
	Adel.	22/-	30/-	32/6	38/-	61/6	64/-	64/-	55/-	67/6	88/6	89/6	94/6	92/6	77/6	90/-f	97/-	95/-
		Melb.	22/-	24/6	30/-	52/6	55/-	55/-	47/6	50/-	71/-	72/-	77/-	75/-	60/-	73/-f	79/6	80/-a
			Syd.		23/-	44/-	44/-	47/-	37/6	42/6	63/6	64/6	69/6	67/6	52/6	65/-	72/-	70/-
				Newc.	23/-	44/-	44/-	47/-	37/6	42/6	63/6	64/6	69/6	67/6	52/6	65/-	72/-	70/-
					Bris.	23/6	26/-	26/-	27/6	32/6	53/6	54/6	59/6	57/6	42/6	55/-	62/-	57/6
									Rock.	32/6	53/6	54/6	59/6	57/6	42/6	55/-	62/-	57/6
									Mackay	32/6	53/6	54/6	59/6	57/6	42/6	55/-	62/-	57/6
									Bowen	24/6	43/6	47/6	49/6	47/6	35/-	49/6	52/-	52/6
										T'ville.	25/6	27/6	27/6	27/6	25/6	27/6	32/-	32/6
										Luc.Pt.	22/6	22/6	-	17/-	23/-	25/6	25/6	-
												I'fail	-	22/6	24/6	27/-		
														Cardwell	23/-	25/6	25/6	-
															Cairns	17/6e	25/-	24/6

a. Plus Cairns transhipment, wharfage and harbour dues 2/- per ton.
b. Plus Townsville transhipment, wharfage and harbour dues 1/8 per ton.
c. Townsville to Mackay and Bowen when transhipped at Brisbane to be charged rates from Brisbane.
d. By direct steamer except from Adelaide (Trans. 57/- F.N.) 43/-, 6/6, 7/6).
e. Local cargo 12/6d.
f. Add a. or b.
g. Plus 6/6d per ton nett Sydney transhipment charges ex Fremantle.

TO COOKTOWN. The rates shown are only intended to apply to non-transhipping steamer. As all cargo for Cooktown is at present trans-shipped at Cairns, the two stage rates should be charged. The rates to Cooktown on such basis will be:-

	Without Transhipment.	With Transhipment
From Townsville	32/6	43/6
" Lucinda Pt.	31/-	41/-
" Innisfail	32/6	42/6
" Cardwell	31/-	41/-

War Surcharge of 35% all ports (except Fremantle, 30%) to be added.

Chapter SIX

An Analysis of Tasmania's Interstate and Overseas Trade.

CHAPTER VI.

AN ANALYSIS OF TASMANIA'S INTERSTATE AND OVERSEAS TRADE.

252. Prior to Federation each Australian Colony published statistics of its trade with the other Colonies. A similar record was continued by the Commonwealth Government under the provisions of the Constitution Act (Section 93). On the expiry of the "book-keeping" period, these records were discontinued as from 13th September, 1910, and the latest published returns were for the year 1909. Later the Governments of Western Australia and Tasmania (in 1922-23) revived the records, and hence statistical data are now available for these states.(1) The fact that practically the total trade of these states is seaborne renders the collection of such data relatively simple. At the Conference of Statisticians held in January, 1928, it was resolved that efforts should be made in other States to record the interstate movement of certain principal commodities, but to date no such action has been taken by the Bureau of Census and Statistics or by the Government Statisticians in states other than Western Australia and Tasmania.

253. The Government Statist for South Australia publishes limited figures for that State made up from the records of Western Australia and Tasmania, and from various other sources. Since February, 1940, statistics in some detail have been collected by the Government Statistician of Queensland. The statistics of interstate trade for New South Wales and Victoria are very meagre. The Melbourne Harbour Trust publishes, in its annual report, the quantities of various commodities of interstate trade loaded and discharged at the Port of Melbourne. The trade with individual States is not disclosed.

254. A word needs to be said at the outset regarding the valuation of imports and exports (oversea or interatate).

(a) With respect to imports, as a result of a recommendation of the Tariff Board, section 154(1) of the Customs Act, 1901-1936, now provides that, when any duty is imposed according to value, the value for duty is to be the sum of the following :-

(a) (i) the actual money price paid or to be paid for the goods by the importer plus any special deduction, or

(ii) the current domestic value of the goods which ever is the higher.

(b) all charges payable for placing the goods f.o.b. at the port of export; and

(c) 10 per cent of the amounts specified under (a) and (b) above.

Current domestic value is defined by the Commonwealth Statistician as "the amount for which the seller of the goods to the purchaser in Australia (or a State thereof) is selling or would be prepared to sell for cash, at the date of exportation of those goods, the same quantity of identically similar goods to any and every purchaser in the country of export for consumption in that country."(2)

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(1) Collected through the co-operation of the Marine Boards (in Tasmania and port and railway authorities in W.A.) and not the Department of Trade and Customs.

(2) Official Year Book, No. 35: 1942-43, p.402.

(b) Since 1st. July, 1937, the following (revised) definitions of f.o.b. values have been adopted for exports generally :-

(1) Goods sold to overseas buyers before export - the f.o.b. equivalent of the price at which the goods were sold.

(2) Goods shipped on consignment - the Australian f.o.b. equivalent of the current price offering for similar goods of Australian origin in the principal markets of the country to which the goods were sent for sale.

255. The Balance of Trade Position. The following table shows clearly the visible balance of trade for the years 1923-24 - 1944-45, viz. :-

TABLE I.(3)

BALANCE OF TRADE, 1923-24 - 1944-45.

Year	Total Trade £'000	Imports (4) £'000	Exports £'000	Excess Exports £'000	Excess Imports £'000	Imports as a % of Exports
1923-24	18,652	9,809	8,843	-	965	110.9
1924-25	17,656	8,808	8,848	40	-	99.5
1925-26	17,162	8,451	8,711	260	-	97.0
1926-27	18,843	9,406	9,437	31	-	99.7
1927-28	19,490	9,529	9,961	432	-	95.7
1928-29	18,998	9,235	9,763	528	-	94.6
1929-30	18,936	9,848	9,088	-	760	108.4
1930-31	14,328	7,344(5)	6,984	-	360	105.2
1931-32	13,726	6,683(5)	7,043	360	-	94.9
1932-33	13,623	6,937(5)	6,686	-	251	103.8
1933-34	15,097	7,587(5)	7,510	-	77	101.0
1934-35	16,229	8,148(5)	8,081	-	67	100.8
1935-36	19,125	9,816(5)	9,309	-	507	105.4
1936-37	21,320	10,722(5)	10,598	-	124	101.2
1937-38	22,992	11,855(5)	11,137	-	718	106.4
1938-39	23,734	11,501(5)	12,233	732	-	94.0
1939-40	25,386	12,483	12,903	420	-	97.0
1940-41	25,706	12,120	13,586	1,466	-	89.2
1941-42	29,348	13,192	16,156	2,964	-	81.7
1942-43	30,607	14,382	16,225	1,843	-	88.6
1943-44	33,184	14,391	18,793	4,402	-	76.6
1944-45	35,698	14,813	20,885	6,072	-	70.9

256. In view of the many "invisible" factors involved in interstate and international exchanges a precise statement of "the balance of payments" as at any particular time for any country is a difficult matter, and the case of Tasmania in this regard is not less difficult than that of most other countries.

(3) This and subsequent tables have been compiled from Statistics of the State of Tasmania, Part IV(Trade and Shipping) prepared by the Deputy Commonwealth Statistician for Tasmania (Government Printer).

(4) The recorded figures for overseas imports include an allowance for freight and other charges. This is not so for interstate imports. It is estimated, however, that the freight on the latter approximated £400,000 per annum pre-war. This figure has probably increased by £100,000 since 1941-42.

(5) Values calculated for the purpose of this table. The recorded values were:- 1930-1, £7,230,000; 1931-2, £6,534,000; 1932-3, £6,796,000; 1933-34, £7,427,900; 1934-35, £7,963,000; 1935-6, £9,564,100; 1936-7, £10,461,500; 1937-8, £11,466,700; 1938-9, £11,215,500.

In Tasmania an important activity is the provision of services for tourists, which has the same effect on the trade balance as an export of goods, though no entry appears on the trade statistics on this account. On the other hand, there are services such as shipping, banking, insurance and so on which enter into the equation, but which cannot be valued with even a reasonable degree of accuracy. Hence, the figures in the above table are those arising from the visible interchange of commodities to which definite value can be given.

257. Subject to these limitations, therefore, there was a large balance of imports over exports in 1923-24. This corresponds with governmental borrowings on Loan Account outside Tasmania and the investment of external capital in local industrial enterprises. From 1924-25 to 1928-29, exports exceeded imports in every instance, the surplus in the latter year reaching the figure of £528,000. In 1929-30, the balance was again largely in favour of imports, the excess amounting to £760,000, despite an export of £426,000 of gold in connection with the Australian exchange difficulty. Again in 1930-31, with gold exports amounting to £120,000 imports were in excess by £360,000 after correcting the sterling values of oversea imports, but in the following year a favourable balance of £360,000 was shown without the assistance of any accumulated gold in the State's exports. For six years the balance again swung in favour of imports to the extent of £251,000 in 1932-33; £77,000 in 1933-34; £67,000 in 1937-38. In 1938-39, however, the balance was again in favour of exports to the extent of £731,600. This favourable balance has been maintained throughout the war years, as might be expected, the percentage of imports to exports falling from 94 in 1938-39 to a record low of 70.9 in 1944-45. In this latter year the excess of the value of exports over imports was recorded as £6,072,000.

258. Table II. below presents data relating to the trade per head of the mean population, viz. :-

TABLE II.

TRADE PER HEAD OF MEAN POPULATION, 1923-24 - 1944-45.

Year	Imports £ s. d.	Exports £ s. d.	Balance of Trade Excess of Exports £ s. d.
1923-24	45. 6. 8	40.17. 5	- 4. 9. 3
1924-25	40.15. 7	40.19. 3	+ 0. 3. 8
1925-26	39. 6.10	40.11. 1	+ 1. 4. 3
1926-27	44. 2. 4	44. 5. 3	+ 0. 2.11
1927-28	44.10. 2	46.10. 6	+ 2. 0. 4
1928-29	42.13. 6	45. 2. 4	+ 2. 8.10
1929-30	44.18. 3	41. 8.11	- 3. 9. 4
1930-31	32. 8.11	31. 6.10	- 1. 2. 1
1931-32	28.18. 2	31. 3. 2	+ 2. 5. 0
1932-33	29.16. 4	29. 6. 8	- 0. 9. 8
1933-34	32. 8. 7	32.15. 9	+ 0. 7. 2
1934-35	34.15. 1	35. 5. 4	+ 0.10. 3
1935-36	42.12. 2	40. 8. 6	- 2. 4. 0
1936-37	46. 3. 9	45.12.11	- 0.10. 8
1937-38	50. 8. 9	47. 7. 7	- 3. 1. 2
1938-39	48.10.11	51.12. 8	+ 3. 1. 9
1939-40	52. 6. 3	54. 1. 6	+ 1.15. 3
1940-41	51. 1. 1	57. 4. 8	+ 6. 3. 7
1941-42	55. 2. 1	67. 9. 9	+12. 7. 8
1942-43	59.17.11	67.10. 6	+ 7.12. 7
1943-44	58.19. 4	77. 0. 1	+18. 0. 9
1944-45	60. 1. 7	84.14. 1	+24.12. 6

Except for the depression years when both imports and exports per head fell sharply the table reveals a steady upward trend in the dependence of the Tasmanian consumer on trade relations. Compared with other States it is likely that Tasmania has the highest volume of interstate trade per head of population, although it is not possible to ascertain the exact position by reference to statistics for the reasons outlined in paragraphs 252-3.

259. Before proceeding to the main section of this chapter, an analysis of the actual content of Tasmania's interstate and overseas trade, it is convenient to refer to the distribution of imports and exports among different countries. As will be observed from the data in Table III the value of Tasmania's interstate trade (1938-39) was 4.76 times greater than the value of her overseas trade. In other words, approximately 80 per cent of the import and export trade of Tasmania is connected with the mainland states. This is a further reason why the scope of this study is mainly concerned with Tasmania's interstate trade.

TABLE III

Tasmanian Imports and Exports from and to Different Countries 1923-24 - 1944-45

Year	Value of Imports £A (Direct shipmenta) from-					Value of Exports £A(Direct Shipments) to -				
	Australian States	United Kingdom	New Zealand	Other British Possessions	Foreign Countries	Australian States	United Kingdom	New Zealand	Other British Poss'ns	Foreign Countries
1923-24	7,991,349	1,113,382	55,811	122,727	525,384	6,168,322	1,462,857	35,377	48,658	1,128,013
1924-25	7,127,401	980,661	99,414	90,377	510,607	5,541,927	1,844,887	90,763	57,556	1,313,040
1925-26	6,932,583	834,928	90,689	113,583	479,010	6,132,004	1,084,468	46,567	52,038	1,395,778
1926-27	7,673,368	944,191	88,725	148,530	551,459	6,960,518	1,198,814	30,235	52,872	1,194,932
1927-28	7,887,940	907,125	43,746	145,751	544,204	6,832,367	1,477,124	22,976	52,604	1,575,846
1928-29	7,470,193	956,103	165,474	82,569	560,907	7,018,914	1,173,870	15,525	54,008	1,501,039
1929-30	8,013,572	998,090	161,562	105,801	569,077	6,590,439	1,508,185	39,173	54,283	886,934
1930-31	6,438,849	492,195	50,563	49,043	199,016	4,877,167	1,404,072	22,457	52,978	627,282
1931-32	5,968,950	247,262	71,328	61,750	184,612	4,990,139	1,285,871	11,456	124,337	631,161
1932-33	6,231,574	322,818	21,208	63,293	157,212	4,895,268	1,065,825	20,030	124,824	579,751
1933-34	6,790,706	373,525	48,577	60,867	154,260	5,126,460	1,301,663	26,100	161,372	894,205
1934-35	7,226,139	427,588	29,431	70,013	210,389	5,922,609	1,511,766	28,936	140,221	477,872
1935-36	8,566,835	511,089	28,811	93,064	364,346	6,557,469	1,581,299	25,133	335,337	809.412
1936-37	9,428,880	590,197	29,601	139,395	273,469	7,188,014	1,474,348	26,806	443,730	1,465,778
1937-38	9,926,803	930,075	61,186	112,656	435,978	8,249,446	1,679,273	41,726	235,580	930,604
1938-39	10,082,392	659,687	76,027	186,525	496,951	8,835,222	1,960,428	13,879	434,977	988,646
1939-40	10,890,248	799,733	19,655	250,728	523,231	10,476,992	1,526,769	7,811	357,572	534,083
1940-41	10,937,932	432,098	34,268	450,061	265,332	12,026,589	692,027	6,082	278,748	582,807
1941-42	12,138,243	388,423	20,014	227,460	417,679	14,283,405	613,644	4,976	145,688	1,108,161
1942-43	13,117,873	445,056	24,659	251,978	542,421	15,340,468	156,366	75	74,821	653,617
1943-44	13,080,749	257,775	70,077	102,068	880,497	17,644,600	399,398	22	32,494	716,845
1944-45	13,898,364	263,166	49,451	307,474	294,157	18,353,872	1,416,624	79	218,415	896,009

260. The percentage distribution of imports and exports among the Australian states, the United Kingdom, New Zealand, and other British possessions and foreign countries for selected years is presented in Table IV below, viz. :-

TABLE IV.

PERCENTAGE DISTRIBUTION OF TASMANIAN TRADE

(Percentage of Values £A.)

Year	Imports					Exports				
	Aust. States	Unit. King.	New Zeal.	Other Brit. Poss.	Foreign Coun.	Aust. States	Unit. King.	New Zeal.	Other Brit. Poss.	Foreign Coun-tries
1923 -24	81.5	11.3	0.6	1.2	5.4	69.7	16.5	0.4	0.5	12.8
1928 -29	80.9	10.3	1.8	0.9	6.1	71.9	12.0	0.2	0.5	15.4
1931 -32	91.3	3.8	1.1	0.9	2.8	70.9	18.3	0.2	1.7	9.0
1935 -36	89.6	5.3	0.3	2.0	3.8	70.4	17.0	0.3	3.6	8.7
1938 -39	87.7	5.7	0.7	1.6	4.3	72.2	16.0	0.1	3.6	8.1
1944 -45	93.8	1.8	0.3	2.1	2.0	87.8	6.8	0.1	1.0	4.3

Imports from Australian states were at their peacetime maximum in 1931-32 (trough of depression) and even in 1938-39 the percentage of imports from this source was 6.8 higher than the percentage in the pre-depression boom year of 1928-29. The percentage of exports absorbed by the Australian states reached the abnormal figure of 87.89 per cent in 1944-45. However, as soon as normal trading relations with overseas countries are renewed an increasing proportion of Tasmanian exports will be shipped to overseas markets, although one can only speculate in respect of absolute quantities and the distribution as among British and foreign countries.

261. So far as the value and percentage distribution of imports and exports among the several Australian states is concerned, data for the years 1938-39 and 1944-45 are presented in Table V below, viz. :-

TABLE V.

TASMANIAN IMPORTS FROM AND EXPORTS TO AUSTRALIAN STATES, 1938-39 AND 1944-45.

(A) Year	Imports				
	Victoria	N.S.W.	Q'land	S.A.	W.A.
1938-39					
Value £A	6,981,829	2,585,215	20,377	494,563	408
% Distribution	69.3	25.6	0.2	4.9	-
1944-45					
Value £A	9,822,658	2,757,613	6,452	1,311,110	531
% Distribution	70.4	19.8	0.4	9.3	-

Table V. (cont'd).

(B) Year	Exports				
	Victoria	N.S.W.	Q'land	S.A.	W.A.
1938-39					
Value £A.	3,420,776	4,264,809	613,718	349,883	186,036
% Distribution	38.7	48.3	6.9	4.0	2.1
1944-45					
Value £A.	8,348,285	7,637,544	1,424,716	753,236	190,291
% Distribution	45.5	41.5	7.7	4.1	1.3

Apart from a slight decline in respect of trade with New South Wales(6) (partly compensated for by an increase with South Australia) there was little change in the relative distribution of imports and exports from and to the five states concerned over the period. Approximately 70 per cent of goods imported are of Victorian origin, whilst nearly 50 per cent of the State's exports are shipped to New South Wales (1938-39). Generally, the direction of Tasmanian exports is a function of the distribution of the Australian population but there are a number of other factors operating as will be observed in Chapter VII.

262. The pre-war year of 1938-39 has been selected as a year indicative of average experience insofar as the product structure and direction of the State's import and export trade is concerned. It will be observed from Table IV that, in 1938-39, 87.7 per cent of exports were sold in Australian markets. In order that the effects of organising for total war on the character of the State's trade(7) may be observed data relating to the year 1944-45 will be included in the analysis to follow. However, it should be noted that in a number of respects the year 1944-45 is not as satisfactory as, say, 1943-44. For example, defence orders slackened off in a number of industries in that year, whilst in a number of other industries 1944-45 saw the fulfilment of orders placed much earlier. But any year of the war that might be selected would have similar unsatisfactory features.

263. For statistical purposes goods entering into interstate and/or overseas trade are grouped into twenty-one major classes, which are further sub-divided into 301 sub-classes. (The classification of factories used in the Production Bulletin consists of 16 classes with approximately 160 sub-classes.) The number of items or sub-classes recorded as exports is only 154. As well as a card number each item is allotted a "statistical number" in connection with the administration of the Customs Tariff. The twenty-one classes mentioned above are listed as follows :-

Class I. - Foodstuffs of Animal Origin (but excluding living animals).
Class II. - Foodstuffs of Vegetable Origin.
Class III. - Spirituous and Alcoholic Liquors.
Class IV. - Tobacco and Preparations thereof.
Class V. - Live Animals.
Class VI. - Animal Substances (mainly unmanufactured). Not foodstuffs.
Class VII. - Vegetable Substances and Fibres.
Class VIII. - (a) Apparel.
(b) Textiles.
(c) Manufactured Fibres.

(6) Due to wartime rationalisation of transport.
(7) From the point of view of,
(a) the type of goods entering into trade; and
(b) the percentage distribution as between states.

Class IX.	-	Oils, Fats and Waxes.
Class X.	-	Paints, Colours and Varnishes.
Class XI.	-	Stones and Minerals (including ores and concentrates).
Class XII.	-	Metals, Metal Manufactures and Machinery.
Class XIII.	-	Rubber and Leather Manufactures and Substitutes (including boots and shoes).
Class XIV.	-	Wood and Wicker (raw and manufactured).
Class XV.	-	Earthenware, Cements, China, Glass and Stoneware.
Class XVI.	-	Paper and Stationery.
Class XVII.	-	Jewellery, Timepieces and Fancy Goods.
Class XVIII.	-	Optical, Surgical and Scientific Instruments.
Class XIX.	-	Drugs, Chemicals and Fertilizers.
Class XX.	-	Miscellaneous.
Class XXI.	-	Gold, Silver and Bronze Specie.

264. Special text tables have been prepared which compare the nature and value of imports and exports in the years 1938-39 and 1944-45 according to the country or state of origin. The percentage distribution of the various classes of goods above has been computed for each of the two years under review, viz. :-

TABLE VI. (a)

THE NATURE AND VALUE OF IMPORTS INTO TASMANIA FROM THE AUSTRALIAN STATES, 1938-39 and 1944-45.

State of Origin	Classes i - iv	Class v -vii	Class viii	Classes xi-x	Class xi	Classes xii & xxi	Classes xiii &xv	Class xiv	Classes xvi - xx	Total All Classes
New South Wales.										
Value £A - 1938-39	1,015,754	60,869	151,604	53,783	163,238	702,535	94,253	42,279	300,900	2,585,215
1944-45	730,842	60,032	231,619	44,589	219,308	1,004,380	100,980	13,206	352,727	2,757,613
Percentage 1938-39	39.3	2.3	5.9	2.1	6.3	27.2	3.9	1.6	11.6	100.0
Distribution 1944-45	27.3	2.2	8.5	1.6	8.1	37.0	3.7	0.5	13.0	100.0
Victoria										
Value £A - 1938-39	1,452,705	297,316	1,526,858	256,819	32,778	2,146,894	263,066	99,267	906,126	6,981,829
1944-45	2,384,676	943,569	1,929,477	314,190	24,247	2,818,886	309,366	46,472	1,351,775	9,822,658
Percentage 1938-39	20.8	4.3	21.9	3.7	0.5	30.8	3.8	1.4	12.9	100.0
Distribution 1944-45	24.2	9.5	19.5	3.2	0.2	25.7	3.1	0.5	13.7	100.0
Queensland										
Value £A - 1938-39	8,552	92	497	30	49	1480	119	8,615	943	20,377
1943-44	2,586	2,305	-	-	-	-	-	1,554	7	6,452
Percentage 1938-39	42.0	0.4	2.4	0.1	0.2	7.3	0.6	42.3	4.6	100.0
Distrib. 1944-45	40.0	35.6	-	-	-	-	-	24.3	-	100.0
South Australia										
Value £A - 1938-39	148,201	28,123	7,453	5.149	255,787	38,399	568	1,201	9,282	494,563
1944-45	493,172	98,603	6,542	11,975	578,157	82,484	1,810	208	38,162	1,311,110
Percentage 1938-39	30.0	5.7	1.5	1.04	51.7	7.8	0.1	0.2	1.9	100.0
Distrib. 1944-45	37.6	7.5	0.5	0.9	44.3	6.4	0.1	-	2.9	100.0
Western Australia										
Value £A -1938-39	121	222	-	-	-	61	-	-	4	408
1944-45	441	-	-	-	-	-	-	-	90	531
Percentage 1938-39	29.7	54.4	-	-	-	14.9	-	-	1.0	100.0
Distrib. 1944-45	83.0	-	-	-	-	-	-	-	17.0	100.0

State of Origin	Classes i - iv	Classes v - vii	Class viii	Classes xi - x	Class xi	Classes xii & xxi	Classes xiii & xv	Class xiv	Classes xvi - xx	Total all Classes
Total all States										
Value £A- 1938-39	2,625,333	386,622	1,686,412	315,781	451,852	2,889,769	358,006	151,362	1,217,255	10,082,392
1944-45	3,611,717	1,104,509	2,167,638	370,754	821,712	3,605,680	412,156	61,437	1,742,761	13,898,364
Percentage 1938-39	26.0	3.8	16.7	3.1	4.5	28.7	3.5	1.5	12.0	100.0
Distrib. 1944-45	26.0	7.9	15.6	2.7	5.9	25.9	3.0	0.4	12.5	100.0

TABLE VI. (b)

THE NATURE AND VALUE OF IMPORTS INTO TASMANIA FROM BRITISH COUNTRIES 1938-39 and 1944-45.

Country of Origin.	Class i- iv	Class v-vii	Class viii	Classes ix & x	Class xi	Class xii & xxi	Classes xiii& xv	Class xiv	Classes xvi-xx	Total all Classes
United Kingdom										
Value £A 1938-39	15,105	8,152	62,461	4,080	11,239	274,841	18,626	7,226	124,966	526,696
1944-45	1,941	2,883	43,467	218	16,435	109,157	13,168	5,141	70,756	263,166
Percentage1938-39	2.9	1.5	11.9	0.8	2.1	52.2	3.5	1.4	23.7	100.0
Distrib. 1944-45	0.7	1.1	16.5	0.1	6.2	41.5	5.0	2.0	26.9	100.0
Canada										
Value £A 1938-39	4,258	127	926	176	136	14,864	2,112	29,486	7,598	59,686
1944-45	-	113,852	80	-	581	2,900	4	6	2,460	119,883
Percentage1938-39	7.1	0.2	1.5	0.3	0.2	24.9	3.5	49.4	12.7	100.0
Distrib. 1944-45	-	95.0	-	-	0.5	2.4	-	-	2.1	100.0
India and Ceylon										
Value £A 1938-39	120	106	13,511	-	-	-	-	12	310	14,059
1944-45	202	158	3,693	-	-	-	-	-	1,031	5,084
Percentage 1938-39	0.9	0.8	96.1	-	-	-	-	-	2.2	100.0
Distrib. 1944-45	3.9	3.1	72.6	-	-	-	-	-	20.3	100.0
New Zealand										
Value £A 1938-39	1,761	36,574	93	-	17	17,908	-	1	4,346	60,700
1944-45	2,464	40,838	30	-	-	486	-	-	5,633	49,451
Percentage 1938-39	2.9	60.3	-	-	-	29.5	-	-	7.2	100.0
Distrib. 1944-45	4.9	82.9	-	-	-	0.9	-	-	11.4	100.0
Other British Possessions										
Value £A 1938-39	59,194	372	131	249	-	159	-	76	14,996	75,177
1944-45	75,877	1,053	-	103,592	-	-	-	25	1,960	182,507
Percentage 1938-39	78.7	0.5	0.2	0.3	-	0.2	-	0.1	19.9	100.0
Distrib. 1944-45	41.6	0.6	-	56.8	-	-	-	-	0.7	100.0

Country of Origin.	Class i-iv	Class v-vii	Class viii	Classes ix & x	Class xi	Class xii & xxi	Classes xiii&xv	Class xiv	Classes xvi-xx	Total all Classes
Total Br.Countries										
Value £A 1938-39	80,438	45,331	77,122	4,505	11,392	307,772	20,738	36,804	152,216	736,318
1944-45	80,484	158,784	47,270	103,810	17,016	112,543	13,172	5,172	81,840	620,091
Percentage1938-39	10.9	6.2	10.5	0.6	1.5	41.8	2.8	5.0	20.7	100.0
Distrib. 1944-45	13.0	25.6	7.6	16.7	2.7	18.1	2.1	0.8	13.2	100.0

TABLE VI. (c)

THE NATURE AND VALUE OF IMPORTS INTO TASMANIA FROM FOREIGN COUNTRIES 1938-39.

Country of Origin	Classes i - iv	Classes v-vii	Class viii	Classes ix & x	Class xi	Classes xii & xxi	Class xiii &xv	Class xiv	Classes xvi -xx	Total all Classes
Belgium	£A -	£A -	£A 2,488	£A 114	£A -	£A 1,058	£A 2,181	£A -	£A 1,205	£A 7,046
France	589	928	188	450	-	215	147	3	2,851	5,371
Germany	69	-	900	1	-	10,588	908	29	18,859	31,354
Japan	1	-	639	-	-	40	69	9	248	1,006
Netherlands East Indies	-	50	-	134,091	-	-	-	-	3	134,144
Norway	821	-	-	10	-	31	-	-	733	1,595
Sweden	62	3,964	-	1	17	3,103	106	2,695	1,822	11,770
Switzerland	-	-	271	1	1	5,977	9	-	1,245	7,504
United States	902	20,763	396	494	2,682	47,026	247	16,335	5,663	94,508
Other Foreign Countries.	12,612	7,215	3,010	26,497	6	1,343	675	252	50,860	102,470
Total Foreign Countries	15,056	32,920	7,892	161,659	2,706	69,381	4,342	19,323	83,489	396,768
Per.Distrib.	3.8	8.3	2.0	40.7	0.7	17.5	1.1	4.9	21.0	100.0

(8) Figures for 1944-45 are not included in this table because the total value of imports into Tasmania from foreign countries was only £A294,157 (1943-44: £A880,497) 95.3 per cent are classified as "Other Foreign Countries".The remaining 4.7 per cent came from the U.S.A. The most predominant classes were Oils,Fats,Waxes and Paints (£A219,000) and Metals and Manufactures of Metals (£A17,964)

TABLE VII (a)

THE NATURE AND VALUE OF EXPORTS FROM TASMANIA TO THE AUSTRALIAN STATES, 1938-39 and 1944-45.

State to which Goods were Exported.(9)	Classes i-iv	Classes v-vii	Classes viii	Classes ix - x	Class xi	Classes xii&xxi	Classes xiii&xv	Class xiv	Classes xvi-xx	Total all classes.
New South Wales										
Value £A-1938-39	1,916,918	69,385	374,166	920	536,184	1,081,343	36,009	120,470	129,414	4,264,809
1944-45	3,449,899	114,911	1,176,024	474	453,872	1,555,597	5,298	85,101	796,458	7,637,544
Percent.1938-39	44.9	1.6	8.8	-	12.6	25.4	0.8	2.8	3.0	100.0
Distrib.1944-45	45.2	1.5	15.4	-	5.9	20.4	0.7	1.1	10.4	100.0
Victoria										
Value £A-1938-39	923,875	490,265	438,225	14,344	137,416	426,436	183,383	428,370	378,462	3,420,776
1944-45	2,797,320	784,069	1,671,153	26,838	119,395	1,496,199	48,834	436,311	968,166	8,348,285
Percent. 1938-39	27.0	14.3	12.8	0.4	4.1	12.6	5.4	12.5	11.1	100.0
Distrib. 1944-45	33.5	9.4	20.0	0.3	1.4	17.9	0.6	5.3	11.8	100.0
Queensland										
Value £A-1938-39	488,849	4,432	61,008	21	156	2,714	18,984	5,671	31,883	613,718
1944-45	1,097,028	3,939	101,432	-	-	14,042	4,544	4,173	199,558	1,424,716
Percent. 1938-39	79,6	0.7	9.9	-	-	0.9	3.1	0.8	5.2	100.0
Distrib. 1944-45	77.0	0.3	7.1	-	-	1.0	0.3	0.3	14.0	100.0
South Australia										
Value £A-1938-39	71,985	4,092	44,115	173	96,327	31,759	7,311	69,407	24,714	349,883
1944-45	130,118	1,232	21,601	-	110,135	154,078	4,204	191,074	140,794	753,236
Percent. 1938-39	20.6	1.2	12.6	-	27.5	9.1	2.1	19.8	7.1	100.0
Distrib. 1944-45	17.3	0.2	2.9	-	14.6	20.5	0.5	25.4	18.7	100.0
West.Australia										
Value £A-1938-39	96,806	187	43,672	123	6	6,552	12	14,514	24,164	186,036
1944-45	101,454	-	12,021	-	-	5,964	18	5,939	64,695	190,091
Percent. 1938-39	52.0	0.1	23.5	0.1	-	3.5	-	7.8	63.0	100.0
Distrib. 1944-45	53.4	-	6.3	-	-	3.1	-	3.1	34.0	100.0

State to which Goods were Exported (9)	Classes i - iv	Classes v - vii	Classes viii	Classes ix - x	Class xi	Classes xii&xxi	Classes xiii&xv	Class xiv	Classes xvi-xx	Total all classes.
Total Australian States.										
Value £A-1938-39	3,498,433	568,361	961,186	15,581	770,089	1,548,804	245,699	638,432	588,637	8,835,222
1944-45	7,575,819	904,151	2,982,231	27,312	683,312	3,225,880	62,898	722,598	2,169,671	18,353,872
Percent.1938-39	39.6	6.4	10.9	0.2	8.7	17.5	2.8	7.2	6.7	100.0
Distrib. 1944-45	41.3	4.9	16.2	0.1	3.7	17.6	0.3	3.9	11.8	100.0

(9) Includes goods for re-export overseas, the details of which are not available.

TABLE VII (b)

THE NATURE AND VALUE OF EXPORTS FROM TASMANIA to BRITISH COUNTRIES 1938-39 and 1944-45.

Country to which Goods were Exported.	Classes i - iv	Classes v - vii	Class viii	Classes ix - x	Class xi	Classes xii& xxi	Classes xiii&xv	Class xiv	Classes xvi-xx	Total all Classes
United Kingdom										
Value £A-1938-39	1,326,518	344,133	-	1,290	-	275,993	50	12,005	439	1,960,428
1944-45	227,902	965,697	-	8,551	-	213,803	-	-	671	1,416,624
Percent. 1938-39	67.7	17.5	-	0.1	-	14.1	-	0.6	-	100.0
Distrib. 1944-45	16.1	68.2	-	0.6	-	15.1	-	-	-	100.0
Canada										
Value £A-1938-39	-	-	-	-	-	-	-	-	-	-
1944-45	-	73,791	-	-	-	-	-	-	20	73,811
Percent. 1938-39	-	-	-	-	-	-	-	-	-	-
Distrib. 1944-45	-	99.9	-	-	-	-	-	-	0.1	100.0
India & Ceylon										
Value £A-1938-39	31,048	17,960	-	-	-	355,479	-	-	228	404,715
1944-45	12,292	-	-	-	-	79,941	49,129	-	-	141,362
Percent. 1938-39	7.7	4.4	-	-	-	87.8	-	-	0.1	100.0
Distrib. 1944-45	8.7	-	-	-	-	56.6	34.7	-	-	100.0
New Zealand										
Value £A-1938-39	1,222	1,194	-	-	38	2,526	-	6,545	2,354	13,879
1944-45	79	-	-	-	-	-	-	-	-	79
Percent. 1938-39	8.8	8.6	-	-	0.3	18.2	-	47.2	17.0	100.0
Distrib. 1944-45	100.0	-	-	-	-	-	-	-	-	100.0
Other Brit.Possess.										
Value £A-1938-39	27,270	-	21	126	-	1,993	-	416	436	30,262
1944-45	3,242	-	-	-	-	-	-	-	-	3,242
Percent. 1938-39	90.1	-	-	0.4	-	6.7	-	1.4	1.4	100.0
Distrib. 1944-45	100.0	-	-	-	-	-	-	-	-	100.0

Country to which Goods were Exported.	Classes i - iv	Classes v - vii	Class viii	Classes ix - x	Class xi	Classes xii&xxi	Classes xiii&xv	Class xiv	Classes xvi-xx	Total all Classes
Total Brit. Countries										
Value £A-1938-39	1,386,058	363,287	21	1,416	38	635,991	50	18,966	3,457	2,409.284
1944-45	243,515	1,039,488	-	8,551	-	293,744	49,129	-	691	1,635,118
Percent. 1938-39	57.5	15.1	-	0.6	-	26.4	-	0.8	0.1	100.0
Distrib. 1944-45	14.9	63.6	-	0.5	-	17.9	3.0	-	-	100.0

TABLE VII (c) (10)

THE NATURE AND VALUE OF EXPORTS FROM TASMANIA TO FOREIGN COUNTRIES, 1938-39.

Country to which Goods were Exported.	Classes i - iv £A	Classes v - vii £A	Class viii £A	Classes ix - x £A	Class xi £A	Classes xii & xxi £A	Classes xii &xv £A	Class xiv £A	Classes xvi-xx £A	Total all Classes £A
Belgium	28,652	19,154	-	-	127,706	4,716	-	-	-	180,228
France	11,423	120,074	-	-	2,698	-	-	-	-	134,195
Germany	55,858	33,900	-	-	642	-	-	-	-	90,400
Italy	-	75,089	-	-	-	-	-	-	-	75,089
Japan	-	15,270	-	-	-	236,582	-	-	-	251,852
Netherlands	6,754	5,453	-	-	-	-	-	-	-	12,207
United States of America	1,448	16,486	-	-	148,268	-	-	-	-	166,202
Other Foreign Countries	18,360	34,105	5	2,564	-	11,125	-	-	12,314	78,473
Total Foreign Countries	122,495	319,531	5	2564	279,314	252,423	-	-	12,314	988,646
Percentage Distribution.	12.4	32.3	-	0.3	28.2	25.5	-	-	1.2	100.0

(10) The United States purchased 96 per cent (£A860,191) of all goods exported oversea in 1944-45 to other than British countries. The purchases consisted mainly of items in Classes V-VII (£A501,131), Class XI (£A165,218) and Classes XII & XXI £A191,102.

265. Imports from Australian States (Table VI(A)).

(a) New South Wales. Nearly 40 per cent of goods imported from this State in 1938-39 were classed as foodstuffs, liquor and tobacco (Classes I-IV). Apart from the metals group (Classes XII and XXI), distribution among the remaining classes was fairly even. The value of imports from New South Wales increased from £A2,585,215 in 1938-39 to £A2,757,613 in 1944-45, an increase of 6.7 per cent, but the proportion of foodstuffs to total trade declined by 12 per cent.

(b) Victoria. Foodstuffs (Classes I-IV), textiles and manufactured fibres (Class VIII), the metals groups (Classes XII and XXI) accounted for 73.43 per cent of goods imported from Victoria in 1938-39. There was little change in the pattern of trade over the period, although there was some shift in the relative importance of foodstuffs in favour of metals.

(c) Queensland. The total value of the Queensland trade had declined from £A20,377 in 1938-39 to £A6,452 in 1944-45, this latter total being made up solely by classes I-VII and class XIV.

(d) South Australia. On the other hand, the value of imports from South Australia was nearly treble the pre-war figure in 1944-45. However, wartime controls would naturally be expected to have little effect on the character of the import trade of mineral ores and concentrates representing in both years approximately 50 per cent of total value.

(e) Western Australia. The value of goods imported from Western Australia has always been negligible. The 1944-45 figure represented a small advance on 1938-39.

(f) All States. The total value of goods imported into this State in 1944-45 represented an increase of £A3,815,972 or 37.8 per cent over the value recorded in 1938-39. Taking the figures showing the percentage distribution of imports into Tasmania in 1938-39 it is convenient to arrange them in order as follows :-

Class	Percentage of Total Imports
Classes XII and XXI (Metals and Manufactures of metals, including bullion and specie)	28.7
Class I - IV (Food, drink and tobacco)	26.0
Class VIII (Apparel, textiles and manufactured fibres)	16.7
Classes XVI - XX (Miscellaneous n.e.i.)	12.1
Class XI (Stones and Minerals)	4.5
Class V - VII (Live animals, animal and vegetable substances)	3.8
Classes XIII and XV (Materials, raw and manufactured, of rubber, leather, glass)	3.5
Class XIV (Timber and wood manufactures)	1.5
Classes IX-X (Oils, Fats and Waxes)	3.1
	100.0

266. Imports from British Countries. (Table VI.(B)).

(a) United Kingdom. The total value of imports from the United Kingdom declined by £A263,530 or 50 per cent. However, metals and machinery (Class XII) and Classes XVI-XX maintained their relative importance, accounting for 52.2 and 23.7 per cent of total imports respectively in 1938-39, and 41.5 and 26.9 in 1944-45.

(b) Canada. The value of timber imports from Canada declined sharply over the war years, but the value of imported foodstuffs classified under Classes V-VII increased from £A127 to £A113,852 and accounted for 95 per cent of the total value of imports in 1944-45. Metals and machinery also declined both relatively and absolutely.

(c) India and Ceylon. The total value of imports declined by 63.9 per cent or £A8,975. Pre-war the most important items imported were textiles and manufactured fibres.

(d) New Zealand. Although the overall value of trade had declined by 1944-45 as compared with 1938-39, mainly owing to the elimination of metals and machinery, imports of goods included in Classes V-VII and in the miscellaneous group represented by Classes XVI-XX rose by 11.6 and 29.6 per cent respectively.

(e) Other British Possessions. This group recorded an overall increase of £A107,330 or 143 per cent. In 1938-39, foodstuffs (Classes I-IV) accounted for 78.7 per cent of the total import value but by 1944-45 Classes IX and X accounted for 56.8 per cent of the total foodstuffs, declining relatively to 41.6 per cent.

(f) All British Countries. The most important single class of goods imported from British countries in 1938-39 was metals and machinery (Class XII), although Classes XVI-XX accounted for 20.7 per cent of the total value of imports. By 1944-45 there had been some levelling out in the percentage of trade between the various commodity groups.

267. Imports from Foreign Countries (Table VI(C)).

The value of goods imported from Germany, the Netherlands East Indies and the United States £A31,354, £A134,144 and £A94,508 respectively accounted for 65.5 per cent of the total recorded value of imports from foreign countries. On the commodity side 79.3 per cent of the total value was represented by Classes IX and X (£A161,659), Classes XII and XXI (£A69,381) and Classes XVI-XX (£A83,489).

268. Exports to Australian States (Table VII(A)).

(a) New South Wales. The total value of goods exported to New South Wales increased by £A3,372,735 or 79 per cent over the six years of war, but except for increases in respect of textiles and the miscellaneous group, foodstuffs (Classes I-IV) and metals and machinery continued to account for approximately 45 and 20 per cent of total exports respectively.

(b) Victoria. The value of exports to Victoria recorded an increase over the 1938-39 level of 144 per cent, or £A4,927,509 by 1944-45. Apart from foodstuffs (Classes I-IV) which account for more than 30 per cent of the total value, the percentage distribution of the various classes of goods is more dispersed than in the case of New South Wales. It should further be noted that the operation of wartime transport regulations has resulted not only in a greater relative increase of exports to Victoria as opposed to New South Wales, but also, by 1944-45, the total value of exports to the former state was £A767,642 more than the value of exports to the latter. Pre-war, the value of exports to New South Wales was worth £A844,033 more than those sent to Victoria.

(c) Queensland. In 1938-39 foodstuffs (Classes I-IV) represented nearly 80 per cent of the value of goods exported to Queensland. By 1944-45 the total value of exports had increased by 134 per cent and the percentage of the total value represented by foodstuffs had declined to 77. The value of textiles and goods in the miscellaneous group exported increased absolutely over the period.

(d) South Australia. Increases in the value of exports classified under Classes XII, XIV and XVI-XX resulted in an overall increase of 115 per cent or £A403,353.

(e) Western Australia. Finally, in the case of Western Australia it may be observed that the percentage of foodstuffs exported (Classes I-IV) improved to 53.4 by 1944-45, whilst the export of textiles and timber declined to £A12,021 and £A5,939 respectively.

(f) All States. The outstanding fact to be noted from the point of view of Tasmania's interstate export trade over the period 1938-39 - 1944-45 is the overall increase in the total value of £A9,518,650 or approximately 103 per cent. Using the data for 1938-39 the various classes of goods exported are arranged in order, as follows :-

Class	Percentage of Total Exports
Classes I-IV (Food, drink and tobacco)	39.6
Classes XII and XXI (Metals and metal manufactures, including bullion and specie)	17.5
Class VIII (Apparel, textiles and manufactured fibres)	10.9
Class XI (Stones and minerals)	8.7
Class XIV (Timber and wood manufs.)	7.2
Classes XVI-XX (Miscellaneous n.e.i.)	6.7
Classes V-VII (Live animals, animal and vegetable substances)	6.4
Classes XIII and XV (Materials, raw and manufactured, of rubber, leather, glass, etc.)	2.8
Classes IX-X (Oils, fats, waxes, etc.)	0.2
	100.0

269. Exports to British Countries (Table VII(B)).

(a) United Kingdom. The pre-war value of Tasmanian exports to the United Kingdom was £A1,960,428, 67.7 per cent of which was in the form of foodstuffs (Classes I-IV). By 1943-44 shipping restrictions had reduced the trade to £A399,398, but in 1944/45 there was a considerable recovery due mainly to large shipments of items included under Classes V-VII.

(b) Canada. The Tasmanian contribution to the Australia-Canada Reciprocal Aid Agreement had the effect of opening up a new market for Tasmanian products. Foodstuffs (Classes V-VII) to the value of £A73,791 were shipped in 1944-45.

(c) India and Ceylon. Apart from a small shipment of foodstuffs worth £10,000 exports to India and Ceylon by 1943-44 had ceased. However, in 1944-45 the Tasmanian exports were worth £A141,362. In the pre-war year of 1938-39, 87.8 per cent of the total export value (£A404,715) was received for goods classified under Class XII.

(d) New Zealand. The main product exported to New Zealand pre-war was timber, the value of which equalled 47.2 per cent of the total export value. Exports to New Zealand by 1944-45 had virtually ceased.

(e) Other British Possessions. Normally, over 90 per cent of goods exported to other British possessions are foodstuffs classified under Classes I-IV.

(f) All British Countries. Although the total value of exports to British countries declined from £A2,409,284 in 1938-39 to £A431,914 in 1943-44, it recovered in 1944-45 to £A1,635,118. The relative importance of foodstuffs (Classes I-IV) and metals

and metal manufactures (Class XII) declined with increased exports of foodstuffs (Classes V-VII). The three classes accounted for 57.5, 26.4 and 15.1 per cent of the total export value in 1938-39.

270. Exports to Foreign Countries (Table VII(c)). In 1938-39, the total value of goods exported to foreign countries was £A988,646, 53.8 per cent of this total being absorbed by minerals, metals and metal manufactures. Japan imported metals valued at £A236,582, whilst the United States and Belgium imported minerals to the value of £A148,268 and £A127,707 respectively. Foodstuffs (Classes V-VII) exported were valued at £A319,531 (32.3 per cent of total), the largest shipments being to France (£A120,074) and Italy (£A75,089).

271. Since the cost analysis of Chapter VII will include inward freight charges only in so far as they increase the purchase price of both imported raw materials (and hence force up production costs) and plant and equipment (with higher resultant overhead charges), the following detailed examination of the product structure of Tasmania's interstate and overseas trade will refer only to those goods exported. Data relating to selected commodities for the years 1938-39 and 1944-45 are collated in Table VIII below. In making the selection of specific items to be included cognizance was taken not only of absolute quantities and/or values, but also of the probable difficulty or otherwise of obtaining accurate data relating to the proportion which shipping costs(11) bear to total costs of production(12) and/or final selling price.(13) As will be observed in Chapter VII it was not found practicable to analyse the cost structure of all products listed for various reasons.

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(11) For the purposes of this study the term "shipping costs" equals shipping, the actual freight rate, plus all other incidental charges involved in selling goods in markets outside the state.

(12) Again, the term "costs of production" may be defined as including :
- (a) the purchase price of raw materials (including transport charges).
- (b) Overhead costs (incl. rent, depreciation, etc.).
- (c) labour costs (including managerial costs).
- (d) marketing costs (incl. transport costs and selling costs. Professor Chamberlin, of course, would object to the inclusion of selling costs in production costs for he differentiates between pure and monopolistic competition on the basis of the presence or absence of selling costs. Vide, "The Theory of Monopolistic Competition," Harvard Economic Studies, No. 38).

(13) Normally, selling price equals the items included under note (12) above plus a certain pre-determined profit margin.

TABLE VIII

SELECTED GOODS EXPORTED FROM TASMANIA (OVERSEA AND INTERSTATE)

1938-39 and 1944-45

Article	Unit of Quantity	1938-39				1944-45			
		Quantity		Value £A		Quantity		Value £A	
		Oversea	Interstate	Oversea	Interstate	Oversea	Interstate	Oversea	Interstate
CLASS I									
Butter	Cwt.	9,391	43,143	62,641	297,777	6,487	19,900	64,759	158,065
Cheese	Cwt.	-	24,936	-	96,317	-	16,181	-	83,721
Fish (Fresh and Other except crayfish)	Cwt.	3	3,653	14	5,977	-	45,136	-	112,933
Crayfish	Case	-	13,968	-	21,477	-	2,464	-	5,626
Bacon and Ham	Cwt.	-	3,018	-	16,285	-	1,975	-	12,304
Lamb and Mutton	Lb.	1,928,438	18,816	53,130	250	2,273,536	456,624	69,690	7,813
CLASS II									
Confectionery, Cocoa and Chocolate	-	(14)	(10)	(14)	(14)	(14)	(14)	(14)	(14)
Dried Apples	Lb.	96,008	621,000	1,410	13,860	-	5,002,230	-	225,217
Fresh Apples	Bushel	3,341,065	1,753,864	918,793	528,741	76,045	1,478,310	38,023	620,000
Pears	Bushel	244,386	10,690	67,406	3,246	-	10,587	-	3,971
Fruits and Vegetables Preserved in liquid	Lb.	2,720,053	8,532,494	58,740	121,133	-	29,758,624	-	611,082
Fruit Juices and Syrups	Cask	-	660	-	4,972	-	27,439	-	212,779
Pulped Fruits	Lb.	6,190,453	8,816,812	121,422	104,941	-	20,561,319	-	331,106
Flour	Ton	3	2,230	29	26,494	-	990	-	11,489
Oatmeal and Rolled Oats	Ton	2,922	1,049	3,487	21,693	-	589	-	13,789
Hops	Lb.	-	2,037,120	-	146,986	-	2,374,944	-	239,731
Jams and Jellies	Lb.	6,178,948	15,087,865	143,080	353,899	800,695	26,226,200	19,248	759,841
Pickles and Sauces	Case	-	5	-	7	-	77,133	-	59,465
Potatoes	Ton	2	77,045	22	974,266	948	146,989	18,220	1,816,169

(14) Not available as one firm only is engaged in the export trade.

Article	Unit of Quantity	1938-39				1944-45			
		Quantity		Value £A		Quantity		Value £A	
		Oversea	Interstate	Oversea	Interstate	Oversea	Interstate	Oversea	Interstate
CLASS III									
Spirituous and Alcoholic wines	Gallon	3,450	207,115	741	57,738	-	-	479	78,484
CLASS VI									
Calf, Cattle & Horse Skins	Cwt.	-	20,972	-	41,229	-	17,468	-	42,069
Rabbit skins	Lb.	3,923	bales 2,172	533	65,253	210,953	1,072,050	93,368	420,007
Sheepskins, with or without wool	No.	249,608	bales 1,782	41,931	18,795	-	-	39,072	18,671
Wool, greasy	Lb.	11,730,857	3,393,733	622,171	150,594	14,523,194	1,808,753	1,132,843	126,454
Wool, scoured and washed	Lb.	237,523	-	15,960	-	2,151,168	363,660	251,998	15,681
Wool, Noils	Lb.	7,712	bales 593	518	7,867	28,386	472,815	4,335	28,356
CLASS VIII									
Woollen and Worsted Manufactures	Cubic ft.	-	402,526	-	922,062	-	761,314	-	2,887,316
CLASS XI									
Pyrites	Ton	-	53,225	-	66,914	-	36,773	-	46,440
Silver lead	Ton	18,050	-	275,974	-	14,479	-	165,218	-
Tin	Ton	-	2,128	-	333,786	-	1,153	-	264,688
Wolfram	Ton	13	299	2,698	62,155	-	7,267	-	118,844
Zinc	Ton	268	8,084	642	52,961	-	-	-	
Zinc Residues	Ton	-	37,913	-	78,071	-	6,294	-	23,603
Limestone	Ton	-	269,340	-	70,703	-	69,738		17,671
CLASS XII									
Cadmium	Cwt.	1,454	1,887	25,579	44,463	-	5,341	-	111,530
Copper	Ton	-	12,602	-	568,548	-	7,559	-	712,908
Zinc Ingots, etc.	Ton	42,587	28,230	847,692	520,334	15,302	64,358	484,846	1,412,403
CLASS XIV									
Timber, dressed	Super ft.	214,166	4,205,809	6,179	86,471	-	6,299,604	-	177,715
Timber, logs	Super ft.	-	216,064	-	2,890	-	239,219	-	2,736
Timber, undressed n.e.i.	Super ft.	1,097,367	41,209,700	11,481	434,501	-	29,623,700	-	438,529
Palings	No.	125,420	1,499,700	1,265	15,918	-	6,500	-	85
Staves, dressed and undressed	No.	3,060	331,552	29	12,376	-	17,334	-	560

Article	Unit of Quantity	1938-39 Quantity		1938-39 Value £A		1944-45 Quantity		1944-45 Value £A	
		Oversea	Interstate	Oversea	Interstate	Oversea	Interstate	Oversea	Interstate
CLASS XIV contd.									
Pegs		-	-	-	25,790	-	-	-	17,917
Racquets		-	-	-	39,213	-	-	-	3,421
CLASS XV									
Cement	Ton	-	66,497	-	239,817	15,031	14,452	61,399	53,017
CLASS XVI									
Paper and Paper pulp	-	-	-	-	-	-	-	60	1,641,813 (15)
CLASS XIX									
Calcium carbide	Ton	635	5,644	14,606	125,164	-	6,725	-	172,751
Total Export Value of Selected Commodities (a)	-	-	-	3,358,773	6,891,281	-	-	2,443,558	14,115,662
Total Export Value of all Commodities (B)	-	-	-	3,397,930	8,835,222	-	-	2,531,127	18,353,872
Total (A) as Percentage of Total (B)	-	-	-	99.87	78.0	-	-	96.5	76.9

(15) Overstated since the figure includes miscellaneous stationery products.

272. It is not proposed to analyse each item in the table above,(16) but it should be noted that 46, 26.6 per cent, of the 173 items declared by the Deputy Commonwealth Statistician to be exports are included. The percentages of the total export value of selected commodities (interstate and oversea) to the total export value of all commodities are tabled above, the figure for interstate exports being lower than for oversea exports for each year. A greater diversity of commodities enter the interstate trade in contrast to the relatively few types of goods exported overseas. Of the 46 items included in Table VIII only 28, or approximately 60 per cent, were exported overseas in 1938-39; by 1944-45 the values recorded for eight commodities had risen and for 20 had fallen.(17) So far as the values of the 44 goods exported to interstate markets are concerned 26 rose, and 18 declined over the period 1938-39 - 1944-45.

273. Although the product structure of Tasmania's export trade has been analysed(16) some idea of the geographical location of the state's exporting industries may be gleaned by tabulating the recorded values of certain specific commodities according to the port of shipment. Table X. includes 81.6 per cent (£A9,916,475) of all goods exported from the State in 1938-39.

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(16) Vide Chapter VII.

(17) Of the 20 commodities for which the exportable value had declined by 1944-45, 15 had ceased to be exported altogether.

Table IX

Selected Tasmanian Exports Classified According to Port of Shipment

1938 - 39

Article	Burnie	Devonport	Hobart	King Island	Launceston	Smithton	Stanley	Straham	Ulverstone.
	£A.	£A.	£A.	£A.	£A.	£A.	£A.	£A.	£A.
Ale and Beer	..	..	55,204	..	207	..	..	..	..
Bacon and Ham	11,013	721	..	..	4,547	..	4	..	..
Barley, Pearl	..	..	2,367	..	..	..	..	..	..
Butter	147,758	881	13,866	28,632	109,245	..	59,044	..	1,062
Cheese	..	..	464	58,604	3,962	10	33,277	..	..
Cider	3	..	2,522	..	8	..	..	16	..
Fish	140	29	19,103	2,010	5,869	..	287	..	..
Flour	..	..	13,140	..	13,383	..	..	..	..
Fruit, Fresh	807	32,401	1,317,184	..	178,272	8	4	..	122
" Dried	..	..	15,306	..	57	..	..	..	..
" Preserved	22	471	177,235	..	2,145	..	..	..	..
" Pulped	..	..	226,300	..	55	..	8	..	..
Hops	..	..	146,986	..	..	..	..	..	..
Jams and Jellies	..	..	496,978	..	1	..	..	..	..
Oatmeal, etc.	..	..	20,427	..	4,753	..	..	..	..
Potatoes	447,811	311,045	1,204	..	38,654	..	69,593	..	105,981
Apparel, Drapery and Textiles N.E.I.	1,851	83	15,621	539	20,297	109	36	34	580
Carbide	..	..	139,770	..	..	..	..	..	..
Cement	..	239,817	..	..	..	..	..	..	..
Hides and Skins -									
Furred Skins	3,474	105	6,283	161	56,431	50	54	..	304
Sheepskins	2,194	363	33,755	378	21,954	327	22	1,655	78
Other	4,279	780	25,689	387	7,108	363	1,174	857	592
Limestone	..	70,703	..	..	..	..	..	..	..
Metals and Ores -									
Cadmium	..	..	70,013	..	20	..	..	..	..
Copper	..	..	..	..	..	..	..	568,548	..
Osmiridium	..	..	2,986	..	..	..	..	..	..

Article	Burnie	Devon-port	Hobart	King Island	Launces-ton	Smith-ton	Stanley	Strahan	Ulverstone
	£A.	£A.	£A.	£A.	£A.	£A.	£A.	£A.	£A.
Silver-lead Ore	236,454	-	-	-	39,520	-	-	-	-
Tin Ore	65,186	-	-	32	268,568	-	-	-	-
Zinc	-	-	1,368,026	-	-	-	-	-	-
Zinc Residues	-	-	78,071	-	-	-	-	-	-
Machinery & other Metal Manufacts.	7,229	2,483	33,847	876	23,068	264	1,524	3,537	659
Timber--									
Dressed	369	-	786	-	35,353	32,846	21,410	-	1,886
Logs	1,145	-	12	-	75	-	242	1,315	101
Palings	1,789	635	10,648	-	1,419	454	-	-	2,238
Sawn	46,511	19,053	82,331	-	223,835	46,572	21,899	5,401	380
Staves	1,820	847	29	-	763	961	7,393	-	592
Wood Manufrs. incl. Pegs & Racquets	1,132	82	33,749	-	41,614	-	-	12	18
Wool	676	9	416,488	697	376,827	148	1,780	6	479
Woollen Manufactures	2,225	25,233	431	-	894,173	-	-	-	-
Total Value £A. of Selected Commodities (A)	983,888	705,671	4,826,821	92,316	2,372,183	82,112	217,751	581,381	115,072
Total Value of All Goods Exported (B)	1,376,749	878,136	5,523,241	166,972	3,070,424	84,273	283,182	725,209	124,966
Total (A) as a Percentage of Total (B)	71.5	80.4	87.4	55.3	77.3	97.4	76.9	80.2	92.1

Chapter SEVEN

An Examination of The Cost Structure of Specific Industries.

CHAPTER VII.

AN EXAMINATION OF THE COST STRUCTURE OF SPECIFIC INDUSTRIES.

274. We have now reached the stage where we are ready to enter on the main task of this study, namely, the relation which shipping costs bear to the total costs of production and output policies of specific Tasmanian exporting industries.

275. It was obvious from the outset that difficulties would be encountered in making a selection of industries for which a cost analysis should be attempted, for the State's visible exports are representative of the three main fields of production, namely, agriculture, mineral and manufacturing.(1) So far as the first two categories are concerned, freight rates, either rail or sea, cannot be considered as exerting an absolute locating effect. However, they are a determinant of output policies for on the level of marketing costs partly depends the profit margin.(2) Since the prices of most agricultural products are subject to wide fluctuations owing to alternating over supply and under supply, it is only to be expected that the ratio of shipping costs to selling price will vary from season to season. In such cases it is, perhaps, more satisfactory to compute the ratio of shipping costs to total costs of production (including marketing costs). Naturally, a separate approach had to be made for each of the above three sections of the survey, viz :-

(a) Agriculture. Data were sought from the State Fruit Board, the Apple and Pear Acquisition Board, the Potato Marketing Board and Australian Potato Committee and the Tasmanian State Wool Committee. In this group also we may conveniently include meat (State Meat Board of Tasmania).

(b) Mining. The candidate discussed the shipping problem facing the miming and metal extraction industries with the several companies concerned and in the case of the Mt. Lyell Mining and Railway Company Ltd. and the Electrolytic Zinc Co. of Aust. Ltd. reference was also made to their head offices in Melbourne. In addition, valuable data were extracted from a thesi entitled, "The Tasmanian Non-Ferrous Mineral Industry"(3).

(c) Manufacturing. From the point of view of the survey this group is the most important, since the freight rate factor can exercise both a definite influence on the problem of location and on the various decisions involved in planning the level of output and markets in which the product is to be sold.

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(1) This classification is, obviously, more satisfactory from our point of view than the broader classification of primary and secondary.

(2) Especially in respect of agricultural industries.

(3) Submitted to the University of Tasmania by T. G. Brinsmead, B.Com., for the Degree of Master of Commerce (1943) and now filed in the University library.

276. In the agricultural and mineral industries the shipping freight rate problem conforms fairly closely to a certain standard pattern but in the case of manufacturing industries the problem varies widely, not only from industry to industry, but also from firm to firm. A preliminary list of 112 firms engaged in exporting a proportion of total output to Mainland or overseas markets was prepared by the Deputy Commonwealth Statistician.(4) Many of these firms are, of course, engaged in multi-product production.

277. Data were submitted by a satisfactory proportion of all the firms contacted; those who failed to do so may be grouped into two broad classes, viz :-

(a) A small minority who were suspicious as to the purpose of the survey and who were hesitant to reveal information which they feared might not be regarded as strictly confidential.

(b) The remainder did not consider it worth while examining the incidence of sea freight charges on their cost structure because of the relative unimportance of such charges in determining output policy.

278. In respect of those firms which did submit data the outstanding difficulty was to obtain data which were comparable as between individual firms within the same industry and, also, as between separate industries.(5) The candidate has observed elsewhere(6) that the larger the organization from which data are sought the more co-operative is the attitude with which the survey is received. In respect of this particular survey four difficulties in particular should be noted :-

(a) The cessation of hostilities in August 1945, meant, in effect, that three periods, each distinct from the other, ought to be considered. The pre-war period, which may be regarded as indicative of normal experience for some firms only; the war years 1939-45, with the consequent inflation of the cost structure, distortion of the pattern of production for each individual firm, and the loss of mainland and/or overseas markets; and the present transition period, in which the field work was undertaken, is beset with uncertainty, and hence entrepreneurs are naturally cautious in predicting the state of the ultimate post-war market.

(b) The number of firms from which data were sought made it necessary to determine upon a standard form of approach. Three different questionnaires were used, with a singular lack of success. A copy of the third draft is included in Appendix 'A' to

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(4) It is desired to acknowledge the co-operation and assistance at all times of the Deputy Commonwealth Statistician for Tasmania, Mr. H.J. Exley, M.A., F.S.S.

(5) Such difficulties are, of course, inherent in all cross sectional studies which aim to survey a single aspect of a wide selection of different industries.

(6) Vide C.P. Haddon-Cave, "The Location of Industry and Distribution of Employment", Research Monograph, 1944 (The University of Tasmania) Chapter III, p.43.

this Chapter. The basic problem was not merely to overcome the psychological effect of "just another form", but also to adapt the questionnaire to coincide with the particular accounting systems adopted by the individual firms. For example, one firm declared (and no more was heard from them) that it would take their cost accountant six weeks, working full time with the assistance of two clerks, to arrive at an exact figure for the proportion of total costs of production absorbed by shipping costs. And there were 21 other questions!

(c) The above difficulty was further emphasised by the fact that few firms can easily be persuaded to divulge to an outside investigator a cost breakdown for, naturally, costs are a cherished secret in any market situation.

(d) Finally, the depletion of administrative staffs over the six years of war made it difficult for firms to extract current statistical information, let alone that for a number of pre-war years. The figures in a number of cases are averages and hence suffer the usual limitations of averages. Nevertheless, they do give a useful indication of the actual position from year to year and the limits of probable variation are not wide.

279. Reference has been made in paragraph 278(b) to the difficulties involved in compiling a suitable questionnaire, which would enable comparable data to be collected and, at the same time, allow for the wide diversity in respect of the problem facing each individual industry. As a first step two sample industries were selected for analysis, namely, cement and patent racquets, the former being a bulky low-priced product, whilst the latter, although light and highly-priced, presents some cost difficulty in packing for shipment and also, being a luxury product, is dependent upon the prevailing pattern of consumer preferences and the state of demand generally. Cement, on the other hand, represents perhaps the classic example of the effects of freight costs on the production of a bulky and, at the same time, low-priced commodity. Except in the case of such products as textiles and the previously noted tennis racquets, where competition for the available market is keen and competition is on the basis of product differentiation and/or a narrow price margin in any case, the freight rate item cannot be considered in vacuo, but must be compared with final selling price. In other words, a freight cost of, say, £100 in respect of any two commodities may represent 3 per cent of final selling price in the case of commodity "A" (total annual selling value of £3,000).[/] In addition, the profits realised from the sale of commodity "A" might represent, say, 15 per cent of final selling price, and in the case of commodity "B" 1.5 per cent of final selling price.

280. Such was the general picture which was confirmed by the initial survey of the cement and the patent racquet industries, and in the light of the experience gained, the original questionnaire used as a basis of discussion when the candidate interviewed the two companies concerned was re-drafted in a more detailed form. When it became obvious that to attempt an analysis for many small firms

[/] and 30 per cent in the case of commodity 'B' (total annual selling value of £3,000).

would be impracticable, owing to the limited nature of their accountancy systems, this second questionnaire was finally re-drafted as in Appendix "A". The questionnaire hardly conforms, it is freely admitted, to the standard rules for questionnaires but, since in the case of every firm surveyed, the sending out of the questionnaire was followed up by a personal interview, it was possible to emphasise that it was not intended that every question should be relevant. Again, in the case of a number of industries of widely differing characteristics the particular approach adopted by the questionnaire has proved to be quite suitable.

281. It was intended that the survey should trace through for each individual industry the effects of shipping costs (Vide para. 281(d)) ~~on individual industries~~ from the importation of raw material, manufacturing accessories, and plant and equipment, through to the exportation of the finished product to Mainland and/or overseas markets. It is convenient to summarise briefly the 21 questions included in the questionnaire in order that their logical connection might be appreciated, viz :-

(a) In the case of a firm engaged in multi-product production annual figures for each product were sought, and if the firm did not desire to reveal actual production figures the percentage which each product bears to total output was asked as an alternative. If production was subject to wide annual variations and/or was still affected by wartime controls the firm was asked, in addition, to quote figures for a normal pre-war year.

(b) The sources of the raw materials for the manufacture of the particular product or products, and the average annual quantity consumed of each, revealed whether the particular industry concerned was dependent upon local or Mainland (overseas) raw materials. (Note also stock investment risks and losses when a firm is isolated from raw material markets, making it necessary to carry much larger stocks than manufacturers in, say, mainland capitals).

(c) The market in which the product is sold and the quantity (or proportion) which each absorbs. This is the crux of the freight rate problem, for obviously the smaller the percentage of output exported the smaller the total shipping cost, and hence the smaller the proportion of total production costs absorbed by shipping costs. However, it is more likely that the limited local market in Tasmania(7) will make the successful marketing of a considerable proportion of total output in Mainland and/or overseas markets necessary in order that production may be expanded to that point of equilibrium where final selling price (or, alternatively, the average selling price for each market) is equal to total costs of production (including marketing costs) plus a normal return on invested capital. Such a point

(7) Calculating on a population basis the following general picture emerges.

Manufacturers in:-	Home State Market %	Market Outside Home State i.e. in shipping category %
New South Wales	39.5	60.5
Victoria	27.5	72.5
Queensland	14.3	85.7
South Australia	8.8	91.2

of equilibrium is, of course, not identical with the point of optimum output under monopolistic competition, which is that output at which total profits are maximised. In the case of nearly all the industries surveyed it will be observed that the limited Tasmanian market absorbs but a small percentage of total output, and this is the case for practically every secondary industry in Tasmania employing more than 20-25 wage earners.

(d) We have already seen that the terms "shipping freight rate" and "shipping costs" cannot be regarded as identical terms for the very fact that shipping freight/charges have also to be paid. The term "shipping freight rates", in general, includes the cost of loading and unloading at the wharves and the actual cost of sea carriage. (8) So far as items other than the actual freight rate are concerned those included under the heading "shipping costs" should only be those incurred by virtue of the necessity to ship. For example. cartage to the waterfront should not be included for a similar expense would be incurred whether the commodity was sold on the home or mainland (overseas) market. The following may be noted at this stage as being of fairly general application, (9), viz :-

(i) Special packing for sea carriage.
(ii) Export and import wharfages.
(iii) Storage charges.
(iv) Agency, commission and other charges involved in selling away from Tasmania.

In the above list marine insurance has been omitted owing to the difficulty of obtaining true f.o.b. values of exports. In any case the omission is not a serious one for in the case of low priced commodities the cost of insurance is very small; whilst in the case of highly priced commodities although the cost is higher, it is of relatively little consequence for the very reason that total shipping costs are not either a locating factor or a determinant in output policy. The following table presents data relating to present rates of marine insurance, viz :-

/rates are incurred implies that a number of additional

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(7) - contd.

Manufacturers in :	Home State Market	Market Outside Home State i.e. in shipping category.
	%	%
Western Australia	6.6	93.4
Tasmania	3.4	96.6

The figures above understate the position insofar as manufacturers probably enjoy greater per capita sales in their own states thus giving a further advantage to the larger states.

(8) During the war years and up to the present time (October, 1946) the ordinary rates quoted have been inclusive of the special war surcharge.

(9) Another general item is interest on working capital tied up in goods in transit and in excess of stocks over and above the quantity which would be held if the factory were in close proximity to the market.

TABLE I.

CURRENT RATES AND MARINE INSURANCE.

	Melb.	Sydney	Bris.	Adel.	Perth
Marine Insurance	5/9%	7/3%	9/3%	8/-%	11/-%
less discount	15%	15%	15%	15%	15%
Stamp Duty	3d.%	3d.%	3d.%	3d.%	3d.%
War Risk Insurance	2/6%	2/6%	2/6%	2/6%	2/6%

(e) Comments were then sought regarding each item comprising the term "shipping costs". For example, an attempt was made to arrive at some conclusion in respect of the cost of loading and unloading vessels at the wharves. The continuance of the 30 per cent war surcharge since the cessation of hostilities was subject to considerable criticism.

(f) The method by which the product is quoted on the market -

(i) F.O.B. SALES. The seller delivers the goods on the export wharf, is responsible for getting the shipping documents prepared, and is paid, usually in full but sometimes only in part on clearing the bill of lading. The buyer's responsibility then begins, freight and insurance being payable by him as well as the usual costs at the overseas end. F.O.B. selling enables the exporter to receive quick payment on shipment and he avoids the risk of overseas marketing associated with price fluctuations and, in some cases, bad carriage.

(ii) C.I.F. SALES. Interstate shipments are made on ordinary consignment, local freight, interstate freight and other charges being paid by brokers and charged against the account sales, the net proceeds being remitted to the consignor. No advances are made against these consignments. With efficient agents the exporter gets a fairly quick return. Oversea consignments are now of two main types, namely :

(A) Ordinary consignments. The goods are shipped to brokers who make an advance, by means of a confirmed credit arranged with a local bank, to cover costs of shipping with a varying margin over and above these costs. After a sale has been effected the broker renders an account sales showing returns, less costs, commission and advance. If there is any surplus remaining, this is credited to the exporter by the broker's representative.

(B) Assignments on guaranteed advance. This differs from the ordinary consignment in the respect that the advance made by the broker is a guaranteed minimum, virtually a minimum f.o.b. price. Naturally, this advance is in excess of the usual advance, but somewhat below the current f.o.b. equivalent. If returns fail to cover the advance, brokers' commission and consolidated charges, the broker has no claim on the consignor for the deficiency. On the other hand, if returns exceed these charges, the surplus accrues wholly to the consignor.

In a number of cases (e.g. chocolate) the product is quoted f.o.b. factory, freight allowed, this being done in order to place distributors in the various markets on an equally competitive basis. Again, f.o.b. factory freight allowed is used as a means to enlarge market areas in order to increase the volume of production, the local market in Tasmania being so limited. Under the freight allowance plan buyers situated at the point of production pay the same delivered prices as those located in, say, the comparatively distant markets of Western Australia and Queensland. The manufacturer, however, receives a rate of profit which is proportionately reduced as a higher freight rate burden is absorbed. The successful operation of the freight allowance system requires a factory base price high enough to return sufficient revenue in nearby markets to enable the entrepreneur to absorb the freight charges to more distant markets and still leave a satisfactory overall rate of profit. As a result of such freight absorptions, differing rates of profit are received from each group of buyers without a corresponding difference in the nature of the product or in terms of sale.

(g) Questions 7, 8 and 9, relating to the items covered by the charge made by the shipping companies proved to be redundant as in every case (with an exception in the case of such commodities as cement and chaff) the freight rate charged is the rate quoted for general cargo. However, attention was drawn in many cases to the inflation of freight rates, since 1939, due to the imposition of the war surcharge.

(h) Having collected all the necessary preliminary data the approach then shifted to the relation of shipping costs to total production costs and the final selling price, viz :-

(i) The proportion which shipping costs bear to the price paid for imported raw materials and the amount by which total costs of production are increased.

(ii) The extent to which freight rates payable on the importation of plant and equipment increase overhead costs. In so far as the machinery imported is manufactured overseas, all manufacturers throughout Australia are affected equally for the landed price is equalised. However, insofar as the machinery is imported from a Mainland state, the higher purchase price, as a consequence of the shipping charges payable, may react unfavourably on overhead costs.

(iii) Finally, with regard to the marketing of the finished product on Mainland and/or overseas markets the proportion of final selling price absorbed by shipping costs was sought. If the product was sold f.o.b. an attempt was made to estimate a figure on the assumption that the product was sold at the point of consumption(c.i.f.)

It will be observed that (i), (ii) and (iii) represent two separate costs of "isolation", namely, (a) the higher prices that must be paid for raw materials and plant and equipment and, (b) the extra costs incurred by virtue of the necessity to ship the finished product to the point of sale.(10) Although the ratio of shipping costs to final selling price may be subject to much variation from year to year, it is to be preferred to the ratio of shipping costs to total costs of production since that latter figure is normally exclusive of profit, leaving aside the concept of normal or, entrepreneurial, profit. It can be argued, of course, and forcibly too, that the State's exporting industries must be able to bear the burden of shipping costs, otherwise they would not continue to export but such an argument presupposes a frictionless economic system which is far from being the case. There may be no other available markets and great difficulties in changing over to different forms of production, both of which apply to say the cement and chocolate industries. This would result in prices which failed to cover the full costs of production with a consequent lowering of living standards and/or the maintenance of production by Government grants, either directly, as bonuses on production or on exports, or indirectly, through cheap credit, low freight rates, writing off debts due by producers to Governmental agencies, and through various other channels.

(i) It was then necessary to consider some aspects of the Tasmanian producers' rivals on Mainland or overseas markets.

(i) With regard to the rivals' costs of production the extent to which they are affected by transport costs (either rail or sea) in obtaining supplies of raw materials. In a very optimistic frame of mind an additional question was included in respect of the relative positions of the home and rival producers' costs of production.

(ii) On the assumption that shipping costs increase the price at which the Tasmanian product has to be offered in order to realise a satisfactory return, data were sought regarding the effects on the (Tasmanian) exporters' competitive position on mainland and/or overseas markets. Or, alternatively, if the Mainland producers' price has to be accepted, the extent to which the proportion of price going to profits is absorbed by shipping costs.

(iii) Summing up, the returns from a unit of the product sold on the various markets were compared. In some cases very full data were submitted revealing the advantage derived from selling in Tasmania and thereby incurring no shipping costs. In other words, et̲ceteris paribus, insofar as the product is marketed on Mainland or overseas markets, profits are reduced pari passu with the level of the shipping costs payable.

(10) Actually, the costs of exporting to an overseas market is not one of the costs of Tasmania's isolation in the same sense as isolation from mainland markets, for all Australian producers are equally placed in respect of the former.

(j) In many cases, one market (e.g. Victoria) absorbs the bulk of the total output of an industry. The reason was often stated to be that "the market was there". An enlightening answer to say the least. The real reasons vary from concentration of population to proximity to Tasmania, to consumer awareness (e.g. pie apple), to the absence of competition from producers in other states (due to the effects of rail freight rates etc.), to the absence of transhipment charges, to comparative production costs, and so on.

(k) The resultant effects if shipping freight rates were lowered by shipping companies with the help, say, of a Governmental subsidy were then sought. It is considered that the extent to which Tasmanian producers are protected by an artificial screen of sea freight rates has been exaggerated in both State Government and academic circles. Admittedly, a lowering of the ruling rates may leave the Tasmanian market open to Mainland producers, but this market represents a very small proportion of the overall Australian market. Tasmanian producers would, on the other hand, have easier access to the extensive markets of the Mainland capital cities. However, it must be admitted that, with a general reduction of freight rates, the small local producer of non-exportable commodities may find himself in competition for the home market with Mainland companies, operating under a much lower cost basis. Moreover, the mainland market is not available to the Tasmanian producer owing to his high costs of production.

(l) The extent to which pre-war and/or present ruling freight rates need to be lowered in order to place the Tasmanian producer in a satisfactory trading position on Mainland and/or overseas markets, and the extent to which it would be possible to sell the product not only in greater quantities on present markets, but also to extend to other markets.

(m) The freight rate item is one determinant in the location of industry, and hence, if shipping costs do represent a high proportion of total costs of production, and if the particular industry does export most of its output to the main centres of population on the mainland, other factors must have weighed more heavily when the decision was made to locate in Tasmania. What these decisions were proved to be varied. The general relation of freight rates to the location and decentralisation of secondary industries will be more fully discussed in Chapter VIII.

(n) The possibilities of making a contract with the shipping companies at lower rates on the assumption that an increased and steady quantity of cargo could be guaranteed. Frequent reference was made to the monopoly enjoyed by the shipping companies, although few cases of monopolistic practices were cited; little hope was founded in the economies of large scale transport.

(o) Tasmania's export trade over the war period was affected not only by rising freight rates, but also by direct Governmental control of shipping space. It was found to be important to consider the extent to

which this control has affected the competitive position of an industry in its pre-war markets. Again, delays in shipping movements have meant that extra storage chargeshhave been incurred at the point of export and the burden of finance increased. If the exporting company is selling f.o.b. then no return is received until the product is loaded on the ship. But the producer still has to meet his wages bill and other current expenses of production. A long period of waiting requires a fund of liquid capital, or ready access to credit accommodation involving extra costs.

(p) A general observation was invited regarding the steps desirable to offset the disadvantages accruing to Tasmania's insularity. In the following discussion reference will be made to the provision of "special purpose" as opposed to "general cargo" ships in the interstate trade, so lowering costs for those bulk commodities exported in large quantities (Although compare (n) above).

282. Only those industries for which most reliable and complete data were available are included below.

283. CEMENT. In pre-war years the total consumption of cement in Australia amounted to over 850,000 tons per year, having reached this level by a gradual though steady increase from the record low figures reached in 1931-32 when the total Australian consumption was below 400,000 tons per year.

284. From Table II (page 155) it will be seen that the Tasmanian industry at Railton has established an export trade to all Mainland states except Western Australia, with Victoria as the main market, normally accounting for over 50 per cent of total output. Peak production was reached during the year ended 30th September, 1940, with a total of 93,428 tons despatched, of which 27,099 tons (or 20 per cent) only were consumed in Tasmania.

285. The figures showing exports as percentages of total recorded production reveal that there has been a distinct falling off in the export trade compared with the pre-war level. This has been solely due to the shortage of shipping space, since Tasmanian cement was not granted a high priority whilst supplies for defence and other constructional works were available from Mainland producers. Of course, with the cut-back in the defence programme the over-all Australian consumption of cement declined, and is only now reviving with the post-war return to private and public building programmes.(11)

286. Table III below indicates that the consumption of cement on the home (Tasmanian) market exceeded the pre-war average of 30 per cent during the years 1942-44. The total production on the other hand, declined steadily over the period 1940-44, the 1944 output representing only 30 per cent of the pre-war (1939) production.

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(11) For a discussion on the economics of Tasmanian cement see C.P. Haddon-Cave, "The Location of Industry and Distribution of Employment", Research Monograph, 1944 (The University of Tasmania). Ch. III, pp. 13-19.

TABLE II

EXPORTS OF TASMANIAN CEMENT 1938-1945

(Unit of quantity - tons)

Year Ending	EXPORTS (DIRECT SHIPMENT) TO					TOTAL	EXPORTS AS %AGE OF TOTAL RECORDED PRODUCTION.					TOTAL
	Vic.	NSW	Qld.	S.A.	O'seas		Victoria	N.S.W.	Queensland	S.A.	Overseas	
30.9.1938	42,725	9,179	4,970	2,441	-	59,333	52.2	11.2	6.1	3.0	-	72.5
30.9.1939	50,812	8,222	6,240	2,050	-	67,324	56.4	9.2	6.9	2.3	-	74.8
30.9.1940	51,414	7,092	5,791	1,837	195	66,329	55.0	7.6	6.2	2.0	2	71.0
30.9.1941	46,676	5,441	4,807	4,158	-	61,082	56.5	6.6	5.8	5.1	-	74.0
30.9.1942	28,924	3,497	4,085	1,769	-	38,275	47.2	5.7	6.7	2.9	-	62.5
30.9.1943	19,979	1,183	5,477	1,545	-	28,184	43,25	2.6	11.8	3.35	-	61.0
30.9.1944	16,051	1,026	2,590	1,482	3,005	24,154	42.8	2.7	6.9	4.0	8.0	64.4
30.9.1945	10,540	1,212	1,408	1,292	15,031	29,483	23.7	2.7	3.2	2.9	33.8	66.3
TOTAL 1938-1945	267,121	36,870	35,368	16,574	18,231	374,164	49.6	6.9	6.6	3.1	3.4	69.6

TABLE III

Year Ended	Consumed in Tasmania (Tons)	Total Recorded Production
30. 9.1938	22,439 (27.5%)	82,772
30. 9.1939	22,718 (25.2%)	90,042
30. 9.1940	27,099 (29.0%)	93,428
30. 9.1941	21,450 (26.0%)	82,532
30. 9.1942	23,068 (37.5%)	61,343
30. 9.1943	18,116 (39.0%)	46,300
30. 9.1944	13,335 (35.6%)	37,489
30. 9.1945	14,973 (33.7%)	44,456
TOTAL 1938-1945	163,198 (30.4%)	537,362

287. Although the industry is located at the source of raw material, inward freight rates on manufacturing accessories are incurred. Limestone, clay and ironstone are obtained from local deposits, whilst coal is brought from the East Coast mines. Gypsum is imported from South Australia and paper bags, spare machinery parts, bricks, etc. are also imported from the mainland. Annual inward freight costs paid reached their peak in 1940, but declined to £2276 in 1944 recovering to £2730 in 1945, viz :

TABLE IV

ANNUAL INWARD FREIGHT COSTS, 1938-1945.

Commodity	1938 £	1939 £	1940 £	1941 £	1942 £	1943 £	1944 £	1945 £
Bags	1736	1697	2092	1939	1425	569	607	727
Gypsum	2579	2296	2640	2737	2787	988	1385	1662
All other	559	303	585	478	501	532	284	341

288. Inward freight charges on raw materials and plant do not unduly increase production costs although it should be noted that, if the rates were lower on coal, Newcastle coal would be used since the Tasmanian product contains 20 per cent ash and the necessary burning temperature is, therefore, not easily reached. Approximately 22 per cent of Tasmania's annual production of coal is burnt in the cement kilns. Table V below presents data relating to the quantity and value of coal produced for the years 1938-43, and it will be observed that the level of output has been steadily increasing, with a slight fall in 1940. Reference has previously been made(12) to the relation of a reduction in the ruling freight rates and the consequent lowering of the "protective" screen (if there is one) provided by the high rates. It was denied that the advantages to be derived by Tasmanian exporters from the resultant widening of the market would be outweighed by the loss of markets that might result by Mainland producers undersalling Tasmanian products. The case of coal, a factor used in the productive process, is somewhat different. Would the advantages of increased efficiency, resulting from the burning of Newcastle coal(13) by all industries requiring high burning temperatures in manufacture, be greater or less than the outback in local coal production, with consequent disemployment of both labour and capital? An answer here is not possible.

(12) Vide paragraph 281(k).

(13) Purchased at a nearly comparable price through reduced rates.

(14) Data were not available for the year ended 30/9/45.

TABLE V.

Tasmanian Coal Production, 1938-43.

Year	Quantity (Tons)	Value (£A)
1938	83,753	61,991
1939	99,392	74,460
1940	83,136	63,688
1941	109,714	85,311
1942	134,442	108,241
1943	145,882	117,361

289. Reference has already been made to the several markets in which cement is sold and the proportional amounts which each absorbs. The following table presents confidential data with respect to the percentage of selling prices in four states absorbed by shipping freight rates (not shipping costs) :- (14)

TABLE VI.

SHIPPING FREIGHT RATES AS PERCENTAGE OF SELLING PRICES, 1938-1944.

Year Ended	Victoria.	N.S.W.	Q'land	B.A.
30.9.38	13.08%	17.79%	33.28%	16.63%
30.9.39	13.91	18.98	32.75	17.84
30.9.40	15.82	21.38	40.18	19.04
30.9.41	16.77	21.84	44.38	20.21
30.9.42	19.51	23.68	44.16	23.33
30.9.43	22.39	26.69	45.60	26.00
30.9.44	21.74	26.26	36.44	25.64

The figures speak for themselves; and in so far as the freight rate only is taken into account the percentages are understated. Moreover, while the price of cement fell, steadily falling over the period under review, except for a small increase in 1944, freight rates have risen both absolutely and relatively. They now represent on the average a quarter of final selling price.

290. In Table VII below data relating to the percentages of total production costs (including all shipping and marketing costs(15) absorbed by shipping freight rates, are shown. It will be seen that for the years 1943 and 1944 in all States except Queensland, the selling price was less than total production costs. This was largely due to a decrease in turnover and a consequent increase in overhead costs. Hence, the percentages of total costs are in some instances lower than the percentages of selling prices.

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(15) Excluding Taxation.

TABLE VII.

SHIPPING FREIGHT RATES AS PERCENTAGE OF TOTAL PRODUCTION COSTS, 1938-1944.

Year Ended.	Victoria	N.S.W.	Q'land	S.A.
30.9.38	15.21%	20.27	37.02%	18.72
30.9.39	17.40	23.23	38.37	21.21
30.9.40	19.51	25.32	46.38	22.92
30.9.41	19.83	25.84	50.73	24.66
30.9.42	19,75	25.74	48.19	24.77
30.9.43	20.77	25.79	50.50	24.52
30.9.44	19.73	24.77	51.12	23.74

291. From the above data the relation of profits, freight rates and all other costs to final selling price are deduced, by the following method, for the years ending 30th September 1938 and 1944 respectively, viz :

Victoria: 30.9.38.

.1308 of price = .1521 of (price - profit)(16)
i.e. .1521 of profit= .0213 of price
i.e.profit= $\frac{213}{1521}$ of price = 14%

Hence, Price = 14% profit, plus 13% freight, plus 73% other costs.

Similarly:-

Victoria: 30.9.1944

Price = 10% loss, plus 20% freight, plus 90% other costs.

New South Wales: 30.9.1938.

Price = 12% profit, plus 18% freight, plus 70% other costs

30.9.1944.
= 6% loss, plus 26% freight, plus 80% other costs.

Queensland: 30.9.1938.

Price = 10% profit, plus 33% freight, plus 57% other costs

30.9.1944.
= 11% profit, plus 36% freight, plus 53% other costs

South Australia: 30.9.38.

Price = 11% profit, plus 17% freight, plus 72% other costs

30.9.44.
= 8% loss, plus 24% freight, plus 84% other costs.

292. The wholesale prices of cement per ton ruling in the above four markets for the years 30.9.1939 to 30.9.1944 are presented below :

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(16) Including taxation.

TABLE VIII.

WHOLE PRICES OF CEMENT - 1938-1944.

Year	Sydney(17)	Melb.(17)	Q'land(18)	S.Aust.(19)
1938	90/-	86/-	86/-	87/-
1939	88/3	83/9	86/-	87/-
1940	87/6	83/-	82/-	87/-
1941	92/1	80/-	77/6	87/-
1942	97/2	80/-	73/6	87/-
1943	100/4	83/4	73/6	87/-
1944	100/4	84/4	73/6	87/-

We may now derive absolute figures as the components of the ruling prices for the years ending 30th September, 1938 and 1944, viz :-

N.S.W. 30.9.1938.

Price (90/-) = Profits (10.8 shillings), plus freight (16.2 shillings), plus other costs (63.0 shillings).

30.9.1944.

Price (100/4) = Profits (6.0 shillings), plus freight (25.5 shillings), plus other costs (80.5 shillings).

Victoria: 30.9.1938.

Price (86/-) = Profits (12.0 shillings), plus freight (11.2 shillings), plus other costs (62.8 shillings).

30.9.1944.

Price (84/-) = Profits (8.4 shillings), plus freight (16.9 shillings), plus other costs (75.8 shillings).

Queensland: 30.9.1938.

Price (86/-) = Profits (8.6 shillings), plus freight (28.6 shillings), plus other costs (48.8 shillings).

30.9.1944.

Price (73/6) = Profits (8.1 shillings), plus freight (26.5 shillings), plus other costs (38.9 shillings).

South Australia:

30.9.1938.

Price (87/-) = Profits (9.6 shillings), plus freight (14.0 shillings), plus other costs (62.6 shillings).

30.9.1944.

Price (87/-) = Profits (7.0 shillings), plus freight (20.9 shillings), plus other costs (73.1 shillings).

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(17) Sydney (Portland) and Melbourne (Aust. A.R.C., Portland Standard Specification) prices supplied by the Commonwealth Statistician, Canberra.

(18) Supplied by the Queensland State Stores Board, the largest buyer of cement in the State and hence it obtains a somewhat more favourable price than commercial buyers. The contractor is the Queensland Cement & Lime Company Ltd.

293. The wholesale price of cement in Tasmania has been 90/6 per ton on trucks at Hobart railway station for some years. It is estimated that a ton of Railton cement sold in the Tasmanian market realises an average profit of approximately 27.0 shillings, or 30 per cent of final selling price. This brings the above data into relief and emphasises the relative trading disadvantages of the Tasmanian exporter.

294. Before proceeding further it should be clearly understood that, as in the case of many other products, the competition of producers, on the various markets is not on the basis of price, but on the basis of cost components, for the price is controlled by the manufacturer (or manufacturers) in the importing State. In other words, the Tasmanian producer who exports to the Mainland must observe the prices ruling in each of the several States. The aim of such producers' agreements, known as "orderly marketing", is the elimination of cut-throat competition on the basis of selling prices. Cut-throat competition is likely to arise in the case of such a standard commodity as cement with a relatively fixed market.

295. It is interesting to note that so far as the selling policy of Goliath Portland is concerned, Queensland is divided into two sections, North and South. There is a cement company near Brisbane which dominates the "Southern market" but in the "Northern market" the high freight rates affect both companies equally, and the Tasmanian product can be successfully marketed because of lower manufacturing costs. A similar situation in reverse arises in the case of competition between South Queensland cement and imports from overseas. Oversea cement from, say, Great Britain or Denmark could not, pre-war, undercut the Australian product at the point of production. So far as Queensland is concerned oversea cement cannot compete in Southern Queensland but oversea vessels could place their "dump" rate cement in North Queensland ports at a cost equal to or lower than the state company located in the South, could land its cement.(20)

296. Since the industry is dependent for its continued existence on an economic basis on its competitive position in Mainland markets, where nearly 75 per cent of total output is sold, the lowering of freight rates will be the main determinant in any future expansion. Pre-war, the company enjoyed equal bargaining power with the shipping companies, and could always use as a bargaining weapon the threat to run its own shipping services.(21) In this connection the optimum size ship is about 2,000 tons.

297. The larger the quantities for transport that can be guaranteed to the shipping companies, the better the bargain that can be struck. Regular shipments would

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(19) Supplied by the Government Statistician, who kindly contacted the two firms manufacturing cement in the State. The price quoted is subject to a 6/- addition if the cement is delivered in the metropolitan area.

(20) It is interesting to note that both high and low shipping freight ratesnullify the tariff. (a) High Interstate rates nullify the tariff when it costs the producer as much to send his product from A to B as it does to bring the competitive product from overseas to B. (b) low overseas rates nullify the tariff when the overseas companiesland some oversea products at so far below the average rate as to constitute to the importer a refund of the amount paid in duty.

enable special ships to be built for the transportation of cement and hence facilitate handling with a resultant lowering of costs. The various contracts struck with the shipping companies have varied according to the prevailing economic conditions; the best arrangement was made in 1936.

298. Although due consideration has been given to the cost of transporting cement by the shipping control authorities there has been no lowering of the cement rate over the last six years. Of course, there has actually been a 30 per cent increase when war surcharge is considered. About four years ago the company investigated the possibility of transferring sections of its plant and equipment to other uses at least for the duration of the war, but the specialised nature of the equipment does not lend itself to anything other than the purpose for which it was built.

299. CHOCOLATE AND CONFECTIONERY.

As in the case of cement, only one firm is engaged in this industry in Tasmania, namely, Cadbury-Fry-Pascall Pty. Ltd. at Claremont. Very full and reliable data were submitted, the products manufactured and the relative proportions of each being as follows :-

TABLE IX.

Product	Percent of Total Output 1938-39	1944-45
1. Cocoa	16	17
2. Bourn-vita	2	7
3. Chocolate and chocolate confectionery	67	63
4. Sugar confectionery	15	13
	100	100

There was little shift in the pattern of production over the six years of war except insofar as the lines constituting items three and four above were standardised. Of course, there has also been some shift in the section of the population consuming the product, together with rationing of supplies to retailers.

300. The chief raw materials used in manufacture are cocoa beans, sugar and milk. Cocoa beans are imported from British West Africa, sugar from Queensland via New South Wales refineries, and milk from Tasmania, Victoria and New South Wales. Other manufacturing accessories are bought in various countries.

301. The Tasmanian plant is merely one unit of the larger Cadbury organisation and hence caters for the Australian market only, viz :-

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(21) It was noted in Chapter V that commodities such bulky, low priced commodities as cement and chaff received special concession rates from shipping companies. The company at Railton being the only Tasmanian exporter means, in effect, that a private contract is struck between the shipping companies and the cement company. Vide next paragraph. Special cement rail freight rates also apply from the Goliath siding (Western line) to Launceston or Devonport, 13/- and 2/6 per ton, the latter rate applying on cement for export only.

TABLE X.

State	Distribution of Output. 1938-39.
	%
Tasmania	7
Victoria	32
New South Wales	34
Queensland	11
South Australia	9
Western Australia	7
Overseas(British)	-(very small %)

Pre-war figures only are given in the above table, as transport regulations during the war have prevented the firm from selling chocolate and confectionery in New South Wales and South Australia. It is anticipated that the post-war distribution of output will be similar to the prewwar distribution.

301. An analysis of shipping costs for each Australian trade was not available but a fair average may be derived from the shipping costs involved in the export of selected lines to the main distributing centre at Sydney, viz :-

TABLE XI.

Item	Cost per 100 lbs of Product	
	1939	1945
	s. d	s. d
Special packing for Sea Carriage	5. 6	9. 3
Sea Carriage	2. 9½	3.11½
Export Wharfage		
Import Wharfage	6¾	6¾
Stacking and Sorting	3¼	3¼
Cartage to Mainland Distributing Centres	5	7¼
Marine Insurance	1¼	4
War Risk	-	¼
TOTAL Shipping Costs	9. 7¾d.	15. 0d.

The above costs for 1939 and 1945 represent 6.5 per cent and 9.75 per cent respectively of the selling price of the line concerned. The firm has been granted a number of price increases for the various products manufactured but the proportion of shipping costs to selling price has risen by 3.25 per cent.

303. The firm considered that all the items in the table above were heavy but made special reference to the outstanding increase since 1939, in the cost of shipping containers. In the example given above, the increase in the cost of fibre containers was 72 per cent. The greater proportion of exports is at present packed into fibre board shipping containers, but as the range of lines is increased, with a return to peacetime production, a proportion of timber cases made from Tasmanian hardwood will need to be used. These will cost approximately double the cost of the pre-war softwood cases made of Canadian spruce.

304. The company maintains its own distribution system throughout the Commonwealth and the various products are sold at the same price in each State. Shipping costs are not allowed to affect sales volume in any State even though some lines might be sold at a loss. In connection with the ruling freight rates, particular reference was made to the 30 per cent surcharge and the additional costs incurred owing to the periodic shortages of shipping. As referred to in Chapter V there have been very few direct boats during the war years to Brisbane, Adelaide and Fremantle and, hence, it has been necessary to tranship at Sydney or Melbourne at additional costs per ton (for figures see Table X , Chapter V). Frequently, goods have also had to be railed to Launceston when ships from Hobart have not been available. Again, additional storage charges on the Mainland have been incurred whilst waiting for vessels to Adelaide, Fremantle and Brisbane.

305. Regarding the proportion which inward shipping costs bear to the price paid for imported raw materials, it was found impossible to prepare more than a rough estimate. A weighted average would probably be about 1 per cent of the landed value of the goods. This is applicable to goods imported from the Mainland only. The position in relation to imports from overseas is much more complicated and cannot be estimated, as in many cases the overseas freight charges are paid by importers who partly process the raw materials (e.g. oversea paper for label printing).

306. Although the freight rates from the Mainland to Tasmania increase the cost of plant and equipment by amounts varying, say, from 1 to 4 per cent and thereby increase depreciation costs, the total effect on production costs is immaterial. At the same time Mainland manufacturers are on a slightly better competitive footing. Again, many machines imported from overseas are transhipped at Sydney or Melbourne, which places the Tasmanian producer at some disadvantage owing to the additional landing costs involved.(22)

307. It is estimated that shipping costs normally represent 6.5 per cent of the final price obtained for all lines on the average of all (civilian) production. Cadbury products are in competition with all other cocoa, chocolate and confectionery manufacturers in Australia, but principally Nestle's in Sydney and MacRobertson's in Melbourne. These firms, of course, sell a much higher percentage of total output in the home market, namely, Sydney and Melbourne respectively. As a result, the percentage of average selling price absorbed by shipping costs will be lower than that for the Tasmanian firm. It is estimated that the figure would be approximately 4.5 per cent.

308. Transport costs in obtaining raw material and manufacturing accessories affect the Tasmanian industry more than Mainland rivals, as in a great many cases they obtain the necessary supplies locally, whereas Cadbury's have no option but to ship from the Mainland to Tasmania. This adversely affects production costs to the extent of £5000 per annum

(22) Vide Chapter VIII.

309. This extra cost item of £5000, plus a further £15,000 on the distribution of manufactured goods, results in a reduction of profits, since prices are fixed (equalized) on a competitive basis for the whole of Australia. Again, some lines cannot be marketed at all owing to the absence of a profit margin and the market is such that higher prices cannot be charged to recoup the Tasmanian firm for the extra freight costs involved in its Claremont location.

310. Furthermore, and as emphasised earlier(23), manufacturers in Sydney or Melbourne are dependent on an export market to a limited degree only, since they are located in the main centres of population, whereas the Tasmanian industry can serve only a very small local market. The table below compares the percentages of final selling price absorbed by profit for a "typical" line sold in all States. Of course, account has been taken only of the variation caused by shipping costs, viz :

TABLE XII

Market	% of Final Price absorbed by Profits.	% of Australian Population in each State.
Tasmania	12%	3.4%
Victoria	5.5 %	27.5%
New South Wales	5.25%	39.5%
Queensland	2%	14.3%
S. Australia	1.75%	8.8%
W. Australia	-0.5%	6.6%
Overseas (Price fixed according to costs and only small quantity exported.)		

311. A lowering of the freight rates between Tasmanian and the Mainland would assist manufacturers in the Mainland states when competing with the Tasmanian industry for the home market, but the advantage to be derived from lower rates would be very much in favour of the latter because its competitive position would be improved in a market of approximately 7,000,000, as compared with the limited size of the Tasmanian market available to the Mainland manufacturers.(24)

312. Moreover, a lowering of freight rates between Tasmania and the Mainland would reduce costs sufficiently for a substantial increase in productive capacity to be possible owing to wider markets. The home industry would be able to manufacture lines previously unprofitable if sold at the ruling mainland prices for similar lines. And, of course, the elasticity of demand is such that a slightly more highly priced Tasmanian product would sell in limited quantities only.

313. During the war period transport restrictions interrupted exports to New South Wales and South Australia. In the other states shipping control has restricted selling operations but has not seriously interfered with either business contacts or competitive position.

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(23) Vide para. 281(c)

(24) cf. Cement; and paragraph 281(k)

314. Since freight rates do represent a significant proportion of total costs of production, being a determinant insofar as output policies are concerned, and since the industry is dependent on Mainland markets, why did the Cadbury plant locate in Tasmania? To an incalculable extent the decision of the parent firm to commence operations at Claremont was based on idealistic considerations. In respect of freight rates they represented a smaller proportion of selling price owing to lower rates and higher prices. In addition, there were other advantages at the time, but these have since been lost in comparison with mainland manufacturers over the past twenty years. The establishment of a new milk chocolate factory is now being planned but it is not yet known whether the site finally chosen will be at Burnie on land already acquired or in Victoria. In any case, the factory will be located in a dairying area. The Claremont factory uses a high proportion of milk from Victoria and New South Wales. The present inability of Tasmanian dairy farmers to fully supply Cadbury's milk requirements is due to the change over to root cropping. This change was originally caused partly by the Cadbury policy in regard to milk prices. Even if the milk chocolate or "crumb" factory is built in Victoria, it is highly unlikely that any of the tangible assets at Claremont will be transferred, at least for many years.

315. In dealing with the problem of Tasmania's insularity it was emphasised that the Tasmanian industry must carry much larger stocks of raw materials than those plants located in the mainland capitals. Not only is there the additional interest on capital, storage and insurance costs, additional losses through deterioration and changes in market values, but also - important in the case of such commodities as chocolate - the manufacturer is unable to quickly vary his pattern of production to meet changing conditions. There are other disadvantages derived from the Claremont location, and which must adversely influence decisions relating to the projection of new industries in Tasmania. For example, the lack of shopping facilities, particularly where girls are employed. Owing to Saturday morning closing, and no reinstatement of a shopping night, it is impossible for employees in industries outside Hobart to do any shopping. This forces employees to seek work in Hobart where they can hurriedly shop in lunch hours or after finishing work at night, but it is also increasing the inefficiency caused by absenteeism amongst employees who cannot, or do not wish to, change their employment.

316. The Labour market is extremely limited in Tasmania owing to the small population. The inability to extend owing to shortage of the labour supply is a severe handicap to existing industries and must deter the establishment of new industries.(25) At the present time at the Cadbury factory, production has been curtailed and male labour reduced owing to the shortage of female labour.

317. <u>TEXTILES</u>.

The two sections of the textile industry with which we shall be concerned are engaged in the manufacture of wool yarn and woollen flannels, dress goods and blankets.(26) Since production is mainly divided between two main concerns they will be treated separately.

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(25) The textiles industry in the North also experiences frequent shortages in the female labour market.

(26) Production of wool in Tasmania is mormally about 17,500,000 lbs. per annum, of which 12,000,000 lbs is exported. Imports of wool, principally for woollen manufactures, amount to 4,500,000 lbs. per annum. The total consumption of wool for manufacturing purposes in the State is therefore approx. 10,000,000 lbs. of which 5,500,000 lbs. are locally produced and 4,500,000 lbs. imported.

318. Patons & Baldwins Ltd.

(a) This company is engaged solely in the production of wool yarn. Considerable quantities of raw material have to be imported from the mainland and for a normal year are as follows :

TABLE XIII

Commodity	Quantity	Source
Wool	7,287 tons	Victoria
Chemicals	1,170 tons	Victoria
General Supplies	490 tons	Victoria
Wool	663 tons	South Aust.
Wool	61 tons	N.S. Wales
Chemicals	18 tons	N.S. Wales
Supplies	41 tons	N.S. Wales

Various minor items are imported from the United Kingdom but these are landed at the same cost at every main Australian port and hence all manufacturers are on an equal basis.

(b) Only a fraction of total output is absorbed by the Tasmanian (home) market as is revealed by the following table, viz :-

TABLE XIV.

Market	Average Quantity (cubic tons)	Percent of Total Output
Tasmania	200	1.4
Victoria	4,860	34.4
N.S. Wales	5,990	42.3
Queensland	1,480	10.5
South Aust.	990	6.9
Western Aust.	620	4.4
Overseas	6	-

No special comments need to be made in respect of distribution of output which is determined on the basis of the distribution of population.

(c) Wool yarn is a fairly highly priced product and, therefore, the proportion which shipping costs bear to final selling price is only 2.85 per cent, calculated on the basis of a weighted average of the quantity sold in each State. Such expenses are recognised as a factor to be considered but only one among many(27). It is estimated that inward shipping costs increase total production costs by an average amount of .84d. per lb. of yarn. The Tasmanian yarn is quoted at the same c.i.f. price in each capital city.

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(27) It is likely that a reduction of the Launceston/Brisbane and Launceston/Perth rates would widen the market available in those two cities. At present only very small quantities are exported.

(d) It is understood that given another chance the company would not locate in Tasmania for the factor of humidity is not now important with technological advances. Again, the labour being isolated is unskilled.(28) Hydro-electric power is not a locating factor so far as the textile industry is concerned for the average annual cost is only £9,000. Electrical steaming is more expensive than coal and local Tasmanian coal mined at Stanhope can be economically utilised provided that suitable equipment is used.

319. Kelsall & Kemp (Tas.) Ltd.

(a) Although the pattern of production varies according to changes in demand it can be stated that this Company divides its total output as follows :

TABLE XV

Product	Percent of Total Output
Domestic Flannels	50
Dress Goods, Blazer flannels	30
Blankets	20

(b) The raw wool used in manufacture is purchased in Victoria, New South Wales, Queensland and South Australia, as well as locally. Aids to manufacture are imported from Victoria and from overseas. Woollen flannels and blankets are made from wool blends which contain a definite and regular proportion of various types of wools.

(c) The entire output is sold on a f.o.b. Launceston basis to buyers in all states except Victoria. So far as this latter state is concerned, in order to compete for the available demand on a slightly more favorable basis the goods are quoted c.i.f. Victoria. Rival Victorian manufacturers quote f.o.b. Melbourne.

(d) The proportion which shipping costs bear to the imported value of raw wool varies, of course, with the ruling price for wool. The range is from 2 to 4 per cent whilst an average is approximately 3½ per cent. The proportion which shipping costs bear to the total value of all raw materials is 2 per cent; it should be noted that this firm has bought larger quantities of Tasmanian wool during the war years than normally.

(e) Overhead costs are increased by the freight rates and landing charges payable on imported plant and equipment. Operations were commenced in 1923 and hence the present plant is 23 years old. Plant replacement should have been carried through in 1939 (6% depreciation rate = 16 years). Although imported plant of British origin is free of duty shipping costs, insurance and exchange charges often increase the landing price in Tasmania of plant between 80 - 100 per cent on the sterling value.

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(28) The fact of isolation, of course, reduces to some extent the possibility of industrial warfare.

(f) The table below shows the proportion of total output absorbed by the various mainland markets, viz :-

TABLE XVI.

Market	Percentage of Output (Average)
Victoria	54
N.S.Wales	31
Western Aust.	6
Tasmania	5
South Aust.	3
Queensland	1

(g) A figure of 1.85 was abstracted from the Company's books showing the average perdentage of the final price obtained on mainland markets which is absorbed by shipping costs. (Or ½d. per yard per 27 inch cloth). So far as the total costs of production are concerned shipping costs account for 2 per cent only, but this is said to be a considerable item from the point of view of competitive marketing. In the depression years competition was so keen in the Australian market for standard flannels that prices were quoted in sixteenths of a penny. Mainland manufacturers have certain freight charges also but no data were available for a comparative survey. The main factor determining the maintenance of a competitive position on mainland markets is a reduction of the unused productive capacity normally existing.(29) This has frequently resulted in competitive price cutting and a lowering of profit margins.

(h) The main rivals of the Tasmanian firm are the Victorian and New South Wales mills which operate to satisfy the home demand; surplus production only is sold in other states, mainly in the form of made up garments. The Tasmanian firm, of course, has no extensive local market. The prices of standard domestic flannels are fixed by the Associated Wool and Worsted Manufacturers of Australia and hence there is competition on a product basis only. So far as dress flannels are concerned there is too much variety in the products for any price fixing agreements to be effective; hence, there is an intense process of product differentiation, the emphasis being on novelty lines. On these latter a higher margin of profit is obtained.

(i) Although the shipping cost item is not one of the main determinants of output, proximity to market is advantageous for other reasons; and although the earlier history of this plant is obscure it seems certain that the Tasmanian location was chosen only as a result of a misunderstanding between the Australian and Head Office (England) directors. In respect of power, quite apart from the fact that power is not a large element in cost, the differential advantage of Tasmanian power, as compared with Victorian, has been lowered with the increased rates charged by the Hydro-Electric Commission.(30)

(29) There is need for some attempt to be made to clearly define the term "excess capacity". There is current confusion between the meaning of this term and the term "unused capacity". It is most convenient to reserve "excess capacity" for a level of production below optimum cost and "unused capacity" for idle physical plant and equipment. The existence of "unused capacity" is, of course, much

320. WOOL AND PROCESSED SKINS.

As the British Government arranged with the Commonwealth Government to acquire the Australian wool clip for the duration of the war and one full wool season after the cessation of hostilities it was not possible to obtain data from private wool brokers, and the Tasmanian State Wool Committee advised that special freight rates on wool were arranged by the Australian Wool Realisation Commission with the ship operators.

321. The arrangement with the British Government embraces all wool, wool tops, noils and waste not required for use by Australian manufacturers. The principal conditions are as follows :

(1) The United Kingdom to pay 15.453126d. per lb.(Aust) flat rate price for the wool in store at the oversea port of shipment.

(2) The United Kingdom to pay 3/4d. (Aust.) per lb. to cover all costs from store at port of oversea shipment to ship.

322. In Australia the scheme is administered by the Central Wool Committee (with subordinate State Committees) which controls the receipt of the wool into store, its appraisement and shipment overseas. From the 1st July, 1942, the price paid to manufacturers was fixed by the Central Wool Committee according to a determination notified to it by the Commonwealth Prices Commissioner who determined the "appraised price" excluding cost of delivery and a special surcharge of 10 per cent.

323. A Tasmanian woolscouring, carbonising and fellmongery company located at Launceston calculated that total shipping costs incurred on both imported raw material and exports of the processed product equal 5.66 per cent of total production costs.

324. TIMBER.

Representations were made to both the Tasmanian Timber Association and the Deputy Controller of Timber Supplies and, although both sources admitted the existence of a detailed breakdown of timber production costs, no such figures were forthcoming. Reference was then made to a sample of timber exporting companies.

325. The special timber rates charged per 100 super feet by the shipping companies are referred to in Chapter V. The total value of dressed and undressed timber, logs, staves and palings exported interstate and overseas in 1938-1939 was £A553,689 and £18,954 respectively. The total value of interstate timber exports in 1944-45 was £A635,787. There were no shipments overseas. Normally, the Tasmanian market absorbs 19-20 per cent of the total cut of between 70 and 80 million super feet, and Victoria, as the main market, 60 per cent.

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(29) contd.
easier to ascertain than "excess capacity.

(30) The Commission took over the Launceston City Council power scheme under a recent agreement. For the Hydro-Electric Commission's rates for bulk supply see Appendix "B" to this Chapter.

326. The Tasmanian timber industry presents a special problem when seeking price and cost data owing to the division of firms into those which support and those which refuse to join the Tasmanian Timber Association. The Association was formed in 1943 after the dissolution of the Tasmanian Timber Organisation, a non-industrial organisation(31) financed by a small grant from the State Government out of timber royalties. The membership of the Association, on the other hand, requires a substantial annual payment and in return the Association represents members before the Arbitration Court and the Commonwealth Prices Commissioner. It is contended by non-member firms that the Association is dominated by the Holymans - Atkins - Kilndried Hardwoods group. These three companies are certainly closely interlocked financially and discriminatory treatment insofar as shipping space is concerned is apparently practiced.(32) So far as cost data are concerned, each section of the industry accuses the other of submitting irregular figures to the Prices Commissioner. It was found impossible, therefore, to determine the effect on the profit margin from selling on the home (Tasmanian) market as compared with selling on mainland markets.

327. Victorian millers, in particular, can afford, under normal market conditions, to reduce their prices below the landed cost of Tasmanian timber. Victorian timbers at present are sold at the same price as Tasmanian, but the proportion going to profit so far as the latter are concerned, is less the shipping costs payable per 100 super feet. Lower production costs of Tasmanian timbers do not entirely offset this disadvantage but lowering of the freight rate would not enable Mainland producers to expand sales in the Tasmanian market. Annual imports of both interstate and overseas timber in pre-war years rarely exceeded 2.5 million and five million super feet respectively.

328. Table XVII below presents data relating to shipping costs per 100 super feet for timber on the main export trades, viz :-

TABLE XVII.

SHIPPING COSTS - TIMBER

Route	Freight Rate per 100 s.ft		Other Costs		Total Costs	
	1939	1945	1939	1945	1939	1945
Northern Ports/Melb.	5/-	6/6	1/6	1/9	6/6	8/3
Hobart/Melbourne	5/-	6/6	1/6	1/9	6/6	8/3
Northern Ports/Adelaide	7/-	9/1	1/8	2/-	8/8	10/1
Hobart/Adelaide	7/6	9/9	1/8	2/-	9/2	11/9
Northern Ports/Sydney	6/6	8/5	1/6	1/9	8/-	10/2
Hobart/Sydney	6/6	8/5	1/6	1/9	8/-	10/2

329. In the next table the above shipping costs are expressed as a percentage of the wholesale prices of selected lines of seasoned undressed hardwood in 1939 and 1944-45 :

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(31) That is, funds were not used for purposes of arbitration.

(32) Vide Chapter V, paragraph .

(33) Data for 1939 from company books, and for 1945 from official Prices Commissioner price lists.

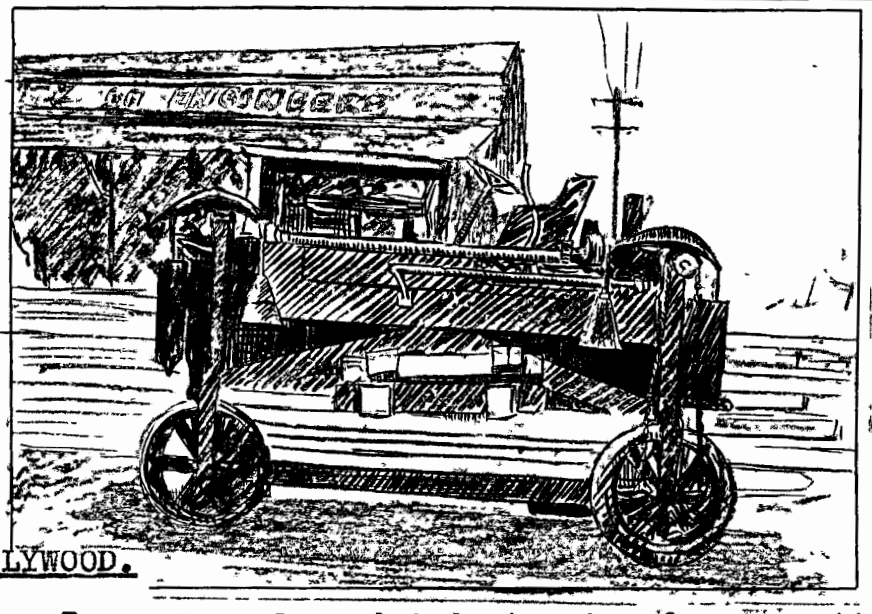
TABLE XVIII(33)

SHIPPING COSTS AS A PERCENTAGE OF WHOLESALE TIMBER PRICES

Size	Wholesale Prices per 100 super feet						Shipping Costs as Percentage of Price.							
	Melbourne		Sydney		Adelaide		Melbourne		Sydney		Adelaide			
	1939	1945	1939	1945	1939	1945	1939	1945	1939	1945	1939		1945	
	s.d	s.d	s.d	s.d	s.d	s.d								
7" and 8" by 1"	32/6	43/-	34/-	45/11	34/8	45/10	20.0	19.2	23.3	22.1	25.0	26.2	24.2	25.6
9" and 19" by 1"	32/6	45/-	34/-	47/11	34/8	47/10	20.0	18.3	23.3	21.6	25.0	26.2	23.2	24.6
8" by 2"	36/6	46/3	38/-	48/2	38/8	49/1	17.8	17.3	21.1	21.1	22.4	23.7	22.6	23.9
9" & 10" by 2"	36/6	49/9	38/-	51/8	38/8	52/7	17.8	16.6	21.1	19.7	22.4	23.7	21.1	22.3
9" & 10" by 3"	42/6	63/-	44/-	64/11	44/8	65/10	15.3	13.1	18.2	15.7	19.4	20.5	16.8	17.8
3" squares	32/6	48/-	34/-	49/11	34/8	50/9	20.0	17.2	23.3	20.4	25.0	26.2	21.8	23.2

330. It will be observed that, pre-war, the proportion of wholesale selling prices of the lines selected absorbed by shipping costs varied from 15.3 (9" and 10" by 3" Melbourne market) to 26.2 (7" - 10" by 1" and 3" squares shipped at Hobart for Adelaide marker). An unweighted average is computed at 21.9. By 1945 the percentages had fallen slightly due to the advance in prices; they varied from 13.1 (9" and 10" by 3" Melbourne market) to 25.6 (7" and 8" by 1" shipped at Hobart for Adelaide market), the unweighted average being 20.4

331. It was strongly contended by nearly all firms interviewed (whether members of the Tasmanian Timber Association or not) that a reduction in the pre-war freight rate will be necessary before markets can be extended under normal conditions of supply and demand. Such a reduction could possibly be achieved by the provision of a special timber ship and the installation of special mechanical handling equipment at port terminals. The drawing below is of a mobile timber carrier used very successfully on Melbourne wharves in the last few years.



332. PLYWOOD.

The Tasmanian plywood industry is of comparatively recent origin and the final pattern of production is not yet stabilised as experimental work on different grades to be developed is still in progress. At present the Tasmanian market absorbs approximately 30 per cent and the Melbourne market 70 per cent of the total output. The competition for the available market in Victoria is mainly on the basis of product. The distributors of such products as masonite and caneite also incur shipping freight rates and/or rail freight rates, mainly from Queensland.

333. The Tasmanian product is priced at the same level on an f.o.b. basis as the Mainland product f.o.r. However, to place the Tasmanian plywood f.o.b. costs 3d. per 100 super feet more than the f.o.r. costs. Approximately 7 per cent of the final selling price is absorbed by shipping costs. Lower freight rates would be one way of assisting the Tasmanian industry when competing with substitute materials. The present shipping services are said to be adequate for the needs of the industry but costs are inflated when stocks have to be accumulated until space is provided.

334. NEWSPRINT.

The average annual output of the Boyer mills is 27,000 tons. The major raw materials used are wood, in log form, obtained from forest areas in the Derwent Valley and transported to the mills by rail, and unbleached sulphite pulp approximately 7,000 tons of which are imported annually from Canada.

335. The total output is sold in Australia, the approximate distribution as between States being as follows :-

TABLE XIV.

State	Percent of total output
Tasmania	1
Victoria	31
New South Wales	50
Queensland	5
South Australia	8
Western Australia	5

336. The company is required to pay on all Tasmania/Mainland trades the basic general cargo rate plus 50 per cent, the loading being applied because of the space lost by the shipping companies due to the cylindrical shape of the rolls. Data for 1939 are not necessary as the Company was not operating pre-war, the rates below (inclusive of 30 per cent war surcharge) being those at present ruling, per ton weight :-

TABLE XV.

Route	Rate per ton (Newsprint)
Hobart to Melbourne and Sydney	39/-
Hobart to Adelaide	45/6
Hobart to Brisbane	78/-
Hobart to Fremantle	102/4

337. A breakdown of shipping costs per unit (roll) of product reveals that the actual cost of sea carriage represents 74.6 per cent of the total cost, viz :-

TABLE XVI.

Item	Amount	Percentage of Total
Wharfage, etc.	4. 0	6. 3
Sea Carriage	47. 2	74. 6
Marine Insurance	7. 11	12. 5
War Risk	4. 2	6. 6
	63. 3	100. 0

338. The product is sold on a c.i.f. basis in accordance with a provision in the sales contract with purchasers. It is calculated that the shipping costs above represent on the average 11.5 per cent of the final selling price. This is fairly high but is to be explained in terms of the bulk nature of the product, the difficulties involved in handling, and the fairly low price ruling. The main locating factor is of course, availability of material in the form of suitable pulpwood. The proportion which inward shipping costs bear to the purchase price of raw materials is 40 per cent and this increases total costs of production by approximately 10 per cent. On mainland markets the main rivals are Canadian manufactures but no data are available regarding the cost of landing Canadian newsprint in Australia.

339. PATENT RACQUETS.

Normally the Alexander Patent Racquet Company is engaged solely in the production of sporting equipment, the total selling value of which is normally about £A65,000. During the war years sections of the plant were switched over to the manufacture of cable drums, switch boxes and munition boxes.

340. So far as sporting goods are concerned the bulk of the raw materials used in manufacture are imported, including ash from England and Canada, cane from the Celebes and gut, binding, lacquers, paints, thinners, leather and tools from New South Wales and Victoria. A cheaper line of racquets is also made from Tasmanian timbers which are substitutable for ash.

341. It should be borne in mind that the location of the Alexander Company in Launceston was purely fortuitous and it is freely admitted that, from an economic point of view, the factory should be located in one of the mainland states. Alexander was a carpentry teacher who could not afford to pay the necessary £5 for a racquet. In making his own he invented a new method of manufacture. "Laminated" racquets made possible mass production and the division of labour now extends to 30 separate operations. A company was floated in 1926 and by virtue of the fact that a laminated racquet withstands high tension, it was soon being sold on the world's markets.

342. This Company also operates under a system of price equalisation and delivers goods free to any store in any capital city. So far as country districts are concerned the goods are consigned to agents who distribute to country areas and pass on the road or rail freight charges incurred. Tasmania absorbs only 3 per cent of total output, whilst the Mainland States absorb 75 per cent and 22 per cent is shipped overseas to South Africa, India, the Middle East, America and Canada.

343. So far as freight costs on imported raw materials are concerned, the effect is to raise the f.o.b. price Liverpool of English ash by about 47 per cent. The timber is transhipped at Melbourne, the cost of which represents nearly 3 per cent of total freight costs from Liverpool to Launceston. Losses by theft are incurred in storing the timber.(34)

344. It is calculated that inward shipping costs increase the total average costs of production by 2.5 per cent or 6d. a racquet. The average cost of production of a racquet is £1. The outward shipping freight rate represents a further 2.5 per cent of production costs; where rail freight is necessary a further 3d. per unit or 1.25 per cent is incurred.

345. The Alexander racquets main rivals on Mainland and overseas markets are the Slazenger, Spalding, Dunlop, Brewer and Hedley. They are affected by rail freight rates to an extent and also by shipping freight rates so far as they sell in Tasmania, but the proportion of the Tasmanian output exported is greater than the proportion of Mainland racquets produced that are imported. Hence the total shipping freight bill payable by the Alexander Company is greater. A lowering of freight rates would not increase sales, but would raise the profit margin under which the Tasmanian industry is operating. It should be noted that shortage of shipping space reduced considerably the export trade in racquets over the war years and it is likely that a percentage of overseas business has been lost as a result.

346. To offset shipping costs, it was suggested that a Government subsidy should be made to exporting industries, or on a percentage basis according to total value of exports. Hence, shipping costs as a factor retarding production would be discounted. Actually, a subsidy of 2½ per cent (outward shipping costs only as inward are incurred by all Australian manufacturers equally with the exception of minor items such as those on gut, tools, etc. imported from New South Wales and Victoria) would not overcome the disadvantage of Tasmanian location because of the difference in commission charges (not included in the 2½ per cent above). Mainland companies, selling the bulk of their output on markets in close proximity to the factory incur fewer costs of commission than the Tasmanian industry. However, the offsetting advantage enjoyed by the latter is lower production costs.

347. <u>WOODWOOL.</u>

The actual position relating to the level of production and cost structure of the main firm engaged in this industry is obscure owing to the destruction of all plant and equipment by fire several years ago and a recent change of management. However, it is estimated that normal production would be equal to 22 tons a week, or approximately 1100 tons per annum. All raw materials and manufacturing accessories are obtained locally.

348. The distribution of output according to the markets in which it is sold is as follows :

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(34) The losses arising from pillage must, of course, be added to the cost of shipping goods inward or outward insofar as insurance charges are thereby raised with the added risk. Some goods are naturally more liable to theft than others. For example, see para. 363) . Conditions which arose from the dislocation over the war period tended to materially increase the opportunities for the pilferer. The quality of packing cases deteriorated; loading and discharging under "brown-out" conditions also increased the liability to damaged cases and subsequent interference with the damaged cargo. All this, apart from the congested cargo accommodation at the mainland ports, particularly at Sydney and Melbourne.

TABLE XVII

Market	Percent of Total Output
Tasmania	Less than 1
Victoria	50
New South Wales	20
Queensland	26
South Australia	4

Woodwool is used mainly for packing glassware and fruit and was once used extensively in Tasmania for packing apples. Queensland produces large quantities of the product mainly for packing around pineapples during certain stages of growth.

349. The Tasmanian product is usually quoted f.o.b. Tasmanian ports although in some cases it is consigned to agents, e.g. in Victoria where the Company has established a firm agency system. Victoria provides the main market owing to the shorter sea route to be traversed and lack of serious competition. However, the state of the Queensland market is the main factor in determining the stability of the Company's activities for unless at least a quarter of total output (275 tons) can be sold in that market production would have to be curtailed, with a consequent rise in costs and decline in the profit margin. The Tasmanian product has to compete with the Queensland product on both a price and product basis and an important factor in the former is the freight burden that has to be borne by the Tasmanian product. Furthermore, a factor inflating the actual freight charge that has to be paid is the cost of transhipping at Sydney.

350. It was not possible to obtain complete data relating to the financial operations of the Company for a normal year since to date no year can be described as normal. Instead, sample entries were selected from the Company's books for the year ending November, 1945 with the help of the accountant, viz :

TABLE XVIII.

Final Selling Price of Shipment to Victoria	Commission (10%) (A)	Freight Rate Paid (B)	Marine Insurance(C)
£1383	£138	£209	£ 6
£2206	£221	£258	£13
£4434	£443	£759	£15

351. Figures for minor items involved in exporting such as cartage and packing were not available but the three above are the most important expenses. (Note inclusion of marine insurance). In respect of the three shipments above the total of columns (A), (b) and (C) represents 25.52, 22.30 and 21.48 per cent respectively of final (gross) selling price. The average percentage figure is 23.1. So far as Queensland shipments are concerned approximately 28 per cent of final selling price is absorbed by shipping costs. Such a high ratio of shipping costs to total costs (including profit) is to be explained by the low selling value per ton of woodwool and its relatively large bulk (cf. cement). The main variety (medium) is now selling at £12.10. 0 per ton

f.o.b. Pre-war this same variety sold for £8.10. 0 per ton f.o.b. but realised £10. 0. 0 on the Tasmanian market, where no shipping costs were involved. The Company stated emphatically that a lowering of rates would enable larger shipments to be placed on Mainland markets. Wartime rationalisation of shipping did not affect shipping space for woodwool as the product was granted a priority, large quantities being used for packing parachute supplies.

352. METAL LOCKS.

The firm investigated is the largest Australian manufacturer of locks. All metals are imported, including sheet and ingot brass, castings and keys. Locks represent an extreme case of a product, which is of low bulk but high selling value. Hence, shipping costs are in no sense a determining factor in the planning of output policies. New South Wales absorbs 50 per cent of total output the remainder being distributed among the Victorian, Queensland, South Australian and New Zealand markets. Only a negligible proportion is sold in Tasmania.

353. The locks are consigned direct and are sent package rate through a shipping agent who pays all shipping costs and charges the appropriate fee. Data relating to the proportion which shipping costs bear to the cost of raw materials purchased and final selling price are presented below for a year of average experience :-

(A)	Cost of Imported Raw Materials and Accessories.		£3,223.
(B)	Inward Freight Charges (Included in (A) Percentage of (B) to (A)	5.58%	£ 180.
(C)	Total Final Value of Output (Selling price)		£21,000.
(D)	Shipping Costs Incurred in Marketing Output (Included in (C))		£ 120.
	Percentage of (D) to (C)	0.57%	
	Percentage of (B) plus (D) to (C) (i.e. of total inward and outward shipping costs to price)	1.43%	

Hence, insofar as shipping costs are a burden at all it is in relation to materials imported. That is, shipping costs represent the price of locating at a distance from the supply of raw material not from the main markets.

354. CARBIDE.

The Tasmanian firm at Electromais bound, under its arrangement with the Commonwealth Government (being the sole Australian manufacturers of carbide) to deliver carbide to all the main ports throughout the Commonwealth at approximately the same landed price, which is at present £31. 1.11 per ton c.i.f. The average annual output 1939-42 was 9,000 tons, declining to 6,500 tons in 1943 owing to a reduction in the requirements of the Services. The distribution of consumption as between states is as follows :

TABLE XIX.

State	Consumption (Tons)	Percent of Total
Tasmania	100	1.3
Victoria	2,000	26.6
New South Wales	3,000	40.0
Queensland	1,500	20.0
South Australia	500	6.6
Western Australia	400	5.3

An overseas market existed prior to 1941, about 800 tons per annum being absorbed.

355. The average cost of landing carbide per ton capital cities is £3. 8. 2, the average f.o.b. value being £27.13.9 and average cost of production £23. 3. 9. Hence, shipping costs represent 10.96 per cent of final selling price (£31. 1.11), or 12.81 per cent of total production costs (including shipping costs).

356. Twenty years ago carbide was used for domestic purposes such as home lighting, but the demand was small and elastic. The main use now is in industrial processes, and this industrial demand is very inelastic. A reduction in the shipping costs incurred in marketing would lower selling price but the resultant effect on consumption would be negligible. However, freight costs would play a major role if Tasmanian carbide is to be marketed overseas. Again, inward freight costs on raw material are a considerable item. Anthracite imported from Wales at £2.12. 3 per ton in 1938, now costs £9.11. 0 per ton, this sharp increase being attributed to higher landing costs. Interstate imports normally include 700 tons of steel sheets, 5,000 tons of coke and 130 tons of tar per annum.

357. CANNED AND FRESH FISH.

Large occurrences of valuable fish - including canning varieties - are found in Tasmanian waters. These include tuna, mackerel, barracouta and sprats, also the Australian salmon. Reference was made to several firms engaged in the export of fresh and cooked fish to the Mainland but the data available were very unsatisfactory. In particular, the (alleged) ratios of shipping costs to both wholesale and retail selling prices varied widely from firm to firm. Consequently, we shall be concerned solely with a new firm engaged in both the fresh and canned fish trades, namely, Fish Canneries of Tasmania Ltd. Canned fish represents approximately four fifths of total output. The Company maintains five centres, namely at Dunnalley, Flinders Island Devonport, Launceston and Margate. A Commonwealth wide market is envisaged when the necessary production is achieved, but at present Victoria is the main market with Tasmania absorbing 10 percent only of output. The decentralised nature of operations results in a somewhat complicated system of distribution. The Flinders Island catch is shipped to Launeeston and thence transhipped to Melbourne, although occasionally a direct service may be available. Hence, total freight costs are as follows :-

Flinders Island/Launceston	£1. 8. 6.
Launceston/Melbourne	£1. 0. 6 plus 8/- transhipment and other charges.

358. The output from the Dunalley and Margate works is shipped via Hobart, although a jetty is now being constructed at the latter centre to berth 1,000 - 1,500 ton vessels which will be able to lift the fish direct. All fresh fish from both Flinders Island and the Southern centres is shipped via Launceston.

359. The canned fish is at present sold direct to wholesalers at an average price of £95 per ton. Where transhipment costs are incurred the total shipping costs being £2.18. 6d. per ton, the ratio of shipping costs to price is 3.1 per cent; where shipment is direct from Flinders Island or Launceston this figure is 1.6 per cent. Data relating to Hobart shipments are not available as the Dunalley and Margate plants are not yet working on a normal production programme. However, the figures above are sufficient to indicate the relative unimportance of shipping costs in the canning section of this industry. The marketing of fresh fish so far as this Company is concerned is secondary to canning and is the means whereby non-canning varieties included in the catch are disposed. Victoria is at present the main market owing to that State's proximity and superior handling facilities.

360. The Australian canned fish market has always been under supplied and, in any case, there will be a complete absence of competition for the next 18 months as U.N.R.R.A. will purchase all available supplies. Ultimately, serious competition from American imports must be expected though here the dollar question enters, and in respect of such a commodity as canned fish, the Commonwealth Treasury may well decide to limit imports to help ration out the available dollars for more essential purposes. Hence, the Australian (Tasmanian) industry may receive for a few years a certain degree of protection.

361. The problem of rail freight charges incurred in transporting fresh fish from Devonport and Burnie to Launceston should be noted. The rail freight rate from Hobart to Launceston is 35/- per ton; from Burnie to Launceston it is 45/- per ton, and as a result no supplies are obtained from Burnie fishermen. The rate Devonport/Launceston is 32/- per ton and Devonport is the main source of supply for the Launceston works except in certain boom seasons when supplies are also obtained from Dunalley. At present, fishermen receive £28. 0. 0 per ton for 'couta, the main canning variety. The cost of canning 1 lb. of fish is at present 10d.(35) The rail freight cost is equal to .13d. per lb. (or 1.3 per cent) and is included in this total cost. Relative to the value of the finished product, the rail freight cost is insignificant. However, relative to the price of the raw material (3d. per lb.) the ratio is .13d : 3d. (4.33 per cent.)

362. FRUIT JUICES, WINES.

The two main companies engaged in this industry were approached, and it is convenient to treat them separately as under :

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(35) The price of a 1 lb. (net) tin is also 10d. The figure must include, therefore, an allowance for 'normal' profit.

363. Lochiel Liqueurs. (Launceston)

(a) This Company has only expanded to anything like its present productive level in the last four years, and hence it is not realistic to refer to pre-war data. Actually, the liqueur industry in Northern Tasmania commenced operations in the form of a hobby in a business man's week-end cottage on the banks of the River Tamar(36). With an export market absorbing 85 per cent of a total output at present of 12,000 cases per annum, the plant is not well situated at Launceston. Again, three-quarters of the raw materials and aids to manufacture are imported from the Mainland, including sugar from Sydney and bottles from Melbourne.

(b) The average price realised per case c.i.f. any capital city is £5.10. 0. Shipping costs to the main markets in Sydney and Melbourne are 3/-, to Western Australia 7/6, and to Brisbane 6/-, per case. Respectively, these costs represent 2.7, 6.8 and 5.5 per cent of final selling price. Hence, the overall relation of shipping costs to (equalised) selling price is 5 per cent exactly. This fairly low figure is to be expected from the nature of the product. However, it is understated to the extent of insurance charges which are at a high rate to cover the effects of wharf pilferage, especially in Sydney (during the transhipment period). Another concealed cost is the inability to ship direct to Brisbane and Perth thus preventing agents buying in large quantities of, say, 300-600 cases. At present, direct boats to Brisbane run every two months and to Perth every three months only.

364. Port Huon Fruit Juices Pty. Ltd.

(a) This Company commenced operations in 1940, the present annual level of production being as follows :-

TABLE XX

Product	Quantity(1945 figures)
Raw Fruit Juices) Fruit Syrups)	210,000 gallons.
Liqueurs	10,000 cases
Wine Cocktail	2,000 cases

Raw fruit totalling 1,500 tons annually, is obtained from local growers, whilst sugar is imported from Sydney on a c.i.f. basis.

(b) Most lines are quoted f.o.b. except those exported to Victoria, which are quoted c.i.f. for competitive reasons(37). (Average Victorian production of wine and spirits is approximately 7,000 proof gallons annually).

(c) Berry syrups, cherry liqueur and other liqueurs are priced f.o.b. Hobart at 19/-, 110/6 and 135/6 per dozen. Total shipping costs to Victoria which is the main market equal 1/9 per dozen and hence

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(36) Cf. reasons for location of the patent racquet, the chocolate and confectionery and even the textile (Kelsall and Kemp), industries.

(37) Cf. Paragraph 319(c).

shipping costs represent 8.4, 1.6 and 1.3 per cent respectively of selling price. The main factor in marketing this product is not the cost of transport but the sales efficiency of agents. For example, the South Australian market for Port Huon fruit juices is an extensive one due solely to the vigorous selling policy of the firm's agencies. Wherever possible, shipments are sent direct from Hobart, but those for South Australia have to be railed to Launceston because of the absence of direct shipping contact between Hobart and South Australia. The shipping cost item of 2/3 per dozen Launceston/Adelaide is, therefore, increased by 2/2 per dozen to cover the rail freight. Using the same price data as before the proportion of selling price absorbed by shipping costs is 18.9, 3.8 and 3.2 per cent respectively.

365. General.

Competition for available markets is keen and on the basis of a fairly low price margin. A reduction in the ruling freight rates, therefore, would almost certainly result in competition from Mainland manufacturers, who are partly prevented from selling on the Tasmanian market by the freight costs they would incur. So far as overseas markets are concerned, orders could not be accepted during the war but it is anticipated that shipments will soon be sent to Iraq, Africa, India and the East Indies. Availability of shipping rather than freight costs will be the determining factor, since the lines to be exported are the highly priced liqueurs.

366. JAMS AND CANNED FRUITS AND VEGETABLES(38)

In order to arrive at an average distribution of the products of this important industry (or group of industries) as between local and export markets an average of five selected years has been calculated from data supplied by four firms , viz :

TABLE XXI.

Market.	Percent of Total Output
Tasmania	9
Victoria	30
New South Wales	27
Queensland	3
South Australia	2.5
Western Australia	1.5
Overseas	27

367. Only very limited data were available in respect of the relation of shipping costs to the cost structure of the industry but the largest concern (H. Jones & Co. Pty. Ltd.) submitted a figure of 3.5 per cent as the proportion of total cost of production absorbed by shipping costs. This 3.5 per cent is in excess of the 3 per cent gross profit margin(39) on which the Company operates. The present level of net profit is only 1½ per cent on that

(38) For obvious reasons it is more convenient to treat processed apples with fresh apples in the agricultural products group.

(39) Out of which taxes are paid.

part of total output sold in Australia. The industry maintains that a rise in the present profit depends upon either a reduction of Company taxation, a rise in final selling prices, or a reduction in shipping costs.

368. Although the Tasmanian industry has the advantage of long establishment and is able to exploit the economies to be derived from large scale production, mainland factories situated at the source of supply of such essential raw materials as tinplate and sugar are lowering their cost structure. Hence it is likely that shipping costs will be a more important factor than in the past.

369. Before proceeding to our next section, a discussion of the effects of shipping costs on the Tasmanian mining industries, it is convenient to summarise the above data relating to the proportion of final selling price absorbed by shipping costs, viz :

TABLE XXII .

Commodity	Reference Paras.	Percentage Relation of (Outward) Shipping Costs to Final Selling Price.
Cement	283-298	1938(Average) - 20.19 1944(Average) - 27.52
Chocolate & Confectionery	299-316	Normal average for all production - 6.5
Textiles	317-319	Patons and Baldwins:- Normal average - 1.84
Wool and Processed Skins	320-323	Shipping costs as a % of production costs - 5.66
Timber	324-331	Pre-war average - 21.9 1945 average - 20.4
Plywood	332-333	Present figure - 7
Newsprint	334-338	Average figure - 11.5
Patent Racquets	339-346	Shipping costs as a % of production costs(Average all lines) - 2.5
Woodwool	347-351	Victorian shipments - 23 Queensland shipments- 28
Metal Locks	352-353	Normal average - 0.57
Carbide	354-356	Present figure (Fair average) - 10.96
Canned Fish	357-361	Present figures- 3.1, 1.6 (Av. 2.35)
Fruit Juices and Wines	362-365	Lochiel(Liqueurs) Vic & N.S.W. - 1.7) Queensland - 6.8) Av. 5.0 W.A. - 5.5) Port Huon Fruit Juice P/Ltd Vic. Berry Syrups- 8.4)Av. 13.6 Cherry Liqueur - 1.6) Av. 2.5 Other Liqueurs - 1.3) S.A. Berry Syrups-18.0) Av.13.6 Cherry Liqueur - 3.8) Av. 2.5 Other Liqueurs - 3.2)
Jams and Canned Fruits etc.	366-368	Shipping Costs as a % of production Costs - 3.5/

It will be observed that the above percentage figures range from 0.57 to 27.52. Of course, even assuming a suitable system of weighting could be devised, any average figure for the overall relation of shipping costs to final selling price would not be realistic. In any case, the data are not comparable and hence not amenable to such treatment. We may, however, group the industries according to the percentage of figures in Table XXII :-

Class I. (Over 20 per cent)

Cement	-	20.19 to 27.52
Woodwool	-	23 to 28.

Class II. (11-20 per cent)

Timber	-	21.9
Berry Syrups	-	13.6
Newsprint	-	11.5
Carbide	-	10.96

Class III. (6-10 per cent)

Plywood	-	7
Chocolate & Confectionery	-	6.5

Class IV. (2-5 per cent)

Wool and Processed Skins	- 5.66
Lochiel Liqueurs	- 5.0
Jams and Canned Fruits	- 3.5

Class V. (less than 3 per cent)

Yarn (Patons & Baldwins)	- 2.85
Port Huon Liqueurs	- 2.5
Patent Racquets	- 2.5
Canned Fish	- 2.35
Woollen Cloth (Kelsall & Kemp)	- 1.85
Metal Locks	- 0.57

It should be remembered that each of the above industries have one factor in common, namely, that the bulk of total output is exported to interstate or overseas markets. Of the six industries in Classes I and II, although shipping costs represent an important item of cost they did not influence the location choice, the source of bulk raw materials being the outstanding consideration. But, with the sole exception of carbide, they do lower the proportion of final selling price available for profit and hence place the Tasmanian exporter at some competitive disadvantage. In respect of the eleven industries included in Classes III, IV and V it is only necessary to refer again to the problem faced by, say, Cadbury-Fry-Pascall. There can be little doubt that these factories, from some points of view, should not be located in Tasmania. However, the freight burden is only <u>one</u> of the costs of isolation.

370. It is now proposed to analyse the shipping cost problem in relation to the cost structure of the main Tasmanian mining industries.

371. <u>COPPER.</u>

Tasmania is the chief course of copper in the Commonwealth, approximately seven tenths of total production coming from this State. The Mt. Lyell Mining and Railway Co. Ltd. at Queenstown operates the State's largest copper deposits at Mt. Lyell, in the West Coast Range, from which electrolytic copper is produced. The only other producer is the Electrolytic Zinc Company at Roseberry which treats complex ores containing a small percentage of copper.

372. The copper mined in Australia is sensitive to price movements. At the outbreak of war in September, 1939, the price of copper in London was £.Stg. 51 per ton. This was subsequently increased to £.Stg. 62. Australia's annual production is between eighteen and twenty thousand tons, of which Mt. Lyell produces 12,500 tons. Prior to the war, Australia produced sufficient copper for her own needs and had an exportable surplus. Soon after the outbreak of war, the British Ministry of Supply expressed its willingness to purchase, under contract, any surplus electrolytic copper up to 7,000 tons,but with expanded production in the munitions industries, no quantity became available for export. In fact, the Commonwealth, during the latter war years, produced only 50 per cent of its total requirements.

373. In Australia, the price was fixed at £A63.17. 6 per ton on 19th December, 1939. Increased mining costs raised the price by various steps to £A100 per ton plus a £5 bonus on all copper produced above the base tonnage set by the Commonwealth Controller of Minerals for each company.

374. Prior to the immediate pre-war years, when the Commonwealth began to consume the whole of Mt. Lyell's copper output, the Company exported to Great Britain and sold its copper on the London Metal Exchange in electrolytically refined wire bar, or as cathode copper. A premium was allowed on wire bar above cathode copper. If wire bar was required for export, the cathode copper had first to be shipped to Port Kembla and there melted into wire bar by Metal Manufactures Ltd., a company in which Mt. Lyell itself is largely a shareholder. From Port Kembla it was reshipped to London.

375. Factors entering into marketing, or what the Company calls realization, costs, at this stage were :

(1) Freight charge to Regatta Point (Macquarie Harbour) per the Company's railway.

(2) (a) Shipping freight rate to Port Kembla(40) together with handling expenses, if wire bar was required.

(b) If not wire bar, but cathode, then shipping and incidental expenses to an Australian port where it could be picked up by an overseas ship.

(3) Melting into wire bar at Port Kembla if (2) (a) operated.

(4) Reshipping to England, together with further insurance and handling charges.

(5) Storage and marketing costs charged by the London Metal Exchange.

For that part of the copper which was required in Australia, numbers (4) and (5) did not apply. Realisation costs over the period 1921-39 were maintained at a fairly steady figure when they absorbed approximately 9.6 per cent of total costs of production. It will be observed that item (1) above should not be included according to our definition of shipping costs but the Company did not separate out each

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(40) Vessels plying the Strahan trade are of the "special purpose" class. They must be able to work Macquarie Harbour on a relatively shallow draft when loaded.

item. However, it is not likely that the inclusion of local freight costs exaggerates to any great extent the ratio of shipping costs to total costs of production and/or selling price.

TABLE XXIII(41)

ANALYSIS OF COSTS OF PRODUCTION AND MARKETING OF COPPER PER TON (£A.)

Item	Av.1916-21	1933	1935	1936	1937	1938	1939
Mining	29	24.8	20.0	23.2	25.9	29.5	28.8
Treatment	33.5	14.8	14.0	14.2	15.8	18.2	19.2
Management	3	1.8	1.3	1.5	1.8	1.7	1.3
Realisation(A)	12	5.2	4.6	4.5	4.2	4.3	4.5
Total	77.5	46.6	46.2	43.4	47.7	53.7	53.8
Less Precious Metals and Pyrites	-	4.9	6.5	6.7	6.2	7.2	7.4
Total Primary Costs (B)	77.5	41.7	39.7	36.7	41.5	46.5	46.4
Prospecting & Development.	5	2.3	2.0	2.5	2.2	1.6	2.0
Depreciation	4.5	2.2	2.5	3.5	3.8	4.0	4.8
Total Secondary Costs (C)	9.5	4.5	4.5	6.0	6.0	5.6	6.8
Total Costs (D)	67.0	46.2	43.2	42.7	47.5	52.1	53.2
London Price of Copper £A(E)	102.0	46.0	41.8	50.9	75.5	56.0	61.6
£A Profit or Loss per ton	+ 15.0	-0.2	-1.4	+8.2	+28.0	+3.9	+8.8
Percent of (A) to (B)	15.5	12.5	11.6	12.3	10.1	9.2	9.7
Percent of (A) to (B) plus (C)	13.8	11.2	10.4	10.5	8.8	8.3	8.5
Percent of (A) too (E)	11.7	11.3	11.0	8.8	5.6	7.7	7.3

376. It will be observed that the proportion of both total costs of production and selling price absorbed by shipping (realization) costs has steadily declined since 1933, and in 1939 represented 8.5 and 7.3 per cent respectively. It should be noted, however, that the market price of copper was often so low that the industry had difficulty in meeting total costs. During the war years, total costs have risen due to (1) the increased prices of factors used in production, and (2) an intensification of the scale of operations with the existing plant and a decline in labour efficiency. It is likely that costs are now approaching their previous high level for the 1916-21 period of £87 per ton. This is largely due to the diminishing returns arising from the geographical nature of the copper lodes (see

(41) The basic data for this table were extracted from Mr. Brinsmead's thesis.

(2) above). This factor of diminishing returns is the main determinant of the level of costs and the profit margin, and the shipping cost item is of relatively minor significance.

377. Since 1939, marketing procedure has changed somewhat. Mt. Lyell's copper is all shipped via Regatta Point to Port Kembla where it is melted into wire bar by Metal Manufacturers Ltd. for the Commonwealth Government. The Australian price for refined electrolytic wire was fixed at £100 per ton delivered buyer's premises. Just where the Commonwealth Government has required delivery is not known. Metal Manufactures Ltd., acting as agents, sell the copper to the Commonwealth Government receiving payment in full, and out of such deduct all marketing expenses and remuneration for melting. The main difference is that price is, for the time being, no longer a fluctuating factor, and all copper goes to Port Kembla.

378. ZINC.

In the pre 1914-18 war period, such factors as cheap fuel, low labour costs, long experience and close control prevented Australia competing in the world market by treating her own zinciferous raw material. Further, in 1913, Australia was importing from 30,000 to 40,000 tons of brimstone from Sicily and Japan for sulphuric acid manufacture. Hence it became obvious that if Australia could treat her own zinc sulphide and recover the sulphur for superphosphate manufacture, for which there was a growing demand, zinc production would become much more profitable. North Broken Hill Ltd., South Broken Hill Ltd., and Zinc Corporation Ltd. became interested for the reason that they were anxious to find cheap treatment in this country for their zinc concentrates shipped overseas. By applying the electrolytic process to their sulphide ores, these companies developed a suitable way of treatment. The deciding factor in the choice of location for a treatment plant depended upon cheap electrical power. In this regard Tasmania had the outstanding advantage, for cheap hydro-electric power had already been developed by an extensive Government hydro-electric scheme (commenced in 1914). The present Company now has a paid up capital of 3½ million pounds and production has now reached the capacity of 200 tons of zinc per day, using approximately 42,500 H.P. of power(42). The works are situated at Risdon, five miles from Hobart on the banks of the River Derwent. Besides the production of zinc, superphosphates fertiliser are manufactured from sulphuric acid recovered as a by-product. Another by-product is cadmium, small quantities of which are present in the zinc concentrate.

379. At present, zinc concentrate supplies are drawn from Broken Hill (N.S.W.) and Rosebery (Tas.), in the approximate proportion of two thirds and one third respectively. Approximately 70,000 tons of zinc and 175 tons of cadmium are produced annually, together with a lead silver residue containing approximately 2,400 tons of lead and 211 ozs of silver. The approximate production of superphosphate fertiliser is 22,000 tons per annum.

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(42) Supplied by the Hydro-Electric Commission at a Contract price of £2. per H.P.

380. The first transport phase is the conveying of the crude ores from the mines to the Rosebery reduction mill. The copper concentrate is railed to Burnie and shipped to Port Kembla where it is smelted, refined and melted into metallic copper. The lead concentrate is railed to Burnie and thence shipped overseas, e.g. to the United States. The third and final float, that of zinc, is railed to Zeehan for further reduction in the roasting plant which reduces the sulphur content by about 50 per cent. It is then railed via Burnie to the Risdon treatment float. This concentrate consists of 82 per cent zinc. It is understood that the Zeehan plant is to be superseded by a roasting plant at Risdon where it is hoped to make use of the sulphur. As the Electrolytic Zinc Co. is primarily a treatment company, it is concerned with the purchasing of additional zinc concentrates to allow economic treatment of its own ores whilst concerning itself with the production of electrolytic zinc.

381. The additional concentrates which form the bulk of the raw material are purchased from North and South Broken Hill and Zinc Corporation mines,(43) at the rate ofabout 2,000 tons per week. The price of the concentrate f.o.b. Port Pirie, Wallaroo or Birkenhead, is based usually on the average price of zinc received each year. In order to handle the 2,000 tons per week arriving by sea, extensive wharf handling equipment has been provided on the company's own wharves at Risdon. This discharging equipment is capable of handling up to 400 tons per hour, and only by this means has it been possible to maintain a regular fortnightly service from South Australia with one vessel.

382. As mentioned in paragraph 378, the deciding factor favouring the choice of the Risdon site was the availability of cheap electric power, essential for the metallurgical process employed in zinc manufacture. The required quantity of power is made available by the Hydro-Electric Commission for the low price of £2 per h.p. Two other locating factors should be noted. First, Risdon's facilities for interstate and overseas shipping made it ideal for the shipping of concentrates from the mainland and for the exporting of refined electrolytic zinc to overseas and mainland markets. Secondly, Hobart was of sufficient size to supply labour (now approximately 1500 employees).

383. No data were available in respect of production costs and hence it is not possible to compute the ratio of shipping costs to total costs. A divident of 14 per cent was declared in 1939-40. We may, however, relate the shipping freight rates (only) ruling pre-war on zinc exports to final selling price, viz :-

(A)	L.M.E. price (Aug.1939)	:	£A25. 8. 9 per ton.
(B)	Freight rate to England	:	28/- per ton.
(C)	Percentage of (B) to (A)	:	5.5
(D)	Australian price(delivered buyers' works)	:	£A20.0.0 per ton.
(E)	Freight rates. (Melbourne	:	20/- per ton
	(Sydney	:	20/- per ton
	Hobart to (Brisbane	:	39/- per ton
	(Adelaide	:	28/6 per ton
	(Perth	:	52/6 per ton

(43) Vide "The Herald"(Melbourne) 30/7/46 for a full report of the annual statement of activities and accounts of the Zinc Corporation Ltd.

(F) Freight rates (E) as a percentage of Australian price..

Hobart to	(Melbourne	: 5.0
	(Sydney	: 5.0
	(Brisbane	: 9.7
	(Adelaide	: 7.0
	(Perth	: 13.1

384. SILVER LEAD.

Mr. Brinsmead(44) has pointed out that productive silver mines have generally been confined to the West Coast Range and the chief sources of extraction have been from galena, a silver lead sulphide mined at Zeehan, Dundas, North Mt. Farrell, Mt. Magnet and the Mt. Claude district, secondly from blister copper mined at Mt. Lyell and thirdly from complex zinc lead sulphide ores of the Read-Roseberry field. With the re-opening of this latter field by the Electrolytic Zinc Company in 1936 the zinc lead ores from that field then became easily the most important sources of silver in this state. Lead, on the other hand, has been produced in joint supply with either silver or zinc or both. In 1939, 11,020 tons of lead were produced and 1,278,116 ounces of silver, being valued at £A173,670 and £118,310 respectively.

385. Transport costs first enter the cost structure of the Tasmanian industry in the carriage of the ore from mines to milling plant. A company's lease may be extensive, covering some hundreds of acres, or a company may mine several leases at varying distances from the reduction works. The reduction plant is placed so as to reduce costs of transport from all these points. Secondly, there is the transporting of the concentrate to the smelters. For this reason, smelters are generally in close proximity to the reduction plant, as at Mt. Isa. Where the output of a mine does not warrant the erection of a smelting plant, then the transport of the concentrate becomes necessary. The Tasmanian companies, having no smelter accommodation, must forward all concentrates overseas, and hence shipping costs are a large item of cost (reducing the selling price if sold f.o.b.)

386. For the reason that production of lead is too small to warrant local smelting, marketing for the Tasmanian producer finishes early. These producers are approximately 80 miles from the port of Burnie, and the freight cost over this distance approximates to about 10/- per ton for Rosebery and £1. 5. 0 for North Mt. Farrell. The foreign buyers sometimes purchase f.o.b. Burnie, whilst others require delivery to their smelters. v North Mt. Farrell and Magnet concentrates are concentrated to about 70 per cent metal and, pre-war, were shipped to Belgium. Rosebery concentrates of 50 per cent metal have been sold principally to America. The disadvantages of transport are more than offset by the concentration of smelting in the low cost plants provided by continental and American interests. Further, as lead exports from Australia are very considerable, and even if smelting took place in this State, the bullion would still have to find overseas markets, the only advantage being the lower cost of shipping metal as against concentrates, which carry anything from 30-50 per cent of waste material.

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(44) Thesis, page 105 A .

387. The wartime shortage of shipping space has meant that large quantities of the ore have had to be stored at the Burnie wharf in anticipation of a ship being available. Handling and wharfage charges total 8/- per ton. The American smelteries purchase the ore delivered at their premises. Such a procedure throws the burden of shipping and insurance on the Company. Insurance rates are 25 per cent of the declared value on all concentrates entering the country. But for the present dollar exchange ratio, in favour of exporters, marketing in the United States would be uneconomic.

388. TIN.

Tasmania ranks equal with New South Wales as a source of tin in Australia. Production has declined since 1918 although increasing slightly since 1938. The annual value of tin mined has also declined for some years, but high prices fixed during the war years raised the level of output, viz :-

TABLE XXIV.

PRODUCTION (IN TONS) OF TIN MINED IN TASMANIA 1933-43.

Year	Quantity	Value £A
1933	957.00	190,041
1934	952.49	219.246
1935	1131.00	258,919
1936	1004.06	206,656
1937	1098.839	260,673
1938	1278,617	244,037
1939	1249.877	282,798
1940	1430,198	367,127
1941	1255.729	328,340
1942	1148.048	297,919
1943	948.817	246,218

389. The most important source of present tin production is the North-eastern district. With the decline of Mt. Bischoff in the twenties of this century, and favoured by a high steady price for tin, small companies increased their scale of operations on the alluvial and lode deposits in this part of the State. The activity of the mines has fluctuated due to such factors as insufficiency of capital, the limited nature of deposits, and the fluctuating price of tin. Some rich alluvial tin has been mined profitably when tin has been as low as £40 per ton, but these finds were never extensive and have largely disappeared. The tin production in this area is now a high cost industry, compared with the principal producers of world output.

390. All Tasmanian tin mines produce a concentrate containing tin oxide, which is highly valued and not of any great bulk, when compared with such metals as lead and copper. For this reason transport costs are not heavy. Also, the concentrate is of remarkable purity and this further helps to reduce transport costs relatively to total costs. All the principal mines of the state are easily accessible to the ports, and in no case does the metal have to travel more than 100 miles by rail before reaching a port. It is shipped to Sydney where two smelters give accommodation to all the Commonwealth's tin concentrate. When smelted the metallic tin is in close proximity to the consumers requiring it either in ingots or plate. It is then processed into various saleable forms.

391. Prior to the war approximately one third of our refined tin found its way to overseas markets, but a very small proportion (only about 3 per cent) was exported in ore or concentrate form. The remaining two thirds of output was absorbed by the home market. During the war the Commonwealth Government assumed control over the output from smelteries and export was made subject to licence.

392. Data were not available relating to a complete cost breakdown for tin production but, according to Mr. Brinsmead(45), the distribution among the several factors is as follows :

TABLE XXV.

DISTRIBUTION OF TIN PRODUCTION COSTS

Item	Percentage of Total Cost.
Wages	53
General Stores	19
Water(Lease Rights and Races)	11.8
Power (Electric)	10
Administration	6.1
Renewals & Repairs	0.1

Shipping costs are normally deducted from gross profit(46) but on the basis of, say, 1/3d. gross profit per cubic yard of drift, they would not absorb more than 0.3 per cent of total production costs or 0.14 per cent of final selling price.

393. Quite apart from the low absolute figure, transport costs cannot be considered a factor having any bearing on entrepreneurial policy. Either high extraction or high reduction costs result in an over-all high cost structure.

The hope of substantially reducing production costs can only come by the discovery of better deposits, improved technical methods, increased mechanisation and modernisation of plant and a reduction in the wages bill.

394. Summing up, we may say that the factor of transport (both rail and sea) looms large in the mining cost problem. Tasmania, however, is fortunate in that her mineral lodes are reasonably close to the ports, but there still remains the high cost of railway operation over difficult terrain. Mineral ores are not only bulky and heavy, but their value, especially in the case of non-ferrous metals, is low relative to their weight. Copper and tin ores in Tasmania carry only a little more than 1 per cent metal, and zinc lead ores, although carrying 20 per cent zinc and 6 per cent lead, are proportionately lower in value.

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(45) Thesis, P. 109 .

(46) As also are the costs of prospecting, depreciation, incidental expenses and head office administration.

(47) In the case of scheelite, the percentage of shipping costs to final selling price is a maximum of 0.5 per cent.

For non-ferrous ores, particularly, the close proximity of the reduction plant is important, and in Tasmania all ores are concentrated by reduction plants at the mines. Transportation is the prime factor determining the location of crushing and concentration mills, with power considerations ranking high.

395. Smelting, refining and processing plants are determined by several factors. The size of plant with access to agents and energy resources is the most important. Transportation costs compel the location of smelters as near as is practicable, after considering all factors, to the point of reduction. Refining and electric smelting plants are primarily located near cheap electric power resources. Hence, the reason why Tasmania was chosen as the location of copper refining, electrolytic zinc manufacture and aluminium smelting.

396. Finally, we must turn our attention to the primary industries, nearly every one of which is dependent upon mainland and/or overseas markets. Hence, although transport costs cannot be considered a factor determining location, they are worth close study from the point of view of their effects on marketing and the net return to the producer.

397. MEAT.

As a result of the report of the Board of Enquiry appointed in 1933 to investigate the operations of the State Meat Board and questions relating to the Meat Export Industry, the State Government decided to repeal all legislation framed under the Meat Industry Encouragement Act, 1924-1932, and in December 1933, the Meat Industry Act was passed. The Act provided for the establishment of a State Meat Board for the encouragement of the export of meat from Tasmania.

398. In November, 1937, the Act was amended to allow the Board wider scope and also to release the capital of the Board for use in developing the export industry.(48) The amendment provided that the Board may apply any moneys at its disposal for the purpose of engaging in and carrying on, any business in relation to the preparation, processing and marketing of meat for export. Prior to the Board, operators from private companies bought on the hoof. Such speculative guesswork is now eliminated for the grower is paid on the basis of a weighed and graded carcase at full export price.

399. In order to control the standard of exports the Board has agreements with private freezing works at Somerset, St.Leonards and Hobart. The conditions of the contract cover the receiving, processing, bagging, freezing and transport of the carcases to the ship's side. Processing charges under the agreement are at the rate of 1d. per lb. dry weight for lambs and 7/8 penny for sheep.

400. The Board arrived at a definite cost of placing carcases on the London market (1937-9), and the following figures give the actual cost of those exported from Somerset, viz :-

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(48) Originally, the Act provided that after defraying liabilities, the liquid assets of the Board were to be invested in Commonwealth inscribed stock. Hence, the powers and functions of the Board were restricted to an advisory capacity.

TABLE XXVI.

Item	Cost per Carcase	Cost per lb. out-turn weight.
	s. d.	d.
Processing, Wraps, Storage, etc.	3. 0.00	1.016
Wharfage	0. 0.19	0.034
Agency Charges	0. 0.48	0.013
Insurance	0. 5.46	0.155
Overseas Freight Rate(49) & Customs	3. 8.93	1.275
London Consolidated Charges	1. 2.68	0.418
Total Cost of Export	8. 6.74	2.911

(b) The following figures show the actual amount realised on the Somerset export carcases :-

TABLE XXVII.

Details	Per Carcase	Per Pound
	s. d.	d.
Gross Amount realized, London	20. 6.58	6.996
Less London Consolidated Charges	1. 2.68	0.418
Net amount Received London	19. 3.90	6.578
Add Exchange	4. 7.86	1.642
Total Amount Rec'd.	24. 1.76	8.220

(c) In summarizing the above figures, Table XXVIII below shows the average value received by exporters from Somerset, viz :-

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(49) Reference has already been made in Chapter V to rate making on the Australian coast. In the case of overseas rates, somewhat different rates apply, viz :

(a) Different rates are applied to different classes of cargo according to their ability to contribute to the fixed charges of ship operation. Some rates, e.g. on wheat and coal cover little more than the prime costs of transport, while others, e.g. on apples, butter, cover total costs with something to spare. If it were not possible to charge differential rates a very great deal of the low grade cargo would not be moved at all because of its inability to bear its total cost of transport, and it is possible that rates for high grade cargo would be even higher than under this "preferential" system(or the service less efficient).

(b) What the traffic will bear depends on a number of considerations but mainly on the "spread" between f.o.b. costs and c.i.f. values, and on the nature of the commodity and the conditions of its production, which determine whether contraction or expansion of output can be achieved easily, and whether the demand for carriage is, in consequence, elastic or otherwise. In the case of meat and apples, with which we are mainly concerned, these factors are all favourable to relatively high shipping costs to overseas markets. There is, on the average, a wide spread between f.o.b. costs and c.i.f. values. At the same time, the demand for carriage is inelastic because production conditions are

TABLE XXVIII

Details	Per carcase	Per pound
	s. d	d.
Total amount received	24. 1.76	8.220
Less Cost of Realization (Local charges, shipping, etc.)	7. 4.06	2.493
Net export value	16. 9.70	5.727
Net value skins sold	2. 8.39	0.920
Net value to exporter	19. 6.09	6.647

Hence, the percentage of total costs of realisation to total amount received was 30.34.

401. Reference to Table XXIX below will show that the prices for Tasmanian export lambs in London varied little over the five years 1933-34 - 1937-38. The lowest net price obtained was for the season 1935-36 while the highest net price was for lambs processed at the Somerset works in 1937-38, viz :-

TABLE XXIX.

	Year	Gross Price London per lb.	London Charges per lb.	Net Price London per lb.
Hobart Exports	1933-34	6.790	.500	6.290
	1934-35	6.037	.492	5.545
	1935-36	6.593	.502	6.091
	1936-37	6.960	.515	6.445
	1937-38	6.980	.510	6.470
Somerset Exports	1937-38	7.020	.380	6.640

402. The season 1931-32 was the commencement of processing lambs for export from Tasmania, and a total of 18,986 carcases were shipped overseas. This quantity was not exceeded ubtil the 1937-38 and 1938-39 seasons when 27,222 and 56,242 carcases were exported. Average gross prices realised on the London market for the 14 different grades varied from 5.41d. per lb. to 7.07 per lb. giving a range of 1.66d. The overall average price (unweighted) was 6.17d. per lb.

403. Following the outbreak of hostilities, a contract for the sale, by the Commonwealth Government, of Australian meat to the British Ministry of Food was completed, covering the year ending 30th September, 1940. Under the contract, the United Kingdom authorities agreed to purchase a total of 240,000 tons, plus additional quantities should they be available for export and required in the United Kingdom.

404. The main clauses of the contract include the following :-

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(49) (contd.)
unfavourable to a rapid adjustment of output to price changes, and there is virtually no alternative to shipment overseas and/or interstate.

(a) All meat for export to the United Kingdom to be consigned to the British Ministry of Food at fixed prices, f.o.b. Australian ports.

(b) Ninety per cent of the contract price to be paid to exporters by the British Ministry of Food on shipment.

(c) The remaining 10 per cent of the contract price to be retained and paid, subject to satisfactory delivery as to quality and weight, within 28 days after arrival of the vessel in a United Kingdom port, or due date of arrival on vessel being lost.

(d) Overseas freight and marine insurance, including war risk, to be paid by the British Ministry of Food.

(e) All mutton and lamb carcases shipped to the United Kingdom to be "telescoped" - the British Ministry of Food to compensate for this service at the rate of 1/6th of a penny per lb. (Stg.)

405. The prices fixed, as per quality and weight, for the various classes of Australian meat were based in the main on the average prices realised for Australian meat on the United Kingdom market during 1938, and provided a better return, on the whole, to the producer than that obtained by him during the 1937-38, 1938-39 seasons.

406. The contract was renewed for the year 1st October, 1940, to 30th September, 1941, and covered beef, veal, mutton, porker pork and baconer pork. Under this contract there were slight variations in some prices. Owing to an acute shortage of shipping, the original contract quantity to be lifted by the British Ministry of Food had to be reduced from 249,000 tons to 144,000 tons, although the Tasmanian section of the industry suffered little loss.

407. To meet the position which had arisen, the Commonwealth Government adopted plans with the objective of canning such surplus production of beef, mutton and pork for which shipping space was not available, and as regards lamb, of increasing the local demand for this product. As from 1st July, 1941, the Commonwealth Government introduced its Lamb Purchase Scheme which provides for the purchase of meat accepted for export at fixed f.o.b. prices, less costs (including 28 days storage). The Commonwealth Government's scheme has, in particular, given valuable protection to export lamb producers against those extraneous charges which have occurred during the war period, namely, storage costs and intra-state transfers of frozen lambs for shipment overseas.

408. The following table shows the prices which obtained for spring lambs during the 1944-45 season, (i.e. the prices at which the Commonwealth Government purchased from Tasmanian exporters), viz :

TABLE XXX.

Weight	1944-45 Season Australian Currency
1st Quality	
20/28 lbs.	7.97d.
29/36 lbs.	7.89d.
37/42 lbs.	7.81d.
43/50 lbs.	7.34d.
2nd Quality.	
20/28 lbs.	7.58d.
29/36 lbs.	7.50d.
37/42 lbs.	7.03d.
43/50 lbs.	6.64d.

Contd.

Weight	1944-45 Season Australian Currency.
(Continued)	
3rd Quality	
20/28 lbs.	7.26d.
Over 28 lbs.	6.64d.

409. Charges made by the Board on lambs processed for export are now calculated at the rate of 1/10thd. per lb. This represents a charge of approximately 1¼ per cent upon the average net return to producers who deliver woolley skinned lambs for export. With the funds which have been so derived during the past five years the Board has directed its efforts toward the equalisation of returns to producers. Uniform processing charges have been maintained at the three processing centres. Prior to the implementation of the Commonwealth Lamb Purchase Scheme, the Board met the full cost of additional storage charges where lambs remained in Tasmanian stores for a greater period than the 28 days' storage, provided for in the processing charge to producers. Rail freight rates on frozen meat shipped from a port other than the port nearest to the processing works have been borne by the Board. Rebates of rail freight costs have been made to producers where their lambs during past seasons have been diverted to a works other than the works nearest to the point of production.

410. The following table presents data relating to the number of lambs treated for export during the past seven seasons, viz :-

TABLE XXXI

EXPORT OF LAMBS, 1938-39 - 1944-45

Works	1938-9 . . .
Hobart Somerset St.Leonards	. . . As set out on Page 200.

411. DAIRY PRODUCE.

The Dairy Produce Export Control Act, 1924-38, was introduced into the Commonwealth Parliament at the request of the dairying industry with the object of organising the oversea marketing of Australian dairy produce. A Dairy Produce Control Board was appointed, and was in existence during the period 1924-35. In the course of its functions the Board regulated shipments to ensure regularity and supply in the London market; controlled forward selling, obtained reductions in oversea freight and insurance rates, and participated in an advertising campaign in the United Kingdom.

412. The Dairy Produce Export Charges Act, 1924-37, provides for the imposition of a levy on all butter and cheese exported from Australia to cover the administrative expenses of the Board, for advertising and other purposes. The rate of the levy is fixed by regulation.

413. Under State legislation prior to the Dairy Produce Act, 1933-35, regulating authorities fixed the proportion of each State's output to be sold within respective states. The Dairy Produce Act was passed by the Commonwealth Parliament to protect these quotas from the effects of interstate competition. A decision of the Privy Council in 1936, however, held that the Commonwealth had no power under its constitution to control interstate trade and the Commonwealth legislation is, therefore, inoperative. The industry is now carrying on its stabilization plan on a purely voluntary basis, through the medium of the Commonwealth Dairy Produce Equalization Committee Limited. This is a Company, limited by guarantee, and includes producers in the States of Queensland, New South Wales, Victoria, Tasmania, and South Australia (cheese only). Its function is to equalise returns from manufacturers irrespective of the markets in which the commodity is disposed. The local market is preserved at a fixed price, and Great Britain absorbs the surplus. Pre-war, under open market conditions, the local price and the export price diverged widely and a tendency was set up for sellers to rush the high price, with a consequent instability in the returns to producers year by year. Under the voluntary equalisation scheme, the individual factory obtains the average return declared, and hence it is a matter of indifference whether the commodity is sold on the local or overseas market. The average is struck of realisations from disposals, an allowance being made for administrative charges and expenses involved in exporting. Those charges common to all markets are not deducted. In respect of interstate marketing, transport charges between states are regarded as charges against the whole industry and borne by the whole industry. Hence, the Tasmanian producer does not incur any extra charges by virtue of the Island's insularity, for all transport costs are spread equally over all producers. In actual fact, the Tasmanian cost structure is lower than that for many mainland producers since heavy rail freight rates are not incurred in transporting the product long distances inland.

414. The original aim of equalisation was to maintain a high price in the home market, since such a price was not possible in respect of the overseas market where the world parity had to be accepted. At present, the industry is operating under a 3-year wartime contract which terminates in 1948, the United Kingdom having contracted to purchase the butter and cheese export surpluses of Australia and New Zealand at firm prices(50). But from a long term point of view, the future state of overseas markets is doubtful. When European production returns to normal it will be impossible to maintain the present high price. Owing to the cold climate in Tasmania, during the winter months,it is not possible to maintain full production throughout the year, and hence considerable quantities are usually stored. Such storage charges are borne by other members of the equalisation agreement. This represents a considerable saving to the industry in Tasmania.

415. <u>POTATOES.</u>

In Australia several different potato sales methods are used. Each State has developed its own methods, which have largely been dictated by local conditions, viz :-

(a) TASMANIA.

Growers in Tasmania have the option of selling to produce merchants at their port of shipment or of forwarding their consignments to Sydney to be sold by commission agents.

F.o.b. Sales: Tasmanian merchants purchase supplies from farmers largely in order to fulfil orders from merchants in Newcastle and Queensland ports. Experiences have shown that the requirements of these two Mainland markets can best be met by purchases rather than consignments. Frequently, they have considerable local supplies and by purchasing to make up any estimated shortage over supply is avoided.

Some Tasmanian growers prefer to sell f.o.b. and merchants must be prepared to purchase at any time that the farmer has potatoes for sale. This means that they usually buy more than required for Newcastle and Queensland. These are offered to Sydney brokers or merchants and if unplaced they are forwarded to Sydney for sale on commission.

Sydney Commission Agents : This type of business commenced about 1906. The percentage of growers' consignments to f.o.b. sales is normally between 40 per cent and 60 per cent, but 90 per cent of Tasmanian shipments to Sydney would be on consignment. . In order to sell growers' consignments at satisfactory prices, the Commission agent must have a clientele of buyers. As growers' consignments from Tasmania vary in volume, commission agents sometimes find it necessary to make purchases from Tasmanian merchants in order to be sure of having sufficient supplies for their Sydney customers.

Prices : Rather a unique system has developed for determining market prices for Tasmanian potatoes in Sydney. Normally, two ships arrive in Sydney each week carrying potatoes. At 10 a.m. each Monday morning the agents meet in their committee room. The Potato Marketing Board supplies the official figures relating to the shipment and carry-over of Tasmanian potatoes on the wharves. The figures relating to local or other interstate forwardings are collected for the meeting and after consideration of the quantity available and the estimated demand, prices are fixed by resolution. One agent has one vote provided that he has the necessary quota of 2½ per cent of the total Tasmanian shipment.

Prices arrived at are regarded as fair average prices, but if it is not possible to sell particular consignments at the price fixed, then agents use their discretion.

(b) NEW SOUTH WALES.

The main crop of N.S.W. potatoes sent to Sydney is sold principally at the Alexandria goods yards. The early Northern Rivers crop is sold from the North Coast wharves. The general system is to offer them by auction and if not sold they are disposed of by private treaty.

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(50) One of the main matters considered at the July 1946 British-Australian dairy produce talks was an increase in prices to meet higher costs of production.

(c) NEWCASTLE.

Wholesale merchants in Newcastle and Maitland purchase their requirements from N.S.W., Tasmania or Victorian sources and distribute them from their stores. It is claimed that this system makes for a more regular supply and, therefore, steadier prices than would be the case if 'consignment' business was developed.

(d) VICTORIA.

For many years the bulk of the Victorian main crop sent to Melbourne was delivered to the railway goods yards, but the advent of motor trucks has considerably altered the system. It is doubtful today whether 50 per cent is sent to Melbourne by rail. These are offered by private treaty and each seller operates on his own idea of values. Supplies delivered by motor truck chiefly go to the Victorian markets but quantities are also delivered to suburban produce stores and to retailers. In some cases the truck owner has turned potato merchant in order to obtain freight. In others, the buyer goes to the country and deals directly with farmers or country merchants and then arranges transport. These sales are made by private treaty.

Victorian forwardings to other States are usually on a f.o.b. basis. The growers' consignment trade has since been developed. Most leading merchants in Melbourne have their country agents and forward purchases from farmers and sales to interstate merchants are quite routine business. Generally, Tasmanian growers do not favour forward selling.

(e) QUEENSLAND.

Brisbane trade in local potatoes (which includes Northern N.S.W.) is a mixture of purchase and consignment. The latter when forwarded by rail are submitted at the daily produce auction sales held at the goods yards. Trade requirements over and above local supplies are secured by interstate merchants usually through brokers. In coastal towns business is conducted similarly, with the exception of auction sales. Inland towns secure supplies from merchants in the nearest port connected by rail. They rarely deal direct with other States.

(f) SOUTH AUSTRALIA.

Local supplies come chiefly from districts around Adelaide and Mt. Gambier. The trade is conducted by merchants on a private treaty basis. Additional supplies are imported from Victoria and Western Australia.

(g) WESTERN AUSTRALIA.

The development of certified seed and irrigation has resulted in this State becoming self-sufficient in potatoes as well as having available an export surplus of 10,000 to 15,000 tons (usually during period November - January). In order to stabilise the home market, experiments have been made with several schemes of voluntary control.

416. In general, there are four systems of wholesale selling, viz :

(a) Controlled selling; control by pool, board or Prices Commission (1939-45).

(b) Private treaty; merchants determining their own scale of values.

(c) Auction sales.

(d) Agreed average values, as determined for Tasmanian potatoes by the Sydney meeting of produce merchants.

417. Auction has the advantage that it ensures quick disposal, and returns which are more fairly approximate relative values of different classes or qualities of the same kind of goods, but may result in wide fluctuations from day to day. It does not contribute to a steady flow of deliveries.

418. The agreed average value system as used for so many years in the Tasmanian trade has helped to give growers a steadier price level than auction sales, and steady prices have always been considered to be desirable by Tasmanian growers. A definite advertised wholesale price also makes for cheaper distribution. Only when prices are so controlled can they be used to regulate deliveries and to assist in achieving a measure of stability. On the other hand, growers are not rewarded in strict accordance with the care they have taken to put up a quality sample.

419. Although practically no data ~~is~~ are collected in respect of interstate trade (other than Tasmania and Western Australia) figures are available of the interstate movement of potatoes (up to 1940). See Table XXXII.

These figures reveal the absolute dependence of the Tasmanian industry on export markets. Table XXXIII, showing total production in tons, brings the above data into relief, viz :

TABLE XXXIII

Production of Potatoes in Tons - Various States

Year	N.S.W.	Vic.	Q'land	S.A.	W.A.	Tas
1934/35	46,033	109,329	21,627	19,377	19,162	70,018
1935/36	62,882	104,125	24,765	19,257	26,278	85,806
1936/37	66,255	196,623	14,826	20,923	22,916	138,557
1937/38	50,833	134,712	16,565	21,615	21,587	99,969
1938/39	39,385	81,415	19,183	18,487	26,532	89,330
1939/40	40,659	087,931	28,306	21,251	30,761	114,409
1940/41	50,562	216,568	21,745	25,583	31,487	114,041
1941/42	38,634	118,454	19,040	24,142	25,600	110,000
(53) 1942/43	64,943	186,098	22,438	32,866	32,246	135,930
1943/44	60,802	209,799	37,329	31,099	33,265	199,141

(53) Control inaugurated.

TABLE XXXI
EXPORT OF LAMBS 1938-39 - 1944-45.

Works	1938-9	1939-40	1940-1	1941-2	1942-3	1943-4	1944-5
Hobart	20,426	16,140	12,698	11,523	9,228	26,941	15,810
Somerset	35,817	39,078	30,363	33,190	31,634	36,396	12,440
St.Leonards	-	53,127	53,122	46,181	46,915	54,094	33,400
TOTAL	56,242	108,346	96,183	90,803	87,777	117,421	61,650

TABLE XXXII.
POTATO IMPORTS AND EXPORTS - VARIOUS STATES

Year	N.S.W.		Victoria		Queensland		S.A.		W.A.		Tasmania	
	Imps.	Expts.	Impts	Expts.	Impts.	Expts	Impts.	Expts.	Impts	Expts	Impts	Expts.
1935	69,264	818	Nil.	22,075	10,607	1,429	5749	888	1907	2318	Nil	54,452
1936	60,450	1,077	Nil.	11,231	16,111	116	7856	483	18	8307	Nil	66,792
1937	96,086	1,004	405	41,596	22,596	N.A.	5883	783	354	6995	Nil	85,774
1938	92,700	985	6,214	33,624	16,474	N.A.	6658	1043	3000(51)	5062	Nil	73,702
1939	71,914	815	Incom	11,895	11,594	71(52)	Incom.	394	Nil	94(52)	Nil	66,444
1940	93,738	933	17,123	7,874	21,056	29(52)	Incom.	2445	Nil	1004(52)	Nil	91,280

(51) Partly estimated.
(52) Overseas only.

420. A five year pre-war average is computed as under :

TABLE XXXIV.

State	Tons	Percent of Total
N.S.W.	53,191	16
Victoria	125,242	37
Queensland	15,593	5
South Australia	19,932	6
Western Aust.	23,295	7
Tasmania.	96,736	29
Total	337,989	100%

421. The market demands in the various States have been calculated by the Potato Marketing Board on the basis of reasonable prices being maintained, which, whilst payable to growers are not unreasonable to consumers. The following gives the distribution of this demand amongst the various States, and also the demand per head of the population. Average annual production (338,000 tons) is just below this level.

TABLE XXXV.

State	Total Market Demand (Tons)	Demand per head of population	Estimated Average Production (Tons)
New South Wales	123,000	105	53,192
Victoria	120,000	146	125,241
Queensland	38,000	90	15,593
South Australia	25,000	100	19,932
West Australia	19,000	95	23,295
Tasmania	15,000	145	96,736
TOTAL	340,000	111	337,989

An average rather more indicative of normal pre-war experience is calculated at 364,000, being the average for the period 1928-1937. This makes the average production just above the total market demand.

422. Prior to 1930, the Sydney market was supplied approximately as follows :-

New South Wales local supplies .. 20% of total demand
Victoria and other States .. 30% of total demand
Tasmania .. 50% of total demand

For the six years ending 1938 the position was approximately :

New South Wales local supplies .. 40% of total demand
Victoria and other States .. 8% of total demand
Tasmania .. 52% of total demand

It is thus apparent that Tasmanian growers made a slight advance, whilst other States lost heavily to New South Wales production.

423. For the year 1942-43 the State Potato Marketing Board arrived at an average cost of production per acre based on a three ton crop, viz :

TABLE XXXVI.

	Item	£ s. d
1.	Rent - average per acre	3. 0. 0
2.	Cultivating before ploughing	10. 0
3.	Seed - allowing for transport and loss by decay, etc.	9. 0. 0
4.	Fertiliser at quota limit (3 cwt. Super plus 1 cwt. Sulphate of Ammonia, Cartage, etc.)	1.12. 0
5.	Ploughing (usual single furrow plough)	1. 5. 0
6.	Cutting and planting	12. 0
7.	Sowing fertiliser	12. 0
8.	Harrowing 4 times @ 2/- per acre	8. 0
9.	Discing twice @ 5/- per acre	10. 0
10.	Scarifying twice @ 5/- per acre	10. 0
11.	Flat hoeing	1. 5. 0
12.	Moulding	5. 0
13.	Digging @ 2/6d. per bag	5.12. 0
14.	Sacks - 45 @ 1/1d.	2. 5. 0
15.	Twine and Branding	3. 6
16.	Carting (Average)	2. 5. 0
17.	Weighing	1. 0
18.	Unloading	3. 0
19.	Inspection and attendance	4. 6
	Total	£30. 4. 0

424. The above sum of £30. 4. 0d. represents the total cost involved to the point of export. An overall sum of £4.10. 0 needs to be added to the above total in order to bring the figure up to the cost level ruling in 1945. For the year 1938-39 a figure of £27. 4. 0 would approximate to the average cost per acre of a 3 ton crop, costs rising by 10 per cent over the years 1938-39 - 1942-43.

425. The present level of shipping costs per ton Burnie/Sydney is compared with those ruling in 1938-39, viz :-

TABLE XXXVII

Item	1938-39	1944-45
Port Charges - Burnie		
Insurance, stamps, bill of lading and exchange	1. 9.	1. 9.
Wharfage	1. 8.	1. 8.
Forwarding	1. 6.	1. 6.
Freight Rate	20. 0.	28. 7.
Port and Other Charges- Sydney		
Sorting and Stacking	3. 0.	3. 0.
Wharfage	4. 0.	4. 0.
Weighing and Loading	1. 9.	1. 9.
Insurance	3. 0.	3. 0.
Inspection	6.	6.
Exchange	8.	8.
Commission @ 5% on a £15 market(54)	15. 0.	15. 0.
Total	52.10.	61. 5.

(54) The general rates of selling commission recognised by the N.S.W. Wholesale Produce Merchants' Association are 6½% if selling price is £6.0.0 per ton and under, and 5% if selling price is over £6.0.0. per ton. Some firms charge a flat rate of 5%.

It will be observed that total shipping costs have risen by 8/7d. per ton or 16.25 per cent over the period 1938-39 - 1944-45.

426. Relating the above figures to f.o.b. costs, we can arrive at the cost of landing the potatoes per ton in Sydney markets, viz :-

TABLE XXXVIII

Year	F.o.b. cost	Landing Costs	Total
1938-39	£9. 1. 4	£2.12.10	£11.14.2
1944-45	11.11. 4	3. 1. 5	14.12. 9

That is, shipping costs represented in 1938-39 and 1944445 22.6 and 20.9 per cent of the total cost of landing potatoes in Sydney. Hence, potatoes represent another case of a declining freight burden over the war years due to a rapid rise in other costs.(55)

427. The following table presents data relating to the unweighted averages of the weekly top prices for Tasmanian potatoes as fixed by the Wholesale Produce Merchants' Association of New South Wales for the years 1935-36 to 1938-39, viz :-

TABLE XXXIX.

Year	(Unweighted) Average Price	Shipping costs as a percentage of Selling Price.
1935-36	£13. 6. 0	16.9
1936-37	12.12. 0	20.9
1937-38	10. 0. 0	26.4
1938-39	18. 7. 0	14.4

The net return to the grower in the immediate pre-war year of 1938-39 was £6.12.10, the Sydney market being under-supplied in that year. It should also be noted that the range of weekly potato prices per ton, Sydney market, 1930-39 was £16. 5. 0 (£24. 2. 0 - £7.17. 0).

428. Before proceeding to analyse the present relation between shipping costs and selling price, it is necessary to refer briefly to the war-time marketing of potatoes. The Australian Potato Committee was set up under National Security (Potatoes) Regulations on 27th April, 1942, the purpose being to ensure that adequate supplies of potatoes would be available in Australia to meet the needs of the defence forces and civilian population. Production was increased substantially but fluctuated year by year, and with increasing demands, it became necessary to ensure that the acreage was maintained at a maximum. As pointed out earlier, production is closely related to price. The Committee first assured a reasonable price to growers by giving a guaranteed minimum price of £10.0.0 and allowing growers the benefit of the market price when it exceeded

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(55) Compare paragraph 330, Timber.

the minimum. In the second season of "control" this was altered to a fixed contract price. The guaranteed minimum frequently resulted in the most profitable market being one to which potatoes should not be sent, either because of transport difficulties, cross traffic or the needs of a less profitable market. Under the contract system, the price to growers is fixed and supplies are directed according to needs rather than market rates. The fixed price for the two main varieties (Bismarcks and Brownells)(56) is £12.10.0, being constant at that level until early August each year, when it rises at regular intervals to a maximum of £14.10.0, viz :-

TABLE XXXIX.

Period	Price (f.o.b. Burnie)
13th August to 19th August	£12.12. 6
20th August to 26th August	£12.15. 0
27th August to 2nd September	£12.17. 6
3rd September to 9th September	£13. 0. 0
10th September to 16th September	£13. 5. 0
17th September to 23rd September	£13.10. 0
24th September to 30th September	£13.15. 0
1st October to 7th October	£14. 0. 0
8th October to 14th October	£14. 5. 0
15th October and after	£14.10. 0

429. Hence, shipping costs now represent from 19.6 to 17.5 per cent of final (gross) selling price, Sydney; the net return to the grower varying from 17/9d. to £2.18. 9 per ton.

430. It is not possible to obtain comparable figures for the total cost of landing potatoes in Sydney from the several Australian potato growing areas. However, the table below does provide a fairly accurate basis for a comparison on a relative basis, viz :

TABLE XL.
COSTS OF TRANSPORTING POTATOES TO SYDNEY MARKET (1945).

From:			
ALL PORTS TASMANIA - BY BOAT DIRECT			
	Freight	£1. 8. 7	
	Sorting and stacking	3. 0	
	Wharfage	4. 0	
	Weighing and loading	1. 9	
	Inspection	6	Total £1.17.10
VICTORIAN RAIL STATIONS - Based on Average Cost of Rail Freight Rates.			
	Freight	£1.15. 0	
	Weighing & Loading	1. 6	
	Inspection	6	Total £1.17. 0

(56) The price fixed for Snowflakes and all other varieties was £11, being raised early in 1945 to £12.

TABLE XL - contd.

From:	MELBOURNE BY BOAT		
	Freight	£1. 9. 9	
	Cartage Rail to Ship Melbourne	5. 0	
	Sorting & Stacking	3. 0	
	Wharfage	4. 0	
	Weighing & Loading	1. 9	
	Inspection	6	Total £2. 4. 0
From	ADELAIDE BY BOAT		
	Freight	£2. 0. 6	
	Sorting & Stacking	3. 0	
	Wharfage	4. 0	
	Weighing & Loading	1. 9	
	Inspection	6	Total £2. 9. 0
From:	ADELAIDE BY RAIL		
	Freight	£3. 2. 3	
	Weighing & Loading	1. 6	
	Inspection	6	Total £3. 4. 3
From:	MOUNT GAMBIER RAIL DIRECT		
	Freight	£2. 8. 1	
	Weighing & Loading	1. 6	
	Inspection	6	Total £2.10. 1
From:	PERTH - BOAT FROM FREMANTLE		
	Freight	£2.15.11	
	Cartage Perth to Fremantle	7. 6	
	Inspection Perth	1. 3	
	Sorting & Stacking	3. 0	
	Wharfage	4. 0	
	Weighing & Loading	1. 9	
	Inspection	6	Total £3.13.11
From:	BRISBANE BY BOAT		
	Freight	£1.11. 0	
	Cartage to boat	3. 6	
	Sorting & Stacking	3. 0	
	Wharfage	4. 0	
	Weighing & Loading	1. 9	
	Inspection	6	Total £2. 3. 9
From:	BRISBANE BY RAIL - SOUTH BRISBANE-SYDNEY DIRECT		
	Freight	£1.12. 5	
	Weighing & Loading	1. 6	
	Inspection	6	Total £1.14. 5
From:	ROMA STREET, BRISBANE, VIA WALLANGARRA		
	Freight and Tran-shipping Cost	£2. 6. 6	
	Weighing & Loading	1. 6	
	Inspection	6	Total £2. 8. 6

431. The state of over-production, likely to persist for some years, will inevitably result in a collapse of the present stable price level if, and when, control is lifted. The target acreage 1944-45 was 66,000 acres, the "normal" acreage being usually 35,000 acres. Hence, since demand is very sensitive to price, lower freight costs would enable prices to be lowered with a consequent widening of demand. Table XLI shows the extent to which demand affects the wholesale price of potatoes, viz :

TABLE XLI.

Year	Australian Production	Average Price	Approximate Consumption in Ounces per Head per Day.
1937	461,141	£6.17. 0	5.7
1938	345,312	11.15. 0	4.0
1939	274,441	17. 4. 0	3.3

It should be noted that the light crop of 1939 restricted the supply by approximately 2½ ounces per head per day and made a difference of over £10 per ton in the average price. It is, therefore, safe to say that if sufficient advertising and publicity could be carried out to increase demand by 1 oz. per head per day it would add £3. to £4. to the wholesale price. The normal average rate of consumption in Britain is 9 ounces per day.

432. The two major problems facing the potato industry, namely :

(a) fluctuation in total production caused by seasonal conditions, which may result in a shortage one year and a glut the next;

(b) a steady decline in the consumption rate per head of population,

appear to be common to all potato growing countries of the world. In Australia there is no doubt that a great improvement in consumer demand could be achieved if a greater degree of "standardisation" of both quality and price could be effected. Irregular price levels have discouraged several firms who are interested in the packaging of potatoes. Intermittent supplies and prices also react against consumption. Every time a rise in price causes people to buy less potatoes, they buy something else as a substitute. A part of that demand is permanently lost. Hence, the reason for the falling consumption per head for each ten year period in Australia. In other words, high prices have more than a seasonal influence on consumption.

433. APPLES.

Tasmania is dependent to a very much greater degree than any other on outside markets for the disposal of the apple crop. Local consumption of fresh apples is normally no more than 100 - 150,000 bushels per annum, or somewhat less than half a bushel per capita. A somewhat larger quantity is normally sold to factories for processing and the balance (normally about 85 - 90 per cent of the crop) is exported to overseas and interstate markets, viz :-

TABLE XLII

PRODUCTION AND EXPORT OF APPLES, TASMANIA, 1936-37 - 1944-45.

Year	Total Production (Bushels)	Exports (Bushels)			
		Overseas	% of total prod.	Inter-state	% of total prod.
1936-7	4,611,000	2,708,653	58.7	1,254,020	27.2
1937-8	4,792,000	2,713,755	56.6	1,887,192	39.4
1938-9	5,724,000	3,341,065	58.4	1,753,864	30.6
1939-40	5,148,000	1,096,625	21.3	2,757,262	53.6
1940-1(57)	4,781,000	53,618	1.1	1,624,758	34.0
1941-2(57)	5,728,600	10,751	0.2	2,135,539	37.3
1942-3(57)	5,104,700	-	-	1,644,852	32.2
1943-4(57)	7,504,700	-	-	1,607,680	21.4
1944-5	5,804,610	76,045	1.3	1,478,310	25.5

434. No other State gives rise to a comparable movement of apples into trade channels. Western Australia exports overseas a fairly high proportion of her crop but the total production is only one fifth that of Tasmania and her interstate exports are negligible. Victoria, New South Wales and South Australia export a much smaller proportion of their crops overseas, and Victoria, in particular, is the source of a moderate interstate movement, but the Tasmanian crop is the dominating factor in the overseas market and the interstate markets of New South Wales and Queensland.

TABLE XLIII.

PRODUCTION OF APPLES, AUSTRALIA (AVERAGE FOR 1934-5 - 1938-39.)

State	Production	Exports	Balance	Est. Consump needs	Est. Interstate Trade	
					Expts	Impts
	'000 bush	'000 bush	'000 bush	'000 bush	'000 bush	'000 bush.
N.S.W.	1,160	140	1,020	2,300	-	1,280
Victoria	2,280	570	1,710	1,600	110	-
Q'land	260	30	230	850	-	620
S. Aust.	930	380	550	500	50	-
W. Aust.	1,250	810	440	440	-	-
Tasmania	4,600	2,660	1,940	200	1,740	-
Total	10,480	4,590	5,890	5,890	1,900	1,900

The above table is based on rather arbitrary assumptions in respect of total consumption in each of the States, but it does serve to illustrate the normal position. The estimates of State consumption levels have been based on estimates of Australian consumption in the years 1936-37 to 1938-39, viz. about 36 lb. per head per year.

(57) First grade fruit only. For these years the total number of bushels produced of other grades was as follows: 1940-1, 1,164,200; 1941-2, 628,200; 1942-3, 638,100; 1943-4, 518,100; 1944-5, 765,210.

435. The Tasmanian industry's dependence on interstate markets means that in the event of restricted overseas markets, or exceptionally heavy crops, leaving a large surplus both the home and Mainland price will collapse. It is, of course, arguable that in the event of intensive competition in the Australian market over a period, Tasmania, by reason of her relatively favourable production conditions, might capture a large share of the markets in New South Wales, Queensland and possibly Victoria at the expense of the growers in these States. But advantages in production are largely offset by shipping costs and by inefficient marketing methods. Another factor working in the same direction is the wider opportunity in the more populous States for selling low grade fruit locally, that is, with wider local markets and smaller volume of production, mainland growers are able to dispose of a larger proportion of their total crop. With a lower percentage of unmarked fruit, a better gross return is secured.

436. The State Fruit Board estimates that in future it will be necessary to export to the United Kingdom and Europe 3,250,000 bushels of apples, leaving approximately 2,000,000 bushels for interstate markets. A local consumption of 300,000 bushels with a canning and drying programme of, say, one million bushels, is also considered necessary. Again, the demand for apples for the manufacture of cider and fruit juices is increasing, and overseas markets, particularly in the Near East, are planned. The widening of these various markets is made necessary by the increase in production during the last few years owing to new crops from trees planted prior to the depression, and the heavier crops resulting from the intensive reworking campaign of the 'thirties. As an example, Tasmania produced in 1930 only a few thousand cases of the Granny Smith variety. In 1945, production equalled 400,000 bushels and the yield will further increase.

437. The method of marketing apples pre-war on both the United Kingdom and interstate markets appears to have resulted in considerable dissatisfaction. In respect of the United Kingdom, the method of shipping on consignment often resulted in the returns received by growers bearing little or no relation to quality and/or returns on other lines. The position on the interstate markets was more satisfactory although some doubtful practices were practised.

438. The overseas trade to England is limited by a quota system to 2¼ million bushels. The overseas export season commences at the end of February and continues until the beginning of June. During this period consignments averaging from 25,000 to 100,000 cases are loaded. The average prices received for good quality fruit vary from 8/- to 14/- per case according to variety and condition and the state of the market upon arrival. The latter is controlled largely by the quantity of English cool-stored fruit and that available from America and Canada.

439. The pre-war costs of shipping fruit to the United Kingdom were as follows, viz :

TABLE XLIV.

Item	Cost per Bushel
Export wharfage	2d.
Overseas Freight Rate	3/6d. & 2½d.
Insurance	1d.
London Charges	1/-d.
Selling Broker's Commission	6d.
Advertising Levy	½d.
Total	5/6d.

Hence, the percentage of overseas selling price absorbed by shipping costs varies from 40 to 68 per cent. Despite this freight burden acreage was not decreasing in the pre-war decade whilst, as noted above, exports were actually rising. In any case, the quality of the service rendered is more important than the rate charged. Here a word needs to be said regarding the efficiency of shipping services available. In respect of fruit for overseas markets, voyages of 70 days and even longer were very common pre-war, resulting in fruit arriving in a poor condition. Again, ships lifting fruit on the coastal trades were often quite unsuitable, having insufficient ventilation and heating due, say, to the proximity of holds to the boilers.

440. In a normal season, exports to interstate markets approximate 7,250,000 bushels, the Sydney and Brisbane markets absorbing four-fifths of this total. The pre-war shipping costs were as follows :-

TABLE XLV.

Item	Cost per bushel
	s. d
Tasmania/Sydney	
Export wharfage etc.	0 1.0
Freight Rate	0 11.0
Sorting and Packing	0 1.1
Inspection	0 0.8
Wharfage	0 1.5
Receiving and Delivery	0 2.5
Commission	0 6.0
	1 11.9d.
Tasmania/Brisbane	
Export wharfage etc.	0 1.0
Freight Rate	1 9.0
Sorting and Stacking	0 1.1
Inspection	0 0.8
Wharfage	0 1.5
Receiving and Delivery	0 2.5
Commission	0 9.0
	3 0.9d.

The prices received in a normal season, when the market is not subject to a shortage of supply, or glut, range from 5/- to 15/- per bushel, the latter figure being obtained for fruit sold ex cold store, to which a charge of about 1/3d. per case must be added. Hence, the percentage relation of shipping costs to selling price varies from 13 to 40 per cent (Sydney); and from 20 to 62 per cent (Brisbane). It will be observed that no attempt has been made to arrive at an average price and relate shipping costs to it, for the price varies so widely with differences in the quality of the pack, the varieties sold and the seasonal period. The average figures computed in the case of potatoes are, to an extent, unsatisfactory for these reasons.

441. Because of the dislocation of markets with the outbreak of war, the Commonwealth Government promulgated the National Security (Apple and Pear Acquisition) Regulations on 14th November, 1939, to provide for the acquisition and orderly marketing of the 1940 crop. A Marketing Committee of the Australian Apple and Pear Board(58) was appointed to supervise the marketing arrangements. As from 1st March, 1940, the Commonwealth acquired all apples and pears in Australia.

442. Advances were made to growers at the rate of 2/- per bushel on apples and 3/- per bushel on pears on the basis of 75 per cent of their estimated production which was determined by an official assessment of the individual crops. In addition, growers received a further advance of 1/- per bushel on apples and pears of prescribed quality delivered to places or to agents of the Board. All advances in respect of compensation were on the basis of bare fruit, the costs of cases and packing, freight, storage and all marketing expenses being met by the marketing authority. Agents were appointed throughout Australia to receive and deal with apples as directed, and a system of distribution devised to meet the particular needs of the domestic market in each State. Insofar as shipping space has been available, oversea shipments have been directed from those states having the largest quantities available for export.

443. The Acquisition Scheme was continued for the 1941 season but an Australian Apple and Pear Marketing Board was constituted under the regulations to administer the scheme. State Committees continued to assist in the administration of the scheme. Acquisition arrangements under the revised organisation provided that, instead of making advances to growers at flat rates, a unit system was adopted which provided for differential rates as between States, and as between varieties of apples and pears produced in each State. Again, the fruit had to be actually delivered to the Board before qualifying for advances except where delivery was not required for marketing.

444. In later seasons the Government has taken action to acquire the Tasmanian and Western Australian crops only. In all other States the growers are not now subject to any control by the Board, and are free to dispose of their fruit through the normal channels of distribution.

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(58) Constituted under the Apple and Pear Organisation Act (December, 1938).

445. The nature of the by-product problem varies from industry to industry. In the Tasmanian apple industry it is chiefly concerned with the utilisation of the surplus and unexportable apples, the quantity of which varies from season to season. The pre-war average percentage of processed to fresh apples exported was 10. Of course, the demands of a war economy have wrought a vast change in the composition of the state's apple exports, nearly 1/3 of total exports in 1943-44 being in dried form. Whereas in 1938-39, 717,000 lbs of dried apples were exported, in 1943-44, 4,032,990 lbs. were exported.

446. Pre-war there were many reasons why an apple surplus should exist, e.g. limits on overseas markets for fresh apples and the existence of a standard of quality for export apples. It follows that there was normally a surplus of apples on the growers' hands every season after the demands of the overseas, interstate and local markets had been satisfied. Utilisation of the surplus as by-products affords the grower some return towards cost of production and removes a possible liability from his hands.

447. So far as the various avenues for the utilisation of apples are concerned, the production of dried apples forms the largest and most profitable market. It should be noted that a widening of the market for solid pack apple is likely in the future. In pre-war days the apple evaporating industry with an estimated capacity of 50,000 - 70,000 cases per season, was merely a convenience to the grower. The maximum normal price which the evaporator could afford to pay the grower was not sufficient to induce the latter to grow good quality fruit. A higher price for dried apples would enable the evaporator to pay more for fresh apples. Increased consumption of dried apples is shown by the wartime increase. The permanent effects on demand are still unknown. Here it should be noted that, on the average, Tasmania produces 90 per cent of the total output of dried apples in Australia. Unfortunately, none of the evaporators keep adequate costing systems. However, shipping costs are high enough to divert the bulk of the output to interstate exports. Dried apple in bulk realises a lower price than the same product packed in cartons - in the case of the former it is likely that the proportion of shipping costs to final selling price is 8 per cent and in the case of the latter only 5.5 to 6 per cent. Pre-war the industry needed complete reorganisation and modernisation both in respect of production and marketing methods for there was a latent demand in Australia to be exploited. It is not proposed to trace through wartime developments here as the greatly increased output has been called forth under defence contracts and can have little bearing on the post-war market. Modern plant and equipment, rigid grading, both as regards quality and colour and more cooperative advertising on the Australian market are necessary if the industry is to expand.

448. The changing nature of the form in which apples are being demanded is reflected in the expansion of activity in the canning section of the industry. Solid pack apple is now being used in increasing quantities by bakers, pastrycooks and restaurants, particularly in Victoria(59). The percentage of final selling price absorbed by (interstate)

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(59) Sales in this State are high (75% of output) because of consumer awareness and the absence of intense competition from tropical fruits (cf. Sydney).

shipping costs is approximately 6.5. It is likely that when overseas markets are stabilised, most of the low priced varieties will be exported in solid pack form thus lowering the freight burden, which is as high as 68 per cent of selling price.(60) It will be first necessary, however, to lower production costs in order that prices comparable with Canadian and American producers may be quoted.

449. Finally, we may summarise briefly the results of our investigations into the relation of shipping costs to the selling price of Tasmanian primary products on mainland or overseas markets. Being bulky and low priced commodities, it is only to be expected that the percentage absorbed by shipping costs is high.

TABLE XLVI.

Product	Reference Paras.	Percentage Relation of Shipping Costs to Final Selling Price.
Meat	397-410	30.34
Dairy Produce	411-414	-
Potatoes	415-432	19.65(Average 1935-36 - 1938-39)
Apples - Fresh	433-446	
Overseas		40-68
Interstate		13-40(Sydney); 20-62 (Brisbane)
Apples - Dried	447	5.5-6
Apples - Canned	448	6.5

Strictly speaking, of course, dried and canned apples are manufactured products but they have been included in this section in order to emphasise the lower freight burden as compared with apples in fresh form.

450. In Chapter VIII we shall be concerned with the relation of shipping costs to the decentralisation of secondary industries in Australia with particular reference to the future of industrial development in Tasmania(61). The Commonwealth and State Governments are now committed(62) to a policy of decentralisation of secondary industries and in Chapter III reference was made to the Commonwealth post war shipping policy, involving the control of freight and charter rates, fares, routes and sailings of all vessels plying interstate trades. Subject to certain conditions, it is anticipated that those trades will be subsidised which serve industries located in decentralised locations.

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(60) Vide para. 439.

(61) Compare the terms "industrial development" and "decentralisation of industry", the latter being applicable only to the States of New South Wales and Victoria where the movement is from the crowded metropolises to the country. In the case of Western Australia, South Australia and Tasmania the problem is to develop new industries. But a fuller discussion will be reserved for the following Chapter.

(62) Vide Resolution V adopted at the Premiers' Conference, August, 1945.

APPENDIX "A"

QUESTIONS INCLUDED ON QUESTIONNAIRE FORM CIRCULATED PRIOR TO PERSONAL INTERVIEW

1. Products manufactured and the relation of each to total output? (If you do not wish to reveal actual production figures, would you please quote the percentage which each product bears to your total putput. If your production is subject to wide annual variations and/or was affected by war time controls, please quote also figures for a normal pre-war year, e.g. 1938 or 1939).

2. The sources of raw materials for the manufacture of your product or products?

3. In what markets are your products sold, and the quantity (or proportion) which each absorbs?

4. What are the main items which go to make up the term "shipping costs" so far as your industry is concerned?

5. Which items (if any) do you consider to be unreasonable and disproportionate with the service rendered, and why? (e.g. Are the costs for loading and unloading vessels at the wharves out of all proportion to the work done?)

6. Which products do you quote "free on board" (F.O.B.) and which do you quote "costs, insurance, freight" (C.I.F.), and why? Do you quote any of your products "F.O.B. factory, freight allowed" (or allowed and prepaid)?

7. Which of the above items (question 4) are covered by the charge made by the shipping companies? (That is, does their charge cover cost of sea carriage only, or such items as loading and unloading - export and import wharfages - insurance, etc.)

8. Freight rates quoted by the shipping companies for the transport of your products?

9. How do you contract with the shipping companies? (By special agreement for a stated period, guaranteeing a certain minimum amount of cargo; or do you simply book space for each particular voyage and pay the ruling rate?)

10. (a) What proportion do shipping costs bear to the price which you pay for imported raw materials? (Normal year)

    (b) By how much per unit do the shipping costs which are involved in the importation of raw materials increase total production costs?

11. What are the effects of freight rates on the importation of plant and equipment? Do they greatly increase overhead costs?

12. With regard to the marketing of your finished product on mainland or overseas markets, what proportion of the final price obtained is absorbed by "shipping costs" as defined in question 4 above? (If you sell your products f.o.b. could you estimate figures for the above table by assuming you sell c.i.f.)

13. Who are your main rivals on mainland and/or overseas markets?
    (a) with regard to your rivals' cost of production, are they affected by transport costs (rail or sea?) in obtaining supplies of raw materials? Could you roughly compare your relative positions with respect to costs of production?

    (b) If shipping costs DO increase the price at which your product or products have to be offered in order to realise a satisfactory return, how is your competitive position on mainland or overseas markets affected? (Or, alternatively, if you have to accept the home producers' price, is the percentage of price which goes to normal profits largely absorbed by shipping costs?).

    (c) Could you compare the returns from a unit of your product (or products) sold on the various markets.

14. If one "overseas" market (e.g. Victoria) absorbs the bulk of your total output, could you state why? (e.g. Is it because it is nearest to Tasmania; is there less competition from the home producer in other States (compare effects of rail freights) or overseas producers; are the sea freights the most favourable on that voyage; is it because no transhipment is necessary; are your production costs lower than rival producers', etc.?)

15. If shipping freights were lowered by shipping companies (with the help, say, of a Governmental subsidy) would mainland or overseas producers be able to export to Tasmania and compete with your product on the home market?

16. To place you in a "satisfactory" trading position on mainland and/or overseas markets, by how much would present and/or pre-war freight rates need to be lowered?

17. If they WERE lowered, would it be possible to sell your product not only in greater quantities on present markets, but also to extend to other countries?

18. If freight rates do represent a high proportion of total costs of production, and if you do export most of your output to the main centres of population on the mainland, why did you locate in Tasmania?

19. What are the possibilities of making a contract with the shipping companies at lower rates, if you could guarantee them an increased and steady quantity of cargo? (ie. Economies of large scale transport).

20. Tasmania's export trade over the war period was affected not only by rising freights but also by direct Governmental control of shipping space. How has this control affected your industry in so far as your competitive position on overseas markets is concerned?

21. With a view to post-war output policy, what steps would you suggest should be taken to offset the disadvantages accruing to Tasmanian industry through the island's insularity? (e.g. the provision of "special purpose" rather than "general cargo" ships might lower costs for those commodities exported in large quantities).

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APPENDIX "B".

HYDRO - ELECTRICITY

HYDRO-ELECTRIC COMMISSION'S RATES FOR BULK SUPPLY.

The following are the approximate rates per horsepower per annum of maximum demand :-

	£	s.	d.
501 to 1,000	10.	0.	0
1,001 to 1,500	9.	0.	0
1,501 to 2,000	8.	0.	0
2,001 to 3,000	7.	0.	0
3,001 to 4,000	6.	0.	0
4,001 to 5,000	5.	0.	0
5,001 to 7,500	4.	10.	0
7,501 to 15,000	4.	0.	0

PRICES AND CONDITIONS OF SALE FOR MOTIVE AND WELDER POWER.

(From the Hydro-Electric Commission ByLaws, 1943).

TARIFF F.

Class 1. - Ordinary.

For consumption up to and including the first 120 units per horsepower installed, per quarter .. 1.5d. per unit
For all additional units .. 0.6d. " "

(Subject to 16 2/3rds per cent cash discount if paid within discount period.)

Conditions. -

(a) Power will be supplied at approximately 415 volts, single or three phase, or 240 volts, single phase.

(b) A consumer having an installation of 25 h.p. or less, consisting of four or more motors and/or welders, will be charged on the basis of 80 per cent only of his total installed horsepower.

(c) A consumer having an installation exceeding 25 h.p., consisting of four or more motors and/or welders, may elect, on connection, to be charged on the basis of horsepower of maximum demand, otherwise he will be charged on the basis of 70 per cent of his total installed horsepower.

CLASSES 2 AND 3. - High-tension Supply of 100 Horsepower and Over :

Class 2. - Measured on low-tension side of consumer's transformer :

All units at Class 1 gross rates, but subject to cash discount of 25 per cent if paid within discount period.

Class 3. - Measured on high-tension side of consumer's transformer :

All units at Class 1 gross rates, but subject to cash discount of 25 per cent and 5 per cent if paid within discount period.

Conditions (Classes 2 and 3). -

(a) These classes cover the rates for the supply of motive-power and/or welder power for 100 h.p. or over supplied at the discretion of the Commission at 2200 volts or over, three-phase, 50 cycles, where the consumer supplies his own transformer, and equipment, and has complied in all respects with By-laws 25 and 26.

(b) The Commission reserves the right to determine in each case whether the power will be measured on the low-tension or the high-tension side of transformer.

(c) A consumer under these classes is subject to a special service charge in the event of a feeder extension exceeding 400 yards, or special substation arrangements being necessary.

GENERAL. -

(1) The minimum charge shall be, up to 2 h.p. installed, 2s. per month; 9d. per month for each extra horsepower.

(2) Subject to By-law 18, subsection (1), all accounts will be on a pro rata daily.

(3) Should the installation of an electric welder necessitate additions or alterations to the Commission's mains and/or apparatus, the Commission may require the consumer to pay the whole or portion of such additional cost.

(4) Portable welders may be connected temporarily at rates obtainable on application to the Commission.

(5) The power factor of any welder shall not be less than 80 per cent on full load.

(6) The equivalent h.p. rating of a welder will be determined in each case on the basis of 960 volt amperes being equivalent to one horsepower, or, where the Commission so decides, as the result of a test.

TARIFF L. - SPECIAL APPLICATIONS

For consumption between hours of 7 a.m. and 10 p.m. daily .. 1.2d. per unit

For consumption between the hours of 10 p.m. and 7 a.m. daily .. 0.6d. per unit

(Subject to 16 2/3fds per cent cash discount if paid within discount period).

Conditions. -

(a) This tariff is applicable to the heating of glasshouses, soil heating, electric vehicles, and other purposes approved by the Commission where the bulk of the energy is used between the hours of 10 p.m. and 7 a.m.

(b) A two-rate meter and time switch will be installed by the Commission, for which the consumer shall pay a rental of 10s. per quarter, nett.

(a) The minimum charge shall be such as may be arranged by the Commission, and shall not be less than 9s. per quarter, exclusive of meter rent, but subject to the usual cash discount of 16 2/3rds per cent.

SPECIAL PURPOSE RATES

Special rates will be qupted upon application for the supply of electrical energy to be used for electro-chemical and electro-metallurgical operation, electro-culture, etc., also for any purposes where the bulk of the energy is required between the hours of 10 p.m. and 7 a.m. or during off peak-load hours only, or under special circumstances approved by the Commission, and shall be such as may be agreed upon by the Commission and the consumer.

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Chapter EIGHT

Shipping Costs
& their Relation to the
Decentralisation of Secondary Industries.

CHAPTER VIII.

SHIPPING COSTS AND THEIR RELATION TO THE DECENTRALISATION OF SECONDARY INDUSTRIES.

451. A policy of decentralisation of secondary industries is held to be essential for Australia for defence reasons, and also to further development along lines more evenly spaced geographically than heretofore. Furthermore, Sydney and Melbourne have reached a size expansion beyond which appears to be essentially undesirable. Special encouragement must, therefore, be given to the development and re-development of other areas. The development of other capital cities such as Adelaide, Perth, and Hobart, and provincial towns, is dependent upon the establishment and expansion of industries in these locations.

452. However, apart from historical accidents, the structure of rail and shipping freight rates, the organisation of the railway network, the concentrated provision of harbour facilities, and many other factors, have contributed towards the establishment of Sydney and Melbourne as the main industrial and commercial centres of the Commonwealth. The advantages which led to the development of these two centres while Australia was undergoing a process of industrialisation are now even more apparent. A very large proportion of the population lives in these two cities, with the result that a large section of the overall Australian market is concentrated there. A skilled labour force has been built up, and fuel and many other materials are obtainable at relatively low cost. Finally, the actual location of many major industries in these two cities is in itself a powerful factor in determining the location of new industries.

453. An indication of the relative industrialisation of the states is given by the ratio of population to the annual value of secondary production. Appendix "A" to this chapter shows the absolute and percentage distribution between the states of,

(a) estimated mean population for the year 1937-38;

(b) factory employment for the years 1937-38 and 1942-43; and

(c) value of factory production for the years 1937-38 and 1942-43.

From these figures two indexes of industrialisation have been computed as shown in Table I. below.

TABLE I.

INDUSTRIALISATION OF AUSTRALIAN STATES.

State	Industrialisation according to Factory Employment(1)		Industrialisation according to Factory Production(2)	
	1937-38	1942-43	1937-38	1942-43
New South Wales	1.01	1.05	1.09	1.10
Victoria	1.33	1.28	1.22	1.27
Queensland	0.64	0.58	0.65	0.57
Sth. Australia	0.91	1.10	0.81	0.93
West. Australia	0.62	0.51	0.65	0.49
Tasmania	0.69	0.70	0.81	0.67

(1) Percentage of Factory Employment ÷ Percentage of Population.
(2) Percentage of Value of Production ÷ Percentage of Population.

An index of 1 would indicate that the State held a percentage of industry equal to its percentage of population. The estimated population distribution for 1937-38 has been used for the 1942-43 calculations in the absence of estimates of population for the later year. The A.C.T. population has been added to New South Wales and the Northern Territory to South Australia.

454. It will be observed that New South Wales has a higher index according to factory production than according to factory employment. This may be because (1) a higher proportion of industry employs large-scale methods of production and (2) a higher proportion of heavy industries is located in New South Wales as compared with other States. The converse may apply to the corresponding figures for South Australia. The greatest relative increase between the two periods occurred in South Australia. Queensland, Western Australia and Tasmania declined relatively.

455. As a result of the present structure of the economy a policy of decentralisation of secondary industries, necessary for strategic and social reasons, can be carried out only at considerable cost to the community. Such cost must be borne until such time as the less developed areas are able to widen the range and expand the volume of their production. This cost will be in the form of the assistance which must be given to manufacturers to enable them to locate outside Sydney and Melbourne, and the higher costs of producing goods at other locations, even where no initial assistance is given. These costs will have been offset when there are advantages to be derived from production at given sites away from Sydney and Melbourne and will tend to decrease as a skilled labour force is built up in other areas, and as the population of these areas increases. On the other hand, there is a danger that the labour force will become isolated, as in Tasmania, and although this will mean a certain amount of freedom from industrial troubles the local labour market will be limited and not capable of suddenly absorbing a new industrial unit.

456. The problem, therefore, is one of encouraging development in the most suitable areas outside Sydney and Melbourne of secondary industries at the lowest net cost to the community. The burden of this policy must be equitably shared by each section of the community. The problem involves, therefore, not only the careful selection of the actual location, but also consideration of the type of industries which should be established in those areas, and the extent and type of assistance that should be provided. Such a large proportion of the Australian population is now concentrated in the Sydney and Melbourne metropolises, while the remainder is so widely scattered throughout the rest of the continent, that it will be impossible to establish and expand many industries even in comparatively large centres, unless they have access to the Sydney and Melbourne markets as well as local and overseas export markets.

457. A policy of decentralisation relying partly on production by decentralised industries for Sydney and Melbourne markets must be expected to cost the community more than a policy designed merely to foster decentralised production for local markets. It is in the production of goods for Sydney and Melbourne markets which offer the greatest advantage in locating in the actual city areas themselves. In some cases it will be definitely uneconomical to operate outside Sydney and Melbourne when the demand is largely concentrated there, but in many other cases decentralised production either in outlying States or in the country districts of New South Wales and Victoria for Sydney and Melbourne markets will be justified.

At the Premiers' Conference in August, 1945, it was agreed that the decentralisation of secondary industries should be carried out conjointly by the Commonwealth and State authorities and the respective responsibilities as between the Commonwealth and States were defined.(3) It will be the task of such authorities controlling decentralisation policy to ensure that the industries which are encouraged to locate in outlying areas are those selected which will not be a permanent burden on the community. income. Now one of the financial disabilities suffered by manufacturers located outside Sydney and Melbourne producing goods largely for sale in these markets is the cost of transporting finished goods to the market. As noted in Chapter VII so called "transport costs" include not only the actual freight rate paid and incidental charges, but also interest on working capital tied up in goods in transit, and in cases of stocks over and above the quantity which would be held if the factory were in close proximity to the market.

458. Again, manufacturers in, say, Western Australia and Tasmania often have to pay transport costs on fuel in excess of the cost to manufacturers situated in Sydney and Melbourne. Sydney is particularly fortunate in the matter of transport costs on coal(4) and, in addition, there are many locations to which transport costs on coal are greater than those paid by manufacturers situated in Melbourne. Where the fuel used is a petroleum product Sydney and Melbourne are not better situated than other main ports, but all ports are in a better position than inland towns. Where electricity is used transport costs may be represented by the costs of transmission, where power is produced at a central point and distributed over a wide area. In the following discussion electricity will not be very important since power is concerned with decentralisation within a State, whereas from the point of view of Tasmania and Western Australia particularly, decentralisation must be conceived in terms of decentralisation from the more highly industrialised States.(5)

459. A further factor involving high transport costs to decentralised industries producing for the Sydney and Melbourne markets is the cost of obtaining materials and plant and equipment from the source of supply. Various locations are

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(3) Vide Appendix "B" to this Chapter.

(4) Ranging from 4/8d. to 6/8d. per ton. On the other hand the Newcastle/Melbourne, Adelaide, Hobart, Fremantle and Brisbane rates are at present 11/-d., 13/2d., 14/9d., 18/9d. and 12/8d. per ton respectively. Current prices of coal f.o.b. Newcastle range from 18/-d. to 25/-d. per ton.

(5) Here it is convenient to emphasise that no matter now scientifically a policy of decentralisation of secondary industry may be conceived for Australia, political considerations are often at cross purposes with such plans. In many cases, the policy has deteriorated into a competitive bargaining game as between States, the Commonwealth looking on as a somewhat confounded spectator. As observed above, decentralisation of secondary industries to such industrialised States as New South Wales and Victoria is narrowly conceived by those State authorities in terms of decentralisation from the metropolis to outlying country areas within the same State. Again, so far as the less populated States are concerned decentralisation of secondary industries is conceived of in terms of decentralisation from New South Wales and Victoria. To conceive of decentralisation in this manner is far from accurate for in the case of these outlying States the problem is rather a matter of industrial development not industrial re-distribution. Hence it is easy to understand an almost three-fold political tension, viz. :-

(a) States of New South Wales and Victoria versus the States of South Australia, West. Australia and Tasmania in bargaining on the open market, in order to persuade industrialists, by the granting of bigger and better subsidies, to select a site in one State rather than another.

differently placed in this regard. Where the materials and machinery are imported from overseas, Melbourne and Sydney have no advantage over other ports of call since the imported price is equalised for all Australian ports. All ports at which overseas ships call, however, do have an advantage over other ports and inland towns. Where the plant and equipment are of Australian origin they will probably have been manufactured in Melbourne or Sydney. Where the materials are of Australian origin, Melbourne and Sydney usually possess an advantage in that an earlier process has been carried out in either city, or because rail and shipping freight rates tend to be framed in such a manner that it is generally cheaper to transport raw materials to one of the States and process them there, than to process them either at the point of origin and transport the finished product to the capital city, or to process them at some intermediate point.

460. There are locations outside Sydney and Melbourne which carry special advantages for the operation of certain industries producing for the Sydney and Melbourne markets. In some cases the existing provision of essential services at such locations is sufficient to induce manufacturers to utilise their special advantages. In other instances, the various advantages of manufacturing in the Sydney or Melbourne metropolitan areas are likely to result in manufacturers ignoring the special advantages which are available at certain decentralised sites, either within the same State or in other States, unless special action is taken to direct them.

461. The problem of industries producing solely for local markets at decentralised locations is different from the problem of decentralised industries producing for the Sydney or Melbourne markets. Factors other than the cost of transport would tend to be the same in both cases, but the transport cost is somewhat different. Where there is no possibility of competition from Sydney and Melbourne manufacturers, this problem of decentralisation does not arise. There are, however, only a limited number of commodities, such as bricks, for which transport costs are so high that no production is possible except in close proximity to the market. In the majority of cases, competition either exists at present costs or might exist at somewhat higher, or somewhat lower, transport costs. At present freight rates, in the manufacture of some commodities where the raw material is not produced in either Melbourne or Sydney, the manufacturer located at the point of origin may have overwhelming advantages over manufacturers located elsewhere so far as the local market is concerned. On the other hand, in the manufacture of commodities the raw materials for which are produced either at, or in close proximity to, Melbourne or Sydney, a manufacturer located in one of those cities may have overwhelming advantages in supplying any market in Australia. Again, in the manufacture of other commodities, the advantages of large scale production may be so great that a small number of producers located in Sydney and Melbourne may be able to supply the whole of the Australian market at a cost lower than that of manufacturers located elsewhere could supply even their own local market. Other advantages such as

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(b) All the States are committed to the policy as such. That is, the States have recognised their responsibility to develop those secondary industries appropriate to each particular State by the provision of services, and financial concessions where necessary.

(c) The Commonwealth, whilst recognising sovereignity in the sphere defined by State boundaries, is nevertheless committed to a decentralisation policy in order to provide for the further defence of the country and in the interests of a balanced national economy. The Commonwealth has also agreed to provide financial assistance to the States in respect of the capital and/or operating costs of particular undertakings provided the specific project is in the general national interest and that the financial costs involved are substantial in relation to the State or States concerned.

a large labour force and proximity to allied industries may give Sydney and Melbourne manufacturers advantages over producers located anywhere else in supplying some, or all, of the markets.

462. Offsetting these advantages, however, is the cost of transporting the finished commodity from Sydney or Melbourne to the market. The local manufacturer, on the other hand, may have to meet transport costs which do not affect the Sydney and Melbourne manufacturer. If his factory is not situated at port of call for oversea ships he will have to pay transport costs from such a port on any imported machinery or fuel he may require. Assuming coal is used, if his factory is not situated on the coal field he will almost certainly have to pay more for his coal than his Sydney rival and may even have to pay more than a competitor situated in Melbourne. The source of supply for his raw materials may be situated at a greater distance from his factory than from Sydney or Melbourne. If he uses semi-finished goods, component parts or machinery of Australian origin, probably they will have been produced in Sydney or Melbourne. Although the cost of transporting the finished product to markets outside Sydney and Melbourne, therefore, may be great enough to offset the various advantages of manufacturing in those centres, production still may not take place at or near the market because of the greater cost of obtaining fuel, materials and machinery there than in Sydney or Melbourne.

463. The above general analysis of the extent to which transport costs may determine location suggests that a general adjustment of freight rates to reduce the disadvantages of manufacturing outside Sydney and Melbourne might be a useful instrument to promote decentralization. In the following section three methods of adjusting interstate shipping freight rates are examined from the point of view of the possibility of promoting decentralisation to the less populous States. The analysis will serve to indicate the problems which arise from any attempt to promote decentralisation by freight rate adjustments, whether to outlying States or to the country districts of New South Wales and Victoria. No reference will be made to the latter problem, since it is concerned with rail rate adjustments. Interstate rail networks have been a powerful factor in promoting the development of capital cities, particularly in New South Wales and Victoria, by channelling all trade through the capital cities. The trade of border regions has been channelled by the same means through the capital cities of the States in which the regions are situated, irrespective of the relative advantages of alternative routes to the main markets or to ports of call for oversea ships. Similarly, the development of port facilities at ports other than capital cities might have been instrumental in promoting the development of such ports by enabling interstate vessels to call there. Had such ports been developed they would either have provided a cheaper means of transport directly, or reduced transport costs by eliminating the need for double handling where a local shipping service existed.

464. There appear to be three ways in which shipping freigh rates might be adjusted for the purpose of reducing the overall shipping costs incurred by a policy of decentralisation of industries. First, the same rate might be charged on any commodity whatever the distance travelled. This would reduce the cost of transporting finished commodities from outlying States to markets in Sydney and Melbourne. Secondly, rates might be adjusted so that the rate on each commodity would be less on journeys to Sydney and Melbourne than on journeys out of these two ports. This would also reduce transport costs on finished commodities marketed in Sydney and Melbourne. Thirdly, some adjustment might be made in the relation between rates on finished products and rates on raw materials, thus reducing the

advantage to be obtained from processing primary products near the market, or nearer the port of shipment for export, rather than near the source of supply.

465. Each of the above adjustments might be achieved either by the payment of a subsidy to the shipping companies to enable them to make the appropriate reductions without loss of revenue, or by appropriate increases in other rates to compensate them for the revenue lost in rate reductions. Basically, the control by the Commonwealth Government of freight and charter rates, fares, routes and sailings involves a decision being made as to which of these two basic methods is to be employed.

466. If rate reductions were to be achieved by appropriate increases in other rates, the effect of such increases on industries already decentralised might be such as to offset, wholly or partly, the reductions made for their benefit. The first method suggested above would involve increases in freight rates on short journeys in order to reduce the rates on long journeys. Thus, a manufacturer situated in Hobart might gain by the reduced cost of transport between Hobart and Sydney both in obtaining his materials and machinery and in marketing his finished product. The cost of obtaining coal from Newcastle should also decrease. On the other hand, the cost of transport between Hobart and Melbourne would probably increase, whilst Melbourne and not Sydney might be the source of his materials and machinery. Even if his position was not affected by higher transport costs between Hobart and Melbourne, he would be in a less favourable position to compete with his Sydney competitors both in the local market and in, say, Adelaide or Perth, as these markets might previously have been protected by the high cost of transport from Sydney and Melbourne. He would also lose any advantage he might have on account of transport costs in processing local raw materials for the Sydney and Melbourne markets, since Sydney manufacturers, for example, would be able to obtain these raw materials at lower costs than formerly. In the case of some industries located in an outlying State such as Tasmania there would undoubtedly be a net gain, but in other cases losses would be incurred. This method must be discarded as a useful method of promoting decentralisation.

467. The effects of a general adjustment to provide lower rates on journeys into Sydney and Melbourne than on journeys out of Sydney and Melbourne would be much the same. If such reductions were to be achieved without Government assistance, rates on journeys out of Sydney and Melbourne would have to be increased. This would be detrimental to manufacturers situated outside Sydney and Melbourne in two ways. First, the cost of obtaining materials and machinery from these two centres would increase. Secondly, the cost of importing (Australian) raw materials would decrease for Sydney and Melbourne manufacturers. In some products, therefore, Sydney and Melbourne manufacturers would be in a better position to supply the whole of the Australian market, whilst in others, manufacturers in outlying States would be little better off than they were before, because the reduced freight rates on finished goods exported to markets in Sydney and Melbourne would be offset by increased rates on materials and machinery of Australian origin. Some decentralised industries would undoubtedly benefit from the operation of a scheme such as this but the results would be so uncertain and varied that it cannot be considered a satisfactory method of promoting industrial development.

468. Finally, we must consider the third method of promoting the industrial development of outlying States suggested above, namely, an adjustment between rates on primary products and rates on manufactured goods. If this were to be achieved without Government assistance it would be necessary to increase rates on primary products in order to offset reductions in the rates on manufactured goods. This would have the effect of encouraging the processing of primary products near the point of origin, by reducing the advantage which now exists if goods are transported over the greater part of their journey as raw materials. This should be an effective method of encouraging decentralised manufacture of local raw materials, both for local markets and for consumption in Sydney and Melbourne. It would, however, have the opposite of the desired effect in relation to decentralised industries using raw materials and semi-manufactured goods originating in Sydney and Melbourne, since transport costs on these would increase. The latter effect would be offset to a certain degree by the reduced cost of obtaining machinery and components from Sydney and Melbourne. This method is more promising than either of the first two considered.

469. It appears, then, that any method based on decreases in rates to reduce the transport costs of decentralised industries must break down if other rates must be increased to compensate the shipping companies for reduced revenue. It is necessary, therefore, to examine the possibility of achieving a general rate reduction with the aid of a Government subsidy to shipping companies to eliminate the necessity for compensating rate increases. In what follows, the terms of the Federal Cabinet decision of 28/8/45(6) should be borne continually in mind, as it is necessary to relate the implications of the decision to the evolving of a freight rate network directly related to the balanced industrial development of the Commonwealth.

470. The effect of each of the methods suggested above would be much the same if assistance were given to the shipping companies so that they would not have to make compensating rate increases, although decentralised industries would benefit generally by reduced shipping freight rates on goods sent to market in Sydney and Melbourne; they would be penalised by increased competition from Sydney and Melbourne manufacturers in local markets where high shipping costs had previously been instrumental in preventing such competition. It was contended in paragraph 281(6) of Chapter VII that insofar as Tasmania was concerned the disadvantage of a general lowering of the shipping freight rate structure had been exaggerated. However, it would lead to an unsatisfactory result insofar as it provided indiscriminate encouragement to industries situated at a distance from Sydney and Melbourne to produce goods for these markets, and discourage the decentralised manufacture of goods for local markets. The net effect on industries already decentralised would be uncertain. It seems, therefore, that general freight rate adjustment must be abandoned as a useful method of promoting decentralisation, although individual manufacturers are likely to benefit from appropriate rate adjustments. Herein lies the simple reason why this method has been advocated so loudly.

471. It will be clear from the foregoing and, more specifically, from the analysis in Chapter VII, that, although shipping costs may be an important element in the excess costs of a number of decentralised industries, there are other important disadvantages of manufacturing outside Sydney and Melbourne. It is suggested that the most effective method of promoting decentralisation is by the payment of subsidies to individual manufacturers and that these subsidies should be

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(6) Vide paras. 151-161 Chapter III.

based not only on transport costs but on all the disadvantages of manufacturing outside Sydney and Melbourne. Resolution No.5 passed at the Premiers' Conference on 22nd August, 1945,(7) concerned the decentralisation of secondary industries, and recognised that one of the Commonwealth responsibilities in the joint Commonwealth and State action proposed was the provision of financial assistance to the States, especially in respect of the capital and/or operating costs of particular undertakings. Thus, where an industry for which decentralisation is proposed intends to manufacture only for a local market, the transport costs of machinery and materials would, presumably, be partly offset by the cost of transporting finished goods to the market if the industry were established in Sydney or Melbourne. It would also be necessary to estimate any disadvantage involved in manufacturing at a distance from allied industries, the cost of small scale enterprise in cases where the industry is already well established in Sydney or Melbourne, and could supply the market to be served, and, perhaps, the cost of conducting the industry with an unskilled labour force. Where manufacture is to be for the Sydney and Melbourne markets as well as for the local market, it will be necessary to offset any savings in transport costs due to proximity to the source of supply of materials or fuel against the transport costs of sending the finished goods to Sydney and Melbourne markets.

472. As was observed in footnote (5), the several State Governments are freely bargaining against each other in order to persuade manufacturers to choose locations within their own particular State. As a result, a policy of subsidisation of specific industries is growing up, even if haphazardly, and even if the subsidy is not being computed precisely on the basis of the disadvantages accruing to the industry through locating at one site rather than another. More often than not, the subsidy is a "market price" fixed by the state of competition between the six buyers (State Governments). Several specific cases are known where the Victorian and Tasmanian State Governments bade against each other quite unashamedly for the purchase of manufacturers' promises to locate in their respective States. Needless to say, Victoria played the role of "price leader."

473. Although it is not considered that one of the possible methods of implementing a policy of decentralisation is by a general adjustment of shipping freight rates, it is not suggested that individual freight rates do not require amendment or that control of shipping freight rates cannot play a useful part in the promotion of decentralisation. It is considered, in fact, that it is essential for the Commonwealth Government to maintain a continual supervision over interstate freight rates and services and this, apparently, the Government intends to do(8) and presumably will do having been returned to office. Such supervision will both ensure that particular areas which could be developed with the aid of a low general cargo rate, or special rates on specific commodities, and satisfactory shipping services are not hindered for lack of these. In some cases, of course, it may be simply a matter of ensuring that subsidy payments are not wasted either because freight rates are too high or because the service provided is unsatisfactory. On application by a particular State, it would be the responsibility of the authority administering decentralisation subsidies for the Commonwealth to ensure that satisfactory means of marketing finished products and of obtaining plant, equipment and raw materials were available at a reasonable cost to every producer to whom a subsidy were granted. It is not suggested, however, that the function of control of shipping freight rates and services should be vested in this authority. In any case, an authority does not appear to exist apart from the Regional Planning Division of the Ministry of Post-war Reconstruction.

(7) Vide Appendix "B" to this Chapter.
(8) Vide paras. Chapter III.

Of course, it is impossible to accurately ascertain the extent to which the regional planning and the development of a balanced plan of industrial decentralisation has proceeded and it is unfair to draw conclusions from statements by Government economists in public. However, it would appear that constructive work has not proceeded very far.(9) One outstanding difficulty, of course, is that insofar as regional planning is concerned, if it is to be done on a Commonwealth basis, the States would be eliminated, and insofar as the decentralisation of secondary industries is concerned the Commonwealth is vitally interested in the development of a balanced national economy for reasons primarily of defence and yet has no direct constitutional powers to implement such a policy. Resort must be had to indirect methods of encouragement and ad hoc agreements with State Governments.

474. Hence, the conclusion is reached that the only satisfactory means of promoting decentralisation from Sydney and Melbourne to the less populous States is by the payment of specific subsidies to manufacturers. The payment of these subsidies is the responsibility of the Commonwealth Government which can pay subsidies to individual manufacturers for this purpose only through the medium of the State Governments. If the Commonwealth recognises that it is essential to ensure the balanced development of the country as a whole and to provide for the satisfactory development of special areas for strategical reasons, then the creation of a Commonwealth authority to administer the payment of subsidies for the promotion of decentralisation seems inevitable. This authority would be responsible for investigating the claims of individual manufacturers, for determining whether the industries applying for a subsidy were suitable for decentralisation, whether the sites chosen were suitable for the particular processes involved, whether their development was desirable, and whether a subsidy should be paid. Generally, the amount of subsidy paid would be computed on the basis of the net disadvantages of manufacturing at the site chosen, in comparison with manufacturing in Sydney or Melbourne. The State Governments would simply be required to act as the agents of the Commonwealth for the purpose of administering the subsidy payments.

475. It is not suggested that subsidies should be paid to every manufacturer who establishes a factory at a decentralised location. The payment of a subsidy should be contingent on the existence of costs greater than the costs of manufacturing at Sydney or Melbourne. On the other hand, the excess costs incurred by some industries at decentralised locations would be so great that their establishment outside Sydney and Melbourne would not be justified. First, if a large proportion of the output was to be sold in Sydney and Melbourne, while fuel, raw materials, plant and equipment were produced at or near these cities, the industry would appear unsuitable for decentralisation. Similarly, if the advantages of large scale production were such that the whole of the Australian market could be supplied at the lowest possible cost by one or two plants, already situated in Sydney or Melbourne, it is unlikely that the payment of a subsidy for the establishment of additional factories elsewhere would be justified. Secondly, where the proposed production was for a purely local market, the payment of a subsidy might not be justified if the capacity already existed for meeting the local demand from Sydney and Melbourne factories and the local market was, in fact, being supplied from those factories with a cheap and satisfactory product.

(9) See, for example, a somewhat superficial treatment in a paper entitled "Regional Planning : The Present Stage in Australia." Paper read by J. H. Shaw, Research Officer, Regional Planning Division, Ministry of Post-war Reconstruction, to Sections P and G of the A.A.A.S. Congress, Adelaide, August, 1946.

476. Provision should be made for the decentralisation authority to have the power to grant subsidies to industries already established in decentralised locations where the authority was satisfied that the granting of such subsidies was both justified and necessary. From the survey in Chapter VII. it will be agreed that the insertion of such a provision as this would be most desirable from the point of view of a number of existing Tasmanian industries.

477. For subsidies to be an effective method of promoting decentralisation, it should be provided that the subsidy once granted would be subject to variation only as the result of variations in the excess costs due to location. This would pro-vide for (1) increases where such costs were increased, (2) reductions as the decentralisation policy proceeds and as other industries were established in the area, thus reducing the costs of manufacturing outside Sydney and Melbourne, and (3) variations according to changes in particular cost items as the result of changes in the general level of prices, changes in import prices or changes in the level of Australian prices.

478. In 1943 the Commonwealth Government set up within the Ministry of Post-war Reconstruction a Secondary Industries Commission with the immediate function of negotiating with private manufacturers for the utilisation of Government munitions factories and annexes developed during the war for conversion to production of goods for peacetime consumer demand. The Commission was also directed to advise the Government on the general development of secondary industries within the Commonwealth. The State Governments were requested to appoint liaison officers to work with the Commission in all matters affecting their respective States, and in this connection the Tasmanian Government established a Directorate of Industrial Development. The Director of Industrial Development was made directly responsible to the Premier and given broad discretionary powers to approach manufacturers with a view to persuading them to consider the possibility of Tasmania as a site for branch factories if and when they contemplated an expansion of their activities.

479. In March of this year the State Parliament agreed to an "Industries Establishment Bill" providing for the expenditure of up to £20,000 in facilitating the establishment of new industries. However, assistance is being given by,

(a) rebates on power charges; on the cost of transferring capital plant and equipment from mainland States; on rail freight rates equivalent to the sea freight rates from mainland ports to North-west Coast ports;

(b) the erection of factories and the leasing of same at 5 per cent of the actual cost of the land, buildings and civic services, with an option to purchase at the actual price over a period of years;

(c) the purchase of share holdings in a company with a distinct understanding that the transaction would be subject to the passing of authorising legislation.

One reason why the acquisition of factory land is necessary is that, with the lifting of capital issues control by the Commonwealth up to £10,000, many smaller companies can now commence or renew operations provided they are relieved of the cost of land and new buildings. Such assistance enables the companies to reserve their capital for the purchase of plant and for working capital.

480. The effects of shipping costs on the cost structure of existing Tasmanian industries were reviewed in Chapter VII. To what extent are they, at present, determining the location choice? From the evidence below it would appear that isolation from neither the mainland markets, nor from the sources of plant and equipment and, in some cases, raw materials is retarding the State's industrial development.

481. In the period June, 1941, to September, 1946, the approximate capital invested by new industries which have actually commenced operations in Tasmania, including munitions plants, food processing works, but excluding flax mills, was £3,257,000. Most of the munitions establishments are now in the process of being converted to peacetime production. It should also be remembered that a number of engineering firms expanded their plant to supply wartime demands, but the capital involved in such expansion is not included in the figure just stated. The number of plants involved is thirty-four. Twenty-two other companies have agreed to come to Tasmania as soon as provision is made for factory space. The companies concerned, including the Aluminium Production Commission, plan to make a capital investment of £4,025,000. In addition, the Government has offered to provide each company with factory buildings under a rental basis giving the companies an option to purchase over a period of years. A further sum of £1,687,500 should be added to the figure for capital investment mentioned above. The expansions to major existing industries are concerned mainly with developments at the Boyer News Print Mills, the Burnie Pulp and Paper Mills, and the Electrolytic Zinc Co. at Risdon. The capital expenditure involved is considerable, amounting to £3,950,000. Finally, the Government is at present negotiating in Tasmania with thirteen other companies, involving a total capital expenditure of about £5,394,000, together with a Government expenditure on factory buildings to the order of £581,800.

482. Total employment provided by industries which have commenced operations approximates 4,200. Insofar as those industries which are due to come to Tasmania as soon as provision is made for factory space are concerned, the supply of labour required will be 2,700 and that required by extensions to the three existing major industries referred to will be 800. If all the companies with which negotiations were still being conducted up to September, 1946, decide to locate in Tasmania, then the additional supply of labour required will be approximately 1,500 persons. It is not known whether the State Government is considering the problems which may arise through a shortage of labour, and which may become more important than any other factor determining the location of secondary industries in Tasmania. As a supplement to the survey in Chapter VII., it is convenient here to take a sample of those new industries which have located, or are in the process of locating, in Tasmania, and summarise the general data available, viz. :-

TABLE II.

BASIC DATA RELATING TO SELECTED NEW INDUSTRIES IN TASMANIA, 1941-46.

Industry	Firm	Location	Remarks
Prepared foods, dried fruits	Bailey Food Products	Hobart	Imported raw materials. Tasmanian market.
Electrodes	O. & F. Company	Hobart	Import Australian made wire and materials for fluxes. Mainland and overseas markets. Plan also to manufacture electric welding machines.
Paint	Tip Top Paints	Hobart	Imported pigments. Local markets.
Venetian blinds	M.T. Brodribb	Hobart	Imported aluminium strips. Local and mainland markets.
Castings	K.L. Engines and Tractors	Hobart	Establishment of a foundry for a standard tractor. The castings will be shipped from Hobart in the rough and machined and processed on mainland.
Rope and cordage. (Still under negotiation.)	Thos. Edgar & Co.	Hobart	Imported raw materials. Local, mainland and overseas market.
Carpets. (Still under negotiation.)	Greig Bros.	Hobart	Raw materials from local woollen mills and rope and cordage factory. Local and mainland markets.
Newsprint	Australian Newsprint Mills	Boyer	Local timbers. Mainland markets.
Nails, Barbed Wire & Chisels.	Titan Nail & Wire Co.	Moonah	Imported materials. Nails and wire for local markets. Chisels, mainland market.
Textiles	Sutex Ltd.	Derwent Park	Yarn spun from imported wool tops. Some yarn used in production of worsteds. Output exported to mainland and overseas. Establishment in Launceston will shortly be supplying the tops.

Industry	Firm	Location	Remarks
Non-ferrous & alloy strip	Austral Bronze Co. Pty. Ltd.	Derwent Park	Local metals - finished product exported to mainland and overseas. The company is removing its existing strip mills situated at Alexandria, N.S.W., to the new works at Derwent Park - additional equipment is also being purchased.
Plastics	Novex Pty.Ltd.	Derwent Park	Imported materials. Local and mainland markets.
Handbags	Ford Sherington	Launceston	Manufacturers of handbags from materials imported from Sydney. Local market only.
Processed fruits, sauces	Sun Vita Products	Launceston	Local fruits, imported vinegar herbs. Local and mainland markets.
Bedding and inner spring mattresses	J.C.& Howard Wright Pty.Ltd.	Launceston	Tick, kapok and steel wire for manufacture of springs are imported. Other fillings produced locally by the woollen mills. Local market.
Replacement parts	Replacement Parts(Tas.) Pty. Ltd.	Launceston	Approximately 40% output exported (to Victoria).
Silica lime bricks	Silica Brick Company	Launceston	Local raw materials. Local and Victorian markets. Production of tiles and associated building materials is planned.
Pharmaceutical Supplies	Kent-Sippe Ltd.	Launceston	Imported materials. Local and mainland markets.
Confectionery	Tasma Sweets	Launceston	Imported sugar, glucose and gelatine. Local fruit juices. Local and mainland markets.
Ovaltine and processed foods.	Wander Ltd.	Devonport	Local raw materials. Australian and New Zealand markets.
Processed foods (peas, vegetables, fruits).	Devon Cannery	Devonport	Local raw materials. Mainland markets.

Industry	Firm	Location	Remarks
Asbestos cement products	Asbestos Cement Products	Railton	Local cement - imported asbestos. Local market.
Titanium pigments	British Titan Products	Burnie	Ilmenite sands imported - experiments proceeding with sands from local deposits. 5% output sold Tasmania; 95% Mainland and New Zealand.
Bicycles	La Trobe Cycle Works	Latrobe	Imported raw materials. Local and mainland markets.

483. Table III. below summarises the data in Table II. above, viz. :-

Source of Raw Materials	Frequency	Markets for Finished Goods	Frequency
Local	6	Local	6
Imported	12	Local and mainland	13
Local and imported	6	Local, mainland and overseas	6
TOTAL	24	TOTAL	25(10)

Incomplete as the data are, it is clear that, provided the commodity is of reasonably small bulk and high price, the shipping costs incurred in either the importation of raw materials or the marketing of the finished goods are not preventing the establishment of new industries in Tasmania producing for, say, the Melbourne and Sydney markets.

484. Finally, we may summarise our findings as follows :-

(a) Shipping costs are not such an important factor in relation to either the location of industry or the determination of profit margins as is popularly believed.

(b) In any case, the importer and/or shipper of goods is primarily concerned with the efficiency and regularity of the service rendered rather than with the cost.

(c) The costs are most significant in the transport of cheap bulky commodities, since rates are charged according to weight or volume of a commodity and without reference to value.

(d) The incidence of shipping costs does tend to favour the location of industry at or near the main concentrations of population, namely, Sydney and Melbourne.

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(10) Includes wire, nails and chisels separately.

485. In any particular instance, the significance of shipping costs must be appraised against other cost and non-cost factors which influence the location of an industry. The determination of the ratio of shipping costs to total costs of production and/or selling price is only a starting point. Moreover, those who are most insistent in their advocacy for a lowering of one or more of the items comprising the overall shipping cost rarely even go so far as working out this ratio.(11) Briefly, the significance of shipping costs is diminished by the cost advantages derived from the concentration of production in a single factory or area. As a result, manufacturers so situated are ready to carry the burden of shipping costs for short or long periods to prevent competitors establishing production in other centres (i.e. freight absorption). Again, the widespread practice of charging equalised prices for the same commodity sold in all capital cities,(12) the cost of moving plant and equipment from an established site and the incidence of land values, building and labour costs, power, light and water and the state of industrial relations further diminish the significance of the shipping cost item considered in vacuo.

486. The Tariff Board in its first report, dated 24/7/1946, on the efficiency and costs of production in Australian industries(13) stated that "one of the most far-reaching conditions" to be considered was the high cost of interstate transport and that "the main obstacle in the way of decentralisation of industry was the cost of transporting raw materials to, and finished products from, decentralised factories." No data to substantiate these statements were submitted and it can only be assumed that no approach such as that summarised in paragraph 485 above was attempted.

487. It is highly improbable that any general policy or principles can be formulated for a shipping freight rate, or shipping cost, structure or formula designed for the specific purpose of promoting a policy of decentralisation or, more generally, of influencing entrepreneurial decisions. Instead, it appears that resort must be had to specific subsidies as discussed in paragraphs 471-477 above.

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(11) Compare paragraph 486 below.

(12) Freight equalisation, of course, operates at the expense of the consumer in the producing centre and to the advantage of the consumer in the distant market.

(13) Vide note (6), Chapter I.

APPENDIX "A".

MEAN POPULATION, DISTRIBUTION OF SECONDARY INDUSTRY, VALUE OF FACTORY PRODUCTION, 1937-38 AND 1942-43.

	N.S.W.	VICT.	Q'LAND	S. AUST.	W. AUST.	TAS.	NORTHERN TERRITORY	A.C.T.	AUSTRALIA
	MEAN POPULATION - Year ended 30th June, 1938, to nearest 1,000.								
No.	2,709,000	1,861,000	995,000	591,000	457,000	235,000	6,000	10,000	6,864,000
Percentage	39.47	27.11	14.49	8.61	6.66	3.42	.09	.15	100
	DISTRIBUTION OF SECONDARY INDUSTRY.								
	FACTORIES.--EMPLOYMENT - AV. NO. ENGAGED DURING YEAR.								
	1937-38								
No.	224,861	201,793	52,119	44,084	23,133	13,170			559,160
Percentage	40.21	36.09	9.32	7.88	4.14	2.36			100
	1942-43								
No.	315,524	262,368	64,292	72,748	25,813	18,310			759,045
Percentage	41.57	34.57	8.47	9.58	3.40	2.41			100
	1949-50 41.5	33.0	9.9	8.5	4.5	2.6			
	FACTORIES--VALUE OF PRODUCTION - TO NEAREST £1,000.								
	1937-38								
Amount	85,168	64,889	18,603	13,820	8,562	5,445			196,487
Percentage	43.35	33.02	9.47	7.03	4.36	2.77			100
	1942-43								
Amount	153,682	121,391	29,045	28,354	11,454	8,075			352,001
Percentage	43.66	34.49	8.25	8.06	3.25	2.29			100
	1949-50 42.9	33.2	9.2	7.9	3.9	2.9			

APPENDIX "B".

PREMIERS' CONFERENCE, AUGUST, 1945.

ITEM 5.

DECENTRALISATION OF SECONDARY INDUSTRIES.

RESOLUTION.

1. Conference agrees that decentralisation of secondary industry should be carried out by joint Commonwealth and State action based upon the following division of State and Commonwealth responsibilities :-

State Responsibilities :

(i) The development of secondary industry to be guided by the respective State Governments along the lines of decentralisation appropriate in each particular State.

(ii) Each State Government to undertake to the full extent of its resources, the provision of services and the financial costs of assistance and concessions. (In cases where requests for assistance involve public works expenditure in order to provide additional services, the financial aspects will, of course, be dealt with through the machinery provided by the Loan Council and the National Works Council.)

Commonwealth Responsibilities :

(i) Close collaboration with State Governments in regard to all matters of Commonwealth industrial policy which may affect the development and location of industry, with particular reference to the means of bringing before industrialists the possibilities of decentralised locations for development.

(ii) Investigation, in association with State Governments, of the prospects of developing secondary industries in selected areas, particular consideration being given to the disabilities requiring to be offset in those areas.

(iii) Advice to the States of development of secondary industry desired in order to provide more satisfactorily for defence needs.

(iv) Provision of financial assistance to the States, especially in respect of the capital and/or operating costs of particular undertakings, provided -

(a) examination reveals that the success of the project is in the general national interest and that the financial costs involved are substantial in relation to the resources of the State or States concerned, and

(b) the State or States concerned undertake to provide such services and assistance as may be agreed upon.

2. The Commonwealth and States agree to appoint the respective authorities to administer the responsibilities set out in (1) above.

New times demand new measures and new men,
The world advances, and in time outgrows
The laws that in our father's day were best;
And, doubtless, after us, some purer scheme
Will be shaped out by wiser men than we
Made wiser by the steady growth of truth".

James Russell Lowell

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