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INTERNATIONAL BANK FOR RECONSTRUCTION AND DEVELOPMENT
INTERNATIONAL DEVELOPMENT ASSOCIATION

APPRAISAL OF THE PORT OF SINGAPORE
EXPANSION AND IMPROVEMENT PROJECT
SINGAPORE
(Supplementary Report)

August 2, 1966

CURRENCY EQUIVALENTS

1 M\$ = 0.33 US cents
1 US\$ = 3.0 M\$

UNITS

Tons Revenue Tons, i.e., weight tons
of 2,240 lbs. or measurement
tons of 40 cubic feet.

FISCAL YEARS

Singapore Harbour Board - July-June
Port of Singapore Authority - January-December

SINGAPORE
APPRAISAL OF THE PORT OF SINGAPORE
EXPANSION AND IMPROVEMENT PROJECT

(Supplementary Report)

TABLE OF CONTENTS

	<u>Page</u>
A. General	1
B. Operations	1-2
C. The Project	2-3
D. Finance	3-4

APPENDICES

1. Cargo Statistics
2. Projections of Cargo Traffic
3. Ship Movements at P.S.A. Wharves
4. Daily Number of Ocean-going Ships Waiting for Berths at P.S.A. Wharves
5. Project Items and Estimated Cost
8. P.S.A. Statement of Present Debt
9. P.S.A. Actual and Forecast Revenue and Expenditure Accounts
10. P.S.A. Forecast of Cash Flow
11. P.S.A. Actual and Estimated Summary Balance Sheets
12. P.S.A. Forecast of Debt Service.

This Supplementary Report is based on the findings of a Bank mission to Singapore in March, 1966 consisting of Messrs. A. J. Carmichael and S. Y. Park.

SINGAPORE

APPRAISAL OF THE PORT OF SINGAPORE

EXPANSION AND IMPROVEMENT PROJECT

(Supplementary Report)

1. The Bank on August 9, 1965 was on the verge of completing a loan, guaranteed by Malaysia, for the expansion of the port of Singapore - the project having been submitted to and approved by the Board - when the political separation of Singapore from Malaysia required its postponement until Singapore became a member of the Bank in its own right. A subsequent Bank mission consisting of Messrs. A. J. Carmichael and S. Y. Park visited Singapore in March 1966 to determine the effect that the separation of Singapore from Malaysia may have had on the trade and prospects of the port, and to update the information contained in Appraisal Report (TO-483a) on the port of Singapore project.

2. The latest information indicates that the justification of the project has not been affected by recent events and remains sound.

A. General

3. The new port at Jurong, to serve the needs of the new industrial estate and satellite town being developed west of Singapore, is scheduled for completion in 1966. The first berth was commissioned in January 1966 and the other four deep-water berths and 1,260 feet of coastal berths are nearing completion. The completed berth has started to handle general cargo and, up to March 12, 1966, six vessels had used the facility. As an interim measure, the Port of Singapore Authority's (PSA) staff and equipment are being used to operate Jurong port and the situation is being reviewed in the light of experience during the first six months of operations. The Government of Singapore has informed the Bank that its policy is to co-ordinate development to avoid unnecessary duplication of port facilities and to ensure that the rates charged are such as to prevent wasteful competition and subsidization of one port at the expense of the other.

4. The Telok Ayer Basin area deals mainly with the traffic lightered to and from deep-sea vessels at the "Roads", and that from coastal vessels using the shallow-water, artificial basin itself. Discussions between PSA and the Government are still under way regarding the taking over of the area, and the terms and conditions of the take-over have yet to be determined.

B. Operations

5. From discussions with Government officials and representatives of private firms specializing in the entrepot trades, it appears that there has been no discernible adverse effect on Singapore's port traffic as a result of the political separation from Malaysia in August 1965.

6. The long-range intentions of the Malaysian Government with respect to the port of Singapore are not known. The Government of Malaysia is in a position to introduce measures to divert the Singapore port's Malaysian traffic to Port Swettenham or other Malaysian ports. However, such measures would be disadvantageous on economic grounds as new port facilities would have to be provided in Malaysia. In any event, the provision of adequate alternative port facilities in Malaysia would take several years and there is therefore no immediate threat to this portion of Singapore's trade.

7. In the meantime, Singapore's officials hope that a workable arrangement for economic cooperation with Malaysia will be established and that a common tariff zone for Malaysia and Singapore will result. Recently, the Singapore Government proposed that negotiations for the establishment of a common tariff zone for Malaysia and Singapore should be re-opened in the near future and the Malaysian Government agreed that this should be done. Rapid progress in such negotiations is, however, not expected.

8. The continuation of Indonesian "confrontation" led to a sharp decrease in the volume of Singapore's traffic in 1964 but this was followed by a modest recovery during 1965. The total PSA wharf traffic (excluding bulk mineral oil) increased by nearly 8 per cent to about 4.6 million tons in 1965 as compared with a 13 per cent decrease in 1964. The volume of traffic in 1965 was almost exactly as anticipated by the Bank's 1964 appraisal mission, in spite of the decrease during 1964 having been somewhat more than estimated. (See updated traffic and operational statistics in Appendices 1 - 4.) Recent reports indicate that the effect of "confrontation" is diminishing and that Indonesia is gradually resuming use of Singapore's facilities for trade.

9. The traffic forecast for PSA wharves in the Appraisal Report envisaged an average annual rate of growth of slightly less than 5 per cent from 4.4 million tons in 1964 to 5.5 million tons in 1969. From the latest information, it appears that the growth rate of PSA's wharf traffic assumed in the original Appraisal Report is still reasonable. In fact, on the basis of the actual results for 1964-1965 and the improved prospects for trade with Indonesia, it appears possible that the projected rate of growth will be surpassed.

10. The updated traffic and operational statistics are given in Appendices 1 to 4 which correspond to the Appendices with the same numbers in the Appraisal Report.

C. The Project

11. PSA has requested that a few changes be made in the project. These are of a minor nature and do not affect the total amount of foreign exchange involved.

12. Details of the original and the present project are given in Appendix 5. The total cost is now M\$ 72.7 million (US\$ 24.2 million equivalent); the foreign exchange cost remaining the same at M\$ 45.0 million (US\$ 15.0 million equivalent) and the local currency cost being M\$ 27.7 million (US\$ 9.2 million equivalent). The main item of the project - the East Lagoon Scheme

for the construction of 4 new deep-water berths - is unchanged and its cost now represents 70 per cent of the total cost of the project. The port engineer's plantyard item, preliminary work on which has already started, also remains the same.

13. Of the floating craft, PSA has decided to procure only the large fire float and no longer intends to purchase the small fire-fighting vessel as seven of PSA's tugs have been fitted with fire-fighting equipment and are now on 24-hour service. This is an acceptable arrangement. Accepting the advice of its consultants, PSA has decided to buy its own self-propelled, diesel-electric, bucket ladder dredger and to transport dredged material by means of locally-hired barges. Consequently, the two 300-ton steel hopper barges and the attendant tug have been deleted from the project and the "dredging unit" item replaced by the bucket ladder dredger, the estimated cost of which is M\$ 2.5 million. A review of PSA's obligations for the supply of water to vessels and to the outer islands and an assessment of its existing five waterboats have caused PSA to revise its waterboat replacement program and to order three vessels at this time instead of the one originally intended. As before, three harbour tugs are to be procured.

14. The item for the procurement of data processing equipment remains the same. PSA expected to complete an investigation of the best type of equipment for its needs by July 1966.

15. Regarding cargo-handling equipment, orders have been placed, after international competitive bidding, for 38 of the 149 forklift trucks. The price offered was lower than anticipated and the total for this item has been reduced from M\$ 3.9 to M\$ 3.7 million. An order for nine mobile cranes has also been placed. The total cost for mechanical equipment has been reduced from M\$ 6.2 to M\$ 6.0 million.

16. It is now possible that a technical college building on part of PSA's estate will be made available at some time in the future for conversion into a head office. In view of this possibility, PSA has decided to delete this item from the project.

17. The amounts included in the original appraisal report estimate for engineering services, including supervision, remain the same and the 7 per cent contingency item added to the 10 per cent already included in the East Lagoon Scheme figure is considered adequate for the project.

D. Finance

18. Past Income and Expenditure Accounts and Balance Sheets were given in Appendices 6 and 7 of the original Appraisal Report. The latest financial information is given in Appendices 8 to 12 which provide:-

- Appendix 8 - Statement of Present Debt
- Appendix 9 - Forecast Revenue and Expenditure Accounts -
Actual 1964 and 1965, Forecast for 1966-1971
- Appendix 10 - Forecast of Cash Flow 1966-1971

Appendix 11 - Summary Balance Sheets - Actual 1964 and 1965,
Estimated 1966 - 1971

Appendix 12 - Forecast of Debt Service 1966 - 1971.

For all practical purposes, the financial projections remain as forecast in the original Appraisal Report and PSA is confident that at least a 6 per cent rate of return on net fixed assets can be attained in the current year and maintained in the future.

August 2, 1966

SINGAPORE PORT PROJECT

Cargo Statistics (Excluding Bulk Mineral Oil)

	Calendar Year Ended December 31										Thousand Freight Long Tons					
	All Port Facilities of Singapore			P.S.A.		Wharves			"Roads"							
	Loaded	Unloaded	Total	Loaded	%	Unloaded	%	Total	%	Loaded	%	Unloaded	%	Total	%	
1959	2,527	3,942	6,469	1,908	76	1,986	50	3,894	60	619	24	1,956	50	2,575	40	
1960	2,483	4,084	6,567	1,906	77	2,197	54	4,103	62	577	23	1,887	46	2,464	38	
1961	2,730	4,602	7,332	2,069	76	2,499	54	4,568	62	661	24	2,103	46	2,764	38	
1962	2,701	4,768	7,469	2,042	76	2,680	56	4,722	63	659	24	2,088	44	2,747	37	
1963	2,836	4,784	7,620	2,076	73	2,814	59	4,890	64	760	27	1,970	42	2,730	36	
% Increase 1959-1963	12%	21%	18%	9%		42%		26%		23%		1%		6%		
1964	2,080	3,917	5,997	1,743	84	2,517	64	4,260	71	337	16	1,400	36	1,737	29	
% Decrease 1963-1964	26.7%	18.1%	21.3%	16.0%		10.6%		12.9%		55.7%		28.9%		36.4%		
1965	2,185	4,227	6,412	1,826	84	2,770	66	4,596	72	359	16	1,457	34	1,816	28	
% Increase 1964-1965	5.0%	7.9%	6.9%	4.8%		10.0%		7.9%		6.5%		4.1%		4.5%		

Note: "Roads" include all ports of Singapore and adjacent islands except P.S.A. Wharves.

Source: Statistics Dept. Government of Singapore: 1959-1965.

SINGAPORE PORT PROJECT

Projections of Cargo Traffic (Excluding Bulk Mineral Oil)

(Thousands of Freight Tons)

	<u>All Port Facilities of Singapore</u>					<u>The Authority's Wharves</u>				
	<u>1963</u> (Actual)	<u>1964</u> (Actual)	<u>1965</u> (Actual)	<u>1969</u> (Projected)	<u>1974</u>	<u>1963</u> (Actual)	<u>1964</u> (Actual)	<u>1965</u> (Actual)	<u>1969</u> (Projected)	<u>1974</u>
<u>General Cargo</u>										
<u>Incoming</u>										
Rubber	337	54	75	450	480	33	39	47	35	40
Rice	486	298	301	600	700	31	12	8	100	150
Wheat Flour	108	66	40	0	0	97	65	39	0	0
Fruit and Vegetables	163	154	162	180	180	76	99	105	100	130
Iron and Steel	254	254	309	200	180	229	159	215	200	180
Machinery and Equipment	393	315	385	430	450	262	242	321	360	430
Textile Manufacture	205	151	134	180	120	101	94	99	110	110
All Others	<u>2,655</u>	<u>2,442</u>	<u>2,611</u>	<u>2,770</u>	<u>2,900</u>	<u>1,802</u>	<u>1,623</u>	<u>1,756</u>	<u>2,010</u>	<u>2,180</u>
TOTAL - INCOMING	4,601	3,734	4,017	4,810	5,010	2,631	2,333	2,590	2,915	3,220
<u>Outgoing</u>										
Rubber	666	424	446	700	770	644	419	430	680	750
Fruit and Vegetables	111	86	110	115	140	97	82	104	105	125
Timber and Logs	253	344	410	295	320	201	261	304	265	300
Rice	154	44	41	70	50	28	24	21	35	40
Textile Manufacture	75	54	45	50	60	16	21	28	30	40
All Others	<u>1,511</u>	<u>1,064</u>	<u>1,051</u>	<u>1,600</u>	<u>1,700</u>	<u>1,024</u>	<u>873</u>	<u>888</u>	<u>1,180</u>	<u>1,230</u>
TOTAL - OUTGOING	2,770	2,016	2,103	2,830	3,040	2,010	1,680	1,775	2,295	2,485
TOTAL - GENERAL CARGO	7,371	5,750	6,120	7,640	8,050	4,641	4,013	4,365	5,210	5,705
<u>Bulk Cargo</u>										
Gypsum, clinker, latex, vegetable oil	<u>249</u>	<u>247</u>	<u>292</u>	<u>330</u>	<u>330</u>	<u>249</u>	<u>247</u>	<u>231</u>	<u>330</u>	<u>330</u>
TOTAL - ALL CARGO	<u>7,620</u>	<u>5,997</u>	<u>6,412</u>	<u>7,970</u>	<u>8,380</u>	<u>4,890</u>	<u>4,260</u>	<u>4,596</u>	<u>5,540</u>	<u>6,035</u>

Source: Singapore Government.

SINGAPORE PORT PROJECT

Ship Movement at P.S.A. Wharves

Year ended June 30

	-----Ships Called -----		Average Turn-		Average Waiting Time	
	<u>Number</u>	<u>Net Registered Tonnage (1,000 T)</u>	<u>around Time Per Ship</u>		<u>For Berths For All Ships</u>	
			<u>Days</u>	<u>Hours</u>	<u>Hours</u>	<u>Minutes</u>
1954	3,637	11,217.5	2	17	n.a. ^{b/}	
1955	3,694	10,833.9	2	9-1/2	n.a.	
1956	3,592	10,777.0	2	18	n.a.	
1957	3,418	10,247.0	2	18-1/2	n.a.	
1958	3,575	11,776.4	2	18	n.a.	
1959	3,722	12,795.7	2	15-1/2	n.a.	
1960	3,997	13,201.7	2	11	n.a.	
1961	4,082	13,410.0	2	12-1/2	3	26
1962	4,018	14,167.0	2	16-3/4	3	49
1963	3,933	14,354.9	2	9-3/4	2	29
1964 ^{a/}	3,554	13,100.9	2	10	n.a.	
1965 ^{a/}	3,532	13,291.4	2	4	n.a.	

a/ Calendar year January 1 - December 31

b/ n.a. means data not available

Source: Port of Singapore Authority.

SINGAPORE PORT PROJECT

Daily Number of Ocean-Going Ships Waiting for Berths

P. S. A. Wharves

1965

<u>Date</u>	<u>Jan.</u>	<u>Feb.</u>	<u>Mar.</u>	<u>Apr.</u>	<u>May</u>	<u>Jun.</u>	<u>July</u>	<u>Aug.</u>	<u>Sept.</u>	<u>Oct.</u>	<u>Nov.</u>	<u>Dec.</u>
1st	4	0	5	0	0	0	3	2	0	1	0	0
2nd	0	0	1	0	0	0	0	0	1	0	0	0
3rd	0	7	0	0	0	0	0	1	1	0	0	0
4th	2	4	1	0	0	0	0	0	0	0	0	0
5th	0	3	0	2	0	0	0	0	0	0	0	0
6th	0	1	0	0	0	0	0	0	0	0	0	0
7th	0	2	0	0	0	0	0	0	0	0	0	0
8th	2	0	0	0	3	0	0	0	0	0	0	0
9th	0	0	0	0	0	0	1	0	0	0	0	1
10th	0	0	0	0	6	1	0	0	0	0	2	0
11th	0	0	0	0	6	0	2	0	0	1	0	0
12th	2	0	1	0	3	0	1	0	0	3	0	0
13th	2	0	0	0	1	0	0	0	0	2	0	0
14th	0	0	0	0	0	0	1	1	0	1	0	0
15th	1	0	0	0	0	0	0	2	0	0	1	0
16th	0	4	0	0	0	0	0	0	0	1	0	0
17th	0	5	0	0	0	0	0	0	0	0	0	0
18th	0	1	0	0	0	0	0	4	0	0	0	0
19th	0	5	0	0	0	0	0	6	2	1	0	0
20th	2	1	0	0	0	0	1	2	2	0	1	0
21st	0	0	0	0	0	1	0	0	0	0	0	0
22nd	0	0	2	0	0	0	0	0	0	0	0	0
23rd	0	3	2	0	0	0	0	1	1	0	0	0
24th	0	0	0	0	0	1	0	1	0	0	0	0
25th	0	1	0	0	0	0	0	0	0	1	0	0
26th	0	0	0	1	0	2	0	2	1	1	0	0
27th	0	3	0	4	0	0	0	4	2	0	0	1
28th	0	10	0	6	0	0	0	3	5	0	0	0
29th	0	0	0	6	0	0	0	1	2	0	0	0
30th	0	0	1	4	0	0	0	1	1	0	2	1
31st	0	0	4	0	0	0	0	1	0	0	0	0
TOTAL :	15	50	17	23	19	5	9	32	18	12	6	3

APPENDIX 4

Source: Port of Singapore Authority

PORT OF SINGAPORE AUTHORITY
PROJECT ITEM AND ESTIMATED COST
(M\$ Million)

<u>As Described in TO-483a - July 1965</u>	<u>Total</u>	<u>Local Currency</u>	<u>Foreign Exchange</u>	<u>As Modified - April 1966</u>	<u>Total</u>	<u>Local Currency</u>	<u>Foreign Exchange</u>
1. East Lagoon Scheme - 4 new berths	47.6	24.5	23.1	1. East Lagoon Scheme - 4 new berths	47.6	24.5	23.1
2. Port Engineer's Plantyard	1.7	0.7	1.0	2. Port Engineer's Plantyard	1.7	0.7	1.0
3. Floating Craft				3. Floating Craft			
(a) 1 - Large Fire Float	1.1	-	1.1	(a) 1 - Large Fire Float	1.1	-	1.1
1 - Small " "	0.3	-	0.3	(b) 1 - Self-propelled Bucket Ladder Dredger	2.5	-	2.5
(b) <u>Dredging Unit</u>				(c) 3 - Waterboats	1.8	-	1.8
1 - 14" Suction Dredge	1.5	-	1.5	(d) 3 - Harbour Tugs	3.8	-	3.8
2 - 300-ton Steel Hoppers	0.2	-	0.2	4. Data Processing Equipment	1.5	-	1.5
1 - Attendant Tug	0.5	-	0.5	5. Mechanical Equipment			
(c) 1 - Waterboat	0.6	-	0.6	(a) Mobile Cranes 9 No.	1.0		
(d) 3 - Harbour Tugs	3.8	-	3.8	(b) Forklifts 149 "	3.7		
4. Data Processing Equipment	1.5	-	1.5	(c) For East Lagoon Scheme	<u>1.3</u>	6.0	-
5. Mechanical Equipment				6. Engineering Services Including Supervision	2.0	0.7	1.3
(a) Mobile Cranes 9 No.	1.0				68.0	25.9	42.1
(b) Forklifts 149 "	3.9			7. Contingencies (about 7%)	4.7	1.8	2.9
(c) For East Lagoon Scheme	<u>1.3</u>				72.7	27.7	45.0
6. New Administrative Offices	5.0	4.0	1.0				
7. Engineering Services Including Supervision	2.0	0.7	1.3				
8. Contingencies (7%)	<u>5.0</u>	<u>2.1</u>	<u>2.9</u>				
	77.0	32.0	45.0	US\$ Equivalent	(24.2)	(9.2)	(15.0)
US\$ Equivalent	<u>(25.7)</u>	<u>(10.7)</u>	<u>(15.0)</u>				

SINGAPORE PORT PROJECT
PORT OF SINGAPORE AUTHORITY

Statement of Present Debt

	Original Amount	Interest	Maturity	M \$ '000		<u>Debt Service 1966</u>		
				Outstanding December 31 1965	Interest	Amorti- zation	Total	
Straits Settlement Government (Singapore) 3% Loan 1962/72 M\$30 million of which re-lent to Singapore Harbor Board. 1937 <u>1/</u> Interest @ 3% on full amount Sinking Fund contribution M\$429,750 p.a.	28,650	3%	1972		28,650			
				Less value of Sinking Fund	<u>20,429</u>			
					8,221	859	430 <u>2/</u>	1,289
War period arrears of Sinking Fund contributions and interest	8,032	3%	1972		2,878	83	376	459
Singapore Government West Wharf Extension Consolidated 3 5/8% Loan 1939	7,000	3 5/8%	1999		5,637	204	90	294
War period arrears of interest	1,062	3 5/8%	1999		876	32	14	46
Colonial Development and Welfare Fund Queen's Dock Loan 1956	1,750	Free	1971		700	-	117	117
					<u>18,312</u>	<u>1,178</u>	<u>1,027</u>	<u>2,205</u>

Notes: 1/ The Straits Settlement Government issue replaced
an earlier 3 1/2% Loan issue.

2/ Sinking Fund Contribution

Source: Port of Singapore Authority.

SINGAPORE PORT PROJECT

PORT OF SINGAPORE AUTHORITY

Actual and Forecast Revenue and Expenditure Accounts
Year Ended December 31

	-----A c t u a l-----		-----F o r e c a s t-----					M\$ 000
	9 Months to Dec. 31, 1964	1965 Draft	1966	1967	1968	1969	1970	1971
1. Terminal and Harbor Operations								
Operating Income	<u>35,635</u>	<u>57,113</u>	<u>59,164</u>	<u>65,383</u>	<u>68,368</u>	<u>69,968</u>	<u>71,400</u>	<u>72,500</u>
Operating and Administration Expenses	33,321	46,760	48,248	50,270	50,907	51,356	51,500	52,000
Depreciation	<u>1,984</u>	<u>3,486</u>	<u>4,100</u>	<u>5,300</u>	<u>6,000</u>	<u>6,200</u>	<u>6,700</u>	<u>6,900</u>
	<u>35,305</u>	<u>50,246</u>	<u>52,348</u>	<u>55,570</u>	<u>56,907</u>	<u>57,556</u>	<u>58,200</u>	<u>58,900</u>
Operating Surplus	<u>330</u>	<u>6,867</u>	<u>6,816</u>	<u>9,813</u>	<u>11,461</u>	<u>12,412</u>	<u>13,200</u>	<u>13,600</u>
2. Dockyard								
Operating Income	<u>21,239</u>	<u>24,073</u>	<u>28,644</u>	<u>30,550</u>	<u>31,150</u>	<u>31,800</u>	<u>32,500</u>	<u>33,200</u>
Operating and Administration Expenses	18,141	21,521	23,992	24,000	24,350	24,850	25,400	25,950
Depreciation	<u>1,061</u>	<u>1,386</u>	<u>1,400</u>	<u>1,900</u>	<u>2,100</u>	<u>2,200</u>	<u>2,300</u>	<u>2,400</u>
	<u>19,202</u>	<u>22,907</u>	<u>25,392</u>	<u>25,900</u>	<u>26,450</u>	<u>27,050</u>	<u>27,700</u>	<u>28,350</u>
Operating Surplus	<u>2,037</u>	<u>1,166</u>	<u>3,252</u>	<u>4,650</u>	<u>4,700</u>	<u>4,750</u>	<u>4,800</u>	<u>4,850</u>
Operating Surplus:								
Terminal and Harbor	330	6,867	6,816	9,813	11,461	12,412	13,200	13,600
Dockyard	<u>2,037</u>	<u>1,166</u>	<u>3,252</u>	<u>4,650</u>	<u>4,700</u>	<u>4,750</u>	<u>4,800</u>	<u>4,850</u>
	<u>2,367</u>	<u>8,033</u>	<u>10,068</u>	<u>14,463</u>	<u>16,161</u>	<u>17,162</u>	<u>18,000</u>	<u>18,450</u>
Interest Income	<u>2,279</u>	<u>2,542</u>	<u>2,300</u>	<u>1,200</u>	<u>1,200</u>	<u>1,200</u>	<u>1,500</u>	<u>1,700</u>
Revenue Surplus	<u>4,646</u>	<u>10,575</u>	<u>12,368</u>	<u>15,663</u>	<u>17,361</u>	<u>18,362</u>	<u>19,500</u>	<u>20,150</u>
Interest Expense	906	1,193	1,313	2,243	3,127	3,651	3,814	3,789
Times Interest Covered	5.1	8.9	9.4	7.0	5.6	5.0	5.1	5.3
Net Revenue after Interest	3,740	9,382	11,055	13,420	14,234	14,711	15,686	16,361
Revenue Surplus plus Depreciation	7,691	15,447	17,868	22,863	25,461	26,762	28,500	29,450
Total Debt Service	1,654	2,205	2,340	3,284	4,185	4,726	4,904	5,466
Times Debt Service Covered	4.6	7.0	7.6	7.0	6.1	5.7	5.8	5.4
Ratio of Operating Surplus to Average Net Fixed Assets	1.6%	5.4%	6.1%	7.2%	6.9%	6.7%	6.8%	6.9%
Operating Ratios:								
Terminal and Harbor Operations	99%	88%	88%	85%	83%	82%	82%	81%
Dockyard	90%	95%	89%	85%	85%	85%	85%	85%

Source: 1964-70 : Port of Singapore Authority
1961 Bank Staff

SINGAPORE PORT PROJECT
PORT OF SINGAPORE AUTHORITY
Forecast of Cash Flow - Years Ending
December 31

(M\$ '000)

	<u>1966</u>	<u>1967</u>	<u>1968</u>	<u>1969</u>	<u>1970</u>	<u>1971</u>	<u>Total</u>
<u>Funds Required</u>							
Investment : IBRD Project	14,000	26,000	19,000	12,000	-	-	71,000
Other	<u>24,600</u>	<u>21,000</u>	<u>15,000</u>	<u>11,000</u>	<u>13,000</u>	<u>15,000</u>	<u>99,600</u>
	38,600	47,000	34,000	23,000	13,000	15,000	170,600
Debt Service :							
Interest : IBRD	135	1,080	1,980	2,520	2,700	2,691	11,106
Other	1,178	1,163	1,147	1,131	1,114	1,098	6,831
Amortization : IBRD	-	-	-	-	-	570	570
Other	1,027	1,041	1,058	1,075	1,090	1,107	6,398
Wages Increase Arrears	<u>4,500</u>	-	-	-	-	-	<u>4,500</u>
	45,440	50,284	38,185	27,726	17,904	20,466	200,005
<u>Funds Available</u>							
Revenue Surplus	12,368	15,663	17,361	18,362	19,500	20,150	103,404
Depreciation	5,500	7,200	8,100	8,400	9,000	9,300	47,500
Loan IBRD	<u>9,000</u>	<u>18,000</u>	<u>12,000</u>	<u>6,000</u>	-	-	<u>45,000</u>
	26,868	40,863	37,461	32,762	28,500	29,450	195,904
<u>Annual Surplus</u>	-	-	-	5,036	10,596	8,984	
<u>Annual Deficit</u>	18,572	9,421	724	-	-	-	
Balance of Capital Funds Available Brought Forward	52,077	33,505	24,084	23,360	28,396	38,992	
Surplus of Capital Funds Available Carried Forward	33,505	24,084	23,360	28,396	38,992	47,976	
Decrease in Capital Funds during the period							4,101

Source : 1966-70 : Port of Singapore Authority
1971 : Bank Staff

SINGAPORE PORT PROJECT

PORT OF SINGAPORE AUTHORITY

Actual and Estimated Summary Balance Sheets as of
December 31

(M\$ million)

	<u>A c t u a l</u>		<u>E s t i m a t e d</u>					
	<u>1964</u>	<u>1965</u> (Draft)	<u>1966</u>	<u>1967</u>	<u>1968</u>	<u>1969</u>	<u>1970</u>	<u>1971</u>
<u>ASSETS</u>								
Fixed assets including work in progress	144.1	152.0	157.4	196.0	243.0	277.0	300.0	313.0
Additions during year	<u>7.9</u>	<u>5.4</u>	<u>38.6</u>	<u>47.0</u>	<u>34.0</u>	<u>23.0</u>	<u>13.0</u>	<u>15.0</u>
	152.0	157.4	196.0	243.0	277.0	300.0	313.0	328.0
Less Depreciation	<u>3.7</u>	<u>8.5</u>	<u>14.0</u>	<u>21.2</u>	<u>29.3</u>	<u>37.7</u>	<u>46.7</u>	<u>56.0</u>
	148.3	148.9	182.0	221.8	247.7	262.3	266.3	272.0
Trade Investment	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
Capital Funds	44.9	52.1	33.4	23.9	23.1	28.1	38.8	47.9
Net Current Assets - Working Capital *	<u>24.9</u>	<u>25.5</u>	<u>25.5</u>	<u>25.5</u>	<u>25.5</u>	<u>25.5</u>	<u>25.5</u>	<u>25.5</u>
	<u>219.2</u>	<u>227.6</u>	<u>242.0</u>	<u>272.3</u>	<u>297.4</u>	<u>317.0</u>	<u>331.7</u>	<u>346.5</u>
<u>CAPITAL</u>								
<u>Debt</u>								
Singapore Government 3% Loan	28.6	28.6	28.6	28.6	28.6	28.6	28.6	28.6
Less value of Sinking Fund	<u>19.2</u>	<u>20.4</u>	<u>21.7</u>	<u>23.0</u>	<u>24.3</u>	<u>25.7</u>	<u>27.2</u>	<u>28.5</u>
	9.4	8.2	6.9	5.6	4.3	2.9	1.4	0.1
Others, including arrears	<u>10.7</u>	<u>10.1</u>	<u>9.5</u>	<u>8.9</u>	<u>8.3</u>	<u>7.7</u>	<u>7.0</u>	<u>6.3</u>
	20.1	18.3	16.4	14.5	12.6	10.6	8.4	6.4
IBRD	-	-	9.0	27.0	39.0	45.0	45.0	44.4
	<u>20.1</u>	<u>18.3</u>	<u>25.4</u>	<u>41.5</u>	<u>51.6</u>	<u>55.6</u>	<u>53.4</u>	<u>50.8</u>
Provisions - Insurance Reserve and certain Retirement Benefits	15.7	15.9	15.9	15.9	15.9	15.9	15.9	15.9
<u>Equity</u>								
Capital Reserves	179.6	184.4	187.0	189.8	192.7	195.7	198.9	201.9
Revenue Reserves and Surplus	<u>3.8</u>	<u>9.0</u>	<u>13.7</u>	<u>25.1</u>	<u>37.2</u>	<u>49.8</u>	<u>63.5</u>	<u>77.9</u>
	183.4	193.4	200.7	214.9	229.9	245.5	262.4	279.8
	<u>219.2</u>	<u>227.6</u>	<u>242.0</u>	<u>272.3</u>	<u>297.4</u>	<u>317.0</u>	<u>331.7</u>	<u>346.5</u>
<u>DEBT/EQUITY RATIO</u>	<u>16/84</u>	<u>15/85</u>	<u>17/83</u>	<u>21/79</u>	<u>23/77</u>	<u>23/77</u>	<u>21/79</u>	<u>19/81</u>

Source : 1964-70 : Port of Singapore Authority
1971 : Bank Staff

* PSA indicates that it would maintain working capital at about this level, the equivalent of four months expenditures (excluding depreciation), which is ample.

SINGAPORE PORT PROJECT
PORT OF SINGAPORE AUTHORITY

Forecast of Debt Service
Years Ended December 31

	(M\$ '000)											
	1966		1967		1968		1969		1970		1971	
	<u>Inter- est</u>	<u>Cap- ital</u>	<u>Inter- est</u>	<u>Cap- ital</u>	<u>Inter- est</u>	<u>Cap- ital</u>	<u>Inter- est</u>	<u>Cap- ital</u>	<u>Inter- est</u>	<u>Cap- ital</u>	<u>Inter- est</u>	<u>Cap- ital</u>
(a) S.S. Government (Sinking Fund)	859	430	860	429	859	430	860	430	859	430	859	430
(b) Arrears <u>1/</u>	83	376	72	387	60	399	48	411	36	423	24	435
(c) West Wharf	204	90	200	94	197	97	193	101	190	104	187	107
(d) Arrears <u>2/</u>	32	14	31	15	31	15	30	16	29	17	28	18
(e) Colonial Development	—	117	—	116	—	117	—	117	—	116	—	117
	<u>1,178</u>	<u>1,027</u>	<u>1,163</u>	<u>1,041</u>	<u>1,147</u>	<u>1,058</u>	<u>1,131</u>	<u>1,075</u>	<u>1,114</u>	<u>1,090</u>	<u>1,098</u>	<u>1,107</u>
IBRD	<u>124</u>	—	<u>990</u>	—	<u>1,815</u>	—	<u>2,310</u>	—	<u>2,475</u>	—	<u>2,691</u>	<u>570^{3/}</u>
	<u>1,302</u>	<u>1,027</u>	<u>2,153</u>	<u>1,041</u>	<u>2,962</u>	<u>1,058</u>	<u>3,441</u>	<u>1,075</u>	<u>3,589</u>	<u>1,090</u>	<u>3,789</u>	<u>1,677</u>
	—	—	—	—	—	—	—	—	—	—	—	—
	<u>2,329</u>	—	<u>3,194</u>	—	<u>4,020</u>	—	<u>4,516</u>	—	<u>4,679</u>	—	<u>5,466</u>	—

Notes : 1/ War period arrears of Sinking Fund contributions and interest.
2/ War period arrears of interest to Singapore Government.
3/ M\$ 570,000 is the first half-yearly repayment of capital on the proposed loan.

Source : Port of Singapore Authority